

BOB FRANK'S RECOLLECTIONS MADE ON THE OCCASION OF THE PENOBSCOT EXPERIMENTAL FOREST'S 60TH ANNIVERSARY

Robert M. Frank, Jr., and Laura S. Kenefic

Abstract.—Robert M. (Bob) Frank, Jr., spent his career with the U.S. Forest Service and oversaw the long-term silvicultural research on the Penobscot Experimental Forest in Maine for nearly 30 years. His reflections here span more than four decades, from his first days with the Forest Service until his retirement in 1996. He touches upon the agency's relations with members of the forest industry and the public, changes in the agency's culture and funding over time, and his role in establishing and sustaining long-term studies that continue to this day.

INTRODUCTION

Robert M. (Bob) Frank, Jr., (Fig. 1) began his career with the U.S. Department of Agriculture, Forest Service as a permanent employee in 1957 on a Forest Survey (now Forest Inventory and Analysis) crew at Shin Pond, Maine. He later worked in the Anthracite

Region of Pennsylvania before being transferred to the research office in Orono, Maine. Frank was a research forester (silviculturist) at the Penobscot Experimental Forest (PEF) from 1963 until his retirement in 1996. He had primary responsibility for the Forest Service's long-term silvicultural experiments on the PEF from the late 1960s until the end of his career.



Figure 1.—Research forester Robert M. (Bob) Frank, Jr., in his U.S. Forest Service office in Orono, Maine (1993). Photo by U.S. Forest Service.

The following text represents the highlights of a 2-hour conversation Frank had with Laura Kenefic on February 15, 2011. This conversation took the form of an interview in which Frank answered questions posed by Kenefic and John Brissette about his career. The text was transcribed by Matsuye Mairs, excerpted and edited by Kenefic, and reviewed and revised by Frank. Frank's perspective is important not only because of his long tenure at the PEF, but because he is credited with sustaining the long-term research through years of waning organizational interest and investment. Frank is regarded by many of his peers as largely responsible for the existence of the more than 60-year-old Forest Service silvicultural study on the PEF today. He received the David M. Smith Award in Silviculture from the New England Society of American Foresters in 2012 in honor of his contributions to his profession.

EARLY INFLUENCES

I was always interested in wood, even in grammar school and high school. I lived in Newark, New Jersey. There were not many trees in Newark. My uncle had a camp in northern New Jersey and we would go there quite frequently. I just fell in love with being away from the Ironbound section of Newark. When I was 10 years old, in 1942, I saw a movie called "The Forest Rangers," starring Rod Cameron, Susan Hayward, and Fred MacMurray. It was about a forest fire and had some Hollywood romance. I said "Boy, it would be great to be a forest ranger!" I was only 10 years old, and that was the start of it. Fortunately, the pieces came together and I am where I am today.

START OF CAREER WITH THE FOREST SERVICE

My first job with the U.S. Forest Service was in 1953 in the state of Washington on the Gifford Pinchot National Forest, at the Randle Ranger District. Back in the 1950s and 1960s, it was highly recommended by the deans and directors of forestry schools that students spend one summer with the Forest Service. A lot of Forest Service jobs were available back then.

In my training it was suggested that we get experience in different timber types. Coming from Penn State in central Pennsylvania, it was nice going out west and seeing the different ecosystems there. I was hired as a fire guard, but 1953 was not a season of fire threats. I spent most of my time hammering wooden shakes on warehouse building roofs. But I got to know some Forest Service personnel and we remained friends for a long time. I just felt comfortable perhaps pursuing a Forest Service job.

When I finished my Master's degree I moved to Boston to sell wholesale lumber. After a few months, I said to myself, "What am I doing in downtown Boston with over 6 years of education in forestry?" So I wrote to my advisor at Penn State. I told him I wasn't happy, and asked if there was anything else he might suggest. He sent me a list of six possibilities around the country. That was in 1957 and there were a lot of jobs for foresters back then. I saw one possibility: a temporary job in northern Maine on Forest Inventory, called Forest Survey back then. So I applied for it and was granted that position.

That was the start of what led to my permanent Forest Service career. I reported for work at Shin Pond, Maine—population 16—on June 17, 1957. Research folks had a good policy at that time; Station Director Ralph Marquis thought it wise for budding researchers to get their feet wet by spending some time on Forest Inventory. Many of us came from suburban or city environments and this got us out in the woods. I would still recommend that this be done today, but of course things have changed. I stayed with Inventory for almost 4 years.

