PERSONAL REFLECTIONS[1]

Glenn D. Weaver

Emeritus Extension Forester
University of Missouri Cooperative Extension Service
Columbia, MO

I grew up on a farm east of Winona, MO in Shannon County. As with many of the farms in the area, when my dad bought the farm, the previous owner had cut every tree that would make a tie or fence post. This practice continued for many years. Then in the mid-1960s I flew over Texas, Shannon, and Reynolds counties studying the forest and wildlife habitat. The forest that was managed for a continuous, sustainable harvest, as Pioneer Forest is, was easy to identify from the air. I have known Leo since early 1970, when I spent a great deal of time in the Ozarks with University Extension. My dad and granddad also knew Leo. My dad worked for Kerr McGee in their forest products division and admired the philosophy and management practices used on Pioneer Forest.

Pioneer Forest has set an example through its management practices that assure continuous sustainable harvest. These practices of cutting only a few of the trees on each acre while always leaving the forest intact have had a profound economic impact throughout this region of the Ozarks.

The direct economic impact of Pioneer Forest includes the continuous sale of timber over more than 50 years. This influence alone is significant. For example, since 1960 the annual volume produced from the forest averaged 4.5 to 5 million board feet. Since 1960, the price for timber has risen from $12 to $165 per thousand board feet. This overall economic activity is notable in an area which, measured by Missouri standards, has been generally depressed throughout this period. The cumulative effect of Pioneer Forest's activity since 1951 has been significant.

The real impact of the business of Pioneer Forest is measured by the accumulation of effects as the direct income produced is trickled back through the forest to its employees and their families, as well as from the forest directly through the sawmills to their crews and families. Pioneer Forest employs six full-time staff, but including the crews responsible for contract sales, the direct collective economic activity reaches from 60 to 82 people each year (Figure 1).

Secondary impacts include the taxes paid, equipment purchased, and the living expenses of employees and contract personnel. Businesses in the community and surrounding areas benefit directly and indirectly from purchases of gasoline, food, recreation, insurance, clothing, etc.

Many latent benefits exist as a result of Pioneer Forest and its management practices. We recognize many examples when we raise the question of the beauty and value of a forest to tourism as compared to the perceived values of clearcuts, or the quality of a river that is protected from erosion by continuous and well-established woodlands. Leo Drey, through Pioneer Forest, has demonstrated that the practice of selective cutting can produce continuous economic benefits for the landowner and area economies while at the same time protecting the many qualities of our woodland resource.

Figure 1—Harvest activity on the Pioneer Forest, ca. 1940–50. *(Courtesy of Pioneer Forest)*

Beyond today's economy and for much longer than even one man's lifetime, this enterprise of Leo's will continue. Leo has demonstrated that generations will enjoy the benefits of never removing the forest from the land. I think this point is best illustrated by the Spencer family, which has had three generations working on the forest since the 1950s. In one section of Pioneer Forest, the grandfather cut beginning in the 1950s, then his son cut in the same section of land during the 1970s, and now the grandson is cutting through this same section of the forest. Because every acre of Pioneer Forest is continuously forested, continuously growing, and periodically harvested, there will be lifetimes of folks like us who will always benefit from this unique resource.

Bill Terry

National Park Service
Ozark National Scenic Riverways
Salem, MO

It was the early 1970s when I personally developed a little sweat equity with Pioneer Forest. I was a young seasonal ranger working for the Ozark National Scenic Riverways. The riverways was, at that time, actively involved in open field management in the old fields along the Current River. We had taken them over and we were actively manipulating old fields, planting food plots, and doing habitat improvement for small game species. I'll never forget, I got an assignment from my supervisor for old field management at a place near Cedar Grove, called the Osborne Riley place. We were to take the Ford tractor up there

[1] The following reflections were prepared by Hank Dorst and the editors, working from a videotaped recording of presentations at the symposium, as well as prepared drafts and notes. For citations, see the annotated bibliography in the appendix.

and put some food plots in. I checked with my supervisor about the boundaries. He said we border Leo Drey there so don't worry; as long as we were on the inside of the fence it was the National Park Service property purchased from Osborne.

