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Life and Work of Roger F. Taylor: Superintendent of the University of Maine Forest from 1946 to 1983

Roger F. Taylor
University of Maine

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LIFE AND WORK of ROGER F. TAYLOR
SUPERINTENDENT of THE UNIVERSITY of MAINE FOREST
FROM 1946 to 1983

By Roger F. Taylor
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Growing up in Rural Massachusetts

The most important day of my life occurred on May 30, 1918. That was the day I was born on a small farm in central Massachusetts about one half mile from the state agricultural college, then called Massachusetts Agricultural College or Mass. Aggie, now the University of Massachusetts. The farm was managed by my father, for my grandparents, his parents. My parents, two older brothers and I, lived upstairs in the large sixteen room farmhouse, my grandparents lived downstairs. The farm buildings consisted of the large, two and one half story house, connected by a two story, five bay carriage and storage shed, to a large barn which held cattle stalls, horse stalls and grain and hay storage. The entire complex stretched for over 200 feet, and one could walk from one end to the other without stepping outside. Several outbuildings consisted of a shop and workroom, a tobacco drying barn, a corn crib, hen house and hop drying shed. All of these, except for the hop shed, were in full use during my youth. Apparently hops had been grown and dried on the farm at one time, but not during my memory.

An interesting feature of the main house and barn complex was the number of toilet facilities available to household members and workers. These were all of the common out-house variety, but were all inside the main buildings. Just off the downstairs kitchen was a 3 holer, two adult size and one child size. On the floor above there was a 2 holer, one adult and one child size, at the entrance into the barn from the carriage shed there were two more 1 holers, one up and one down, and then at the end of the original upstairs cattle tieup, there was still another 1 holer. The original builder of the complex apparently believed in convenience or else had a diarrhea problem.

Water to both the house and the barn was from a well on higher ground on an adjacent farm. The flow from this well by gravity was continuous into a tank in the kitchen and also to a tub in the barnyard. The flow never stopped. Overflow from the barnyard tub created a flow down the farm lane whenever the cattle had their fill and let the tub fill up.
Life on the Farm

Recalling events in my life during my early years in North Amherst, Mass., goes back into my pre-school days around 1920, when I was 2 years old. We lived upstairs in the big old 16-room farm house on North Pleasant Street, and had access to a big attic overhead. A full staircase went up to this attic. I remember some items of food hanging up there, but I'm not sure what they were. Possibly dried apples and other fruits and vegetables. In winter, the attic was cool and dry. The upstairs living quarters opened from the kitchen into a long closed in area above five bays that stretched from the downstairs kitchen to the main barn. The floor was rough boards, but smooth enough to ride a scooter or tricycle on, and also a place to push toy cars around. I remember spending time in that area, and often going down the stairs outside our kitchen door to Gramp and Grammies kitchen door, where I also spent a lot of time. In the summer I played outdoors with my toy cars, and a toy hand operated power shovel. I don't know where this toy came from, it may have belonged to my older brothers before I came along. It was certainly sturdy enough to have been several years old when I got it. It was made of cast iron, big enough for me to sit on at age 3 or 4, and turn a crank to scoop up a bucket of dirt, raise it up and pull a string to open a trap door and dump the load. It didn't swivel or turn in any way, but it was mounted on tracks and could be moved forward or back, so I could pick up the same dirt several times, or make a small ditch as it moved along. I could play with it for hours.

* * *

The September after my fifth birthday started a great change in my life when I started in first grade in the North Amherst school. There was no pre-schooling of any kind in those days, so this was something quite different and exciting. I don't remember much about that first year except meeting a lot of kids my age that I never knew existed, and learning 'readin', writin', and rithmitic'. Reading really excited me. Within a few years I always had a book or two at home which I borrowed from the town library next door to the school. After a while there came a time when it seemed I couldn't find a book of my caliber in the library, that I hadn't read once or twice before. I probably wasn't into the highest culture in books. I liked westerns and read all of Zane Grey's books I could find. Later my brother George used to buy several western magazines with all western stories in them, and I got to read most of them.

* * *

All of my classmates were friendly, from first grade through high school, but none were real bosom buddies to me. I played some with a neighbor across the street, Richard Bigelow, and with another boy, Allan Larned who lived on another small farm down the street. Both families had at least one cow, a pig, and chickens, for milk, eggs, and meat. Before any of us were even of school age, we had chores to do, caring for the animals in any way we could. We all learned very early that there were chores in the house and barn that had to be done every day, no matter what else we might have wanted to do. This was true of the majority of the kids in my classes, even those who lived in town, so we all grew up expecting to have to do work of some kind, wherever we were.
One was a classmate, Victor Hardendorf, who lived north of town, up past the local gristmill, about a mile in the opposite direction from my home. It was probably when we were in third or fourth grade that I went a few times to his home after school. His mother was always home, I never met his father who I think was a professor or administrator at one of the colleges. One time I went home with Victor because he wanted to show me something. We went down into his basement, they had a real nice home, and he opened a door on a structure that looked like a large dog house. Instead of a dog coming out, out popped a baby skunk like a young kitten. Soon four more came out and we could hold and pet each one just as though they were kittens. I was a little leery at first, and especially so when after about a minute, the mother skunk came out. Victor said to just pat them gently and move slowly, and there will be no odor or any problem with them. The mother had gotten into the basement earlier and had the babies right there and the family had been feeding them ever since. I heard later that in mid-summer when the young ones began to roam around the house, the folks left the cellar door open and one night the whole family disappeared and never came back. Probably once the skunks were out, the folks quickly closed all the outside doors, but I never heard of them ever having any problems with those animals, and we played with them several times, with no problems.

Another classmate I played with often was Gordon Hobart, who lived in the built up part of North Amherst, a short distance from the school. This was probably when I was 7 or 8 years old, and I don't remember what we did, played ball some I'm sure, and I think he had some games in the house. Gordon also came down to our farm, and we played around in the buildings, and in the summer went swimming in the river in our pasture.

From the time I started school at 5 years old, until I finished the sixth grade, I walked to and from home to school every school day. I don't remember what happened on real stormy days, everybody walked, there were no school buses for us, although a trolley did go by our house, but it didn't run on bad days either, so probably we all stayed home.

* * *

Walking the road, especially on the gravel shoulder where people drove their horses, often was profitable for me. Sometimes a calk would loosen up and fall out of a horse's shoe. My dad would give me a penny for any good one I found and brought home to him. Over the years I found several, but only one stands out in my memory. Most of the ones I found were quite new and in good shape, because what happened was when the new calk was hammered into place in the shoe the blacksmith or owner did not set it in hard enough, and did not check it the next day. After a day or so of use the calk would loosen and fall out and it would not be noticed until later. One noontime I was walking home for lunch and spotted a real good calk. I couldn't wait to get my penny so I could stop at the store after school for some candy, so I ran all the rest of the way home. When I came in the yard I saw my father standing in the doorway of the horse barn, and ran right to him. When he saw the calk, he agreed that it was a good one, and started fishing around in his pocket for a penny. I couldn't wait to get my penny so I could stop at the store after school for some candy, so I ran all the rest of the way home. When I came in the yard I saw my father standing in the doorway of the horse barn, and ran right to him. When he saw the calk, he agreed that it was a good one, and started fishing around in his pocket for a penny. We were both in the barn at that time, standing right behind one of the horses. As he was handing me the penny, I fumbled it and it fell to the floor close behind the horse's hoof. If I had moved in slowly I could have pushed the horses leg aside to get the penny, these horses knew me, and were very gentle normally. This time however, being as excited as I was to get a penny, I practically dove down behind the horse's hoof, and the horse
seeing a quick movement behind, struck back with one hind leg. Fortunately I was close to her leg when she kicked out, and instead of whacking me in the head, her leg just propelled me backward several feet across the floor. I wasn't hurt at all, but we were both quite startled, and I'm sure my dad thought I was hurt bad at first. Anyway, my dad quieted the horse down, and retrieved the penny, and I'm sure I must have had a piece of candy before that day ended.

* * *

Another incident that happened while walking home from school, probably while I was in first grade, is still quite vivid in my memory. Autos passing on the road were quite rare, sometimes none would pass either way during the walk to or from the school. In fact it was more usual to see a horse and buggy, or team of horses on the road, which of course is why I was finding calks during those walks. This one day while walking home from school, I ran across the road, thinking that I saw a calk on the other side. I probably saw an auto coming, but being used to the speed of horses, I ran across in front of the car, which probably was going 15 to 20 miles per hour. The woman driving was startled by my crossing in front of her, and jammed on the brakes and stopped right beside me. She got out of the car and took me by the arm, and asked me my name. When I told her, she said she knew where I lived and would take me home, which she did. When we got there, she also told my mother that I had run across the road right in front of her car. My mother thanked her and took me in the house. I don't remember if I got paddled or not, but I don't remember ever running in front of another auto, then or since. Can you imagine something like that happening in the year 2000?

* * *

At the North Amherst school there was a ball field connected and owned by the town, which us school kids could use for play during recess, and the town baseball team used for games nights and weekends. There was no playground equipment on the grounds until my second or third year, when someone put up an iron pipe frame with two posts set firmly in the ground about 8 feet apart, connected with another pipe about 1 1/2 inches, or maybe 2 inches in diameter. This cross piece was about 6 feet above the ground so we had to jump to grab it, but then those that were strong enough could pull themselves up, and chin themselves or get up on top and do skin the cat and whatever other acrobatics they were capable of. I was able to do as much, if not more than most of the kids, so I would rush right out and spend most of every recess on that bar. It was a very simple piece of playground equipment, but meant a lot to me. Later they did have a sea saw board, and I think a jungle gym, but I never used them. A couple of stakes were set up on one side of the playground, to play horseshoes. I don't remember any other playground equipment while I was at the school. Everything was very simple then.

The ball field at the school was heavily used by local baseball teams for practice and regular games. Every town seemed to have a baseball team, a place to play, and there was strong competition between teams. Through the spring and summer there were games going on at several ball fields most evenings and weekends. It was one of the major entertainments during those years, with no cost to the fans, and not much to the players. All they needed was a bat and a ball and a glove, and if someone else had the bat and ball, all you needed was a glove. You seldom saw any uniforms, and some came right from work to play ball. There was lots of
kidding and fooling around, and everyone had a good time, with whole families watching or playing.

I remember seeing a photo of my two older brothers, George and Claude, on their way to school one winter day, walking on the trolley tracks, which was the only area with the snow cleared down to the ground, and the snow banks were way higher than their heads. Of course they were small, but the snow still must have been 3 feet deep or more. By the time I started first grade, the roads and trolley tracks were being plowed, so I always had a plowed out area to walk in. When only the trolley tracks were cleared, it was all done by a crew of men with shovels who cleared the snow wherever it was over 6 or 8 inches deep. A trolley could plow through the lighter snow accumulations. Autos did not travel much in winter.

* * *

My grandparents both died in 1925. Grammy, Ophelia Maria Taylor, died April 24, and Gramp, Lewis Henry Taylor, May 10. I can remember coming home from school for lunch and hearing that Grammy had died. I think I cried most of the way back to school that day. I really loved them both, but her death, coming first, hit me the hardest. When my grandfather died, just over 2 weeks later, I don't remember feeling so sad, but I know I missed them both a lot, and probably hadn't got over Grammy's death.

The deaths of my grandparents, (my father's parents), was the start of several changes in our family life. My dad had spent his whole life working on the farm with his father, and naturally expected to continue owning and running the farm after his parent's deaths. We immediately moved downstairs into their quarters, and my folks started in to make some renovations. It took several years, but eventually an inside staircase from the dining room up to the upstairs kitchen was cut off and by utilizing that space and a portion of each kitchen, a bathroom was built in each apartment, and a coal furnace was installed in the cellar. By the late 1920's, the house finally had flush toilets, bathtubs, and hot and cold running water. Until then, we had all taken our baths in a washtub on the kitchen floor, with water heated on the wood stove.

While this was going on, some legal problems were being worked out over the ownership of the farm. I never knew the real problem, but it ended up with the farm being put up for sale by auction. I suspect this was to divide its value equally among the four heirs, my father, his sister, and two brothers. I don't think my dad ever expected it to go this way, but it ended up with him having to bid against others to buy the farm that should rightly have been his, after working on it all of his life. I can remember the sale, only a few people there, mostly out of curiosity, but one person kept bidding against my father to purchase the farm. My father was desperate, this was his home, the only place he knew, where he had lived from the time he was 6 years old. His whole life was in this place, so he kept raising the bid as long as the other person did. The bidding finally stopped and my father owned the farm, but I think he paid about $13,000 for it, which at that time was probably three or four thousand too much. Then it was necessary for my folks to take out a mortgage on the farm to pay off the other three heirs. This wouldn't have been so bad if economic times had stayed good, but 1929 was the start of the greatest economic depression the world has experienced which lasted for 10 years. Although I didn't appreciate it
then, I am sure my folks had some desperate times keeping up payments on something they
should have owned free and clear.

* * *

During these years and into the mid 1930's our family income was primarily from sale of farm
produce, and an occasional calf or milk cow. My father also did odd jobs with his team of
horses. In the winter, they pulled a wooden V-plow to clear sidewalks and other small areas for
the town, and in the spring and fall he would use them to plow and harrow garden areas for local
residents. Several times during the summer he and another farmer would hitch their two teams
in tandem for a four horse hitch to pull a road grader to grade up rural roads on the outskirts of
town. I don't know what the pay was for these jobs, but it all contributed to the income of the
farm. My mother, who was a registered practical nurse, often worked at a local nursing home,
and also some home care work, which would be similar to what is called hospice care now.

* * *

During the late 1920's and early 1930's, my dad was associated with a cattle dealer named Fuller
from Belchertown, who accumulated a herd of cattle and held periodic auctions at our farm to
sell them. For several years, a herd of 100 or more were pastured at our farm, with as many tied
up in our barn as there was room for, and an auction was held several times during the summer.
As these cattle were brought to the farm, most of them were put into our pasture, and sometimes
temporary fences were put around hay fields to provide more room and grazing for the animals.
In spite of the extra work putting up and moving the temporary fences, to keep the cattle in good
grazing, we always had a source of water for them by inclosing a portion of one of the two
brooks that crossed the farm, or the river that bordered the regular pasture, so there was no need
to supply water, and no stables to clean. We did supply extra food at times, especially when the
cattle were all in our regular pasture. My dad would usually plant one field with millet which
was fast growing, and by mid-summer before it matured we would cut a wagon load each day,
and haul it into the pasture for extra green feed. The cattle loved it, and also fresh cut Rowen in
late summer. In the summer there was no problem supplying plenty of food for one hundred or
more cattle for the several weeks on the farm between auctions. These were busy times for all.
My mother provided coffee and possibly some other drinks, (no alcoholic drinks, there were
none at our home), and at least once, she and some neighbor ladies prepared sandwiches when
the auction ran into mealtime in late afternoon. They didn't want any customers to leave before
every animal was sold.

Obviously feeding all of these animals required a good supply of hay and grain. Our barn was
always filled with hay each summer, and often a second crop, called Rowen, was cut and usually
fed to the animals immediately. Rowen, cut as a second crop did not have time to mature and
would not store well for winter, but was well liked by the cattle in the fall. Millet which was
often planted as a cover crop was also fed to the cattle as a green food in the late summer and
fall. Hay on our farm was all cut and harvested as loose hay.

* * *
Horse power was the only power on our farm, pulling pieces of equipment on the farm. All mowing was done with a horse drawn mowing machine with a five or six-foot cutter bar. This machine was pulled by a team of horses with the driver riding on the machine. The two wheels had cleats on the rims which created traction on the ground and as the mower was pulled forward and the wheels turned, this motion was transferred to the pitman rod, which in turn activated the cutting knife to slide back and forth on the cutter bar. Since the cutting knife didn't start moving until the wheels turned, it was very important to be moving forward before lowering the cutter bar to start mowing. If started too soon, the blade would choke up with uncut hay and stop the whole machine, requiring manually cleaning it all out, and starting over again. Also, after circling a field a few times, if the team wandered a little bit when cutting the next swath, a little strip of hay would be missed and left uncut. One time after I had mowed a field, my father half kidding, asked me why I left all those rooster's combs scattered through the field. I told him that the horses didn't walk straight, but he came right back and said I was supposed to be driving them. I didn't have a reply for that, but did do better later on. That was about the most criticism I got from my dad, and I don't remember any that came in anger.

All of our hay was air dried and about one day after cutting it usually required tedding, which was use of a one horse drawn 2-wheel affair with a series of forks mounted on an 8-foot long shaft between the wheels, and powered by the wheels as they turned. As the tedder crossed the hay field and the forks rotated beneath the shaft, the tines picked up the partly dry hay and kicked it into the air so that it fell back to earth fluffed up to finish drying. This was one of my jobs from about age 7 to sit on a seat on top of the tedder, and drive the horse around the field until all of the hay had been stirred over. This often had to be repeated, especially if a shower came up before the hay could be taken into the barn. Hay had to be completely air dried before storing in a barn where it was always packed tightly into bays. Damp hay would soon overheat in a packed area and spontaneous combustion would develop. Every year we would know of someone’s barn, and often the whole building complex, which would burn from a fire started in the barn by spontaneous combustion. My dad was very conscious of this, and very careful not to store wet hay in the barn. Even so, I have seen him in a hay mow with his arm pushed way down into the hay to check for heat.

Hay on our farm was all handled as loose hay, we had no bailers or power loaders of any kind. After the loose cut and teddered hay was considered dry enough, it was raked into windrows with a one horse dump rake. This was a machine similar to a tedder, but with a large rake mounted instead of the forks. The rake could be raised with a hand lever, or by stepping on a foot pedal which caught a rod into a gear on each wheel, and as the wheel turned forward would raise the rake. This again was often my job, as soon as I was big enough to reach and depress the foot lever. The procedure was to drive back and forth across the hay field with the rake accumulating hay, and when it was full the foot lever would be engaged and the rake would raise and dump the hay. When the rake got to its full height it hit a trip which released it and it fell back down to the ground to continue raking. On the reverse trip back the rake would be tripped at the end of each dump load from the previous trip. As the raking continued across the field windrows would develop where all of the rake loads were dropped end to end. These windrows, as the name suggests, were also a means of completing the drying by raising the hay into elevated rows that the wind could blow through.
Now, when it came time to haul the hay into the barn for storage, came the real work. Our hay wagon had a flatbed body with an extended rack which widened it out to about 8 feet. Some hill farms had hayracks with high sides to hold the loose hay. Our land, being quite flat, worked well with just this wide flat rack, and would carry more volume, if the load was placed right, or built right as we always said. Building a good load required placing forkfuls of hay as far out on the edges as possible, and then interlacing them with more hay into and across the body. If the interlacing was not done correctly, a whole section of the load could slide off when hitting a bump or curve on the way to the barn. This did not please anyone, and the loading was watched quite carefully. The loading was done by one or two people on the ground with hand held pitchforks, and one person on the wagon. The wagon would be driven in and stopped between two long windrows, and the ground crew, with one on each side, would tumble some of the windrow together into a convenient pile to lift. With a hand pitchfork, they would lift as much of the pile of hay as they could lock on to their fork, and pitch it on to the wagon. The person on the wagon had to help pull the fork full of hay onto the body and then place it securely in a way to maintain the load as wide as possible, and intertwine with other hay to hold it in place. If the load was allowed to narrow in too soon, it would end up being too small for a worthwhile trip to the barn, and that was frowned on. With a ground crew of two the hay would be coming on to the wagon quite fast at times, and the load builder would be kept quite busy trying to build a good square load, and still help the ground crew get each forkful up on to the load, especially as it grew higher. For several years, until I grew big enough and strong enough to lift a forkful of hay up over my head and on to the hay wagon, I was the load builder, and had to drive the team of horses forward as we progressed across the field.

I learned how to build a pretty good load of loose hay although I can remember having some real problems at first. Those were times when one of my brothers was there to help our dad on the ground pitching hay onto the wagon. I liked it much better when there was just my dad and myself hauling hay. With him alone on the ground, I had time to arrange the load while he was making up the next forkful. This wasn't so easy for him, but was much easier for me, and I always thought I had the hardest job anyway.

One of my greatest thrills at that time, was one summer day when I was 13 years old and we drove out on to a field of windrowed hay and I jumped down from the wagon and started to tumble a windrow together for loading. My father put the reins down and stood on the wagon and told me to pitch it on. I did, and felt so good about it that I continued for the whole load. In fact I felt so grown up, that when my father said we had enough, I said there was room for a couple more forkfuls, just like he used to say to me. I'm sure he got a chuckle out of it, although I never saw it. I thought I had finally become a man.

At the barn, unloading was another tough job, especially in my early years. My father had been brought up doing everything by hand, and we continued for a few years after he took control of the farm. This meant that the wagon load of hay had to be driven in on the barn floor to the bay to be filled. Then, every forkful of hay that had been pitched on in the field, had to be pitched off and mowed away to fill each bay. Again my job was in the haymow with the job of pulling each forkful of hay in and packing it into the back and sides while all the time treading it down to pack in as much as possible. As it was in the field, this was a hot and sweaty job, with hayseed all over you, but without any breeze whatsoever. There were times when I felt I was getting
buried in hay, and just couldn't move any more into the back corners. I remember one time calling to my father, "I can't, I can't". His answer was, "there's no such thing as can't", and he kept right on pitching hay in on top of me. I managed to climb up on top of it and I decided that he was right, but you have to work at it.

There was only a year or two of this hand work before a hay fork was installed in the barn to unload the hay wagon. This consisted of a special fork, or grapple, (there were several types), connected to a heavy rope which ran through a set of pulleys in the barn, and then outside where a horse could be hitched to one end. The load of hay was driven just inside the main barn door with this hay fork positioned above it. Our fork was a harpoon type with 2 harpoons mounted in a U-shape with a projection that folded into the tip of the harpoons as they were pushed down into the load. After being set as deep as possible, a latch was pulled at the top of the U to set these projections at right angles to get a strong grip of the hay. Because of the interlacing of the hay to form the load, when the horse that was hitched to the end of the rope outside was led away from the barn, a substantial amount of hay was lifted off of the wagon and up to a trolley on a track that ran the length of the barn, just under the peak. When the fork reached the trolley it tripped a latch and the whole load hanging from the trolley traveled along the track to the bay that was being filled. When it reached the right spot another light trip rope was pulled which released the fork load of hay. Sometimes the hay fell on to a temporary platform and was pitched into the mow by hand from there. More often, a temporary slanting platform was erected, and the hay slid off into the mow as it dropped from the fork. Then the empty fork and trolley was hauled back by the trip rope to the end of the track, where the trolley locked in place and the fork descended for another load. This mechanism did reduce some of the manual labor of unloading, but did require an extra person to lead the horse out the right distance to pull the trip load of hay to the right location in the barn. After a couple of trips the horse would often stop at the right distance, but then it had to be brought back and hitched up for the next trip, so it always required a person with it. Some people rigged up an electric powered winch which could be operated by the person on the load, and eliminated use of the horse and the extra person. At our house, when a load came in to be unloaded, my mother would often come out to lead the horse, and sometimes I did when one of my brothers was there to help in the mow.

* * *

On the farm we also raised market gardening products such as asparagus, onions, celery, beets, carrots, sweet corn, and strawberries. For our own use there were currents, grapes, blackberries, and other wild berries on the farm. Field corn for meal and fodder was also a staple, as well as several acres of tobacco.

Tobacco was started from seed which was saved from one crop to another. In the spring this seed was broadcast seeded into a cold frame structure with sides about one-foot-high and covered with a number of glass sash which were about three feet wide, and ten feet long. These sash were made with the side rails extending six inches on each end for handles, and a person on each end could lift and carry the sash from one end to the other, or just pile one or two over to open up the bed for weeding or watering, or cooling on hot days. When the plants were ready for transplanting (about 6 to 8 inches tall), and conditions were right in the field, a quantity of the most uniform plants were pulled and placed in flats to carry to the field.
Pulling, or lifting, the plants from the seed bed was a careful procedure. First, the bed had to be thoroughly watered to loosen the soil around the roots. Then, since all the plants were not uniform and only the largest would be lifted the first day, it was necessary to pull each plant carefully so as not to disturb the others around it, so they would continue to grow for the next planting. Care was also necessary not to squeeze or damage the stem, so plants were usually lifted by one leaf.

Planting on our farm was done with a horse drawn planter. It was a simple frame on four wheels, with a large wooden barrel mounted high on the front, well above two seats mounted side by side, behind, and very low down. In the center and in front of the seats below the barrel was a small plow device which created a trench that was open for a few inches as the machine moved forward. The barrel was filled with water through an opening under a seat on the top. With two people in the seats, each with a tray of plants in their laps, a tripping mechanism connected to a wheel would release a portion of water into the trench. At that instant one of the two planters took a turn inserting a tobacco plant into this trench, holding it long enough for the trench to close with the roots firmly set into the earth at the correct depth with water to give it a good start.

Even though the team pulling the planter were held to a very slow pace, the two planters were kept very busy having a plant ready to insert every time the water valve clicked, spacing the plants a little over a foot apart. If one of them fumbled with his plants, the other one had to make two or more plantings in a row to give the partner time to get organized again and get back into the alternating pattern. For several years I worked beside my mother in the planting seats, and she often had to do double duty because of my fumbling around trying to get a supply of plants straightened out. My Ma was very nimble with her fingers, and probably could have planted several rows alone, if it had been necessary. Usually my fumbling only resulted in a couple of misses on my part, so she covered those quite easily, and we got along quite nicely. My dad always drove the team and kept them right on the mark which was made by a small disk on a pole that projected out from the planter to mark the location of the next row.

It was important to have uniform spacing between rows for cultivation during the growing season. Tobacco was always a worrisome crop to raise. Extreme care had to be used to protect the leaves throughout the growing cycle, because price depended upon the quality and condition of the leaves which were the sole product from the plant. After planting, the fields of tobacco had to be hoed and cultivated to keep them free of weeds until the plants developed and spread enough to shade out the weeds themselves. Then another chore developed, as the plants matured, suckers would sprout out at the base of each leaf, starting with the bottom leaves and progressing up the plant as the upper leaves developed. To maintain full growth into the tobacco leaves, these suckers all had to be removed as soon as they developed. Over a period of a month or more before harvesting this was a tedious, daily chore, to check every leaf on every plant to remove every sucker as it developed. This job was usually done in early morning while waiting for dew to dry in the hay field or on other dry crops.

Obviously this meant that the tobacco plants were still wet with dew or rain when suckering was carried on. Wet hands and clothing and juice from the broken suckers produced a strong odor of
green tobacco which was sickening to many people, and along with the continual stooping to reach the bottom leaves, often bothered me so much I would have to leave the field at times. In late August, when the plants became mature and were ready for harvest, a final suckering and topping was done to remove all parts of the plant except the valuable leaves. Topping refers to breaking off the top flowering stem of each plant to prevent growth going into production of flowers and seed. The exception of this was that most farmers reserved several of their best plants and let them come to full blossom and seed, to collect and use for the next year’s crop. Our tobacco, and most in our area, was open grown in the field and harvested as full plants. Mature tobacco plants were about 5 feet tall after topping, with leaves 2 feet or more in length. In some areas leaves were harvested directly from the standing plants, which usually were grown under a complete cover of netting to reduce insect and other damage, possibly a misnomer, but this method was often called 'shade grown tobacco'.

Harvesting of mature plants was done on hot clear days to facilitate quick wilting. As soon as the final suckering and topping were completed, the plants were cut close to the ground with special axes or hatchets, some having adjustable heads to make a clean square cut across the stump. After cutting, each plant was laid back onto the previous one in the row, with all butts lined in the same direction. After an hour or so in the hot sun the leaves would be wilted and flexible enough that they could be handled with little worry about cracking or shredding. Then a crew supplied with 4 foot laths would pick up each plant by the butt end, and standing a lath on end using a hollow spear on one end of the lath, spear through the stem about 8 to 10 inches from the butt end. From 4 to 6 plants would be strung on each lath and laid out on the ground. These laths of plants were loaded on to a variety of conveyances, and hauled to drying sheds. Many were loaded on to flatbed trucks or wagons by piling one slat of plants on top of another until the pile got too top heavy. This worked O.K. except sometimes the lower plants had some damage from the weight above. Our farm had special racks running lengthwise on a wagon, with 2 top rails about 3 feet apart and 5 feet high. The slats of plants were placed with the ends of each slat on the rails, with the plants hanging down. Up to 50 or so slats could be hung on our rack with no damage, and they were hung in the same way in the tobacco drying barn up to 4 or 5 tiers high until completely dry in late October or November. At that time there was a wait for a so called 'tobacco damp', a period of mild, damp weather when the barns would be opened up to let all the moisture in the air into the building to dampen and wilt the dry leaves again. Now the plants could be handled again without breakage, and were all taken down, pulled off the slats, and piled on old rugs, burlap, or whatever, on the dirt floor of the tobacco barn. These piles, usually 4 or 5 feet high were immediately covered with more of the same material to retain this damp condition. Now, because the leaves would soon dry out and become brittle again, it was imperative to handle them as rapidly as possible.

This meant that each leaf had to be stripped off its stalk and placed into a form for bundling. Our bundling form was a box, 3 feet long x 1-foot-wide x 1-foot-high with an open top. One side was hinged at the bottom, and hooked at the top. Three 5 foot lengths of binding twine were laid across the bottom and up both sides equal distance apart along the length of the box. An equal length of heavy wrapping paper was laid in on top of the twine with the upper edges bent down over the sides of the box. Each person stripping tobacco would accumulate as large a bundle of leaves in his, or her, hands as possible, keeping all the butt ends of the leaves even, and would place the bundle in the box with the butts against the end of the box and the tips overlapping and
mingling in the center, and maintaining equal amounts in both ends. When the box was full, a board cut to fit inside of the box, was placed on top of the tobacco to compress it enough to make a tight bundle. The board was removed and the paper and twine wrapped and tied firmly around each bundle as they accumulated and the bundle removed from the box by releasing the hinged side and rolling the bundle out. Due to the need for speed, and the lack of help, many farm family members worked long hours getting their tobacco stripped and bundled ready for market before it dried out. During a tobacco damp, it was quite common to see a lantern light shining in an isolated tobacco barn well after midnight, and often through the night. In many cases this was the major income for the year, so it was very important.

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All of our corn was hand planted in marked rows. When the fields were ready for corn planting, we first marked them out with a simple frame which had six narrow skids set at about 3 feet apart, pulled by one horse, and with handles behind for a person to guide it. The first pass across a field was made as straight as possible by eye, and then successive rows were made by setting the outside skid in an outside skid mark from the previous marking. My job was to lead the horse at the right distance from the previous marks so the outside skid traveled in the right skid mark. My dad would hold the handles and guide the marker on the right line when I and the horse got off a little. After a few trips across the field the horse and I got pretty good, or at least my dad would say the horse was catching on O K. Marking out the field in one direction wasn't all of it. On some fields we also marked it all out again crossways. This was so the corn was planted in hills, exactly where the lines crossed, and the corn crop could be cultivated with a one horse cultivator in both directions. This was for two reasons: one, it reduced hoeing and weeding down to just in and around the corn hill, and two, when the last cultivating was done and the corn was over our heads, a spike tooth cultivator was used to eliminate weeds and also to leave a relatively smooth surface throughout the corn field. By this time the lower portions of the corn plants were quite open with few, if any leaves. At that time, probably late August, my father would go into the cornfield with a hand operated seeder and sow fresh grass seed throughout the whole field under the upper growth of the plants. This seed germinated and grew rapidly in the cool, damp soil under the corn. In a month or so, by the time the field corn was ready for harvest, a new crop of hay was well established. This procedure worked well for us, because everything on the farm was done by hand.

When the corn crop was mature it was cut by hand with a sickle cutter or a type of corn ax. The corn ax cut the stalks very low to the ground and left a clean field for a hay crop the following year. To cure the corn, as it was cut, it was stacked in the field as a shook with each armful of stalks with ears attached stacked together in an upright position until about a 3 or 4-foot diameter stack was built. This was bound tightly with twine at about head high and left to stand in the field for several weeks until dry. Then if the weather was good, the stacks were taken down and each ear was husked and the ears of corn collected in a basket to be hauled into a crib near the barn for further drying and storage. As the weather grew colder, or storms were expected, the corn stacks were brought into the barn where in some areas corn- husking bees were held. For us it was just a job to get the corn husked clean and into the crib for winter storage. After the ear was picked clean from the husk which remained on the stalk, the remaining stalks were laid by armfuls into a wooden trough which had a hand operated knife like a guillotine at one end. Each
bundle of stalks were pushed out several inches beyond the knife which was swung down to cut off the protruding part. All of the corn stalks were cut up this way into small pieces which were fed to the cattle. Even though the pieces were quite dry, the cattle ate quite a bit and the rest was used for bedding and then returned to the fields mixed with manure. Practically everything was recycled in those days. There was a considerable amount of physical labor involved in producing enough dry corn to fill our corn crib, from preparing the soil in the spring, marking the rows, planting seed, cultivating the crop, and the final harvest. I was involved in all of it for several years, before and throughout my teens. I well remember cultivating a field of corn and seeing several kids from town walking down our farm lane to go swimming in the stream that bordered our pasture. At the time I was jealous, but I always got to the swimming hole sometime before or after supper, so I made out alright.

All of this labor to fill a corn crib, which to us was a wooden building with close knit wire mesh enclosing bins in the interior to keep out rodents, was to have a supply of dry corn for use as animal feed, and for our own personal use as a household food. To get a supply of corn meal for our personal use the dry kernels had to be shelled off of the cob. This could be done by hand but was a terrific job, and we had a corn shelling device that did an excellent job, but was still a lot of labor. This was a solidly built wooden upright box with a top shute to drop an ear of corn into, a bottom shute for the kernels to drop into a container on the floor, and another side shute where the empty cob was kicked out. Inside was a wheel with teeth along one side which revolved against another wheel which scraped the kernels off as one turned against the other. The main toothed wheel was turned by a hand operated crank attached to a shaft which ran all the way through the box and had a heavy flywheel attached on the other end. As corn was fed into the machine from the top, the ears would roll around between the two gears which were mounted on a slant, and the kernels would be scraped off as the ear dropped down between them. When the kernels were all off, the bare cob would drop against the revolving wheel and be kicked out onto the floor, or into a container. Once the machine was turning, the heavy flywheel helped to keep up the momentum with just enough steady cranking to keep it up. After that it was just steady work, one hand feeding in the corn ears, and one hand turning the crank. I don't remember what the production was, maybe a bushel of shelled corn in two hours, maybe more, maybe less, but it always seemed like forever, but it was better than doing it with your fingers.

Located on the Leveret Road in North Amherst was a water powered grist mill which is where we took our corn to be ground into meal. For pure cornmeal for house hold use, the shelled kernels were ground between two flat mill stones which were turned by water power. The water for this power was diverted from Mill River which ran through town, from Cushman through North Amherst, to Amherst, and on through South Amherst, where another grist mill was located. The North Amherst mill was supplied with water from Mill River through a hand dug canal which brought in sufficient volume to turn a water wheel and in turn revolve all the machinery in the mill. These mills operated for many years grinding corn and other grains for local farmers and merchants, and also pressed apples for cider every fall. They were eventually forced out of business when portable mills powered by gas engines or electric motors came into general use. The last I knew, in the year 2000, this old mill building was still in use, but now was a card and gift shop.

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As a supplementary income to all of the above, my father and his father before him had always raised market garden produce for sale at the farm, and at local markets. At first my awareness of it was mostly through weeding and harvesting some of the crops like onions, carrots, celery, beets, sweet corn, strawberries, etc. The financial end of it didn't hit me until the early 1930's when we began to feel the effects of the Great Depression. I never had much money except for the occasional pennies I got for a horseshoe calk, or a skin from a muskrat caught in a trap on the river. I did start to get a few dollars raising and selling guinea pigs and rabbits to a research lab at Mass. Aggie College (U. of Mass.) around 1930, but that only lasted a couple of years when they started hurting for money. After that I only kept some rabbits which we used for food through the middle 1930's. I was able to sell some of the skins for fur, and actually used one myself for a class at Stockbridge School in 1936. It was for a lab involving mounting a skin. Thankfully there was no grading, it was a pretty lumpy critter when I finished!

After 1930, jobs and money were scarce, and sales of produce were drastically reduced. Strawberries and sweet corn sales persisted for several years until the cost of production became higher than the return. A shelter with tables and chairs was set up on the edge of the strawberry field and the pickers brought their full containers there for credit. Strawberry prices dropped to about 10 cents a quart at the farm, and less than that at the markets. Several of my classmates and other kids in town came to work picking strawberries for 2 or 3 cents a quart. I thought they got 3 cents a quart, but at my 65'th high school reunion one classmate was reminiscing about the good old days and remembered picking strawberries at the Taylor Farm for 2 cents a quart. She made enough during the season to buy a bathing suit, so I guess it satisfied her at the time. A few ambitious young pickers would pick 100 quarts in a day, giving them a daily wage higher than many full time workers received.

Some of the berries were sold to local markets in one bushel crates which held 30 quart baskets. There were 3 layers of baskets in a crate and the dividers rested on the layer below, so none of the baskets could be filled above their rim without damaging the berries. This was good for us, but at the store they had to use at least one box to fill the others to good measure. I'm not sure whether my folks gave an extra basket or not, they may have. Sweet corn was another crop that persisted well into the 30's but eventually costs exceeded income and that was dropped. Our corn was always delivered fresh. It was picked early in the morning and delivered to the markets by around 8:30 a.m. The price I remember the folks getting from the markets was $1.00 for a bag of 100 ears, or 1 cent an ear. At the farm they may have gotten 15 cents a doz. During those years a penny was a valuable coin!

The Depression years also had a disastrous effect on tobacco as a cash crop. Tobacco was always a worrisome product to raise. Not only was careful handling necessary, but damage from insects, animals, and weather, especially hail, were all items of worry for the farm family. A sudden summer storm which turned into a hail storm could shred the leaves of a whole field of tobacco, and all that could be done was to plow it under, at a complete loss for the year. We were lucky on our farm, but I do remember hail on several occasions, but only a few plants were damaged at any one time. Another big worry, and perhaps the worst one for my folks, was waiting to find out what the tobacco buyer was going to offer to pay for the crop. As with most agricultural crops, the grower had little to say about the price he would receive for any given
crop. The buyer set the price. About all the farmer could do to increase his return, was to produce a product of high quality and quantity. Most tobacco growers in the Connecticut River valley area did produce a good quality of leaf tobacco and for years it was a good cash crop for most of the small farms. During the Depression however, the price paid to growers dropped dramatically, and even though it cost about 15 cents a pound to raise it, in 1935 the price paid was 6 cents per pound. In 1936 the price dropped to 5 cents a pound, and my folks stopped planting tobacco after that. In fact, two years later the infamous 1938 Hurricane flattened the tobacco drying barn along with the attached shop, as it did to other structures throughout all of southern New England. This effectively put the farm out of tobacco raising, and even though the prices rose to 80 cents a pound during the 1940's, my folks never raised any more.

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Winters were different than summers, but even though the numbers of cattle decreased to thirty or so, the work continued. All of the cattle were held in stanchions or box stalls in the barn cellar. Prior to 1930 the tie up for cattle was on one side of the main barn floor, with the horse stalls on one end, and cattle stalls the rest of the length of the barn. At that time there was only room for the pair of horses and about 20 head of cattle. There was no water in the barn, but a continuous flow ran into a tank outside in the barnyard. The door for the horse stalls opened at ground level at the front of the barn, and the horses were led out and down to the water trough below for water. If they were not working out, and were in the barn all day, they were usually let out for water three times each day. Even in the winter there was seldom a day that they were not used for some chore, pulling a sled or wagon or other utensil, on the farm, or in the community.

On the other end of the cow stable, a door opened on to a 2-stage ramp which made a 90 degree turn half way down, and let the cattle get down to the barnyard area for water. There was about a ten foot drop from the main barn floor to the cellar floor. While the cattle were out getting a drink, the stable had to be cleaned. There were several so-called scuttle holes along the walkway behind the stalls. These were trap door openings in the floor which could be opened to shovel manure and other waste down into the cellar below. This became one of my duties as soon as I was able to hoe and shovel the manure into the scuttle holes, probably when I was 7 or 8 years old. The manure would accumulate in several piles until it could be loaded on a wagon and hauled out to be spread on the fields in the spring and fall. Many farms had manure spreaders with a movable floor and kickers on the rear which were activated in the field while the unit moved forward. We never had one on our farm. We loaded the wagon by hand, and on the field we spread it by hand. Once the technique was learned, manure was spread as evenly on the land as the spreader did, but with considerably more work.

After my grandparents died in 1925, my dad decided to move the stable into the cellar of the barn. A concrete tie up was built in one half of the cellar, with two lines of stanchions facing each other across a 6 or 8 foot walkway for feeding hay and grain. Hay was dropped down from the haymows above, through another scuttle hole in the barn floor. Another chore, morning and night. The remainder of the cellar was left open in the center for cover for the cattle when out in the yard during stormy weather, with a pig pen at one end, and box stalls at the other. This new stable being flat on the ground floor, and opening directly out on to a field, created a different way of cleaning the gutters behind each row of cows. Now we had to use a wheelbarrow which
was loaded as the gutters were cleaned. It took several loads to clean the full length of the stable, and each load had to be wheeled out through the rear door and dumped about 50 feet from the barn. When the ground was soft, and as the manure pile got higher, planks were laid to run the wheelbarrow on. As the slope got steeper up on to the pile, it took a good run for a start to get a full load to the top. Some didn't make it, but it didn't matter, the pile eventually reached that point anyway, after a long winter.

After several years of using a wheelbarrow to carry out the manure, and after experiencing all the difficulties of pushing a loaded one up on to the outside pile in the winter time through deep snow and over slippery planks, my dad installed an overhead track with a metal hopper hanging from a trolley on the track. The track was located so that the hopper could be pushed around alongside of the gutter behind the cattle. By means of a chain fall, the hopper could be lowered down to the floor, and manure from the gutter could be shoveled directly into it, the same as into a wheelbarrow. When full it was raised to its highest point and then the whole load could be pushed out over the outside storage pile and when it hit a tripper at the end of the track, it would release and the hopper would roll over and dump its load. Then it could be hauled back into the stable by a rope attached to it, and the operator, (usually me), didn't have to go out into the yard very far, which was especially appreciated on stormy days. This was a great improvement over the wheelbarrow, but still a major chore each day. This cleaning took place both morning and night while the cows were let out into the barnyard to drink. A group were let out at a time, and their stalls were cleaned and new bedding and fresh hay put down while they were out. When let back in, most of the cows would go right to their stall without any help, but occasionally one would get into the wrong place and the one that belonged there would try to force her out. It usually took one of us to straighten things out and get the intruder into her right place. After a few weeks there seldom was a problem.

Due to the poor economic situation in 1930, my two older brothers left home to take jobs giving monetary return. George, the oldest, married in 1932 and maintained his own household from then on. Arthur Claude, the next oldest, worked at a variety of farming and trucking jobs. After service in World War II, he became grounds keeper at a state institution in Massachusetts. Being the youngest and still in school, I remained at home.

During all of the years when I attended Junior and Senior High School in Amherst, my routine seldom varied. My Dad and I arose at 5:00 am and went into the barn to do chores before breakfast. In the winter, it was usually a rush to get into the barn, because it was comfortably warm there from animal heat. The house was always cold, because the wood fires had gone out during the night. My job of cleaning stables and watering the stock was usually completed by 7:00 am, which gave me time to eat breakfast and catch the bus to school at 7:45 am. After school from 3:30 to 5:30 pm was a repeat of the morning duties. Due to this routine, there was very little opportunity for involvement in extra curricula school activities. However, I have never regretted the work experience and conscientious attitude that I gained during these years.

An amusing incident, which wasn't so humorous at the time, occurred during one of my High School years. This particular year, my schedule had Gym class on the first period in the morning. Gym class usually consisted of a period of calisthenics followed by participation in some athletic sport. This was greatly enjoyed by some of the town boys, who barely got out of
bed in time to get to school in the morning, but after two hours of pitching hay and shoveling
manure, I was not all that enthusiastic about more exercise during the first period of the day.

With the old stable vacant, it soon became a place to store old hay which could be used for
bedding when necessary. I had been keeping several pair of rabbits in small pens in the old
stable and I'm not sure how it happened, but one or more pair got loose and started living in the
piles of old hay. It was no problem because the doors could be kept closed, and the rabbits were
happy. My sale of rabbits to Mass. Aggie ended in the early 1930's, but during the Depression
years, rabbit became a staple for many of our meals, and turned out to be a valuable asset for the
farm. I continued to raise them in the old stable, and I could almost always reach into a hole in
the hay and pull out several young ones, so we had a constant supply.

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Many of the previous descriptions may sound as though life on the farm was all work, and no
play, but actually many of the jobs were enjoyable, and I never felt I was overworked or
mistreated while at home on the farm. In the summer I went swimming in the river which
bordered our pasture every evening after supper, and on Sundays, and even during some work
periods when there was a break in the work. When haying in the lower fields and my father had
to drive a load of hay up to the barn and bring back another wagon for another load, I would run
down to the swimming hole for a swim, and be back quite refreshed to help load the next one.
Often there were several local kids swimming, so I was seldom alone. None of us kids had a
bathing suit, so it was a simple procedure to strip off our pants and dive into the water.

The swimming holes that we used, in this river that ran through several adjoining pastures, as
well as our own, often varied according to how the stream was affected by the annual spring
floods. All of these lower pastures were in the river's flood plain, and would be completely
covered with water during these spring floods. The stream had numerous crooks and turns and
the force of the flood waters would often gouge out deep holes in some of the sharp turns, and
occasionally even cut a new channel and straighten a section of river. Each spring kids from
both sides of the river, Amherst and Hadley, would spend time checking out the deepest holes
where we could dive as well as swim. There usually were two or three good spots to swim in the
several pastures in our area. Since the river was a general division between Amherst and Hadley
farms, kids from both towns used the same pools. We all were good friends and I never knew of
any problems between us. We all swam and played together even though some went to separate
schools. We often were able to maintain a usable pool during low water time in the summer, by
imbedding a plank across the upper part of the pool so that the water would flow over it and
wash out the area below. All of the river in this area had a sandy bottom, so this worked very
well.

This light soil in the river banks also made easy digging for muskrat dens and this is where I did
much of my trapping. I always checked my traps once and sometimes twice each day. During
any flood period I watched the river very closely, and pulled all my traps out when the water
started to rise. I couldn't afford to lose any traps if they should wash away, and the rats would
move out anyway if the water overflowed their dens.
This gives a general idea of my activities on the farm and in school up to my early teens. School days from Junior High through High School were pretty much the same routine, summer and winter. The summer months added much variety, and during the school year, weekends and holidays created some breaks in the daily routines. In the winter ice skating was a very popular activity, especially if one was located near a pond that was cleared and maintained for skating, or in many places for ice harvest. Either one was fine because snow was cleared from both, except that areas cleared for ice harvest sometimes only lasted until late January or February. Snow was cleared so that ice would form from the bottom, and be pure clear frozen water, and not have a mixture of snow in it.

In Amherst, within a mile or so of Mass. Aggie College, ice skaters had an ideal situation. The College pond was maintained for use of the College hockey team, for practice, and possibly some official games, they had no other hockey rink at the time. For practice, a portable frame about 1-foot-high was linked together to form a rectangle the size of a standard playing rink. This took up a major portion of the center of the main pond but still left plenty of room around it and beyond for the rest of us pleasure skaters. Flood lights were set up on poles to illuminate all of the rink area and much of the rest of the pond. All of the ice in and around the rink area was cleared of snow, and the ice actually smoothed with an ice planer pulled by one horse. I don't remember how this planer worked but it left a thin covering of ice scrapings which were swept off immediately by a crew of workmen with push brooms. All of this was about 1/2 mile from my home, so it was an ideal place for me to skate.

I don't remember just how old I was when I started ice skating, probably about 10, and that was with clamp-on skates. With these skates it was necessary to have shoes with firm leather soles for the clamps to hold securely. As shoes became worn and soles became thinner, often the soles would buckle as the clamps were tightened. Many tumbles occurred when a skate would come loose in the midst of a race or other game being played on the ice. Because of this and other frustrations with the clamp type skates, I soon started saving some money to buy shoe skates. This also was a problem at that age, with bodies growing rapidly, shoe sizes changed, and a larger size would be needed. I don't remember whether I bought new or used shoe skates, but before my teens I know I had a pair. There always seemed to be someone who had outgrown their shoes, and with a little swapping or bartering, a pair that fit could be obtained with very little money needed. During my teens most of my skating was in the evenings after supper. Several of us kids knew how to turn the lights on when the hockey team wasn't practicing, and no one from the campus ever objected, so we always had a lighted and cleared skating rink.

Every evening there would be a group of young, and some not so young, skating on the pond. Sometimes all we did was skate around and around the pond, but often a group would get together and have races and play tag games, and quite a bit of jumping for distance and over objects set on the ice. One object was a hockey goal net and frame which we would lay flat on the ice and some of us could jump over it in either direction. It doesn't seem possible as I am writing this, but I know I cleared it several times myself. There were lots of spills but I don't remember any serious accidents with all the foolish things we did. For me these evenings were looked forward to all winter long, and I only missed if it was storming, or if I had some school
homework which I hadn't finished during my study periods in school. I often combined homework with stormy nights at home, so I didn't miss skating on most good evenings.

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Another annual chore each winter was cutting and hauling home our yearly supply of firewood from our family woodlot in Leverett. This lot was about 5 or 6 miles from home by road, but in the winter with a sled on snow, we could cut cross lots across several farms from home on North Pleasant Street up over a height of land to East Pleasant Street, and then on through Cushman to our woodlot. A period of bare ground in the winter would force us to use a wagon and follow the roads, which took more time and labor for the horses, so we often waited for a good snow cover for these trips to the wood lot. Traveling with the sled we had to cross the two main roads, North and East Pleasant, which were plowed fairly regularly in the 1920's, but the rest of the way was over fields, road shoulders, lawns and finally on gravel roads which were seldom plowed. With a good layer of snow on the ground it was usually good sledding all the way to the woodlot, but sometimes a warm sun in the middle of the day would melt a light film of snow on the main roads and leave bare spots in the areas where we had to cross on our return trip with a load of hardwood on the sled. Several times before we could cross the bare road, we had to shovel snow from the roadside and put a layer of snow across the road where the sled was going to go. My dad didn't swear but, several times I heard him muttering under his breath about the road supervisor plowing the roads too close and spoiling the sledding. My dad never drove a car, so his only thoughts were about horses and sleds when there was snow on the ground. The highway superintendent must have gotten it from both sides, there was no sanding of roads at that time, and there were times when I skated on the road in front of our house. The ice was so thick no cars could travel on it, even with chains on. We often had freezing rain during those years which coated everything with ice. What I enjoyed the most about this, was the heavy layer of crust it would create on top of the snow, which we could slide on for long distances on slopes in the area. Another fun thing in the winter time!

With the pair of horses and a sled, we made good time except when we hit a bare spot and had to shovel some snow to make a passage. When we arrived at the lot, we parked the sled where it could be loaded handily, unhitched the horses and tied them nearby. Then with crosscut saws and axes, we cut down a supply of hardwood to make up a load for the sled. We always cut the trees into what we called sled length, which was about 16 feet long to fit on the sled and overhang at the back 4 or 5 feet. When we figured we had enough, my dad would get one of the horses and start hitching her on to a stick or two of the wood and she would drag it along side of the sled. Usually it was getting near noontime by then, and he would tell me to gather some dry wood and build a fire where we could have lunch while he yarded the wood out. This was a job I always looked forward to, it was a break from pulling on one end of a crosscut saw, and I was hungry. There was a special place where we always built our fire, near an opening between two boulders that leaned together and created a sheltered spot to get out of the wind and any storms that might occur. When the fire was going good my father would put some grain in a feed bucket for each horse and hang it over their heads so they could eat, and then bring our lunch pail over to the fire. I would have some forked sticks ready to put our sandwiches on and toast them over the fire. For a drink, we often had a mixture of about half and half, cold milk and coffee, a mixture I liked then, and still do today. Sometimes on a cold day this drink would be partly
frozen, so we would place the container near the fire to warm it a little. We had to be careful with this, our containers were glass bottles and if heated too quickly would crack and our drink would be gone. I learned this the hard way trying to warm my drink too fast. I never did it again. As soon as we finished lunch we started loading the sled with the pile that had been pulled up alongside earlier.