A vacancy occurred in Maine where a temporary office was established in what became the Orono Unit. I was ready to move to Maine when another chance came up. A pastor in Mount Carmel, Pennsylvania, was upset about strip mining in the anthracite coal fields of Pennsylvania. He had contacted a Congressional person, who contacted the Chief of the Forest Service, and—to make a long story short—the Station was

asked to conduct a survey of the lands disturbed by strip mining and coal processing plants throughout the entire anthracite area. This was before remote sensing, in the early 1960s. They asked me if I would be interested in doing this project, which would take a year or two. I asked, “Well, what about the offer to go to Maine?” The Director shook my hand and said, “It’s a deal. When you finish this job, we’ll ship you to Maine.” Without any written documentation or bureaucratic bumbling, the Director arranged that I should go to Maine.

After I completed my assignment in Pennsylvania, I reported to duty in Maine on April Fools’ Day in 1963. As I remember, the temporary office was on the third floor of the library on campus at the University of Maine in Orono. The building which would contain the USDA office was being constructed at that time. I remember visiting there during February of that year to see the new building. I asked the foreman to let me walk the steel girders, and he showed me where my room was going to be. That was kind of neat.

We only stayed a short time in the library and then the building was ready to be occupied. We moved to our new building sometime in the spring of 1963. We stayed in the USDA building until near the end of my career, when the university needed the space and we were asked to vacate. We moved to a new building off campus, on Godfrey Drive in Orono.

FIRST IMPRESSIONS OF THE PEF

The roads on the Experimental Forest were narrower than they are now, and we did not have the signage that we later developed. I had some experience with the timber type because I spent the better part of two growing seasons in northern Maine. One of the big differences was the amount of hemlock we had in our stands here on the Experimental Forest. Also, there was less spruce than you would see in the so-called spruce-fir part of Maine. We had more hardwoods in some of our sites. They were managed even at that point in time; they were eliminating red maple, as I recall. The plantation of pine was very young; it was

planted in the late 1950s. Also, the pine trees at the museum¹ site are certainly a lot bigger now than they were 50 years ago.

FRANK’S ROLE AT THE PEF

I was told before I left Upper Darby [Pennsylvania] that the main reason I would be going to Maine was to address the problems of spruce-fir regeneration in the Compartment Study². The Station wanted to establish a system of inventory for regeneration. Regeneration was not being studied on the Experimental Forest. That was a top-down decision from Station headquarters, but you have to remember, the Station was much smaller then.

So that was my first job: to establish a measurement system for very small trees [Fig. 2]. Up to that point, very little was known about the effect of the various treatments on regeneration. We researched the measurement problem and had statisticians help us and suggest what we should do. The methodology of putting in the plots, we actually got that from reviewing the literature. We developed a system that I guess to some degree is still in operation. You really get to know the different areas on the Experimental Forest when you get on your hands and knees and spend many, many hours looking at regeneration.

I want to mention Orman Carroll [Fig. 3], who was our first technician. Orman was in the logging crew that helped establish our long-term study, which started in 1952. But somewhere near the end—it took several years to install the study; I believe until 1957—they asked Orman if he would be willing to become an employee of the Forest Service. This happened before I was stationed in Maine. The Forest Service wanted him to take over from the logging crews, because they knew there were going to be periodic reentries.

¹ Maine Forest and Logging Museum at Leonard’s Mills.

² The long-term, large-scale silvicultural experiment on the PEF, consisting of even- and uneven-aged silvicultural treatments and exploitative cuttings, replicated at the stand level.