Well, Rex Innis and I went up there. We took about 3 days to plant several nice food plots. Being avid bird hunters and quail hunters, we thought we had done a really good job. About 3 days after that I was talking to Charlie Kirk, the forester for Leo Drey at the time, and Charlie was not so happy about our resource management efforts. He felt that inside that fence was Leo Drey's property. My supervisor and Charlie had several heated discussions that ended up at our park's Van Buren headquarters. The bottom line was, that was Leo Drey's field and Leo wasn't that interested in food plots; he and his foresters were interested in timber.

The solution was that another ranger and I spent the better part of several days planting pine seedlings through those food plots. My supervisor and Charlie Kirk had a running jab at each other at the coffee shop in Salem, MO. My supervisor had some of the guys at the sign shop in Salem make a sign that read 'The Charlie Kirk Memorial Forest, established 1974'. I'll never forget Rex Innis and myself standing there in the middle of that memorial forest next to that nice big redwood sign and those little pine seedlings about 6 inches tall. Those trees in the Charlie Kirk Memorial Forest are now about 20 to 30 feet tall. It's a living memory to a time in my life and I am glad it's a part of Pioneer Forest.

I also wanted to say that I am an avid outdoorsman. I don't think many people in the last 30 years, other than Leo's professional foresters, have tramped over as much of his land more than I have, hunting, hiking, camping, enjoying pawpaws, and seeing the beauty. I have really felt a fondness for those woods. People who work there, like Terry Cunningham and Clint Trammel, have told me about beautiful stands of timber and I have gone and looked at many of them.

It has been a fortune for me to have access to the lands of Pioneer Forest. I am a spiritual man and I often thank God for the things that I have been given. Driving through St. Louis traffic I think about Missouri's Ozarks—what a great place to live. My life has been enhanced to be in the presence of Pioneer Forest and to think that a far-sighted man like Leo Drey is so willing to share his land with the people of this State and this Nation.

David Bedan

Conservationist
Columbia, MO

Like so many people, I have had the privilege of benefiting from Leo's generosity, in my case primarily through backcountry recreation. In the 1970's, while teaching classes at St. Louis University, I led a number of Sierra Club backpackers into Pioneer Forest, leading mostly urban students who had some real life-changing experiences in those wild places.

I think Leo decided that since I was using the place so much I should do something for it. He asked me to write a report, along with Bob Goetz, *Pioneer Forest Recreation Study* (1976). This was a follow-up to a Bureau of Outdoor Recreation study, completed earlier in 1976, that identified a huge smorgasboard of potential projects that could be done on the forest. Our assignment was to narrow that down to some specific and doable things. I was really thrilled when the Roger Pryor Pioneer Backcountry was finally dedicated down at the Himont Tower site in October 2001, because it seemed like concrete proof that some of the ideas in our report 25 years ago were being implemented on the ground.

We have heard a lot of talk about how Pioneer Forest has shown that timber harvesting is compatible with a long-term sustainable management that can maintain or improve the ecology of the forest. I think Pioneer Forest can also be applauded for showing that timber harvesting can be compatible with a true backcountry experience. Pioneer Forest is not a wilderness area in the sense that the term is defined by the Wilderness Act of 1964, in which you can't have any timber harvest entry of any kind. However, the timber management practices on Pioneer Forest are very compatible with backcountry experience, especially since they only go back into a given area every 20 years. It is easy to lay out trails in such a way that there is almost no conflict between the primitive backcountry recreation experience and timber harvesting.

I'm talking here about what I call 'self-propelled' recreational experiences—hunting, dayhiking, backpacking, nature study, nut and fruit gathering, fishing, horse-riding. There can be too much of any good thing, so I think there has to be some management because we don't want too much impact in any one area or from any single use. I think that's not too difficult to manage and that the Pioneer staff is well on top of managing it.

The biggest challenge in management, though, is limiting motorized access, because with motorized access you can have several orders of magnitude greater impact in terms of soil erosion, littering, spotlighting of deer, and conflicts with other recreationists. One off-road vehicle can ruin the experience of dozens of other back-country recreationists. In a large area like this, with a small staff, it's a very hard thing to do, but I know Pioneer staff is aware of this challenge. I think that we can probably never eliminate unauthorized motorized access, but it can be kept down to an acceptable level.

