IN OUR OPINION: Applying the scientific method

These are difficult times for the Pacific Northwest's beleaguered timber industry.

Indeed, it now appears that times are going to get worse before they get better.

To be sure, the industry has its enemies; but Jerry Franklin and Jack Ward Thomas are not among them, as some have suggested.

Drs. Franklin and Thomas have provided important, albeit controversial hypotheses for discovery concerning our region's old growth forests and the spotted owls which inhabit them.

Nevertheless, we are a long way from knowing whether Dr. Franklin's theories concerning biological legacies in old growth forests can benefit old growth dependent plant and animal species. We also do not know whether the spotted owl conservation plan proposed by Jack Ward Thomas and his group of wildlife biologists will work.

What we do know is that there is some linkage between old growth froests and spotted owls. How much of a link remains to be seen.

The reason there are no results to test is that these theories are products of a process called the Delphi approach, which is a research technique more at home in the world of sociology than in the world of silviculture.

Ross Mickey, who is a forester with the Eugene-based North West Timber Association, discussed the limitations of the Delphi technique in his critique of the Thomas report.

"The main tenets within the science of conservation wildlife biology are based on interpretations of observed animal behavior," Mickey wrote. "This is different from sciences which use scientific methods to first propose a hypothesis, then set about to prove or disprove that hypothesis through experimentation. The concepts of wildlife conservation biology are not derived through experimentation, but rather are theoretical, based on the best opinions of informed academicians. Decision making by consensus is sometimes referred to as the Delphi approach."

Dr. Franklin and his colleagues at the H.J. Andrews Research Group, where the new forestry was born, have also relied heavily on the Delphi approach.

Frederick J. Swanson, who is a research geomorphologist with the Forest Service's Pacific Northwest Research Station, and a member of the Andrews group, talked about this in an article titled *Toward The New Forestry*, which appeared in the December, 1989 issue of *American Forests*.

"The Andrews research group has little organizational structure; decisions are made by consensus," Swanson wrote. "This kind of participatory goal setting and project review is essential as we attempt to move from the adversarial approaches that have dominated public forestland policy in recent decades. It is also critical as we develop and apply nontraditional, sometimes controversial practices."

Dr. George Brown, who is the dean of the College of Forestry at Oregon State University, describes Franklin's new forestry as "a hypothesis waiting to be tested." He has urged that the testing begin, noting that there is an enormous amount of scientific research to do, and that the Congress seems anxious to hang its hat on Franklin's hypothesis.

In May, Dr. John Beuter, who was on the faculty in OSU's College of Forestry for 18 years, told a joint meeting of three congressional subcommittees he believes it will take a minimum of five years to integrate our rapidly expanding spotted owl date base with new forest plans for the Pacific Northwest's national forests. Beuter told subcommittee members, "the proposed spotted owl conservation strategy is part of a big experiment for which the Pacific Northwest is the laboratory."

David Reinhard, who is the associate editor of the *Oregonian* talked about this experiment in a recent editorial.

"Oh how we bow to the great god Science," Reinhard wrote in reference to the fact that many view the Thomas report as the last word on spotted owl conservation.

"Good science is, or should be, the beginning and not the end of prudent public policy making," Reinhard said. "Policy makers may eventually reach the same conclusions as the scientists, but other competing values — real jobs and real human lives, for example — should at least figure in the conversation."

In his subcommittee testimony, Dr. Beuter said much the same thing about the limitations of the Thomas report.

"At least as much time and competence must be devoted to the consideration of economic, social and cultural issues as was devoted to the consideration of the biological needs of the spotted owl," Beuter declared.

Dr. Brown is equally pragmatic in his critique of Franklin's new forestry.

"We need to deal with much more than the biological ramifications of this hypothesis," he said in a recent *Evergreen* interview. "We need to measure its operational, silvicultural, social and economic consequences."

There is yet another consequence that needs measuring. As we busy ourselves creating and/or preserving spotted owl habitat, we are also improving living conditions for the bard owl, which is the spotted owl's greatest natural enemy. Privately, some wildlife biologists have speculated that bard owls pose a greater threat to spotted owls than does logging. No one knows for sure.

What ought to be clear by now is that, while Drs. Franklin and Thomas have provided important hypotheses that merit rigorous scientific examination, it is much too early for Congress to consider these hypotheses as the basis for passing new laws aimed at preserving old growth timber and conserving spotted owl habitat.

What Congress must do now is provide a legally and politically secure climate in which scientists can work, At the moment, this climate does not exist. If it did, the Thomas committee probably would have seen fit to endorse conducting some new forestry experiments within spotted owl habitat conservation areas.

Unfortuately, the committee rejected a proposal to conduct even limited scientific research in habitat conservation areas. We believe the committee acted out of fear for the political consequences of appearing to side with science in the current climate of environmental hysteria.

So long as this climate of fear and hysteria persists, there is no hope for applying the scientific method to the Thomas report or to Dr. Franklin's new forestry hypothesis.