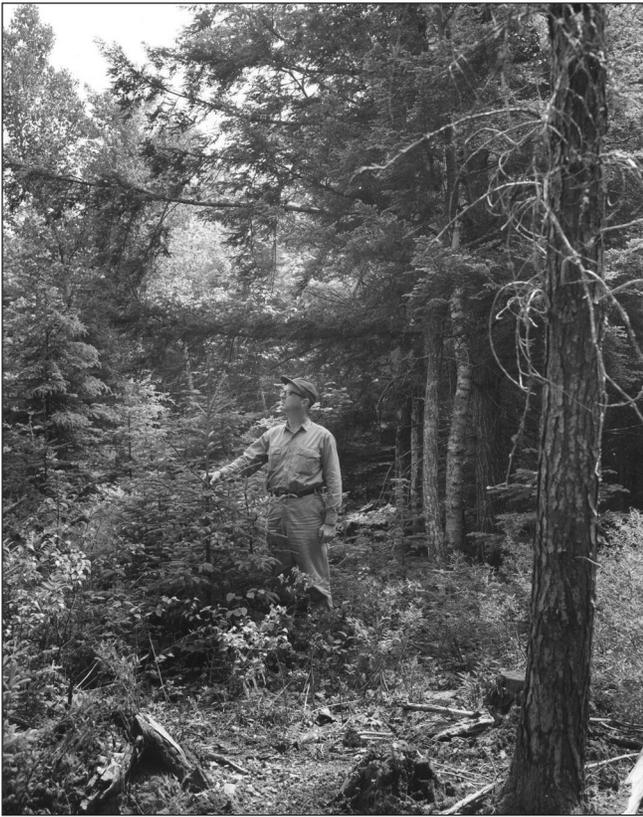


Figure 2.—Bob Frank inspecting red spruce sapling growth on the Penobscot Experimental Forest (ca. 1965). Photo by U.S. Forest Service.

Orman accepted and stayed with us until 1979, when he retired. But he was a Cracker Jack technician. He was a hands-on person and could repair equipment. He knew his trees, he knew how to get around in the woods, and he was dedicated. Hours did not mean anything to him; rain did not mean anything to him. He was just the all-around technician that an experimental forest needs. And a great guy to work with, too.

Arthur Hart [Fig. 4] was Project Leader; he had taken over from Frank Longwood about that time. Arthur Hart was a marvelous person. He not only became my advisor, but he was my friend and, most of all, my mentor. Unfortunately, he became ill with cancer early in 1968 and passed away in 1969. That changed things on the Experimental Forest. I was still relatively new. Much of the responsibility fell on me to continue many PEF activities. The Compartment Study was a large study. There were 28 compartments at the time.

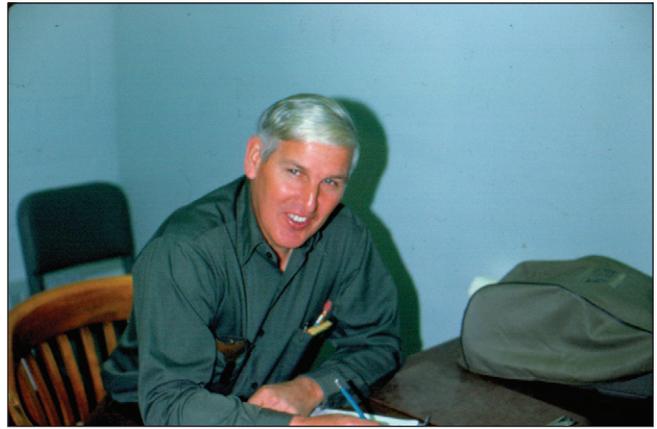


Figure 3.—Penobscot Experimental Forest technician Orman Carroll (1976). Photo by U.S. Forest Service.

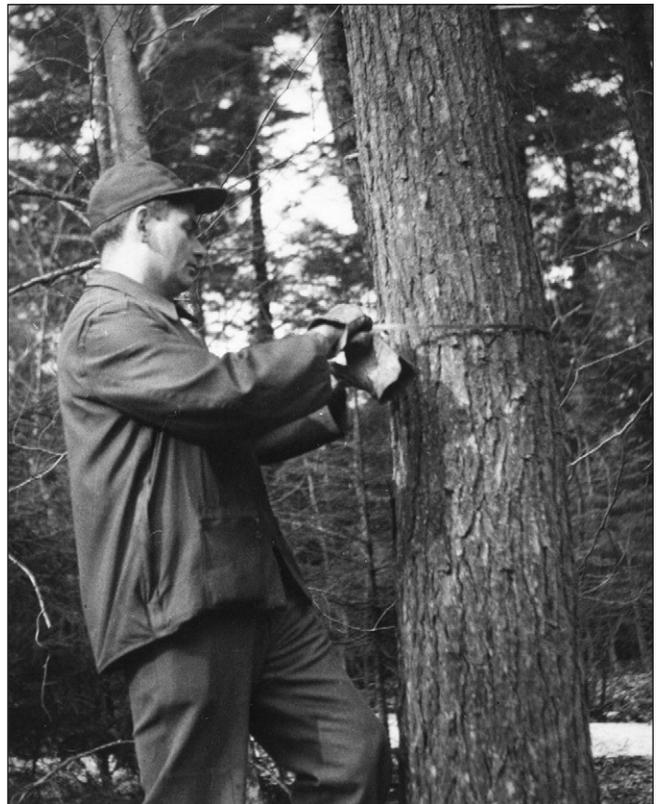


Figure 4.—Arthur Hart measuring tree diameter on the Penobscot Experimental Forest (ca. 1960). Photo by U.S. Forest Service.