I see the back-country concept on Pioneer Forest as one of the great experiments in our country about how timber management can be compatible with back-country recreation.

David R. Larsen
Professor, Department of Forestry
The School of Natural Resources
University of Missouri-Columbia
Columbia, MO

Pioneer Forest has from the beginning maintained an openness and willingness to collaborate with students and researchers, serving as a veritable outdoor laboratory. Its staff understands the unique opportunities that they provide and they want others to learn from their forest.

Students have visited the region of the Ozarks in which Pioneer Forest is located since the start of forestry schools in the United States. The first forestry summer camp in the area was led by Dr. H.H. Chapman of Yale University, who brought his 1907 forestry class to study southern pine forests near Grandin in southern Carter County (fig. 2). This was the home of the largest sawmill in the Nation at the time, and some of the lands then owned by the Missouri Lumber and Mining Company and likely studied by Chapman's students are now part of Pioneer Forest. Chapman reported on this and subsequent summer camps in the Ozarks in *Yale Bulletin 2* in 1913.

The University of Missouri held its first forestry summer camp in the woods near West Eminence in 1912, also on land that belonged to the Missouri Lumber and Mining Company. Summer camps after 1912 were held in Butler County on land that is now University Forest Conservation Area until the Department of Forestry was terminated in 1921. In 1947, the School of Forestry was re-established and resumed summer camps. The camps were directed for many years by Lee Paulsell, who had helped Leo Drey buy his first forest land during 1951-54 before rejoining the university.

Paulsell, Dick Smith, and others began a tradition of taking forestry students on field trips to Pioneer Forest, as did other universities and colleges over the years (fig. 3). These trips, hosted by Ed Woods and Charlie Kirk and later by Clint Trammel and Terry Cunningham, often included picnics on the Current River after a hard day visiting numerous sites on the forest. The Pioneer staff has always been willing to lead tours for forestry students whenever asked, and Woods and Kirk also contributed articles to the *Missouri Log*, a publication of the University of Missouri Forestry Club.

I know from personal experience that Pioneer Forest has hired many college students to work on the forest over the years. Having grown up in Salem, MO, where the forest has its headquarters and where my father was a friend of Woods and Kirk, I learned about forestry and Pioneer firsthand as a child. When I was in forestry school at the University of Missouri, I spent the summers of 1976 and 1977 contract thinning in pre-commercial stands on the forest. I also spent the fall of 1977 working on the remeasurement of the continuous forest inventory. Those experiences added greatly to the sum of my forestry background.

The continuous forest inventory in particular yielded large rewards scientifically. Many of the research studies associated with Pioneer Forest have strongly depended on this dataset. I myself collected site index on 482 CFI plots in 1979-80 and used

Figure 2—H.H. Chapman and his Yale Forestry Class in Grandin, Missouri, in 1907. *(Missouri Lumber and Mining Co. photographs, 1906-1916, Western Historical Manuscript Collection, Columbia, MO)*

Figure 3—Ed Woods measuring a large white oak. *(Courtesy of Pioneer Forest)*

the data to develop a whole stand forest growth model for my 1980 master's thesis. The U.S. Department of Agriculture Forest Service, North Central Forest Experiment Station also used this data to calibrate the STEMS/TWIGS forest growth model, and it was further used to develop a matrix transition model (Lootens and others 1999).

In the early 1990's, the University and the North Central Forest Experiment Station initiated a project to describe the method of cutting implemented on Pioneer Forest so that others might try the method (Loewenstein 1996), and a number of graduate students and other researchers focused on related studies of forest management, structure, and reproduction. Larsen, Metzger, and Johnson (1997) asked the question 'what are the probabilities for understory reproduction given various overstory densities?' Larsen, Loewenstein, and Johnson (1999) summarized these results and gave specific recommendations for those interested in managing other forests in the Missouri Ozark Highlands with methods similar to those used on Pioneer.

Numerous other students and researchers in forestry, ecology, and related fields have sampled sites across the Ozarks, including Pioneer Forest, for studies of forest composition and plant communities, fire history, and the relationship of wildlife and insect communities to forest structure.

