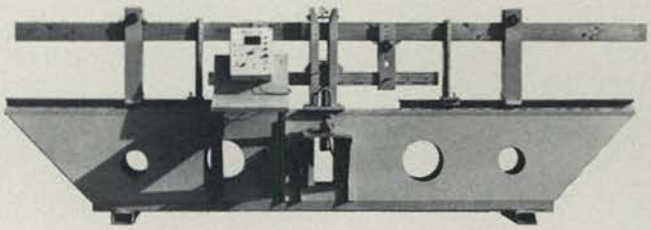
Idaho Forester 1986

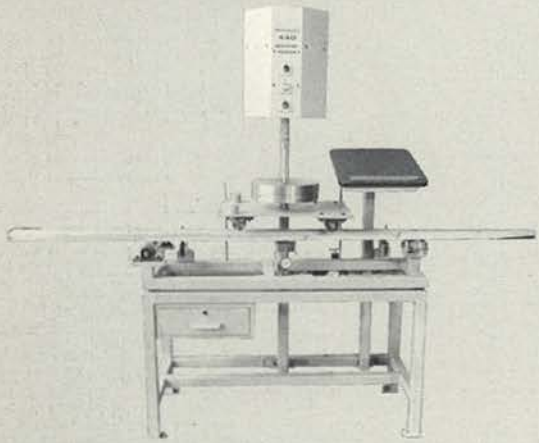
A Magazine of Natural Resources

MACHINE STRESS RATING

CLT
Continuous Lumber Tester

Model 312
Bending Proof Load Tester





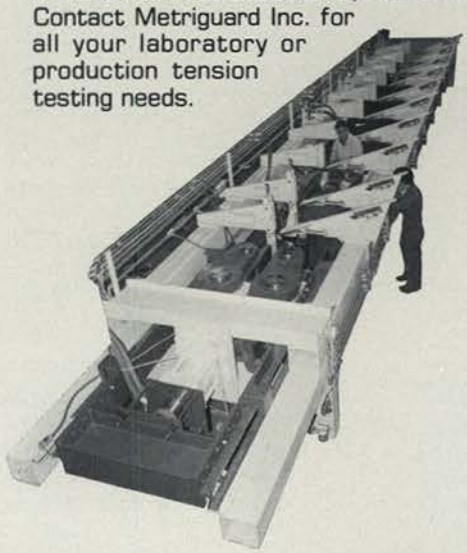
Model 440 Flatwise Dead-Load Lumber Tester

CLT — Continuous Lumber Tester — Machine Stress Rating (MSR) of dimension lumber at full planer-mill speeds. The method of choice for economical MSR production. Modern technology combined with rugged design for accurate, reliable production.
Model 312 — Bending Proof Load Tester — Measures edgewise bending E and verifies strength in MSR quality control. Load cell force measurement. Direct digital E and force readings. Axial and transverse, rotational & translational degrees of freedom. Roller bearings at load points reduce friction. Two independent force calibration means assure accuracy.
Model 440 — Flatwise Dead-Load Tester — Economical measurement of flatwise bending E for laboratory use, calibration, and quality control applications. Push-button, air-powered control of test weights. Rapid, convenient operation.

TENSION PROOF TESTING

Off-line testing — valuable for laboratory use and production quality control. For example, the **Model 412** above tests lengths 5' or longer to 100,000 lbs. tension, 2x3 through 2x12 sizes. Accurate, direct-reading digital tension force readout from load cell. Instrumented to meet your most exacting research needs. Especially useful in testing finger joints, connector plates and verifying tension strength in lumber.

Production line testing — for use when every piece of material needs the quality assurance that only tension proof testing can give. Production-line testers available in sizes ranging from 20,000 lb. capacity to the **Model 4130** below capable of testing 4x16 cross-sections to 210,000 lb. force. Contact Metriguard Inc. for all your laboratory or production tension testing needs.