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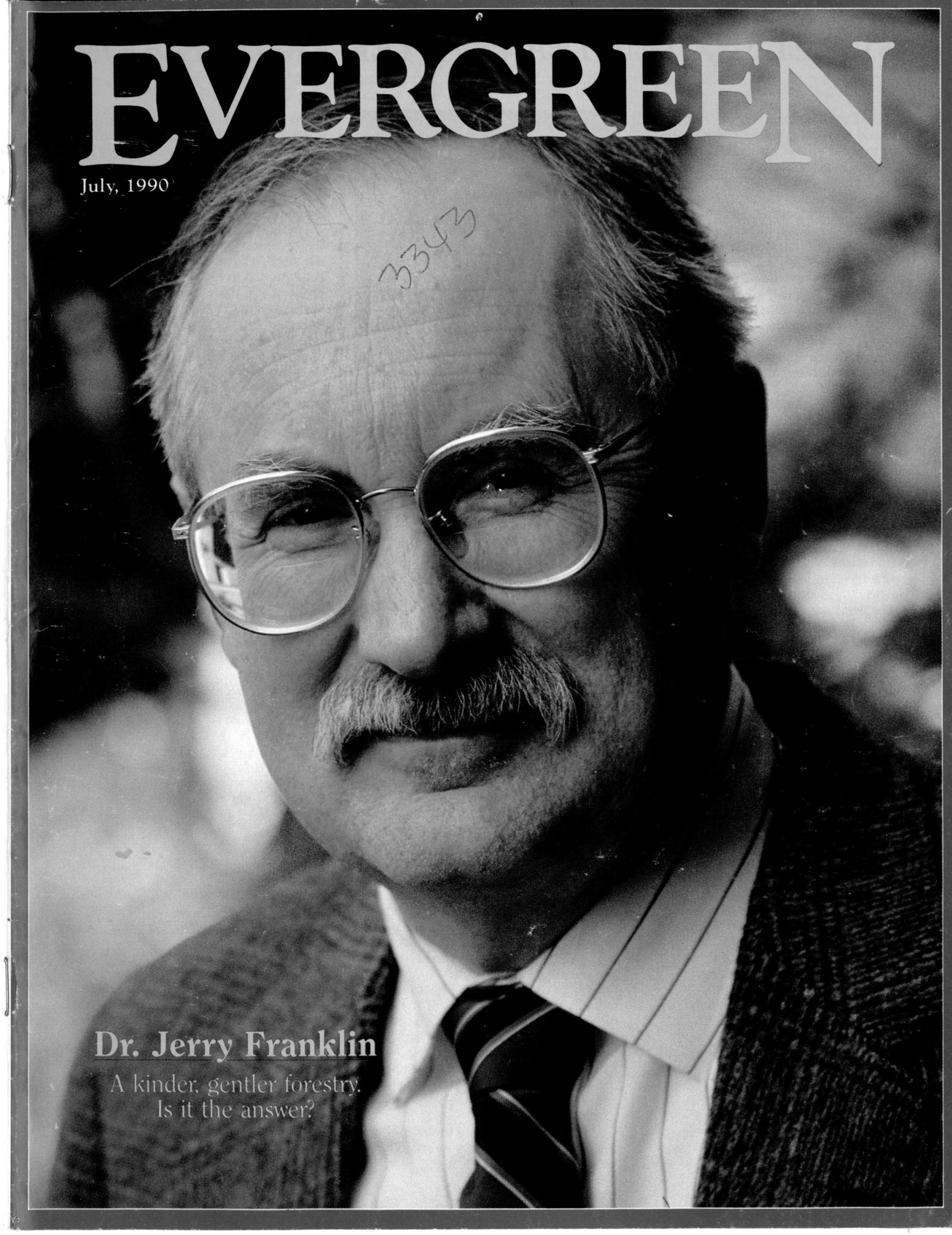


ST. HELENS TEN YEARS AFTER ARMAGEDDON

At 8:32 a.m. Sunday, May 18, 1980, a primeval force up from the basement of time tore the top off the crown jewel in southwest Washington's Cascade mountain range.

In a single, killing moment, more than a cubic mile of Mount St. Helens splendor rocketed into the heavens. It would fall back to earth in the form of a powder-like ash which blanketed communities as far away as Kellogg, Idaho, 400 miles to the east.

The lateral blast moved across the heavily timbered landscape at 400 miles an hour, smashing everthing in its path. Within 15 miles of ground zero, 100 mile an hour winds blew at 500 degrees Fahrenheit.

In the eternal moments that followed, 57 people lost their lives, together with 5,000 black-tailed deer, 1,500 Roosevelt elk, 200 black bear, 15 mountain goats and countless thousands of birds, small animals, salmon and steelhead.

More than 150,000 acres of forest land were leveled by the force of the blast. Huge trees, some over 250 feet tall, were snapped at their bases like wooden match sticks.

Armageddon had come to Mount St. Helens.

The worst damage was on Weyerhaeuser land. 68,000 acres of prime timber land, including 14,000 acres of old growth, lay jackstrawed like pick-up-sticks. Years later, company regeneration forester, Dick Ford, would describe the devastation as "the largest clearcut ever."