The willingness of Pioneer staff to share its management philosophy, and to explore the benefits and limitations of that management through scientific research, speak eloquently about the commitment of Pioneer Forest not only to share with but also to learn from others.

David Hamilton[1]

Wildlife Research Biologist
Missouri Department of Conservation
Jefferson City, MO

I'm interested in black bears, which I regard as integral to the look and feel of a Missouri oak woodland. Bears are native to Missouri. At settlement thousands of black bears roamed the Missouri and Arkansas Ozarks. Bears provided early settlers their primary source of meat, hides, and grease. It was believed that bears were gone from the Ozarks by 1920; however, a 1950 *Missouri Conservationist* article included a photograph of a bear cub shot near Salem, MO. This strongly suggested a breeding population nearby, while another large bear was shot in Reynolds County in 1954. Missouri may always have had small numbers of resident bears. In addition, the first large program to restore black bears occurred in Arkansas in 1956. This program used bears from northern Minnesota, and once released, many moved into Missouri and Kansas, though undoubtedly many were shot.

Leo Drey showed a strong interest in black bears years ago, writing to the Missouri Conservation Department at least two times, first in 1972 and again in 1978, suggesting Pioneer Forest as a place to help maintain or restore black bear populations. The Department decided both times against it. The belief was that Missouri probably didn't have very good habitat and since bears occurred in Arkansas, Missouri would naturally benefit. Thus, without direct intervention, there has been a resurgence of black bears in Missouri with sightings increasing. Between 1990 and 1993 we recorded about 600 sightings in Missouri; there are now, on average, about 200 to 300 sightings a year with bears scattered occasionally over 54 counties.

What does a bear look for? Does Pioneer Forest have the bear necessities? Bears like a large block of forest. Pioneer Forest has excellent habitat, with heavy forest density, low traffic volume, few people, no resident livestock, and ongoing conservative forest management. The most important food source is acorns, although only seasonally available, and bears may feed 20 hours a day in preparation for hibernation. Areas of oak-hickory forest under management such as that on Pioneer Forest also produce berries. Berries are an important summer food. While blueberries were thought to be a historically important food source, today blackberries are an important substitute. Pioneer's single-tree selection management produces openings where sunlight reaches the forest floor, stimulating fruit production. In addition, the number one prey item in their diet is ants, and, seasonally, tent caterpillars.

Food availability and quantity dictate the size of individual bears, and in turn influence the size of the litter and fitness of the cubs as well as the size and age of the female at first reproduction. While we do not have much data from Missouri,

[1] David Hamilton passed away on September 8, 2007.

we do know that in Arkansas bears begin to reproduce at 2 and have cubs every year. Bears in Missouri are mid-range in size, with males up to 500 pounds, compared with an average of 250 pounds in the Southwest and up to 700 to 800 pounds in Pennsylvania and the Adirondacks.

In the Missouri Conservation Department, we began looking closely at the distribution of bears in Missouri in 1991. To do this we used bait station surveys where at each station we hung sardine cans from trees. Each station was revisited to collect data on the presence of black bears. There were 50 stations on each route and about 60 routes region wide. In addition, motion-sensitive cameras have been used, especially to determine differences in bears and whether reproduction is occurring in Missouri.

Using the black bear occurrence records, we have developed a habitat model of southeast and southwest Missouri by also adding forest cover information and human population density. Bears like at least 80 percent canopy cover and 10 or fewer people per square mile; in a lot of bear areas there are several square miles per person. By combining several layers of information we now estimate there are 2.9 million acres of adequate habitat for bears; much of it is in the eastern Ozarks, and the particular region that stands out is where the large block of Pioneer Forest occurs. This is where Richard Guyette describes from his data the diversity and roughness of topography and thus a region showing the least disturbance. In this region, around the Current and Jacks Fork Rivers, bordered by several exterior blacktop roads, is a large block of habitat that is probably the best in the State.