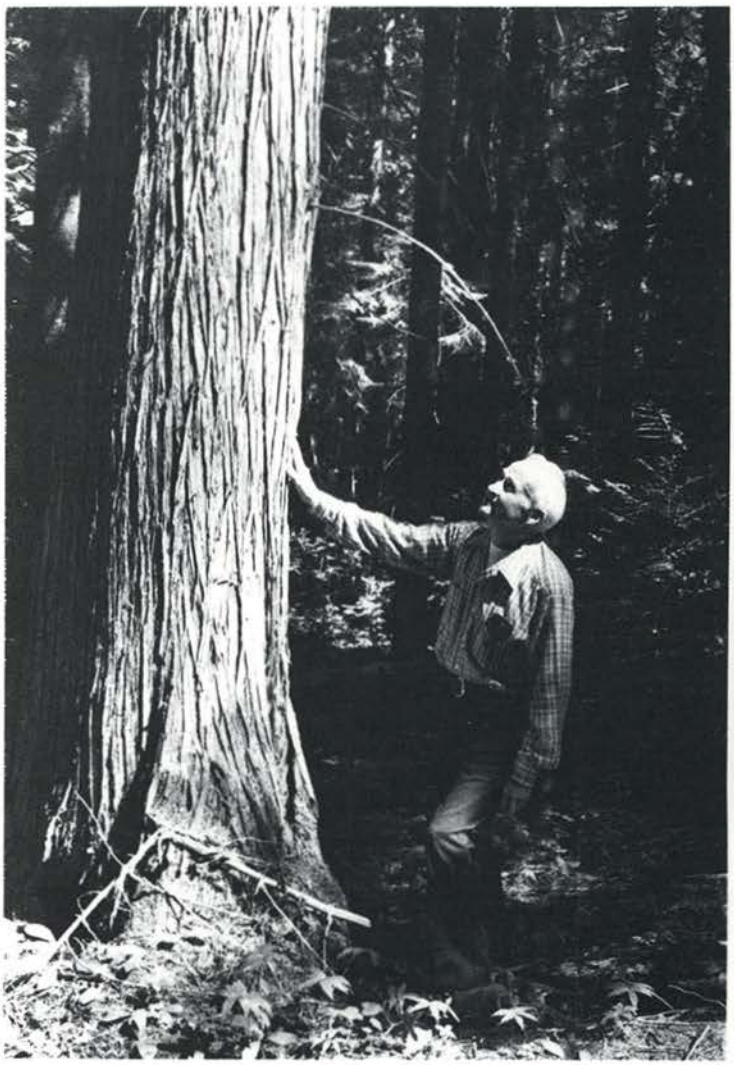
Metriguard INC.

serving the forest products industry through electronics

P.O. Box 399 TEL: (509) 332-7526
PULLMAN, WA 99163 (509) 332-1600
U.S.A. TELEX: 910 350 6817 (METRIGRD WA)

Dedication

Charles A. Wellner



The 1986 Idaho Forester is dedicated to "a forester's forester"—Charles Wellner, a 1933 alumnus of our college. Wellner spent over forty years in silviculture and research with the U.S. Forest Service, and was instrumental in founding the Intermountain Research Station in Moscow. As director of the station, he worked to foster an interdisciplinary, ecological approach to land management.

For the past twelve years, Wellner has been a champion of Research Natural Areas—unique undisturbed habitats which provide baseline data on natural diversity. He and other UI naturalists have succeeded in having twenty areas designated, and are promoting preservation of more than one hundred other sites.

As Affiliate Professor of Forest Resources, Chuck Wellner continues to enlighten and inspire students through his zeal for intelligent management of our natural resources.

Editorial

Integration for Multiple Use

Most of us are dreamers. In our dreams, we create a set of ideals and call them goals. Sometimes we keep these goals to ourselves, sometimes we share them with others and sometimes we tack them on the refrigerator and try to come a little closer to achieving them every day. Experience has taught us that we as individuals and as a society would not progress very far without any goals. The ambition of the 1986 *Idaho Forester* is to renew and encourage a goal that is not new, yet has been difficult to achieve. The aim is the integration of our natural resources for multiple use.

In our minds, integration for multiple use does not involve the exploitation of the environment by the maximum number of people possible. Instead, first and foremost it is the practical management of resources that at least meets, if not exceeds, the survival needs of the entire wilderness biosphere. At the same time, however, our goal should be to allow as much use of our wilderness as is possible.

Between loggers, ranchers, miners, sportsmen, and several million other people, all of whom want to use the same limited resources, it is no longer wise, or even feasible, to allow one group exclusive use of a resource. In addition, we are taught that it is impossible to manage for a single resource without affecting others. A policy governing timber will impact the forest, wildlife, fisheries, soil and all users of these ancillary resources.