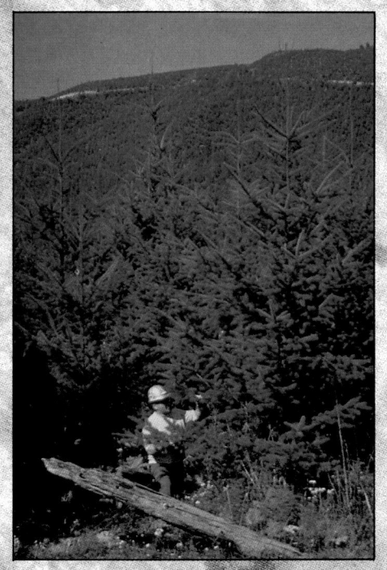
A month to the day after St. Helens erupted, the company established its first seedling test plot within the blast zone to determine whether it would be possible to grow a new forest in the ash-covered moonscape.

On September 15, more than 1,000 company loggers moved into the blast zone to begin what would be a two-year-long salvage operation. In many areas, the grayish ash was so thick, timber fallers wore respirators.

During the peak summer months of 1981 and '82, more than 600 log trucks rolled off the blast site daily. In all, more than 850 million board feet of timber were salvaged; enough to construct 85,000 three-bedroom homes.

The replanting effort on company lands began in earnest in February, 1981. It would take six years to complete, and more than 18 million seedlings would be hand planted in the blast zone. Because volcanic ash is sterile, it had to be scraped away from each planting site so that each seedling could take root in mineral soil.

Today, 10 years and two months later, life has returned to St. Helens. Across more than 45,000 acres of this once-



UP FROM THE ASHES

upon-a-time moonscape, Douglas fir trees reach 25 feet into the southwest Washington sky.

In a recent interview with Seattle *Times* reporter, Bill Dietrich, Weyerhaeuser company lands manager, Ross Graham said, "We're pretty proud of this. Before we started, the whole valley was gray. It was ugly and sad."

Depending on one's perspective, there is still some ugliness on Mount St. Helens. The 110,000-acre Mount St. Helens National Volcanic Monument, adjacent to Weyerhaeuser's new forest, stands in stark contrast. The Indian paintbrush is back, along with the lupine and the fireweed, but it will be a very long time before the forest returns, for these lands are being left in a natural state.

The significance of this contrast is not lost on anyone who sees it.

Graham speaks for Weyerhaeuser's recovery project: "It is proof of the amazing resiliency of nature. It underscores the strength and validity of the partnership between man and nature. It shows we have the ability to engineer a prompt recovery that is good for wildlife, fisheries and the economy of southwest Washington."

There is plenty of proof for all to see.

More than 700 elk have returned to the blast zone now. In recent years, Weyerhaeuser wildlife biologists have observed 136 different species within the reforested area. And to almost everyone's surprise, coho salmon planted in St. Helens streams are surviving at rates comparable to other western Washington fisheries.

The St. Helens eruption destroyed the last of Weyerhaeuser's old growth timber, effectively removing the company from the Page spotted owl-old growth debate which is raging elsewhere in the Pacific Northwest; but it has not stopped Weyerhaeuser from touting its brand of forestry.

In the weeks before last May's 10th anniversary of the blast, the company ran an extensive television advertising campaign which chronicled the history of the recovery effort. And in a recent speech before the Longview, Wash., Chamber of Commerce, Weyerhaeuser president, John Creighton, Jr., extolled the virtues of the company's high yield forestry program.

"Congress should direct that the most productive portions of the region's federal forests be managed with the same intensive practices that we and others, including the Washington Department of Natural Resources, have adopted," Creighton suggested. "By more than doubling the annual growth on these working forests, and by shortening the rotation between harvests, the sustainable allowable harvest on these lands could be increased immediately. Spotted owl habitat could be preserved, and a large portion of the national forests could be managed for uses other than commercial timber production, including old growth preservation."