This was real hard work; some pieces were small enough to lift directly on to the sled from the ground. For the larger ones we placed two skids from the ground up on to the sled body and rolled or slid these up the skids. Our loads were usually about 1 cord or a little more, which was about all we could put on the sled by hand, and also was all the horses could pull if we happened to run onto some bare ground on the way home. When the sled was fully loaded, it was necessary to bind it securely to hold it all in place for the trip home. The procedure was similar whether the load was on a sled or wagon. Two chains were looped around the load, one near the front, and one near the rear. The front chain was pulled together as tightly as possible using a commercially made chain binder, which drew the chain tight by means of a hand operated lever. We apparently only owned one binder because to tighten the rear chain, we always used a spring pole. This was always a young hardwood sapling, usually hornbeam, which would be inserted into the looped rear chain so that as it was pulled over toward the front of the sled it would create a twist in the chain, and bind that part of the load nearly as tight as the commercial binder did. This pole would be pulled down as far as possible, creating great tension in the pole and placing the tip near the front chain which it was tied down to. Actually this spring pole binder maintained a tighter chain than the commercial binder did. As the sled, or wagon, traveled over rough roads and fields, the load of uneven shaped hardwood logs would shift and settle, and the chains would slacken. The tension in the spring pole would take up the slack automatically as we traveled. The chain binder on the other hand, would have to be reset periodically, to retighten the front chain as the load shifted. This was probably the reason my dad only had one chain binder, and it was necessary to have, to squeeze the load together before setting in the spring pole.

From the town road to our woodlot, we used a one lane woods road which some claimed was at one time a branch of an old Post Road between Boston and Albany, N.Y. At one time it had been a well-built road. Several culverts which crossed this road were constructed of large granite slabs which in the 1920's and 30's were the best part of the road. The last several hundred feet up to our woodlot was a fairly steep incline, and at that time some erosion had occurred which washed out portions of the road, but the granite culverts were intact, even though in some cases the road was washed out around them and these holes had been filled in with sticks of wood and other debris. In winter time these eroded areas were filled with snow and ice, and the road was quite smooth, although very slippery. This created a serious problem for the horses to hold back the heavy load of hardwood as we left the woodlot area. To help hold back the sled, a heavy chain was looped over each rear sled runner so that as the sled moved forward, the chain would slip back under the runner, and gouge into the ice and snow which slowed the sled enough to ease the pressure on the horses, which in some places had a hard time maintaining their own footing. If there was a lack of snow for sledding and we had to use a wagon to haul the wood, a similar devise was used to lock up the rear wheels on these slopes in the winter time. A chain was wrapped around a wheel near a spoke and a loose end of the chain was fastened securely to a log or the wagon frame. As the wheel turned forward, enough slack was left in the chain to let
the wheel turn until the chain was directly under the wheel and the wheel was locked from turning and the chain would dig into the ice and snow as it did on the sled runners. Whether sled or wagon in the winter, even if there was bare ground on the main roads and in the fields, there was almost always ice and frozen snow on this shaded woods road, so applying these chains on the downhill slopes was a regular procedure.

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One incident which I remember occurred one summer about 1930. My brother, Claude, was living at home, probably still attending Smith School in Northampton. (Both George and Claude went to Smith School, instead of Amherst High). Our father had talked about cutting some gray birch in the woodlot during the summer so it would wilt and be partially dry for use in our cook stove in the fall. One day Claude said to me that we ought to go up and cut some of that birch that Pa was talking about. Claude was driving my mother's old Model T Ford at that time so we got our axes and a saw and drove up to the lot. In the summer, with the high wheels of the Model T, we were able to drive right up to the woodlot. We parked the car near the boulders where we usually ate lunch, and took our axes and saw in to where there was a small stand of gray birch trees. Gray birch are short lived trees, and never grow very large, and this group was very representative in size, ranging from 3 inches to 7 or 8 inches in diameter at the base. We started to cut the larger trees to make room for the smaller ones to fall. To cut these larger ones we first chopped a small notch in the base on the side where we wanted the tree to fall, and then with our saw, we sawed into the back side until the saw blade got within an inch or a little less from the back of the notch. These trees not being very large, we then could push them over by hand with the small amount of wood at the back of the notch acting as a hinge to control the direction where the tree would fall. As one of these trees started to fall, a branch caught the top of a smaller gray birch nearby and bent it almost to the ground before it let go and the small tree sprung back up almost as straight as it was originally.

I think we both got the idea at the same time that we could have some fun with these gray birches. Swinging birches is something that most every country boy, and many girls, had done if they had access to an open stand of gray birch. This species is very limber and the top will often bend clear to the ground without breaking. This can be observed quite often after a heavy wet snow fall, or ice storm during the winter. For a person to swing a birch, all one had to do is climb up the tree as high as possible and when feeling the tree start to sway from the added weight, hold tightly with both hands and swing your body out in the direction where you want to land. If all conditions are right, (your height in the tree, your body weight, and size of tree), the tree will bend quickly at first, and slow up about half way down and deposit you very gently on the ground. A heavy person may hit the ground a little too hard, and a light person may end up dangling several feet in the air, but that is all part of the fun. Claude and I couldn't resist the temptation, and for the next hour or so we climbed and swung from just about every tree in that grove that we could climb.

We finally decided we had better get to cutting some wood, or there wouldn't be a load ready the next time Pa came for it. We finished cutting the larger trees with the ax notch and using the saw for the back cut, and then cut all the rest with our axes. Even with the time we spent playing, we still cut more wood that day than our father could haul on one load.
One other incident I remember was one winter day when I went with my father to the wood lot to cut and haul some pine logs to a saw mill to have them sawn into lumber for our use at home. Everything went well in the wood lot. We set the sled on the road beneath a bank that was 3 or 4 feet high, cut several pine trees into logs and with one horse hauled them out on to the bank above the sled. From there it was fairly easy to roll the logs on skids down onto the sled. When we were loaded and all chained on tightly we set off to the sawmill which was located in North Amherst in an area called Slab City, obviously because of all the wood slabs produced by this sawmill. The road to the mill came from Cushman, past the pond and home of the Wheelock’s, and the house Mary and I rented from them when we were first married, and then turned down around the lower side of the dam and to the mill which was located below the road and used water from the pond for power. These roads were all snow covered and in excellent shape for sledding, and the local kids were sliding from the hill above and then on to the mill road near the dam. As my father turned the team from the pond road on to the mill road, a boy on a sled came speeding down the hill and right under the team of horses. He almost made it through, but the second horse was stepping forward and put one foot down right on top of the boy and his sled. Fortunately, the horse felt something wrong when she stepped down, and was able to keep from putting all her weight on the boy's back. I don't remember how it all came out, but someone took the boy to a doctor and he wasn't hurt real bad. I do remember seeing his sled afterward and some of the top boards were broken, but they could have been broken before. Kids used anything they could get hold of in those days to have fun with. In those days accidents happened, even with horses and sleds.

Another memory about swinging birches, where I learned a valuable lesson that stayed with me for my lifetime, occurred one summer day when I was walking alone along a stream that ran through our pasture. There were a number of 3 or 4-inch diameter saplings growing on the stream bank and leaning out toward the open pasture. On an impulse that they looked like ideal trees to climb and swing out over the grassland, I picked a nice looking one, and started to climb. I got up to where it narrowed down to about 2 inches and figured this would be a good place to swing out and let the tree bend and lower me gently down to the ground. I reached up as high as I could and swung my body out to start the tree bending toward the ground. Before I could swing my feet out to put my full weight bending the top down, I heard a snap, and the next thing I knew, I landed flat on my back on the ground, a fall of probably about 8 to 10 feet. I was fortunate to land on grass and soft earth, but even so, the force of landing completely knocked the wind out of my lungs and it seemed to take minutes, although probably seconds, before I could get a breath. When I finally got fully breathing again, and determined that I wasn't injured, I looked to see what had happened. Then I realized that the tree I had tried to swing was not a gray birch, but was an aspen, or popple as we knew it, and was very brittle and would not bend like the gray birch, and had broken clean off just below the spot where I was hanging. Right then I learned to identify any tree that I planned to do anything with, for a stunt, or for any useful reason.
This episode of trying to swing a popple tree occurred during a period of my life, probably from 7 or 8 years old through my mid-teens, when I spent many hours roaming over most of the farm land from the center of North Amherst to and including Mass. Aggie (Univ. of Mass.), and across the road from our farm up to East Pleasant Street, and into Cushman. At that time this area was almost entirely open farm land with some scattered small wooded areas along ravines and in pasture land. As I was doing some trapping of muskrats at that time, I was continually looking for muskrat sign along streams, and often traveled alone, but some of my friends in the neighborhood would sometimes go with me. Dick Bigelow across the street, Allen Larned from down the street, and Gordon Hobart from North Amherst center all enjoyed this roaming, so sometimes all four of us would be out together.

I knew the land better than most, because of a duty that my dad had with the town of Amherst. For over 50 years he was appointed Field Driver and Pound Keeper for the town. In those early years this often involved chasing down, rounding up, and catching stock that had broken down a fence and escaped from a pasture, and was roaming around in other farmer's fields. This was the Field Driver part of the position, and taking the animals back to our barn and caring for them until the rightful owner came for them, was the Pound Keeper part. The owners were supposed to pay my father for the food and care when they came to pick up their animal, and I guess most did, but it hardly ever paid for our time. It wasn't easy to catch a healthy young heifer when she started running across several farms, jumping fences on the way, and running through new planted crops. Sometimes the locals would get out to help, it was like going to a fire, some excitement, and they would be some help in heading it off so we could get a halter on it. I never knew of an animal getting hurt with all this activity, but I thought one was going to be killed this one time.

There was a deep gulley with a stream in the bottom running down through the fields from North Pleasant Street to the river that ran through all of the lower pastures. This one time a young heifer was loose and was racing toward that gulley. Apparently she thought she could jump across it and sailed out into the air from one bank and dropped head first into the opposite bank. Her neck doubled sideways as her body flipped upside down into the bank, and then rolled back down into the stream. I was standing on the opposite bank trying to head her off at this gulley, so I got a good look at the whole incident, and I was sure she had a broken neck when she rolled back into the stream, but the next thing I knew she was standing up and scrambling back up the bank she started from. This was tiring, and the whole incident took the starch out of her, and we soon had a halter on her and took her back to our barn with no ill effects except for a coating of mud. A little more excitement than usual, but no harm to her. We collected all kinds of animals over the years, horses, cattle, sheep, goats and pigs, but as farms disappeared, most of the animals that ended up at my folk’s farm were dogs and cats brought in by the Amherst Police. Some were retrieved by their owners, some stayed on as pets, my folks loved animals, but many were put to death when there was no claim for them.

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We all got well acquainted with the local farms, some were dairy farms, but many, like ours, raised tobacco, onions, potatoes, etc., for a cash crop and food for themselves. The Gaskill Dairy Farm, which bordered the Taylor Farm for its entire length on the south, was a very progressive farm. Mr. Gaskill, the owner, (I can't remember his first name), worked for the Mass. Aggie Experiment and Extension Service, and tried out and promoted many new and forward looking ideas on his own property. He was one of the first farmers in the area to plant alfalfa as a forage crop, and also rotated his pasture land to maintain good feed for his cattle in their summer pasture. His stables were in excellent condition with fine hay barns and silos adjacent. Of course, his position at the college gave him an added income, but his methods and top notch herd of Jerseys produced an excellent supply of milk with a high milk fat content, which paid well at that time, so his farm was not just a gentleman's farm, it was also a highly productive and lucrative farm, also raising pigs, chickens, turkeys, and some ducks and geese. With all of this, his farm crew occasionally had some problems when trying out new equipment or ideas. As with all farmers at that time, circa 1930, horses were his primary farm power. He had at least two teams of horses which were used regularly for plowing, tilling, mowing, and hauling farm products. Trucks at the time were becoming more common and dependable, and he decided to try one out on his farm to haul fertilizer, seed, and crops when they matured.

In the middle of haying season, about 1930, my father and I were loading hay in one of our fields near one of Gaskill's hay fields, where his crew was doing the same. The difference was that they were loading their hay on to a truck with an elevator conveyor attached to the rear which picked up the hay which was in a windrow straddled by the truck as it drove around the field. This conveyor was a great labor saver in lifting the hay from the ground to the top of the load, but it did take much more power to pull and activate it, so it really needed the extra power of a truck to pull it. It also required about the same crew as before, with one man driving the truck, and two men on the load moving the hay from the rear, and spreading it evenly over the truck body to build a good stable load for the trip to the barn. These fields were quite similar, fairly level, with an occasional low spot that would be soft after a good rain. In fact, Gaskill's fields extended from a slope running down from a slightly elevated area which has since been developed into housing. My oldest brother, George and his wife Jennie, built a house there, where Jennie lives today, in the year 2000. Because of the layout of Gaskill's fields, and due to a rain about two days earlier, there were some soft spots in those fields. The truck was nearly fully loaded when it crossed one of these soft, wet spots. The driver, not being accustomed to driving a truck in a field, and probably not at all, slowed down and then speeded up suddenly when he felt the wheels sinking into soft ground. Applying the gas suddenly made the rear drive wheels' spin and sink deeper, and the truck was stuck. With the loader behind they couldn't back up, so one of the crew went to get a team of horses to pull the truck out of this wet spot. The team was hitched to the front of the truck and when they were ready to pull, the truck engine was started with the intent to drive forward as the team pulled.

The idea seemed alright, but the team was not used to the sound of a truck engine roaring away, especially right at their heels. When the teamster urged them to pull and the truck's engine roared as the driver tried to help by driving forward, the horses were frightened and instead of pulling together evenly, one would jump ahead and then the other would, creating a seesaw arrangement which did not move the truck at all. When my dad saw what was happening, he said, "My God, they will ruin that team if they keep that up!" I knew what he meant because I
knew that a pair of horses had to learn to pull together before they could become a team. One of the crew realized that too, and they shut off the truck engine, and tried to make the horses pull the loaded truck out of the hole which they had already made deeper. With the excited horses not working well together, and the loaded truck sunk deeper into the soft ground, nothing moved, so the 3-man crew spent most of the rest of the afternoon unloading the truckload of hay, and digging out in front of the rear wheels. By then the horses had settled down enough to pull together and haul the truck on to firm ground. My dad said later that those horses would never make a good team again after an episode like that. For Mr. Gaskill that was an experiment that went wrong, and we never saw his truck being used again in his fields, although soon after we did see trucks in fields, but usually there were tractors available to help them out of similar troubles.

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On the other side of our property toward North Amherst center were several farms of various sizes all the way to Meadow Street. From the back door of our hay barn one could see north over open farm land for nearly a mile, and west into Hadley a much further distance. The next door farm which shared our boundary line, which was also a common pasture fence for both farms, was about the same size as ours, but with various owners and aims over the years as I was growing up. We spent many hours maintaining this common fence with very little help from the tenants of the other farm, many of whom had no stock, and were not concerned with the fence which we needed to keep our stock at home. One family worked the land as we did, raising tobacco, onions, potatoes and other crops, but when the Depression hit in 1930, they couldn't make a living and payments on the property, and they moved out. The next owner moved into the house, rented out the land, or sold hay, but converted the barn into a large chicken house. He never got up to full production, probably didn't have the interest or markets, and was away a lot. He hired me several times to feed and water his chickens twice a day. He paid me 25 cents a day for the work I did, and I was very happy to get it. That was the first money I ever got paid, for working for anyone. After another year or so he abandoned the farm and another couple moved in. They had local jobs, possibly at Mass. Aggie, and lived in the farm house for several years. Several local farmers utilized the fields for hay and crops until after World War II, when developers took it over. It now has apartments on the land.

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The next open farm land was crop land owned by Robert Adams Dairy which was the largest dairy in North Amherst, and one of the largest in the Amherst area. Bob Adam's residence was on the west side of North Pleasant Street, the same side as our farm, but his barns and dairy and other fields were on the other side of the street and closer to our farm. Near these buildings was a large farm house and a separate house where several of his farm hands lived. One employee had several children about my age who I played ball with in a pasture behind the house. There weren't many kids our age in the neighborhood, so we often played baseball or football with only 2 or 3 on each team. We also roamed around through Adam's farm buildings, so I got to know my way around most of the farm buildings in our neighborhood. Adam's Dairy was up to date for the times, and from his herd of Holstein and Jersey cattle, he produced, pasteurized, and
home delivered milk and cream throughout the town, and probably to some stores. His fields were used exclusively for hay and corn silage for cattle feed, and for pasture.

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On the same east side of North Pleasant Street toward North Amherst center, was a farm owned by Arthur Hobart, and near him lived a son, Harold Hobart. Both families were related to Gordon and Gardner Hobart, Arthur their grandfather, and Harold an uncle who was twin brother to Harland, who was Gordon and Gardner's father. I don't remember either family very well, although I had been to the farm with my dad a few times and had met Arthur Hobart. The farmer lived across the road from Bob Adam's residence and had a small herd of cattle. I don't know where he sold his milk, possibly to Adam's, or maybe to Hood's Dairy in Springfield. My memory of Mr. Hobart is that he was killed in a stall by a bull he was raising, in the early 30's I think. I have since heard that his son Edward (Ned) Hobart took over the farm, and eventually sold it to one of the Jones family, probably Walter. The area now is heavily developed, both on and around the original farm. Jones is probably the only one who made any money from it!

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The next farm land north of Adam's land on the west side of North Pleasant Street, was owned by Ned Puffer who was in the business of selling hay, grain, ice, and gravel. Puffer's pond and ice house were located near Wheelock's home and below their cottage where Mary and I lived for the first year or so of our marriage. I don't know whether he owned the pond or not, the Wheelock's house was near the dam, and water from the pond supplied power to the mills below, so a number of people had an interest in it. At any rate, Puffer cut ice and stored it in an ice house from that pond for many years. On one or more occasions while we lived in the cottage above the pond we overheard a worker in the ice house singing to himself. It was a local black man and his voice sounded very nice to us. We wished he would sing more often! Ned Puffer owned several trucks used to haul his products and deliver ice. He also had one light truck which was outfitted with an enclosed cab and body with seats along the inside of the body. This was the school bus that he drove to carry North Amherst kids to Amherst Junior and Senior High School. I rode on it quite often while going to Junior High, and occasionally while in High School, although then I mostly rode my bike or walked. This bus had no heater, and a hand operated wiper for the wind shield. Where we lived, I was always the last student to get on the bus, and I recall several times when it was raining or snowing, Ned would have me stand beside him in the front and work the windshield wiper by hand to clear the view. He was a large man, with a big stomach, and had a hard time reaching up to turn the wiper, and I think he waited for me to get on to do it for him. He always called me 'Tate', which is what he called my father.

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A farm road going down through Puffer's fields from North Pleasant Street was of a little better quality than most farm roads and was used for access to the pasture land near the river, which was similar to our pasture and others along the river. The difference in this area was that it was not used for pasture but had a slaughter house located on it. This place operated under conditions which would be outlawed today, but were accepted at that time. When animals were
slaughtered, blood was saved in tubs and the stomachs and intestines were dropped into the basement of the building. Several hogs were housed in this basement and they fed on the contents of these entrails that were dumped there. I'm sure they had access to other food and water, but they kept this waste material cleaned up pretty well. As kids, when no one was around, we looked into the place but the hogs appeared vicious, and we never stayed long. I never went near it alone, I didn't like it, although I was familiar with slaughtering animals, we always had a hog of our own butchered each fall for our own use, along with chickens and rabbits.

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All of these fields from the Taylor Farm to Meadow Street in North Amherst have been developed into some type of housing, primarily for students and others from the University. One development on Puffer's old property is now called The Puffton Apartments, and most of the other fields have condos or apartment buildings located on them. All of the buildings that I grew up with on the Taylor Farm are completely gone, but if they were still there, it would now be impossible to see beyond the apartment buildings on the next farm. The Taylor Farm was purchased by the University of Mass. with the intent to install an interchange at North Pleasant Street and establish a new bypass road down through the property, and then south along the lower portions of Gaskill's farm to University property to connect to roads near the athletic facilities. The intent was to relieve traffic on North Pleasant Street where it cuts through the campus, especially during change of classes. After selling the property to the University, my folks had a limited time to remain living there. When this time was up, an ironic twist occurred, that as part of his duties at the University, Gordon Hobart was the one who had to tell my folks that they had to leave by a certain date. My father, who had lived in that house for 80 years, was heartbroken to have to move. A short time after getting this notice, on April 12, 1970, while standing in the living room, he collapsed on the floor, dead. My mother moved to an apartment in Amherst, but in less than a year, on Jan. 8, 1971, she also passed away. To leave the old homestead was a terrible shock to both.

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My mother's family, the Albee's, lived on East Pleasant Street. To get to their house, I could walk across some fields behind Allan Larned's home and travel on a farm lane that ended not far from the back of the Albee's property. I was probably 8 or 9 years old when I learned the route to their house. I am not sure of the relationship of all of those who lived there at the time, mostly aunts and uncles I think, but I did go there a number of times. Whether I ever met my Grandmother Albee, I'll never know, she was divorced from my mother's father, Fred Humphrey, and married George Louis Howard. I don't recall ever meeting either of them. Fred Humphrey died without a will and even though he didn't intend it, all or at least a major portion of his estate went to my mother who was his closest living relative. My first auto was his, that she received as part of his estate and gave to me. As far as I know, Humphrey never had any contact with my mother or any of our family. My memories are very vague about visits at the Albee's. What I remember most was picking hazel nuts from some bushes on the lower part of their property. At that time there were few insects and the nuts were plentiful, and delicious.
Two farms beyond the Larned farm was Mass. Aggie, (University of Massachusetts) land, some
of which was wooded, and some was orchard. Being an agricultural college, it had an extensive
orchard area of apples, and several varieties of other fruit and grapes. When these fruits were
ripe they were a great temptation for us youngsters to get a sample, but it wasn't only us kids that
were tempted. One night a couple of us went over, or under, the fence which surrounded the
orchard, to get some grapes which were planted in rows. As we walked around one end of a row
we came face to face with a man on the other side. He was as startled as we were, all of us
expecting we were meeting a night watchman. We ran and got out of there as fast as we could,
and I think he did also. I never went back into that orchard after that, but I did spend a lot of
time in that area which was partly wooded and had a steep slope on one side which ended up into
a field. A road up through this wooded area which goes from North Pleasant Street to East
Pleasant Street was called Lover's Lane. It was a favorite walk for young couples from the
college.

Another attraction, at least for me, was a toboggan chute that some campus group built down the
slope not far from Lover's Lane. I didn't have a toboggan myself, but did get a few rides down
the chute on one that was left there by someone. Some of us kids slid down on pieces of
cardboard, but they didn't go as far, and were hard to control. Someone built a ski jump
alongside of the chute, but neither structure was there for more than 2 or 3 years. I think
someone got hurt on one or the other, and the college stopped their use.

About this same time, when I was about 10 or 11 years old, I got interested in joining a Boy
Scout Troop. There wasn't one in North Amherst at the time, but I heard that there was a group
that wanted to start a new troop in Cushman. I believe the interest was started by a young man
from England who was a student or visiting professor at one of the colleges, and was living
locally. Being from England where it all started and where he had been involved with scouting,
he felt that all boys should be in scouting over here. He volunteered to be the scout master for as
long as he was here, and enough kids got interested to form a troop. One of my older brothers, I
think it was George, had been a scout 10 years before, and my mother still had some of his scout
clothing stored away, so I was able to have a scout shirt and maybe some other parts of a uniform
to wear at our first meeting. This made me look as though I knew something about scouting, so I
was elected as a group leader and given some other official duty which made me part of the
troop's officials. I think I was quite serious about being a scout, and got more involved than
some. I don't remember many details, but I did earn several merit badges, and was involved in
some of the ceremonies to open a meeting, and at special affairs. I liked the scoutmaster but
after about 3 years he left to go somewhere, perhaps back to England, and one of the parents took
over for a while but, he wasn't very enthusiastic about being a scoutmaster, and the troop slowly
dissolved.
As scouts, several of us had become good friends and had gone on overnight camping as scouts, and then continued it on our own. We had gone to a camp site at Lake Wyola in Leverett several times, as scouts and later. During this time, we heard that there were some cabins on Mt. Toby that we might be able to use. One of our group learned how to get to one of these camps, and we decided to try to find it. We rode our bikes up to the southern end of Mt. Toby Reservation and after crossing through a pasture, left our bikes in the bushes, and hunted around for a trail which turned out to be quite obvious, once we found it. We hiked quite a way up on to the mountain and began to think we had missed it, or there wasn't any camp, when someone yelled that he saw it. It was just off the beaten path, and looked pretty run down as we approached it. It turned out that it was the oldest camp of three on the mountain, but it had a good roof and a cook stove, and several bunkbeds. We had brought food for an overnight stay, with the hope and optimism that we would find a cabin, and so we settled right in.

As it turned out, over a period of perhaps 3 years, several of us stayed in this camp at least 3 times, and in another much nicer camp, several more times. None of these camps had locks on the doors, and we never met or knew any of the owners. The older one probably was built by local people before the area was made a Reservation. All were log cabins, and the nicer one we had heard was built by some college professors, but I never knew who they were. They evidently didn't mind others using the cabin. They had a sign inside that said to leave the cabin clean, and replace the firewood before you leave. We must have done all right, no one complained, and we often met people on the trails. The third cabin belonged to the college Outing Club, and was used more often, so we never tried to stay there.

We never saw much wildlife on the mountain, usually we were making too much noise, but one night around eleven, four of us were in bed talking when we heard a thump on the roof. We grabbed our flashlights and ran outside. On the roof, looking quite surprised, was a bobcat. When it realized what we were, it ran over the roof, jumped to the ground, and ran off into the woods. It was the only time I ever saw a live bobcat, and as we were discussing it later, it could have been aggressive and jumped on to one of us, but I think the lights scared it as much as anything. We had a lot of fun staying in these cabins and hiking the mountain trails. We got to know the trails so well that we often went on midnight hikes around the mountain and always knew where we were. This was in the early 1930's and when I went into the reservation with some of my family in 1998, in the rain, nothing looked familiar.

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Some of these friends from scouting and camping remained friends for many years, but most eventually drifted away. George Monette was one whose whole family got to be like a second family to me. When we started in scouts, I met George's folks, who lived in a house near and belonging to the Harlow dairy farm on East Pleasant Street where Mr. Monette worked. He was one of several Vermonters who moved their families down into southern New England to work on dairy farms after World War I. Bob Adams had at least 2 men from Vermont working in his dairy. Most of these dairies had apartments or separate houses for these families to live in. These men all had close association with dairies or cattle farms in Vermont, and were in high demand for that type of work in southern New England, especially since they were used to long hours and hard work. The fields and pastures of Bob Adam's Farm abutted the fields and
pastures of the Harlow Farm, and it was nearly a straight route for me to walk over to Adam's Dairy yard, and then walk about one half mile up his gentle sloping farm road to the top of the hill, where I crossed over a pasture fence into Harlow's fields. From there it was about another half mile across these fields to the Monette's home. I started using this route while in scouts, to meet George, and go together to the scout hall. It was about 2 miles from his house to the scout hall and I would often leave my bike at his house and when I got there, we would ride our bikes from there into Cushman to the hall. Sometimes I rode all the way from home, through North Amherst, up Pine Street to either the Scout hall, or to Monette's home.

George had two younger sisters and with the same group that camped together on Mt. Toby, we all chummed together, and spent a lot of time at the Monette's home. The girls may have been an attraction, but for me they were more like sisters that I did not have, and I enjoyed being with them in the house where we would all join in playing cards, and sometimes assembling a jig saw puzzle. Lillian was the nearest to my age, George was older, and Dorothy (always called Babe) was the youngest. This was all during the early 1930s when I was in Junior and Senior High School. I spent many evenings and weekend days at Monette's. They were like a second family to me. For the first couple of years that I knew them, they lived in the Harlow house near the dairy farm, and then the farm was being sold and they moved to another house in Cushman village. I believe they bought this house, and at about this same time George got a job in Amherst delivering telegraph messages for Western Union, on his bicycle. This was the depth of the Depression, 1934 or 35, and any job was welcome. Mr. Monette got work on one of the government work projects, W.P.A., (Work Project Administration), where the work week was split, with one crew of men working three days, and another crew working another three days, they didn't work Sundays. Mr. Monette usually had some work the rest of the week at the Harlow Farm or elsewhere. I know he received eleven dollars for the three days on W.P.A., and may have earned another eight or nine dollars at other work the rest of the week, which gave him a good salary for the times, for a six-day week. Mrs. Monette took in some washing and ironing also, and with George contributing some of his salary, they seemed to make ends meet.

I can remember the first time I ever saw oleomargarine was at their house. I was sitting at the kitchen table talking with Mrs. Monette and she handed me a bowl with what looked like lard to me. With it was a small envelope with some orange colored powder in it. She told me to mix the coloring powder in with the lard, which she called margarine. I asked her what this stuff was, and she said that it takes the place of butter, and would look like butter if I mixed it up right. I was always willing to help out there so I started mixing. It ended up being more of a job than I had anticipated to get the coloring uniform throughout, but I finally got it to her satisfaction, and found out that margarine was cheaper than butter, and they had been using it for some time. We still used butter at our house, and I had never heard of margarine. After that I mixed the coloring several times at their house until they were able to buy it with the color all added, and it was called oleomargarine, or simply oleo as it is today. People wouldn't buy it at first because it looked like lard, as I had thought when I first saw it without the coloring, and the company added the packet of coloring as a do it yourself project, and then added it themselves to improve the looks and sales. The lower price during the Depression helped to get sales started on oleo as a substitute for butter, and it has continued in very general use to this day.

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During my senior year at Amherst High School, the Principal, Ralph Haskins, began to talk with all of the seniors individually, about their future. There were no guidance counselors in our schools at that time, and the principal and some teachers tried to guide students into a job or higher education. Some already had plans for college, and didn't need much guidance. Others, like myself, really hadn't made any plans, or even given it much thought. Ralph Haskins spoke to me several times in his office about my future plans. Of course he asked me if I had any plans or thoughts about what I would like to do in the future. I told him that I really hadn't thought that much about the future, but I had helped a veterinarian when he had come to our farm to doctor some animals, and I thought I might like to do that. We looked into it and soon found that both the cost and the course material were beyond my capabilities, that was ruled out. Mr. Haskins suggested joining the Coast Guard, but I had very little interest in that, and since there wasn't much else to be offered during those hard times, we pretty much left it at that. He certainly tried to help me make up my mind to do something, but I probably wasn't much help at the time. I had taken the general course in high school which was not aimed for a college education, and because of that, college was pretty much ruled out.
Post High School Years

Experience and Education

After I graduated from high school in June of 1935, I started looking for a job. A steam line was being put in on the Aggie campus in a deep trench in which the steam pipes would be completely enclosed when the line was completed. This would have been all pick and shovel work, the trench was at least 8 to 10 feet deep, and mostly all hand dug. I applied there for a job, but with so many men looking for work, the boss wasn't about to hire a kid right out of high school, even if he claimed he knew how to use a shovel. I came home pretty dejected, I really hadn't appreciated how hard it was to get a job, there always had been plenty of work on our farm and the other farms that I was familiar with and I hadn't paid attention to lines of men applying for work on the few construction jobs in the area.

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I do remember getting one job on construction. It was in Northampton on construction of a dormitory for Smith College, immediately after my graduation from high school. I have no memory of how this job came about, or how I got to the site, it must have been through someone already working there who recommended me. He must have been embarrassed, because as I remember, I didn't last one day. The job that day was to wheel loaded wheelbarrow loads of concrete up a series of planks to the second floor where it was spread for a permanent concrete floor. Three or four of us were working in line so as to keep a steady supply to the crew spreading it into forms to create the floor. The ramp was in two stages to reduce the steep angle from the ground floor to the second floor. When my turn came I started up the first set of planks and barely made it to the mid-landing. Those loaded wheelbarrows weighed several hundred pounds, and were just about all I could handle on flat ground, never mind up an incline. I should have quit right there, but being a little stubborn and proud, I started up the second ramp. After only a few feet the wheelbarrow started to tip sideways and I could not hold it steady, and over it went spilling concrete over the plank on the ramp, and down to the ground floor. I managed to hold on to the wheelbarrow and get it back upright with about a third of the load inside. I wheeled that up and dumped it, and went back down on the return ramp to the ground level, and the boss. I expected a real blasting from him, but he was either a real nice guy, or in a real good mood that day, because all he said was," Well Son, that's the only job I have open for a few days, and if you can't do that, I can't use you here". It was obvious to me, and everyone else I'm sure, that I couldn't handle those heavily loaded wheelbarrows, so I left, and that was the end of my attempts at construction work.

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I did get a job at a Brick yard in South Amherst, which lasted a little longer. Here I was able to do most of the routine jobs, like placing the pallet molds in the clay mixing machine, and removing them when they came out the other end with the molds full of clay. On each pallet were 8 molds, each the size of one brick, and after being filled with fresh clay, was removed from the mixer, placed on a wheelbarrow, and replaced with an empty pallet for the next filling.
There were several pallets in the clay mixer at all times, so there was one full one coming out of the machine continuously, with very little break between. When the wheelbarrow was loaded, another worker wheeled it into an open yard where the pallets were spread out to partially dry and harden in the open sun. While he was gone another wheelbarrow was being loaded and made ready to be taken out as soon as the worker returned with his empty one. Most of the jobs in the brick yard were continuous like this unless a malfunction of machinery occurred, or a brief stop to replenish the clay supply and let the machine work it up into a consistency for it to fill the brick molds. There were opportunities to swap jobs with another worker, which didn't give anyone a break, but the change made it seem like one.

The one job that did me in at the brick yard was when we were building the kilns up to finish off the hardening process with heat from a fire. The sun dried bricks were brought in and stacked a certain way to form a beehive type of structure with vents at the top and bottom to ventilate and control the fire. An experienced worker built the kiln and I had the job of handing him the bricks from the supply that was being brought in from outdoors. This was no job to hand 2 bricks at a time to him at a consistent rate, and after he had placed the previous 2 in place, have 2 more ready for him to take. When his hands reached out for the next pair of bricks, he expected them to be there. A very definite rhythm developed, and if I fumbled, it threw him off, and he let me know about it. It all went along quite well until the kiln was built up higher than my head. Since I couldn't reach him from the ground, he simply said "Toss 'em". I could toss 2 bricks up to him alright, but I was never sure that he was going to catch them and was afraid they might be falling back down on to me. He told me several times not to worry, that he would catch them, but I still couldn't bring myself to trust either myself, that I would get them up to him, or that he would always be there ready to catch them. We were still supposed to be on the same rhythm as before. My problem was that after every throw, I looked up to see if he had caught the bricks OK. This not only threw us off rhythm, but after a short while my head was splitting from the twisting and turning of looking up and down continuously. Both the boss and the kiln maker were telling me to not look up, just throw the bricks, "He'll catch 'em", but I just didn't trust either myself or the other worker enough to throw a pair of bricks, each weighing about 4 pounds, straight up over my head, and expect him to catch them every time, so I always looked up, ready to jump out of the way. The experienced crews were like jugglers, the one on the ground picked up 2 bricks and in one motion threw them up and the kiln man reached out into space, and even if they separated by several inches, grabbed both and placed them into the wall he was building and was ready for the next 2 when they came up at that same time. I worked at most of the jobs in the brick yard, but never could master that one, and only worked there about one month.

As a high school graduate in 1935, I had very little knowledge of the world around me, or even the State of Massachusetts where I lived. My horizons were broadened tremendously that summer when I got a job with a long distance furniture mover. As I slowly learned techniques of packing and handling everything from fragile glassware to grand pianos in and out of truck vans, I was sent as a helper on moving jobs to and from distant cities such as Boston, New York, Philadelphia and Washington, D.C. For a young person during the Depression of the 1930's to have a job was exceptional, and to be able to travel while on the job was a tremendous educational benefit. Also the friendship that developed with the owners and fellow workers in
This came about, because my brother, Claude, was working for a local furniture mover, Westcott and Son, in North Amherst. At supper one evening he suggested that I try Westcott's for a job, they were looking for dependable workers. So the next morning I rode up with Claude when he went to work at 7:30 a.m. I went into the office, actually into their kitchen and talked to Jack Westcott while he finished his breakfast. Jack and his son George owned and operated the business, and Jack's wife Florence did all their bookkeeping, billing and payroll etc. Jack Westcott was the founder of the business, and had built it up with his son George taking more responsibility as he matured. Several years before I applied for work, Jack had received an injury to his back that nearly incapacitated him. He was still able to get around with a shuffling gait, and his hands shook quite bad, but he looked after things around the warehouse, and a second hand furniture shop that he ran, and still went out on some jobs.

Jack and Florence both greeted me, and knowing Claude from the time he had been working for them, and also respecting the Taylor name as dependable folks, they told me I could go to work that morning, if I wanted to, and so I did. I was 18 years old and thought of myself as being stronger than most kids that age, and I figured I was ready for anything that morning. As it turned out, the job I was assigned to that day was not moving household furniture, but removing large Greek and Roman statues from a museum building at Amherst College, to clear it for renovation. These statues of Greek and Roman gods and goddesses were of very heavy construction of plaster of Paris, and perhaps with cement added for strength, and being mostly of rounded contours, such as one of Venus of Milo, were very hard to get a grip on. Some were 10 or 12 feet tall, but most of these were sectional, and could be taken apart for transport. The major problem was that there was no elevator in the building, and all of these structures were on the second and third floors, and had to be carried down several flights of stairs, outside and loaded on to trucks to haul them to a warehouse for temporary storage.

I became one of the crew on this job that first day of work for Westcott and Son. There were occasional projections on these statues where one could get a handhold, but mostly each person carrying just had to work his fingertips into a spot secure enough for him to support his share. There were usually 4 to 6 men carrying these segments down the stairs. When we reached a landing where the stairs made a turn, we would stop, and each one tried to improve, or at least get a renewed grip, so as to ease the strain on our finger tips. I was fairly strong in my arms and shoulders, but not at all used to carrying a weight by my fingers, and my hands and arms up to my elbows soon started to ache. There were several breaks from the carrying when we took a truckload of statues down the road about one half mile to the storehouse, and unloaded there. They had an old fork lift there to do the unloading with, so that simplified that part of the job tremendously, so we all wanted to go with the truck to unload. I did get to go a couple of times, so that helped to ease my aching muscles, so I got along all right until about the middle of the afternoon. Jack Westcott had showed up on the job just after lunch, and had got up several flights of stairs by himself, and finally stopped on one of the landings to watch the proceedings. Every time a crew went down past him carrying a heavy part, Jack would give some encouraging word, trying to help any way he could. One of our last trips of the day was a fairly heavy and cumbersome section of one of the larger statues, and every one of the 5 or 6 of us carrying it was feeling the strain. When we got to the landing where Jack was standing, we stopped for a
moment to rest and readjust our grips. Just as we started to go down the next flight of stairs, I passed close in front of Jack, and as I did, he reached out and placed his shaking hand on my shoulder, and said, “Careful Roger, careful”. His shaking hand on my shoulder so unnerved me that I don't know how I finished out the day, but I did.

When I got home that night and walked in to my mother in the kitchen, I must have been close to tears, and I told her that I was not going back to work there ever again. My mother was a great counselor, and after hearing my story, she explained that Westcott was just trying to be kind to me, on this first day of work, which he knew was hard for all the crew, and especially for me. After my mother’s explanation, I began to realize that what she said was right, and that he probably felt frustrated that he couldn't help physically, and was trying the only way he could, by giving an encouraging word. Anyway, the end result was that I did go back to work the next day, and for several years afterward, and became like family to both families, father and son. I think most of us who worked for the Westcott’s felt as I did, we didn't work for them, we worked with them. I worked many hours with George Westcott in the storehouse and work shop, crating up furniture for overseas shipment, and packing other into temporary storage, and also much time moving household goods locally, and over long distance, and I enjoyed every moment of it.

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All of these tryouts at various jobs occurred during the summer of 1935, after my graduation from high school, but along with that activity, I was also continuously thinking about my discussions with the high school principal with regard to some kind of continued education. My older brother, George had been working in the experimental gardens at the Aggie College, and had talked with students and professors who were attending or involved with a two year college course at Mass. Aggie, called Stockbridge School of Agriculture. From hearing what George found out, I got more information from the college, and learned that a new course of wildlife study was being started that fall, and noting that a considerable amount of time was involved in field work, and especially forestry, which I thought I might enjoy, I decided to enroll in that course. At the time, Massachusetts College of Agriculture did not have a Forestry degree program established, but they did have a Forestry Department with 2 full professors who provided service courses to the entire campus as needed. This new wildlife course was developed and became part of the Forestry Department, which soon became the Forestry and Wildlife Department. These events pleased me very much, these offices and the class rooms in the building became our class headquarters, and I personally thought the world of these two men, Professor Robert Holdsworth, and Professor J. Harry Rich.

J. Harry Rich was a contrast to Holdsworth, being a practical outdoor field forester, who loved to be in the field with his classes, and seemed to enjoy teaching them how to cope with adverse conditions of deep snow and cold weather. Prior to moving to Maine, most of my forestry training came from Harry Rich as part of one of his classes. For most of one year of the two at Stockbridge, our class had one full day each week working on forestry projects in forests in the area surrounding Amherst. We often rode out in the back of an open dump truck at 8:00 a.m., and the truck would leave us and return to pick us up at 4:30 in the afternoon. No one would have objected if the professor had ridden in the cab with the driver, but Harry Rich never did, he always climbed into the back with the rest of his class, and rode out in the open truck. The class
usually rotated one to ride in the cab where it was warmer. These field exercises involved all aspects of forest management, surveying the area, with a timber type map, plotting in roads, streams and other landmarks, cruising the timber, and gathering all the information necessary for a management plan, which we prepared later in the classroom and at home. We often worked in pairs, although sometimes alone, and Professor Rich spent his whole day going from one group to another, explaining, correcting, and guiding us in the right way to do each job. I enjoyed it, and looked forward to those days in the woods. Other classes in both field and forest, were tree and plant identification, soil tests and identification and a variety of associated features of field and forest.

Another excellent professor, Charles Thayer, was a soils specialist and an all-around good farmer who explained many things about the relationship of various plants and animals to the different soil types and related vegetation. These men were all, what I considered, 'down to earth people', and where I had been born and brought up on a farm, they talked my language, and I understood and followed their discussions both in the field, and in the classrooms, so that is probably one reason I enjoyed their classes so much.

The Wildlife professor, Reuben Trippensee, who had been hired to be the lead person for this course in wildlife management, was unable to move to Amherst and start classes until the spring of 1936. He apparently was locked in to his previous position as Wildlife Manager for the U.S. Forest Service in Milwaukee, Wisconsin until the end of 1935, but he did get started with us for the spring semester in 1936. For me this was advantageous, without a wildlife class that first semester, we were exposed to more forestry related courses, which is what I personally wanted. Wildlife discussions were involved, as they are in all forestry programs, wildlife activity is a vital part of forestry. Our initial class in the fall of 1935 numbered 16. As well as I can remember, several dropped out or changed majors that fall, when they discovered that they did not like outdoor work, in snow and cold weather. I know we had 12 remaining during the spring semester of 1936. This was a nice sized group, we all became friends and worked together in groups, and as a class, and also individually on projects of our own. Professor Trippensee started us right in looking for signs and field locations of dens and habitat of all of the local wildlife, from the smallest mice and birds, to deer and bear and hawks and crows. I'm sure we missed a lot of them, but we all were amazed at the numbers and variety of wild animals that might be living in a relatively small area of woodland. As a class, we made game surveys of several woodland areas in Amherst, Pelham, and Leverett. These surveys were much more detailed than most of us had envisioned. An outline survey of the area or property being recorded had to be made first, with cruise lines laid out for the number of people involved in the survey. These lines were usually placed close enough together so the cruisers could call to each other and often see each other as they progressed along the line, which was usually a compass line. As an animal or game bird was flushed from near one line, its progress was noted and recorded so that if or when it was spotted on an adjacent line, it would not be counted twice. All wild life sign was noted, dens, nests, droppings, browsing, etc., and designated as to the animal using or causing it. I was learning this technique in 1936, and saw it still being taught to wildlife classes at the University of Maine in the 1950's. Game censuses have slowly been adapted to use of small planes and helicopters making aerial surveys, especially of large game animals and birds, and new techniques are always being developed.
For years, the two-year Stockbridge School had tried and succeeded, to place every student who desired, in a summer job between years, that was relative to his or her major. Each department was responsible for placing their students. It probably wasn't a very large number who needed a job for that summer, many were taking classes to increase their knowledge of a job they had been working at, and went back to it during the summer and vacations. Of our group, majoring in Wildlife Management, only a few had jobs to go to, and most of us relied on summer jobs suggested by our department head, which were not very plentiful. If I had been more knowledgeable of possibilities, and had expressed my strong interest in forestry, I might have been able to obtain a position in a forestry oriented project for that summer. But, thinking I had to go along with what was suggested by the faculty, I settled on a summer job at the Wilbraham Game Farm, which specialized in raising pheasants and (bob-white) quail, for stocking of fields and forests of Massachusetts. Except for the breeding stock being semi-wild birds, and having to be completely enclosed in large wire cages, the whole operation was similar to a large poultry plant. One of my duties each day was to enter these cages, which were approximately 20 feet wide, 100 feet long, and 10 feet high, and collect eggs that the nesting hens were laying in scattered nests throughout the cages. All of this was supposed to be as close to normal wild conditions as possible, with flocks of hen pheasants and several cock pheasants in each large enclosure. Each day's collection of eggs were placed in large indoor incubators, under controlled temperature and moisture conditions, until they hatched and were raised like baby chicks in enclosed pens, until large and strong enough to be put out into open air pens to become acclimated to outdoor conditions as their parents were. Collecting the eggs was a slow, tedious process, because care had to be taken not to make any sudden moves that would startle the wild birds in the cages. The earth floor of these pens resembled a field of hay and grain, having been seeded down, with the stand well developed, before putting the breeding flocks in to establish their nests. The egg collector had to check every foot of the ground for nests, and move each hen off to collect the eggs. Usually that was no problem, they moved right off as soon as a person came near their nest, and most hen pheasants would simply run a short distance from their nest. The major problem was with any cock pheasant that happened to be close by when the hen ran by. The cocks would almost always fly a short distance first, and then settle to the ground and run a ways. If one was really startled he might make a full flight the length of the pen, and that was the danger that he would hit the wire enclosure under full speed, and be severely injured or killed. No matter how careful anyone entering these pens was, it was inevitable that at least one pheasant, and usually a cock, would take off and fly the length of the pen. Most would not be flying hard enough to be injured, or would stop before hitting the end of the cage, but almost every week a bird would be severely injured, or killed outright, and someone in the crew would take it home for supper. We had a cock pheasant for supper one night at the home where I boarded with a family of a man who worked full time at the Game Farm. I guess it was good eating, I don't remember much about it, but they all should have been good healthy birds, being fed the best of grains every day. I enjoyed this part of my duties, but another job that came up periodically was not so pleasant.

This was the cleaning of the indoor baby chick pens after the chicks were moved out into the open air pens. It was like cleaning any chicken pen, a very hot, dusty job, scraping together all of the litter and droppings, and other debris, and shoveling it into a wheelbarrow to haul out side
and dump into a truck. The only thing that got my interest was this truck, which was of early 1920's vintage, the make I don't remember, possibly an International or Federal. An interesting feature was its dump body, which was similar to what I was familiar with at home on our horse drawn dump cart. These bodies were mounted on a hinge over the rear axle with a latch on the front to hold the body in place while being loaded, and in transit. If loaded slightly heavier on the rear, when the latch was released the body would tip up and dump the load automatically. If the load was evenly balanced, or heavier toward the front, it wouldn't dump without some assistance. Sometimes a slight lift on the front would be enough to dump it, but if not, part of the load would have to be shoveled to the back until the extra weight finally tipped the body up. This truck dump body had an extra feature to assist the dumping process. Attached to the frame under the front part of the dump body was a heavy duty screw jack which could be raised and lowered by turning a crank on one side. Unless the operator foolishly loaded his whole load into the front part of the body, this jack would raise the front of the body high enough that the load would start to slide back, and that added weight would tip the body the rest of the way, and dump the load. Pretty neat, I thought, but it still made sense to keep the load heavy on the rear, and let its own weight dump the load. This did require the operator to remember to fasten the front latch before loading, or possibly lose his load before it's time. After being shown where the litter was to be dumped, I was told to drive the truck and dump the loads as they accumulated. I mentioned that I didn't have a driver's license, but that didn't matter, it was all on the farm roads. I had driven a car some, but never a truck of any kind, but I looked forward to driving this one. Someone showed me how the gearshift worked and sent me on my way. For the next several days I worked real fast loading the truck so I could drive it out about the half mile to the dump area. Driving that old truck was probably the most enjoyable job I had at the Game Farm, and also the best training for me for my driving test, and my later years working for Westcott. As it turned out, work at the Game Farm lightened considerably soon after the pheasant breeding season ended, and the manager was hard put to find jobs for me even though they had signed me up for the full summer. After several discussions with everyone concerned, and also with everyone's best wishes, I ended working there, and moved back home.

I immediately took some more driving lessons with my mother, and with a tenant who lived upstairs. After a couple times out together, the tenant had me drive to Northampton and around through the city which is where my driving test would take place. When we got home he told me to go for it, if I got around with the tester as well as I just did with him, I would be fine. So I applied, took the tests, and got my driver's license in the summer of 1936, when I was 18 years old.

As soon as I returned home from the Game Farm, I had applied for work at Westcott's, and went back to work immediately. All my life, from high school graduation, to retirement at age 65, I was always on some company's payroll, and never had the need to file for unemployment compensation. Back at Westcott's, and with a driver's license, I was of more value to the company than before. I began to be sent on errands with a pickup truck to make some local moves of single items and small lots. I usually had one or two helpers with me and even though most of them had much more experience moving furniture than I did, since I was the driver, they looked to me to be the leader. I worked a lot with George Westcott and especially with Bill Bartlett, both men being top furniture handlers and packers.
By packers, I mean the placing of household goods securely and compactly in a moving van, so as to get the most in, and yet positioned securely, with no chance to rub or chafe against the truck body or each other. Bill Bartlett had been a long time employee and was the most experienced and trusted man on the payroll. He had the newest truck assigned to him, and no one else ever drove or used it. Another worker, Eddie Keogh, and I often worked with Bill on local jobs, and I would go alone as Bill's helper on long distance trips. At first, before we got ready to start loading a household of goods, either Bill or George, depending on who I was working with, would go into the house and look through each room and they would remember every major piece of furniture in the house. They would go back to the truck and tell their helpers what to bring out to fit into the particular spot they were filling at the time. Either one of them could stand on the back of the truck and tell us which bureau or chest of drawers, or whatever, to bring from the room where it was located. After working with them both for several months, I got so I could tell the article they needed for a certain spot, whether a heavy piece for the bottom layer, or a chair, sofa, or other lighter piece for the top. It soon got so that when working with either one of them, they would rely on me to bring out the right piece to fit their need, and they would not bother looking through the house first. Even though I didn't do a lot of the packing myself, I often would tell Bill or George that I have something for the spot, and go in and get an item that would fit. Of course their expertise helped, because no matter what we would bring out, both men were such good packers that they could find a way to put it into a secure position where I had visualized it going.

Even though Eddie Keogh was a severe alcoholic, I enjoyed working with him, and the two of us and Bill Bartlett worked together a lot as a team. I used to pity Eddie at times when he would come to work with a severe hangover, but he would still do the work. I have seen times when we would go upstairs in a house for a bureau or other heavy furniture, and Eddie would stand at the end of it with his head in his hand. All I had to ask was, “You all set Eddie?”, and he would immediately bend down and get ready to lift and carry, when I was. He must have suffered during those days, but he kept right on working as long as he had someone to guide him. In later years, when I was living in Maine, I heard that he had been committed to the Veteran's Hospital in Leeds, and after they took the alcohol away from him, he only lived a few months. I liked Eddie Keogh, enjoyed working with him, and hated to hear of his death. He apparently was living on booze toward the end. Sad!

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Some of the jobs I had were to move small lots of household goods on a pickup truck. Westcott had one with a larger than normal flatbed body which I used for some of this work. This was a Dodge truck with a rebuilt Plymouth engine and in quite good condition for an older vehicle. One noon time, George came out of the office and asked me to haul a small load of furniture to New York state with this truck. He said he would help me load, but I would have to travel alone and the owner would help unload at the destination. It sounded OK to me, so off we went into Amherst to load up at the owner's apartment. On the way George told me that this man had just got a job with a chewing gum manufacturing company, Beechnut Gum I think, in Canajoharie, New York, and I would be hauling his furnishings from his apartment in Amherst to his new residence in New York state. It turned out to be a larger load than anticipated, and took some careful and creative packing to get it all on to the flat pickup body, and tied securely for the trip.
of well over 100 miles. It was after 3:00 pm when we were finally loaded and I was on my way. I'm sure there was some worry but George acted as though I was just going across town, and wished me well as I started out. My route was from Amherst to Greenfield, then over the Mohawk Trail to North Adams, then to Troy, N.Y., past Schenectady and Amsterdam, and then another 20 miles or so to my destination. It was an uneventful good trip, but many years before the New York Thruway was even dreamed of, on narrow 2-lane roads all the way for approximately 140 miles, it was after 6:00 pm when I located the address and the owner of my load. With George helping with the packing and tying on the load, everything was secure and in good shape when delivered, and with the owner's help, plus a neighbor or two, everything was unloaded and placed in the house in short time, and I was soon headed back to North Amherst, and arrived back in Westcott's yard about 9:30 pm. I parked the truck and dropped my papers off at the office, and left for home. That was the end of one day's work, not usual, but still not uncommon in those days.