So then, what is our task? To begin with, we must maintain an open mind. We cannot lock out people or ideas that may be contrary to our own. We must be willing to listen and compromise as often as possible

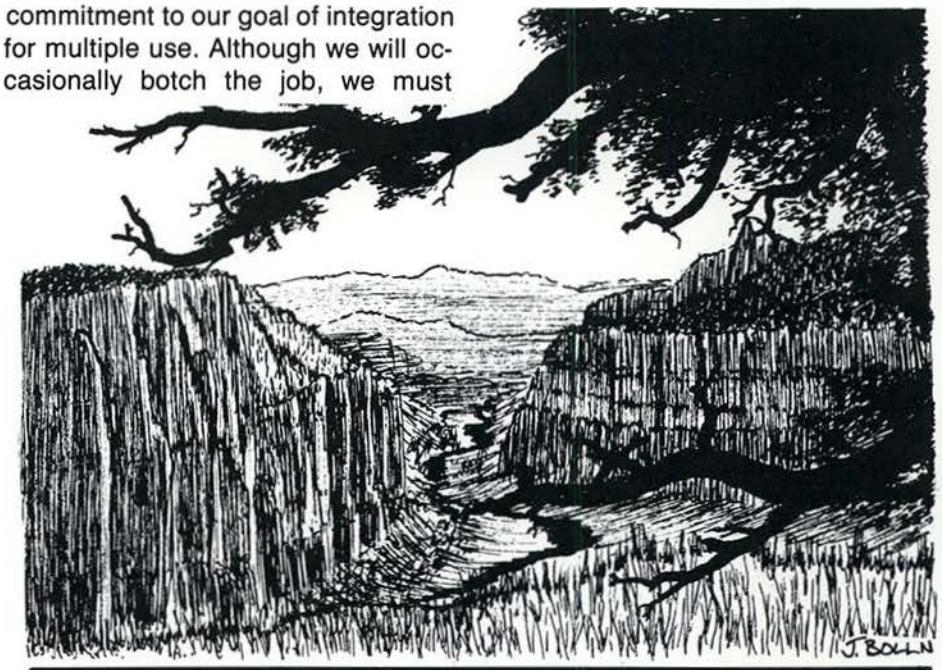
It takes cooperation and coordination between different groups such as the Forest Service, State Fish and Game Departments, college researchers, the Audubon Society, Trout Unlimited, timber harvesters, grazers, politicians, and even the local (perish the thought) ORV club. Ego trips, shady politics and backbiting will not solve our problems. That will only happen through the cooperation and hard work of dedicated individuals.

We attend the College of Forestry, Wildlife and Range Sciences to learn sound and practical management of our natural resources and their users. We as students should make a strong commitment to our goal of integration for multiple use. Although we will occasionally botch the job, we must begin anew, renewed by the knowledge learned in those mistakes. With a strong attitude to help one another, and to perpetuate the resources, we will see positive results as we become managers ourselves.

Support is always helpful. We value and will continue to need the encouragement, opinions and best wishes of our teachers, friends, and the citizens who support integration for multiple use.

Read on, learn and enjoy!

The 1986 *Idaho Forester* staff



Front cover photo—Indian Paintbrush, by William H. Jones
Back cover photo—Backpacking the Upper St. Joe, by William H. Jones

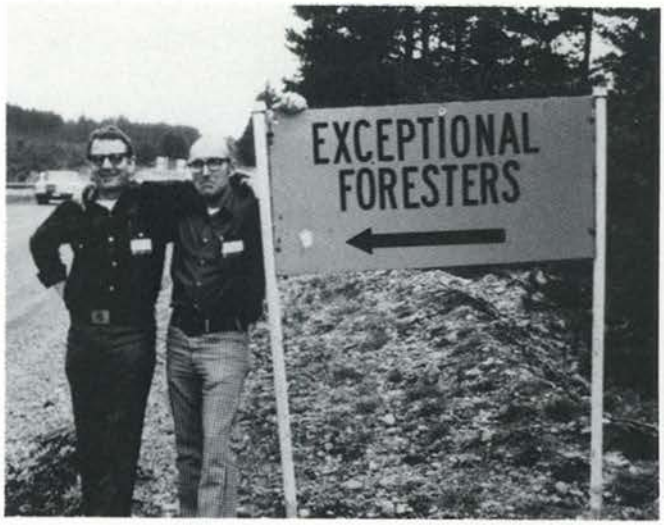
Center photos:
winter scene—William H. Jones
wood lilies—Lynn Kinter
Brown's Pass—Chris Vetter
mountain goats—Kirk Naylor
leaning cabin—Randy Hollander
controlled burn—Ed Sellers

Table of Contents

Volume LXVIII

ISSN 0270-7616

Sam Ham



Dave Adams

Aram Eramian

Bruce Higgins

Lynn Kinter

Lynn Kinter

Feature

Articles

Ocelots and Idaho

by
Mike Tewes

What do ocelots and Idaho have in common? Try the Department of Wildlife Resources. Since 1981, ocelots have been the focus of my doctoral research for the wildlife department at the University of Idaho. I decided to pursue my studies at UI because one of the world's foremost authorities on cats, Dr. Maurice Hornocker, was stationed here.