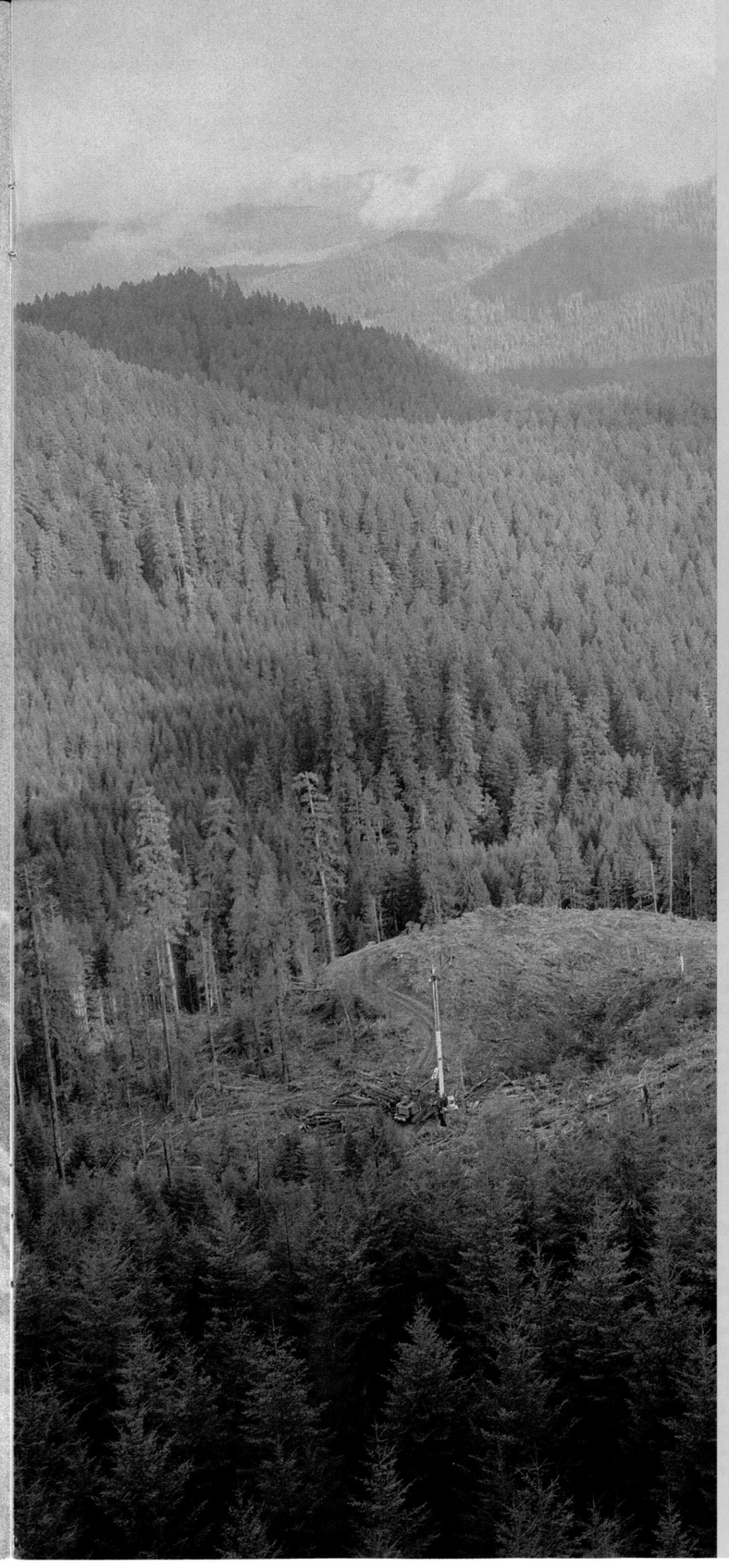
Others disagree; among them, Dr. Jerry Franklin, University of Washington professor of forest ecosystems, and the chief architect of the much debated "new forestry." (See *A Kinder, Gentler Forestry*, Page 3)

"Life in the forest is not that simple," says Franklin, of Weyerhaeuser high yield forestry. "Turning all or most of the public forests into a Weyerhaeuser kind of tree plantation would be a deliberate sacrifice of the ecological diversity found in naturally growing forests containing a wide variety of plants, animals and trees."

Still, Weyerhaeuser seems determined to press a broader philosophical point, which is that human intervention in the natural world is not harmful, and that intensively managed forests are compatible with other environmental objectives.

Weyerhaeuser helicopter pilot, Louie Pottschmidt put the St. Helens debate in perspective during a recent company sponsored press tour.

"If we allow environmentalists to say that anything that changes nature is harmful, we kind of drift."



A kinder, gentler FORESTRY

The world has changed a great deal since Jerry Franklin was a kid growing up in Camas, Washington.

Back then, in the early 1950's, his dad worked for Crown Zellerbach, first on the log pond and later as a foreman in Crown's paper mill.

The Korean War was winding down, and the nation's economic engines were running full tilt. The technological age was upon us; and a war-weary nation busied itself constructing the largest peacetime economy the world had ever known.

For the first time in U.S. history, the American dream took on real meaning as Uncle Sam delivered on his promise to help GI's complete their educations and build homes for their young families.

The nation needed lumber, and the United States Forest Service delivered, blazing new trails through heavily timbered western forests that stretched as far as the eye could see. In some national forests, including the Siskiyou and the Umpqua in southwest Oregon, these were the first harvests. Ever.

It would be another 25 years before young Jerry Franklin would stand the forestry world on its ear; but sometime in his ninth year, somewhere along one of the myriad trails that criss-cross the Gifford Pinchot National Forest, Jerry decided he wanted to be a forester when he grew up.

"It was a pretty idyllic time in my life," Franklin recalls. "I hunted and fished my way through boyhood, mostly along the Wind River. It was grand."

Things are still pretty grand in Jerry Franklin's world. He is the Bloedel Professor of Ecosystem Analysis at the University of Washington, and Chief Plant Ecologist in the Forest Service's Pacific Northwest Research Station.

But most notably, Dr. Jerry Franklin is the spiritual leader of what has become the most controversial forestry debate since Gifford Pinchot, the first chief of the Forest Service, and John Muir, the founder of the Sierra Club, argued the finer points of conservation vs. preservation more than 80 years ago.

The debate which Franklin has stirred centers on "the new forestry," a collection of concepts developed over the past 15 years by he and several of his colleagues.

Ever the consummate politician, Franklin describes these new concepts as "a kinder, gentler forestry."

"Traditional forestry practices such as clearcutting, shelterwood cutting and selection cutting have focused on the regeneration of trees and not the perpetuation of complex ecosystems," Franklin explains. "These practices often destroy many of the linkages that occur in naturally regenerated forests which grow up in the aftermath of fire or windstorm. These forests are complex and rich in structures and organisms. They differ in the extreme from intensively managed forests where the systems have been

A kinder, gentler forestry

simplified. The new forestry utilizes the concepts of ecosystem complexity, biological legacies and viable landscapes to retain ecological values in managed forests."