THE PEF OPERATING COMMITTEE

The PEF Operating Committee was a small group of industry people—representatives of the landowners—that kept tabs on what we were doing. They were there when we needed help from them. What was nice about that was we always had a little cash from the sale of timber from our experiments. This money was used for research, mainly to hire students for the summer when our Forest Service budgets wouldn't allow for it. At that time there was a lot of comradeship amongst the forestry fraternity and that does not exist as strongly today. It was a time when we had the great companies that no longer exist. These were the folks that wanted the Forest Service to establish a research unit in Maine. It happened and we should be thankful that it is still progressing after 60 years.

MEETING THE NEEDS OF FOREST INDUSTRY

Of course the long-term experiment—the Compartment Study—did not occupy all my time. In the late 1960s forest industry was facing a labor shortage. It was difficult to get people to work in the woods. When I started at the PEF, some of the logging was done with horses. At the same time that we had horse logging, we would occasionally get operators who had “jitterbugs” or small cleat tractors. I remember in early 1969, one of the last operations that Mr. Hart was involved with, we had our first skidder come on site. He was apprehensive and said, “My gosh, this might be the end of some of our regeneration.” Well, that proved not to be the case, because we could detect very little difference between operations done with horses, jitterbugs, or small skidders. There was a need for some other means of getting trees from the stump to roadside, and mechanization came into play.

Clearcutting was drawing the attention of some segments of society at that time, and generating controversy. Many clearcuts were commercial clearcuts, even on company lands—by no means true clearcuts. There was little market for low-grade

hardwoods and the smaller softwoods, so they were left on site. I remember the PEF Operating Committee stating, “We need studies to show what will happen to advance regeneration when we use larger equipment and when we clearcut.” And that was the reason for the strip cutting study³ here on the Experimental Forest—perhaps one of the first times this harvesting method was tried in Maine [Fig. 5].

About that same time, work was being done in Fish River country in Aroostook County where the first mechanical harvester—a Beloit tree harvester—was brought onto land owned by Seven Islands Land Company, I believe Prentiss and Carlisle, and Great Northern Paper Company. This was a big machine with tracks. The plan was to harvest by clearing strips of different widths and different orientations. Many people were invited; there were probably 30 to 40 forestry-oriented people watching this machine operate [Fig. 6]. You could hear comments like “This will be the end of the Maine forest” and “The Maine forest will not survive this machine.” The machine had a 60-foot boom. It drove up to one tree at a time,

³ Compartment 33; see Bjorkbom and Frank (1968), Czapowskyj et al. (1977), and Frank and Safford (1970).

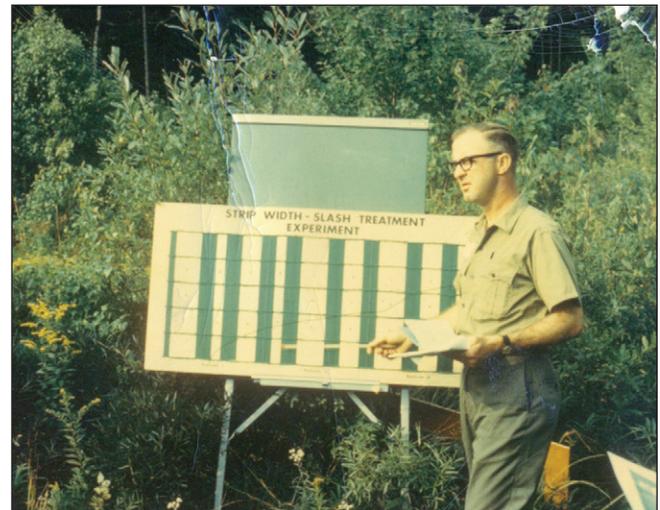


Figure 5.—Bob Frank explaining the experimental design for the strip cutting experiment (Compartment 33) on the Penobscot Experimental Forest (1969). Photo by U.S. Forest Service.



Figure 6.—Foresters on a field trip to see the Beloit tree harvester in operation in northern Maine (1967). Photo by U.S. Forest Service.

delimbed it, topped it, and laid entire stems down in small bunches. Then a rubber-tired grapple skidder moved out bunches of these long stems to a landing.