Gerardo Camilo

Associate Professor of Biology
Saint Louis University
Saint Louis, MO

Several years ago my graduate student Nick San Diego and I began to look for sites closer to home in order to pursue research on questions raised by our earlier work in tropical ecology. We were interested in how management practices translate to ecological patterns and whether forest management that is profitable can also enhance biodiversity. The staff on Pioneer were happy to cooperate with us, so we began to do research there.

We set out to analyze how various forest management practices have affected the composition of leaf litter invertebrate communities, and especially how these communities are influenced by the scale of disturbance. Two of our sites, an unharvested site in the Current River Natural Area and an area subject to single-tree selection harvest, were on Pioneer Forest, and the third, a site that had been clearcut, was at the Reiss Biological Station.

What we found is that tree species diversity and spatial heterogeneity were greater on the site harvested by single-tree selection than in either the uncut or the clearcut sites, thus creating conditions for maximum diversity in leaf litter communities. At a scale of 100 square meters, the clearcut and selectively cut sites were similar, but at 250 square meters, the spatial heterogeneity of the selectively cut site on Pioneer was three times the heterogeneity of the clearcut or the uncut sites, even though one might expect the uncut site to be highest.

Trees, a forest do not make. We wanted to look at differences in scale from the perspective of an insect. Clearcuts even as small as 2 or 3 acres are mammoth for an insect, compared with the scale of heterogeneity in single-tree selection. The insects seem able to tell Pioneer Forest from everything else. They respond better to the distribution in tree sizes there. Single-tree selection thus seems to be the management regime with the greatest health and diversity in the leaf litter community.

The staff on Pioneer Forest may have difficulty describing just what they are doing when they practice single-tree selection, but we can measure the effect of what they do by looking at the insects.

David Russell

Trees L.C.
Van Buren, MO

I have been working for Mr. Drey, indirectly, since 1981. I was raised in St. Louis, MO but moved to the Ozarks when I was 14 years old. I had a pickup truck, a new wife, and a new chainsaw. Cutting sawtimber was the way we derived our living in the Ozarks. We had worked on the national forest and on private forest land, doing logging operations. It was cut everything that you see—all you had to do was find a tree and cut it.

In 1981, the logger I worked for was cutting a tract for Pioneer Forest and I found myself standing on a south hillside in the middle of a hollow called Round Pond with a chainsaw thinking 'what in the world am I doing here?' I remember that because there was a different concept being placed in my mind; it was the beginning of my education in the timber business. I was beginning to realize what was appropriate and how things were to be done. We didn't just go out and look for trees to cut. There was a management plan being implemented, even though at that time I didn't realize what it was.

I look back now, decades later, operating a sawmill producing close to 3 million board feet per year, cutting roughly 1.3 million off of Mr. Drey every year. I look at that and I can see there is a right way to do things and a wrong way to do things, and I have done both. Because of the way Pioneer Forest does things I look out there and I say, 'this is the right way.' Now I have loggers working for me who probably would not have to be told which tree to cut because of the educational process they have been through and because they have worked on Pioneer Forest.

When we do private timber sales now we can take the approach Pioneer Forest does, that is, we should be doing uneven-aged management. We know the forest product can be pulled off without destroying the environment, without destroying the ecological benefits, without destroying the recreational benefits, and when we leave we try to do it in the least intrusive way.

Now you will look at me today and think there's a logger. No, I'm a businessman who tries to do things right, and working for Pioneer Forest has been a right fit for my business.

We sell every product that we produce today—the lumber, the bark, we even sell our sawdust. There is no waste to what we harvest from Pioneer Forest. We leave the forest better. I'm very quickly approaching being able to go in on the same tract that I logged decades ago. I can't think of another process, or another place, where I can go back 20 years later, where the timber will be better, the ecology will be better, and the environment will be more protected than it was 20 years ago. Mr. Drey, I thank you for allowing us to work on your forest.

Gene Maggard

Akers Ferry Canoe Rental and
Jacks Fork Canoe Rental
Salem, MO

My wife, my son, and I own two canoe rentals in Shannon County, one called Akers Ferry Canoe Rental, the other around Eminence called Jacks Fork Canoe Rental. We also have about a 1,500-acre farm that is almost surrounded by Pioneer Forest. We have enjoyed our relationship with Leo and Kay and Pioneer Forest as neighbors over the years. Really, each year the hunters from our part of the Ozarks, which is northern Shannon County, should send a thank you letter because they really enjoy your property and their access to it. But more than that it's beautiful land—and in my business, canoe rentals need trees for their beautiful scenery.