Stripped to its bare bones, Franklin's hypothesis challenges traditional forestry's first commandment: *Thou shalt always clearcut Douglas fir.*

Not surprisingly, many foresters, schooled in the ecological wisdom of clearcutting, are voicing skepticism, noting that the new forestry is little more than an untested hypothesis; but no one is laughing at Franklin, and that is because his ideas have quickly gained favor with a Congress that is struggling to find a way to diffuse the raging controversy over continued harvesting of old growth timber from federal forest lands in western Oregon and Washington.

What makes Franklin's new forestry so appealing to the peacemakers is that it may grant them safe passage through not one, but two political mine fields: The spotted owl debate, which now threatens the economy of the entire Pacific Northwest; and the clearcutting debate, which is now rumbling up Interstate 5 from California.

Dr. George Brown, who is the dean of the Oregon State University college of forestry, believes Franklin's theories need to be tested immediately.

"In a scientific sense, the new forestry is a hypothesis waiting to be tested," he said, "but it is an important hypothesis because it suggests forest management strategies that may better accommodate wildlife habitat, biodiversity and long-term site productivity."

Brown believes it will take 10 years to fully test Franklin's concepts, and he acknowledges that Congress may be in no mood to wait a decade to find out whether the new forestry is the long sought solution to the widening debate over timber harvesting on federal forest lands in Oregon and Washington.

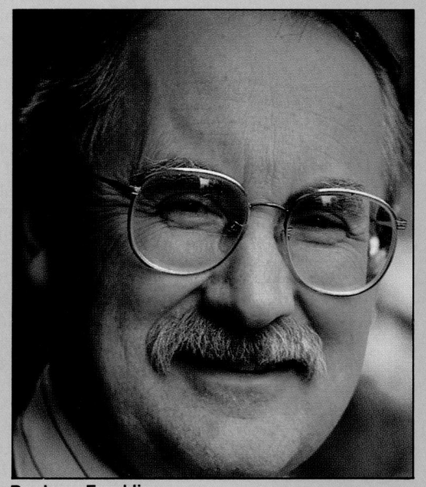
"It will take time," Brown insists, "and it will take an interdisciplinary approach involving all of the sciences of forestry. We need to deal with much more than the biological ramifications of this hypothesis. We need to measure its operational, silvicultural, social and economic consequences."

Timber industry reaction to Franklin's new forestry has been mixed, principally because there are no scientific tests which can be used to prove or disprove what he is saying; and also because there is a widespread fear the congressional cart will be placed before the scientific horse.

Preservationist groups were quick to embrace Franklin's work, perhaps *because* it cannot be easily quantified; but the honeymoon ended abruptly when Franklin suggested that one way to minimize fragmentation, the checkerboard look which characterizes adjacent clearcuts, was to have larger harvest units and larger spaces between the units.

Franklin is nonplused. In fact, he seems to thrive on the controversy he has generated amongst his colleagues, and amongst the protagonists in the spotted owl-old growth debate.

"There are times when I feel like a long-tail cat in a room full of rockers," he says. "But I welcome the challenge because I believe there is a great deal more which we need to account for in our forests than we are currently considering. The new forestry provides a framework, a system if you will, for developing management prescriptions which do a better job of integrating ecological values with commodity production."



Dr. Jerry Franklin

The translation on this is that Jerry Franklin believes it is possible to manage forests for wood fiber as well as other ecological values, including many subterranean organisms which cannot be seen without the help of a good microscope.

Franklin believes these organisms are critical to the forest's biological legacy; and he frequently talks in terms of the richness, diversity and complexity of this legacy. His critics point out there is no know scientific means for measuring things like "richness", "complexity", and "biological diversity."

Franklin admits his scientific base is limited, particularly in terms of on the ground experience, but he nonetheless argues for implementing some of his new forestry concepts to see what works and what doesn't work. He sees implementation as a means of breaking the either or mind set that has characterized the forest land allocation process since Congress ratified the Wilderness Act in 1964.

"Attempts to resolve land allocation conflicts, including the old growth conflict, have focused on how society should divide up the pie," Franklin says. "If we take the pie-cutting approach, the result is commodity-producing lands managed intensively for high yields of wood fiber, plus preserved lands that are completely withdrawn from timber cutting. Ecological values and wood production are assumed to be incompatible.

"Unfortunately," Franklin continues, "the forestry profession has done a poor job of providing convincing evidence to the contrary, generally equating good forestry with regeneration of trees. The public has been left with the impression they have only two forest management choices. The first is to lock up all forests in wilderness areas. The second is hell for bent forestry. I have a problem with both of these choices because they ignore many ecological values. We need to develop some middle ground between these extreme points of view."

In Franklin's opinion, the new forestry *is* the middle ground. It is kinder and gentler, and therefore more appealing to a public that Franklin believes is growing increasingly suspicious of federal forest management policies.

"I think the public is still supportive of the concept of multiple use forest management," Franklin says, "but they also believe there has been too much emphasis on timber production at the expense of other forest values."