I saw this as an opportunity to conduct research. It was one of the most miserable jobs I worked on. The resulting tangle of slash and other debris was almost overwhelming. The crew and I were putting in temporary regeneration plots on industry land to try and assess the effects on advance regeneration. I worked with a forester from Great Northern and we published some of the results.⁴ We found that the machine itself did not cause problems because it rode on its own brush, but where the grapple skidder repeatedly traveled, that was the problem. I believe those cleared strips have since been logged again.

⁴ Frank and Putnam (1972).

That was the beginning of mechanization and clearcutting, and of course the clearcutting debate continued. That forced us here on the Experimental Forest to look more at machines. What is unique about this property is that we would use logging systems that were in vogue at the time as much as possible. I think that has served us well.

MANAGEMENT INTENSITY DEMONSTRATION AREAS

In the late 1960s, Arthur Hart was notified, I think by the Washington Office, that we were an experimental forest, not a demonstration forest. Therefore, we had to eliminate our demonstration areas. At that time we had a 40-acre block as a demonstration area. These MIDs, or management intensity demonstration

areas, existed on many Forest Service experimental forests⁵. We decided that if we eliminated this 40-acre area, it would be difficult to take many of the groups we had then, like schoolchildren or high school or college students, on silvicultural tours. In a short period of time in the woods, this demonstration area gave many individuals their initial exposure to forest management procedures; perhaps their appetites for additional forestry knowledge would start on this area! We decided to modify and streamline our procedures in order to reduce the work required to maintain the demonstration.

The MIDs were small in area for statistical analysis. We pretty much had to do 100-percent inventories. People back then didn't have the finesse we have now in statistics. So we originally measured every tree, which was too much. But we could really measure those trees! We had technicians who would run through those trees, and we got results.

We modified the treatments through time; I am happy to hear that they are being kept up.

FOREST SERVICE CULTURE

I was first exposed to Forest Service culture in Washington State at the Ranger District in Randle. I liked it. I saw cohesiveness amongst the workers, from the District Rangers to the mule packers. It was great. Being a student at the time, I was invited to loggers' homes for dinner and so forth, and we got to know people quite well. When I came to Orono, because we were a small unit at the time, we were surrounded by non-Forest Service personnel, mainly industrial. You always stood out in the crowd. You were the only federal person, or maybe one other with you. But because of our exposure to various groups, we got to know these people not only professionally but socially.

Back in the 1960s and 1970s, I remember being invited to my project leader's home for dinner. I will never forget the first visit. God bless Min Hart, Arthur

⁵ Also called Cutting Practice Level plots.

Hart's widow. She is still alive and lives next door to us; she is 93. The first time my wife Dorothy and I visited them was in 1964. I know Min wanted to meet my wife and that was one of the reasons we were invited. We had a delightful evening. When we left, she said—this was in the summertime—“Now, we go to bed early, so please don't contact us after 8:30 because we get up at 3 in the morning. We do all our chores and tend to our garden before we go to work at 8 o'clock.” And I respect that time to this day and never call her after 8:30.

Even earlier, in the 1950s, we had Christmas parties in Upper Darby. Everyone at Station Headquarters would be invited to a restaurant and you got to talk to the Division Chiefs, Directors, etc. After I was transferred to the Orono Unit, something they did—that I believe is not done today—when someone from Headquarters or from another unit visited, you invited them over for dinner. We would be invited to one of the scientists' homes. When Director Marquis, or Assistant Director Warren Doolittle, or others including the Station Editor or Station Statistician visited, we would always entertain in someone's home. I remember once the Station Editor came to talk about the preparation of publications. My wife Dorothy and I invited him over for dinner. It was an awful, icy winter night; we had to walk about 400 feet down to the house. Everything went well, we had a nice dinner, it was a good visit, and I drove him back to his motel. We did a lot of that and even went on picnics in the summertime. We do less of that in the Forest Service now. Society has changed.

TECHNOLOGY TRANSFER

Throughout my career there was a pull and tug. I knew I had to produce manuscripts in order to stay in the good graces of the organization. On the other hand, I dealt with so many people in forestry who were potential users of our results who I knew would not spend much time reading publications. I tried to make the publications I did write as practical as I could. I wanted them to be guides for people to use in their work.