Hank Dorst

Mark Twain Forest Watchers
Elk Creek, MO

I'm going to discuss a chronology of learning and activism on public forest land in which Pioneer Forest was instrumental. The year 1988 saw rebellions against clearcutting by residents near the Willow Springs and Poplar Bluff Ranger Districts of the Mark Twain National Forest. At that time the Forest Service was getting most of its timber volume from clearcuts. Good young white oak poles were routinely dropped in the name of creating an even-aged stand and immature sawtimber was indiscriminately cut before its time. The forest plan was new and language about using uneven-aged management in certain situations was not being implemented.

We were researching forest management alternatives to clearcutting. One day a silviculturist at the Houston District recommended getting in touch with the Pioneer Forest folks, saying they'd show us their system, and mentioned it was 'brushy woods' and that it wouldn't look as good as we expected. (Of course, clearcuts are entirely brush!)

In December 1988, we visited Pioneer along B Highway near Current River with Clint Trammel. Photos taken that day of recently harvested stands and stands cut in the 1970's are still in our slide show today. We learned that uneven-aged management is a dynamic system requiring regular but infrequent entries, perhaps 20 years on average. (A major flaw of the highly touted Missouri Forest Ecosystem Research Project (MOFEP) conducted by the Missouri Department of Conservation is that the uneven-aged management prescription there plans entries every 10 years.)

The opened canopy after selective harvest allows more vigorous growth of the residual stems and recruitment of seedlings and pole size trees into gaps. As the canopy closes, growth slows and eventually it is time to cut again. This system helps minimize oak decline, as less vigorous and older offsite trees that typically decline are often removed in uneven-aged harvests. It could be said that the Forest Service, with its over-reliance on clearcutting in the 1970s and 1980s, set up an age class homogeneity with too many stands of older trees, rather than tending larger acreages with partial cuts each year, thus exacerbating oak decline. The 1990s saw a change in Forest Service management away from complete reliance on clearcutting to more balance in management methods.

Over the years we were constantly able to point to Pioneer as a model of another way. Pioneer has also been our learning place where we could go and talk with staff and see examples in the field of different conditions. For that, we are thankful.

Today we look back on Pioneer's accomplishments. But we also must look ahead to the challenges and opportunities of the future. Just as it played a role in public forest management changes, Pioneer Forest is uniquely positioned to occupy a leadership role in the effort to increase the use of good forest management on our private forests. Through its participation in Value Missouri, an organization of industry, landowners and environmentalists working to promote FSC forest certification and better private forest management, Pioneer is once again playing a leading role.

Victoria Grant

Landowner
Reynolds County, MO

Though I work for the National Park Service, I speak as a private landowner who happens to live next to Pioneer Forest. I live in southern Reynolds County near the top of the Current River watershed. My husband and I have a 90-acre farm, half-timbered and half-pastured, nestled at the end of a county gravel road. It's a beautiful spot. We are bordered on two sides by Leo Drey's Pioneer Forest. We drive through the forest everyday to the blacktop and we are really happy about having Leo Drey as a neighbor.

First of all, as a private landowner, there is a wonderful sense of security that you know your neighbor. When you look at a plat book and you see that Pioneer Forest owns a section of property, you know what to expect; you can see in your mind that it will be a mature forest, it's going to stay a mature forest, and if there is timbering done it's going to be done in a certain fashion. So you're not worried that it will be divided into 10-acre parcels, sold, or clearcut. It's an intangible benefit we have as a neighbor of Pioneer Forest.

The section of Pioneer Forest we drive through every day was cut in 1998, and we owned our land before, during, and after the cut, so we've seen what happened during and we've seen what happened afterward. As my husband likes to say, 'when Leo Drey cuts, it still looks like a forest afterward, there are still big trees, big enough that a man can hardly get his arms around.' My husband is 6'4" and he has pretty long arms.