The new forestry has been a long time coming. Back in the early 1960's Franklin and his colleagues conducted a series of studies on the H.J. Andrews Experimental Forest, near Blue River, Oregon, which led to major changes in the Forest Service's debris management program. Prior to completion of these studies, loggers were required to clear away virtually all post-logging debris.

"We were able to quantify the ecological importance of leaving large organic debris on logging sites," Franklin recalled. "Woody debris is an important nutrient source. Left in place, it helps minimize erosion, and it also provides habitat for wildlife. A great deal of money was being spent cleaning up debris that was better left on site."

In a subsequent study, Franklin and his colleagues concluded that stream side buffer zones adjacent to logging sites do much more than help control water temperatures. They are also an important source of nutrients which feed all sorts of acquatic life, including fish.

Although Franklin and his colleagues have been contrarians for many years, it took the spotted owl-old growth controversy to thrust them into the limelight.

It began innocently enough, with Franklin's suggestion that old growth forests might be important reservoirs of biological diversity. And why not? He had already proven the point on a smaller scale on log landings and along streams.

To test his idea, Franklin and his colleagues started climbing around in the canopies of old growth forests to find out what was happening and who lived there.

The Northern Spotted Owl

Franklin remembers: "We found an incredible diversity of invertebrate life in those old growth forests, especially insects that are predators or parasites on other insects. By contrast, invertebrate communities in young forests are heavily weighted toward insects such as aphids that eat plants. From this starting point, we theorized that old growth forests may be a major source of predators and parasitic invertebrates for adjacent young forests. As a corollary, we realized the value of retaining trees of diverse ages in managed forests."

The eruption of Mount St. Helens in 1980 provided Franklin with the missing link in his theory that biological legacies are passed from old forests to new forests.

Franklin set foot on St. Helens two weeks after the eruption, expecting to witness primeval forces never before seen by man. Instead, he found fireweeds pushing up through the ash, ants crawling about and gophers burrowing here, there and everywhere.

"What we observed on St. Helens led us to develop the theory that biological legacies, composed of green and deadwood, are mechanisms by which much of the ecological diversity of natural forests survive catastrophic disturbance," Franklin explains.

"These biological legacies explain how nature rapidly recreates complex ecosystems, and not just young stands of trees, after catastrophes."

The time had come for Franklin and his colleagues to say, out loud, what now seemed so obvious to them, which was that the way to preserve biological legacies was to leave more trees, living and dead, of varying sizes, ages and species on logging sites. Franklin estimates he would leave from eight to 15 green trees on each site, thereby significantly altering the traditional look of the clearcut and, presumably, enhancing the possibility that the harvested forest will pass its biological legacy along to the new forest.

Among those who are skeptical of the new forestry is Dr. Robert Buckman, former deputy chief of research for the Forest Service, now a professor of forestry at Oregon State University.

"As a scientist," Buckman begins, "I want to argue that as beautiful as Jerry's story is, and as much as it needs to be tested, there is the possibility that it will lead to unhealthy forests rather than more healthy forests. We simply do not know the answer to this question. I would also argue that the question we ought to be asking is how tough are these forest ecosystems, not how fragile are they. It is also important for us to learn as much about the ecological processes at work in young and middle aged timber stands as we know about old growth stands because there is as much beauty and purpose in the regrowth process as there is in the decaying process."

Franklin is sensitive to his critics, and to the fact that many foresters consider him to be a heretic.

"I think a lot of people are misreading what I am saying," Franklin says. "I am not suggesting that we throw out all of our old forestry tools. There will still be the need to use herbicides and prescribed fire, and we will still clearcut along more traditional lines in some areas. What I am suggesting is that we add some new tools to our kit so that we can do a better job of integrating ecological values with commodity production."

Clearly, spirited debate lies ahead, and that is just fine with Franklin.

What is not fine is that, amid the emerging academic debate there is mounting political pressure to resolve the spotted owl-old growth issue faster than may be possible or even prudent. As an example of the importance of moving with purpose, Franklin cites evidence that predominantly young timber stands which inherit significant numbers of old growth trees and snags may fulfill the habitat requirements of species such as the northern spotted owl.

"On the Olympic Peninsula, owls are known to use multi-aged stands that were created by windstorm and wildfire some 70 to 90 years ago," he reports. "By adopting new forestry practices, we may be able to recreate spotted owl habitat in a matter of 90 years, rather than having to wait 200 to 250 years."

In its Jack Ward Thomas report, the Interagency Spotted Owl Committee acknowledged the potential of Franklin's theory, but refused to authorize any harvesting experiments in owl habitat conservation areas.

"It's unfortunate," Franklin says. "I believe we can create suitable owl habitat, structural diversity if you will, using new forestry harvesting techniques. What we do not know is if we can create optimal habitat."

OSU's George Brown puts the new forestry in sobering perspective:

> If the objective is to implement timber stand management techniques and harvest practices that retain green trees, we can do it tomorrow. In fact, the traditional clearcut has already all but disappeared from public forest lands. The problem we have as scientists is that we do not know what the new forestry will do to forests. I would be very concerned implementing the new forestry throughout the Douglas fir region without first testing it.

Franklin agrees with the need for rigorous scientific review, but adds his own sobering perspective:

> Ecosystem science is finally beginning to provide us with a quantifiable rationale for continuing to practice multiple use forest management; but with all of the new constraints that are being imposed on forestry, it is becoming increasingly difficult to figure out how the hell to turn the corner in this debate.