I did not solicit people for tours on the Experimental Forest. I did not suggest that when they go home, they tell others to come. They just came. And it increased year after year. Most of them were industrial foresters and government foresters. We also had many organizational groups including The World Forestry Center from Portland, Oregon [Fig. 7]. We had foreigners and I believe that continues to this day. We had many visitors from academia, from the local colleges and other places including Canadian provinces from Ontario to Newfoundland. It was always a treat when you could spend some time, have all your ducks in a row, have nice signs that impress people, have literature to hand them, and even publications. It was the entire package I tried to present. I was always willing to answer questions while they were here. I think it worked well with industrial people, with graduate students and so forth. And I might add, since I retired, the ownership has gone to the University [of Maine] and the use of the Experimental Forest—based on the base that was built here—has increased many, many fold.

REPLICATION IN THE COMPARTMENT STUDY

If there was one mistake I made—though I was never the final decisionmaker—it had to do with replication in the Compartment Study. The study plan was revised in 1974. We decided to reduce the work load without impacting the overall results. Unfortunately, we only had two replicates of our treatments. At the time, we eliminated some compartments. Most of these were eliminated based on the soil-site conditions; we eliminated those that seemed to have variation from the norm. Those became what we called units. We kept them in the state of readiness for future research. Had we created another replicate from them, we might have bolstered the strength of the experiment.

We did not have much additional suitable land within the Experimental Forest, but we might have found some areas where we could have started new compartments. That was about 20 years into the experiment; now we are 60 years in and we would



Figure 7.—Visitors from the World Forestry Center in Portland, Oregon, view Bob Frank's model of tree growth response by species and treatment following precommercial thinning in Study 58 on the Penobscot Experimental Forest (1987). Photo by U.S. Forest Service.

have had 40 years more experience. But we didn't do that. Nor did we get together with other experimental forests. Maybe these could be future goals.

MOTIVATION TO CONTINUE THE WORK

I was having fun. I really enjoyed my work. It was satisfactory and I truly felt we were producing results beneficial to many user groups. If I had to do it over again—only a fool would say they wouldn't change anything—but as far as my forestry career was concerned, I would do it again.

I do not know if this is common knowledge or not, but I was offered a position with a company in Maine, to start a research unit. It was Great Northern Paper Company. I had 3 weeks to make a decision. I was mid-career, and I was thinking, "I am established in my home, in my job, and in my church. My kids are in school. Do I want to change that?" I really wanted to work for industry. Now, when I think of that offer, I'm thankful I did not take it.

I had passion to continue this work. I was always hoping it would continue beyond me, and it is in good hands now. One of the things that really made it happen was computer systems. How could we ever acquire information about problem insects, invasive species, you name it, if we did not have a good data set?

COMPUTERS

Managing the data was always a big job before we had computers. My initial and continuing fear with computers is that when the analysis is done manually, you are likely to only make little mistakes, but with computers you are likely to make big mistakes. To minimize mistakes, you need someone familiar with what is happening in the field to look at the data in order to detect grave mistakes.

When computerization was in its infancy, we started numbering individual trees in the field [in the Compartment Study]; I thought that was an interesting

improvement. In order to number trees, we had to create a system to minimize the effort and control errors on remeasured plots, because much of the field work was done by temporary people during the summer months. I went out into the field as much as I dared. We usually had good technician coverage, but mistakes were being made. We reviewed the research on how to number trees, and there were several ways of doing it. The student (I always call them students; they were temporary employees) we had at the time was Bruce Birr. It's funny that we are talking about this now; just the other day I got a letter from John Brissette saying Bruce now works at Rhinelander [Wisconsin]. I haven't seen him in 35 years. He was here in the early 1970s and was the one who went to the library to find ways to number trees. We came up with the "wagon wheel" approach. That worked well until we started to put numbers on trees down to the 1-inch class. We struggled. But we kept the trees in order by dividing the circular plots into ten 36° pie-shaped segments. This procedure enhanced the accuracy of the measurements we were taking. I don't know exactly how it's done now.⁶

Our concern was: How many digits will fit on a small tree? If you add just one more digit, that multiplies how much numbering must be done. Do our plots have to be 1/20-acre for the smallest trees? Could we make these plots smaller and maintain statistical accuracy? I'm not sure how that is unraveling now.⁷

I thought when we started numbering trees and accumulating data and were able to measure the growth of individual trees, that somehow we could correlate this growth with soil type; I mean specific soil type, or the soil on which that one tree was growing! I remember talking to soil scientists about this over the years. I looked at available soils maps and knew these were of little help. You actually have to determine what soil each tree is growing in. It would be an interesting project to get the data necessary to

⁶ Comment: This system is still in use.