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One summer, I think it was 1937, I did have a job that ended on time, although I still put in 9 hours a day to do it. The local Work Project Administration Office, (WPA), located in Amherst, hired several pickup trucks with drivers to stand by at their warehouse ready to haul hand tools and other equipment out to work sites as needed. The WPA was one of several federal programs designed by the Roosevelt Administration to provide work for family men during those depression years of the 1930's. To provide an income for as many men as possible, there were always extra workers at every job location. Following this philosophy, where two pickups would have been sufficient to handle the requests for equipment, three or four were always on hand at the warehouse. Most job locations always had a backup supply of hand tools on hand, so there was seldom a need for more. The usual requests came to replace broken handles and dull cutting tools, or on a shift to a new location needing different tools. With all the extra trucks on hand and taking calls on a rotation basis, there were some days when some of us never moved all day. The truck owners were happy because they still received their daily pay and their only expense was for the driver, but for us drivers those were very boring days. I remember having a few short trips during one week, but most only took one hour or two at the most, even including time at the warehouse loading up, and time at the job site unloading the new supply and loading up with the used tools to be returned to the warehouse. Everyone moved slowly on these jobs which everyone knew were made up just to provide work for as many family men as possible.

A story that circulated during that period told about the foreman on a roadside hand mowing job who defended his need for eight men on his work crew. He said that his outhouse was down the road several hundred feet and his work crew operated with two going, two coming, two using the facility, and two doing the mowing. The Superintendent couldn't find any fault with this, there was always a crew mowing, so 8 man crews became quite common. Some of the work was criticized as being foolish and wasteful, but in later years was found to be an asset in that area. Sidewalks were constructed through rural areas where there would be only one house every half mile or so. At the time of construction, the only people using these walks were the men building them, and it wasn't until after the war in the 50's and 60's, that some of these areas became highly developed, and filled with family residences which made these sidewalks greatly appreciated even though they had deteriorated over the intervening years. Most were fairly easy to level up
and repave, and are in continual use to the present time. You can see them today in areas that were field and forest back in the 1930's.

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One of my best days on this job was getting a call to deliver a wheelbarrow and some hand tools to a crew who were building one of these walks along a road through a heavily forested area somewhere in the Gardner area. It may have been out toward Baldwinsville or another small town, I don't remember the exact location, but I arrived at the site right at lunch time. Since no one worked during lunch time, I sat down with the crew to have my lunch also. Talk got around to what tools I had brought over, and I mentioned that one tool was a 2-man cross cut saw for felling and cutting up some of the larger trees that were in their way. This crew was made up of men from the city and it appeared that not one of them had ever used a crosscut saw, not even the foreman. During the course of conversation, I mentioned that I had used a saw like this quite a bit in the family woodlot. Immediately the foreman asked me to demonstrate and teach them how to use the crosscut saw. It wasn't my job to do, but I ended up spending an hour or more demonstrating and working with each crew member with the crosscut saw, cutting down and cutting some larger trees into pieces small enough to be handled by hand. I'm sure the foreman took all the credit for it after I left, but at least his crew knew a little bit about how to use that saw while working in that wooded area, and I had a very enjoyable day, for a change.

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During my last couple of years in high school I got acquainted with some of the older students who had driver licenses, and on several occasions rode with them to other ice skating rinks, one at Smith College in Northampton, and another in Greenfield, Mass. There was no great attraction at either one, but they were a change and fun to travel with a group, and skate together. On one of these trips through South Deerfield to the skating rink in Greenfield, a major change in my life developed. As we passed by an abandoned dance hall called 'The Gables', we noticed that the place was lighted and had a number of cars in the yard. Our curiosity was aroused, and on our return from the ice rink we stopped to see what was going on. To our surprise we found it was now another skating rink, a roller skating rink, and after coming in from being outdoors on an ice rink, I was quite impressed with watching young people my age skating around in a warm room, and accompanied by music. This looked like a lot of fun to me, with a good mixing of girls and fellows in the crowd, and out of the ice and snow and cold of ice skating. I didn't have a driver's license at that time and had very limited means of traveling the ten miles or so from home to the Gables, but I did get there several times in the next couple of years, and learned how to get around on roller skates. I quickly learned that they were much different from ice skates, especially the long bladed racing skates I had been using at that time. With the front wheels under the ball of my foot, there was nothing to stop my toes from tipping down to the floor and taking me right with them. After several spills, I learned how to keep my feet flat with all 4 wheels on the floor. Also at first, I had to rent the skates at the hall and these were all clamp on types, so I was back to where I had been when I first started ice skating. After becoming acquainted with several of the regulars who skated there, most from the Greenfield area, I met one or two who had cars, and occasionally would get a ride from home with one of them. In one way or another, until I got my driver's license in 1936, I managed to get to the Gables once or
twice a week to skate. At that time, it cost 25 cents to skate for three hours in the evening and I think another 10 or 15 cents to rent skates. The more I skated, the more I liked it, and the more friends I made, and I soon purchased a pair of mounted shoe skates so I felt much more comfortable and competent on the floor. With my license and the use of my mother's car, I went skating several times a week, and when I got a car of my own soon afterward, I went almost every night. I believe Monday night they were closed, although sometimes open for special parties. The attraction wasn't just skating around and around all evening, it was the social attraction to many of the other regulars, and also learning and practicing several maneuvers on skates, both with and without a partner.

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Once every evening there was a session of special dance music played for those who could do some special footwork and turns in time with the music. I was quite friendly with two sisters who lived near the Gables, and who had skated there since it opened. Both girls could do most of the dance steps and turns, and also a special one that we had designed and perfected ourselves, although the oldest sister and I were the most compatible with this one. This maneuver was basically a large figure 8 utilizing the whole dance floor except we did not cross in the center but made a loop into the center and then back out to circle close to the outside of each end, and all at high speed. Since most of the travel was on a curve shifting from right to left, and at high speed, there was a considerable chance of leaning so far on these curves that our feet would slip out from under us. I was often asked how we could lean over so far on these turns without losing our footing, and I just said it was practice, which it was, but always with the same partner. We simply learned how to act as counterweights for the inside partner as we changed from one curve to the other. That, and a waltz step to music were the highlight of the evening for me, and occasionally the management would play this music twice in the course of an evening, just for us. Many couples could do the dance steps, but when it came to the circle maneuver, most of them cleared the floor or soon did when we passed them on one of the curves.

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I made a number of close friends during the several years that I skated at the Gables and they were all from the Deerfield, Greenfield, Turner's Falls, and surrounding towns. With a few of these friends I learned to visit and enjoy the several so-called Polish Picnics which were developed by some of the local catholic church clubs to raise money for their churches. They all had a basic raised dance platform, with a roof and open sides. Most were located in an open grown wooded area, with enough open land to park a few cars, and all were open through the summer months, usually just on Sunday afternoon and evening. They all had at least one polka band playing polkas and waltzes almost continuously for free dancing. It was the polka music that created the term of Polish Picnic for these affairs, even though there were often several other nationalities involved in the operation. Their money was made by selling beer and soda, and snacks to the dancers, and the many who came just to watch and listen to the music. It always intrigued me that a group sponsored by a church would be selling beer and dancing on a Sunday afternoon, but this was a normal time for enjoyment for most of the Polish and other European nationalities, Saturday night and Sunday, at the end of a week of hard work. I did not dance at all, but I always enjoyed this type of music and watching the dancers.
For several summers I spent many Sunday afternoons with some of the fellows I had become friends with at the Gables, visiting four or five of these picnic sites during an afternoon. We sometimes traveled in two or three cars, and it probably looked like some business was coming when we drove in, but we seldom bought anything, except an occasional soda and a bag of potato chips. Where we were driving around from place to place, we stayed away from the beer. The police did watch those leaving the picnic grounds but usually only bothered ones who were obviously too drunk to drive. There wasn't much traffic in those days, so there was very little problem with drunken drivers except when they went off the road into a ditch or a tree. Our Sundays were usually completed with the regular evening skating session at the Gables, and giving one of the girls a ride home afterward. Not all of our skating was at the Gables in Deerfield. On several occasions a car load of us young fellows would try out some other rink that we heard about. I remember one was at an amusement park near Worcester, Mass. which we evidently liked, because we went there several times. I suppose the other attractions drew us also, but we always spent several hours skating while there. It had a good floor, and good music to skate with. Another popular rink was in Pittsfield in western Mass. One thing I did not like there, was a large multicolored lighted globe mounted in the ceiling which they used at dances that were also held there. Occasionally through the evening of skating they would dim the lights, light the globe, and start it revolving and casting multicolor lights all around the hall with some accompanying music. I never did like flashing lights, and I would always sit out these particular skates. This bothered me some to go to this skating rink, but what put a final stop to it happened on a trip home from there.

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Most of the gang I traveled with had some spending money. Actually, most of our group and in fact most of the regulars at the Gables skating rink, had a job of some sort. From soon after I graduated from high school in 1935 until the early 1940's, except for a few trial jobs as related earlier, and while attending Stockbridge School, I had full time employment with Westcott and Son. My pay of $21 for a 6-day week was enough to give my mother $5 each week for board and room, (plus some help on the farm), $3 to $5 to run my car and for spending money, and $10 or more into a bank account to pay for my tuition and books, etc. for Stockbridge. The others at the Gables had a variety of jobs, one worked in a gas station in Greenfield, several worked in the Greenfield Tap and Die, Miller's Falls Tool Co., Department stores, on farms, etc. Wayne Allen was handy with tools and bought 1929-30 model A and B Fords that had been damaged in accidents, and could be bought for $10 or $15, and sometimes less, depending on the body work and engine work needed. He would have two or three of these old cars in his mother's dooryard, and rebuild one with parts from the others. Even though they were 7 or 8 years old, when he finished remodeling and painting, he always had one of the nicest old cars to drive, of any of us. When he needed some money he would put a for sale sign on his latest one, and soon sell it for $75 to $100. I always thought that Wayne would be able to make a good living with a car repair and body shop but I don't think he ever did, but instead had worked at one of the machine shops in the Greenfield area.

It's interesting to note, that after associating with, and being good friends for several years in the late 1930's, we drifted apart and completely lost track of each other, especially after I was
married and had several jobs out of the Greenfield area, plus tremendous changes in our lives during World War II, and afterward. In fact, out of the group of a dozen or more friends that I associated with at the skating rink and at the Polish Picnics, there were only two that I ever recall having contact with after the War. One was Bill Devino who worked at a gas station in Greenfield during those years in the 30's, and after I met him at the Gables, I would have him service my car on a weekend which he regularly worked. Often there would be several of our group hanging out at that service station on a weekend, and usually one would pump gas for a customer, if Billy was busy in the station. As far as I know the owner never objected, he trusted Bill Devino, and knew that I had an oil change and grease job on my car once or twice a month at his station.

One other friend from those days was Joe Green, who kept track of me better than I did of him. Joe and Mary's brother Walt, became acquainted at the Greenfield Tap and Die, and Joe kept up on me through Walt. One time Walt took me to see Joe in a trailer park where he lived. His wife had died and he was living in a trailer alone. Another time when he heard that we were going to be in Greenfield, Joe came to Walt's house to see me. That was the last contact we had, and a few years later I heard that he had died, and I suspect most of those friends I had back in the 30's have also passed away. All would be in their 80's.

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Now to get back to one of the incidents that in combination with several others, gradually took me away from roller skating. With four of my skating friends, three from Greenfield, and one from Northampton, I had driven to Pittsfield in western Mass. where we spent the evening roller skating. When it closed at 11:00 p.m., we got a soft drink or a coffee, and something to eat at a local diner, and then headed for home. One of the Greenfield boys was in the front passenger seat beside me, and the other two with the one from Northampton were in the back seat. This incident occurred in the fall of 1939, and as I write this account in the spring of 2001, I only remember the name of the one riding beside me on the front seat, and still only his nickname, 'Red' Denofrio. Anyway, they soon all fell asleep, except for the fellow from Northampton, who was riding in the middle of the rear seat, and instead of sitting back and falling asleep, he leaned forward over the front seat, and kept up a steady conversation all the way from Pittsfield to his home in Northampton. When we finally got rid of him at his home I was greatly relieved to hear the end of his continuous chatter. The other boys hardly woke up when he got out of the car, and as we started off to get them home in Greenfield, they all went right back sound asleep.

Everything was fine until traveling up Route 5 & 10 in Whately, I drove around a gradual curve and then on to a long straightaway. I don't remember going around that curve, or traveling down that straight section of road. As it happened, a man had stopped on the road shoulder about half way down this straight section and luckily looked up in time to see my car coming directly toward his. He ran to the woods to be safe, and saw us hit his car squarely in the rear. I don't know what speed we were going, but both cars were totaled, and we were all very lucky to come out of it as well as we did. All of us being asleep and completely relaxed may have helped but when I awoke, the car radio, which was an added accessory under the dash, was playing fine, and all else was quiet. Then a voice from outside called if we were all right. Then we all spoke together that we thought so, but soon began to realize that some of us were hurt. The worst injuries were to Red Denofrio who was seated right beside me. There were no seat belts at that
time, my car was a 1935 Ford, and the other I think was a 1936 Ford. When we hit, Red piled into and under the dashboard, and his head or something cracked the wind-shield. He had some cracked ribs and a broken leg below the knee, and multiple bruises on his body. The two fellows in the rear seat came forward and hit the back of the front seat, which was a full back all the way across, hard enough to bend it into a vee that came forward between Red and me. They received some cuts and bruises, but otherwise were both OK. I had a bruise on my right knee which hit the radio where it was mounted under the dash, but didn't stop it from playing, and bruises and pains on my chest, but no serious injury. It was then that I realized, and finally appreciated, that our buddy from Northampton had been trying as hard as he could to keep me awake while he was with us, and had cautioned me to keep my eyes open the rest of the way home. It must have been obvious to him that I was sleepy all the way from Pittsfield to Northampton, and later he told me that he worried that night about my making it home OK.

Anyway, soon after the accident a state trooper showed up, I don't know how he got word but he was there very soon, and was very helpful. He got word to someone to pick up the owner of the other car, and then took the four of us in his car to the hospital in Greenfield. I called home from there and my mother answered. When I told her that I had an accident she remained very calm, as usual, and asked if anyone was hurt, and where I was. I told her that we were at the Greenfield Hospital and that Denofrio would have to stay over in the hospital for a day or so, but the rest of us could go home right then. She said she would be up to get me as soon as she could, as I knew she would, even though it was around 2:00 a.m. by that time. She was a wonderful mother and person. The next day my car was hauled down to Mike Yarrow's garage in Amherst and pronounced a total loss, as I also heard the other car was too. The frame of my car was buckled so much that one side nearly touched the pavement under the middle of the car, where it was setting in the garage yard, and the front end was driven back over the engine nearly to the windshield. Why we weren't more severely injured I'll never know, but as I mentioned earlier, being asleep and completely relaxed may have helped. Anyway, I was very thankful to come through it as well as we did, everyone, even Red Denofrio healed up completely. I paid all of his hospital bills which I don't think went much over $100, but of course still amounted to 4 or 5 weeks’ pay for me, but I was glad to be able to pay it, and real happy that we all came through this accident as well as we did.

Incidentally, as well as being very helpful to all of us at the time of the accident, the state trooper also wrote up and turned in his report which resulted in the loss of my license for 30 days, for 'driving to endanger'. This was more of a nuisance than a hardship to me, but I did have to hire a friend who wasn't working at the time, to drive me to my job location in the morning, and bring me back home at night, and I only got out a few times in the evening and weekends when one of my friends from the Gables would come down and pick me up. I'm sure that was a long month for me at the time, but I don't remember it that way now.

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Working for Westcott was not boring to me because almost every morning was a new and different job, even if it was a typical moving job. Even though we handled very similar household goods on most moving jobs, there were always variations in sizes, shapes, and weights, and locations where we found them, and where we placed them at the new residence.
Often we were in and out of the same apartments or houses where we had moved other families recently. We often wondered why some of these families moved, but all had their own reasons. One day I remember we moved three families, two just swapped houses, and one moved to another apartment. With two vans and a 3-man crew for each, we managed to stay out of each other's way with the first two families, and then we combined our efforts to move the third family in record time that afternoon. All local moving jobs were always completed in the same day with beds set up and utilities working so the family could eat and sleep at their own table and in their own beds that night. Our crews always worked until the job was finished, sometimes well into the evening. We were all hired and paid by the day, and it was just considered part of the day's work, with no overtime pay.

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Even though the days were always long and sometimes boring on the return trip home, I enjoyed going on long haul moving jobs. Sometimes these were only one day trips from Amherst to the Boston area, but they were always long days, sometimes starting at 4:00 a.m. and returning home late in the evening. In the 1930's Westcott had two large moving vans, a 1925 and a 1926 White chassis, with large closed van bodies custom made on each. These bodies were 8 feet wide their whole length, from the front windshield to the tail gate. The driver and passenger seat was one single continuous seat completely across the driver's compartment. There was room for 4 passengers plus the driver, with one of the passengers sitting with plenty of room, on the left side of the driver. The padded back was identical to the seat and hinged at the top so the bottom could be pulled up level and held by chains to create, with the seat, two bunk beds. They were pretty precarious ledges to sleep on, and I never knew of anyone ever using them. If we had an overnight trip with a part load or empty van, we would sleep in the van on a bed of furniture pads. If we had a full load, we often drove through the night.

On one occasion Bill Bartlett and I rented a cabin, somewhere in the Baltimore area, and it turned out to be one of the most uncomfortable nights we ever spent. It was a raw wet chilly night with no heat in the cabin, and few blankets. We got very little sleep and pulled out early in the morning, it was warmer in the truck. This was a 1936 Chevy which did have a heater of sorts. This truck, purchased new, was pretty much considered to be Bill Bartlett's truck, and I never knew of anyone else ever driving it. I rode many miles in it on long distance trips with Bill, and several times when I could see he was getting sleepy, I offered to drive, but he always refused and just the thought of someone else driving his truck seemed to wake him up and put more life into him. He never dozed off on any trip when I was with him although I can remember seeing him with his eyes half closed and his head tipped way back so he could see the road ahead. Of course this was in the 1930's with very little traffic on the roads, especially in the night, so there wasn't too much to worry about, except to stay on the road. Riding in this new Chevy truck was a pleasure compared to the old White vans. On a long trip the Chevy would average about 40 miles an hour, while the Whites would do well to average 25 miles an hour. Some of this was due to the quality of the roads, but trucks in those days were not designed for speed, so we thought those rates were quite good. Even the common cars in use, Ford, Chevy, Plymouth, and Dodge, would seldom go faster than 65 or 70 top speed, and their engines would not stand up very long if run continuously at 60 miles per hour or faster. This was why a 100 mile trip from Amherst to Boston in one of the Whites was usually started at 4:00 a.m. so as to
be in Boston at 8:00 a.m., and depending on the load, it was usually after dark before we got home in the evening.

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One of my first trips to Boston was in one of the White vans with George Westcott driving. With one extra helper with him, George picked me up at home at 4:00 a.m., and we were on our way. With all the hills on Route 9 from Amherst to Worcester and a loaded van, we probably didn't average any better than 20 miles an hour, and it was after 6:00 a.m. when we got into the city of Worcester and stopped for breakfast at a diner on the outskirts. George was always generous when it came to meals on the road, so we all had bacon and eggs and coffee and doughnuts for breakfast, and some sandwiches made up for lunch. I don't remember details of what we had for a load that day, but it must have been a load of household furniture because it took us most of the day to unload and place everything in its new location. We always assembled all the beds, tables, etc. so that everything was ready to use when we left, so this took some additional time. We finished up by midafternoon and started for home about 4:00 p.m. This put us on the road and back at the same diner in Worcester at about 6:00 p.m., 12 hours from the time we had breakfast there. George liked this diner and the cooks, so I'm sure he planned to make his stops here before hand. We all ordered supper, which probably was what they used to call Hamburg steak, with fried potatoes and some kind of a vegetable. When we finished this main meal, George asked me if I wanted some dessert. We always had some dessert at home after a meal, so I said yes. He said, "you better have some of that homemade apple pie, probably ala mode, don't you think?". Apple pie I understood, but ala mode I had never heard of. George saw the blank look on my face, so he smiled and quickly set me straight that it was with a scoop of ice cream on top. That was a new one on me, we always had sharp cheese with apple pie at home. Anyway, I tried it, and I liked it, and still do, but that was my introduction to pie ala mode, through George Westcott's generosity.

After leaving the diner near 7:00 p.m., we were all anxious to get home, so George drove the old truck as fast as it would go, which still was at best 30 miles an hour on the downgrades. However, when we got to some of the longer downhill slopes in the Belchertown area, he would shift the transmission into neutral and let the truck roll down these hills in freewheeling. We were all young and pretty carefree in those days, so we enjoyed these roller coaster rides down those hills and around corners at speeds that got up close to 50 miles an hour. Fortunately traffic in those days was very light, almost non-existent, because the brakes on that heavy van were not up to stopping us quickly if we had met another vehicle on one of the many curves, or come up behind a slower vehicle on the road ahead of us. I did have some serious concerns on several sharp curves, but George cut these corners, sometimes on the wrong side of the road, but never met anyone, and kept the van on all wheels and in the road, so we gained maybe one half hour, and got home safely that night.

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We put in many long hours at daily pay of $3.50 to $5.00, and along with many hours over the road in a moving van, and hard physical labor loading and unloading furniture or freight, I think all of us employees were happy with the job, primarily because of the family attitude of the
Westcott family. Everyone knew each other, crew and employers, even down to George Westcott's young son Jackie and daughter Marion. Jackie at 3 and 4 years old was around with the crew anytime we were working around the trucks or in the warehouse, and soon learned much of the strong language that he overheard from some of the crew. When he turned 5 years old and was scheduled to go to kindergarten, there was much concern about how his language would affect the class at school. Apparently, being a bright kid and with some caution from his mother, he dropped the foul language and fitted in very well with the rest of his class, and did very well in all of his schooling. A great relief for all of us who had a concern for his wellbeing.

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Jack Westcott had a warehouse (old truck garage), which was packed full of furniture which he accumulated from families who for various reasons had excess items to discard when making a move. Jack, or his drivers, would offer to take the items at no charge, to help the owner clean up. Most families were pleased to get the offer and not have to worry about left over goods. This accumulation of household goods was entirely Jack Westcott's enterprise. He sold some items directly out of the warehouse, and about twice each summer as the accumulation increased, he would hold an auction and sell off a good portion of it. One job I didn't like was when he had a customer who was looking for a certain item. Whenever I was around the headquarters Jack would call me to help get the item out of his stockpile. At that time, he was physically unable to lift or handle any furniture, but his mind was as sharp as ever. If an item was buried in a back corner of the building he would remember where it was after several years, and tell me to move all the stuff in front to get it out for the customer. I know Jack liked me for my patience, but it was often quite strained after moving many items to get the desired piece, and then the customer saying that it wasn't quite what she had in mind, and I had to put everything back in place again. I did like working on the auction, which I did many times. With a helper I put items on the auction block for sale and felt real good after the sale to know that piece of furniture would not have to be put back. Most buyers would come right up and take away their purchase themselves. Sometimes we set it out on the lawn for them to pick up later, but either way, it was gone as far as I was concerned.

* * *

My experience with Jack Westcott's auctions got me another job that had an interesting result. Amherst College was doing some renovating and refurnishing of their theater and some other buildings, and made plans to hold an auction to sell the items being replaced. Most of these items to be sold were beautiful pieces of furniture, and still in excellent shape. Because of the value of these items, the College administration wanted to have an experienced furniture handler presenting the articles for sale. They contacted Jack Westcott, and he suggested that I could do the job, which I did. I had learned how to handle nice furniture while working for Westcott's, so I came prepared with new white cotton work gloves, and clean clothes. There were chairs and benches of mahogany, maple, oak, and other hardwoods, most that had been highly polished and I knew I shouldn't get any sweaty finger marks on any of it. I handled much of the furnishings alone, and felt quite comfortable doing it, and really enjoyed the day. When it was all over at the end of the day, an administrator congratulated me, paid me $10.00, and also presented me with 2 tickets to a play starring Tallula Bankhead, a famous actress at the time, who was to be at the
Amherst College theater in a few weeks. Mary and I, who were not married yet, went to the play but neither of us remember anything about it. I think we both were too awed to be in such a high-toned, (to us), theater at Amherst College with all the people dressed in fine clothes, suits and dresses.

* * *

I was involved in a variety of activities concerned with the moving of household goods, farm products, and freight. One job I worked on for several months as a helper, was a daily freight route Westcott had from Amherst to Springfield, Mass., and return. The drivers I worked with were both characters in their own right. The first one was Ralph Gould, a transplanted Vermonter, whose parents lived on a hard scrabble gravelly farm in Cushman. That's another story I may write about. Ralph was a solid, heavy set, very moderate individual who always smoked a pipe. He was very careful to check all the vital parts of any equipment he was assigned to every day. He had been fired from a former trucking job in Vermont because a truck he was driving ran out of oil and froze up the engine, so he checked everything, oil, water, gas, tires, etc. before starting any equipment he would be driving. Even if someone told him that they had just checked it, he went over it himself. Then, after checking everything, he had to fill his pipe and light it, and then we were off. Ralph was a good steady worker, but a little too slow for a delivery route, we were often late getting home at night and some shops had closed by the time we got to them with their order. He was soon transferred to other work, and a new driver took over. Harry Annis took over the freight route. Harry and his dad Pop Annis, I never knew his first name, came to work for Westcott in the early 1930's when their jobs in fishing and stone quarries ended in Stonington, Maine due to the Depression. Harry was a slim energetic person and with his Downeast accent and great sense of humor, he was a pleasure to work with. His dad, Pop Annis, was of similar build and energy, and even though he was about 60 years old, he would work all day carrying furniture, and never seem to tire. The start from our headquarters in North Amherst at 7:30 a.m. was a run through some of the dairy farm country in several small towns nearby. At several of these farms we picked up their daily supply of milk which we delivered to a Hood's Dairy in Springfield. This milk was stored in 40 quart milk cans set into tanks of ice water. Most of these farms had their own supply of ice which they had cut from a pond or river the previous winter and packed in sawdust for this and other uses during the rest of the year. It was a rugged start of the day's work to get each of these 40 quart cans of milk lifted out of the ice water and secured into the van for the trip to Springfield. Production at each farm would vary from 1 or 2, to several cans, and it was imperative for us to get them to the Springfield Dairy while still cold. After making our rounds picking up from the designated farms, we could usually plan on getting to Hood's Dairy before 11:00 a.m., and getting the milk into the Dairy's refrigerated storage immediately. Then our plan was to take our lunch break at the Dairy, where we could get a bottle of cold chocolate milk at no charge, and also an ice cream bar or other item for dessert. In those days many companies were very free with favors to their customers and workers, which is very different today.

* * *

Springfield was a major shopping center for central Massachusetts at that time, and especially important to residents of the college towns of Amherst and Northampton and much of our return
load were items purchased at several large department stores. Items ranged from a ladies hat in a hat box, boxes of new clothing, to crated items like refrigerators, stoves, and washers. Many shoppers rode into Springfield on a trolley, and found it very inconvenient to carry items home on a trolley, so several local delivery trucks traveled into Springfield from their home areas, the same as we did. We all made the rounds of stores where we had orders, and stopped at some just in case a new order might have come in, which often happened. Once all our stops were completed we headed immediately for Amherst because we needed to be all delivered with an empty truck ready for the early milk pick-up the next morning. Usually deliveries went fairly rapidly even with a crated item to deliver. As we did with all furniture deliveries, a crated item was unloaded, uncrated, and deposited in the location designated by the purchaser. Occasionally problems would come up where we had to remove a door or some other item to place a delivery, and that would make us late finishing our route, but that was usually taken in stride as normal procedure. Sometimes a few items were left over at night because no one was home to accept them, or for other reasons. If it was important that they be delivered, we might leave them for another crew to deliver on the following day, or if not, leave them on our truck for delivery the next afternoon. Everything got delivered, one way or another.

* * *

A sideline to the Ralph Gould story must include his parents. They were honest hard working folks also from Vermont, and they moved down into Massachusetts with their son, and bought a small farm in Cushman which I'm sure they thought would be adequate to support them for the rest of their lives. It turned out to be very poor soil for agricultural crops, but they did raise chickens for meat and eggs, and some cattle for beef and milk. After several years of scratching a living from the gravelly soil, and receiving an offer from a local contractor, they decided to sell the property. I don't know what price they received for the farm, but I am sure it was considerably more than they paid for it initially, and they were very pleased. The contractor, who immediately started excavating gravel from most of the property, was also very pleased, he got a gold mine of gravel for his payment, and everyone came away happy with their deal, I think, although there may have been some second thoughts by the Goulds when they saw what happened. Similar deals were made throughout New England, and in most cases both parties were completely satisfied, even though to an outsider they appeared unfair.

* * *

And another little story about Pop Annis, who even at age 60, was an impetuous individual who when sent to get a particular tool, would start off before he knew what it was he was after, or where it was located. He knew of his failing, and even told a story about an event in his young life which I always thought should have cured him of this problem. At age 10 or 12 young Pop was cabin boy on a sailing ship, and one day the Captain told him to bring the sextant to him. The boy took off on a dead run, but didn't return for 15 minutes, and said he couldn't find it. The Captain told him it was on the top shelf in his room. The boy said he didn't think he should go in the Captain's room, and then the Captain roared at him, "Go Get It!", so off he went again. The boy was awed at some of the items he saw in the Captain's room, and spent some time just gazing around. He finally found the sextant and raced back on deck to the Captain. By this time the Captain was in an ugly mood, and besides that, the sky was all clouded over so he couldn't
make his observations anyway. He was so angry that as the boy handed the sextant to him, he roared out, "Oh, throw the damn thing away", and young Pop, the boy, threw it with all his might, over the rail, into the sea.

* * *

Some moving jobs in college towns were eye openers for some of us farm kids and others from poor families, while working for Westcott. An interesting one was at Smith College in Northampton, Mass. Each summer a music professor, who probably was a renowned musician, and a professor of music at Smith College, moved with his wife and several employees, to a summer estate on Cape Cod. They either owned or rented the summer place, so it was fully furnished, and our load consisted entirely of trunks and packages of music and family personal items, and always at least two grand pianos, and often an upright also. What was interesting to me was a young lady, who turned out to be the professor's full time secretary, who designated every item to be loaded, and was also at the summer residence to supervise where each item was to be deposited. When we were all unloaded and ready to leave, she gave each of us workers a tip which was at least as much as half of our day's pay. She apparently supervised and handled most of the household affairs. We seldom saw the professor or his wife except for one time when a trunk to be loaded was in the wife's room, and he took two of us to her room to get it. They apparently maintained complete privacy because he knocked on the door, and his wife opened it, which was the only time I saw her during this whole job. This was still in the depths of the Depression, but there were people with wealth in most communities, especially college towns.

* * *

One trip I was on took an Amherst College professor's goods to a summer place on Martha's Vineyard, which required crossing on a ferry. At the time, the ferry was not designed for large or heavy vehicles, and had low overhead framework. Westcott got the measurements of the passageway on the ferry, and we had to remove a van body from one of his trucks, and replace it with one with low sides to clear any low obstructions on the ferry. Westcott would do this type of thing to satisfy a customer, where many movers would not or could not do it, but this kept them in business all through the 1930's Depression. Another example of care and customer pleasing was also with an Amherst College customer. This family was moving from one house to another in town, and had very expensive and delicate furnishings. Their complete set of dining room chairs, and some in the living room, were completely upholstered in pure white leather. Before we started moving these chairs out to the van, George Westcott told us to wash our hands, and rewash them before handling the next one, and all the other furniture. He didn't want any sweat stains or specks of any kind on that furniture. This was not new to us, this was the kind of care Westcott practiced on all moving jobs. We all learned it early on the job. Westcott and Son was a highly respected household moving concern wherever they did business because of this care in handling all goods.

* * *
An example of the respect and trust of Westcott's clients was amply demonstrated on one move I was on for a family in New Rochelle, N.Y. They were moving from a large home in New Rochelle to another large residence in Northampton, Mass., where the father was taking a position at Smith College. Their volume of household furnishings required the use of two moving vans, and also the complete packing of every item in the house. The family left with their personal luggage and other items necessary for a period of vacationing while waiting for their goods to be delivered in Northampton. Four of us with two vans drove to New Rochelle and entered the house with a key which had been sent to Westcott in advance. The family had left a day earlier. We brought all the necessary packing material with us from North Amherst, and started wrapping and packing every item which could not be loaded individually in one of the vans. Books and non-breakable items were packed in wood and metal containers, dishes and glassware were all wrapped individually and packed in wooden barrels. This was all pretty standard packing containers during the 1930's, although some of the large moving companies, like Mayflower, had started to develop their own standardized containers. Packing was a slow tedious job, especially where every fragile item had been left in its place of use, ash trays on stands, knick-knacks on shelves and stands, dishes and glassware in cupboards, and other items where last used. After locating and planning our packing project, we started wrapping and packing about midafternoon. This was after driving 5 or 6 hours from North Amherst that morning. Someone went to a deli and got cold cuts, bread, etc. for supper, and we continued packing until about 10:00 p.m. We were then very pleased to be able to take a hot shower and sleep in one of the several made up beds in the house. It took part of the next day to complete all of the packing, and then we started loading the vans. By the end of that second day, one van was completely loaded, and the other nearly so. We left enough beds, some just a box spring and mattress on the floor, so we each had another good night’s sleep in the house. We finished loading the next morning, locked the door, and were on our way home by noon. How many families in these days would trust their entire estate to a group of complete strangers? That was the trust and respect that Westcott had earned.

An event that occurred on September 21, 1938, created a major change in my life, not instantly, but within a few short months. This was the infamous 1938 hurricane. It blasted into southern New England flooded coastal cities and land; broke or uprooted large expanses of forest; and damaged many homes and buildings. Whole forests areas were flattened by the force of the wind and due to the water soaked earth, from several days of rain ahead of the violent wind storm.
Moving the Last Family out of Quabbin Reservoir and the 1938 Hurricane

It had rained almost steadily for several days. The earth was saturated with water, streams were rising rapidly and most lowlands were flooded. In spite of the rain and hazardous road conditions, a furniture moving van left North Amherst, early on September 21, 1938, to travel to the small town of Enfield in central Massachusetts, to move a family's household goods to a new location. It was essential that this move be made immediately, because Enfield was a doomed town. In the early 1930's a major plan was developed to create an adequate water supply for metropolitan Boston, Mass. The plan called for a dam and a dike to be constructed across the Swift River valley in central Massachusetts, to create a large reservoir of fresh water. The area to be flooded included four towns, Dana, Greenwich, Prescott, and Enfield, all to be nearly completely inundated. By 1938 the dam and dike were nearly completed and water was rising rapidly in the basin created. The last remaining family in Enfield was to be moved on this fateful day.

I was a helper on this van, with two other men, George Westcott, an owner of the company, and Alec Bielunas, another helper. As we crossed a bridge on our approach to the village, we noted that water in the stream was nearly up to the floor trusses of the bridge. Throughout the morning and early afternoon, while we were loading the van with the household goods, the rain slackened some and the air was relatively quiet. We were somewhat lulled into thinking that the long rainstorm was coming to an end.

A daughter of the family was apprehensive about our handling of her personal clothing, dresses, gowns, and jackets, and loaded most of her clothing into her car for transportation to the new location. This car was a new Chevrolet convertible which she had recently received as a graduation gift and consequently was the pride of her life at the moment, along with her nice clothes. She carried everything from the house to the car with the utmost care to prevent them getting wet or soiled from the elements.

By early afternoon we had finished loading all of the household goods into the van and were ready to travel to the new location. This was a farm house not a great distance away, but located on higher ground outside the reservoir area. As we crossed the bridge on our way out of the village of Enfield, we noted that the water had risen nearly one foot since morning, and was lapping at the bridge floorboards. This really brought to mind how much rain had fallen, and we began to notice that both wind and rain appeared to be increasing in intensity. Our destination was on a gravel road off of Mass. Highway 9 which was a primary route to Boston from central Massachusetts. This gravel road ran along side of a newly developed cemetery which had been established to receive the remains from cemeteries in the Swift River valley which had to be relocated out of the reservoir area. The farm house was located a short distance beyond the back boundary of the cemetery on the opposite side of the gravel road.

As the wind and rain had increased considerably, the van was backed in as close as possible to a front porch and a tarp was tied into place from the roof of the van to the roof of the porch. For a short while this was quite effective in keeping the goods dry while carrying them from the truck into the house. Suddenly the wind increased in velocity, and the tarp was torn loose. After
several attempts to hold it in place failed, it was cast aside, and we moved through the unprotected space as quickly as possible to reduce rain damage to the furniture. During this time, we began to notice a grove of pine trees across the road had started to uproot and fall against each other in domino fashion. Our comments were that the wind was pretty strong to blow a whole stand of trees down. No one knew, or even dreamed at the time, that this storm was a full blown hurricane, the infamous 1938 hurricane that caused loss of many lives, and millions of dollars’ damage to property in both coastal and inland areas, and devastated much of the timber through central New England, as far north as southern Maine. The several days of heavy rain had all been related to the hurricane which had followed the Atlantic coast north to Long Island and blasted its way north into New England. Winds off the ocean had created tremendous waves and high tides which swamped many coastal towns and cities in Connecticut and Rhode Island, and caused torrential downpours throughout the area. The saturation of the earth with water created such soft conditions that even large trees such as elm and oak with massive root systems became very unstable and hurricane force winds uprooted them with ease. Weather forecasting at the time was not a major feature of news broadcasts, and also since radio was the only communication system, very limited current news was available. Consequently, no mention of a major hurricane was predicted for the Northeast, and probably it wasn't even known to be a hurricane as it came up off the Atlantic coast from the south. In fact, few people if any, in New England had ever heard of or experienced a hurricane prior to 1938.

As the wind and the rain slashed against the house and windows, and lifted shingles on the roof, everyone became concerned that some severe damage would occur to the house. It was even suggested that some of the household goods should remain in the van until the storm abated. During this time the daughter had left her good clothing and other personal goods in her convertible because that seemed to be the safest and driest place for them. Suddenly a violent gust of wind and rain tore a strip of asphalt shingles off the roof of an adjacent shed and we watched helplessly as a large segment of it dropped directly on to the car and sliced through the canvas top like a knife. With a sharp cry of dismay, the girl ran to her car to salvage her belongings from the rain that was cascading through the torn roof. Several of us went to help and we soon emptied the car of its load, but not without much of the clothing damp and wrinkled from each of us grabbing large armfuls and running to the house with it. Some clothing even had black marks and grit from the roofing material that tore through the canvas top. I wondered afterward if the owner regretted not letting us take her belongings in the van with all the other household goods.

The van was finally unloaded and the household items distributed in their appropriate locations throughout the house by about 5:00 p.m. The wind and rain had abated quite drastically and it seemed almost quiet after the violent conditions earlier. Now it seemed all we had to do was pack up and drive the thirty or so miles back to Amherst. Before we even started the truck we noticed that the road back to the highway was completely blocked by two large oak trees that had blown down during the storm. The home owner mentioned that the gravel road continued on and then looped back to the highway, so perhaps we could get out that way. This sounded encouraging so the three of us settled into the cab and started on our way. We were barely out of sight of the farm house when we came to an area where the road dipped slightly and crossed a low open field. When the truck headlights shown across the field ahead, the road appeared to disappear into what looked like a large pond. The whole area was completely flooded over and
no trace of the road was visible under the water. As we thought this was more of a blockade than
the two oak trees, the van was backed back to the farm house and turned around. To move the
oak trees an ax or saw was needed, and the only available one was a dilapidated splitting ax
belonging to the home owner. While frustrating attempts were being made to chop through the
trees with that tool, George was scouting around for other routes and soon came back with an
idea that we could drive across a small field and enter into the cemetery and continue on a
cemetery road out to the main highway. Anything sounded good compared with attempting to
hack our way through oak trees with a dull ax, so it was returned to its owner and once more we
settled into the truck cab in expectation of a good ride home. George drove and picked up speed
as much as possible before leaving the gravel road to cross the field and enter the cemetery.

With ground conditions as soft as they were, it was still a gamble to cross this field and the
newly landscaped lawns in the cemetery. Our momentum was slowed appreciably as we crossed
the field, but the heavy grass sod supported the dual drive wheels enough that our forward
motion continued and carried us on into the outer limits of the cemetery. It was immediately
necessary to turn sharply to the left to avoid hitting grave headstones, and to reach a cemetery
road. As George swung the van barely in time to miss a headstone, we felt the right front wheel
dip slightly in and out of a soft spot or depression.

In anticipation of a problem when the rear wheel hit that spot, George increased the truck speed
and with a violent bump and lurch of the truck body and enough forward moment-um, the rear
wheel bounced through the depression and the truck continued on to one of the internal cemetery
roads. We never looked back, but all realized the soft spot was a recently filled gravesite which
had been turned into mush by the heavy rain. If that rear wheel had sunk deeper into that soft
grave, the van body would have bottomed out on each side and it would have taken a crane to lift
it out. A narrow escape there, but now it became an easy trip out of the cemetery, because the
roads and grounds were recently built and landscaped with small trees and shrubs that resisted
damage from the hurricane.

Our spirits were quite high as we turned from the cemetery road on to the main highway, Route
9. When we could see down the road our spirits dropped. The truck headlights showed two men
standing in the road and behind them a large tree was completely blocking the road. We drove
slowly up and stopped near the two men. They explained that their vehicle was on the other side
of the tree and they were headed in the opposite direction from the way we were going.
However, they did have a crosscut saw with them, and they had already cut through the base of
the tree trunk. What they needed was a chain and a heavy vehicle to pull the tree to one side
enough to let us both pass. We had the heavy vehicle all right, but no chain. However, after a
moment we remembered that the van carried some heavy rope for various rigging jobs. Very
quickly the rope was taken from the tool box, one end attached to the tree trunk and the other end
to the front of the truck. Backing up slowly and steering toward the side of the highway, the tree
was pulled around enough to open a passageway for vehicles on the other side. By the time the
tree was moved and the rope was removed, several more cars had arrived. Someone said that we
had just removed the last major obstacle on the road, at least as far as he had come. Not knowing
what lay ahead beyond that point, we continued on toward home.

By now the only light showing came from either our truck headlights or from the rare car lights
that we met on the road. All electric power had been knocked out by the tremendous force of the hurricane, wires were down everywhere, power poles toppled, trees uprooted with power lines entangled in their tops on the ground. The rain had nearly stopped, but a heavy cloud cover completely blocked any light from the moon and stars. The only people out were others like ourselves who were attempting to get home. All others, as country folk did, went to bed when it got dark and planned to get up at daylight to assess the damage and go about repairing it. Every house that we could see as we traveled along the highway was completely dark, not even a candle was left burning. No one had any thought to be up trying to repair anything in complete darkness, and it was complete. Without our lights on it wasn't possible to see the hood of the truck, or even a hand in front of our face. It was a night of complete darkness, which I have never experienced before or since. There were no portable generators or flood lights available at that time and very few people even had flashlights, so no one gave any thought to staying up and attempting any cleanup after darkness fell. Consequently, as we traveled on toward Amherst, the only light was from the headlights of the van we were riding in. It was now well after 10:00 p.m. and most other travelers had either reached their destination or stayed in some location along the way. Several places where large trees had blown across the road and been partially removed to allow cars to pass, created anxious moments for us in getting the large moving van through. Several times the van scraped through against tree trunks and branches, and in one place the passage was off the road to bypass a large tree which had not been moved. Eventually we approached Amherst and wondered what we would encounter there.

Amherst was a town noted for the numerous majestic elm trees which lined it's streets and especially dominated the town common. As soon as we entered the residential section of town we realized there was trouble ahead. Large elms, some with trunks four to five feet and larger in diameter were uprooted, some supported many feet in the air by their massive branches, others resting against houses, some flat on the ground with their lower branches driven deep into the earth by their tremendous weight. Some autos that had been parked on the streets and in driveways had been crushed by the falling giants. Driving very carefully George threaded his way around trees and debris that littered the streets. Where the street terminated at Amherst Common, it was obvious to us that the van could go no further. Several hundred of the town's treasured elms were toppled or partially uprooted on the Common, and along the streets. Some left large craters where whole root systems were torn up from the earth. Others that were partially uprooted, lifted large segments of earth, sidewalk and pavement which blocked all passage of vehicles, and anyone on foot.

This was the end of our travel with the van. George Westcott decided to stay with the truck through the night, although his decision might have been different if he had known that his wife at home was enduring considerable stress while caring for two small children and coping with wind and rain from a severely damaged house roof caused by the hurricane. Alec Bielunis left to stay with a family friend who lived nearby, and I started out to walk the two and one half miles to my home. The beginning of my walk was through the maze of toppled trees and uprooted pavement in and around the Town Common. The way was dimly lighted by the truck headlights which had been left on to help us on our way, and a few other scattered car lights through the center of town. When I reached the outskirts of town and started walking the last two miles to my home, I suddenly became aware that all the light was gone. As I left the business section and began walking into the more rural area, not a light shone anywhere. I realized now that I was in
the complete darkness that we had seen from the truck while driving into Amherst except at that
time we had the truck headlights shining ahead of us and it wasn't a complete absence of light.
This was complete, not a flicker of light from a candle or lantern, or any reflected light
anywhere. The cloud cover was so heavy with some rain that I was now traveling in complete
darkness. This is a condition that I have never experienced since that night. It was fortunate that
I had walked this route many times while going to high school and knew the landmarks well.
The road had a hard blacktop surface and by checking periodically to be sure I was on it; I was
able to continue on my way toward home. Feeling the hard road surface beneath my feet, I felt
quite confident of getting home in good time, even though it was after midnight. I had bumped
into several toppled trees and power poles along the way, so I walked with my hands
outstretched in front of me to guard against walking directly into some obstruction. Since I had
traveled this road so many times and every curve and slope were very familiar to me, even
though I couldn't see a single landmark, I felt quite sure of my location. Knowing that I had only
about one half mile to go, my spirits were high when suddenly I was abruptly halted by a large
tree trunk across the road. Feeling along the trunk I discovered it was lying flat on the road
surface so I couldn't crawl under it, and it was so large I couldn't get a grip to climb over it. The
only alternative was to go around it, but which was the best? I turned to the right and followed
the trunk for a short way when I reached the first branches of a massive top. Realizing it would
be very difficult to work my way around the multitude of branches in this tree top, I turned and
went back toward the base of the tree. Feeling my way around the mass of uprooted stump and
base of the tree, I began to feel good about my decision to go that way when all of a sudden as I
made a step forward, my foot went down into empty space and I plunged into a soupy mass of
mud at the bottom of a hole left by the uprooted tree. Only my pride was hurt and I climbed out
covered with mud and considerably soaked with the rain water in the hole. My worst feelings
were of foolishness for not realizing what a substantial hole would be created by the uprooting of
such a large tree, which turned out to be an elm.

The remainder of the walk home was actually quite free of problems, but I was much more
cautious and careful of my footsteps the rest of the way. Soon I saw a light in the distance and as
I approached I could see it was a lantern that my folks had left lighted on a table inside a window
of our home. I entered the kitchen, doors were seldom locked in those days, and had hardly got
into the light of the lantern when my mother came out of her bedroom. She had been in bed but
would never have slept until she had received some word from me. Her first words were to ask
if I and the others, were alright. I certainly couldn't have looked very good, but when I assured
her that I was fine, and the others were also, her next words were to clean up and go to bed. I
told her I needed to go another mile to George Westcott's house to tell his wife that he was all
right. That idea was vetoed immediately as I was reminded that it was only a few more hours
until daybreak, and then this darkest of nights would end, but the memories would not.
Timber Salvage After the Hurricane

Damage from the Hurricane covered all of southern New England into Vermont and New Hampshire, and southern Maine. Whole forest areas were flattened by the force of the wind and due to the water soaked earth, from several days of rain ahead of the violent wind storm. The effect was so disastrous, that the Federal government set up an agency to assist land owners and salvage as much of the blown down timber as possible before it became insect ridden and dried out to create a tremendous fire hazard.

The Northeastern Timber Salvage Administration was the agency, and supervisors were brought into the area from various U.S. Forest Service positions. An organization was set up to locate downed timber, negotiate with land owners for harvest and purchase of the timber, and deliver it to a receiving site. By January 1939 the program was developed to the point where local labor was needed to handle the influx of logs to receiving sites.

I applied for a scalers position and after a few days of training I was assigned to a new receiving site. Many receiving sites were lakes and ponds where logs were hauled on to the ice in winter and left to be partially submerged in water when the ice melted. In summer the logs were rolled directly into the water. The nearest site for me to be checked out on log scaling and grading, and U.S. Forest Service book keeping methods in February of 1939, was on a frozen pond in Leveret, Mass. Some logs had already been dumped on the ice, and trucks were bringing more in continuously, driving out on to the ice to unload. The chief scaler on the job would scale (measure lumber volume), and grade 100 logs, which I would then scale, and compare our figures. After two days of this, he signed his approval, and I reported to the district headquarters in Springfield, Mass. for an assignment.

The district supervisor who I reported to was a man by the name of Leslie Graham. He was a career U. S. Forest Service employee, and for me he was a prince! The day I reported to his office was a few days earlier than he expected, (I had been approved for scaling sooner than most), and a site for me to work at had not yet been firmed up, but instead of putting me off until a work site was set up for me, he immediately signed me on to the payroll and had the clerk in his office find work for me in the office. For about a week I commuted to Springfield and did odd jobs in the District Office. I don't remember much about what I did there, but some of it was folding letters and other mail and stuffing and sealing envelopes. I seemed to have kept busy, and I think some of it was productive. Anyway, I was on the payroll at $60.00 every 2 weeks, excellent pay for the times.

In a few days I was told to meet locally with my field supervisor, who took me to the site in Pelham, Mass., where I was to work, and pointed out the area where logs were to be stacked and said that truckloads would be coming in soon. He dropped off a bundle of peaveys, and then left me. The site was a valley with a steep slope on one side and a gentle slope on the other side. With the welcome assistance of the truck drivers and later a crew of laborers, I was able to scale, grade and tally over 2 million board feet of sawlogs, and by hand labor only, roll them into piles of about 50 thousand board feet up to the top of the steep slope. The trucks hauling the logs at that time would average loads of about 800 board feet. A load of 1 thousand board feet was
regarded as an exceptionally large load. The first load of the day came in shortly after the supervisor had left, and I was still trying to figure out just how to go about piling up truckloads of logs. Fortunately, the driver of the first truck was an experienced logger and hauler. I explained what had to be done and he immediately had some suggestions, which I was very happy to hear. With his load, and a lot of lifting and rolling, we built a crib of logs at the bottom of the steep slope. The next few loads were unloaded and piled onto this base as high as we could by rolling them up on skids. Now the plan was to drive the trucks up to the top of the slope to unload and roll the logs down on to this base pile. Everything was working out quite well with the help of the truck drivers to get their loads onto the pile, but I needed a full time crew for this work so I could scale, grade, and mark the logs as they were unloaded. After a few days two laborers were hired and that made our operation much more efficient, and relieved the truck drivers from the extra work of piling their logs after unloading. Most of these trucks were short wheel base vehicles and not equipped to carry logs of 14 and 16 feet in length.

Many interesting entrances occurred when some of these heavily loaded trucks drove up a short but steep slope to get to the top of the higher slope. The lighter trucks such as Fords and Chevrolets would often rear up on this slope and the driver would negotiate the entire slope unable to steer because the front wheels were completely off the ground. If traction remained equal for both rear drive wheels the trucks would usually progress up the slope fairly close to the designated route. However, if one wheel should slip due to snow or wet conditions, the front end of a truck would swing sideways and settle down crossways to the slope. This would require considerable maneuvering to get the truck back into position to try again. Occasionally the swing around to the side would be so violent that the load would break loose and dump on to the ground creating much hard work moving the logs to a correct pile. Several trucks actually tipped onto their sides, load and all. This created an even larger problem to release the load bindings and get the truck back on its wheels before moving the logs. To reduce the chance of these problems occurring, often my crew and I would stand on the front bumper of these trucks to hold the front end down while they drove up that short slope. Our weight was usually enough to counter balance the overhang on the rear of the truck and keep the front wheels’ firm enough on the ground to guide the truck up the slope. These problems, and the normal ones of creating, and maintaining more of these large decks of logs, (eight finally, each made up of 50 to 100 thousand board feet of saw logs) we took as normal tasks.