When I look at it now, particularly during fall color, it is a forest with every layer or structure that is giving me those blazing colors, from a canopy to a subcanopy, to ground layer, down to the soil layer. I think the management on Pioneer Forest is wise enough to know they have invested in preserving the soil structure, and Lord knows we don't have enough soil in the Ozarks to begin with. But I think they see that soil structure as the placenta for growing the forest, taking care to preserve that. It's been said many times down there that if everyone cut their forest like Leo Drey, the Ozarks would never run out of timber. I've been able to see that every day as I drive back and forth on my little gravel road. We consider ourselves extremely fortunate to live next to that kind of a good neighbor, with that kind of philosophy.

Caroline Pufalt

Ozark Chapter, Sierra Club
St. Louis, MO

I come primarily from the perspective of activism through the Sierra Club, although it is really hard to capture everything Pioneer Forest and Leo and Kay Drey's environmental activism has meant to us.

To start out with a downer, the United Nations recently released a report on the threats to the worldwide closed canopy forests and it was pretty disturbing. We in the United States have 8.2 percent of the closed canopy forest. It seems like a small percentage, but it is important and we are responsible for it. That responsibility has inspired a lot of us to work on forests and forest management over the years. When I think back to the time Hank referred to in the early 1980s, and what the conflicts and the agenda were like then, I remember all the hectic, disruptive activity in the Pacific Northwest, with demonstrations and tree sitters, some of which is still going on— conflicts between jobs and the environment. Then, here in Missouri we had our own smaller but very important issues involving clearcutting and public lands. We all knew then that the method of forest management used on Pioneer Forest was an example we wanted to emulate.

The folks at Pioneer were very welcoming and shared their information with us. It was a real frustration that some of the managers of public lands and those that even advised private landowners didn't seem to be too receptive to that. So, it is really gratifying to know that the studies have been done, the results are in, and we can see what a contribution Pioneer Forest has made.

As I think about the Pioneer Forest and Leo and Kay Drey I remember the movie 'It's a Wonderful Life.' I think of Leo and Kay Drey like Jimmy Stewart and Donna Reed. Pioneer Forest is like the Building and Loan, their forest, our natural resources, and they preserve them, keeping them available to us for value added for the community. Imagine Jimmy Stewart's nightmare if there were no more Pioneer Forest, if there were no model. It is a wonderful forest, and so, Leo and Kay, it's a wonderful life (fig. 4).

Mary Chapman

Director, Forest Stewards Guild
Santa Fe, NM

The Pioneer Forest is not the only example for sustainable uneven-aged management across the United States. But it is among the largest, the longest in tenure, the most firmly grounded in research and inventory, and the most progressive in outreach and education efforts. Moreover, the land ownership ethic of the Pioneer Forest exemplifies the concept that productive forestry can go hand in hand with ecological responsibility. In this, the Pioneer Forest provides a valuable model for private and public forest landowners across the Nation.

Two definitions of the word Pioneer make its selection as the name of these lands very prescient and fitting:

1. One that originates or helps open a new line of thought or activity

2. An early settler in a new territory

It seems to me that accomplishments of Pioneer Forest demonstrate both of these meanings.

Pioneer Forest is recognized for having bucked trends and for crafting a style of uneven-aged forest management using selection silviculture that is in the forefront of ecologically and economically sustainable forestry. Is Pioneer Forest all alone on this path?

In 1995, several foresters began identifying the best examples of forest management from around the country by asking the question: what does 'sustainable forestry' look like on the ground, and who is doing it? After interviewing a wide range of forest managers and getting a sense of their philosophy, meetings were held around the country inviting these foresters to come together to discuss their management perspectives and practices. Many of these foresters felt quite isolated as a result of the general view of their concerns and techniques held by the mainstream forestry sector. As Pioneer staff know well, the refrain was 'that won't work here' and 'you can't do that, and don't talk about it, either.'

Participants were surprised and energized through contact with like-minded foresters. They wanted an organization that would preserve that spark, so they formed the Forest Stewards Guild, which now has over 400 members managing 5.5 million acres in the United States and Canada. Guild members share a mission to promote an alternative vision of forest management. Clint Trammel is a founding member, and we're proud to have had him on our Board of Directors.