⁷ Comment: The measurement plots for saplings are now 1/50-acre instead of 1/20-acre.

correlate individual tree growth with specific soil data. An additional enhancement in an analysis of this type would be to factor in the relation of the subject tree to adjacent trees. Are they free to grow on one side, two sides, three sides? You should be able to get a better handle on the association between the growth of trees and soil.

BUDGET CUTS OF THE 1980s

The budget cuts were large. Here's how we survived. In a sense, it was a tense time. We all knew how budgets were shrinking. I believe a portion of one budget got cut 85 percent! I remember employing work-study students and volunteers to accomplish our field work. Once, we were able to enlist one or two elderly folks. I think it was a service group. That didn't work out. We struggled. We also asked for and received some money from the companies from the PEF stumpage account.

But here's another part of the budget story. It didn't happen all at once; it took some time to unravel. Orono was on the list for possible closure as budgets were being reduced. Now, this is my interpretation. We heard from different sources, above the Project Leader level, perhaps above the Director level, that research done on the experimental forests was essentially for the National Forests. So what you guys are doing up there in Maine just didn't fit the mold.

These were hard times. Morale was down, people were transferred, and I was going to be transferred to New Hampshire. As I recall, the plan was that I would come back in the summertime and continue to work on the Experimental Forest. Of course you had to accept that possibility. I was not at the higher echelons of any decisionmaking, but a white paper was produced by the Director at the time, and it was suggested that it be distributed to our consumers.

We could not lobby for increased funding. That was illegal; we couldn't do that. So Project Leader Bart Blum and I put together lists of people we were going to visit. I took the northern part of the state and he

took the southern part. We went to different people explaining, "You've been consumers of our work in the past, this is what we've done, and these are our publications." We showed them the budgets, but we didn't say anything like "Please, please, will you help us get more financing?" I do not know if that's a blind elephant or not, but it might have appeared desperate at the time.

Many, many letters were written to the Director supporting this unit. He later said, "I was impressed with the response and the support you had from all the difference agencies, companies, and organizations. I was really impressed with what you got from the Maine potato growers. What was that all about?" I said, "Potato fields are just a small percentage of the land they own. They own a lot of spruce-fir country." That was the only way I knew how to answer.

I think the letters had a significant influence; there was another influence also. I received a telephone call from a very influential person wanting to know if I would be willing to talk to Senator George Mitchell about our budget problems. He was scheduled to talk at Husson College [in Bangor, Maine] at a Businessman's Breakfast. I attended those meetings. Many forestry people and business leaders in the community attended, also. Senator Mitchell was giving a talk. I was told that I had his time from when he left the lectern where he was giving his speech until he reached his automobile and I would walk with him. I was thinking, "What can I say to the Senator without violating what I'm not supposed to ask?"

Here's the interesting part. At this time there were two forces working against each other in Congress. George Mitchell was pushing the Clean Air Act and Robert Byrd did not like it. Senator Byrd was from West Virginia and he was concerned about the effect the Clean Air Act would have on the coal industry. So, somehow I had to weave this together. At that time I think we still had eight scientists in the Orono unit. I looked up how many scientists were in West Virginia. I thought, "Well, I can mention that."

As I walked Senator Mitchell down to his automobile, I walked as slowly as I could. He was being very cordial and asked me questions about the work I was doing, who we were, and who we were doing the work for, and so forth. Trying to be as encompassing as I could, I said, “We have eight scientists here in Maine, they have X numbers here and there, and in West Virginia they have 52 scientists.” He stopped and looked at me. And he said, “I didn’t know that.” That was the only time he stopped. Shortly after that walk with Senator Mitchell, I believe the Director received a communication from him. And, as I was told—I’m getting this down through the levels—Senator Mitchell said, “If there is going to be research done for Maine, it is going to be done in Maine.” And that was the end of the unit moving from Orono, at least at that time. That’s the way I understood it.