Only one problem developed that created a worry for me, and that was the check scaler who monitored the scaling and record keeping at each receiving site. I cannot recall his name, but he was another career U.S. Forest Service man, but the opposite of the district supervisor, Leslie Graham. He had been brought in from duty in the West, and brought with him his experience working with the large timber in Washington and Oregon. To him, our New England timber was all of questionable value, and even with the definite grading rules that we were working with, he would still downgrade nearly every log at least one grade. I had been told that I would be checked sometime, but hadn't given it any thought until one day I saw this Forest Service man drive in to the site. He came up and introduced himself as the check scaler, and marked off 100 logs along the top of one of our piles. He numbered, scaled and graded each one and then told me to do the same for comparison. At the time I had no knowledge of his background and I scaled and graded as I had been doing right along. He took my copy, put it in his clip board, and left. The next day or so I received a message to report to the district office as soon as possible.
When I entered the office, Leslie Graham greeted me warmly, and told me to have a seat. Then
he told me that the check scaler had been in and said I was giving too much volume, too high a
grade, and not culling heavily enough. He wanted me fired. Leslie said that he wanted to give
me another chance, he had told the check scaler that this was all new to me, and that I probably
was nervous being checked that day. The scaler had agreed to give me another chance, so I went
back to work, and waited for him to show up again. In a few days he came in and repeated the
procedure. This time I cut the volume of every log, and I don't think I had a single number one,
and several culls. It was probably obvious to the scaler what I was doing, but I must have come
close to what he did, and he had to accept and compare my figures to his. I never heard anything
more from him until several months later, when another episode came up.

By early summer a portable sawmill had been set up in the lower level, and had started sawing
the logs into lumber. These logs being out in the open had to be sawn soon before they became
infested with borers and stain. While the mill was being set up, loads of logs were unloaded and
piled where they could be rolled directly into the mill when it started operating. When the mill
became operational, I had the trucks unload directly on the skids going into the mill where they
were sawn within minutes.

One part of the scaling procedure was to mark each log on the small end with the scale and a
number. Also the opposite end had to be stamped with a small hammer with the letters, U.S., to
signify that it was owned by the United States Government. On some of these logs that were
going to be sawn in a few minutes, I had neglected stamping, thinking it wouldn't matter, they
would soon be lumber. One day the same check scaler came in and saw that some logs were not
stamped, and really bawled me out, saying that those logs were not legally owned until stamped
with U.S. I'm sure he was correct and following U.S. Government regulations, but at the time it
didn't seem important to me. Anyway, this time his report to Leslie Graham was so strong that I
was not fired, but I was transferred to other sites, and to other duties. This transfer moved me to
various sites in Massachusetts and Vermont.

One interesting spot was a pond storage site in Belchertown, Massachusetts, where logs were
rolled down a steep slope into the water. As the pond filled with logs, new loads dumped down
the slope became crossed up, and eventually a large log jam developed which the local crews
could not break up. The final solution to breaking this jam and getting all the logs into the water
was to bring a crew of experienced river drivers from Maine to do the job. It was an exciting
event to watch these men prying out key logs near the bottom of the huge pile, and then run
nimbly to the side to escape the loosened logs that came tumbling from above. Within a very few
hours all the logs were in the pond and the slope was bare.

By the spring of 1939 sawmills were set up at all land based sites. It was imperative that these
logs be sawn into lumber before insects and stain attacked the wood and reduced the value of the
final product. Logs stored in water were protected from these pests and could be sawed out at a
later date. The lumber produced by these mills was stacked under strictly regulated conditions.
For several months my duty was to visit several sawmill sites each day, scale and grade any
sawlogs which might have been delivered, and inspect the lumber yards for compliance with
regulations. Governmental regulations and specifications were definite and strict, but at times
 seemed unreasonable. Logs that were scaled on the log brow of a mill and as mentioned before, even though they would be sawn into lumber within minutes, had to be stamped on one end with a U.S. stamp and also marked with log number and scale. Lumber piles had to be lined up in perfect line with identical front and top slope, and when completed had to be completely covered with roof boards, all of which had to be securely wired down to prevent damage by wind or rain. This last requirement was very desirable because at the time no one knew how long these piles of lumber would stay in place. As the harvest of downed timber neared an end and much of it had been sawn into lumber and stacked, I was assigned the job of inspecting some of these completed sites.

A partner on this project was the son of one of my favorite professor’s at the college, Professor Charles Thayer who taught a Soils course for both farm and forest. He was very knowledgeable about forest trees and other vegetation, which was very educational and interesting to me. His son, Charles Jr., and I worked together very well, and had some good times on the job. The hurricane had created a tremendous inventory of lumber at a time of limited need still under the influence of the Depression of the 1930’s. However, by 1941, the world situation and the United States preparation and involvement in World War II, created a great demand for lumber, and the majority of this salvaged lumber was utilized during those years.

From 1941 to 1943, I worked for a lumber wholesale company Lawrence and Klein, of Fitchburg, Mass. Much of my duty was shipping lumber from one of these lumber yards in Vernon, Vermont to markets in southern New England and New York State for primary use in military requirements. At the beginning of my employment with this company, I was in charge of a lumber yard and a hired sawmill in Sharon, New Hampshire. Logs purchased by Lawrence and Klein were delivered to the mill yard, and sawn and the lumber stuck in the open to dry. As this lumber became dry enough, it was hauled by local truckers to southern New England markets. One of my duties was to scale and record all logs as they came in, and tally and make a bill of lading for all lumber as it was shipped out. There were some unpleasant moments standing on a lumber pile at 7:00 A.M. with the temperature around 15 below, with a pad and a pencil, tallying 5000 board feet of random width, and lengths boards, as they were being loaded on to a truck by two active workers. Even so, I generally enjoyed the work, and could always look forward to a warm place to do the final computations in a small office I had built when I first arrived, which had a wood stove that I started a fire in before getting out in the cold.

Due to a lack of quality sawlogs in the Sharon, NH area in the summer of 1940, the sawmill producing lumber for Lawrence and Klein had to close down. After shipping out all of the remaining lumber from the drying yard, my work at that site was finished. To keep me on the company payroll, until a purchase of hurricane salvaged lumber from the U.S. Government was completed, Ivers Lawrence transferred me to a sales route in the fall of 1941. For over a month, I traveled over western Massachusetts interviewing purchasing agents from a list of companies Ivers provided me to see if they might be potential customers for his lumber. I dislike this job immensely. Some agents were pleasant, but many were arrogant and rude. They were told who I represented and kept me sitting in the reception room, sometimes actually for hours. I disliked this type of person and seldom made a repeat call.
Ivers Lawrence was a fine man and I enjoyed working for him so I stuck it out, until the first of February, 1942, when I was transferred to Vernon, Vermont. This was the site of about one million board feet of hurricane salvaged lumber belonging to the U.S. Government. Ivers Lawrence had purchased the entire amount and moved me there to handle orders and tally and record the lumber as it was loaded on trucks for shipment. Shipping this lumber was the climax of the whole hurricane salvage project, which I had started on in 1939 in Massachusetts, from receiving, scaling and stacking sawlogs before and during the time they were going through a sawmill, checking the lumber for drying, and finely shipping the dried lumber to processors for its final use. The war effort used tremendous quantities of lumber, and by the fall of 1942, my work with Lawrence and Klein was finished, with every board shipped from the site in Vernon, and no other position with the company available, I immediately started working in the Greenfield Tap and Die plant.
Major Events in a Young Life

During the later years of the 1930's I developed a love for automobiles, and especially the mobility they provided, and owned several over a short period of time. In 1936 and 1937 while attending Stockbridge School of Agriculture at Massachusetts State College, I did not own an automobile but had considerable use of my mother's car and also one belonging to my next older brother, Claude. In 1937 my mother inherited a 1933 Ford Sedan and gave it to me to use. This was a welcome and unexpected graduation gift which I greatly appreciated. Up to that time I had used my mother's 1931 Chevy convertible, and my brother Claude's 1932 and 1934 Chevy's. I was very fortunate to have a car of my own just after graduation and especially during such a depressed period. After returning to full employment with the trucking company, I bought a 1935 Ford Sedan for $500. Many miles were traveled in this auto to various roller skating rinks in several local cities and states.

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With several of my roller skating friends, it became a habit to travel around on a Sunday afternoon visiting several Polish Picnics in the local area. I was never good at dancing the polka, but very much enjoyed listening to the music and watching others dance. Many times two girls would dance together, either to attract attention, or because many of the young men were like me, not too keen on dancing themselves. One Sunday afternoon during the summer of 1939 at one of the picnic sites at Pine Nook, in South Deerfield, I saw two young ladies dancing together. They were dancing with a different polka step than most of the locals used and also were dressed much more formally. The dance step I recognized as the so called New York step and combined with their clothes and appearance, I assumed they were visitors from the city. I was immediately strongly attracted to one of them, so much that I developed courage enough to speak to her and made a tentative date to see her at a roller skating party later in the week. The night of this date I drove to the end of my driveway and stopped. I had also made a vague date with a girl who lived near one of my work sites for the hurricane timber salvage in the opposite direction, for this same night, and had to decide at this moment which way to go. I turned left and went to the roller skating party. It was a split second decision, but the best one I ever made. Mary was a local girl from Montague, Mass., who with her cousin had gone to work in Yonkers, New York several years before we met. After a few more dates she never returned to the city but found work locally so we could be together. A little over a year later, on Oct.12,1940, we were married and 60 years later we enjoy each other's company the same.
Changing Jobs - A Major Move

By the fall of 1942, my work with Lawrence and Klein was finished. With no other position with the company available, I immediately started working in the Greenfield Tap and Die plant. They were desperate for machine operators to fulfill their orders for taps, dies, gauges, and brooches for plants manufacturing military requirements. Throughout the rest of World War II, I worked in these so called defense plants. I worked the 3 p.m. to 11 p.m. evening shift, which gave me time to work on a local farm several hours each day and on my days off. The farm job paying 12 to 15 dollars per week was a welcome addition to my shop salary of about 35 gave dollars per week. We needed any extra income we could get because of several important events for Mary and I that occurred during these years. One was on Dec. 10, 1942 when our first son, Arthur, was born. Another was on September, 25, 1944, when our second son, Larry, was born. Later, in Maine, on Dec. 17, 1947, our third son, Gene, was born, and finally, on Sept. 14, 1954, our one daughter, Eileen was born.

Some comments about machine shop work may be appropriate and interesting to some. Routine shop work was not something I would have wanted for a life's work, but I was able to work some diversity into my jobs, which did much to relieve the boredom. In the Greenfield Tap and Die Shop, I operated a surface grinding machine which could also work as a lathe and turning machine. Much of our work was repairing and finishing taps and plug gages which had threads or outside diameters ground in another part of the shop. With a tapered plug or tap, which was a few thousands of an inch undersized, our job was to place the item in a chuck and grind the face, or end of it back a few thousands to bring the taper back up to the correct tolerance. This was precise work, which needed close attention, and I enjoyed doing that. Another precise and delicate procedure was to cut a radius into the leading edge of a grinding wheel, with a hand held commercial diamond. I'm sure this is all done with machinery now, but at that time, in the early 1940's, it was done by eye, and a steady hand. This radius in the grinding wheel was then applied to the leading circumference of plug gages to make them more readily inserted in use. When ground on to the plug, it had to be a perfect fit and not cut into the outer diameter of the gage, or into the face. A tricky procedure from start to finish, and though I was able to do it more often than several of the other machine operators, I still had times when I worked a whole shift getting one order done. Later, when I shifted jobs from Greenfield Tap and Die to Threadwell Tap and Die, I had exposure to another milling process.

This was cutting the threads into blank taps, running three separate machines. These blanks were plugs of various diameters with grooves equally spaced around, and lengthwise of the plug. The 'lands' so called, between these grooves, would become the threaded, cutting portion of the finished tap. Through a system of correctly adjusted cams, these machines turned the blank against a cutter which would rise from its lowest point in a groove to its highest point to start the cut on the next land. From the high point, which would become the cutting edge of the finished tap, the cutter cut deeper until it came out in a groove, where it rose to start the next cut. The cams had to be set precisely to start the cutting on the leading edge of each land. When I started work on these machines and had a change of sizes or styles, I had to wait for a machinist to set up and adjust the cutting action. Sometimes there was as much as a twenty-minute wait for him to get to my machines. After watching him adjust the cams and make the other necessary
changes a number of times, one day I decided to do it myself rather than wait for him to show up. I didn't find it very difficult, and soon had the machine running and producing correctly milled blanks. When the machinist came to do the setup, he was quite disturbed that I had done it on my own. He checked all my work and found everything to be OK, but still went off mumbling to himself. He obviously reported it to the Shop Supervisor who came by a few minutes later. I didn't know what to expect, but was quite relieved when the Super didn't appear disturbed, but actually seemed pleased. Without a word, he looked over the work I had finished, and then asked me if I had set up the machine for this job, and I told him I had. He then asked me if I had done this kind of work before, and I told him I hadn't. He asked where I learned how to do it, and I told him, "Right here". He then said," Keep right on doing it. If you have a problem, come to me, not the machinist". He obviously wasn't too pleased with the machinist and welcomed my taking over. In fact, it became obvious to me later that the machinist made the job more involved than necessary to make it look harder. I had skipped several steps when I set up the machine, thinking them not necessary, and they weren't. After a few months at this milling job, I was shifted to another department, finish grinding broaches. A broach is a reaming tool used primarily for cutting out keyway slots in axles and other shafts. It is a steel bar varying from a few inches in length to a foot or more, with cutting teeth machined into one edge. Again I was assigned interesting work requiring some concentration and expertise, and worked at it until I quit there in September, 1946, to take on the final job of my career.

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The outside farm work was a welcome change from the repetitious routine of shop work, and with a full work schedule, I had given limited thought to a change of jobs. Then, in the spring of 1946, I received a call from Professor Robert Holdsworth at Massachusetts State College asking if I had an interest in a forestry job. My interest was very strong and when he explained more about the job my enthusiasm increased. He said that Professor Robert Ashman called from the University of Maine to inquire if he knew of anyone who might be interested and capable of managing the University of Maine Forest. Ashman and Holdsworth had been classmates at Yale, and respected each other’s judgment. As a result of this call and a recommendation by Professor Holdsworth and another former professor, J. Harry Rich, I came to Maine for an interview in June and was accepted for a new position of Forest Superintendent.

The Forestry Department at that time was located on the second floor front of Winslow Hall. The single office for the one secretary was in an alcove directly over the front door entrance. When I stepped into this office to introduce myself, a professor who happened to be talking with the secretary at the time, looked up and we were both surprised to see a familiar face. The professor was James D. Curtis who had been teaching at Massachusetts State College during the last year of my attendance there. I had no idea he had moved to Maine during the intervening years, or in fact he was the Professor of Silviculture primarily responsible for management of the University Forest, and I would get most of my information and direction as Forest Superintendent from him. This was one of many instances in my lifetime of the influence of several individuals after a long period of lost contact. The secretary in the Forestry Department office was Melva Horne (sister of Maxine Horne), the first of a long line of dedicated, cooperative and efficient office staff that I have been associated with during my term as Forest Superintendent. This dedicated support group has been a major contributor to the efficiency and
growth of our forestry program at the University of Maine.

The first years of my employment were in a period of rapid expansion of enrollment at the University. My position was new and not established with a complete budget. Professor Ashman was under considerable strain to prepare for the influx of students returning from the War under the G.I. Bill. Some students were coming back to finish their degree and some to start. The budget for my position was put together from several different sources in what at the time was the College of Agriculture and also the Maine State Forest Tree Nursery. The Nursery was located on campus and managed by the University of Maine Forestry Department. By appointing me as Resident Nurseryman, I was put on the State Forest Service payroll for the summer months.
Moving to the University of Maine

Moving to South Apartments

During the summer of 1946, with the enrollment of an enlarged student body and addition of teaching staff, a critical housing shortage occurred. Local housing was unavailable, so my move to Orono was put off until temporary housing units were brought in from military bases and set up on campus. One-story barracks type buildings were located on the north end of campus, where Alfond Arena is now, for single male students. Apartment buildings were located on the south end of campus in the area of the present York Hall and York Village, for married students and staff. One row of buildings were one story, flat roof, utility apartments for married couples without children. The rest on three parallel streets, were two story buildings with eight apartments in each, a total of 23 apartment buildings, which became known as the South Apartments. The apartments ranged from one to three bedroom units. The summer of 1946 was a time of hectic activity on campus in an attempt to provide housing in time for the start of the fall term. Several times during the summer I received communication that housing would be available shortly. I would give my notice to the tool and die factory where I was working and then receive notice from Orono to hold off a little longer. My boss in the factory finally told me not to bother with a week’s notice, one or two days would be sufficient. I think he had hopes I would change my mind and stay there. He knew I was taking a drop in salary to move to Maine, but also that I preferred an outdoor life to a factory job.

Word finally came that housing would be available in September and arrangements were made to make the move. Westcott and Son, the moving company I had worked for was contacted, and since they were familiar with my experience in handling furniture, I was allowed to act as helper to the driver in loading and unloading, thus reducing the cost of moving substantially. Our household goods were loaded one afternoon and the next day the drive was made to Orono. The roads were not designed for direct or rapid travel at the time, and the trip of 330 miles with two young children took nearly ten hours. Our arrival coincided fairly closely with the truck and then it seemed that our troubles really began. Landscaping had not begun and a large pile of earth blocked the front entrance to the South Apartment that had been allocated to us. The back door wasn't quite as convenient for moving furniture through, but it was clear, if the truck could maneuver back there through the muddy back yard. The driver managed to get the van fairly close to this rear door and unloading began. Upon entering the apartment however, we found that the walls and ceilings were freshly painted, but the floors were heavily coated with clay soil which had been tracked in by the workmen. It was essential to move the furniture in, set up beds, and make the place livable for a very tired family. Everything was placed on a temporary basis and over the next several days was moved around to allow for a thorough scrubbing and cleaning of the floors, eventually getting to the point of installing a rug and permanently locating furniture. Several times during this period the family had strong reservations about this move to Maine. However, as we slowly got involved in work and family affairs, made new acquaintances, and became accustomed to apartment dwelling, we came to enjoy our years in the South Apartments, with several lifetime friendships resulting.
Introduction to the University Forest

The original University Forest area as leased from the Federal Government in 1939 was comprised of several separate tracts of land totaling 2,085 acres in the Old Town-Orono area. In 1941 an area of 325 acres north of Gilman Falls Avenue in Old Town, was transferred to the city of Old Town for use as an airport. With this and other transfers, by 1946 the University Forest was reduced to an area of 1747.72 acres. Details of the acquisition are given in Life Sciences and Agriculture Experiment Station Bulletin 696, entitled "Background and History of the University of Maine Forest" by Dwight B. Demeritt, February 1972. The Forest was renamed the Dwight B. Demeritt Forest in his honor in 1971.

From 1939 to 1946 Jerome Dunphy of Old Town was responsible for activities on the Forest under supervision of faculty members of the University of Maine Forestry Department. His major duties during these years were allocating stumpage permits to local residents for firewood and some sawlogs. His time was occupied in designating stumpage areas, inspecting cuttings, scaling products and assisting with other timber stand improvement projects.
Assuming Full Duties

After Jerome left to work with the Soil Conservation Service in Aroostook County, a student, Harrison Ripley, was employed during the summer of 1946 to oversee operations in the University Forest until I arrived to take over. His assistance and the information he provided were of great value in my becoming familiar with the Forest and its current events. Two major harvesting operations were in progress and a considerable number of individual firewood stumpage sales were made each year. Many of the firewood sales were to Old Town residents and practically all of the members of the Old Town Fire Department were cutting their firewood in the University Forest. Because of this close contact with the firemen, the Old Town Fire Station became a regular stop for me, and many of my stumpage sales were initiated there. Several advantages resulted from this association. I became acquainted with many of the municipal employees of Old Town and on a personal basis received a number of favors for the University Forest. Prior to 1951 the Forest had no means for plowing snow off the roads. Travel in winter on University Forest roads was continued as long as possible into the winter until a major snowstorm would block vehicle travel. After that, snowshoes would be used to get to work locations. The only vehicle belonging to the University Forest and the one I had for transportation was a 1939 Chevrolet Beach Wagon, actually a station wagon with wooden side panels, and not designed for travel in deep snow. Yarding of forest products to a truck road was done by local teamsters when ground conditions and snow cover were advantageous for use of horses and sleds. This work was usually done in mid-winter about the time of heaviest snow fall. Roads then had to be plowed to allow trucks access to piles of logs and pulpwood that were ready to be hauled. My relations with the Old Town Highway Superintendent were excellent, and after major snowstorms and city streets had been cleared, he would direct one of his plow trucks to drive through the Forest roads and remove the snow wherever necessary for our trucking operations. There was never a charge for this service and therefore anytime a request came from the city for a large Christmas tree or flag pole, it was provided enthusiastically. For many years one or more trees were provided for Christmas festivities in Old Town, set up on a temporary basis each fall. Eventually living trees were planted and these are being used currently for lights and decorations at Christmas. Similar procedures were also in effect with the Town of Orono because of the close involvement of the Town and the University, especially in the areas of fire and police protection. Excellent public relations with Orono and Old Town municipal employees continued throughout my term as Forest Superintendent.
Shelterwood Project

One of the harvesting operations which was in progress in 1946 was the first cut of a projected three-cut shelterwood cutting of white pine, in Compartment C, in and adjacent to Block I-8. The block system of division of the Forest had not been established at that time and the cutting area was delineated by use of forest type lines around a white pine stand. A local man, Edward Dempsey, a native of Stillwater, was hired to do the cutting. At that time most pulpwood was sold as sap peeled wood. This required working as rapidly as possible during the summer months when sap peeling was possible. Working with a bow saw, axe and bark spud, the trees were felled, limbed, peeled and left full length where they fell. When peeling season ended in August, Dempsey went back over the area and bucked the stems into four foot lengths and piled this wood along skid trails he had previously swamped out. Piles were put up with stakes at each end, with no pile being less than one-half cord. Most woodsmen of that era took pride in making square, uniform piles slightly higher than four feet to give good measure. Well put up piles were essential because in many cases the wood remained in place for several months until suitable conditions developed for yarding to a truck road. In the 1940's practically all yarding was done with horses and all products were hand loaded and unloaded. Neat piles and well swamped out skid trails were much appreciated, if not demanded, by the yarding crew. By early winter, Edward Dempsey had completed bucking and piling all of the trees which he had felled and peeled earlier, about 300 cords.

At this time, contact was made with a local teamster to yard the wood. His plan was to haul the wood on snow using a double bottom, two horse sled. When conditions suited the teamster, Eldridge "Red" Crosby of West Old Town, he drove his horses and sled around over the swamped out trails where the pulpwood was stacked to break out the trails and leave a sled track. He did not yard any wood at that time, but drove around with an empty sled. Several days later he returned with a crew of three family members. The sled tracks were well frozen and firm, and this crew would load the sled rapidly with up to two cords of pulpwood and unload it into long stacks along the access road, all by hand. With the previously prepared tracks in such good shape, everything worked very smoothly, even the horses did not have to work real hard, even with a two cord load. The hardest part of their day was the trip of five miles to and from their home place each day. This crew always brought substantial lunches, the main part of which appeared to be steak sandwiches. After a period of getting acquainted, the information finally came out that these were venison steaks, the source of which was the back field of the Crosby farm. Their stock was replenished at any time of the year when it got low by a crew that would spread out and walk through a wooded area and drive out any deer in that area. A hunter stationed near one edge would shoot one of the deer that were flushed out. This was fairly common practice for many country dwellers in those years when cash for meat was scarce. Most game wardens were aware of it, but were lenient with families they knew used the meat for their own use as food.

The access road into this shelterwood cutting area was laid out and bulldozed prior to the completion of the cutting. It was common at that time for the pulpwood companies to have bulldozers available for road construction on their own lands, and they would also contract out on a job where they expected to get some of the products for their own use. The company in
Great Works in Old Town known at that time, 1946, as the Penobscot Chemical Fiber Company or P.C.F. (later James River Corporation, and in 1999, Fort James), was contacted, and one of their bulldozers was dispatched to bulldoze a road into this area through Blocks G-8 and H-8 in Compartment C. The job took four hours and cost forty dollars in the fall of 1946. A year later another access road was bulldozed by a local contractor into Block D-5, Compartment E, from the Logan Road. This was about a six-hour job and cost seventy dollars.
Problems of a Logging Job

When Ed Dempsey completed his work in the shelterwood area in early winter, an attempt was made to continue his employment through the winter months. While an area in Block D-5, Compartment E and vicinity was being laid out and marked for cutting, Dempsey worked in another area of the Forest helping his brother, Percy Dempsey, to cut logs on a stumpage sale. Percy was a house builder and would buy logs on stumpage and by doing all the cutting, yarding and hauling himself, would get his lumber provided at less cost than buying it outright from a mill. This lower cost often looked better on paper than it actually was. The two brothers and their brother in law, Jim Riley, worked together for several months during that winter of 1946-47. Several times after a substantial snow storm, they spent a full day or more just breaking a trail in through the drifted snow with Percy’s truck. They worked hard every day and even when the day was nonproductive in timber harvesting, if they made it through the snow to the job location and back out, they seemed to have a sense of accomplishment. House building was always suspended in the winter time, so any productive activity was considered to be of value at that time.

In the spring of 1947, Ed Dempsey was put back on the University Forest payroll as a piece work cutter in Block D-5, Compartment E. This was a mixed softwood stand of pole size timber. Spruce, fir and hemlock pulpwood was not peeled, but during the summer a small amount of pine was sap peeled. George Randall, a local teamster who lived close to the north boundary of the Forest on College Avenue Extension, was hired to yard this pulpwood and a few saw logs. Randall had two horses, but skidded most of the pulpwood in tree length, one at a time with one horse. If a large log or pulpwood stick was encountered, he would hitch the spare horse on to assist. Sometimes, when one of his sons was available, both horses would be used, working singly. Dempsey would fell, limb and top trees for several days and Randall would come in and yard these trees in one or two days. After being yarded to a central location or yard near the recently bulldozed road, Dempsey would buck the pulpwood into four foot lengths and pile it along this road, separating the species into separate piles. Logs were rolled up on to a raised skidway to facilitate hand loading later. All of this cutting and liming was done with a bow saw and ax, so production of one and one half to two cords of pulpwood per day was considered good. Many cutters did well to cut and pile one cord in a day. Piece work cutting was paid at a rate varying from five to six dollars per cord for pulpwood, and four to five dollars per thousand board feet for sawlogs. Sap peeling of pulpwood was an extra two to three dollars, all depending on the species.

A hot, dry summer of 1947 continued into the fall to create very dry conditions throughout Maine and the Northeast. On the day in late summer when Ed Dempsey finished this cutting job, I had arranged to transport him and his equipment to his home in Stillwater. I went to the yard where he was finishing up in midafternoon to pick him up. He had finished earlier than anticipated and was sitting on a log pile smoking a cigarette when I arrived. Before picking up his tools to leave, he bored down through the duff to extinguish his cigarette in what appeared to be mineral soil. We then carried his equipment out to the gravel road and loaded it into the back of the station wagon and we proceeded to his home in Stillwater. After spending some time there unloading his equipment and determining from scale slips the amount of pay due him to
settle the account, I drove back to the University Forest. A trucker, Amos "Pete" Coulombe, was hauling pulpwood from the shelterwood area in Block I-8, Compartment C. As it was near five p.m. I parked in the gravel road and walked in on the bulldozed road to see if any trucks were still there loading up. I was barely out of sight of the road when I heard a fire truck siren near the beach wagon. Running back out to the road I saw an Old Town fire truck behind the beach wagon. The crew said they had just finished putting out a fire in the woodyard where I had picked up Ed Dempsey. A call had come into them from the Old Town Airport. A small plane flying out of there had reported a smoke in the University Forest, and the Fire Department had responded immediately. Apparently the cigarette had not been extinguished in bare soil and had almost immediately ignited the dry duff layer. In less than two hours a fire had started, burned over about one half acre, and been extinguished by the local Fire Department. After thanking the fire crew, I drove to the fire scene to check out the situation. Several small hot spots of smoke were showing that had developed after the fire crew left. I had two full Indian back pack water tanks with me and pumped this water on to the hot spots that were visible at that time. Returning to the area later in the evening with more water and equipment, it was well after dark before I was satisfied that the fire was completely out. Several piles of pulpwood burned enough to char the ends of about two cords. Since the mills would not accept charred wood, these ends had to be cut back to fresh wood, all done with bucksaws. A small amount of pulpwood and sawlogs were destroyed by the fire, but due to excellent relations with the Old Town Fire Department and Airport employees, the immediate reporting and response held this loss to a minimum.
**Catastrophe of Fire**

Regrettably during this period, relations between fire protection agencies throughout the state were not as cooperative. Problems over compensation and liability for an agency assisting at a fire in a neighboring community created a situation where some town fire departments would not assist in extinguishing a forest fire until it crossed the town line into their area. As a result, a serious situation existed throughout Maine in 1947 with a very dry summer and fall, and not good cooperation between fire departments. The Maine Forest Service was the main coordinator for forest fire fighting, but was often frustrated by this lack of cooperation. A number of fires occurred during this dry period and were held to a minimum by Maine Forest Service Fire Wardens and dedicated fire fighters working in their own communities. This success lulled some people into believing conditions were not serious, but it was obvious to many that an explosive situation existed. As drought conditions became more serious and aggravated by high winds, fires broke out in numerous places throughout the state in mid-October. The areas most noted due to high loss of property along with devastation of forest land were in southern Maine ranging from Brownfield on the New Hampshire border to Kennebunkport on the ocean and affecting numerous communities in between. Several of these communities were practically wiped out by the fire. Another area was on Mount Desert Island, with the most serious damage in Bar Harbor and on Acadia National Park. Many palatial summer homes were destroyed along with a section of the town of Bar Harbor. A fortunate change in wind direction saved the town from complete destruction on October 23. Gale winds continued into the night and were forcing the population to evacuate by sea from the town wharf, when a change to on shore wind brought relief and an opportunity to stop the approach of fire into the town.
Volunteers Aplenty

This so called Bar Harbor Fire started October 17, 1947 from a neglected town dump, and through a number of unfortunate incidents of poor communication and inefficiencies in fire suppression, grew to a major conflagration in a few days. Help was given by some ten towns and cities, and the National Park Service flew in 41 trained forest fire fighters from the west. The Forestry Department of the University of Maine cooperated vigorously, sending altogether 1200 men, not all forestry students, directed by Forestry Professor Arthur G. Randall. Other colleges and Dow Field Air Base sent another 2400 men. The above information was taken from the book "History of the Maine Woods" by Philip T. Coolidge, copyright 1963.

In 1947 the Forestry Department of the University of Maine had one truck equipped with a canvas top and wooden seats which was used to transport student classes on field trips. When the call came for volunteers to fight fire on Mount Desert Island, students turned out in large numbers. To transport these volunteers to the fire scene many vehicles were needed. Private cars, Jeeps, R.O.T.C. trucks, and the Forestry Department truck were used. The coordination of this group by Professor Arthur G. Randall usually resulted with him traveling in a lead car, with the Department truck next, and a U of M. R.O.T.C. truck behind. These units would be followed as a convoy by the various private vehicles. I had been driving the Department truck which had seats along each side, to transport various classes associated with the Forestry curriculum, such as Botany, Entomology, Pathology, and Soils, on field trips, and I volunteered to drive it on these trips to Bar Harbor. Actually our destination was Somesville on Mount Desert Island, where a command post had been set up. The usual routine was to assemble at Winslow Hall at about 5:00 A.M. and start out about one half hour later. This made our arrival time at Somesville a little before 7:00 A.M. The fresh volunteers would then be assigned duties for the day and my time varied with the daily situation. Some days there were night crews ready to return to Orono, and I would start right back and then return in late afternoon for the crew that had worked all day. Other times I assisted the R.O.T.C. driver delivering food, drink and supplies to the fire lines. With the all-wheel drive military vehicle, we were able to travel along bulldozed fire lines, and bring supplies, especially water for fire suppression, quite close to where it was needed.

Several interesting incidents occurred during this involvement with this fire. Once while making a delivery of supplies to the fire line we came on to a tank truck with a load of water, stuck up to its axles in a soft spot in the bulldozed trail. Firefighters with back pack Indian tanks were filling them directly from the tank truck to lighten its load. These men had to walk quite a distance to fill their tanks, but it was the only water available to them. There was firm ground beyond this soft spot, so we reasoned that if we could get our all-wheel drive truck around it, we should be able to hook on and pull the tank truck on to firm ground. We scouted out a route around the tank truck and even though there were several trees up to three or four inches in diameter, the driver drove the army truck through, pushing over and uprooting trees as he went. After hooking on and pulling the tank truck along to a place much closer to the fire scene, we continued on, making other deliveries to other firefighters.

Another incident occurred on one of our first trips down. Road blocks had been established in Ellsworth at the junction of Route 1 and Route 3 to restrict unnecessary traffic on the road.
leading to Mount Desert Island. On one trip with a convoy of trucks and private cars we were stopped by a guard at the road block, and Professor Randall got out to explain who we were and that we were authorized to travel to the Island. One of the forestry students, John Walker, later Chief of the Maine State Bureau of Forestry, was in the convoy driving a surplus army jeep which he had purchased after his discharge from the armed services. He was also wearing military clothing as many recently discharged servicemen did. When he saw the hold up at the road block, he pulled out of the convoy and sped up past the others to the guard post and made a wave and motion to pass the convoy through. The guard, thinking he was an army officer, stepped back immediately and waved the whole convoy through. That was one of the fastest trips we made to the fire scene on Mount Desert Island. After about a week of transporting workers to and from the fire scene, the fire was under enough control that the student crews were discharged from fire duty and activities at the University returned to normal. Shovels, axes and other firefighting tools that had been used by the crews were considerably mixed up, and we felt fortunate to get back the approximate number that had been supplied. One item that returned on one trip became a valuable asset to the Forestry Department and is still in use. This was a Pacific Marine fire pump which had been brought on shore from a Naval ship and then abandoned when the crew went back to their ship. Some students saw it and brought it back with other equipment. For many years that pump was a main stay of the Departments' firefighting organization under the direction of Professor Arthur Randall.
New Crops and Other Events

Another significant event occurring in the fall of 1947 was an excellent white pine seed crop in the University Forest area. An abundant supply of white pine seed was spread naturally over the entire forest and was especially welcome on the area in and around Block I-8 in Compartment C. As mentioned earlier this area had been established as a shelterwood type of silvicultural regeneration cutting designed to be reproduced to white pine. The first cut of a planned three cut program had been completed in 1946. This cutting had removed most of the commercial size understory timber and provided a good opportunity for establishment of seedlings. An effort was made to determine the amounts and extent of the seed fall by setting out screened seed traps at various locations on the Forest. In the shelterwood area four one quarter acre plots were established with four seed traps in each plot. The traps were one meter square boxes of 1 by 4 inch lumber, with window screen on the bottom and 1/4 inch mesh wire on the top. This allowed seed to fall into the trap and prevented consumption by birds and rodents. The amount of seed fall per acre was calculated from the average count of seed collected in these traps. In the fall of 1948 several millacre plots were established, and all new white pine seedlings on these plots were counted and marked with metal tags. The number of seedlings counted ranged up to 178,000 per acre, the first year. Many died from various causes in the next several years, but so many survived in the shelterwood area that heavy thinning was required in later years.

Operating funds for the University Forest have never been plentiful and this was very noticeable in 1946. The beginning salary of the Forest Superintendent was $2100 per year, including a housing allowance. Student wages were set at 60 cents per hour, up from 35 cents a few years before. A minimum amount was budgeted for equipment and supplies, most of which went for bowsaw blades, files, axes and other hand tools, and for spikes and creosote for bridge timbers. Gas and oil allowance was provided for the one passenger type vehicle. Piece work cutting was at a rate from $4.50 to $5.00 per cord, and $5.00 to $6.00 per thousand board feet. Yarding of timber by horses ranged from $1.00 to $2.25 per cord and up to $3.50 per thousand board feet. Equipment available to the Forest in 1946 consisted of the 1939 Chevrolet Beach Wagon, and a supply of hand tools, none with power.

During the period from 1947 to 1956, because of limited funds in both departments, the Forest Superintendent also served as the resident nurseryman for the Maine State Forest Nursery which was located on the University of Maine campus behind fraternity row on the bank of the Stillwater River. A portion of this area has been in use as a tree improvement research area and a University Landscaping Crew, since the mid 1950's, when the State Nursery was moved to the Greenbush area, and since abandoned.

Responsibilities at the Nursery included three months’ full time during the summer and part time and weekends in the spring and fall. Duties included lifting, packaging and shipping seedlings, preparation and seeding of seedbeds, and summer care including fertilizing, irrigating, and weeding. A required course in Nursery Practice (seeding and planting) was taught at that time by Professor Henry A. Plummer who also had the overall responsibility for the Nursery operation. As part of the course each student was required to work forty hours at the Nursery and be involved in all phases of its operation. Since all work was done by hand labor, this
supply of workers was very beneficial to the Nursery program. Some students did not appreciate the time and work involved, many called it slave labor, but others learned much about the planting and growing of seedlings and were able to use this knowledge to advantage in later life. During the summer months eight to ten high school students were hired to provide care for the young seedlings. At that time all seedlings were raised for two to three years in a seedbed, and then transplanted into individual rows for one to two years more to develop better root systems. Much of this transplanting was done in the spring as class work, but much of it had to be done on weekends with paid labor because of the short time period suitable for transplanting. Several students and their wives worked on weekends to get the job done before new growth started. As supervisor of these crews, I spent most of my working time at the State Forest Nursery during the spring and summer. For several years, because of the need for experienced help, my wife worked along with the student crews also. This brought in very welcome added income at a time when our family had increased to three children, and of course was essential added income for most of the student families who were getting through college with support from the G.I. Bill and their own meager savings. This period of combined duties with the State Forest Nursery and the University Forest brought me into close contact with nearly all Forestry and Wildlife students during those years. Also through demonstrations and research, I also had considerable contact with the Extension Forester and various professors. Albert D. Nutting was Extension Forester until 1948 when he became Forest Commissioner for the State of Maine. Fred Holt replaced Nutting as Extension Forester for a year and then moved on to Augusta to a position with the Maine Forest Service, and eventually to Forest Commissioner. Lewis P. Bissell came to Orono in 1959 and remained as extension Forestry Specialist until his retirement in 1977.

My first exposure to chainsaws was while assisting Al Nutting with a demonstration of a two-man chainsaw during an annual Farm and Home Week in 1948. This demonstration was held in the wooded area near the intersection of the cross country trail and the entrance road to the deer pens. At the time it was a novelty and not taken very seriously by most of the spectators, who were primarily farmers and woods workers. The advantages of changing from a light one-man bow saw to a one hundred pound two-man temperamental power saw were not very obvious to this group. Several years and many changes were necessary before chainsaws became accepted for general use on the farm and in the woods.

The fall of 1947 saw several students expressing interest in obtaining work in the University Forest. A limited portion of the Forest budget was allocated for labor, both hourly and piece work, and these several students became the first of a long list of University students who have worked as members of the University Forest work crew. These first crew members included Richard "Dick" Hale, Elmer "Al" Orcutt, John Walker, Winfred "Win" Hibbard, John Parsons and a student named Childs who was not majoring in forestry. This crew worked primarily on piece work cutting projects ranging from improvement cuttings removing gray birch which was overtopping desirable softwood, to thinning in pole size softwood stands. Most material harvested at that time was either fuelwood or pulpwood. Much of the Forest had been high-grade in the years before acquisition by the Federal Government and very little timber of sawlog size was ready for harvest. This actually was helpful to the student workers who were using bow saws and axes for their cutting tools. Their cash outlay for equipment was low and transporting it was relatively easy, especially for several who either rode a bus or walked from campus to their work site.
Life in the University Cabins and South Apartments

Several University Forest crew members lived either in the South Apartments or in the University Cabins which were located in a circle in the field overlooking Park Street. The cabins were primarily for single male students sharing costs and duties in a cooperative manner. Some married couples lived in mobile trailer units located adjacent to the Cabin Circle. Both South Apartments and University Cabins were initially heated with coal stoves which were eventually converted to oil. Refrigerators provided by the University were actually ice boxes. Local ice companies delivered ice several times each week at a price of about 35 cents for a 50-pound block of ice. Because of problems resulting from overflowing pans of water from the melting ice and inefficient refrigeration, most ice boxes were replaced as soon as possible with electric refrigerators.

During the period of using ice boxes several ideas were tried to reduce the cost of ice. In winter time basins of water were set outdoors to freeze and the resulting blocks of ice were used in place of purchased ice. During the winter of 1947-48 several of the tenants in apartments adjacent to ours, Steve Macpherson, Jack Nicholson, and Red Kendrick, joined with me in a project to cut our own ice and store it for use in the spring. In early January we went to the Logan on College Avenue Extension and using crosscut saws and ice chisels we hacked out several blocks of ice. These were manhandled with considerable effort up a bank and into the back of the beach wagon. Several trips brought what looked like an adequate supply for all of us well into the spring. Our insulating material was limited, mostly fir bows and old blankets, our intent being to depend primarily on cold winter weather to preserve the ice. Everything looked real nice for about two weeks, when a late January thaw developed with rain and warm weather for several days. Our ice stock had diminished so much by the end of the thaw that we decided to use the ice immediately before it all melted away. This development eliminated our enthusiasm for cutting our own ice and we never tried it again. Our interest in acquiring an electric refrigerator also increased after this episode and it was soon afterward that we were able to buy a good used unit for 15 dollars and our dependence on ice was eliminated. Most households in the area soon converted to gas or electric refrigeration, and by the early 1950's most local ice dealers had gone out of business.
Upgrading My Education with Some Welcome Help

Having been out of school and away from studies of any kind for about 10 years, in the summer of 1947 I started to take some courses at the University of Maine to refresh my memory and update my forestry education. During the summer term I took a 2-hour course in U.S. History and a 2-hour course in Trigonometry. Following these, in 1948 a course in Surveying called Field Work and Plotting, in 1949 spring semester a 4-hour course in Forest Mensuration and a 4-hour course in Silviculture. Fall semester of 1949 I took 3 hours of Forest Soils and 3 hours of Forest Management, and in the spring of 1950 another 3-hour course in Forest Mensuration with Aerial Photography a major part. A full work schedule was maintained during this period and many adjustments were necessary as faculty positions expanded and changed.

Faculty members during this period included the following:

- Dwight B. Demeritt who served as Professor and Department Head from 1933 to 1946, when he resigned to take a position of Vice President and Woodland Manager for Dead River Company of Bangor, and Eastern Corporation of Brewer.
- Robert I. Ashman from 1930 to 1957 as Professor and as Department Head from 1946 to 1957. After retirement in 1957 "Prof" continued working at one half time until 1961.
- Gregory Baker from 1935 to 1972 as Professor of Wood Technology and as acting Head of the Forestry Department in 1957-58.
- James D. Curtis from 1939 to 1947 as Silviculturist and also responsible for the management of the University Forest during that time.
- Edwin L. Giddings from 1946 to 1948 when he left to become woodland manager for the Penobscot Chemical Fiber Company of Great Works, Maine, known as the P.C.F., and more specifically woodland manager of a subsidiary of the P.C.F., the Penobscot Development Company, known as the P.D. Ed returned to the School of Forestry as a lecturer in 1969 and Associate Professor in 1970, serving as Acting Director of the School in 1971-72 and as Assistant Director until his retirement in 1977.
- Henry A. Plummer as instructor of timber harvesting from 1946 to his retirement in 1975. From 1946 to 1956 Henry also had full responsibility for management of the Maine State Forest Nursery and was instructor of a seeding and planting tree nursery course during his full term. He was responsible for locating and evaluating areas suitable for a new State Nursery during a period of expansion in 1955-56. The Greenbush State Forest Nursery is a result of his efforts. Professor Plummer also spent many of his summers assisting Arthur Randall at the Forestry Summer Camp at Princeton, Maine.
- Arthur G. Randall from 1946 to his retirement in 1977 taught classes in Policy and Economics, and Forest Management. He also spent most of these years as Director of the summer camp program along with his full teaching schedule. For many years he also sponsored a student fire attack crew known as the "Hot Shots", and spent many hours of his own time scheduling and training this group. Through his efforts many students received certificates of efficiency in some specialized field of forest fire suppression, which were of considerable benefit when these students encountered forest fire situations, especially in the western states.
- Howard L. Mendall from 1937 until retirement in 1977 was Professor of Wildlife Management and also Leader of the Cooperative Wildlife Research Unit in Maine.
Howard was a very popular and highly respected leader in his field of teaching and research.

- Jay S. Gashwiler assisted Howard Mendall from 1945 to 1948 when he left Maine for a position with the U.S. Fish and Wildlife Service in Salt Lake City, Utah. With his leaving, the Forestry Department lost a very valuable and efficient secretary, Melva Horne, who had become Mrs. Jay Gashwiler, and of course went with him.
- Frank K. Beyer became a faculty member in 1947 and taught a variety of subjects until his retirement in 1969. His ability to fill in as instructor of most courses in Forest Management, Wood Technology, and Wildlife Management, was greatly appreciated and desired by other faculty members when the need arose. Frank was advisor to the student Forestry Club for many years and also coached and assisted at University track meets.
- Harry L. (Lee) Kutz became Assistant Professor of Wildlife in 1947 and served until 1950 when he was forced to resign due to ill health. His untimely death occurred a few years later. Lee was the first Wildlife professor to utilize the University Forest to any great extent in his class work. We cooperated many times on special problems and wildlife inventory projects.
- Gordon L. Chapman became a faculty member in 1948 and served until his sudden death in 1956. As a professor of silviculture he became heavily involved with research and management of the University Forest. His influence and involvement with management of the Forest are very much in evidence to this day.
- Malcolm W. Coulter began his long teaching career at Maine as an instructor in Wildlife Management in 1948. His influence was felt in all areas of Forestry and Wildlife at the University and throughout the United States and worldwide, and he has remained very active and involved in Wildlife problems since his retirement in 1983.
- Harold E. Young began his teaching and research career at Maine in 1948, and retired in 1982. As a professor and teacher he was highly respected by his students and later gained international notice through his work on biomass use and his Complete Tree Institute.
- In 1949 Earl M. McChesney filled a position for one year while Henry Plummer attended Yale University to fulfill requirements for an advanced degree. Earl took a leave of absence from the U.S. Forest Service and soon after this year at Maine he established his own business of consulting forester, landscaping, and tree work in Bangor.
- Horace F. Quick replaced Lee Kutz in 1950 as professor of game management and continued in that capacity until resigning in 1963 to move to a new position in Colorado. Horace also made considerable use of the University Forest for classwork and other projects. We spent considerable time together during these years discussing and visiting areas used in his class work and other special projects.

As the years passed and the Forestry and Wildlife Department grew to the status of School and eventually to College, a number of faculty members contributed to and utilized the University Forest in numerous ways. Their involvement will be noted later with other events in their particular time period.
One Fire and Its Aftermath

During several very dry seasons with high fire danger periods throughout the state, the Forest has been very fortunate to have had limited fire problems. However, as noted earlier, several fires have occurred and some could have been disastrous except for the excellent cooperation of the local fire departments. One such fire occurred in the fall of 1948 when I received a call one Sunday afternoon from the Old Town Fire Department. Fire had been reported on the Guaranty Lot by the Maine Forest Service Fire Tower at Chick Hill in Clifton and also by a plane out of Old Town Airport. I drove out to find a truck and firemen from Old Town at the scene, in Block G-8, Compartment H. They had stopped the spread of the fire which covered nearly two acres, and were mopping up hot spots when I arrived. The fire had burned through a stand of pole size red and white pine and into an area of heavy fir undergrowth. I worked with the firefighting crew well into the evening when a fairly heavy rain began to fall. Not seeing any hot spots or smoke rising, the Old Town crew packed up and left. I stayed on until about 9:00 P.M. and feeling assured that the fire was controlled, especially with the rain that was falling, I also went home. During the night the rain stopped and early the next morning I drove out to check the fire area. As I approached the end of Pinkham Road the valley and road hung heavy with wood smoke and I became quite concerned that the fire was picking up again. When I got into the fire area it was obvious that the fire wasn't spreading, but was still quite active in the ground in stumps and roots where it had been protected from the rain. I sprayed the contents of two Indian Backpack water tanks on the more obvious hot spots and then drove back to campus to replenish my water supply and recruit some help to dig out the underground fires. I arrived back at Winslow Hall just as the 8:00 A.M. classes were starting. When that first hour of classes finished I was able to get Professor Frank Beyer and several students to volunteer, and we went out to the fire area. After several hours of hard digging and spraying of water we finally had the fire completely out. More rain later on was welcomed as more insurance against our having missed a spot.

Next came a reconnaissance to determine the extent of the burn and amount of damage. The majority of the damage resulted from the heat generated by the fire in the heavy undergrowth along the southerly border of the stand. The fir undergrowth was completely consumed and flames had reached to the lower branches of some of the pole timber. Approximately 2400 board feet of saw timber died and were salvaged later. White Pine were particularly vulnerable, but Red Pine were also killed by the intense heat around the bole, and by the fire around the roots underground. The dead and severely damaged trees were felled and cut into logs with axes and crosscut saws. It was planned to yard these logs to the truck road by skidding them across a swampy area which had a layer of old log corduroy over it and had been used as a skid trail in the past. The University Farm was at that time slowly converting to mechanical power for their farm work, but still had several work horses for use on various jobs. I borrowed one of these horses and equipped with proper harness and twitch chains, we set off together through the woods from campus to the back boundary of the Guaranty Lot where the logs lay. Everything went fine on the walk over and on reaching the logs I maneuvered the horse into position and attached a twitch chain to a log. When all was in order I spoke to the horse and she readily pulled the log out on to the skid trail and down a slope to the corduroyed trail. For a few feet all went fine until suddenly the rotten wood forming the corduroy gave way under the horse’s
weight, and down she went with her front feet down through the corduroy into the muck below. I immediately unhooked the log and getting around to the horse’s head, I spent a few moments quieting her down. When she became more relaxed, I laid a number of tree branches alongside of her front legs and then by pulling on her head and assisting where I could, got her on to the branches and eventually back on to firm ground. It was very fortunate that her hind legs did not break through as much as her front ones did. As soon as I got her back on firm ground and most of the mud brushed off, I headed her straight back to the barn, and that ended our horse logging on that particular job.

After returning the horse to the University barns I began searching for other means of yarding the logs. To get across that strip of old corduroy logs, I needed something with greater flotation than a horse’s hoof provided. My first thought was of a track type crawler tractor, but these were rare in the area at that time. While checking around however, I heard that the Soil Conservation Service might have one on campus. At that time, they had a maintenance shop in a stall where the present University Fire Department is located. The maintenance man, Schlosser, repaired and serviced equipment in this shop. A small crawler tractor belonging to the Soil Conservation Service was based at this shop when not in use on projects. I explained my problem to Schlosser and the timing was such that the crawler was available, shop work was minimal, he was pleased to have an outdoor project, and so plans were quickly made to do the yarding the following week. As planned, the crawler was moved to the site and traveled across the old corduroy trail with no problems. In spite of the fact that the tractor had no protective cab, winch, or other features for woods work, the logs were yarded out to the truck road in a very short time. My interest in obtaining a crawler tractor for use on the University Forest was raised to great heights after seeing the advantages of this machine, but due to financial restrictions, it was several years later before I was able to acquire one.
The Mechanical Age in the University Forest

However, in 1948 an acquisition of importance did occur. The 1939 Chevrolet Beach Wagon had become quite decrepit, the roof leaked, the wooden sides were rotted, and the transmission was causing problems. Funds were acquired from somewhere and bids put out for a new standard shift, one half ton pickup. The winning bid was a 1948 Dodge 3-speed pickup. The price paid is lost in memory, but was probably less than $1500.00. The purchase of this new truck was beneficial in several ways. It not only was much more useful in daily work chores in the Forest, but it also improved morale by showing that purchase of needed equipment was possible. As noted earlier, lack of harvesting equipment in the Forest hindered operations, and any means available was used to yard out wood products. Also due to lack of University Forest harvesting equipment most sales of wood products during the 1940's were stumpage sales, especially fuelwood. People who bought fuelwood stumpage used any means available to them to yard the wood to a road. Several with large families went into their designated cutting area and each family member would manually carry the wood out one stick at a time to a road as it was being cut. Others cut and piled their wood at the stump and later hired a local teamster to yard the wood with horses and sled. Several had old cars or trucks stripped down, with bunks added to haul the wood out. For each one, his method seemed the most efficient, and probably was for him. As an observer, none of them appeared to be efficient or practical.