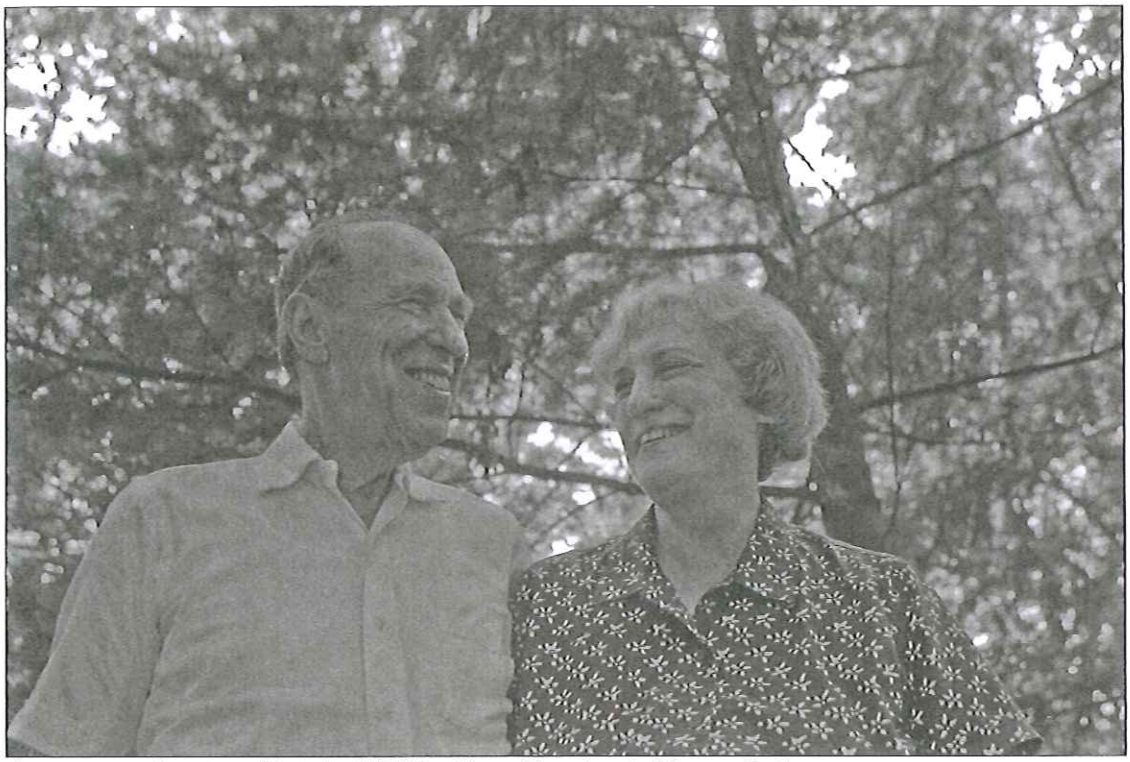

Figure 4—Leo and Kay Drey. *(Photo by Cliff White, Missouri Department of Conservation)*

For most guild members, seeing is believing—a trait we share with residents of the 'Show Me' state. Demonstration of silvicultural practices and impacts is a major focus of the guild, from northern hardwoods in the Upper Peninsula of Michigan, where individual tree selection harvests without changing stand composition towards increasingly shade tolerant trees, to oak and pine forests of southern New Hampshire, and from redwood in California to Douglas fir and mixed conifer in the Willamette Valley and pine forests of southern Oregon, where uneven-aged techniques are being used successfully to manage and regenerate forest types that have traditionally been clearcut and replanted.

Selection silviculture is a forte of our membership. A U.S. Fish and Wildlife Service biologist visited a member's forest on a California field tour and commented, 'if all of our forests were managed this way, we could de-list most of our endangered species.' Nevertheless, we face considerable challenges in researching, quantifying, documenting, and publicizing these success stories, since selection silviculture is not the style of forestry traditionally applied to most managed forest land today.

Pioneer Forest is to be commended for its considerable proactive efforts to demonstrate economical and ecological viability. Pioneer's research program is truly a model for the country. But is Pioneer all alone? Not anymore.