In Praise Of The Logger

The logging business is changing, and no where are the changes more in evidence than on federal forest lands in southwestern Oregon.

"We really are much gentler with the land than we once were," says Guy Gaylord in an obvious reference to the kinder and gentler aspects of Dr. Jerry Franklin's new forestry.

Gaylord, who logs for Oak Mine Timber Company, Grants Pass, is representative of a new breed of loggers who have grown up in the shadow of the industry's roughshod image.

Although the checkerboard pattern of once-upon-a-time clearcuts is still a prominent feature on the national forest landscape in southwest Oregon, new harvesting techniques, including modified clearcuts, are in vogue on national forests and Bureau of Land Management timberlands.

"I think there is a lot more concern for the land than there used to be," Gaylord says. "We all know the timber resource will not go on forever if we don't treat it right, and we know the public is watching every move we make. Those are powerful incentives to do the best job possible."

In May, Oak Mine completed a Forest Service timber sale contract on the Rogue River National Forest which Gaylord believes typifies the transformation of the logging industry.

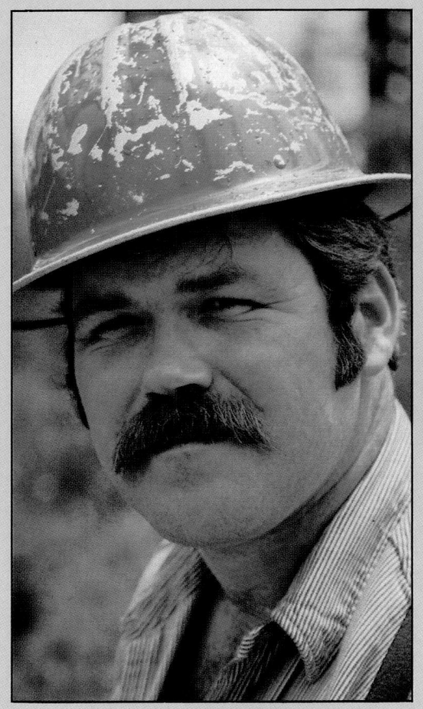
"The Forest Service wanted us to remove the mature timber without damaging any of the younger trees that are growing on the site," Gaylord explained. "The challenge was to fall the big trees and get them out of the brush without damaging the little trees."

Ed Scriven, who has been a Forest Service timber sale administrator for 18 years, watched over Gaylord's crew to make certain sale contract specifications were followed to the letter of the law.

"It was an outstanding piece of work," Scriven says. "What it shows is that when the Forest Service and the logger have a clear understanding about what the finished product is supposed to look like, we get good results."

Gaylord credits his crew for a job well done.

"There are places on the site where our timber fallers had less than five feet of clearance between stands of young timber," he said. "One mistake and you kill little trees that will someday be big trees. Nobody made any mistakes. About all I did was keep the crew pointed in the right direction. They did the rest."



Guy Gaylord

The sale in question, on the Prospect Ranger District, is in an area known for killing frosts. The harvesting method of choice, called a shelterwood, leaves many of the older, larger trees on site to protect younger trees from moisture and cold.

"Once the younger trees are six to eight feet tall, they can usually escape the ground-level frost," Scriven explains. "Then we can go back and remove the big trees we initially left for protection."

Gaylord believes harvesting in successional stages will cost consumers more money because of added logging and timber stand management costs, and he hopes the consumers will understand and accept the resulting higher cost of wood and paper products.

"The Forest Service and the logging industry are going to great lengths to be more responsive to public concerns about timber harvesting impacts," Gaylord said. "We don't always see eye to eye with the Forest Service, but we always do what they tell us to do because that's the law. We frequently do more than the law requires because we want the public to know we care about forests, and we are willing to back our words with actions."

Oak Mine removed 870,000 board feet of timber from the sale area, enough to build about 87 new homes. At least as much mature timber was left behind, to be removed in another four or five years when the younger trees on the site are old enough to survive a killing frost.

"I would have loved to have taken it all," Gaylord confesses, "but in this day and age we deal in tradeoffs, and I think this was a good tradeoff between the nation's need for wood fiber and the need to protect the timber resource."

Scriven's final inspection report reflects the Forest Service's satisfaction with Oak Mine's work.

"Operations on this sale from layout of skid trails to felling to skidding operations was outstanding," Scriven wrote. "Protection of the residual trees by the fallers and skidding crew are to be commended. Guy, give my thanks to your fallers and skidding crew. We appreciate the extra effort."

The extra effort Scriven describes is not peculiar to the Prospect Ranger District. Across southwest Oregon, the word is teamwork, as the loggers, the Forest Service and the BLM respond to growing public and scientific concern for the impact of logging operations.

"There is the impression that nothing is being done to address these concerns," says Greg Miller, executive vice president of the Medford-based Southern Oregon Timber Industries Association. "The truth is that a great deal is being done to lay a gentler hand on the land. I wish loggers got more credit for the changes that are taking place because their skills are what make the changes possible."

Mike Hupp, who is a timber sale administrator on the Umpqua National Forest, talked about loggers and their skills, during filming of *We Can Have It All,* an *Evergreen Foundation* film scheduled for release late this summer.