The post war period brought an improved economy and a desire for new homes. Stumpage sales of sawlogs to local individuals increased as sales for fuelwood decreased. Many homeowners began to convert from wood heat to oil heat as oil became plentiful and relatively inexpensive. New homes were equipped with oil burning furnaces and only a few were built with fireplaces. Most homeowners were pleased to use a clean, cheap fuel, that could be activated by turning a thermostat, especially after a lifetime of cutting, splitting and handling wood, and carrying out ashes. As this trend continued, several stumpage sales of sawlogs were made to include enough volume and variation of species to supply material to build one house. Size and style of houses varied so much that desired amounts of lumber ranged from 10 to 20 thousand board feet. These larger volumes, size, and weight, required more power to yard to a landing. Until 1951 horses were the exclusive means of yarding sawlogs on the University Forest. Many logs were skidded with one horse, but the larger ones often required a team to move them. Several local teamsters in the area were employed at different times to yard logs in the University Forest, both for stumpage sales and for regular harvest operations by the Forest crew. These teamsters included men like George Randall, Red Crosby, Ernest Starbird, Guy Ellingwood, Raymond Pinkham, and Frank Paige. Most of these men lived on small farms and supplemented their income by working with their teams in woods operations. The exception was Raymond Pinkham who operated a dairy farm with his father, Myron L. Pinkham. They produced their own milk and pasteurized and bottled it at the farm and delivered it house to house in the Old Town area. Their team was used primarily for farm work, but was available for woods work in the off season, especially in the winter. In fact, Raymond had yarded wood in the Forest when it was still in private ownership. In 1933 he worked with his team to yard pine timber which had been cut on James Sewall's land, in the area now called the Sewall Pines, for use as piling on the bog road leading to Pushaw Lake near Mud Pond. He commented to me that there were some mornings when the temperature dropped to nearly 50 below zero that winter.
In November, 1946, Henry King of Gilman Falls Avenue, Old Town, was granted a permit to cut pine and spruce stumpage in Block C-4 north of the Logan Road, and also in Block H-4 east of College Avenue Extension. Lumber produced from logs cut on this operation were used for construction of a house for one of his sons. One humorous incident occurred when Jim Curtis and I were showing Henry King the areas for harvest and were discussing a contract. Henry made the comment that he might start cutting before he had a chance to sign the contract. Curtis, thinking the name King was English, said there should be no problem. He said if King was another nationality, like French, there might be a problem in trusting him. Henry King looked back hard at Curtis and said, "I'm a full blooded Frenchman ". This was an embarrassing moment for Professor Curtis. My personal experience in dealings with local citizens found them to be quite trustworthy, whether of French ancestry or other.
Stumpage Sales Increase

During this same period through the fall and winter of 1946-47 another stumpage sale was in progress in Block B-9, Compartment H. Clinton Boyington, a local logger, had purchased the stumpage and begun logging the area before I arrived. He had a two-man crosscut saw crew and a team of horses. The stand, in an old field and pasture, consisted of mature white pine with an understory of fir, spruce, and mixed hardwoods. Several of the pine were open grown pasture pine with large limbs unsuitable for sawlogs. No local market was available for pine pulpwood and these trees were very difficult to cut with crosscut saws, so they were left standing. Ten years later when chainsaws were being used and a local pine pulpwood market existed, these trees were harvested. The two men on the cutting crew were expert with crosscut saws and axes and often produced 4 to 5 thousand board feet of sawlogs per day. In another area of the Forest they cut 3 thousand board feet of sawlogs before 9:00 A.M. on one particular day to meet a scaling deadline.

Logs from Bonington’s job were sold to several local sawmills and also to Raymond Pinkham and his father Myron L. Pinkham to rebuild a barn which burned as a result of a lightning strike in the summer of 1947. These logs were all loaded on trucks by hand or by use of a horse and parbuckle.

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Another stumpage sale or actually several different ones were made to Archie Ouilette of Old Town. He purchased stumpage of white pine timber in the Sewall Pines in Block I-12, Compartment C. This timber was cut into sawlogs and sawn into lumber at a local sawmill, and then used for construction of a house in Old Town for Archie and his family. He also bought firewood stumpage and with his children carried every stick to the roadside, where it was later picked up by a truck. Archie worked at the Old Town Canoe Company, and with low pay and a large family, he was often low on cash. In spite of his tight economic situation, he always came in to the office in Winslow Hall with a cash payment before hauling any of the wood from the Forest. It was with great difficulty that I convinced him to haul the last of his logs to the sawmill and then pay for them later.

Several other local men, like Archie Ouilette, were treated with complete trust and this trust was never violated. Men like Pepper Martin, Joe Arsenault, Mervyn Gilman, and Kenneth Laflamme would cut firewood, haul it home, pile it in their yards in neat piles, and then call me to come and scale it so they could pay for it. Others would stack the wood near the stump in neat piles for scaling. These men were all more like friends than just customers, and we trusted and respected each other. It was a pleasure to have known them and gained this mutual respect and friendship.

John St. Peter, a Maine State Game Warden, cut logs in February of 1947 to obtain lumber for construction of his home in Old Town. He borrowed Raymond Pinkham’s team to yard the logs and his truck to haul them. I doubt if any payment was required, Raymond was always very generous in loaning equipment, as many people were at that time. Along with St. Peter, Ouilette, and Pinkham, several other homes and buildings were constructed in Old Town and Orono using
lumber produced in the University Forest.
Students Commuting to Work and What They Did

Piece work cutting by student crews began in earnest in 1947. One of the first was Richard "Dick" Hale, who had worked in the Forest during his first years at Maine, prior to entering the armed services in World War II. After the War, in 1946, Dick came back to the University to complete his education. He applied for work in the Forest to earn money to help pay his way through college, along with the G.I. Bill. His first cutting area was adjacent to the Sewall Pines, a short distance from Stillwater Avenue. On his work days he would ride the local bus from campus to the entrance to Sewall Road, carrying his bowsaw, axe, pulp hook, and other equipment in a pack basket, and then walk in to his cutting site. Later at other locations, he would ride the bus to the closest point and walk from there. Sometimes walking all the way from campus was the most expedient. Few students had cars in those days, so walking to work was quite common. Because of the time lost while walking and my interest in helping the students earn as much as possible, I started to coincide my trips to and from the Forest so as to give as many students as possible rides from campus to their various work sites. Later, when equipment was acquired and a yarding crew worked closely with me yarding forest products, it became a habit and customary for most of the work crew to ride with me to and from the work sites. Many were picked up at their dorm or fraternity house or other place of residence, if it was on the way. I continued and was happy to do this until my retirement in 1983.

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Another crew of piece work cutters in 1947-48 were noted earlier. Elmer "Al" Orcutt, John Walker, John Parsons, Win Hibbard, and several others cut pulpwood along the northern boundary of the Forest between College Avenue Extension and Gilman Falls Avenue. This cutting was a thinning of a mixed softwood stand with a high percentage of balsam fir. By removing the fir and poor quality spruce for pulpwood, a reasonably good stand of spruce and white pine remained. Some questions were raised by the large volume of fir compared to spruce because only a year earlier the pulp mills had permitted only about 10 to 15% fir in a given lot of spruce and fir pulpwood. However, in the spring of 1948 when this wood was hauled, it was accepted even though it was close to 90 percent fir. From that time on, fir and spruce were mixed in any proportion, and many times loads of pure fir were classified as spruce. This pulpwood was yarded by George Randall who lived on the adjacent farm. Much of it was piled on his field and trucked out before the frost went out. This wood was all cut with an axe and bowsaw. Production varied widely, as it does today with chainsaws, depending on the proficiency of the worker. Pay was at the rate of $5.00 per cord cut into four foot lengths and stacked for yarding. Some students cut up to two cords per day, while some cut barely one half cord. Some of the low volume cutters did not work very hard and spent considerable time looking around and talking. At first I was concerned that they were wasting their time, but in most cases they didn't need the money as much as being able to get out in the woods and observe nature. Their enjoyment and experience more than paid them for their time.

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Other students working on an hourly basis during the years 1948 to 1950, included Niles
Williams and Ray McDonald. Their jobs at that time ranged from cutting gray birch and scattered pockets of pulpwood which were not profitable for piece work, to maintenance work on roads, bridges, and culverts. As noted in Maine Agricultural Experiment Station Miscellaneous Publication 682, "An Historical Review of the University of Maine Forest", roads, bridges, and culverts had been neglected during the years before World War II, and many needed extensive repair to provide safe and adequate access for vehicles transporting students and forest products. Log bridges were dug out and rotted timbers discarded, and new timbers cut and dragged into place by hand or by use of the 1939 Chevy Beach Wagon. As noted in Publication 682 several culverts and bridges were rebuilt in 1946 and 1947, and continuous maintenance has been necessary since that time. In 1949 Ray McDonald assisted on the reconstruction of a bridge on the Sewall Road in Block G-6. Spruce and hemlock logs were cut near the Logan Road in Block E-7 and dragged to the bridge by the 1948 Dodge Pickup which had been purchased to replace the 1939 Chevy Wagon. With this new truck, Ray and I thought we had a great new tool to work with. It was the first major equipment purchase that I had made as Forest Superintendent.
Road Maintenance by Cooperation

Due to the lack of equipment and labor during the war years, much of the road system was in a neglected condition, and in sections having little use, a growth of grass, weeds, and small trees had developed. In these areas only two wheel tracks were bare and usually these had settled or eroded so that the center of the road would contact the underside of autos using the road. An attempt to smooth off this high center and remove the vegetation was found quite difficult with only rakes and shovels for tools. However, a considerable length of road was improved this way by hand, and other ideas were tried to reduce the labor involved and increase production.

With the purchase of an older home in Orono, I had acquired an old power garden cultivator with a single spiked steel drive wheel. Using this machine equipped with steel cultivator teeth, I dug up the high center strips so they could be raked into the wheel ruts. This cultivator, which was donated in 1997 to the Page Farm and Home Museum on the University campus, is unique with its engine mounted inside the drive wheel, and has two trailing caster wheels to support the rear. Between the studded drive wheel digging into the gravel in front, and the cultivator teeth digging in behind, this machine was quite effective loosening up the gravel road center. However, it was still necessary to rake this loosened material in to the low spots by hand.

Another idea we tried was to drag a log with spikes on it behind the truck. That wasn’t very successful either. While talking the problem over with the University Farm Foreman, William "Bill" Hardy, he mentioned that he had an old horse drawn road grader which he was converting over to be drawn by a farm tractor. Bill had removed the front wheel assembly and replaced it with a tongue to fit the drawbar of a farm tractor. He agreed to try this unit out on the University Forest roads, and with one of us driving the tractor and the other manipulating the grader blade by its manual controls, we regraded most of the Forest roads. Because of the large amount of vegetation growing in the road surface, grading did not result in a smooth finish, but rather was a series of bumps and hollows created by sod and roots ripped out by the grader blade and spread across the roadway. Some large stones and other debris had been loosened and lay scattered on the surface. By raising the blade slightly above ground level and setting it at a sharp angle, and then traveling along the roads at a fast speed, much of this loose material could be knocked off to the side. This procedure was working quite well until the blade made contact with a high spot in the road. Gouging into the road suddenly at its sharp angle, the blade lifted the grader and threw it sideways into a ditch and nearly upset the tractor, which came to an abrupt halt. Bill and I were both considerably shaken by the incident and decided that the job we had done to that point was satisfactory and left it at that. It took several years, but eventually the debris in the roads decomposed and smoothed out. In later years roads have been kept graded and in acceptable condition by addition of gravel and grading with a bulldozer blade.
Extra Curricula Activities

In 1947, through my contacts with Bill Hardy and others on campus, I became aware of the University Fire Department, which was a very rudimentary department at best. This organization had been started only a few years earlier through efforts of Charles Crossland and other dedicated members of the University of Maine staff. Orono and Old Town had fire departments at that time, but they were primarily volunteer units, with only a small basic force of full time firemen. Only two or three firemen were on duty at any one time. When a call came in, the alarm was sounded by the stations siren or horn, and volunteers within hearing range were expected to leave whatever they were doing and report to the fire or emergency site. Often the volunteer firemen were out of town, especially during daytime working hours, and would be unable to respond to an alarm. This possible shortage of manpower, especially during the war years, plus several serious fires on campus, prompted serious discussions and plans for a campus based group that could be alerted by a steam whistle at the heating plant. A second hand Chevrolet truck was purchased and rebuilt with a tank, pump, ladder racks, and containers to hold fire hose and other accessories. Helmets and coats were purchased, and as members were recruited, were issued to each one. In 1947 I joined the group of volunteer members of the University Fire Department. The Chief of the Department was Lee Plaisted whose full time job was herdsman for the University Farm. Bill Hardy, the Farm Foreman, was Assistant Chief. All members were volunteers, pay for regular firemen was $68.00 per year, officers got slightly more. In 1952 Bill Hardy left the University to establish his own business, and I was appointed Assistant Chief. In 1956 Lee Plaisted resigned from the Fire Department and I was appointed Fire Chief and continued in that office until 1975 when I resigned from the Department also. Many dedicated men served as volunteer firemen during those years. Included were truck drivers, grounds keepers, janitors, printers, department heads, and faculty members. Every Tuesday evening was drill night, sometimes by ourselves, and often with the Orono or Old Town Departments. These contacts were especially beneficial to me as University Forest Superintendent in setting up excellent personal relations with the two departments so that I knew most of their members personally. As will be noted later a number of advantages for the Forest developed through these contacts.

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In the late 1940's other contacts were made that had lasting influence on the University Forest and also on me. One of these was with Peter J. Sulinski of Old Town, who was trying to establish a business after World War II. He had experience in construction and had set up a lumber planer on land of his father which adjoined the Forest. Very limited funds created many problems in his initial efforts. Pete believed very strongly in protecting his equipment from the elements and maintaining it in excellent condition. He managed to obtain enough lumber to build a small building to house his planer and power unit. When operating the planer, he stood outside and fed lumber into the machine through an opening in one wall. Power rolls propelled the lumber through the planning knives and then the lumber fell out on an open platform on the opposite side of the building. One winter day in 1948, I stopped by to talk to Pete and pulled up long side of him as he was feeding the planer. Some of the boards were ice coated and needed extra pushing to help the power feed rolls get a grip to propel them through the planer.
Occasionally one would stop and need a tap on the end to start it into the rolls. Pete had an old axe which he used as a hammer to tap these boards along. He was somewhat frustrated from working under these adverse conditions, with a light snow falling also, and just as I rolled down my pickup window to speak to him, he made an extra hard swing at the end of a board, and because of slippery ground and axe handle he missed, and the axe swung around and struck my pickup door just inches below the window opening and my face. We were both somewhat shocked, but I finally said that if he didn't want to see me, all he really needed to do was say so, not be quite so emphatic. He apologized immediately and said it was an accident, which I already knew, and we became good friends as well as having good business relations for many years. In fact, within a year Peter Sulinski and his brother in law, William Davis, installed a sawmill in this same area immediately adjacent to Blocks E-15 and F-15 in Compartments I. For nearly fifteen years a good portion of University Forest logs were sold to Sulinski's Mill.

Some interesting events resulted from my association with Sulinski and Davis over the next several years. The brothers in law were business partners, but had little else in common. Pete Sulinski was a serious, hardworking individual, very determined to make good in business. Bill Davis was an easy going person, inclined to high living and very willing to let someone else do the work. He drove a big car and flew his own plane, and spent considerable time doing both. After a year or so of partnership Pete felt that the mill should be insured against fire, and checked with several agencies for rates and coverage. I happened to be in Bill Davis's kitchen checking scale slips when Pete walked in to report his findings. Sawmill fire insurance rates have always been relatively high and the quotes he had received were no exception, but Pete still suggested that they had better buy the insurance to protect their investment. Bill Davis, having other plans for use of the money, argued against it. After several minutes of pretty strong argument Davis walked out, saying as he went that Pete could insure his half if he wanted to, but Bill would let his half burn. A very short time later a fire did start during the night and burned the mill flat. The next morning when I stopped by to offer my condolence and assistance, Pete immediately said to me, "You heard that S.O.B. say I could insure my half and he would let his half burn, well my half burned anyway". The partnership ended that day. Sulinski rebuilt a new mill on the same spot and operated it until the late 1960's, when it also burned down and was never rebuilt. By that time, he had developed a highly successful construction company and the sawmill was a very minor division.

In the meantime, Bill Davis established a sawmill on Gilman Falls Avenue where Folsom Trucking Company is now located. I continued on good terms with both men and sold logs to both mills. Bill Davis took me up in his plane several times to look over the University Forest and surroundings from the air. However, in a very short number of years Davis first lost his driver’s license for drunken driving, and soon after his license to fly was revoked for the same reason. His business also failed and by the late 1950's he moved away from Maine back to his native home area in Alabama.

One incident that occurred at Davis's mill may help to illustrate some of his problems of management. The University Farm crew were improving a drainage on one of the Rogers Farm areas and needed to remove a large white pine which interfered with the project. This tree was quite limby in the top, but did have about sixteen feet of butt stem suitable for a sawlog. The only problem was that it was nearly three feet in diameter and very heavy for the limited
equipment available. I was asked to contact Bill Davis as to whether he would saw this log in the event we could get it to his mill. Without hesitation he said that he could saw anything we brought in. By using two farm tractors and a small bulldozer the log was finally loaded on to a farm truck and hauled to the mill. I had two men with me, the Farm Foreman had two men with him, and there were four men in the mill crew. It took all ten of us to manhandle the log on to the mill brow and roll it on to the sawmill carriage. After each pass by the saw to remove a board it took about half of this crew to move the log forward for the next cut. After several boards were removed from one side it was necessary to turn the log over to start sawing the other side. This required the strength of all ten of us using peaveys to rotate the log on the carriage skids. Every time the log had to be turned, the majority of the crew had to leave their stations and assist the sawyer. The entire process of sawing this one log into lumber took several hours, and produced about one thousand board feet of wide boards. Davis had quoted a price per thousand for sawing this log, and his actual costs were more than double due to the amount of time required to manhandle it in the mill. After lengthy negotiations, it was agreed to split the difference between the two figures, so he came close to breaking even on that day’s work.
Development of Areas For Research and Demonstration

During the period from 1948 to 1956 considerable emphasis was placed on establishment of sample plots throughout the University Forest. Plots were established for a variety of reasons, including attempts to determine amounts of seed fall and resulting germination, reproduction studies, effects of various silvicultural practices, and demonstration plots. As mentioned earlier, layout of plots and seed traps in the shelterwood area in 1948, were the first that I established personally. During the winter of 1949-50 Earl McChesney substituted for Henry Plummer who was on sabbatical doing graduate study at Yale. Earl and I established a series of plots in pine and spruce near the Logan Road in Block E-7, Compartment E. Since the Forest roads were not plowed at that time we parked on College Avenue Extension and used snow shoes to walk in to the area, and did most of the layout work on snow shoes.

During the years from 1946 to the early 1970's, it was fairly consistent for snow to maintain a constant depth on the ground between 24 and 30 inches from January to March. A thaw would reduce the depth dramatically and then a storm would deposit enough snow to bring the depth back up to 24 inches or more. Snow falls of 10 to 20 inches seemed to be fairly common. The heaviest snow fall I ever experienced was 37 inches on December 31, 1962, and will be discussed later. Because of these snow depths and lack of plowing equipment, much travel in the Forest was on snowshoes during those years in the winter.

Gordon Chapman came as Instructor of Silviculture in 1948 and soon became heavily involved in plot establishment on the Forest. We spent many hours together establishing a variety of plots, ranging from square one quarter acre plots, to areas of several acres enclosing a particular timber type. Some were established in anticipation of a particular silvicultural treatment, and others as examples of treatments done in prior years. Gordon devised a system of designating a plot by using the last initial of the individual most responsible for it, then the number of the plot established by the individual in that year, and finally the year of establishment. Thus C-3-49 was the third plot established by Chapman in 1949. All of these plots were tallied for a 100 percent inventory, many to a minimum diameter of one inch. In dense fir thickets and areas with multiple hardwood sprouts this was a very tedious job requiring considerable patience. Gordon and his wife, Doris, spent many weekends in the Forest making these inventories. Doris spent hours tallying for Gordon on these weekends and being newlywed apparently did not object. This was the type of dedication to the job that many professors demonstrated then and some still do.
Enjoyable Extra Duties

Another side job developed in the 1940's and 50's because the Forestry Department owned the only vehicle on campus, except for the R.O.T.C. unit, that was set up to transport students. This was a stake side truck with a canvas top and seats along each side. Several departments providing service courses to Forestry students would request use of the truck for transportation on field trips. These included Botany, Soils, and Agricultural Engineering. Professor Fay Hyland of the Botany Department made an annual trip with his Dendrology classes to the Orono Bog (Caribou Bog) on Stillwater Avenue. This often involved four or more divisions, with an equal number of trips each year. Fay did not care to drive the truck and also on some days it was needed to transport another group to the University Forest, so I generally was the driver for these field trips. Most field labs started at 1:00 P.M. and were planned for four hours, so I would take the class out at 1:00 P.M. and return to pick them up at about 4:30 P.M. Occasionally, especially if a storm was imminent I would stay with the class throughout the lab period. These were very educational periods as well as very entertaining to me. Fay Hyland would identify and designate 20 or more bog plants on these trips, and his descriptions and methods of identity were unique and to the point. He used references to smell, color, shape, and other characteristics to drive his point home. Some remarks were humorous, some a little corny, but they helped in memorizing features of some of the plants. Also in walking around to locate different species, Fay was generally able to walk on the firmer sections of the bog, and with rubber footwear would stay relatively dry. However, it was usual for one or more of the students to attempt a short cut and stumble into a soft spot into mud and water up to their knees or deeper, and sometimes requiring help to get out. This was not too unpleasant on a mild, sunny fall day, but during an occasional early snowstorm the whole excursion could become very unpleasant. As a result of the consistent use of this bog area by Fay Hyland over a number of years, when a portion of it was given to the University by International Paper Company, as an addition to the University Forest System, it was named The Hyland Tract of the University Forest in honor of Professor Fay Hyland.
Origin of Segments of the University Forest

Other sections of the University Forest were also designated originally by use of names that had some association to that particular area. The largest section, laying along College Avenue Extension and bounded on the north by Gilman Falls Avenue received the designation Sewall Block, due to a substantial portion of it having been owned by James Sewall, founder of the present James W. Sewall Co. of Old Town, and also as a means of recognizing his efforts in acquiring the land for the University. A section on the south eastern side of Stillwater Avenue, Compartments J and H, was designated the Guarantee Block. This title developed from the fact that a principal original owner was a company known as the Guaranty Realty Company. Over the years the word Guaranty was mispronounced Guarantee, and this title has persisted. Compartment G, in Stillwater adjacent to Interstate 95, has been called the Smith Farm Block, relating back to a previous owner of the property. Compartment A near the campus, has been called the Game or Deer Pen Block because of the game pens and cages that were constructed there in the 1930's. One other section which was originally separated from the Game Pen Block by a private lot, and straddled the cross country trail was known as the Orchard Block. It originally bounded three sides of the University Orchard which has since been abandoned and completely removed. The private lot has been acquired by the University and these three tracts now blend together as one, along with substantial acreage north of the Game Pen Block which was also purchased by the University from private owners.
A Start With Mechanical Equipment

As experimental and demonstration plots were established on the Forest with each one requiring specific types of silvicultural treatments, along with much of the rest of the Forest in need of management, a larger volume of wood was harvested each year. It became increasingly more difficult to hire a team of horses for yarding. There were less teams in the area, and most were in use on farms or elsewhere in the woods and were available for work on the Forest only at spare times from other jobs. It became quite frustrating to plan a harvest cut and not be able to remove the products at a desirable time. This prompted me to investigate other means of yarding forest products. Very few machines were available and adaptable for woods work at a price my budget would allow. Eventually I heard that several loggers were using a small crawler tractor made by the John Deere Company, and having fair success with it. Contact was made with Davey Force of Bangor who was the local John Deere representative. Davey was a very cooperative individual and soon arranged for a lease of a John Deere Model M.C. crawler tractor to the Forest on a yearly basis. The retail price of this unit was $2500 and our lease cost was 10 percent per year, or $250.00. Davey was also able to eliminate the freight charge by having the machine included in a rail shipment to a local dealer, Herschel Peabody of Bangor.

This crawler was a basic farm wheel tractor, Model M, with a track assembly replacing the wheels and steering mechanism. Thus, the model became M.C., the C designating the conversion to a crawler. The first models we received had the same instrument panel as wheeled models, even to a hole in the center for a steering column. These first crawlers were not intended for woods work; they had been designed for farm work on wet or soft ground where wheels would bog down. However, loggers were so desperate for machines to yard wood with, that the majority of these crawler tractors ended up on logging jobs. Many problems developed from the rough use of these machines in the woods. There were no shields over rollers and sprockets, and no protection of the engine or vital under parts from brush, stumps, and rocks. Operators soon became aware of the many hazards, such as small stones and gravel jamming the rolls and sprockets, large rocks and stumps damaging and puncturing the transmission and oil pan, sticks and branches striking the engine, breaking oil and fuel lines and even ripping off fan belts, and tracks derailing off the front idle wheel when turning in deep mud or among stumps and rocks. Owners and operators of these early machines soon devised protective shields over the most vital parts by use of various ingenious designs and materials.

As local dealers became aware of where the machines were being used, saw the problems occurring, and saw some of the devices being used for protective guards, word soon got back to Davey Force and to the John Deere plant engineers. For several years as new models came out, factory designed protective shields such as a full length belly pan, rock guards over the rollers and sprockets, side shields and radiator guards on the engine were added, and usually advertised as innovative new ideas. Most were copies of some Yankee ingenuity, with perhaps some improvement in engineering design and materials. As much as six years after the first crawler was leased to the University Forest, Davey Force was still bringing plant engineers out to inquire about problems and recommendations for improvements.

One incident that I reported in 1955 could have been a serious accident, and my report resulted in
a definite improvement to the machine. The steering clutches on these crawlers were controlled by two long handles projecting straight up from the floor board between the operators knees to about waist level with the operator sitting in the tractor seat. The top ends of these handles were extended for a hand grip by hard rubber extensions, approximately six inches long, which screwed on to the threaded top ends. These rubber extensions had no reinforcement inside and in cold weather became quite brittle, and would break off at the base of the threaded section. Nearly every John Deere crawler I knew about had one or both of these rubber extensions broken off leaving a stub section threaded on to the top of the clutch handles. Most people simply continued to operate the machines by holding lower on the handles, even though it was not as comfortable or efficient as the longer handle. I tried to maintain a supply of rubber handles to replace broken ones, but it still was an aggravating situation. One day it was impressed upon me that this was more than just aggravating, it could be hazardous. One of my student helpers was yarding logs with the crawler in a foot or more of snow. While traveling forward, one track rode up over a stump that was hidden in the snow, and at the same time the other track dropped into a depression. The sudden jolt from the stump and sharp lean to the side threw the student operator sideways out of the driver’s seat. Tractors at that time were not equipped with seat belts or protective canopy of any kind, had very simple low seats, and very little else to hang on to. Most operators depended on the steering clutch handles for support while driving the machine. As the student was thrown sideways he grabbed one of the hard rubber extensions for support. Under the force of his weight the handle snapped and without any other support he rolled out of the seat, over the top of the moving track, and on to the ground. Happening to be nearby at the time, I ran to the machine and reached in to the instrument panel and turned off the ignition switch. Luckily, the crawler had continued to move forward in a straight line and the student operator had rolled away and avoided getting caught or crushed by the track. After relating this incident to a John Deere engineer, I soon found reinforced handles at local dealers and there was no more breakage after that.

Other than these aggravating, but not serious faults, these John Deere crawler tractors were very tough durable machines, withstanding much hard use and abuse, and yet continuing in service for many years. The University Forest lease called for replacement with a new model every two years. This was an excellent arrangement for the Forest with practically no maintenance necessary except routine servicing with fuel, oil, and grease. Wear on tracks, rolls, and sprockets would just be approaching time to be serviced or replaced when the machine would be turned in for a new one. The John Deere Company was very cooperative and continued this favorable lease arrangement until the mid-1960's when the Company made some policy changes which made it more advantageous to purchase out right the current model that was on lease. Keeping one of the crawlers for five years made it necessary to rebuild the tracks, replacing all of the pins and bushings, and drive sprockets. A major expense for the University Forest.
Adaptation, Assembly, and Other Incidents

The first John Deere Model MC crawler tractor lacked one very essential accessory for woods work, a power winch. The John Deere Company did not manufacture a winch and did not even suggest one at first. At the time they had very little knowledge of use of machinery in woods work. I saw the advantage of a winch immediately, and spent considerable time trying to locate one that could be adapted to this machine. I finally located a hand operated Braden Winch at Gass Auto Parts in Orono, and it was successfully mounted on the rear of our machine. This winch cost $300.00, which was more than one year’s lease of the crawler, but compared to prices above $5000.00 fifteen years later, was a bargain. John Deere eventually adapted a Gearmatic winch to their crawlers and then soon manufactured their own. Through several lease periods each tractor was delivered with all the accessories bundled separately, and each part had to be mounted before the machine was of any use on the Forest. With no work place available, most of this work was done outdoor using homemade tripods and hoists to lift parts into place, some like the Gearmatic winch weighing several hundred pounds. Several times when a tractor was delivered in the summer this assembly work was done at the State Forest Nursery, in between other jobs. Once completed, the crawler was used to bulldoze compost piles and for other grading jobs in the Nursery. Many times equipment and labor were integrated for projects in the State Nursery and in the University Forest. Often the crawler tractor would remain at the Nursery behind Fraternity Row until needed in the Forest late in the fall. One open shed was available to park it under cover, so it made a good place to keep it when not in use. However, many students became aware of its presence and thus arose another incident. Weekends throughout the summer and fall I often went to the Tree Nursery to check on seedbed and transplant conditions, and make a work plan for the following week.

One Sunday morning after walking around the Nursery grounds, I went to the shed where the John Deere was stored to check it over, but the shed was empty, the crawler was gone. Steel lags with cleats on a crawler track assembly leave very clear tracks on a gravel driveway, and a very clear trail led away from the shed. I followed the tracks out of the Nursery yard and across a strip of lawn to the paved public highway out front. From there I could see the machine had crossed a wide expanse of lawn on the other side of the road, and was setting on the first landing, up several steps from the sidewalk, at the entrance to a girl’s dormitory. All of these tractors at that time came with a simple on or off ignition switch with no key necessary, so anyone familiar with the machine could start and operate it. When I got over to it, I discovered that it had been driven up several concrete steps and stopped just before hitting the main entrance doors. It was an expert job, or very lucky one, and very little damage had been done to the steps or landing. However, to back the machine off the landing and down the steps was another matter, and I knew that some protection would be needed on the steps when the crawler moved back enough to tilt down on to the steps and roll down on to the sidewalk. My first concern was to advise the authorities of the situation so any investigation could be started that they considered necessary. Often incidents of this type were dismissed as college pranks and not investigated unless serious damage or injury occurred. At that time the University Police force consisted of a Chief, Steve Gould, and some part time assistants. Steve was a highly respected retired State Police trooper who took over the campus police chief’s job after the previous Chief, Frank Cowan, retired. Both of these men practically alone, maintained order on campus through good public relations.
and the resulting respect from students and staff. Steve Gould could simply walk up to a group of unruly students, calmly ask what the problem was and within minutes would have them all laughing and joking, and walk on leaving a happy, friendly group behind.

Chief Gould being the authority to contact, I called him on the telephone at his home in Stillwater. Very typical of him, when he answered the phone, his first words were, "There's nobody home". He had no idea who was calling and it probably wouldn't have mattered anyway. It was his natural manner to be brash and irreverent, but in an inoffensive way that usually brought a smile to the recipient. His manner and humorous comments contributed considerably to his acceptance and respect from the public and college students. In spite of my concern over the problem at hand I had to chuckle at his comment. My answer was, "That's OK, I only wanted to talk to you". After another comment or two, I explained my problem to him. He said he would be right there, and while I waited for him I gathered some boards to place over the steps for protection when backing the crawler down. After waiting for Steve to review the situation and see the whole incident as it resulted, I proceeded to remove the crawler from the dormitory entrance and return it to the shed. By backing it very slowly to the edge of the landing and letting it balance gently over the top step, and down on the lower ones to the sidewalk, and then with the help of the protective planking I returned the crawler tractor back to the shed at the Forest Nursery. I'm sure there were some chuckles from a few students while watching all of these maneuvers. To prevent a recurrence of this incident, I removed the distributor cap and rotor so it was impossible to start the engine, and with later machines ignition switches with keys were added to prevent theft or at least reduce it.
Hazard in a Bog

In 1952 many loggers were still using horses for yarding timber even though many had converted to the use of crawler tractors. Several local teamsters were still active in the woods with their teams. One of these, Guy Ellingwood of Old Town, had a yarding job on land adjacent to the Guarantee Block section of the University Forest. He drove his team from his home on Gilman Falls Avenue and planned to cut through the Guarantee Block, and then along the back boundary line to his job location. After reaching the end of Pinkham Road he started driving his team along the boundary across the area of corduroy over a bog where several years before I had a problem with a horse breaking through. I was not aware of his plans and was unable to warn him of the dangerous bog area, and did not hear of the incident that occurred until the next morning. Part way across the bog, one horse broke through the corduroy log surface and sank up to its belly into the muck. Ellingwood worked all night trying to get the horse out, but the bog was too deep to get any footing for the animal and by morning he knew it was useless to keep trying. He stripped the harness off and went out to get a gun with which he shot the horse where it lay. Within a few weeks no sign of the animal remained. Portions above the bog were eaten by foxes, raccoons and other animals, and the remainder sank deeper until all portions disappeared from sight. A very unfortunate incident, but not a rare one under the hazardous conditions of this type of work.
Construction Begins - The First Building

In 1950, prior to the delivery date of our first crawler tractor, I decided to build a shelter for it near the area where we had several logging operations planned in the Guarantee Block. No money was available for building materials, so I decided to build a log structure with materials from the Forest. With a bow saw and axe and some use of a Disston power bow chain saw, I cut a number of pole size hemlock trees that were close to the Pinkham Road in the Guarantee Block. After limbing them out with an axe, I hooked long chains on to them and pulled them out one at a time to the road with the Dodge pickup. Then hooking several together behind the pickup I dragged them down the road to the building site in Block B-5, Compartment J. My knowledge of log building construction was limited, but I had observed several, and also had some experience building rough frame buildings, so I felt competent to complete this project. It was a simple rectangular structure with a roof sloping from front to back, and an eight-foot doorway in front. Each log was notched near its ends to fit down into another notch in an adjacent log to form a tight corner. As each course of logs was laid on each side and the back, the notched corners were spiked together with eight inch spikes taken from bridge construction supplies. As spikes were not plentiful, only alternate courses were fastened, but with tight fitting notches, the structure was very rigid. The front being mostly door opening, was tied together by use of a mud sill as a first course on the bottom, and then with cross logs above the doorway. Rafters were poles with the top side hewed smooth with an axe, and rough boards borrowed from the State Forest Nursery were used for the roof and doors. Roll roofing purchased for the roof and hardware for the doors was all the cash outlay for this first building in the University Forest. Sphagnum moss was used to fill in gaps and crevices between the logs, and the building was quite tight and well-sealed against the weather. This building was used for about ten years until it was unable to accommodate the newer models of crawler tractors of larger size and equipped with protective canopies, winches, and blades. It continued in use as a storage facility until the late 1960's when other buildings became available, and it was finally torn down and removed.
Impact of Mechanization

The acquisition of the John Deere crawler tractor for use in yarding timber, and road maintenance and construction, was the start of a rapid change in production of products from the University Forest. It was now possible to plan projects in accordance with research needs and labor supply. Our previous dependence on local teamsters had seldom allowed for precise timing of any harvesting operation. Now with our own source of a machine for both yarding and road construction, operations planning was much improved. The gravel road system constructed in the 1930's by the Resettlement Administration provided an excellent basic road layout. However, much of the Forest needed additional seasonal roads to give access to trucks for hauling of forest products. With the relatively slow moving crawler tractor it was most efficient to yard short distances. This made it necessary to provide access roads into the harvest areas for trucks that not only traveled faster, but also carried more volume than the tractor. This development of access roads had started with the hiring of bulldozers to build roads into the shelterwood area, and into the cutting area off the Logan Road, during the horse yarding period. Our new John Deere bulldozer was immediately used to construct access roads for several planned projects. One of the first of these seasonal roads was off of Pinkham Road in the Guarantee Block, to provide access to a series of sample plots previously established by Gordon Chapman and me. This road which was completed in 1954, became the loop road which starts from Pinkham Road in Block D-7 and after circling through five other blocks, returns to Pinkham Road in Block E-8. Some gravel has been applied on this road but it is still primarily a seasonal winter road only.
A Labor Force Develops

Student workers during the 1950's included Al Coulombe, Swede Nelson, Neil McGowen, Chet Sewall, Dwight Southwick, George "Bud" Wieland, Luther Zai, Al Cameron, and Robert Wing. All were foresters except Dwight Southwick, who was enrolled in Agricultural Engineering. Generally, the Forest labor force was made up of students enrolled in the Forestry or Wildlife curriculum. Occasionally, through the work study program or for other reasons, students from other majors were hired. Dwight's wife, Ruth, was our secretary while he was in college, and through her association with the Forestry Department he inquired about a job in the Forest and was accepted. It was a good choice, both were very personable, competent individuals and a pleasure to work with. Students worked wherever a job was open, so it was not uncommon for a Forester to be working on the farm or in the barns, and non-Foresters to be working in the Forest. It was excellent experience for all.

Neil McGowen and his wife Barbara, both started to work at the State Forest Nursery when Neil enrolled in the Forestry curriculum in 1950. For the next four years until he graduated, they both worked seasonally at the Nursery, and Neil worked part time in the University Forest as well. As noted earlier, the spring season at the Forest Nursery was a very busy period. Large crews were needed for lifting, packing, and shipping, and also for transplanting seedlings. Several wives of forestry students worked many hours sorting and aligning seedlings for transplanting. On weekends many of the husbands would join them and crews of twenty or more would often be in the fields at that time. Neil and Barb McGowen were very faithful and dedicated workers. With a young son to raise and with Neil enrolled as a full time student on the G.I. bill, they needed all the extra money they could get. Mary and I had three sons at that time and we also were happy to work on weekends for whatever extra money we could earn. In spite of the heavy work lifting trees and digging trenches for transplanting, the group of workers were very congenial and time passed quickly with much teasing and joking. Many long lasting friendships were formed during this period.

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By 1950 it was obvious that an inventory of the University Forest was necessary for long range planning of management goals and procedures. The only previous inventory was from a cruise done by Fred Holt in 1939. Fred was a forestry student at the time and after graduation worked as a County Agent, Extension Forester, and Forest Commissioner for the State of Maine. Management of the University Forest to the 1950's was based primarily on this initial inventory. In 1952 I planned and initiated a cruise of the Forest taking a ten percent sample. This was a line-plot cruise with lines five chains apart, with one tenth acre circular plots every two chains on these lines. Two trees nearest the plot center were measured in detail for diameter, height, last ten-year growth, crown class, etc. A type map and notes on condition and recommended treatment of stands were recorded continuously along each line. The relatively high percent of sample plus the data recorded from each plot, made progress of this timber cruise quite slow. When student labor was available I worked with one or two helpers, but also spent many hours cruising alone. With help we seldom finished more than fifteen plots per day. Alone I would do much less, although my progress improved as I developed methods of chaining between plots.
and tallying all the details without assistance. Neil McGowen was one of my most dependable student workers at that time, and through the Christmas break and between semesters in January 1953, he and I spent every good day cruising the Forest. The weather was good from the standpoint of not having storms, but many days of bright sunshine were bitterly cold throughout December and January of that winter. Standing in one spot recording data in a notebook with air temperature near 0 or below, was not a pleasant task. The cruiser moving from tree to tree around the plot kept somewhat warmer, so we would alternate jobs at each new plot. Also, to warm our hands, we each had a little pocket hand warmer which was fueled with lighter fluid. It's doubtful that these warmers would pass safety regulations today, but they were much appreciated on many days that winter. I still have mine although it hasn't been used since that time.
Changes in Harvesting Operations in the 1950's

Combined with the forest cruise, office computations, preparation of type maps, and analysis of stand data, continuous harvesting operations were in process in the University Forest. Several of these were stumpage sales to local residents as well as to commercial crews. In January 1951, Winston (Win) Pullen cut a few pine and spruce sawlogs on the Guarantee Lot, Block D-7, Compartment H. The following spring of 1952 Pete Sulinski's crew cut several thousand feet of pine and spruce in several of the one and two acre plots along the loop road in Blocks E-7 and F-7, Compartment H. At the same time Bart Oliver was cutting pine sawlogs in the Sewall Block, Block G-8, Compartment C. Meanwhile, University Forest crews were also harvesting pulpwood and sawlogs in the so called Shelterwood Area in Blocks I-7, I-8, and I-9, Compartment C. The original area of 25.4 acres, had been reduced to 22.06 acres, and then divided into three strips of about seven acres each. To extend the periods between cuts for demonstration purposes, consecutive strips were harvested each year from 1952 to 1954. The majority of the cutting in these harvesting operations was by use of axes, bow saws, and two man crosscut saws.

Power chain saws were slowly gaining in use for timber harvesting, but were so heavy and bulky that their primary use was for felling and bucking large timber for sawlogs. For use in the University Forest we had one two-man chain saw weighing well over one hundred pounds and also several one man saws weighing from thirty five to forty five pounds. Maintaining these saws in operating condition was a continual chore, and consequently their use was limited to making cuts on the largest timber. Practically all of the limbing was done with axes, and small trees were cut with the hand saws. The student crew during the early 1950's tried various ways to use power tools to reduce some of the hard, tedious labor of felling and bucking timber, but often went back to using hand saws and axes to reduce the frustrations of using those early power saws. Some of these saws, which were forerunners of things to come, had names from the manufacturing agents as well as designated names such as, Disston, Mall, McCulloch, Homelite, Pioneer, Hornet, Poulan, Precision, and Remington. Most, if not all, of these saws were gear or chain drive and therefore could exert considerable power to the cutting chain. The major problem was that with all that power on the cutting chain, an operator could not hold a saw against the pull of the chain in a cut. The saw had to be placed on the wood to be cut with the rear butt plate contacting the wood. This prevented the saw from being yanked out of the operator's hands, which would happen if the cutting chain was engaged and made contact with the wood near the center or tip of the bar. Cutting with the top of the bar was also practically impossible. The power of the moving chain was such that any attempt to cut with the chain moving outward along the guide bar would thrust the body of the saw back toward the operator with great force, and considerable pain and injury could result if a vital spot was struck. These several disadvantages of use of these early power chain saws resulted in considerable reluctance of the public to purchase and use them. Thus it came about that a number of manufacturers produced a few models and then became discouraged with sales and abandoned the project. However, several companies such as Homelite, McCulloch, and Poulan persisted in the manufacture of chain saws, and with the development of direct drive saws of lighter weight, became leaders in this field.
During the late 1950's and early 1960's power chain saws became accepted for production timber harvesting and hand saws rapidly became obsolete for woods work. The change in design, from gear drive to direct drive from the engine to the chain, was a major improvement in chain saws. The speed of the cutting chain was increased enough that at full speed it could be set on to the wood at any point and would cut smoothly without kicking and yanking as the teeth cut into the wood. These saws created a whole new concept in timber harvesting by their ability to be used for all phases of felling, limbing, and bucking trees into logs or pulpwood. Major improvements came rapidly after that, especially after the introduction of foreign made saws from Sweden and Germany. From 1950 to 1983 the University Forest acquired a continuous variety of power chain saws through various lease arrangements and loans, and some purchases. As new models came into production, companies would replace the older models. The University Forest and the College of Forest Resources are greatly indebted to a number of chain saw companies and distributors for their contributions to this supply of chain saws.
Changes in Design and Instruction in the Use of Chainsaws

Expanding interest in chainsaws in the 1950's brought a variety of events to the Forest in the form of demonstrations, evaluations, and maintenance assistance to owners. The Disston Saw Company had a traveling repair shop mounted on a truck, in which their mechanic could assemble an entire saw from parts in stock. On one visit to the University Forest a field day was planned with maintenance workshops, cutting demonstrations, and a full meal of roast pork provided at noon, all at no cost to the participants. The pork was roasted over an open fire, and appetites were well developed from the aroma during the morning. This program was planned and carried out mainly by Elmer "Al" Orcutt, a Maine forestry graduate, former University Forest employee, and at that time operating this traveling repair shop for the Disston Saw Company. Later as an employee of Homelite Corporation, he was instrumental in providing a scholarship for the Forestry Department from Homelite. While doing saw testing work for homelite, he brought a crew of engineers to the Forest one February to evaluate a new model of saw under severe winter conditions. A mild period set in, and after waiting several days for cold weather to return, they finally set up lights and ran the trials during the night to utilize the coldest period. I provided a large wolf white pine for their use, and they ran the trial saws at full throttle and under full load for hours that night. That model stood up well to the tests and became very popular during its years of production.

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The entrance of foreign manufacturers into the chain saw market in the United States during the 1960's brought more changes in design and quality of power chain saws. German and Swedish saws were among the first to be imported and Swedish saws were among the first to include several new features in design, to reduce safety hazards and improve operator comfort. Anti-kickback devices such as a chain brake and hand guards were introduced. Anti-vibration rubber engine mounts were utilized to reduce operator fatigue and blood circulation problems. New designs in cutting chain also helped to reduce kickback. At the same time the Swedes were carrying on research in safe and efficient cutting methods, and ways to increase production. Results of this research were used by their distributors to promote sales of these improved chain saws in this country and around the world.

In 1969 some of these progressive methods of felling, limbing, and bucking developed in Sweden, were demonstrated in the University Forest by Tommy Holme, a Swede who was representing the Jonsereds Chainsaw Company of Sweden. This demonstration was sponsored by Dave Tilton as part of his efforts to establish the Tilton Equipment Company as a major distributor of Jonsereds chainsaws. This company has prospered, and from 1969 to 1983 was very cooperative and helpful to the University Forest and the School of Forest Resources, by providing free use of chain saws, spacing saws, and other wood handling equipment, as well as providing competent, well trained instructors, for Forest employees and student summer camp programs. Instructors included Tommy Holme and Janis Grins, from Sweden, and Daniel Tilton from Tilton Equipment Company, who received his training in Sweden. Janis and Danny were especially helpful during many sessions of harvesting exercises at summer camp. They always left many favors, such as screw drivers and caps for the students, but above all they left with all
of us, a much better understanding of safe, efficient use of chain saws and wood handling tools, and the benefits of following all safety procedures.
Operating Problems in the 1950's

In 1952, the second cut in the Shelterwood area was progressing with some crews using combinations of power chain saws and hand saws, and some crews working solely with hand saws, all using both two man crosscut saws and one-man bow saws, and axes. All of the yarding was done with the John Deere crawler tractor equipped with the adapted Braden winch. By current standards this was a very light, crude unit for yarding timber, but to us at the time it was a real advanced piece of equipment. There were numerous times when doubts arose however. The idler wheel flanges were low and if the tracks became loose or the idler wheel was slightly misaligned, it was quite common for a track to ride up over the flange and run off the idler wheel. The normal place for this to happen was in deep mud or locked behind a stump or rock, where in either case it was necessary to raise the side affected high enough to free it and be able to pry and pull and work the track back into place. The idler wheel adjustment to tighten the track was an aggravation in itself. There were screws on each side of a yoke and in adjusting the idler wheel to put tension on the track, it was necessary to turn each screw equally to maintain perfect alignment. Sometimes, even with an equal number of turns, the yoke would not move smoothly, and the wheel would be out of line. Then it would be necessary to measure, and eyeball, and then drive in a straight line to observe the position of the track on the idler. All of these problems were reduced as new models were produced with higher flanges and an improved single screw adjustment for the idler. Present day machines all have hydraulic adjustments in this place.

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Another problem was with the winch which had been adapted to fit on the rear of this early machine. The Braden winch was designed as a complete unit, with its drum and control levers all mounted on one frame. When mounted on the rear of the crawler tractor, the control levers were located so far behind the operator that he had to twist his body around and rise partly out of the seat to reach them. It was safer and more convenient to set the brake on the tractor, dismount, and operate the winch from the ground behind the machine. The problem with that method was its inefficiency when an operator only wanted to release a load, move ahead to firmer ground, and then winch the load up tight again. Most times an operator would stay on the tractor and twist his body around to operate the winch, rather than going through all the procedure necessary to dismount from the machine to operate the winch from the ground. If a helper happened to be nearby, many times he would move in and operate the winch for the driver. By the late 1950's a Gearmatic manually operated winch had been adapted to the John Deere crawler tractors by the manufacturer. The controls were located in a convenient spot readily accessible to the operator, and made winch operation much safer and efficient. At the time it didn't seem possible to improve on it. Progress however, cannot be stopped, and improvements continue to be made, with the change to hydraulic operation, and on to single lever controls, with automatic brakes and other features common today.

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The Shelterwood area was becoming very useful as a demonstration of this type of silvicultural
cutting for both student classes and landowners. To prolong this use without drastic change, the area was divided into three segments in 1952, with a segment to be treated each year from 1952 to 1954. This second cut of a planned three cut shelterwood produced a high percentage of sawlogs, and with the use of hand tools for cutting, and the relatively inefficient crawler tractor, it became the major operation on the University Forest during those three years. Many frustrating incidents occurred during those years, and several stand out in memory. To facilitate hand loading of the logs on to trucks for hauling, a raised log deck was desirable. A slight slope in the area was selected, and a skidway was built up with one large log placed parallel to the road, with two long skids placed on it running back onto the slope. Placing the first layer of logs on the skidway was relatively easy by rolling them with peaveys from the rear end of the skids to the front. As the logs accumulated on the skids it was necessary to place new short skids from the ground up on to the lower layers of logs. To roll the logs up these skids as the pile got higher required much manual strength, and some of the larger logs were almost impossible to move. To reduce the manual labor and build the log pile higher, I got a long length of one-inch rope and rigged it up as a parbuckle. When this was in place, whenever a large log came along, we looped the rope around it and hitched it to the crawler in front of the pile, and pulled the log up on to the pile by driving forward. By the use of this method we eventually had a single log deck with nearly thirty thousand board feet of logs in it. The hauling of this harvest will be discussed a little later.

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A major problem with the first John Deere crawlers was the low flanges on the idler wheels which allowed the tracks to become misaligned and run off the idler under certain conditions. Unfortunately, those adverse conditions were when operating in deep mud or among stumps and rocks. Mud picked up by the tracks would pack in around the low flanges and allow the tracks to slip off the idler wheels during a turning action. Attempting to make a turn with a track jammed against a stump or rock could also force the track off the idler wheel. Either situation resulted in a tedious and frustrating job, jacking the machine up out of the mud or away from an obstruction, backing off the adjustment for the idler wheel, and then tugging and prying the track back into correct alignment on the idler wheel. When back in place, it was still necessary to readjust the idler wheel to put correct tension on the track with as near perfect alignment as possible. Until the manufacturer corrected the problem by increasing the height of the flanges, a track would be thrown several times a week, and usually under the most adverse conditions imaginable. Over these several years we became quite efficient at replacing tracks in mud holes and rock piles.

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Cold weather was both a hindrance and a help on logging operations. Most of the logging operations in the University Forest were carried on during the winter to take advantage of frozen ground for both yarding and trucking over low wet areas. Once roads were packed down and frozen, sometimes with more snow and ice than soil, they would generally hold until spring breakup, unless a prolonged thaw occurred during the winter. In the forest, conditions were different. Skid trails for yarding kept changing as cutting areas changed, and seldom were frozen very solid. Crossing a wet spot might be fine for a few trips in the morning after a cold night, but as the temperature warmed up during the day the ice crust would soften, and eventually the
During the winter of 1953 I was yarding logs across a wet run, thirty or forty feet wide. With only a few more logs remaining, I was attempting to finish up late one afternoon. Because the ice was nearly all melted, I had been varying my route across the wet area to try to stay on the firmer ground. On the last trip through I went back to one of the earlier trails because there were no new routes available. About in the middle the crawler went into a soft spot, and at the same time the logs being dragged behind caught on some roots, and stopped the tractor's forward motion. Before I could reach around behind me to release the brake on the Braden winch, and also push the clutch to stop the tracks from turning, the crawler had dug itself down into the soft mud. After releasing the load on the winch line, I attempted to drive the crawler forward out of the mud hole, but there was no firm base for traction. I then decided to winch the crawler backwards out of the hole, and removed the winch line from the logs, and fastened it to a solid tree further back. With the crawler in reverse, and winding in the winch at the same time, I attempted to back out of the hole. The machine started to move, but the strain on the winch line was so great that it broke a few feet back of the winch. Without enough cable to reach a solid anchor, I tried another idea. This time I put sticks of pulpwood, brush, and tree branches down under the tracks anyway possible. Many times by putting wood crossways under the front of the tracks, it would be pulled back under as the tracks turned, and would form a support and give traction to drive out of a hole. In this case the material simply went down beneath the tracks and floated around loosely, without providing any support or traction.

By this time, it was getting dark, and I decided to leave the machine where it was and return in the morning with a new winch cable and personal outlook. During the night it turned quite cold and I was concerned about finding the whole machine frozen in solid in the morning. As I suspected, when I walked up to the crawler at 7:30 the next morning, the wet area which had become a large mud pie as a result of the numerous trips across it, was now frozen solid. I started the tractor engine and lowered the bulldozer blade to exert downward pressure and raise the front of the machine. After several attempts the tractor lifted slightly and broke the ice around each track. I then took a chance and put the gear shift into a forward gear and let out the clutch. To my amazement and relief, the tracks gripped on to some of the woody material that I had put underneath the night before, and the crawler drove out of that mud hole as though it was on dry land. The mud had frozen all around the tracks and locked all of that woody material in a tight grip which gave perfect traction for the crawler tracks. The overnight timing was just enough to create these ideal conditions. Another day of freezing weather would have locked the machine so tightly, it would have required a jack hammer to break it loose.