The ocelot is listed as an endangered species by the U.S. Fish and Wildlife Service. Of the 37 species of wild cats found in the world, the ocelot ranks among the most beautiful. Ocelot range only in this hemisphere - from Argentina, through Central America and into Mexico. A few isolated populations cling to existence in the warm, humid environment of south Texas. This subtropical setting became my research home for three years.

Prior to 1981, no biologist had attempted to apply modern ecological or behavioral study techniques to these cats. Consequently, the Office of Endangered Species contracted me, together with the Caesar Kleberg Wildlife Research Institute of South Texas, to examine ocelot ecology and identify factors which threaten their survival.

My first objective was to locate an ocelot population. This task was akin to searching for a needle in a hot, thorny, tick-infested, rattlesnake-laden haystack. I loved every bit of the search.

After trapping my first ocelot in 1982, the toughest part of the research was over. I had found the key to the lock which held the ocelot's secrets. Eventually, I caught and radio-collared a dozen ocelots in the Rio Grande Valley.

Located in the southmost tip of Texas, the Rio Grande Valley is a fertile region bounded by the Rio Grande River on the south and the Gulf of Mexico on the east. Citrus, fruits, vegetables, sugar cane, sorghum, and cotton are important crops which dominate 95 percent of this landscape. Ocelots are squeezed into a fraction of the remaining 5 percent of native vegetation. Obviously, loss of habitat has been the ocelot's major conservation problem in this area.

The ocelot population I studied generally seemed to be surviving well. I even recorded one female which gave birth to three litters in fifteen months. However, a potentially serious threat to population maintenance may be the result of the overall development in the Rio Grande Valley. The extensive road network is a byproduct of this development. Three of the four ocelot mortalities I documented were known or suspected roadkills. Some ocelots have to cross roads to utilize their meager patches of habitat and thus become vulnerable to automobiles.

One of the highlights I experienced during my study occurred in 1983. The U.S. Fish and Wildlife Service happened to be holding their bi-annual directors meeting on the refuge where I was performing my study. This gathering included the regional directors, heads of divisions, and then director, Bob Jantzen.

Mike Tewes

One of the radio-collared ocelots dashes across a small opening in its dense brush habitat.

Bonnie Tewes

Mike Tewes removes ectoparasites from a sedated ocelot in south Texas.

For "entertainment", I presented a status report on my ocelot research. A discussion evolved about why a recovery plan had not already been developed for this cat. The result was initiation of the process to formulate the recovery plan - a document scheduled to be released by the end of 1986.

Some ideas on how to approach future ocelot conservation in south Texas have emerged from my research. Ocelots will occupy small islands of habitat and travel on narrow, interconnecting corridors of this habitat. Such information will assist federal and state wildlife agencies in establishing priorities used for land acquisition. Now, even a few small islands of habitat may be regarded as a potential ocelot home.

Furthermore, the U.S. Fish and Wildlife Service envisages an ambitious plan to develop a "wildlife corridor" on the lowermost 250-mile stretch of the Rio Grande River. A 100-yard strip of vegetation on the north bank of the river will be acquired so various wildlife species can more easily pass from one habitat island to another. Ocelots should also benefit if this undertaking is completed.

Recently, Maurice Hornocker established the Wildlife Research Institute here on campus. Maurice and I are planning the next phase of ocelot research. After achieving a new level of understanding, we find many new questions urgently await answers. Are other populations yet to be discovered? What is the minimum area of habitat island and corridors required by ocelots? How effective will our management of existing ocelot populations prove to be? Will active management techniques, such as habitat enhancement, competitor removal, or establishment of new ocelot populations, provide a feasible alternative to securing this species?

Idaho and its wildlife expertise has been and will be instrumental in advancing this new front of knowledge, thereby assisting with the conservation of this endangered cat. Ocelots and Idaho - what a nice combination.

Mike Tewes, a wildlife graduate student at the University of Idaho, hopes to complete his dissertation this summer.

Nature is painting for us,
day after day,
pictures of infinite beauty
if only we have the eyes
to see them.