TRANSFER OF THE PROPERTY TO THE UNIVERSITY OF MAINE FOUNDATION

What precipitated this was the perception of the PEF owners—and I got this right from the horse’s mouth—that because of reduced budgets and conversations they had with other people that I was unaware of, that the Forest Service was probably going to give up and pull out [of the PEF]. I was in most of the meetings when the owners met. I remember one meeting where the decision had to be made: What were the owners going to do? I was at this meeting—I don’t recall anyone else from the Forest Service being there—a dean [from the University of Maine] actually asked me, “Bob, is it something the museum could undertake?” I said, “There is no way the museum could do it, though there may be a part it can play somehow.” He was thinking in terms of gearing up for it with an employee or two, or something like that. The university said, “There is no way we can handle the work load, the data collection, and so forth.” So it eventually wound up with the agreement we have now. The university owns it and we have a memorandum of understanding. I think that is working out fine.

Would I have liked it to go any other way? I can’t say at this point in time. The majority of what might be considered pertinent work or studies with firm results are still being maintained. We now have the university overlaying their own set of studies on other parts of the Forest, plus an increase in graduate student work because of this.

THOUGHTS ON CHANGES SINCE FRANK’S RETIREMENT

I don’t know all the work you are involved with, Laura. One of the potential opportunities that bothered me when I was working here is we did so little with northern white-cedar. I love cedar. I’ve hammered thousands of wooden shingles on my home, my barn, my garage, my camp, and outbuildings. I’ve even replaced, in one case, a set of shingles. I use a lot of cedar for posts, I use a lot of cedar lumber for paneling, for railings ... I just love cedar. It’s good to see an increase in cedar research. Much of the initiative with cedar came from you and others. It was a void, no question about it. So that’s good.

I am happy that the research is being maintained. I think I was somewhat more fussy about how the Experimental Forest looked when I was here, but that’s a natural reaction when someone leaves. If a sign is falling over or you can’t read it, you should get it out of there. That sort of thing. Some of the roads could be improved. I realize that there are constraints. As far as the work is concerned, I think that with the staff you have and the means you have to do it, I feel it is being utilized and progress is being made. I know that you are involved in so many things and John is spread so thin. And you have one technician who keeps everything else going here.

ANECDOTES ABOUT THE OLD FOREST SERVICE BUILDING ON THE PEF

When a new study had to be installed, I spent quite a bit of time on the PEF. I tried to pare it down so I

could get my work done behind the desk. We would bring our lunches out and meet in the old building [Fig. 8]. I call it the old building; I think it was built in 1952. Naturally I was sad to see it go.⁸

On hot days we would all go into the building and it would be cool. We never had more than one permanent technician assigned to the Experimental Forest. We also had summer students hired as work-study or government employees. We always had a crew. There would usually be a minimum of four of us, maybe more. We even had loggers that would come and chitchat. We renovated that building and installed a bathroom, shower, an oven, and a wood stove. On one occasion we entertained a busload of budworm

research people from Vermont for a 2-day visit. The night they were here, we cooked a turkey in the oven for them and served them a complete meal. It was an adequate building for many purposes. It's all gone now.

One of the most humorous stories I remember from the Experimental Forest took place in the old building. Our technician Orman Carroll had three daughters. His wife would line up the lunches on the counter so when they went out the door they could pick a lunch. One day at lunchtime, we opened our lunches. Orman didn't talk too much, but I heard him say "What in the world is this?!" He had, instead of lunch, a daughter's gym suit! We all had a good laugh and shared our lunches with him.

⁸ The building was torn down in 2010.



Figure 8.—The Forest Service building on the Penobscot Experimental Forest (1952). Photo by U.S. Forest Service.

FRANK'S FOREST SERVICE LEGACY

I know how eastern spruce-fir research began. I never met the man who began the research in the 1920s—Marinus Westveld—but I worked with someone who knew him and worked with him. That was Arthur Hart, who was Project Leader toward the end of his career. I currently live next door to a lady that met Marinus Westveld—it is Arthur's wife. I have much respect for that early work. We look at it now with so much added knowledge that we think, "My goodness, that was pretty basic." But when you build a pyramid you have to start at the base and eventually you put that top stone in.

So if this experiment—the PEF—continues, and I might add that the Penobscot Experimental Forest is probably as well known now as any time in history,

I would like to think that I was an important cog in the wheel that kept it going [Fig. 9].

I think I did the best I could. Fortunately, I think I was able to do it in both a satisfactory and meaningful manner. I had good people to be associated with, below me, above me, and equal to me.

I certainly appreciate the opportunity to talk with you in this way. And it is still fun!

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Figure 9.—Bob Frank at the entrance to the Penobscot Experimental Forest shortly before his retirement (1995). Photo by U.S. Forest Service.

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