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A couple more incidents relative to the shelterwood cutting might be of note. During the fall of 1953 a severe hurricane swept through Maine, and caused some windthrow in the University Forest. Two thirds of the shelterwood cutting had been completed, and that portion had been thinned substantially with wide spacing between crowns. I fully expected to find a heavy loss in this area, but evidently my selection of healthy, wind firm trees to leave was correct, because there was a minimum of trees blown down in the cut over area, with a much higher loss in the uncut strip. These uprooted trees were harvested along with the marked timber during the winter of 1954. In fact, much of the downed timber was marked for removal anyway, so loss from the
One of the piece work cutters in the shelterwood area was Al Coulombe, a forestry student who also played on the varsity football team, a rare situation. After the football season in the fall, he liked to work cutting timber with a bow saw and a two man cross cut saw to keep in shape, as well as to earn some money. He took the job by himself, telling me that he would have a partner with him to help with the cross cut saw work. I was a little concerned about him working alone until one day when I walked in to see how he was doing. Working with him were three of the huskiest brutes I had seen in the woods in a long time, helping him pulling on the crosscut saw, piling pulpwood, and even manhandling logs around. Al had brought some of his football teammates out for exercise. They didn't have much experience, but they were willing workers and had plenty of brawn. Al's team did quite a job that winter, and I don't think he had to pay them much, except for a six pack of beer occasionally.
Many Changes Occurred During the 1950's

There were many changes and developments during the 1950's, and several made profound changes in the lives of myself and my family. Early in 1946, in anticipation of our arrival in Orono, Prof Ashman had negotiated with Frank Paige to purchase a house he owned adjacent to the University Forest on College Avenue Extension. While waiting for a University lawyer to check and clear the title, a small sum of money was advanced to hold the property. Mr. Paige was separated from his wife and several children, so the lawyer was having difficulty making contacts to clear the title. A second holding period was arranged, and time went on with us living in the South Apartments. Finally, at the end of a work day, I stopped at our office and Prof Ashman called me into his office. He said that the lawyer had called that day and approved the purchase of Frank Paige's house. He also said that this was the last day of our option to buy, but he thought that if I stopped to tell Paige the next morning the details could all be worked out that day. At 7:00 the next morning I rapped on his door and when he opened it, I started to explain that the University was ready to make the purchase. Before I got very far he interrupted, and said he had sold the house that morning. He apparently had another buyer who was just waiting for our option to run out, and they had signed the sale just after midnight that morning. Frank Paige was obviously well aware of the option period, and also fed up with waiting for the University to make a decision. We were all a little disappointed at the time, but in the end it all worked out well for us. Our family life would have been completely different if that sale had gone through. As it turned out, in 1950, Mary and I bought a home on Pond Street in Orono, and moved from the South Apartments to our new home in June of that year. This house, which was over 100 years old, needed some repair, and a barn was in dire need of something, but we felt fortunate to be able to finance the price of $4500, through loans from Mary's folks and also from Professor Robert Ashman. A note here is appropriate about Robert Ashman. He was one of the finest men I have ever known, very pleasant to work for, kindly and helpful in every way. He treated me like a son, and helped us in many ways other than a loan of money, and I am sure he helped many others in similar ways. He was a real gentleman, and I am proud to have known him, and his wife.

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After moving in to the Pond Street house, every spare moment I had was spent working on developing a garden and repairing the buildings. My first project for repair was the barn. The roof leaked and most of the sills were rotted out. My first consideration has always been to get my equipment under cover, and the barn in that condition was not much protection for my car and the University Forest pickup. Therefore, I decided to tear down the old barn, salvage all the usable lumber, and build a two car garage. I immediately started tearing down the old barn, using much care to save every piece of usable lumber, and removing all of the nails from each piece. This lumber was separated by sizes and stacked carefully for future use. When I finally had the site cleared and an area laid out for the size building in my plan, I made careful measurements to locate points for the support base. My plan was to support this garage on cedar posts set deep in the ground, and cut off level all around to support 8 by 8 timbers which I had salvaged from the old barn. These timbers became the sills that were the base for the 22 by 24-foot garage. The barn, which had been a two story building, provided enough lumber for the
completion of the garage, with some left over. Roofing, siding, and nails were all that had to be purchased to complete the building, and second hand overhead doors were acquired for final security. Thirty-five years later, a recent owner has made some much needed renovations, but the basic structure remains the same.

One incident, among many, while working on this garage, is still vivid in my memory. Our youngest son Gene, who was four years old at the time, was quite an energetic individual, who liked to roam. Several methods to keep him at home had been tried such as strapping on a harness and tethering him to a clothesline post where he could play on the grass. We also had put a wire fence around the same area, because he soon learned how to remove the harness. One day I was finishing up shingling the roof, and was nailing the final course along the ridge. All of a sudden I heard a voice say "Hi Daddy", and looked up to see Gene at the top of the 16-foot ladder at the end of the building, just ready to crawl on to the roof, and saying that he wanted to help me. I moved quickly over to him and told him I was ready to go down, and he needed to go down first so I could use the ladder. I was concerned how well he would climb back down the ladder, but he started right back down when he saw I was coming too, and went down as easy as I did. He had gotten out of his harness and pen, and came up to help. After that I never left a ladder up against a building unattended.

As soon as the garage was finished, I moved right on to more repair and renovation work. Over the next several years, every one of the eight rooms in the house was done over, a major support sill and foundation was replaced, an oil burner was installed in the coal and wood burning furnace, and a major change was made on the back of the house. This major change involved tearing down an ell on the back of the house, and constructing a closed in porch across the back in its place. This ell had been a summer kitchen many years before, but more recently was used for rough storage, and a workshop. It was attached to the house, but was not on a firm foundation, having been originally set on posts which had seriously deuterated over the years. Two rooms on the first floor of the house had been changed over into a small apartment, with a kitchen, bath, and combination living room, bed room. This was rented to a young family with one child, and I wanted to add a room to relieve their crowding. When another child arrived we finally let them use one of our bedrooms upstairs, but prior to that, I went through the same routine as with the barn, tearing down the ell, saving the lumber, and building an enclosed porch, 10 feet wide and the length of the house across the back, 36 feet, with a partition near the center, and a door from each apartment opening into one portion of the porch. With this seemingly unending work at home, along with full time work in the University Forest, and part time work at the State Forest Nursery, there was very little time for other activities. We did try to make one trip a year back to visit with our families in Massachusetts, and occasionally go further to visit other relatives. We were greatly restricted by both time and finances, during those first years of owning our own home.

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Pond Street, in the Webster side of Orono, was one of several streets in a purely residential area. At that time, it was home for many University of Maine faculty and staff, as well as some Federal employees. Housing was in short supply, and faculty salaries were not much higher than mine, and therefore many of our neighbors were faculty members owning homes of the same
vintage and condition as ours. Among our neighbors in 1950 were Win and Mary Pullen, Win and Betty Libby, Bart and Lou Oliver, and many others. Pullen became Associate Dean of the College of Life Sciences and Agriculture, Libby became President of the University of Maine, Oliver was State Conservationist of the Soil Conservation Service, and other neighbors were extension service agents, experiment station researchers and chemists, as well as full time professors. Through these neighborly contacts in the early 1950's, close friendships developed which have continued to the present.

During that same period Orono schools consisted of three elementary schools, a high school, and a parochial school. St. Mary's Catholic Church operated the St. Mary's School on Main Street which most Catholic children attended, Orono High School was in its present location, although much smaller, and the elementary schools were well located around town, the Birch Street School on Birch Street, the Bennoch Street School across the street from the Post Office, next to the Fire Station, and the Webster School on the corner of North Main Street and Pierce Street. Children living in the Webster side of Orono attended Webster School to grade four, and then were transported by bus to one of the other elementary schools for grades through six, and then to the high school for the last six grades. Many changes have occurred since then, the Asa Adams Elementary School was built in 1956, Webster School was abandoned and torn down soon after, and Bennoch Street School was utilized for several years as a recreational hall, and finally removed to make a parking lot. Birch Street School is the only remaining elementary school building, and is currently used as a senior citizen meeting hall and thrift shop. Additions have been made to the high school which include a new gymnasium, town library, and junior high school. St. Mary's School was closed several years ago and has been renovated into apartments. Students from that school transferred to the public schools, or to a parochial school in Bangor.

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Progress was very slow coming to the University Forest and to the State Forest Nursery. In 1952 the Nursery received an allotment of money to purchase a farm tractor, with plow and harrow, for soil tilling. Demand for seedling transplants was increasing, and expansion of the nursery area was necessary to provide this demand. Two acres of old field in the Smith Farm Lot of the University Forest were allocated for nursery use, and the tractor was necessary to plow and harrow this land in preparation for planting. This equipment seemed like tremendous progress at the time, but hand work was still necessary for seedbed preparation, seeding beds, transplanting seedlings, and lifting and shipping transplants. Later a small garden type tractor was purchased for plowing trenches for transplanting seedlings. No other equipment was acquired by the Nursery until 1956 when a Federal Soil Bank program was established, and funds were available from the Federal Government to establish an expanded or a new nursery. For several years we had expanded the Nursery in Orono and Old Town by using the land on the Smith Farm and also several acres leased from Penobscot Chemical Fiber Company near the Penobscot River. With the expanded Soil Bank Program however, this was not enough area to fill the demand. Therefore, Henry Plummer was commissioned to locate a new area that would meet all of the requirements necessary for a successful and productive forest nursery. After investigating land areas all over the central part of Maine, an area in Greenbush was selected and has been developed into an outstanding forest nursery.
Meanwhile, an event occurred which had a tremendous effect on developments in the University Forest and also in the Forestry Department itself. In the fall of 1952 a small sawmill was acquired by the Maine Forest Service and the Maine Development Commission for use as a promotional project at the Eastern States Exposition at Springfield, Massachusetts. When the Exposition ended, the mill was determined to be surplus equipment, and through the efforts of Professor Gregory Baker, and cooperation of the Forest Commissioner, Albert Nutting, and his deputy, Austin Wilkins, the mill was transported to Orono, and stored over winter. During the summer of 1953, Professor Baker selected a site and supervised the setup of the mill in the University Forest. With the State Nursery farm tractor and a wagon, the sawmill was hauled from storage in the Rogers Farm barn in Stillwater, to the site on the Sewall Road in the Forest. With the help of several of the summer nursery crew, I worked with Professor Baker to set posts and manhandle the mill sections in to place on sills on these posts. Most of the final adjustments and finishing touches were done by Baker, and my crew went out to help when more manpower was required. By the end of summer, the mill was operational, and several projects were initiated to utilize it.

One of the first projects to utilize the sawmill was a two phase project involving a silvicultural operation and a sawmill study. A one-acre plot was laid out in a mixed softwood stand at the junction of the Sewall Road and the Shelterwood Road. With four students, Professor Gordon Chapman laid out and marked the plot for cutting. Working with this group, and Professor Baker, we cut and yarded a select group of logs to the road, and with the Nursery's farm tractor and wagon, hauled them to the sawmill. At the mill the logs were segregated into diameter classes, and the sawing of each size class was timed and the volume recorded. The intent was to determine the minimum diameter log that could be sawn and produce enough lumber to be profitable. This mill has an eight-foot carriage and will handle logs up to twelve feet long fairly well, but for this study all the logs were eight feet long. The limited test appeared to show that logs less than ten inches in diameter were marginal in profitability for this mill. Professor Baker was the sawyer for this project, and for several others that involved student class projects. I became the sawyer for all other projects, and for many years was the only sawyer. Most of the students working on the Forest had an opportunity to work in the sawmill several times, and some spent many hours in it. Working with and handling lumber as it was sawn from a sawlog, was a valuable experience for students to see first-hand the effect of crook or other defect in the log on the lumber produced.

The first lumber produced by the mill was used to construct a building to enclose and protect it. Once this building was completed, more logs were sawn and the lumber stuck up in piles to dry for future use. With this ready supply of lumber from our own logs and sawmill, plans were soon made for the construction of a storage shed and workshop. In 1955 a two bay storage shed with an additional enclosed workroom at one end was built across the Sewall Road opposite the sawmill. Each bay and the workroom measured ten by twenty feet. Construction took place during the fall and the roof was finished during the Christmas recess. Cold weather during this
period created several problems, frozen lumber split when nails were driven in, asphalt roofing
had to be heated with a blow torch to bend it over the ridge pole and at the eaves, and storms
interrupted much of the outside work. One student, George Nelson, who came from Hampden,
worked with me to finish this building during that winter recess. This building, with the sawmill
nearby, became the general base of operations for the Forest until 1962. The workroom was
equipped with a work bench, wood stove, several chairs, and electric lights from a portable
generator.
Job Headquarters - For a Short Time

With the construction of the storage shed and workshop near the sawmill, this became the work headquarters for much of the Forest activities. The John Deere crawler and other logging equipment were stored there when harvesting operations were in the vicinity or the equipment was not in use. Maintenance of chain saws and small tools was done in the shop, and work on heavy equipment in one of the bays. Sawmill operation was fairly steady through mud season in the spring, and on stormy days through the summer and fall. The combination of sawmilling, maintenance work, and other projects made this location into a major headquarters where considerable time was spent. Especially on stormy days, many lunch periods were spent beside the stove, heating tea and sandwiches on the top and drying clothing overhead and on racks. These were times that created close comradeship with my student crews. Allen Gordon, Alex Knight, George Nelson, and Clint Waite were several who spent many lunch periods with me beside the stove in the work shop. Those were pleasant times for me.

One of the special projects done at this location over several years, was the outfitting of stake body trucks into units for transporting students. The sides were fitted with plywood and stakes to a six-foot height, and bows were installed overhead. One truck had a canvas top and others had metal tops. Seats were fashioned along each side with an end gate at the rear. Often the end gate was also used as a ladder for access into the truck body. The Forest crew and I made these bodies with the tools we had available in our workshop. Trucks of this type were the only transportation available to Forestry classes until the mid-1960's, when a school bus was loaned to the Department by the Maine Forest Service. Eventually a used school bus was purchased by the Forestry Department and others followed, until presently all transportation is by bus or van.
Slight Progress During the 1950's

More efficient harvesting methods and improvements in equipment came very slowly during the 1950's. Use of chain saws became more common, but were still gear driven models and weighed from 25 to 35 pounds. Most loggers used a chain saw to fell timber, but did most of the limbing with axes, except for the very large branches. Skidding was done with anything available, from horses, to rebuilt four-wheel drive trucks, to small crawler tractors. Loggers with crawler tractors, as we did, thought they had the ultimate machine for woods work. There were times however, when owners would have traded it for a team of horses. On cold winter mornings when it sometimes took until noon to start the engine, and when a track came off in a deep mud hole, or a branch caught and tore off wires or a fuel line, thoughts often became favorable about going back to horse logging.

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In the University Forest there was also the problem of yarding stump-cut wood. All of the pulpwood and firewood had traditionally been cut to four foot lengths and piled in the woods near where it had been cut. This wood then had to be loaded on to a sled or other conveyance and hauled out to a road landing. We had the crawler with a winch and cable for skidding logs, but nothing to load short wood onto. Several ideas were tried, from wrapping a cable around a bunch of wood and winching it out, to utilizing a travois attached to the drawbar and dragging on the ground behind, as well as a two-wheel trailer. None of these ideas worked well, the load usually spilled onto the ground and had to be reloaded several times before getting to its destination.

With the saw mill available in 1953, I decided to saw out some oak logs from the Forest, and build a scoot for yarding four-foot wood. A scoot is a sled with runners about ten feet long, with two five or six foot cross bars, with two bunks attached. The cross bars are attached to the runners with pins to allow flexibility and maneuverability on rough terrain and around corners. In the fall of 1953 Neil McGowen and I took the timbers of 4 by 8-inch oak into the State Nursery building to shape and drill holes to fit the pieces together into a scoot. All we had to work with were handsaws, chisels, and a bit and brace. The hardest job of all was drilling the one inch holes for the pins, and a dozen other holes for bolting the parts together. We found that drilling holes through four inches of green oak was not easy, but after several hours of perseverance and shifting jobs, it was finally finished. For skid shoes on the bottom of the runners, we hunted for a hornbeam tree about six inches in diameter. This was cut to the length of the runners and split lengthwise down the middle. One half was fastened onto the bottom of each runner, and replaced when worn out. In winter, on snow, these wooden shoes would last quite well, but when the scoot was hauled on bare ground, they wore out very rapidly. Hornbeam of the right size was scarce in the Forest, and occasionally I used sugar maple for shoes, but that also was scarce, and the whole process was time consuming, so eventually I bought two bars of one half inch by four-inch steel and fastened them on the runners for permanent shoes.

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One of the first uses of the new wooden scoot was to yard logs and pulpwood from a commercial clear-cut plot on the Loop road in the Guaranty Lot. This plot was a triangular shaped area located in Block G-7, Compartment H. It had been laid out partly to fit an area with a curve in the road forming the wide end of the triangle, and also to form a plot of variable width in which distance of seed dispersal could be studied. The sawlog timber in the plot was sold as stumpage to Leo Perkins, a machinist in the Agricultural Engineering Department. Leo, a native of Old Town, planned to build a house in Stillwater for his home. With a couple other Stillwater residents and University employees, Thornton "Ponto" Young, and Linwood "Red" Storman, Leo cut 15 thousand board feet of pine, spruce, and hemlock logs. During the winter of 1953-54, the three men worked on weekends using axes and crosscut saws, to fell, limb, and cut these logs to length. Due to several stormy weekends and an early breakup in the spring, plans to drive a truck in over the frozen bulldozed road were canceled, and I was asked to yard the logs out to the gravel Pinkham Road with the John Deere crawler and new wooden scoot.

Being anxious to try out the scoot, I agreed to give it a try. With Neil McGowen helping I moved the crawler and scoot to the area and went in for the first load. Our plan was to roll the logs on skids up on to the scoot bunks, and thought that we could get a second tier of smaller logs on top of the first layer. We soon found that most of the logs were so heavy that it took all the power we had to get the first layer on the scoot, never mind trying to roll logs up to the next level. It was quickly decided that there must be a better way. Since the crawler was now equipped with a power winch, we unhooked from the scoot and located the crawler at right angles and about midway on one side of the scoot. By pulling the winch cable out and looping it around a log and back over the scoot, and attaching the end to the side nearest the crawler, we created a parbuckle to roll the logs onto the scoot bunks by winch power. The process was relatively slow but much easier on our muscles. However, other problems occurred which became quite frustrating at times. Whenever an extra heavy log or a rough knotty one came along, instead of rolling easily up the skids, it would resist rolling and the scoot along with the log would be pulled sideways toward the crawler. This forced us to always place the scoot with one runner up against a stump or rock, to keep it from moving while loading. Also, with only a single line pulling the log up, one end of the log would always slide back, so one of us always had to be ready with a peavey to keep the log in proper alignment up the skids. When winching logs on to the scoot became too frustrating, we sometimes tried to push the logs on using the bulldozer blade. This worked with varying degrees of success, but eventually after utilizing all of these methods to load logs onto the scoot, and making many trips over a very muddy trail, all of Leo Perkins logs were hauled out to Pinkham Road where they could be loaded on a truck for hauling to a sawmill.

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Other logs cut by University Forest crews in this same plot needed to be hauled to the University Forest sawmill located in Block G-7, Compartment E, on the other side of the Forest. With no truck available for hauling, and even if one had been, after all the effort loading the logs on to the scoot, it didn't make sense to reload for the relatively short haul to the mill. Therefore, we loaded as many logs as possible on to the scoot, chained down the load tightly, and started out on the nearly two mile trip to the mill. All went well along the Forest roads and also along the road.
Shoulder of Stillwater Avenue from the mouth of Pinkham Road to the entrance of the Sewall Road. At that time Stillwater Avenue was a concrete highway and I had no concern about damaging the road surface with the steel lags of the crawler when making the crossing. All of our movement of equipment from one part of the Forest to another was done by driving the crawler over the roads or fields, and I had crossed Stillwater Avenue many times before with no problems. However, this was the first time I had made a crossing with a heavily loaded scoot behind. Traffic was not heavy in those days and when no cars were in sight I started across. The load moved smoothly along the gravel shoulder, but when the crawler was well out on to the concrete pavement and the scoot runners came on to the edge of the concrete, it brought the load to a sudden stop. The steel lags of the crawler had no traction on the smooth concrete road surface, and slipped around as though it was on ice. In recent times this situation would have been very serious, with today's heavy and fast traffic on this highway. The 1954 traffic was very moderate in both numbers and speed, and at times there might not be a car in sight in either direction. At this particular time when a car came along it would slow way down and drive past on whatever side seemed to have the most room. The only way to get the loaded scoot across the pavement now was to unhitch the crawler, drive it across on to firm ground in the Sewall Road, and then pull the winch cable back across Stillwater Avenue to the scoot, and winch the loaded scoot across to the gravel road surface of Sewall Road.

This procedure was repeated several times as subsequent loads were brought from the Guaranty Lot to the sawmill. The only critical moments were when the cable was stretched taut across the main highway in the process of winching. At these times it was necessary to have someone stand guard to prevent cars from running into the cable which was not very visible to approaching drivers. Crossing the concrete highway with a lag tractor caused very little damage and we continued this practice for several years until the early 1960's. At that time major renovations were made to both College Avenue and Stillwater Avenue. The road shoulder that we were using for a tractor lane was originally the old trolley car bed which had been abandoned in the early 1940's. The renovation consisted of rebuilding the base in this bed and widening these two major highways by resurfacing the entire width of old concrete plus the additional rebuilt trolley bed. The surface material was asphalt which is easily torn up by lag tracks and required boards to be laid down to drive over. This got to be too much of a nuisance and also was frowned on by the highway supervisors, and the practice was discontinued as soon as I was able to acquire other means of transporting equipment and materials from one area to another.

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In addition to hauling logs and pulpwood with crawler and scoot, several other methods were utilized. One was use of the Farmall wheel tractor and farm wagon belonging to the State Nursery. During the winter of 1953-54, Neil McGowen worked on a special problem involving marking and harvesting timber on a sample plot in Block J-13, in the Sewall Lot. This plot is located adjacent to the Sewall Road and a plan was developed to yard the logs and pulpwood to the roadside with the John Deere crawler, and then load the logs on to a farm wagon which would be pulled with a wheel tractor. This combination could travel much faster on the forest roads than the crawler, and all of the logs from this plot were to go to the University Forest sawmill for lumber to be used in construction of buildings in the Forest. The plan worked fairly well except for the work of loading the logs from the ground on to the wagon. This was entirely
a manual job, rolling the logs by hand and with peaveys up pole skids from the ground on to the wagon. Fortunately, none of the logs in this plot were very large, so two men were able to load most of them. The few large logs were left until last, and then by using the crawler's winch and cable as a parbuckle, were winched up the skids and on to the wagon. This seemed to be easier than rolling by hand, but was much more frustrating at times. Often the uneven weight of the butt end of the log would cause that heavier end to slip down on a skid and the log would slide off to one side of the skids back on to the ground. Then it would have to be lined up again and the whole procedure repeated until we got it right. Sometimes several attempts were made before the log finally was put in place on the wagon. In spite of the fact that the wheeled tractor was faster over the road, other problems of loading and maneuvering the farm wagon convinced us that it was not the most efficient way to transport wood, and also the unit was in fairly constant use at the State Nursery, so it was seldom used later.

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After completion of the cutting and yarding of the marked timber in this sample plot, with the pulpwood stacked on the roadside, and the logs hauled to the Forest sawmill, spring was approaching, and with mud season coming on, a project that became traditional at that time was started. This was the startup of the sawmill after the winter layover. The first year after setup of the mill in 1953, there was very limited lumber available for a building, so Professor Baker attempted to protect the unit with materials available. With the help of the University Forest crew several poles were cut and set up around the mill and engine. The tops of these poles were tied together with some of the limited pieces of lumber that had been produced that fall. Other light poles were laid across from one side to the other and then some old tent canvas was laid on top of these poles. This improvised roof gave partial protection from snow and rain during the winter of 1953-54. The spring season of 1954, with a supply of logs stockpiled, became the time to produce lumber needed to construct a building to house and protect the entire mill, and also stockpile lumber for other future use. At that time Professor Baker was the one person most familiar with the setup and operation of the mill. Consequently, during that spring, whenever he was free from classes, he would come out and run the mill as sawyer. I would always try to work with him or be near the mill at these times so as to learn as much as possible about it. As time went on I gradually took over the sawyer's job, and after 1954 I did all of the sawing until in later years when Dick Hale joined the Wood Tech Department staff, and having operated a sawmill of his own, worked one or two class periods each year with some of his students. With no heat in the mill building, it was not very efficient to operate it in the winter, so this startup in the spring became a standard procedure in the work projects of the University Forest for many years. Through the winter months as cutting operations progressed, many of the smaller, short logs were stockpiled at the mill site, and sawing began during spring break up, especially on stormy days. By having sawmill work available during mud season and on stormy days, employment for the student work crew was kept fairly consistent, and the student employees could depend on steady employment throughout their work period.

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The 1950's was the beginning of many more activities in the University Forest. Word was spreading about the availability of various wood products beside firewood, such as sawlogs and
cedar posts and rails. Housing was in short supply and many families were either renovating older houses, or planning to build new ones. To obtain lumber for these projects, several local men asked to purchase stumpage of timber suitable for sawlogs. At that time there were several local mills that would do custom sawing of small lots of sawlogs. By doing much of the labor themselves, homeowners could obtain lumber at a lower price than purchasing direct from a lumber yard. Considerable time and labor was involved in obtaining lumber this way, trees had to be cut, limbed, and bucked into logs, the logs had to be yarded to a truck road, loaded on to a truck and hauled to a sawmill, and after the lumber was sawn out it had to be put back on to a truck and hauled to the building location. The cutting, limbing, and bucking was all done with axes and crosscut saws, the logs and lumber was all hand loaded, and finally the lumber had to be stacked in open piles with sticks separating each layer for drying and left for six months to a year before it was suitable for use. If all this labor and lost time had been calculated, purchased lumber would have cost less money, but, money was what these folks were short of, and time was available, and hard labor was expected, so that route was selected.

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Local people who bought stumpage during the 1950's included repeaters such as Bart Oliver, Win Pullen, and Leo Perkins, along with Matt Sharpe, Ernest (Bubs) Garceau, Pete Sulinski and son, Pete,Jr. Several new homes in the Old Town and Orono area were built during this period with lumber harvested from the University Forest. Most of these would not have been built if this local timber had not been available. The home owner was involved in all phases of the construction, from cutting the timber in the Forest, to the final nailing of the finished lumber on to the house. In spite of the hard labor involved, or perhaps because of it, much pride was taken in the production of these homes and they all remain in use today, many by members of the same family.

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The winter of 1953-54 saw the start of an operation in the Forest that was unique for us, but common on many commercial harvesting projects. A logger by the name of Lawrence Nedeau, bought stumpage on the Guaranty Lot, and planned to yard it with horses. One of the first areas he worked in was a sample plot, number C1-54A, which had been established to be clear-cut. My initial meeting with Nedeau was not under the most friendly of situations, but after some explanations and apologies, our difficulties were worked out. By chance, in the fall of 1953, I was walking the boundary lines around the Guaranty Lot, and discovered some fresh cut pulpwood near the west line in Block G.7. Looking around, I located the men doing the cutting in the adjacent lot which was owned by a farmer named Cunningham, whose land ran from his farm buildings on Stillwater Avenue back to the boundary of the Guaranty Lot. They told me that they were cutting stumpage on Cunningham's land, and when they complained to him that his land was pretty well cut over, he told them to go way back and they would find some good cutting. This they did and they found good cutting, the only problem was that it wasn't on his land. I'm quite sure they knew that because the line was cleared and painted, and quite obvious to anyone looking for it. As for Mr. Cunningham, he definitely knew it, but he had very few qualms about taking a little wood from over the line. In fact, when I confronted him he tried to convince me that he owned beyond the painted line because of an old fence that ran along
parallel to the boundary, but several yards on the University side. Someone years before, perhaps him, had put the fence there because that is where there were some trees to fasten the wire to, not because it was the boundary line. I didn't get much satisfaction from Cunningham, except to stop the cutting, and harvest the wood myself. However, after talking with the cutting crew, I learned that the boss was Lawrence Nedeau, and he asked if I had any stumpage that he could buy. After thinking about it, I thought this might be a good way to get the sample plot clearcut, because Nedeau had horses for yarding, and that would free me up for other work. After some negotiating, we made a deal, and Nedeau moved his team over to the log tractor shed on the Guaranty Lot. Thus began an interesting couple of years.

When I took Lawrence Nedeau around to look over the plot to be cut, it became obvious to me that his sight was very poor. After a while he admitted that he was nearly blind, and depended almost completely on the men working for him to get around in the woods, and to drive his vehicles. He had one pretty dependable man working for him, so I decided to continue our agreement, and let him clear cut the plot. Lawrence had no problem working with another person on the end of a cross-cut saw, or by himself with a bucksaw, felling timber. He also liked to sap peel trees during the summer and do other jobs that he could get his hands on without needing to see too clearly. The cutting on this plot went quite well, producing both logs and pulpwood, which Nedeau sold through wood brokers Johnny Baker and Edmund Nolette of Bradley. At that time many pulpwood and sawlog transactions were handled by wood buyers, also known as wood brokers. They were companies or individuals who made contracts with paper mills and sawmills to supply a certain volume of wood for processing within a specific time limit. The broker handled all phases of purchase, delivery and payment for both pulpwood and sawlogs from the supplier and received pay with a commission from the mill. To fill a given contract, a broker would buy raw material from a substantial number of small suppliers. For many years I had sold products from the University Forest though broker companies like Prentiss and Carlisle of Bangor, and Baker and Nolette of Bradley, so I was familiar with the system and the individuals involved. To be sure of receiving the stumpage money due, on each load hauled Baker would withhold the amount due and have a check ready for me each week. I received scale slips from Baker along with the check, and also duplicate slips from the mills for comparison. There was little chance for error with this system, and everyone was kept reasonably honest.

With this arrangement working out quite well and the work all going along very satisfactorily, I started Nedeau working on another series of plots, all further in on the Guaranty Lot. These plots were located in Blocks E-9, E-10, F-9, F-10, with an old woods road running through them. To have his horses close to the woods operation Nedeau asked if he could build a hovel for them near the old woods road, and not far from a spring where he could get water. Without too much thought I agreed with this, and then he soon built another shack for his man to stay in to be with the horses. All this seemed alright, and certainly made a more efficient operation. It wasn't long though, before he asked to build another shack to stay in himself. I wasn't too keen on this whole arrangement, but the work was progressing well, and with other cutting to be done in the area, it looked like another year of work was available for him from that one location. So, by the time summer arrived in 1955, Nedeau's camp was well established, with two camps for humans and a hovel for horses. The horses soon had a beaten path down to a watering hole near the spring in Block F-11. This spring was the sole water supply for the whole camp. It actually was excellent
water, having been for many years a source of water for many Old Town residents, when the City water supply came from the Penobscot River, and was not in great favor.

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The area which is now in Blocks F-10 and G-10, had been in young hardwood and in 1936 was underplanted with spruce, with the intent to remove the overtopping hardwood at a later date. Due to several circumstances this never was done, and so nearly 20 years later, much of this hardwood was large enough to make pulpwood. A differential of $3.00 per cord was paid for sap peeled hardwood, so Lawrence Nedeau was eager to cut and peel the merchantable hardwood in that area during the summer months. This area consisted of rolling terrain with a fairly smooth surface, and Nedeau's crew was able to open up certain portions of it well enough to drive a small truck through. This enabled him to drive close enough to the cut wood that it could be loaded directly on to the truck without yarding. For this reason, he decided to sell his team of horses and buy a small truck to haul the wood himself. Because of his poor eyesight, Nedeau could not drive the truck himself, but felt that he could always hire a driver. The arrangement actually worked out quite well that summer, and the job went along fine, with nearly all of the merchantable hardwood in that area cut and peeled by the end of the peeling season in August. By that time other sample plots nearby, notably C1-54B and T1-54 were marked for cutting, and his crew started harvesting these plots. Nedeau's camps were located in the edge of C1-54B, so he couldn't have been any closer to his work. The timber cutting went along well, and since he no longer had horses to yard with, I had made arrangements to yard the logs and pulpwood with the John Deere crawler. Every week or so I would move my equipment in and with my student crew would yard whatever products had been cut up to that time. Nedeau was able to hand load and haul the spruce and fir pulpwood on his small truck, but found it too difficult to load and haul the logs. The job finally ended up with him paying stumpage for spruce and fir pulpwood, and the University paying him for cutting sawlogs. As it happened, 1955 was a year when we could not find a buyer for pine pulpwood, so only logs were cut from pine trees. I did insist that the tops had to be delimbed to flatten them down, so many of the top stems were left where they fell with most of the limbs removed. It turned out that this was all helpful as I will comment on later.

Lawrence Nedeau and his crew, which usually consisted of only one man, spent about another year cutting timber and peeling in the summer, on various parts of the Forest. He had converted his truck over to haul gravel, and he hauled several loads in on the Loop Road on the Guaranty Lot to make the plots more accessible. Mary and I had bought our place on Park Street the year before, and I paid Lawrence to haul several loads of gravel there to build up the driveway and dooryard. I had to spread and level all this by hand, but that's another story. Finally, with priority for student employment, and very limited funds for outside labor, I could no longer keep Nedeau working on the Forest and he left. His camps remained for about a year, but were vandalized and deteriorated rapidly, so we demolished the remains, burning most of it on the spot. Within another year it was difficult to see where the camps had been.

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The logs which had been yarded from Plot C1-54B had been stockpiled in a yard near Nedeau's
camp to await trucking. Not many trucks were available to haul logs at that time, and those that were had all the work they could do during the winter hauling period. As the spring of 1956 was fast approaching, and the road into the log pile would be impassable when the frost went out, I was beginning to get desperate for a trucker who would be capable of handling these logs. I had contacted Amos "Pete" Coulombe, who had trucked for me ten years before, and he had assured me that he would haul the logs. But as time went on I became worried that the road would break up before he came. I knew what the problem was, he was trying desperately to finish hauling all of the wood from another job that he had been working on all winter. That was his real bread and butter, and my job was minor as far as he was concerned. However, he was more aware of my road conditions than I realized, and just as the surface was softening, but before the frost went out, he showed up. Also, he came with what at that time was considered a sophisticated loading system. This was an A-Frame cable log hoist, called a "Jammer", with a John Deere crawler tractor for power. I was amazed to see the whole apparatus loaded together on his truck. The tractor had been loaded on first, and the base of the Jammer was chained to the rear bunk of the truck and then tipped forward by hand over the tractor on to the head board. As the A-Frame of the Jammer tipped forward, it pivoted on the rear bunk and raised the base clear of the ground for travel from one location to another. Seeing the load drive in, I thought it must have required a crane to load it, but soon found out that wasn't the case, actually it could all be done by one man, as I have done myself in later years.

Pete backed his truck up near the log pile and unloaded the Jammer by lifting the A-Frame up and back so that the base settled on to the ground with the two 25 foot poles of the A-Frame pointing up. He then unhooked the chain holding the base to the rear bunk, and drove away from it. Next he backed up to a small embankment and drove his crawler off the truck. With the crawler he then pushed the Jammer around into position to load logs. The log Jammer had a heavy base of two log bunks mounted on skids about 8 feet apart. The bunks were mounted on each end of the skids, to make a base framework about 8 feet square. The two poles were mounted on steel pins, one on each end of the front bunk. These poles were mounted on an angle so they came together at the top, and were bolted securely where they joined. A snatch block, or pulley, was suspended between the poles close to where they joined. Another snatch block was mounted in the center of the front bunk between the base of the poles. The end of a steel cable was threaded through each pulley with a crotch line attached to the end that came through the top pulley. This crotch line had a hook attached on each end to give it a span of at least 16 feet. The other end of the cable, which was about 100 feet long in total, was laid out at an angle from the base and attached to the crawler. The Jammer was positioned opposite the log deck with the truck between. The A-Frame was tilted forward so that the top pulley was about over the center of the truck body, and was held in position by two guy wire cables attached to trees or stumps in the rear. To load the logs, two skids were laid against the truck body, the crotch line hooks, or dogs, were caught in to each end of a log, the crawler tractor backed down the road pulling on the cable, which pulled the log up the skids and on to the truck body. As the tractor drove forward, the crotch line dogs were released and pulled back down to attach to another log. This was repeated until the truck was loaded. The limits of the load were controlled by two factors, the capacity of the truck, and the height of the A-Frame. For ten years or so, as trucks got larger, A-Frames got taller, some getting up to 28 or 30 feet high. Loads could still not be built up much over 5 or 6 feet high because the crotch line connection would come up to the pulley and limit the height the log could be lifted.
After watching the ease with which three men loaded logs with this rig, I knew I had to have one also. I immediately got together material for the skids and base, squared out the timbers in the sawmill, cut two 22 foot poles, and with a lot of drilling and improvising, built a Jammer. The trucks that were hauling logs from the University Forest at that time seldom carried 2000 board feet, so a taller A-Frame was not necessary. However, five or six years later, when the Jammer needed rebuilding, I replaced the A-Frame with longer poles, to accommodate higher loads on larger trucks. The era of use of these log loading devices lasted only about 10 or 12 years, when hydraulic loaders came into use and they were immediately abandoned. Many were left in the woods where they were last used, and eventually rotted and rusted away.

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The effect of supply and demand, plus the continuous research and experimentation in the pulp mills, often created changes in the demand for various species of pulpwood. Some mills used a very limited number of species, such as only spruce and fir, while other mills used several species of softwood plus some hardwood. Pine had been a species refused by many northeastern pulp mills due to problems with pitch in the pulping process. Occasional demand for pine would occur when a mill would try out new processes in bleaching and methods to eliminate the pitch and other impurities in the fibers. While Lawrence Nedeau was cutting in the sample plots there was no local market for pine pulpwood, but the following year a market was located at a distant mill. To move the wood to this mill required loading it on to railroad freight cars, or more correctly, into freight cars. There were no open rack pulpwood cars at that time, and 4-foot pulpwood was all loaded into box cars which originally had been designed to transport automobiles. These cars had slightly wider doors than regular boxcars to allow autos to be driven or pushed inside, during the time they were used for that purpose. Most had not been used for that purpose for a number of years, because most new autos since World War II were carried on special auto carrying trucks. Also, these autos were much larger than the early ones, and would not fit into these boxcars. In the years after the War, demand for pulpwood had increased dramatically, and the railroads pressed any surplus boxcars they had into service, to move wood to the various mills all over the State of Maine. These wide door cars served the purpose, but not well. All wood was handled by hand, one stick at a time. A loaded truck would be backed up to the open door, and each stick of pulpwood was carried by hand into the boxcar and placed on a stack in each end of the car. Since these cars were about 40 feet long, each stick had to be carried over 20 feet to place it on the first stacks in either end. As the car filled up toward the center, the walk got shorter, but the man got more tired. Even with 3 or 4 men carrying, it took several hours, often two days, to fill a car with a normal load of 16 to 18 cords. The railroad usually allowed 3 days for loading before charging a penalty, demurrage, and most crews used most of that time to load. Therefore, I was surprised to learn that a student crew had loaded a boxcar in one day on a weekend.

This all came about when I learned that a market was open for pine pulpwood in 1956. I hated to see all the pine tops laying in the woods from Nedeau's job just going to waste. Also, there were more being left from every pine tree cut on the Forest. A couple of students working on the Forest, Clint Waite and Burt Walker, said that they would like the chance of salvaging this pine. I was pleased to have someone who would search around for the scattered tops, cut them into 4-
foot bolts, and yard them out. After several weeks these tops were all cut up and yarded to a truck road ready for hauling. Clint had a buddy who had a truck and wanted the job of hauling the wood to the siding in Old Town, and loading it into a boxcar. Again, I was happy to have him do it, it saved me the job of locating a truck, and quite often helping on the loading. I ordered the car to be set on Friday so it would be available over the weekend, giving us 4 days instead of 3, because Sunday wasn't counted as a work day. I went out on Saturday to see how they were doing, and no one was there, but I didn't worry about it because they had 3 more days. Going out on Sunday I found them hard at work with a crew of 5. It was obvious they were all working real hard, but I was still amazed when Clint called me that night and said the car was all loaded. Afterward I found out why, the truck was borrowed, and was only available on Sunday, so they had to do it in one day. Every individual stick in 18 cords of pine pulpwood was handled several times that day; picked up from the ground and thrown up on to the truck body, stacked in tiers on the truck, transported to the boxcar, and then carried into and stacked in the car. This was all hard physical work, which I knew from personal experience.

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All of our spruce, fir and hardwood pulpwood for years had been trucked to local mills, Penobscot Chemical Fiber (P.C.F.) at Great Works, Eastern Corporation in Brewer, and Eastern's branch in Lincoln. For many years the branch at Lincoln was the only one that utilized pine pulpwood, and at times they shut off deliveries because of an oversupply. Therefore, I was constantly on the alert for another market for pine. The sawlog market was never a problem, with several sawmills in the area, all in the market for logs, but the pine tops and small trees that would make pulpwood was never in high demand, and many mills had no use for pine pulpwood at all. One market that did develop in the 1950's was International Paper Company (I.P.), in Jay, Maine. The trucking distance being too great for the limited capacity of the trucks at that time, all wood going to that mill had to go by rail. Most paper companies then as now, had a number of University of Maine Forestry graduates employed, so it was usually quite easy to make contact with a person familiar with the University Forest and its problems. Morris Wing was wood lands manager for I.P. and a strong supporter of the U. of M. Forestry program. Even though the mill did not like to take only pine from a supplier, through the influence of Morris and others on the staff, they agreed to accept it from the University Forest. This got us started in the loading of many boxcars in the 50's and 60's. In the late 60's and 70's, as hydraulic loaders became more commonly used, the railroads came out with a radical change in design of freight cars for hauling pulpwood. These were the open rack cars which are in general use today. They could still be loaded by hand, and many were at first, but they were also readily loaded by hydraulic loader, and usually by only one or two men. The second man acted as a helper on the freight car, straightening out sticks that got crossed up when a grapple full of wood was released on the load. An experienced operator could do this fairly well with the grapple, but it did take more time, and could be quite frustrating. The early grapples and the entire hydraulic system was not as sensitive then as it is now, and most loading is done by one man now.

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The winter of 1955-56 was a sad time for the University of Maine Forestry Department students and faculty. Professor Gordon Chapman became ill and was operated on during Christmas.
Break to relieve pressure on his brain from a tumor. For a time it appeared that the operation was successful, but after a few weeks it became noticeable that his condition was worsening. At times his speech was not clear, and lapses in memory became common. Even so, many of us still had no idea Gordon's condition was as bad as it was, until quite suddenly at the end of May, 1956, he passed away. Students and faculty alike were very saddened and shocked by his death. Many, as I had, had worked and studied with him many hours. As a Silviculture Professor with a strong interest in research Gordon Chapman spent many days in the University Forest. Working together, he and I laid out and inventoried numerous sample plots, as well as the loop road on the Guaranty Lot. During his time at Maine from 1949 to 1956, Gordon was a most dedicated forester and researcher, spending much of his spare time working on these plots. Many weekends his wife, Doris, would work with him recording data from these plots. The Forestry Department and the University of Maine lost a very dedicated and valuable individual with the death of Dr. Gordon Chapman.

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Often after a sad and depressing event, an uplifting and beneficial period will develop. Thus, after the sorrowful period of Gordon Chapman's death, such a period came to be. A search had gone out immediately for a replacement professor to teach Silvics and Silviculture, and continue research efforts. The replacement turned out to be an excellent choice, Dr. Ralph Griffin. Again, through the many hours spent by him in the University Forest, Dr. Griffin and I worked many hours together on various projects. His previous work having been in the South, primarily in Virginia, Ralph was not well acquainted with Maine tree species, and their growth patterns. This brought about several discussions about growth rates and length of life of Maine tree species. Being used to one and two-foot annual height growth in southern pine, it took more than talk to convince him that a two foot high white pine seedling might be nearly ten years old. Ralph was finally convinced after cutting one off at ground level and counting the annual rings. Also, he immediately enrolled in a dendrology course with Professor Fay Hyland, and soon became very proficient at determining species of woody plants in Maine. However, even with this knowledge, he was occasionally mistaken. One example occurred when I was showing him around the Forest looking at plantations. We were in Block N-2, in Compartment B, not far from the Stillwater River. The whole area had been in cultivation at one time and much of it had been planted with various species by work crews of the Resettlement Administration in 1936. A few acres in the center had not been planted and had filled in naturally with a heavy stand of birch. As we approached this stand, Ralph enthusiastically commented that it looked like an excellent area to do some improvement cutting in, to develop a nice white birch stand. I hated to hurt his feelings so I casually commented that I doubted if there were very many white birch in the stand. He looked surprised and went immediately closer to check out bark and buds and then realized as I did, that this stand was entirely gray birch. It was a natural mistake, and Ralph has commented about it several times himself.

One of the first areas that Ralph Griffin marked for cutting was a plot numbered T1-54, which Chapman and I had established a couple years before. This plot was heavy to hemlock, with scattered pine and spruce. I believe we were both pleased with the results after the cutting was completed. Working together on this marking and many others, Ralph and I discussed practically every tree in the plot as to why it should be removed or left for the future. This
helped me greatly over the years to look for and determine the association of one tree to its neighbor.

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The post war period through the 1950's was a time of building and renovation. Along with several mentioned earlier were the following local residents; Matt Sharpe cut several thousand board feet of pine and spruce sawlogs in a plot on Spring Road in the fall of 1956, with a student Robert Abbott, cutting the remainder of sawlogs and pulpwood during that winter. At the same time Pete Sulinski Jr. yarded and hauled pine sawlogs which had been cut by Ralph Griffin's Silviculture class in the Sewall Pines. This was the first of almost 30 annual harvests in the Sewall Pines Plot that Dr. Griffin supervised as a class project. Another local resident, Ernest "Bubs" Garceau also cut several thousand feet of pine and spruce in the Sewall Block in H-9 and H-10. Bubs had lived and worked on the Pinkham Farm while a youngster, possibly as a foster child, and through his knowledge and familiarity with equipment there, and the generosity of Raymond Pinkham, he was able to use the farm horses to yard, and the farm truck to haul these logs to a sawmill, and the lumber produced to his building site. All of these men built homes for their families with the lumber from this timber in the following year. During this same period of 1956 and 1957, several sample plots on the Loop Road were being harvested following guidelines set up by Dr. Chapman before his death. Clint Waite and Burt Walker worked as a team cutting logs and pulpwood in plots that were planned for demonstration of various silvicultural treatments. These included thinning, commercial clear cut, a modified Wagner strip shelterwood, selection, and improvement cut.

The plot that Ralph Griffin and I had marked in the fall of 1956 was also ready for harvest. I was planning to start this harvest soon, and was thinking about who to have do it, when I went in to talk with Professor Ashman about another matter. We had finished our discussion and Prof asked if I needed any more help on the Forest. I told him that I could use a couple cutters right then, but as I looked at him I was beginning to wonder just what he had in mind. Prof Ashman had a very subtle sense of humor, and you had to be alert to catch it sometimes. He did have a little smile on his face as he said that one student was a Forestry Major, but his partner was not. This was alright with me as long as they both were able to do the work. Prof said that the Forestry Major was Robert "Bucky" Walters, who I did know, and his partner was Hugh McCafferty enrolled in the two-year agriculture program. This all sounded fine to me until Prof Ashman said that there was one more thing I should know. Hugh McCafferty was blind! When he said that, I was quite shocked, and probably showed it. I couldn't imagine a blind person working in the woods cutting timber. However, I could see that Prof apparently had been convinced that it would work out alright. He said they would be using a crosscut saw, and the blind man would be able to pull on one end without any problem. It seemed that would be about all he would be doing, so I said if Bucky wants to work that way, it's alright with me. The next day I contacted them and made arrangements to show them the lot. They were both strong, healthy looking young men, and it was not noticeable that one was blind. Walking through the woods their elbows were touching, and Bucky would make a low comment if they encountered a low branch to duck under, or a stump to step over. Watching them from a distance, it was difficult to see any problem with either of them. This gave me more confidence that they would be able to do this timber harvest safely, and with some efficiency.
The plan for this operation was to fell the timber and limb it out tree length, and I would yard it to a landing, where they could later buck it into 4-foot lengths and stack it in piles for hauling. Since they worked primarily on weekends, I let two or three weeks go by before starting to yard any of their wood. By this time there were a number of cords of tree length pulpwood cut and laying crisscrossed through the cutting area. It soon became apparent that this was not the way to harvest pulpwood. With a selective cut using crosscut saws it was almost impossible to drop the trees in a pattern that would align them for efficient yarding. Almost every stem had to be winched one way or the other to maneuver it around standing trees so it could be lined up in one direction for a straight pull out of the forest. So much time was involved in moving stems around before yarding, that it took nearly all week to yard the wood that was cut in three weekends. By the end of the week though, there was enough tree length wood piled on the yard that I thought they might be bucking it up that next weekend so I could scale it and give them some pay. Consequently, I went out on Sunday to see how they were doing. As I approached their cutting area I could hear a chain saw near the piled wood. I was somewhat disturbed because they had assured me that they would be doing all the cutting with hand saws. However, I thought, if they have access to a chainsaw, it would make the most sense in bucking up that long wood, and Bucky should be able to do that safely enough. But when I stepped into view of the yarded wood pile, I got a real shock. Instead of seeing Bucky using the chainsaw, it was the blind Hugh McCafferty! Bucky had measured off the long stems and made a small notch at each four-foot interval. Hugh would slide his hand along the stem to a notch, set the saw blade in it and saw off each four-foot piece. After watching from a distance for a while, I decided that what they were doing was probably the most efficient system for them, and that in spite of, or perhaps because of his blindness, Hugh was as safe an operator as one could ask for. Future association with him proved me to be right.

A few months passed during which time several different truckers were hired to truck forest products from the University Forest to the various markets. During that time there was no consistent trucker available in the area, and I had to hire anyone who happened to be available at the time. One day Hugh McCafferty came to me and asked if he could have the job of hauling pulpwood. He would buy a truck, hire a driver, and load himself. He was so positive and anxious for the job that I agreed as long as he could fulfill the requirements. Within a week he was on the job with a stake body Ford truck capable of carrying about three cords of four foot wood. For drivers Hugh got anyone who had a license, and were willing to spend the time to haul a load or two. I'm not sure how much he paid these drivers, if anything, but most did nothing but drive the truck. Hugh had an uncanny sense of direction, and once I took him to where wood to be hauled was located, he could direct a complete stranger right to the pile. He would determine the species by feel and smell, and was seldom fooled. After positioning the truck near the pile to be loaded, Hugh would throw a number of sticks on to the truck body and then climb up and pile them into the correct tier on the truck. He would repeat this until the truck was fully loaded and all chains were in place. A few of his drivers would help, but most had never handled pulpwood, so Hugh felt more comfortable working alone. Once loaded, Hugh would direct the driver to the mill, and then unload the truck by hand. Every stick was handled at least three times during the loading and unloading process.

Only one time do I recall that a mistake was made in species identity. The local pulp mill, at that
time the P.C.F., (Penobscot Chemical Fiber), at Great Works, did not use any pine pulpwood. They did take spruce and fir, and some hemlock. This day McCafferty had a driver who knew absolutely nothing about tree species. They went out to pick up a pile of fir to take to the mill. Stopping at some piles of pulpwood, Hugh got out to feel of the bark and attempt to distinguish which pile was fir. In the dead of winter, covered with snow and frozen, it was often difficult for a sighted person to tell the species. In this case one pile was white pine and the other was fir. Both species at a young age have relatively smooth bark and being frozen gave off very little odor. Hugh picked the pile that he thought was right and asked his driver if the bark was dark green and had some pitch blisters. The driver thought he was seeing what Hugh described and told him that was the right pile. They loaded it on to the truck and drove to the mill. When they pulled up to the scaler's platform they heard someone laugh and Hugh knew right then that he had loaded the wrong species. The scaler told him that they did not take any pine at this mill. Hugh said that he knew that and he had his driver drive back in to the Forest and he unloaded the pine back where he got it.