"I don't want to suggest that everyone out here is an angel," Hupp said, "but the plain fact is there are a helluva lot of good loggers out here. Without their skills, we could not do the special things we now require to protect the forest environment."

"An extended moratorium on old growth harvesting is not an acceptable solution from a social and economic standpoint, and it is not necessary from a biological standpoint."

John Beuter's Five Year Plan For Managing Owls And People

Dr. John Beuter, who is one of the nation's most respected forest resource analysts has told Congress he believes the federal forest planning process provides a framework for resolving the spotted owl-old growth controversy.

"It is hard to imagine that any third party solution to the old growth-spotted owl issue has a better chance of distilling management options and the public interest than has been done with the national forest planning process," Beuter told a joint meeting of three congressional subcommittees.

Beuter, who spent 18 years in various teaching and research capacities within the Oregon State University College of Forestry, told subcommittee members he believes resolving the spotted owl-old growth controversy hinges on integrating a spotted owl conservation strategy with federal forest plans on each of the region's national forests.

"This will take time, perhaps several years," Beuter testified. "However long it takes, it should be done in a careful, deliberative manner with a vision for what is desired in the long-term. The goal should be a long-term solution, not a quick fix to get us through another year."

In a subsequent *Evergreen* interview, Beuter speculated that the final owl habitat conservation plan would "fall somewhere between" the recommendations of the recently released Jack Ward Thomas report and the Forest Service's spotted owl habitat management plan, which the agency implemented last year.

Beuter also told subcommittee members that, while the Forest Service set aside substantial amounts of ecologically significant old growth during its recently completed 10-year planning process, enough old growth remains, which is not ecologically significant, to provide a major portion of the region's short-term timber supply.

(Ecologically insignificant) "old growth should be used as a source for assured timber availability for at least the next five years at levels commensurate with harvests of the recent past, or at least with the harvests proposed in final plans or preferred alternatives of draft plans, Beuter testified. "This will provide breathing room while the long-term solutions to old growth-spotted owl issues are negotiated."

Beuter also told *Evergreen* that, in the near term, forest plans are "the best assurance we have that we aren't going to hell in a hand basket."

"I did not want Congress to simply decide to stop cutting timber because we do not yet have all of the answers we need concerning owls and old growth," he said. "The fact is that we have a good approximation of the owl's needs within the habitat management plan the Forest Service has factored into its forest plans. These plans provide us with the assurance that we can harvest at or near preferred alternative levels in the near term without sabotaging our long-term decision making process."

Beuter also told subcommittee members, many questions, not directly related to spotted owl-old growth conservation must also be answered before reasonable strategies can be developed.

"At least as much time and competence must be devoted to the consideration of economic, social and cultural issues as was devoted to the consideration of the biological needs of the spotted owls," Beuter said. "People and their habitats also have needs."

Beuter, who is also working in an advisory capacity on a timber community economic diversification study the Wilderness Society is conducting, told the joint hearing there are about three million acres of old growth timber remaining on federal forest lands in western Oregon; that about half this amount has been set aside in areas where harvesting will never occur; and that the remaining half will be harvested over the next 100 years.

He also told subcommittee members Oregon's old growth reserve will actually increase in size over the next century.

"Over the next 100 years, some stands of timber currently younger than 160 years of age will grow into old growth status," Beuter explained. "The dynamics of the situation are such that, barring catastrophic events, the acreage of old growth on public lands in western Oregon would never decline below 2.2 million acres, and 100 years from now, virtually all of the remaining 2.2 million acres will be on lands that are not available for timber production. It should be clear that there is no plan to cut every stick of old growth in Oregon."

Separately, Beuter told the subcommittees, "It should be evident that we are a long way from old growth extinction in western Oregon. Many questions need to be answered about ecological and strategic significance of remaining old growth, but I am convinced that a reasonable sustained harvest of old growth can continue while study continues."

Beuter said maintaining harvest levels at or near levels of the recent past is critical to the economic viability of the region's forest manufacturing sector.

"Most modern forest products firms require assured timber availability for three to five years of operation, and a long-term prospect of a reasonable chance to obtain sufficient timber supply at reasonable prices." Beuter explained. "Without such assurance, investments in the forest industries and interdependent industries will cease. The base for jobs, income, taxes, and competitiveness will erode, along with the vitality and viability of many rural communities in the Pacific Northwest."

Beuter also told the subcommittees the recently completed Oregon State University timber supply study, *Timber for Oregon's Tomorrow,* underscores the importance of continuing the old growth harvest in order to maintain the vitality and viability of the state's economy.

"The OSU analysis makes it clear there is little slack on other ownerships to offset further harvest reductions on federal lands," Beuter explained. "There is a lot of timber growing on the regenerated private lands, but most of it won't reach merchantability for another 20 to 30 years. Federal timber is needed to maintain a viable forest industry and to maintain the economic and social stability of many Oregon communities. An extended moratorium on old-growth harvesting is not an acceptable solution from a social and economic standpoint, and it is not necessary from a biological standpoint."

Beuter likened the proposed owl conservation strategy to "a big experiment for which the Pacific Northwest is the laboratory."

"The strategy involves tradeoffs and risks," Beuter declared. "There is little doubt an experiment is needed and will be done, but great care must be taken in designing it."