At that time all our pine pulpwood was shipped in boxcars to an International Paper Co. mill in Livermore Falls, Maine. Approximately 18 cords were needed for each boxcar, so that much had to be accumulated before we could ship. These boxcars were completely enclosed cars with extra wide doors which had originally been designed for transporting automobiles, and as described earlier, the increased need to transport pulpwood and other forest products by rail saw these cars and others pressed into this use. Probably from the railroad's perspective, use of these cars for this purpose was ideal, but from the standpoint of the people who had to load and unload them, they were horrible. As has been mentioned before, the doors were in the center of the car, and it was at least 20 feet each way to the ends of the car. This meant that every stick of pulpwood or lumber or other product had to be carried by hand that distance to start the first pile in the end of the car. With the piles running across the width of the car, it took four or five piles to fill the ends to the doorway. The space in the doorway was piled in the opposite direction so the doors would be free to open with no wood pressing against them. The first piles at the ends of the boxcar were the most difficult and tedious to fill. Two to four men were needed, with each one carrying one pulp stick at a time and placing it in a pile at the end of the car. From the back of the truck to the inside end of the boxcar could often be 25 feet or more. This made a trip of 50 feet or so for every stick of pulpwood taken from a truck and loaded into the boxcar. As the piles grew in height, each succeeding stick had to be piled higher.

For the average person with good sight, the only problem was in lifting the heavy wood up high enough to be placed on the top of the pile. Hugh McCafferty had an additional problem, not being able to see how high the pile was at any particular time, he had to use intuition or some other sixth sense that he seemed to have, to walk up to a pile of pulpwood and without hesitation throw the stick he was carrying on to the top of the pile, and have it land exactly right. He would work with others unloading a truck and building full piles in the box car, and never did I see him misplace a pulpwood stick. We always worked together loading boxcars, and it was always a pleasure to work with McCafferty. The University Forest crew and I would help load his truck and go with him to reload in to the boxcar. When loading his truck I preferred to work on the truck alongside of Hugh. With two or three men on the ground throwing pulpwood on to the rear of the truck, I felt safer working beside him than with some others. As the wood was placed on the rear of the body, our job was to pick up each stick and place it on the front piles that we were
building. Two people using pulp hooks, picking up sticks that were being thrown roughly on to the truck body very close to their feet, and in a restricted area, can get pretty hectic. And when one of these two is blind, it would not appear to be a desirable spot to work in. However, working with Hugh McCafferty, I felt safer than with any of my sighted crew. He seemed to know instinctively where every stick was, and in fact when an occasional stick would be about to hit his foot as it was thrown on to the truck body, he would simply raise his foot at the right moment and let the stick slide on by. He handled a pulp hook expertly and when working close together, I never had any reason to worry about being struck by his hook. Several incidents involving Hugh McCafferty are of interest.

Several of his classmates told me of an incident that occurred with his truck. There was a problem with the transmission when shifting gears. One night about midnight Hugh's classmates missed him in the dorm and went out to find him. They found him sprawled on his back under his truck with transmission parts all around him. He was overhauling the transmission so he could haul wood the next day. The darkness of night didn't bother him at all, it was the same as daytime to him.

Another time he was scheduled to meet me at the University Forest sawmill after a three o'clock class, so I could take him to some pulpwood that he was going to haul to a pulp mill. He had been to the sawmill before, which at that time was located on the Sewall Road, so I had no doubt that whoever he had as a driver that day could find it. The time went by though, and when it got to be after four o'clock, I thought that perhaps he couldn't make it that day. It was beginning to get dark and we were closing up the mill, when his truck drove up. Hugh jumped out and was all apologetic for being late. I told him it was O.K., but he explained what happened anyway. His driver on this day, as I had just noticed myself, was a young lady classmate of his. She had never been out in the University Forest and was not familiar with any of the roads. Hugh had been giving her directions from his memories of turns and side roads, which he did by judging time of travel, and the feel of the road. His driver had gone past the entrance to the Sewall Road off of College Avenue Extension before he realized it. About 100 feet beyond the entrance, Hugh realized they must have passed it, and told her to stop. After verifying that this was the road they wanted, she attempted to turn the truck around to get back to it. In doing so she backed too far on one side of the road, and went into the ditch. They had spent the last hour getting unstuck, and turned around, and from what I heard, Hugh had to do the driving to work the truck out of the mud. Later, when I saw the spot, I marveled that he got out at all, without a tow. Through my working years, I have worked with one man with no right arm who trucked sawlogs for a living, and another man with no left arm who trucked lumber for a living, and both loaded and unloaded everything by hand. I thought I'd seen everything until I worked with blind Hugh McCafferty. Since then I have met a man born with no arms, who can do with his feet, practically anything that others can do with all their arms and legs. I now realize that handicap is only in the eye of the beholder. Those that have a will to do, can do.

One final incident, just before graduation, Hugh came to say goodbye, and at the same time asked if he could buy enough lumber from the University Sawmill, to build a chicken house. He was going to marry the girl who drove his truck that day, and they wanted to start a business raising poultry. He was going to build the chicken house himself, and I would have loved to have supplied the lumber, but there wasn't enough lumber in stock at the time to fill his order.
With his will and determination, if he continued with these plans, I'm sure he found some lumber somewhere, and built his building, but I have lost track of him since his graduation.

The graduation of Hugh McCafferty left me without a trucker for pulpwood, although I did have a local trucker to haul logs. During the previous year's several different local truckers had been employed to haul logs. One of them, Ivan Miles of Stillwater, had been most available and from the mid '50's had been my most dependable log trucker. His main trucking was gravel and loam, with several tractors equipped for bulldozing and backhoe work. Actually this was a sideline occupation as he held a full time job at Penobscot Chemical Fiber in Great Works. His job at the mill was shift work, so two out of three weeks he worked evenings or nights, and had his days available for his contracting business. Many times he would swap his daytime shift with other workers so as to have that time free for his business. Ivan apparently needed very little sleep, and took catnaps between shifts, and I expect even while at work in the mill. Many duties in the mill required periodic activity with fairly long intervals between. Workers had to remain on duty but were inactive during these periods. The saying used to be that if no one was working, everything was going well, especially around the pulp and paper machines.

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Since most of the harvesting of timber in the University Forest was during the winter months, and this was a slack time for gravel hauling and backhoe work, Ivan converted his truck bodies for wood hauling each fall. Sometimes logs were loaded into dump bodies that only had higher sides added on. At the mill, loads would be dumped like gravel, and end up in a jumbled heap. This was a quick way to unload, but did not please the scaler and yard men who had to rearrange the logs for scaling and piling in storage decks. It was soon necessary to replace the dump bodies with log bunks to appease the mill crews. Even so, these bodies were pretty crude by today’s standards.

At first stakes were loose fitting at the ends of the bunks, and sometimes needed replacement after each load. Many times logs would be jammed against these stakes so hard that the only way to remove the stake was to chop it off. For this reason, they were always made of wood and usually cut at the location of the log pile in the Forest. This being a nuisance and sometimes difficult to find suitable stakes at the log site, most truckers shifted to use of homemade trip stakes on one side of the truck body. There were several variations, but basically these were a 2x8 hardwood plank about 3 feet long fastened on to the truck body on a steel rod which acted as a hinge so the stake could be held upright and when released, could swing down to the ground. A hole in the center of the plank was reinforced with a latch arrangement to engage a chain attached to the center of the bunk and threaded through this hole to hold the stake upright. When logs were loaded and jammed against this chain, great tension was created. To unload, a rope was attached to the latch release pin or ring on each trip stake, (usually two on a truck), and after binding chains had been removed, a hard yank was supposed to release both stakes simultaneously. When it worked as planned, the trip stakes would flop violently down from the pressure of the load of logs, and would be followed by a good portion of the load. The remainder of logs on the truck body could then be easily rolled off by one man with a cant dog and the entire load would be left in a reasonably neat pile in the mill yard.
On the other hand, as was likely, if one of the latches stuck for some reason and only one released, one end of the load would fall to the ground and the other end would jam even tighter against the upright trip stake. The usual procedure to release the stuck latch was to strike it with a peavey or back of an ax. To do this one had to stand under the portion of the load still on the truck, with the hope and trust that when the load released he could dash out of the way of the cascading logs. Some ran to the side, some straight back, and some dove under the truck. At one time or another almost everyone involved in this operation got caught. Many had close calls with only broken bones or bruises, but every year deaths were reported that resulted from being crushed by falling logs. It was a dangerous way to live, but improvements were being made all the time. As long as trip stakes continued in use many methods were developed to release them in a safe manner. Many types of latches were devised, as well as release mechanisms which were activated from the opposite side of the truck. None were wholly satisfactory and finally they were abandoned completely when hydraulic loaders came into common use.

There was a period during the 1950's and 60's when a very common method of loading logs came in to use in many parts of Maine, especially in relatively level land with no steep slopes to load from. An A-frame was constructed on skids with steel cable attached to a crotch line and running through a set of pulleys to a power source. This A-frame, or "jammer" as it was called, was made entirely of poles cut in the woods and bolted together. The bottom skid assembly was about eight feet square with the poles for the A-frame mounted on one side with handmade hinges. These A-frames ranged in height up to 24 feet depending on the size load to be carried on the truck. Logs were accumulated in a pile parallel to the road and the jammer was set on the opposite side of the road, with the truck in between. The crotch line was attached with hooks to each end of a log and when a tractor attached to the other end of the cable moved back, the log was dragged up skids on to the truck bed. By using guy wires attached to trees or stumps, the A-frame could be tilted forward so that its top was over the truck bed. This aided in swinging the log into an appropriate place on the load. Loads up to about 3 MBF were loaded with the major physical effort used to pull out the crotch line and place the hooks. When moving to a new location the jammer could be dragged on its skids for a short distance, or it could be readily tipped on to a truck body for longer moves. Jammers, though very popular and in common use, had a very short life span. When hydraulic loaders came into use for handling wood products, jammers were abandoned where ever they were last used. Hydraulics reduced the man power requirements to one or two men on most jobs, and many times one man alone handled the transport of all the products on several different jobs.

When Hugh McCafferty graduated, I needed a trucker to haul pulpwood. Ivan Miles had trucks which he converted to haul logs, but he did not have one equipped to haul pulpwood. Word got around real fast and I soon had offers from several truckers. Most of these were commercial truckers who would fit in trucking University Forest wood between their other jobs. This didn't seem too dependable to me, and when one particular individual came along, his qualifications seemed to fit our needs much better. This person was William Donnell, a student at the time, and had been cutting and hauling pulpwood for a living, and to finance his way through college. He had been in and out of college over a period of years, depending on the state of his finances. He was now back in college with plans to complete his studies in the next two years. Although
he was majoring in Education, Bill Donnell had more experience cutting and handling wood products than most Forestry majors. Another tie to the forestry profession was the fact that his sister, Mary Donnell, had recently completed her studies as a Forestry-Wildlife Major at Maine. Sis Donnell, as she was known, was the second female, after Martha Ann Burow, to enroll in the Forestry program, both in the mid '50's.

Bill Donnell trucked all the pulpwood from the University Forest during the years of 1959 and 1960. He had a partner, Elmer "Herk" Wilcox, who was an engineering major. Both men, being older than most students at the time, were very conscientious and efficient workers. All the wood was loaded and unloaded by hand, on a truck body designed to hold about three cords. Even though taking a full schedule of classes, they were able to haul all the pulpwood produced, and even on occasion have time to do some of the cutting. Bill always got a kick out of some of the phrases he heard from workers at the various mills. Sometimes he would return chuckling over some expression he had just heard, like one individual commenting about another person being busier than a cat scratching on a tin roof, or another saying someone was about as much good as a cut cat. He once said he might accumulate such sayings into a booklet, and he may well have done that by now. After graduating Bill spent some time teaching school, and is now operating a clapboard mill which is a classic, producing quarter sawn clapboards for very particular installations. Elmer Wilcox worked much of his career as an engineer on the construction of I-95 interstate in northern Maine. His son, Shawn, is a first mate on oil tankers working 2 and 3 month shifts, and when off duty is an able and willing worker with the Orono-Old Town Kiwanis Club, which I also have been a member of, since my retirement in 1983.

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During the period from the mid 1950's to late 1960's, Ivan Miles hauled practically all of the logs harvested in the University Forest to the various sawmills to which they had been sold. Depending on markets, logs were sold to a number of different mills in the area, especially in the early years. Some of these mills were; Jordan Lumber Co. of Old Town, with a sawmill in Milford; Jones and Merrill Sawmill, also in Milford; Peter Sulinski Sawmill in Old Town; William Davis Sawmill in Old Town; Horne Sawmill in Old Town; a Home Sawmill in Bradley; and Leon Williams Sawmill in Clifton. The primary sales over the years were to Jordan, Sulinski, and Williams, in that order.

Jordan operated his sawmill only in the spring and early summer, and bought and stockpiled logs during the winter months. His intent was to get clean logs, skidded on snow, with a minimum of dirt and debris imbedded in the bark. As with most sawmills in the 40's and 50's, there was no debarking equipment to strip off dirty bark and produce a clean bole for the saw to cut through. When the mill started sawing in March or April, any dirt on the logs was still frozen, and would dull the rotary saw blade rapidly. To remove some of this from logs which had been skidded on bare ground or through mud, Jordan would often times hire a man to stand with a water hose and wash off, or at least soften this dirt, to lessen the damage to the saw blade. Because of only sawing in the spring and summer, and having a limited log storage space, Jordan's purchase of logs would end when the space was filled, or when he thought he had enough to fill his market needs for lumber. This was usually in February, and the harvest in the University Forest always continued until May or June. Therefore, I had to have other markets where I could sell the
remainder of the harvest. When Peter Sulinski started his mill in the late 40's, I sold him logs only occasionally, mostly when he could harvest and truck the logs with his own men and equipment. Later, in the 50's, when I had acquired yarding equipment, the Forest Crew cut and yarded all sawlogs, and since Pete was by that time also in the building trade and too busy to haul logs, I started contracting all the trucking.

Various truckers were hired, some of whom were: Bill Tash, Pete Coulombe, and Ivan Miles, all of Old Town, plus the students, McCafferty and Donnell. During the period when the students were trucking pulpwood, most of the logs were trucked by Ivan Miles, and when both students graduated, the trucking of pulpwood was taken over by Miles. For well over 10 years, Ivan Miles trucked all of the forest products harvested in the University Forest.

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This was a period of great experimentation and development in the harvesting and trucking of forest products. Chain saws were coming into their own at this time, and production was increased considerably over cutting with axes, crosscut saws, and bow saws. Small tractors were becoming very popular for use in skidding, especially lag type crawler tractors. These tractors could haul a larger load than horses, so units were built to carry larger loads and be hauled by the tractors. For pulpwood, scoots were built to carry one or more cords of 4-foot wood, or several hundred board feet of sawlogs. Scoots were single sleds with 10 feet or longer bunks on which to pile 4-foot wood. Some were made with log bunks especially for hauling logs. These scoots were usually homemade of oak or other hardwood, with replaceable wooden shoes on the runners. Neil McGowen and I built one in 1953 and I used it for several years to yard all pulpwood and firewood cut in the Forest. It was also used to haul logs to our University Forest sawmill. Since this required travel on gravel roads, the skid shoes wore out rapidly. The desired wood for shoes was hornbeam which is scarce in the local area, so after trying other hardwoods which wore out faster, I finally bought 1/2 inch by 4-inch flat steel to shoe the runners. About 1956 a machine shop owner came by with an all steel scoot that he had designed with an offer to leave it with us to try out and evaluate. I was very happy to do that, and the unit proved to be excellent for what it was designed. Unfortunately for the designer, skidders and hydraulic loaders were just coming into more general use, and his sales were very limited, if any, and after a year or so he came by and donated the scoot to the University Forest. This scoot probably carried 5000 cords or more out of the Forest, and is still available and in occasional use to this day. It was the primary carrier of 4-foot pulpwood to roadside for over 10 years, all of that wood loaded and unloaded by hand labor.

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During this same period, for skidding logs, log arches were developed. The first ones were built on wheels and attached to a drawbar. The tractor had to be equipped with a winch to make these operable, so not everyone had one. Our John Deere crawler had a winch, and by the mid 50's John Deere Co. produced a log arch of their own, one of which I was able to acquire. An operator who was proficient in maneuvering the crawler tractor with the trailing log arch, could increase production considerably over the old way of dragging the logs full length on the ground. The winch cable running up over the top pulley raised the forward ends of the logs high enough
to clear rocks and stumps, and also greatly reduced contact with the ground and consequently delivered much cleaner logs to the landing and subsequently to the mill. The log arch could be jackknifed at different angles so as to pull logs straight in to it. In fact, it was necessary to do this, because if the pull was to the side, the high leverage was such that the arch would tip over on its side. For some student operators this maneuvering of the crawler and arch was difficult to become proficient at, and some never did. Many days the major production was accomplished in the mornings when I worked alone yarding logs. Afternoons, which were the usual work periods for most students, would often be spent with a student operator learning which way to turn the crawler to get a certain response from the arch. My patience would be somewhat stretched before the day ended after constantly signaling which lever to pull, especially when backing in to position to attach logs. Many times the afternoon would be spent with several extra workers and production would be less than half of what I did in the morning working alone. My only justification for this was that I felt the experience for the students was a valuable education, and that was the main purpose of the University Forest and the provision of this practical work experience. I myself gained considerable experience in methods of getting the arch back on its wheels due to the many times it was upset by these inexperienced operators. The arch seemed very light when it flipped over from the sideways pull of a powerful winch, but to lift it back on to its wheels, we soon discovered that it was almost impossible to do it by hand. Therefore, I devised several methods of righting it, using the same winch and cable that upset it, depending on the situation. Basically this was done by looping the cable around the wheel that was up in the air and attaching the end to a tree or stump to one side. As the cable was wound in, it would straighten and flip the arch back on its wheels, hopefully. Sometimes it took several attempts before success, but it always worked. These incidents were embarrassing to the operator, but generally were helpful in impressing him with the need for correct orientation of crawler and arch, and sometimes aided in mastering the technique.
Use and Acquisition of Chainsaws

Due to lack of sufficient funds for new equipment, the University Forest was always behind in acquiring some of the innovative equipment that was coming on to the market during this period. Consequently, we yarded logs with winch and log arch, and pulpwood loaded by hand on a scoot for about 20 years. Because of excellent relations with several chain saw agencies, and especially due to efforts of Professor Henry Plummer, we were able to assemble a good supply of power chain saws. The names of some of the saws that we had use of during the years from 1950 to 1970 were Mall, Pioneer, McCullock, Homelite, Disston, Hornet, Poulan, plus several others, only a few of which are still on the market. At one time or another, several models of each of these makes of saws were donated to the University Forestry Department for use at summer camp and in the University Forest. Professor Plummer was continually in touch with representatives of these companies, and they kept us supplied with enough saws of the various makes for most camp exercises, as well as my use in the U.M. Forest.

During the late 1960's several foreign made saws began to appear in use, most coming in originally through Canada. Soon local agencies began to promote sales of these saws. The first of these saws were imported from Sweden and West Germany, and incorporated many new designs and features which added to operator’s comfort and safety. The Swedes especially put a lot of research into the study of ergonomics, (operator comfort and safety), and their saws became immediate favorites with woods workers in Maine, and across the country during the 1970's. Distributors in Maine, like R.D. Faulkner of Brewer, and Dave Tilton of Rye, New Hampshire, were very influential in promoting these saws, and have continued to prosper in their endeavor’s into the 1990's. Through my association with the Tilton Company, especially Dave, the founder, and his son Dan, who worked with the classes in wood harvesting at summer camp, for ten years or more, we had a supply of Jonsered and Olympyk chainsaws and other woods tools available for our use at no cost to us, and updated continually. This relationship continued until my retirement in 1983, and our friendship continues to this day. I have a Jonsered chain saw that the Tilton Company gave to me at my retirement party, and I am still using it in the year 2000.

Chainsaws are now manufactured in many countries around the world, and include names such as Partner, Jonsereds, Husqvarna from Sweden; Stihl and Sachs-Dolmar from Germany; Olympyk from Italy; and Echo and Shindaiwa from Japan. All of these saws have utilized the improved features developed by the Swedes and others, and have assumed the major market for chain saw sales. U.S. made chainsaws, such as McCulloch, Homelite, and Poulan, have a more limited place in the U.S marketplace.

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Associations and acquaintances with individuals, business, and municipal agencies, through various activities of stumpage sales, fire department activities, and other events, were quite often helpful to the Forest in diverse ways. In the 40's and 50's several Old Town firemen purchased and cut their winter supply of firewood in the University Forest. My contacts with them at the Old Town Fire Station also brought contacts with other city officials and employees, who often
stopped there to visit. The Superintendent of highways was a frequent visitor and also purchased firewood stumpage from the Forest. We became well acquainted and he was aware of a problem I had each winter with no equipment to plow snow off the Forest roads. Consequently, without my asking, for several years, after his crews had cleared the city streets, he would send one or more trucks through the Forest roads and clear them of snow. Since there never was a request for compensation for this favor, I was very pleased to receive a request from the city to provide a fir tree to be erected in the park to be lighted at Christmas. For over 10 years we would select a tree each fall and cut it for the city crew to haul and set up for lights. This was continued through the tenure of several highway supers, and ended when the last one I worked with, Dick Lacadie, decided to plant a living tree and eliminate all the extra work of putting up and taking down a cut tree each year. As it turned out I was in a position to provide a living tree as well, although this tree came from our own family production in Orono. This was a Colorado Blue Spruce, and Dick also took several others which were planted near the new municipal garage on the Airport Road in Old Town. Dick Lacadie and I continued to be friends after we both retired, and until his death, October 9, 1989.

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Others who were good neighbors and helpful to the University Forest were folks like Lawrence Griffin and Everett McIninch who lived on each side of the Sewall Road Gate on Stillwater Avenue, and Carl Ryder, who lived across the street. Also Joe Sewall, whose land abuts the Forest, and especially his handyman, Clarence Strout, who often stopped to talk when we were working nearby. Another very good friend was Raymond Pinkham, as was his father before him. As mentioned earlier, Raymond Pinkham was very generous in loaning equipment, and helping anyone he could. One of several incidents when I got assistance from him was late one afternoon in the dead of winter. Marshal Ashley, who was a student employee at the time, and became one of U. of Maine's Forestry professors, and I, were yarding pulpwood in the Guarantee Lot, and decided to make one last trip to clean up an area. Our route was along a wet run which was frozen solid except for one spot where we turned off to travel out to a truck road. This spot was not frozen as well as the rest and was breaking up every time we crossed it with the John Deere crawler and loaded pulpwood scoot. It was getting near dusk on this winter day, but to finish up we decided to make this one last trip. When we drove over the weak spot in the ice the tracks broke through slightly but the spot still looked as though it would support the machine for one more pass. However, it didn't! This last load turned out to be a full one, and did not slide easily around this corner, which caused the crawler's outside track to dig in and break into the ice. I then had to back up to get squared around for a better pull. This maneuvering caused the ice to break more, and the crawler was settling into a hole with firm ice all around. We decided to unhook from the scoot and try to winch the crawler backwards out of the hole. The winch cable was pulled out and wrapped around a tree so as to turn the crawler to the side so it would miss hitting the loaded scoot as it came out of the hole in the ice. The engine was revved up and the winch engaged. The cable tightened and started to pull the crawler back, but by now it had sunk so deep that the winch itself was below the surface of the firm ice behind. As hard as it could pull, the winch was unable to lift the rear of the crawler high enough for the tracks to catch on the solid ice. We threw some pulpwood into the hole to get some traction to help lift the rear, but with our next attempt at winching, the cable broke. Along with that, we soon discovered another problem. The pulpwood under the rear of the crawler had tipped the front end down so
far that it was down into the water that was rapidly filling the hole. In fact, just at that time it went low enough that the fan blades picked up water and sprayed it all over the hot engine. In the process the ignition system was shorted out, and the engine stopped running. Now we really had a problem. Fortunately, with all of the moving around we had done, one corner of the bulldozer blade was over a stump. I lowered it down on to the stump, and then just by engaging the starter to activate the hydraulic system, I was able to put enough down pressure on the blade to raise the front of the crawler out of the water. Now we were in an impossible situation to get out by ourselves, the winch in the rear jambed into the ice, and the front end hung up on a stump, with nothing but mud and water under us.

Trying to think who could help us at this late hour and in the dark of a winter evening, it came to us that Raymond Pinkham had an old Caterpillar tractor in his yard that he had used for land clearing. We drove our pickup out to his farm yard and went into the barn where he was milking his cows. After telling him our problem he said that he couldn't go out himself because of his chores, but a foster son of his, Ernest Garceau, would be along after 6:00 P.M. and might be willing to help. I knew Ernest quite well, so thinking he would help, and where it was almost 6:00 P.M., we waited. He came very shortly thereafter, and immediately agreed to help. We rounded up all the chain we could find, plus lanterns and a flashlight, Ernest started up the old Cat, and away we went in the dark. The Caterpillar was so much larger than the John Deere, that we had to cut several trees to widen the trail into where the machine was stuck. Doing all this by lantern light was a new experience for all of us, but we finally succeeded in getting the Caterpillar backed in to position to hook on to the front of the John Deere. I got into the John Deere seat to put the transmission into neutral, and while there thought I would try to start it. I hardly engaged the starter when the engine started right up. While we were gone, the heat of the engine had dried out the ignition system, and with the front end lifted up out of the water, all systems were working. Ernest tightened up his winch, and started forward and pulled that John Deere out of the hole like it was a fly. As soon as it got on to firm ground we were on our own again. All that work and Ernest only had to pull about 6 feet to get the John Deere back on to solid footing once more, but I for one was most grateful to Raymond for loaning the use of his machine, and for Ernest Garceau for his part in operating it. This is the way people helped each other, not too long ago!

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Everett McIninch and Lawrence Griffin were very good neighbors who lived on opposite sides of the entrance to the Sewall Road on Stillwater Avenue. They both took an interest in the Forest, and would let me know about any strange actions that might take place, and always were watching for possible fires in the Forest. They both knew our procedures of yarding wood and plowing snow with the John Deere crawler. One incident and favor by Everett McIninch, I'll never forget. I was working with my afternoon crew in the Guaranty Lot one winter afternoon, and had left Bob Bauer, a student employee, finishing up plowing snow on the road through the Sewall Pines. I had plowed all morning with the John Deere and knew there wasn't too much left to do, so had not bothered to add fuel at noontime. Knowing how the students all enjoyed operating the crawler, I should have paid more attention to the fuel, but I was sure he would run out of work to do in that area, and then he was told to drive the crawler over to where the rest of us were working. About the time when I expected him to show up on the crawler tractor, I
looked up to see someone driving in with a brand new Plymouth car. Not recognizing the car, I was surprised to see Bob Bauer get out. He said that he ran out of fuel near the gate of the Sewall Road, and Everett McIninch was in his yard next door. When he explained what had happened, and that he was going to walk over to where I was, Everett immediately told him to take his car, and that would save him the long walk. All Everett knew about this student was that he worked for me, and yet he offered and entrusted him with his brand new car, but that's the way Everett was. A wonderful neighbor to have, even though perhaps a little too trusting!
Major Memorable Events

Winters in Maine had long been noted for the severe cold and deep snow. As a teenager on the farm in Massachusetts, I had questioned some of the stories I had heard over the years. We occasionally had up to two feet of snow on the ground, and down to minus 25 degrees’ temperature during the course of a winter. I couldn't imagine weather more severe than that. One winter in the early 1930's, a black man stopped at our farm in Massachusetts, asking to work for a meal. During these depression years this was a common occurrence at our farm. As it happened, my dad and I were just starting out to our woodlot for a sled load of firewood, so my dad told the man to come along and help. On the way he explained that he was on his way south from a logging operation in Maine. The job had closed down due to the great depth of snow, which he said was so deep that when a tree was felled, it would sink completely out of sight in the snow. At that time, it was hard for me to believe four to six feet of snow on the ground, but since coming to Maine, I have seen and experienced it, so now I am a believer.

Most of the 1900's, up until the 1970's, had fairly heavy snowfalls, with cold temperatures which reduced melting, and built up accumulations on the ground. Many logging operations had to close down in February because of the depth of snow by that time. Even in the Orono area in the 1940's and 50's, the temperature dropped to as low as 30 below on several occasions, and during the winter months’ snow depths would often average 27 inches. Usually between storms the snow would settle several inches, and then be added to by the next storm. On a Sunday, December 31, 1962, a record storm dropped 37 inches of snow in the Orono - Bangor area. Added to over a foot of snow already on the ground, and with a very strong wind blowing drifting snow, this storm brought the whole area to a standstill. Some local streets were kept open, but main routes in and out of the area were blocked for as long as two days, due to heavy drifting.

My only equipment for snow removal was the John Deere crawler tractor which had been left at the scene of our winter logging operation. We couldn't have left it any further from a traveled highway, if we had planned it. Also, Ivan Miles, who was doing the trucking at that time, had left his front end loader out in the same area. We both needed these machines to start snow removal. I wanted to clear the roads on the Forest, and Ivan wanted his machine for snow removal at home, and in the Stillwater area. The day after the storm, New Year’s Day, 1963, I drove to Stillwater Corner and picked up a student worker, Roger Mitchell, at his trailer in a park there. We wanted to get to the entrance of the Logan Road off College Avenue Extension which was completely blocked by snow drifts at the Stillwater end. Bennoch Road was also closed, so we drove up Stillwater Avenue to Old Town, and then out Gilman Falls Avenue to the north end of College Avenue Extension, which we found to be completely blocked also. Nothing was open beyond the intersection of Gilman Falls Avenue and Bennoch Road, so we gave up on an attempt to retrieve the machines that day.

During Monday night, the Old Town road grader operator was able to break a single lane all the way through College Avenue Extension. It was a meandering lane, with no turn outs, but it did give us access to the Logan Road entrance. I picked up Ivan Miles and Roger Mitchell and we drove up to the entrance, hoping all the time that we wouldn't meet someone coming the other
way, because if so, one would have had to back up a long ways. At the road entrance we
shoveled out a place to park the pickup so traffic could pass by. Now we finally looked down
the Logan Road to see what we had to battle to get back in the half mile or so to the machines.
This road was lined with gray birch trees, and it seemed that every one of them was doubled over
into the roadway, and loaded with snow and ice. We could only see about fifty feet ahead at any
one place, and the snow depth ranged up to four feet, depending on the amount of drifting. The
three of us on snow shoes started out in single file and soon discovered that the leader could not
break trail for more than thirty or forty feet before becoming exhausted. Each step, even on
snowshoes, would sink a foot or more into the soft snow, which would then tumble in on top of
the shoe and have to be lifted up at each step. We were all in good physical shape, but were
more than willing to relinquish the lead after a very short time. Along with breaking the trail, the
leader also had to break a path through the birch tops which almost completely blocked the road.
From the snow on the trees and floundering in the snow on the ground, we were soon covered
white from head to foot, but were well warmed up from the exertion. In about an hour we
arrived at Ivan's front end loader where we left him and continued on another quarter mile to
where the John Deere crawler was parked. Before reaching it we heard Ivan's tractor start up,
and could hear him lifting and pushing tree tops out of the way with his loader, as he made his
way back out to the main road. We in turn, got the crawler started, and began our job of
plowing out the University Forest road system. With only the small John Deere to do the whole
job, it took more than a week of continuous plowing to make all of the Forest roads passable.
Several other storms have been nearly as severe but none quite came up to the severity of this
one.

* * *

1963 was a momentous year for several other reasons also. One event was a national tragedy -
the assassination of President John F. Kennedy, and another was a local major event - The Orono
Fire Station burned down. In 1963, even though I had been serving for several years as the
volunteer Fire Chief of the University's Fire Department, I had no radio communication while
working in the University Forest. As a consequence of this, when I came in from work in the
Forest at about 4:30 P.M. on Jan. 3, and stopped in at my office in Deering Hall, I was quite
surprised to find long lengths of frozen fire hose stretched out down the basement hall. After
locating the janitor, Wilfred (Beauty) Cota, who was also a member of the Orono Fire
Department, I was told that the Orono Fire Station, a large 3-story wooden building, had caught
fire from an overheated chimney, and burned to the ground that afternoon. The below freezing
temperatures that day caused all the hoses to become frozen, and any warm spot with length
efficient to stretch them out was welcomed to thaw them out enough for future use. It all
happened in a few hours between noon and 4:30 P.M., and my crew and I working in the Forest,
had no knowledge of all of the activity in town. The station was a loss to the town, but most of
the equipment was saved, and after a couple of years in some temporary quarters, a new fire
station was created on the upper level of the new town hall. This has outgrown itself, and in
1995 a new public safety building is being built nearby to house both the Fire and Police
Departments of the Town of Orono.

* * *
January and February of 1963 were not good months for logging operations. Snow cover of 3 to 4 feet in depth continued without letup well into the month of March. All operations in the University Forest were drastically reduced, but not curtailed. Most of the student cutting crews stopped working due to the difficulties of wading through the deep snow with a chain saw, plus the requirement that each tree had to be cut close to ground level, requiring that the snow had to be shoveled away from each one before cutting. An attempt was made to assist the cutters by plowing lanes through the forest area with the bulldozer, coming as close to marked trees as possible. This helped with access into the cutting area, but even though snow was cleared away on one side of some marked trees, at least one, and usually two other sides had to be cleared to make room to operate a chainsaw in the crowded space. Another serious problem was the accumulation of exhaust gases in the deep hole in the snow at the base of the tree. These were extremely difficult and hazardous conditions to work in, and decisions to quit were entirely justified, and usually encouraged.

However, one student cutter, Calvin Gammon, who was probably the most experienced and efficient cutter working in the Forest at that time, said that he wanted to continue working because he needed whatever amount of money he could possibly earn, to stay in college. Because of his interest and dedication to the job, and with additional cutting by some of the harvesting crew, I increased the efforts to open up lanes and break down snow barriers wherever possible through the cutting areas, and often took time away from yarding, to clear additional trees after a strip had been cut and room made to drive the crawler between remaining trees to clear snow away from another section. This was not the most economical system for harvesting, but by working together we were able to cut through and harvest most of the area in my plan for that winter. Harvesting of the logs and pulpwood under these conditions was also a difficult process. Logs were cut to standard lengths, and left where they fell. Pulpwood was cut into 4 foot lengths and stacked in piles located where the crawler tractor with scoot behind, could drive alongside for loading. The cutting plan for this block of timber was to open up the stand by removing poor quality and closely growing trees to free up and leave a well-spaced residual mixed stand of healthy fast growing trees. This process produced a high percentage of pulpwood, with a scattering of logs that had to be yarded out first, to open up a skid road to haul out the pulpwood. Maneuvering around with the crawler and log arch and dragging out the logs helped to break down the snow depth to a fairly hard packed layer about 2 feet deep. This worked fairly well as a surface to travel on until the unit hit a soft spot, or the load bogged down behind. When this happened, the tracks dug down into the snow to get a grip, and if they didn't get down to solid ground before the belly pan of the tractor compressed the snow under it, the whole machine would come to a stop, hung up on compressed snow under its belly. This often made it necessary to unhook the trailing equipment to use the winch to haul the crawler on to firmer footing. Sometimes all that was needed was to throw a stick of pulpwood under the tracks to get the unit moving again. Experience taught us numerous ways to keep the equipment moving and productive, and extricated from numerous dilemmas.
Ingenuity Pays Off

Another development, along with the chain saw when cutting a full length pulpwood tree, after it was delimbed, into 4-foot sections, needed a simple method of measuring. When hand operated bow saws were used, most standard frames had been designed so that the distance between the tip of the frame and the handle end measured 48 inches, and could be laid out along the stem after a cut had been made, to reach to the spot to cut the next length. This was the most common procedure while working with bow saws, although there were still individuals who measured with ax handles, or with a 4-foot pole.

When chain saws came into common use, new methods had to be devised. The early saws in New England often had 18 or 20 inch blades, and with the body of the saw the overall length would be in the mid-thirties. At first many operators would lay the saw out on the log or stem to be cut, and with their right hand holding the rear handle as usual, would lay their forearm down along the log and adding the length of their forearm to the saw would come up with what they assumed to be 48 inches. Depending on the length of their arm, and how they held the handle, some were quite accurate, and some were not. When my student cutters first started using this method of measure, I had found pulpwood logs anywhere from 45 to 52 inches in length. I immediately required that they carry a 4-foot pole or rule with them to measure more accurately. This was a nuisance for anyone to carry with them and keep track of in the brush and snow, and so everyone was trying to devise a better method.

Nothing dependable had developed until one day Cal Gammon came to work with a piece of an old fish pole taped on to the bottom of the rear handle of his saw and projecting backwards long enough to make a total length of 48 inches, from the tip of his saw blade to its end. It looked like it would be a hindrance when twisting the saw around in different directions while cutting branches and felling trees, but the fishpole being flexible would bend back and forth as it swung by his body and other obstructions and did not bother as much as I thought it would. After measuring some of his wood, I was quite pleased because it all measured within an inch either way of 48 inches, which was acceptable to the mill. The other cutters immediately added some variation of the fishpole, from a leather strap to a stiff rod or branch, and even just a piece of rope. These all worked to improve the accuracy of measure, but all had drawbacks.

Within the next year however, industry had noticed what was going on in the woods, and companies came out with plastic whips which could be bolted on to the saw handle and be cut to length for any particular saw. I soon had most of our University Forest saws outfitted with these whips. These were in very common use until the pulpwood market shifted from buying short wood by scale, to long lengths by weight. Even though there is a trend recently back toward harvesting wood in shorter, cut to length sizes, chain saw measurements are out because most of the present cutting is done with high tech computerized machines using hydraulic shears or saws operated from a closed, climate controlled cab. These machines will sever a tree at a very low stump, lay it over and pull it through a series of blades to remove the limbs, at the same time measuring accurate lengths of desirable products from each tree as cut.
Memories of Our New Home

1962 and 1963 were memorable in relation to work in the University Forest, but also in our personal lives, although as I recall events, it seems that every year of our lives, had memorable events. When we moved to our property at 111 Park St. in Orono in 1955, our family was excited with the additional space of house and land to work and play in. I had great thoughts of a garden area and a tree nursery. Our first chores, however, were to finish shingling part of the house roof. The previous owner had purchased the roofing and stored it in the barn. He had finished all of the back side of the house, and I had agreed to finish the job so we could move in sooner in the spring, especially since the shingles were all there and paid for. I don't remember any problems with it, and with sons, Art and Larry, helping, it was all done that year.

Another chore was to fix the old barn so we could get our equipment under cover. This barn was in the same location as our present garage, but it was a 2 1/2 story building, and in somewhat poor shape. An earlier owner had raised chickens on the property and in the barn. As usual, in those early years, rats were a major problem. Many rat holes were visible in the lower walls and foundation, and had been covered with sheets of tin from old tin cans, and other material. Since they had stopped raising chickens here at least 10 years before we moved in, rats were no longer a problem, but some areas looked pretty messy. Also the general foundation was quite deteriorated, so something needed to be done. As a temporary stopgap, we opened up the original doorway to get a car inside, and made another doorway in a side bay for the Forest pickup which I used for work, and always kept under cover at home. Due to the pressure of work to get a tree nursery started at home, and a full time job in the University Forest, we used the barn in this condition for several years. As it turned out, the side bay having a timber across the entrance as part of the foundation, made it necessary to build a ramp from the driveway up to get in on to the floor of the side bay. The original entrance was more suitable for the pickup, so we kept our car in the side bay.

This worked fine except for one incident that occurred one day when the car was setting in the yard and it began to snow. One of our sons decided to put the car in the garage to keep it out of the snow and started to drive it up the ramp into the stall. All would have been fine except when the front end of the car got in through the doorway, the rear drive wheels started to spin on the ramp. This was the first and only car we ever bought that had positracktion rear end. Both axles locked, and spun the rear end sideways into the doorjamb. I found it in that position when I got home that night, and had to jack up the rear end to slide it sideways to free it up and finish driving it into the garage. I had one University pickup with positracktion also, and found that the rear end would twitch sideways in any snow or slippery going. Several times in the winter, with snow on the road, I had stopped in the Forest to open a gate, and when I started forward with the pickup to drive through the gate, the rear wheels would spin together, and try to put the pickup through the gate sideways. The first time that happened I nearly slammed sideways into one of the gateposts. It was a big surprise, I had assumed that with both rear wheels driving together, the truck would be great in snow and get around real good. As it turned out, for a two-wheel drive vehicle, a standard differential was much better than this so-called positracktion. It appeared to me to be one of the poorest designs ever made by automotive engineers, and they have made many!
Developing a Home Tree Nursery

Except for a couple of small garden plots, our 10 1/2 acres was either forest or hay field. The first job to develop a tree nursery was to plow and till sod ground and work it into shape for raking and shaping seedbeds. My experience at the State Nursery over the previous 10 years was a great help in developing this home nursery, because much of the work done there was by hand labor, and that's all I had at home. The first requirement was for tilling equipment, and I soon located a used Ford-Ferguson tractor with a double bottom plow and a disk harrow. With this unit I was able to plow and disk about 2 acres of sod land in a portion of the open hay field. With continuous harrowing through the summer, the area became quite weed free, and in reasonable condition for seedbed preparation in the fall. My plan was to grow Christmas tree planting stock, and some ornamentals. I had purchased some seed from commercial seed sources, and some I had gathered from local sources. This first supply included balsam, Frazier and Douglas fir, and Colorado spruce. I also purchased 10M 3-0 balsam fir from the New Hampshire State Nursery, for $55.00. These balsams were transplanted into this new nursery area in the spring of 1956, and our first sales were of 5200 3-1 balsam fir transplants in 1957, for $70.00/M.

Bill Hardy was one of our first customers as he was trying to get some Christmas tree plantations started in his fields near his home in Hope, Maine. Bill had resigned from his job at U. Maine, and moved back to his old family homestead in Hope, into one of two houses on the property, that he had been renovating for several years. He had taken a job managing a large dairy, blueberry, and Christmas tree farm for Mr. Ned Cutter in Union, a nearby town. Bill worked for Ned Cutter, for 7 or 8 years, learning a lot, and meanwhile developing his own areas of trees and especially wild blueberries. He was one of our best customers for trees for several years. During this same time we added more varieties of trees for sale, getting into ornamentals as well as seedling stock. For about 10 years while Art, Larry, and Gene were at home, and in school, our family was able to handle all the hand work that went into building seedbeds, fertilizing and seeding, weeding, mulching, and irrigating, and then after 2 or 3 years, lifting these seedlings and transplanting them into rows for further development. And then after 1 or 2 years as transplants, lifting them, tying them into bundles of 25 or 50, and packing them wrapped in wet sphagnum moss for shipment. For all of this, we got $75 to $100 per thousand for 4 or 5-year-old seedlings.

As the family got older, went to college, and found outside work, our workforce dwindled, and also the demand for larger trees for landscaping grew, we shifted over to just starting enough seedlings to grow to fulfill this market. Gene was still in school and with his help and the others on occasion, we developed a local market for ornamentals. For this market we had a variety of species including, Balsam, Frazier, Douglas, and Concolor Fir, White, Red, Austrian, Jack, Scotch, and Mugho Pine, Colorado Spruce, White Cedar, Mountain Ash, Red Maple, Sugar Maple, Norway Maple, White Birch, Red Oak, and an occasional other odd native wild tree. By the mid 80's this market had tapered off, and the trees that were left were too large to handle by hand, and many of these are still in the places where they were transplanted, back in the 70's. Several hundred of the original plantings of fir were sold as Christmas trees during the 70's, many to the UM forestry student club for their annual sale to raise money for scholarships, and
some to local families. It was an interesting, busy period, we made enough over expenses to help with our home expenses, and pay for a few extras, but not much. Many of our Colorado Blue Spruce, and other ornamentals, are at this time growing well in Orono, Old Town, and several surrounding towns and cities.

Along with the Nursery project in 1962 we decided to tear down the old barn and rebuild a full size garage, large enough to hold two cars, one pickup, and our Ford Tractor. This turned out to be the same basic area as the original barn, 24 x 36 feet, with a second floor with sloping roof and 2 ft. lift at the eaves. Razing the old barn and breezeway right to the kitchen door took most of the summer of 1962, because every usable board and timber was salvaged, and every nail removed before stacking them on piles for future use. A room which apparently had been rented to students in former years, had been built into one bay of the old barn. This room of approximately 12 ft, by 30 ft., was completely sheathed with 1 x 8-inch tongue and grooved spruce boards, floor ceiling and walls. Salvaging this lumber gave me enough material to completely board in all of the new buildings walls, and part of the roof. In fact, I only had to purchase one 2”x6” for a rafter, all others were salvaged and reused from the old building, as was most of the studding and floor joists. When the new construction was complete there was still lumber left over, and some of it is still stored in our shed, which was also built with some of this salvaged lumber. I hired Ivan Miles with his front end loader to clear out and move all of the old foundation of rocks, plus other debris, and smooth out the whole ground surface for the new construction. He also brought several loads of sand and gravel for an interior surface, and for outside landscaping. Ivan came on Easter Sunday 1963 to do the initial clearing, and we started laying out the foundation immediately after he finished. It was slow, working evenings and weekends, but by fall the main building was closed in and the roof covered with felt paper. The breezeway was only partially done that year. In the fall we completed covering the roof with asphalt shingles, and just before this was finished, a tragic event occurred.

Shortly after noon on November 22, 1963, I was working in the so called shelterwood area in the University Forest, yarding logs with the John Deere crawler and log arch, when Cal Gammons came in to work. He came right to where I was working and stopped me as I was driving out with a load of logs. He appeared excited and I wondered what was up until he asked if I had heard the news that noon. I hadn't, and so he told me that he had just heard before leaving home that President Jack Kennedy had been shot in Texas. He didn't know whether the president had died or not, but it had sounded quite serious. That was all I heard about it until I got home at the end of the day. Then I heard that Kennedy had died and his assassin had been caught and also killed by another assassin as he was being taken into prison. At this time Mary told me that she had heard the news on the radio, and gone outside to tell our son Art, who was finishing up the roofing on the garage that afternoon. We were all pleased to get the roof finished up before snow and cold weather arrived, but also very saddened about the death of our president, as was the case with nearly everyone in the country, and throughout the world. President Jack Kennedy was highly respected and liked, at home, and abroad.

A sideline to this that many of us at the University remembered well at the time, was a visit, about 2 1/2 years before, by Jack Kennedy as a speaker at a commencement that was held in the football stadium and field. The secret service requested a firetruck to be on standby at the north end of the field during the president's appearance. As University Fire Chief at the time, I took
two other volunteer fireman with me to man the truck, and stood by during all of the events involving President Kennedy. What we were supposed to be doing, I still don't know, but we were there, prepared to do it, and we had a good location to see and listen to the President. It was a sad day for all of us when he was assassinated.
Forest Headquarters Relocated

Discussions had been ongoing for several years about a good location for a Forest Headquarter location with a source of power, water, and sewage disposal, and a caretaker residence, storage and maintenance garage. Several areas had been considered, most having problems with one or more of these requirements, and ranging from the Sewall Pines area off of Stillwater Avenue, to the sawmill site, to a location on College Avenue Extension. Finally, in 1961 a decision was made to use a location on the Extension, near enough to the end of the power line coming from Stillwater Corner. where a connection to electric power could be made without an exorbitant cost, and the soil and location were suitable for both a drilled well for water, and an area for a septic system. This is the present site of the Forest Manager's residence, pole barn, and several outlying buildings, on both sides of the road.

The spring of 1962 saw the start of the first structure, a pole type building for storage and maintenance of Forest equipment. This was a three bay, one story garage, 36 x 48 feet in size. Very little money was available for this construction except for normal student labor through the summer, and the academic year, which meant that materials had to come from the Forest, or through donations. Over several years I had stockpiled enough lumber to completely board in this size building, and now I made an agreement with Leon Williams at his mill, to plane all of this lumber, all four sides. To pay for the planing, Leon selected out boards that he could sell for knotty pine paneling, and exchanged these for the cost of planing the volume that we needed for our building. Leon was very generous in these dealings, and we ended up with a surplus of 4-sided lumber which was used later on in the construction of other storage sheds. In fact, this worked out so well that when the University of Maine forestry camp was being relocated from the original site on Rt. 1 near Grand Lake Stream Road, to a new site on Long Lake, it was worked out again with lumber from our University Forest and sawmill, to provide enough pine paneling for the large recreation and dining hall. Along with the planing of the lumber, Leon Williams also donated windows for that building. Leon was always very generous and supportive of the University of Maine Forestry Program.

The next donation of note was from the State of Maine Forest Service. The Forest Service had acquired a large number of surplus, pressure treated power poles, from the naval radar station at Cutler, Maine just a few years before, when the station put all their power lines underground. These poles were all 30 to 40 feet long, and 6 to 8 inches on the top ends, and very heavy with the pressure treatment. Through our good relations with the Forest Service, practically everyone in supervisory positions was a Maine graduate, Austin Wilkins, Forest Commissioner, Al Nutting, the Director of the School of Forest Resources at this time was a retired Forest Commissioner, 20 of these poles were donated for our use. Now the problem of transporting them from the fire control station in Cherryfield to our site in Old Town. No Problem! They had a flatbed tractor trailer at the Maine Forest Service headquarters near the airport in Old Town, and we were welcome to use it, and a loader was available at the site to load. So it came about that on a good day when one of my student workers, Jonathon Anderson, had a free day, we set off for Cherryfield. The truck was a big old army surplus International, that today wouldn't have been permitted out of the driveway, but still had substantial power, would putt along at about 40 miles an hour pretty well, the lights worked, and it probably didn't need a horn, if it ever had one.
We arrived at the Forest Service site before noon without incident, feeling good about the whole trip. The Forest Service crew was there ready to load us up with a front end loader, and extra chains. The front end loader was not the most efficient machine to handle these long poles, and it took a little longer than it should have to load, but eventually the trailer was loaded, actually over loaded, but as the crew said, “No one will bother you. You’ve got a State truck”. So about midafternoon Jon and I headed for Old Town. After driving through Cherryfield, I decided to take Rt.182 as the shorter route through to Ellsworth. The truck seemed to have plenty of power to haul the load, even though not much speed. This was all right with me because I wasn't out to make any speed records with an overloaded, old, army surplus truck. Route 182 goes over a height of land with a long climb to get to the top. As we approached the start of the climb the road made a long S curve, (probably still does,) and as we wound around these curves I could see in the rear view mirror a big semi oil tanker coming up fast behind us. As soon as we hit the slope the truck slowed down, and I had to start down shifting to maintain what momentum we had. I also saw that the tanker was going to pass if he could, so I eased over to the edge of the road to give him room. The tanker went by OK, but in the process of pulling over, I went a little too far and the right hand drive wheels went off the pavement onto loose gravel. As soon as I felt the drag I stopped so we wouldn't sink in deeper. I had not driven a tractor trailer very much, so we sat for a moment to decide how to get out of our dilemma.

Suddenly, a car with New York plates pulled in about 30 feet ahead of us, and a man stepped out. He came back alongside and said he owned a trucking business back home, and maybe he could help. I told him that any help was welcome right then. He told me to cut the front wheels toward the ditch, let off the brakes and let the weight of the trailer pull the truck back down hill and into the road, meanwhile straightening out the front wheels until the tractor was on firm pavement, and then stop, shift into forward gear and stay on the road. Everything worked fine the way he said it would until I wanted to stop the backward travel, to shift into a low forward gear. The air pressure for the brakes had dropped while stopped, and the foot brake would not stop the truck's backward motion. I was real worried about some vehicle coming up behind us, and us not being able to stop or get into a forward gear, so I hollered at Jonathon to grab the emergency brake, and pull with all his might, which he did, and miraculously it held long enough for me to yank the gear shift into low gear, and we started forward. The good Samaritan from New York was standing watching until he saw we were in gear, and headed up the hill, and then with a quick wave, he ran to his car and took off to get out of our way. We never saw him again, but I imagine he had some worried thoughts for a moment, until he saw that we had it under control. I will always remember and appreciate his help, and also that Jonathon Anderson was with me that day, to grab and hold that emergency brake. We growled up over the top of that hill in the lowest gear in the transmission, and then on through Ellsworth and Bangor, without any problems onto the site of our pole barn construction in Old Town, and I think we both were thankful that day was over.

Now, with the basic materials on hand, construction began. The rectangular site had been cleared and pole locations laid out on the ground, with batter boards and cross lines. The student work crew and myself went to work first to dig the 20 holes for the support poles. Each hole was hand dug to a 6-foot depth for stability and reduction from frost heaving. This work was done by hand because I had money for student wages, but none to hire a back hoe to do the job. Looking back at the time and money spent to dig these holes by hand, it probably would have been
cheaper to hire machinery, and figure out a way to pay for it later. Each hole was 3 or more feet in diameter by the time the digger made room to get down in the hole to shovel out the last 2 feet in depth, and throw it up out of the hole. Some holes had good sized rocks in them that had to be winched out with the John Deere tractor. With the part time labor, and other projects going on at the same time, it took several weeks to get the holes dug and the poles set in a reasonably accurate rectangle.

Setting the poles with the equipment we had available also required some ingenuity, but after doing a couple, our system worked quite well. The procedure was to roll a pole into place with the butt end about half way across the hole. A wide plank was stood up in the hole on the opposite side from the pole butt. The John Deere crawler was brought into place with its' bulldozer blade lowered so several men could lift the small end of the pole onto the top of the bulldozer blade. Lifting the blade to its' highest point and driving slowly forward at the same time, did two things. The pole was lifted to a higher angle and also slid into and across the hole and the butt came up against the plank on the other side of the hole. As the tractor moved forward the pole was raised and the butt end slid down the plank to the bottom of the hole. Once in the hole, in a more or less upright position, the pole could be braced and maneuvered around to line up in correct position and perpendicular. Then the hole was back filled with sand and gravel that had been hauled in earlier. This procedure was followed for all the poles. A few slipped off the plank on the way down and jammed into the wall, and had to be pulled out, the hole cleaned out, and the procedure repeated, but the job was done in a couple of days.

Then came the job of cutting off the side poles to a 12-foot height, and spiking on 2x8 planks for a plate for the rafters, and installing the rafters. The center poles were cut to give a 6-foot pitch to the roof. Side bracing was put where necessary and purlins were fastened in place to support aluminum roofing, and along the sides for a support for board and batting siding. By the time classes resumed in September, the basic structure was in place, but roofing and siding had to be put on to close it in for the winter. With classes started, my winter crew was anxious to get started on timber harvesting, but I told them that nothing would get going in the Forest until the pole barn was finished, with roofing, siding and 2 sets of double doors built and installed. They all took it in good humor and worked extra hard to finish the work quickly. Except for painting, the barn was finished and usable by mid-October, 1963.

During the 1960's and early 70's, there were periods of quite heavy snow fall during the winter months. In the Orono- Old Town area there was often 2 to 3 feet of snow on the ground during January, February, and March. Often there was 1 foot or more of snow in the woods in early April, and substantial snow falls to mid-April. It was during this period, about 1966, that several major storms over a week or so, with some rain mixed in, deposited 28 inches of heavy wet snow over our local area, and on the roof of the new pole barn. I had hoped for some mild weather to loosen the snow cover on the metal roofing so it would all slide off, but it had stayed cold, and the frozen snow stayed right in place. I had thought about getting a crew up to shovel some of that snow off, but the time didn't fit in right, and I wasn't too concerned anyway, until after another day of mixed rain and snow, I got a call in the evening from Walter Carpenter, a professor in the Aggie Engineering Dept. He told me that he had been out to the barn that afternoon with a class of students who were taking samples of snow from various roofs to compute the weight of snow that was occurring from these storms. He said that the snow on the
pole barn roof weighed about 78 pounds per square foot, and knowing how the roof was built, he said it was only designed to support a maximum of 65 pounds per foot, and he said we had better shovel it off the next morning, if it hadn't collapsed in the meantime. I wasn't particularly concerned, but I did make plans to get right at it the next morning. Before starting to shovel I put up a ladder inside the building to get up and look at the rafters. Sighting along on the underside of several rafters, I could see that they sagged as much as 3 inches in some places, but there were no cracks or splits anywhere. After removing most of the snow off of the roof, these rafters straightened back up to their original position with no ill effects from this excessive weight. At the same time, a similar building at the Maine Forest Service headquarters near the Old Town Airport, with steel trusses supporting the roof, had severe damage to the roof when several of these trusses tried to bend with the weight, and instead twisted sideways and let the roof sag and crack in that area. It was a good demonstration of the resilience of wood compared to steel, and I was glad that our wooden structure held up as well as it did.

The logging business was a hazardous occupation in the past, and still is in many situations. Also, trucking of forest products, especially the loading and unloading, was a major contributor of serious accidents. Many accidents occurred when operators felt too confident about their abilities and took life threatening chances to speed up the job. Many had the ability, but not the control of events that occur when heavy logs change direction, or roll unexpectedly. Many methods were used to load sawlogs on to trucks. On flat land, A-frames were used, and sometimes even a single spar tree with a pulley mounted as high above the truck body as possible was used with a rope or steel cable as a parbuckle to roll or drag logs up a pair of skids on to the truck body. This type of parbuckle was usually a single line from the pulley, around the log, and back to an anchor on the truck. The power source was originally a horse or oxen, and later a tractor, truck, or donkey engine attached to the other end of the line. It was far from an ideal method of loading, but at times worked real well. Much of its success depended on the operator's judgement as to where to place the loop of line around the log to be loaded. Since all logs have a larger, and heavier butt end, the center of gravity is not in the center of the log. Therefore, the line has to be placed slightly off center toward the heavier butt end to be rolled squarely up the skids. If the log is uniform throughout its length, it will roll fairly smoothly up the skids, but if it has a knot or other imperfection where it rolls on a skid, that end may move forward or back, and the log might swivel around and slide backward until one end hits the ground. Then it's a matter of straightening it out on the ground, and starting all over again. Anyone in the way when a log slipped this way could be in serious trouble if caught by the falling log. Being alert, and understanding the many consequences that can happen with this procedure, was vital to stay healthy.

On hilly or rolling land another method of loading logs was often used. This was to build a ramp on a hillside oriented closely to a road or truck landing. These ramps were usually built out of logs, with one large one anchored into the ground near and above the road level, and parallel to the road. Two other long logs were laid about 8 feet apart with one end on the base log, and the other ends resting on the ground on the upper slope. As logs were brought out of the forest to the landing, they were rolled out and piled on this ramp, several layers high. From this location, with a truck parked below, lined up with the ramp, the logs could be rolled down skids on to the truck platform. With the ramp being several feet above the truck body, 2 or 3 tiers of logs could be loaded straight across before having to roll uphill for the last tier or so. Both of these loading
methods have been used in the University Forest during the 1940's and 1950's. The single tree spar method was used once for several loads of logs, using a horse for power to pull the log up on to the truck. Raymond Pinkham used this method of loading when he bought logs from the Forest to saw out for lumber to rebuild a barn which was destroyed by fire from a lightning strike. Pete Sulinski's crew used a truck and a tractor for power at different times when loading logs for the Sulinski mill. No serious mishaps occurred during these procedures, and no injuries that I knew of, but one man was seriously hurt at the mill while unloading logs, but recovered in a few months.

There are few good slopes in the University Forest to load logs from a log ramp, but I did make a decision to attempt one in 1954 on a slight slope in the Shelterwood Area, Block H-8. One of the final harvests of the overstory of this shelterwood cutting was made during the winter of 1953 and 54, producing about 20,000 board feet of pine sawlogs. I did not like the single spar parbuckle method, and thought a ramp might work out better if we could build it up high enough. We found the largest log in the lot and set it in close to the truck road. Then we brought out 2 full length tree trunks and with the bulldozer got them up on to the base log about 8 feet apart and running back up the slope on to solid ground. With good sized butts as a base log and as runners, the top of the runner logs was close to 4 feet above the road where a truck would be parked to load. This looked good to load the first two tiers on a truck directly off the runner skids, and if we had several tiers of logs on the skids, the top layers would roll across easily to top off the truck load. This skidway looked good and worked well.

As logs were skidded out, a crew rolled them by hand along the skids to the end near the road. After one tier was in place, another was rolled up on top with temporary skids to make a second layer. This worked fine for 2 layers, but going higher than that was too much of a slope to roll logs up by hand. So now we had to go to a parbuckle method to get logs up to 3 or 4 layers high. I had over 100 feet of 1-inch rope at home that had been used on a hay lift back at my old home farm in Amherst, Mass. With this rope a parbuckle was rigged up to get the logs up onto the higher layers, and we ended up with a pile of logs about 4 layers high. This put the first logs to be loaded nearly 9 feet above ground, and about 6 feet above a log truck body of that period. I didn't have a regular trucker at that time, but located one in Old Town who was looking for a job. This was Bill Tash who was recommended by a relative, possibly Raymond Pinkham. Anyway, he came in alone to haul the logs, I had told him that our crew would help him load. He looked the pile over, turned his truck around to be headed out and set it in front of the skidway. After clearing the body of his chains and binders, and setting in 2 solid stakes on the off side, he was ready to load. We set 2 short skids from his truck body up against the log pile just below the top log. Bill picked up his peavey and stood in the middle of his truck and said, "Let her go!". I was up on top of the log pile with a couple of students, and looking down at the man on the truck, it didn't look like a safe place to be. I asked him if he was going to be alright there. He just said, "I'm alright, let it go". So we eased the top log over the edge and down onto the skids to the truck as straight as we could and as far as we could hold it. When we had to let it go, it slipped and partly rolled down the skids and hit the truck body quite hard, but before the log could bounce or roll toward Bill Tash, he had swung his peavey forward and caught the log with the hook and stopped it right where it landed. I had used a peavey quite a bit to roll logs into place, and turn them on a sawmill carriage, and in the woods, but never in such a precarious spot as Bill Tash had placed himself. But as he said later, he had done this many times and it had always
worked for him, and he never gave a thought about the danger, and this was the attitude of most forest workers over all time, I guess. Until an accident happened to them, they went through life with no worry or thought that one could affect them. As long as I knew Bill Tash, I never heard of him having an accident that laid him up. Everyone had bumps and bruises, but they were not considered accidents.

Because of difficulties in locating landings suitable for the use of ramps, most loggers in our area soon shifted to the use of the portable A-frames, or Jammers, as they were called. I built two for our use in the University Forest. The first one was tall enough for the truck loads being carried in the 1950's and 60's. For the hooks on the ends of the crotch lines, I used hooks designed for use on peaveys or cant-dogs. They worked fairly well for medium sized logs, but often when hooked into a large, heavy log, they would become deeply imbedded in the end of the log, and it took considerable time and effort to release them after the log was lifted into place on the truck. Occasionally one would snap in two, especially in cold weather, and this was very hazardous for the workers, so efforts were made for a better design, and soon a hook was specifically designed for this use, with a flange around the point, to control penetration into the ends of the log, and make it easier to remove.

As trucks increased in size or added an extra axle and set of wheels on the rear to support heavier loads, and longer logs, loads were loaded higher, and taller poles were needed for the jammers to raise logs high enough to set on the top layers. In the mid-1960s it was necessary to build a taller jammer for use in the University Forest. This second A-frame jammer was built on the original base, and it was just a matter of cutting two taller poles and fitting them together into the base hinges, hanging a pulley at the top, and refitting with a longer cable. Sounds simple, but it still took most of one day.
Innovations and Problems

The refitting of trucks to haul larger loads created some interesting problems and events. The addition of so called “Dolly” wheels, was done by hooking up an old axle with dual wheels, just behind the main rear drive wheels. This gave the appearance of a tandem rear end, but still only the original set of wheels and axle had power, the dollies were idlers that were hooked up with heavy springs and ran on the road to support the extra weight of a larger, and longer load. Most were designed so that they could be raised when the truck was empty, and locked up to clear the ground and reduce wear on the tires when traveling empty. By the 1990’s idlers became common on many heavy trucks, quite often to add a third set of wheels to double axel trucks and trailers, but with the addition of air or hydraulic power to raise and lower them, and regulate the amount of down pressure needed for any specific load.

In the early days it was more of a chore to raise and lower the dollies. In the woods, or where there might be a log of the right size handy, the driver would back the truck up so the dolly would ride up onto a log, or a rock or bank, high enough to clear the ground, and would lock it in that position. The locking device was usually a chain welded onto the center of the axle and drawn up through a hole in the truck bed. This would be held up by a slotted grab hook, or other slotted device across the hole with a chain link anchored in the slot. To release it and lower the dolly wheels just required knocking the chain out of the slot, one way or another, and the spring tension would force the wheels right to the ground. On fairly level, firm ground, dolly wheels worked quite well to support larger, longer loads, but the variety of road conditions in the forest, created numerous problems with these non-powered wheels on the rear. Backing into deep snow or into soft ground, would often let these idler wheels ride up enough to take some of the weight off the drive wheels, and they would start to slip and bring the truck to a standstill. If it was in snow, that could usually be dug out with a shovel enough to get the drive wheels back down to firm traction, and get moving again. In soft ground or mud, if no power equipment was handy, to push or pull the truck out, small logs and brush would be jamb in under the drive wheels hard enough to create some traction to move out. Several times I saw a driver think that all he had to do is get started, and he could drive right out of a mud hole, but he would be very disappointed when the truck moved forward far enough for the drive wheels to ride over the pile of brush and drop off the other side, with the dolly wheels now on the brush, and the drive wheels back down in the mud, worse than it was before. Then he had to do it all over again, and also brush in the soft area all the way to firm ground, as he should have done in the first place. Some roads, during mud season, almost became corduroy roads, laid in with pulpwood sticks and brush. One delivery a day to the mill was often lost, due to mishaps like this in the woods.

Another problem, with or without dolly’s, was loss of steering due to front end lift with a load of long logs. A load of 14 and 16 foot logs would create so much weight on the rear that the front end would lift enough so the front wheels would lose firm contact with the ground, and lose their steering ability. There were troubles in Massachusetts, and they were repeated in Maine, with similar short wheel base trucks. One particular incident occurred when Ivan Miles attempted to make a sharp, uphill turn from a side road on to the Logan Road, with a fully loaded truck. When the front wheels of the truck came on to the Logan Road and he started to turn up the hill, the rear end settled and the front wheels barely touched the road. At the same time the weight of
the load settled on to the dolly’s, and the drive wheels slipped. Ivan came walking back into the woods where I was working to see if I could push him out with the John Deere dozer. I drove the tractor out and tried to push the truck forward with the bulldozer blade. As I pushed, the front wheels rose higher off the ground, and there was no way Ivan could steer to head the truck up the Logan Road. I was pushing the truck straight across the road into the other ditch. I then moved the tractor out on to the road close to the front end of the truck, and hooked the winch cable on to the front bumper. I had to pull the front wheels down on to the road surface so Ivan had some steering ability, and then I drove ahead, pulling the truck ahead, and on to the road.

The incline on the Logan Road at that point was enough that the front end would lift if I released the winch, so I had to keep a tight hitch for several hundred feet, until the truck was on level ground again. I was concerned that Ivan would have more trouble on the trip to the mill after leaving the University Forest, but later he told me he made it without much trouble, except to negotiate a couple of sharp turns, where he had to backup once or twice to swing the front end around. I have seen this happen recently with tri-axle trucks on sharp turns.

The first log jammer, (A-frame log loading device), was built for use in the University Forest about 1958. It, and a taller successor, were used continuously to load logs on to trucks for delivery to a mill, or locally. Most of its use was loading logs produced in the Forest on to trucks belonging to Ivan Miles, who hauled all of the logs for well over ten years as well as the bulk of the pulpwood after Hugh McCafferty graduated. During all of this time the Forest crew located and set up the jammer and I usually operated the John Deere crawler to provide the power to load the logs. Although it was ideal to have four people handling the equipment, (one on the truck, two handling the crotch lines and end dogs, and one operating the power unit), at times when the Forest crew was not available, and Ivan drove out without a helper, he and I handled all of the jammer components alone, and loaded numerous loads by ourselves. Through these same years most pulpwood was still being loaded and unloaded by hand, although most haulers were continually trying to devise something to reduce the physical and hand labor of handling every individual stick numerous times. At most pulp and paper mills there were cranes working in the wood yards. By having the trucker loop a heavy cable under and up the sides of each tier of 4-foot pulpwood as it was being loaded, when it arrived at the mill a crane would hook into the two top ends of the cable and lift the whole tier off at one time, and swing it onto a storage pile where it would slide out of the sling, which then would be returned to the truck. This reduced the labor and speeded up unloading tremendously, but loading was still a problem in the woods.

Ivan tried bolting a set of forks onto the bucket of his front end loader and picking up a quantity of wood to place up on the truck body. This reduced the heavy work of lifting each stick of pulpwood from the ground up nearly 4-feet onto the truck body, but it still had to be lifted and put into the tier being filled. Then he bought a surplus army backhoe mounted on a 6 x 6 truck chassis. He replaced the bucket with a grapple, added some controls for opening, closing, and swiveling the grapple, and he had something that worked, but also had its’ drawbacks. The two engines, one for the truck, and one for the backhoe, both had problems, especially in cold weather. Sometimes one would start, but not the other, and it was often necessary for both to be running to move the unit along as a pile of wood was being loaded. Several times I hooked the John Deere battery up to jump start one of the engines, which might take an hour or more, plus several cans of starter fluid. Ivan used this rig for a couple of years, but one day it caught fire and was destroyed before the fire department could get to it, and Ivan decided to retire and get
out of the trucking business.

By this time, around 1970, there were many trucks hauling wood with either their own self-loading hydraulic loader mounted on the truck, or on a separate unit which stayed in the woods and loaded each truck when it came for a load. I contacted a local trucker, Kenneth Cyr of Old Town, who had two trucks, one with a loader and one without. He had a helper to drive one truck, and Ken drove the one with the loader and by traveling together, he could load both trucks at the same landing, and also have a helper while loading each one. The production from the University Forest was not high, but it made a good fill in job for Cyr, so he seemed pleased to take it on. Also, he was able to load and haul both logs and pulpwood without needing extra help, so that was a real plus for me.
During this same period a major change came about which affected my duties and routine considerably, when the Harold Worthen property in LaGrange was added to the University Forests. This 250-acre woodland was donated to the University by the owner, Harold Worthen of Bangor in 1964. For years he had used a small hunting camp on private land a mile or so beyond. He had acquired and used this property as a hunting area since about 1943, and built his own camp over an old cellar hole on the property which originally consisted of two early settler’s lots. Apparently each lot had been settled after the Civil War, and some land was cleared for farm and pasture use, but certainly would have been barely good enough for subsistence living, and by the time of World War I, both were abandoned. Trees growing on obviously cleared land were 40 to 50 years old in the late 1960's. Both original properties had a cellar hole, or really a root cellar, with a hand dug water well nearby. One well, near Worthen's camp site is still usable. I understand the original camp has since been replaced, but it had considerable use until the 1980's. Mr. and Mrs. Worthen had no children or heirs, who had an interest in this property, and since both were getting along in years, they became concerned that a new owner would strip the lot, if they sold it. They both loved the property, and wanted to preserve it as a well-managed forest.

Harold Worthen had been in the Maine State legislature and became well acquainted with Al Nutting while he was Maine State Forest Commissioner, and in the early 1960's he contacted Nutting, who at that time was Director of the University of Maine School of Forest Resources. They discussed several alternatives, and also made several tours of the Demeritt Forest near campus. Harold Worthen was very favorably impressed by the appearance of this area, and after being convinced by Nutting that his woodland would be treated the same way, he and his wife agreed to donate the land to the University, to be managed by the Forestry Department. On April 23, 1964, Harold Worthen, Albert Nutting and I met with U. of M. President Lloyd Elliot, in his office for the formal transfer of deeds to the University. Later a small celebration with all the participant's spouses was held in Well's Commons. Harold Worthen had a couple of requirements tied to the donation. One was that he should have use of the hunting camp during hunting season, and we agreed that he could use it at any time he desired. Also, he was quite adamant that none of the white birch trees along the road near the camp, be cut during his lifetime. We adhered strictly to his requests, and for several years cut and hauled in a supply of firewood for the camp. Unfortunately, his life span ran out and he died a few years later.

However, I was very fortunate to have spent valuable time with him for several years after his donation. He was immediately anxious to show me the property boundary lines, and we combined two projects in one day. One day in late summer I picked him up at his home in Bangor, and with a student worker, Fred Schwink, we drove to LaGrange and in to the lot which is about 3 miles from the center of town. Because of poor road conditions we could only get to a separate small lot about 1/2 mile from the camp. At that time this portion of the road was a rough corduroy winter road, some 4-wheel drive vehicles did get over it, but Harold and his guests had always parked their cars at this lot, which he owned and was part of his donation, and walked in from there. We loaded a chainsaw, gas and oil, and other tools and lunch into a wheelbarrow, and walked in to the camp. Our first job was to cut enough firewood for the
coming hunting season. A considerable stand of gray birch had filled in an old field about 100 yards behind the camp, and Harold said he would be happy to have some of that brought in for camp wood. Harold was well along in years at that time, and somewhat over weight, so I mentioned that Fred and I would cut the wood and bring it in the wheelbarrow to a small enclosure that was set up for wood storage. He was pleased with that, and said if we brought it in, he would be glad to stack it. With Fred cutting and limbing the trees and cutting them into stove lengths, I loaded up the wheelbarrow and pushed it down to the camp. We soon had that wood shed overflowing and Harold said they had never got the firewood in that fast before. He had always had some of his old cronies helping, and it made a big difference with two younger men working at it.

After eating our lunch, we started out to look at boundary lines. Actually, what he wanted to show me most were the two northerly corners, and the line between. This was a walk of about 3/4 of a mile, partly on a woods road, and partly along the eastern boundary line. The line was marked with paint of several different colors, apparently any paint that was available at the time, and not a straight line. I later concluded that Harold had been guided by blaze marks adjacent to the line which had been made by a logging crew boss or forester on the adjacent property, to keep the logging crew from cutting too close to the boundary. These blazes were not intended to be a straight line, only a guide to prevent cutting over a neighbor's line. Most of the Worthen property lines bulged out because of this tendency and in later years when surveying those lines, an attempt was made to straighten them by cutting into the bulges without cutting into the neighbor's property. Some bulges still exist, but neighboring owners at that time all accepted the lines as we reported them. The travel along the easterly line was slower and Harold was beginning to tire by the time we got to the northeast corner, which took us a while to locate. We found the northerly boundary line and by lining up the 2 lines we eventually found the corner post, which had fallen over in the brush. After setting it straight we progressed across the property to the northwest corner which Harold assured us was in a stream that crosses into and diagonally the whole length of the Worthen Forest, and is the head water of Birch Stream which runs into the Penobscot River. We found a post and set it up as near as we could to where the two lines met, and then started out on the south line to head back to the camp, and the trip home. By this time Harold was getting very tired, and would set down every chance he got. Fred kept running ahead checking the line and returning to tell us the best route to take. Harold and I finally got on to an old skid road, and Fred went on ahead to be sure we were on the shortest way to the camp. Our progress was quite slow and at times I was quite worried that Harold wouldn't be able to get to the camp on his own. After Fred had been gone about 15 minutes, we suddenly heard a chainsaw start up and run a few minutes, and we knew it was Fred who had got to the camp. It wasn't a long way off, so our hopes rose considerably, and about 20 minutes later we came in sight of the camp. It was nearly 5:00 p.m. and we had another hour ride to get Harold home to Bangor, and Fred back in time for supper in the Commons.

Fred had loaded up the wheelbarrow and was ready to go with it, but Harold was sitting on the edge of the porch, and not showing much interest in the 1/2 mile walk out to the truck. Fred quickly said he would carry our gear out to the truck and come back with the wheelbarrow for Harold. That didn't go over well with Harold at all, no way was he going to be carried out of there in a wheelbarrow. This apparently got his adrenaline going, and he got right up and started out on the walk to the truck. There was no dry place to sit on the road out to the pickup truck, so
he had to keep going, but the walk didn't seem so hard for him as the trip down through the woods, and we made it without incident. I got him home at about 6:00 p.m., and he seemed to be O.K., but even though he lived for several years after, I never knew or heard of him going back up to the camp, but he could have. I met with him several times on campus, and he gave several items from the camp to Al Nutting, which I brought down for Al. One item was a wooden 'moose sled', which after Nutting's death, Leone Nutting gave to me. It is stored in our garage in the year 2000.

The Worthen Forest was a valuable adjunct to the local Demeritt Forest, and the two were the basic University Forests that I managed during my term as Univ. of Maine Forest Superintendent. The only cutting done on the Worthen Forest while Harold Worthen owned it was for firewood for his camp, and a few cords of white birch which he had contracted to have harvested shortly after he bought the property. I think the logger only cut about three cords of white birch when Harold stopped the cutting. He was very dissatisfied with the job, the cutters were only taking the clear bottom portions of the trees which were good enough for veneer or boltwood, and leaving the rest in the woods. This was too much waste for Harold, and he never had any more wood harvested except the small amounts for the camp stove. Therefore, no timber was ever cut during the more than 25 years that Harold Worthen owned the property. During this period a large volume of timber had grown into merchantable size, or over mature, so there was an immediate need of some intensive silvicultural harvesting. The most obvious, and handiest, area to start in was immediately across the road from the camp, in the area where Worthen did not want the birch cut during his lifetime. Mixed with the birch was a heavy stand of merchantable fir which was ideal for a pulpwood harvest. In the fall of 1964 two students, Gilbert Levesque and one whose name I cannot remember, were interested in working together cutting pulpwood, and had their own cars for transportation, and agreed to work in the Worthen Forest. I assigned two areas for them to work in, with the stipulation that they only cut merchantable balsam fir.

With this arrangement, it wasn't necessary for me to mark the timber to be cut, and I didn't have to worry about future crop trees being cut unintentionally. One of these areas was directly across the road from the camp and contained the white birch that Harold Worthen did not want cut while he was alive, but was heavily stocked with mature balsam fir. It was an excellent cutting chance and when the young men saw it they couldn't wait to get at it. There was only one problem in that the fall rains had started, and it wasn't cold enough to freeze up the road to the lot. In fact the opposite was true that the rains had softened the road to make it impassable for autos. However, one Friday noon when they were through classes, we drove up to see the lots again, and finalize arrangements so they could get started that day, and continue over the weekend. All went well on the road into the Worthen Forest until about a mile from it I drove into an area of soft clay. The 2-wheel drive pickup that I was driving was unable to keep going and finally bogged down. We spent a good part of that afternoon jacking up the wheels and stuffing rocks and brush under them, and then pushing the truck forward until it reached firmer ground where we left it and walked into the cutting area. After making our plans for the harvest we walked back to the pickup and by driving through a field to get around the soft spot, we made the trip out without trouble.

I mentioned to the two students that they had better leave their vehicle in that field the next day,
and not try to go any further until it froze up some more. I found out the next week that the
owner of the car they rode out in thought he could make it all the way in by going around the soft
spot in the field and avoiding some other soft places that we had seen when we walked in the day
before. He was successful for a short way, but got stuck in another place he hadn't expected.
This time there was no way to get out without help from a tow truck. Meanwhile the other
student had started out walking with the thought that his partner would be walking right behind
him, and continued in and started cutting. The car owner walked three miles back to the center of
LaGrange to locate a tow truck to pull the car out. At Bishop's Garage, he hired someone to go
out and pull his car back on to firm ground. He was pretty unhappy with himself when he finally
got into the cutting area at noon by walking, as his partner had several hours before.

By several weeks later, the road had frozen enough for me to move the John Deere crawler
tractor to the Worthen Forest and smooth up some of the worst spots in the road, so that after
snow and a hard freeze came, we soon had a solid smooth road in as far as the camp, and access
for cars for workers, and trucks for hauling forest products. Beyond the entrance to the camp on
the left, and the stand of birch and balsam fir on the right, the road sloped down to a large
overgrown meadow with a stream which ran the full length of the Forest from north to south, and
crossed the road near the far side of the meadow. This stream is actually part of the headwater of
Birch Stream, which continues on through South LaGrange, and Argyle, into the Penobscot
River in Alton, just above Old Town. Once frozen, this section of road was fairly smooth, and
passable up on to the next higher ground.

On each of these elevations which are probably not higher than 10 feet above the level of the
meadow, there is an old cellar hole. These apparently date back to the late 1860's, after the Civil
War, when portions of land were set aside by the States and Federal Government, and given to
deserving families whose men had served in the Union Army during the Civil War. Two
families had settled there, each on a one-hundred-acre lot, which combined today form the major
part of the Worthen Forest. By checking the age of trees presently growing in the areas cleared
for farming by those settlers, it was determined that the area was abandoned by the end of World
War I, 1917 or 1918. It must have been a very hard life for those families, on very poor soil,
with a road not much more than a trail, impassable for even a horse and wagon during mud
season, and over three miles from the nearest village, yet these homesteads were occupied for
about 50 years.

In 1965 when our first operations were getting started, a bridge over the stream through the
meadow was quite dilapidated but used through the winter by filling it with snow and ice where
it had broken down. During the winter other loggers were working on Webber timber land
beyond the Worthen Forest, and used this same road for access and as a hauling road for their
production. When they were producing pulpwood and sawlogs, the company kept the road
plowed through the winter and maintained it well as a frozen, winter haul road, but nothing was
done to maintain a passable road in the summer. For me and my student University crew to
carry on our work of surveying and marking lines, and marking timber for harvest, we needed a
passable road all year. This meant fixing and replacing culverts and this bridge, as well as
adding gravel to about 1/2 mile of corduroy road across the boggy area before reaching the
camp. This section of road also had another problem, with roadside alders and gray birch
overhanging the road so heavily, that in some stretches a vehicle driving through was pushing
apart their branches. To eliminate these trees, I decided to cut them and lay them out, branches and all, on top of the present corduroy to add another layer, and then spread gravel over all of it. In some places there were already three layers of log corduroy and maybe more, where each succeeding one had sunk into the mire, and another added for a top layer. Very little, if any, gravel had ever been put over these corduroy logs, only moss and muck from the surrounding area to partially cover and hold these logs in place. With the limited funds available I hoped to cover all of this layer of brush and tree stems that my crew and I had spread over the worst sections of roadway as additional corduroy.

I contacted Owen Folsom, who had a sand and gravel business in Stillwater, and had hauled some that I had ordered for University Forest roads over several years. Since his gravel pit was in Alton, almost halfway to LaGrange, he agreed to haul gravel to the Worthen Forest road for the same price. When we were ready with all the overhanging brush and trees cut and spread over the old corduroy, in the late summer of 1967, Folsom's trucks started hauling gravel. Two or three trucks came at intervals as they were loaded at the pit, and each one backed in as far as he could go, and dumped and partially spread his load over the brush. This worked out real fine as between loads I could spread and grade each load with the John Deere bulldozer. Occasionally a truck would back too far, and sink into the muck. It was no problem because I could use the load he just dumped as a base for the dozer, and push the truck up on to firm footing, where the driver could go on his own. My crew had also installed several wooden box culverts to let some pools of water drain through the road. These culverts, which I had used in several places in the University Forest, were made of 2 or 3-inch hemlock plank which I had sawn out with our Forest mill. These made a square box, 12 to 16 feet long, and about 8 by 10 inches inside. These culverts were covered with 1 foot or more of gravel, and would support all the traffic we had on these forest roads at that time, and yet keep these pools drained enough to prevent washouts from water over the road. In a few days the brush was all covered with a good layer of gravel, and a few more loads were added until the budgeted amount of money ran out.

Then I turned my attention to rebuilding the bridge across the Birch Stream tributary. At the spot where the old bridge had been, the stream was partially filled with the debris used in the winter time to cross it, and partially blocked above with brush and other debris that had floated or washed down during high water in the spring and summer. At this time, in late summer before the fall rains, the stream water was very low, so with a couple of my summer crew working with me, we pulled as much of this debris out of the stream as we could by hand, and then I drove the John Deere dozer into the stream bed above the road and bulldozed down through the cut in the road where the bridge was to be built. This cleaned out all the remaining debris and surplus mud that had accumulated in that area. I paid special attention to widening the cut at the bridge location to make room to lay in a couple of logs on either side as abutments for the bridge timbers. While I was doing this, my crew cut and limbed a hemlock tree for use as these abutments. The butt end of this tree was cut into the lengths that were needed for the abutments, about 12 feet or so, and even though the prime time for bark peeling had gone by, we were able to peel most of the bark off of it. Then, with the tractor, we hauled them to the bridge site. The two large logs were rolled into the stream bed and one rolled into the cut in the bank on each side. This involved quite a lot of hand work with shovels and peaveys to imbed them securely into each bank with 6 or 7 feet of stream width between them.
Once these abutment logs were secure, we went about cutting several pole size spruce trees to get eight bridge timbers to span the stream width. I used hemlock for the abutments where they had to withstand the water and abrasion of sand and debris, and spruce for the bridge timbers which would be relatively dry, and strong and resilient to stand heavy loads. If tamarack had been handy, I would have used that for the abutments, it is one of the most durable woods in this area. The spruce trees were cut into 12 foot lengths, with each one at least 7 or 8 inches in diameter. These were peeled as best we could, and then hauled to the bridge site. Each one was laid into place with much smoothing and notching of both the base log and the bridge timbers. Our aim was to have the upper surfaces of the bridge timbers as level as possible to lay the bridge planking on. This was not an easy project, but with modern chain saws it wasn't too difficult to smooth off knots and bumps, and cut shallow notches to set the timbers into. These timbers were set with two together 8 feet apart to line up with the wheel tracks on this one lane road, and the others were laid with one at either edge, and the others in between. When finished laying these bridge stringers, as they are called, across the stream from one abutment to the other, we had a surface area to be covered with planking about 12 feet square, or sometimes only 10 feet square, depending on the road. Since the approach to this bridge is down a slight grade with a slight curve, I planned on a 12-foot width and about a 10-foot span across the stream. Both ends of the 12 foot stringers would be buried in gravel when the final grading was completed, and would be part of the approach, so only about 10 feet of the span across the bridge would need planking. After these initial bridge planks were laid in place and spiked down, we also laid planks across the bridge in each wheel track as running planks about 30 inches wide, for each set of wheels for log trucks and other vehicles. These running planks protected the base planks from wear, and also added strength and stability to the whole structure.

My original plan for management of the Worthen Forest was to selectively cut over about 25 acres each year so as to cover the whole 250-acre forest in 10 years. Along with this work, I also planned to continue all cutting in the Demeritt Forest involved with silvicultural classes and research projects. All of this to be done with paid student labor, and some class work. In 1966 when the Worthen Forest was getting developed and a management plan developed (which was entirely in my head), our logging equipment was very basic and limited. The John Deere crawler tractor was our base, with a trailing log arch operating from the winch on the tractor to skid logs from the forest to a landing for pickup by a truck, and a homemade scoot (sled) and later a trailer to yard 4-foot pulpwood, all loaded and unloaded by hand. In the late 60's I acquired a commercial trailer with a hydraulic loader attached, to handle some logs and all pulpwood mechanically. This was a tremendous asset, especially when working alone, as I often did for one half of each day because most of my student workers only had half days available for work in the forest. Often when working in Lagrange in the Worthen Forest, I would drive up alone at 7:30 in the morning, work until about 11:30, drive home to Orono, eat a quick lunch, pick up one or more students who didn't have transportation, and drive back to Lagrange to work the afternoon. Usually other workers would drive up in their own cars, especially those who were doing piece work cutting and brought their chainsaws and other equipment for cutting timber.

When a logging project developed in the Demeritt Forest (about once or twice a month), the John Deere and other logging equipment had to be transported back to Old Town for use there, and then returned to Lagrange as needed. The first several years of harvesting and road and bridge construction and maintenance, this movement was done on a 1973 International stake body truck
which I was able to buy and rehabilitate earlier for use to haul the John Deere and logging arch to Forestry Summer Camp in Princeton each summer. This equipment was also the Camp's base for timber harvesting along with a welcome assortment of chainsaws and other equipment on loan from various dealers.

To continue with my harvesting plan of the Worthen Forest, required continued maintenance and development of a road system through the entire area, with another bridge on a road that winds back across the same Birch Stream tributary as the first bridge. Over a period of nearly 15 years of continuous winter harvests, it was not possible to completely cover the entire 250 acres as planned. Within the first two years it was obvious to me that we would not cover the whole area in 10 years as planned. Several reasons were obvious. With limited equipment trying to keep operations going on separate forests over 20 miles apart, with part time labor, many who were inexperienced, and not least of all, a high volume of timber needing to be removed from the Worthen Forest, it was not possible for my crews to cover the 25 acres during their available time in the college year. My time was occupied almost exclusively with yarding timber, and road and bridge maintenance. On very stormy days, especially rainy, I would try to catch up on office work, payrolls, timber scale, trucking, etc. Much of this was done at home in the evening to keep up to date. From 1966 to 1973 was a very busy and productive period, with timber being harvested from both the Demeritt and Worthen Forests. In 1973, before my 10 year plan was completed, the economy changed, and the price of gas and oil increased dramatically, which cut down on making extra daily trips to Lagrange, and also a need to concentrate more in the Demeritt Forest, reduced our harvest considerably. For all of the above reasons, plus routine breakdowns and mishaps, and some periods of extreme weather, my original plan to cover the Worthen Forest with a sound silvicultural treatment was not accomplished even in the sixteen years to my retirement in 1983. Never the less, it was an enjoyable and educational time for me and many of my student workers.

As anyone who has worked harvesting timber in the north woods can recite, there would be daily events similar to some in the past, but never exactly the same. They could run the gamut from being humorous, awesome, disgusting, painful, and frustrating, and expensive. Winter weather had a lot to do with all of these situations, although snow and cold temperatures were also of great help in harvesting wet and rocky areas. Many forest roads that were completely impassable in the summer time due to deep ruts, rocks and stumps, were changed into smooth, solid highways in the winter with a pack of snow and ice graded off with a bulldozer or skidder blade. Sometimes these snow packed roads lasted longer into the spring mud season than one made of natural earth smoothed out and graded. A spring rain would soften the earth surface and create muddy conditions while the hard packed snow, (which was mostly ice), would be wet and melt slightly, but then often freeze up again on a cold night. This factor could often extend the harvesting period in rough or wet country several weeks before spring breakup.

The Worthen Forest road system was all made up of old wagon roads or skid trails that had been widened and graded as mechanized equipment became more commonly used in the harvesting of timber. These roads all needed to be smoothed and graded each winter with any snow and soil that was available at the start of the winter harvest. Since I depended primarily on a student work crew, I planned most of the harvesting projects to start in September, after the University students had returned to start the fall semester. Summer crews were nearly all on work study
programs, who took jobs where money was available. I tried to give preference to forestry or wildlife majors, but often, to make up a summer crew, it was necessary to hire students from other majors. Most of these had farm or country backgrounds with some woods experience, even if only in camping out, so they had knowledge of hand tools and physical labor. Some were actually better forest labor than many first year forestry majors. Some of the summer work conditions were unpleasant, and occasionally a student worker would quit, and look for other work on campus, when black fly time started and we were clearing and repainting plot and boundary lines, some in swampy areas. Those that stuck it out learned first-hand a little about Forestry because during the summers we worked on a variety of projects including cruising and tallying plots, marking timber for harvest, cutting, splitting and marketing firewood, and work in the University sawmill, plus maintenance of the buildings and grounds, and equipment.

One on-going project, along with property lines, was to clear out and repaint lines and replace missing corner posts on the several hundred 10-acre grid plots covering the entire University Forest complex. This grid system was initiated by Dr. Ralph Griffin in the late 1950's to aid him in his silvics and silviculture field labs, and also to narrow our inventories and harvest records down to specific 10 acre areas. Maintenance of the lines and corner posts of this grid layout was an extra chore for me and my crew, but it did simplify my record keeping and assisted in assigning cutting areas to the harvesting crews. Marking timber, which is the term used for designating trees to be harvested, or occasionally to save, is usually putting a paint spot or a blaze on each tree to be cut. This mark is placed, and diameter taken at 4 1/2 feet above the ground, at approximately breast height, or DBH in Forester's terms. All timber harvested during my administration was marked with a paint spot at DBH. Also on a commercial operation, a spot is also put on the stump portion of each marked tree to insure that only the desired trees were cut. This lower mark would be visible after the tree was harvested.

With my student crews I seldom marked the stump. They were all conscientious workers, and I trusted them to do the work as required. Occasionally an unmarked tree would get cut in error, but as near as I could tell, they were all reported to me as soon as possible, so I could add that tree to my tally. I never had an occasion where one of my student cutters cut a medium to large size unmarked tree, just to get the added volume in their harvest tally. They were all interested, dedicated, cooperating, and honest in their relations to the University Forest and to me. It was a pleasure and an education for me to work with such a great group of several hundred young people who worked with me over the 37 years of my service to the University of Maine.

Beginning in the mid 1960's, there were some incidents of theft and vandalism in both the Demeritt Forest, and in the Worthen Forest. None of these incidents was ever traced or blamed on University students. Breaking and entering a small work shop in the Forest, and theft of small tools and lumber to build a camp, was traced to local youngsters. Theft of firewood was by older locals during a period of high fuel oil prices, fairly common throughout the area during the 1970's and 80's. The Demeritt Forest suffered several cable gates cut and broken, and some attempts to circumvent the gates by driving 4-wheel drive vehicles around them and across deep ditches. One attempt to cross a ditch resulted in the whole load of stolen hardwood being deposited in the ditch to facilitate getting the bogged down vehicle out and away before being discovered. He never tried it again, hopefully he learned a lesson. One incident of pure vandalism was to the John Deere crawler tractor which was parked for the night at a harvesting
site in the Demeritt Forest. The leather seat was slashed, handfuls of dirt and debris were stuffed into the fuel tank and radiator, lights were broken, and hydraulic hoses were cut. A very expensive, disgusting and frustrating event, to remove the machine from the forest to a shop for replacement and repair of parts. During this same time, similar events were occurring in the Worthen Forest in LaGrange, although none of these were pure vandalism. They were all outright thefts, and could not be justified legally or morally, but I did understand the reasoning behind them.

In the early 1970's, with the increase in heating fuel and gasoline prices, use and prices of wood burning stoves and firewood increased drastically also. These increased costs created a rash of firewood thefts quite widespread throughout Maine and northern New England. With the road and bridge improvements we had made for our own access to the Worthen Forest, we also created excellent access for anyone to the same areas. I soon learned that we needed to remove all hardwood firewood from the area as soon as it was yarded, or it wouldn't be there the next morning. At this same time, Worthen's hunting camp which our forest crews also used, was broken into and an old, but excellent heating stove was stolen. To have heat in the camp when in use, a sheet metal stove was installed which wasn't of enough value for heating or resale to warrant another break-in. One Christmas and New Year break period, four forestry students, Chuck Gadzik, Paul Cushman, and two of their buddies stayed in the camp for about three weeks while cutting timber to earn cash for the coming year. This was a cold, snowy period in the early 1970's, and to heat the camp comfortably, Chuck brought an efficient cast iron heating stove from his family home. Several nights during that period had temperatures down to 20 below zero, and that stove, often glowing red hot, heated that camp and melted snow on the roof which created massive icicles all along the eaves. as the melt ran down. This was an interesting and unique sight to see when I arrived there each morning, but I knew they were keeping warm overnight.

Another problem created by improvement of the access roads, was the construction of the second bridge across Birch Stream. This bridge opened up a whole new area of hardwood growth, including a stand of white birch. Noticing fresh pickup truck tracks crossing the bridge and beyond, I first assumed it was probably someone hunting who was driving up in there. One day I got curious and drove up the road myself. I was shocked when I got to the white birch stand to see several tops of some of the larger trees laying close to the logging road. I could instantly see that someone had cut some of the higher quality birch, and taken only the lower clear part of the trunk, which he could sell as veneer or bolt wood, either of which was bringing high prices at the time, and still is, for that matter. All I could do was harvest the remainder of these trees for pulpwood or firewood, and then on the way out, drop a large tree, which would be salvaged later, across the road to block further access. Another sign of the times, sale of stolen property for cash.

The increase in use of firewood during the early 1970's, due to the high price of heating oil, created still another problem for equipment owners who had to leave their hydraulic machinery outside overnight and weekends. This was theft of hydraulic pistons and hoses for use in the construction of homemade wood splitters. Many people who previously had been only partially heating their homes with wood, and splitting it by hand, started using 8 to 10 or more cords of firewood to heat their entire house, and decided they needed a power wood splitter to do the job.
Most Maine natives, especially country folks, are quite handy with tools and can usually concoct a devise to do a certain job, often from junk material around their place. One item they might not have had during those years was a hydraulic piston along with hoses and connections. Many had worked with hydraulic equipment and knew the power in the pistons, so it seemed like a logical place to get one was from one of these numerous machines parked around the countryside. Our University Forest equipment was no different than many others, and especially when parked for the weekend in the relatively isolated Worthen Forest in LaGrange, was quite vulnerable to theft, even if an attempt was made to camouflage it out of sight of the traveled roads. In spite of our success at hiding it for several weeks, one Monday morning when I went to start up our Gafner hydraulic loader, I discovered the main boom piston and two long hoses with connectors, missing, as well as the battery from the John Deere. This guy wasn't just going to make a wood splitter, he planned a self-starter for it too. This theft not only cost my budget several hundred dollars, but also a full day of lost production acquiring and installing replacement parts. On any job, these losses are not easily accepted or compensated for, but in some ways were less aggravating, and sometimes less expensive than outright vandalism, which was done with no apparent reason.

Several such acts of vandalism occurred to buildings and equipment in the University Forest, but perhaps the most expensive and aggravating one was on the John Deere crawler tractor while parked in the Demeritt Forest. I found it one morning with all the seat upholstery slashed beyond any repair, every tank, radiator, fuel, hydraulic oil, and other openings stuffed with sand, dirt, leaves and other debris, spark plugs broken and wires ripped off and discarded into the forest, and many scratches and dents from rocks thrown against it. All broken parts and most tanks had to be replaced, but not until special equipment was brought in to move the tractor to a garage where it could be worked on. A very expensive and frustrating experience all done for no apparent reason. These are some of the many problems facing every contractor and equipment owner who depends on these machines for his or her livelihood, and even though the University Forest has been able to survive these acts of theft and vandalism, they caused many anxious moments and unneeded expense of money and lost production.

However, in spite of these several acts of theft and vandalism, and a rare but occasional accident, none of which were life threatening, my job as University of Maine Forest Superintendent was for me, a very rewarding and enjoyable livelihood. The University Forest became my life and I thought of it as though it was my own. Along with the several hundred students who worked and studied with me in the Forest, and I got to know as friends, we molded the land and trees into a productive forest of high quality timber, as well as a laboratory for scientific studies and a natural area for professors to teach their subject matter in actual conditions. The great variety of soil and water conditions, timber and other woody plants, and animal species living in the area provided an excellent field laboratory for the extended teaching, from the class room to actual conditions, for forest and wildlife management courses. The University Forest has become a valuable asset to the College of Forestry, Natural Sciences, and Agriculture, and I am pleased and proud to have had a part in developing and providing it.

THE END
Epilogue

Details of the condition, observations and development of the University of Maine Forest are given in Maine Agricultural Experiment Station Bulletin 682, entitled "An Historical Review of the University of Maine Forest" by Roger F. Taylor, June 1985.

* * *

My first involvement with Hot Shot Crews was after the disastrous 1947 fires. After a number of years as Ranger on several National Forests in the West, Arthur G. Randell came the University of Maine as Professor of Forestry in 1946. He had extensive experience with forest fire suppression during his years on National Forests and was the logical choice for a leader, when a request came in to the University for additional manpower to help fight fire that was raging on Mount Desert Island in the fall of 1947. Male students came forward to volunteer in such large numbers that many classes were cancelled until the fires were under control and these students were released from duty to go back to their studies.

Professor Randell’s experience firefighting with inexperienced crews prompted him to set about organizing a Hot Shot Crew made up of University students. A program of training was set up with definite goals of expertise required for the several different aspects of a fire suppression operation. Everyone got training in the overall operation of fighting a forest fire, but also each individual concentrated in some aspect of the job that particularly interested him (they were all male students at that time). These positions ranged from time keeper, camp boss, line boss, pumper operator, nozzle operators, scout, to ax, saw, and shovel men. At the end of eight weekends of field training, plus several hours of lecture, each crew member demonstrated his specialty and if approved, was granted a certificate designating this fact. Each spring, at a formal presentation, often by the Maine State Forest Commissioner, a card stating that the holder was certified for a specific expertise with a Hot Shot Crew, was made to each approved crew member. When called upon to assist at a forest fire, whether as a crew member or individually, by presenting this card he would be placed where his expertise and knowledge was most valuable. Many University of Maine forestry students worked in summer jobs on National Forests in the West and received high praise for their ability and dedication due to this training as Hot Shot Crew members during the 1950’s and 1960’s.

* * *

Roger died on March 5, 2008. He was a registered Land Surveyor, a licensed Professional Forester and a member of the Society of American Foresters attending many of their annual Nation Meetings. He was a member of the Orono and Old town Kiwanis Club and the Orono Health Association maintaining and distributing their health aids. He was on the Orono Tree board, and a participant at Leonard Mills events.

During his tenure at University of Maine, he received a number of honors from both faculty and students. These included dedication of several Year Books in his name, receipt of a Distinguished Professor Award from the College of Forest Resources, and several citations for his assistance to the U. of M. Woodsmen’s Team, and other campus organizations. He was an
honorary member of Xi Sigma Pi, the forestry honor society. He has a building on campus named after him. It’s called Taylor Hall and is the home of the Woodsmen’s Team training facility.
Movin’

Witten by Don S. Lacroix
Amherst, Mass. High School General Science Teacher
After completion of a summer job, 1940

After eight weeks of intensive study and observation (sweat and aching back), a so-called “softie” has unearthed some facts which the laity and hoi polloi never dreamed were necessary for success in the business of moving, crating and storing furniture.

The next time a big van backs up to your apartment just as you prepare to beat the landlord and the sheriff, bear in mind the following characteristics of your moving man. He must have a strong back and (contrary to wide-spread misinformation), a strong mind; the ability to steer long, heavy divans up narrow, crooked stairs without gouging the wallpaper or scratching expensive mahogany banisters; ingenuity enough to transport ten-ton bank vaults, or a priceless china cup, without dropping or marring either; the tact to ignore five years accumulation of dust under a refrigerator; the willpower to resist temptation when loose change is found folded back in the top of a baby buggy, or a diamond ring rolls out from under the cushion of an overstuffed chair; the fortitude to withstand summer’s heat and winter’s cold (this is written at 42 20’ N. latitude); the vitality to load and unload furniture all day and, and drive long miles all night; the ability to pack Aunt Hepziba’s heirlooms under her supervision, or Uncle Bim’s choice liquors, while he samples every other bottle; the education necessary to answer questions of all small boys and sidewalk superintendents who stand by to supervise, gossip, or just plain ask; the training of a veterinarian to care for all household pets that must be stowed somewhere (usually in the helper’s lap, after the van is loaded clear out beyond the fondest expectation of any tail-board (end gate to mid-westerners); the sagacity of a Philadelphia lawyer and the patience of Job when it comes to figuring out Army and Navy crating and moving regulations, to say nothing of understanding the multifarious pronouncements of the various government agencies, gas, tires, taxes, --oh, migosh!; the eye of an engineer and physicist to estimate within one pound the weight of furnishings in an eight room house, cellar and attic after-thought included; the mechanical efficiency necessary to change (in seven minutes), the inside tire of a set of duals which blows out at night during a heavy cloud-burst; a sense of humor which will take care of the situation when upon arrival after a 700-mile run, no one is in the apartment, no key can be found, and the neighbors are all away; the naïve evasiveness of a 12-year old school boy when it comes to explaining the disappearance of grandma’s mattress when her things were brought out of storage after six years, or how moths have cozily taken over a professor’s $1200 oriental rug while he was away on sabbatical; the “funny-bone” slant to be able to smile when the bride decides that the grand piano just brought in through a window would look better if put in the other room; the x-ray brain of a mind reader as crotchety sister Sue wonders if the 300 pound box of books shouldn’t be taken up attic, or no, in the study, well no, over in Junior’s room, or better yet in the basement, (by that time you and the guy on the other end of the box are ready for the ambulance); a stomach chemically constituted to handle (along with sandwiches, coffee, and doughnuts) a modicum of naphthalene flakes, paradichlorobenzene crystals, camphor, and other so-called moth repellants; the “lazy bones” ability to sleep on a board, floor, folding cot, bench,
or behind the steering wheel at any time when not loading, unloading, or driving; the American
tenacity to stick to it long enough to make a dollar; the poise to remove a mattress single-handed
and carry it down three flights without being thrown for a 10 yard loss; the physiological
immunity to lock-jaw, blood poisoning, and sudden death when a 400 pound stove falls from
grasp, or a rusty nail pushes it’s way beneath the hide, or a half inch sliver leaves the floor to rest
under a finger nail.

Here, folks, are listed a few of the anatomical strata and substrata of the man who picks up your
furniture in the old house, and lays it down at the new residence.

**Note:** Dan Lacroix was my general science teacher at Amherst High School. He spent this
summer working for the same moving company I had worked for. He explained it well.

~ Roger
UNIVERSITY OF MAINE FOREST STUDENT EMPLOYEES
EMPLOYED DURING TERM OF ROGOR F. TAYLOR AS SUPERINTENDENT
FROM 1946 TO 1983

Listed by Approximate Date of Employment

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<td>George Bourassa</td>
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<td>Win Hibbard</td>
<td>Bill Donnell</td>
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<td>Elmer Orcutt</td>
<td>Bob Haight</td>
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1982-1983

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184
PHOTOS
ROGER'S NEIGHBORHOOD in AMHERST, MASS.
Farm House in Amherst

1930’s

Timber Salvage After 1938 Hurricane

July 15, 1939
Roger and Mary’s Wedding

October 12, 1940

1939 Chevy Beach Wagon

1947
Pond Street House

After Garage and Back Porch was Completed

About 1954
Roger - 1952
Demonstration of Tree Planter

1950’s
Loading Logs with A-Frame and Student Workers

1950’s
Seedbeds in State Tree Nursery at Stillwater Annex

November 1956
Park Street House showing New Garage and Breezeway
Roger F. Taylor Hall - UMO Campus
Roger and Mary at Retirement Party

April 30, 1983