John Ruskin

Strong Medicine for the Forest Products Industry Has it Healed the Patient?

by A.A. Moslemi

In a speech before the forestry deans in September 1985, Charles Bingham, Executive Vice President of the Weyerhaeuser Company, concluded that "the medicine that has been forced upon the forest products industry is strong indeed and we have reacted to it accordingly."

The medicine Bingham referred to was administered in 1979 when Federal Reserve Board Chairman Paul Volker held firm and eventually brought inflation under control—at a cost. By controlling the money supply, he was able to reduce rampant inflation and bring it to a level that is expected to pose no significant threats for the foreseeable future. However, credit sensitive industries, such as housing, took a terrible beating, thereby adversely and severely impacting the solid wood products industry. The profitable decade of the seventies turned into the awful years of the eighties with demand declining sharply and prices plunging. In fact, in 1982, the returns turned negative, accelerating a series of decisions by the industry to cut costs at all levels and improve productivity.

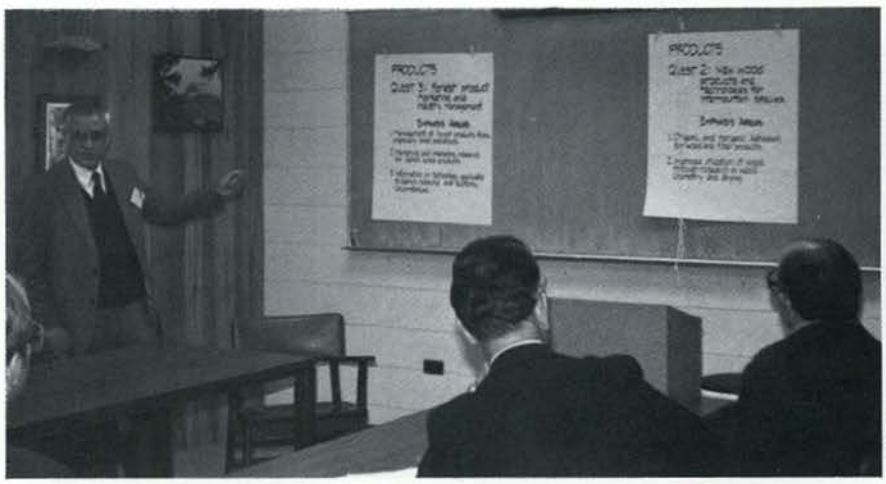
We have now witnessed a sustained downturn in the solid wood products industry which began in 1979-80 and continues today. These events led to a series of other events which continue to depress prices and, at best, produce razor-thin margins. The average returns of 25 percent in the late seventies plunged to a negative 5 percent or so in 1981-82. Although the demand side for lumber has improved substantially since the early part of this decade, prices remain low and returns are at less than 10 percent.

The forest industry's response to declining margins has been to reduce raw material, cut labor costs, and bring processing costs under tight control just to survive. Jobs in this industry in Idaho have declined from 20,000 people in the late seventies to something around 13,000 today. The loss of wages and tax dollars have affected local communities and have reduced the state's income at a time when other key industries in the state (such as mining and agriculture) face similar problems. In turn, the state of Idaho has had to cut services.

The irony of the new reality is that the demand for solid wood products is pulling up sharply. In 1984, for example, the United States demand for softwood lumber set an all-time high of nearly 43 billion board feet. However, prices did not move up in relation to that strong demand. For example, fir/larch lumber prices fluctuated from around $170 per thousand board feet in 1976 to $250 in 1979. Prices plunged to $162 in 1982 and increased to $190 in 1984. The price of this lumber commodity stands at $180 today. (These are current dollar values which do not account for effects of inflation over time.) The price structure for other types of construction lumber fluctuated in a similar manner.

It is clear that the industry has had to pare costs or perish. Many mills could not survive and were permanently shut down (such as the Potlatch mill in Potlatch). Others changed ownerships, usually from larger companies to smaller ones with lower overhead and labor costs and special timber set-asides. Since 1980, seven major sawmills have closed in Idaho.

Why have prices remained depressed in spite of increased demand for lumber? The reason can be summarized in one word: "overcapacity"—when both the United States and Canadian productions are combined. Canadian mills have continued to increase lumber shipments to the U.S. and claim a greater share of the market.



Rob Daley

Dr. Moslemi discusses our forest products program.

George Savage

Student presentation on Idaho's forest industry—Ken Nygren, Susie Vogt, Lance Deverich, Jeff Bolln, Dr. Gary Machlis, Bill LaRue, Elliot Skolnick.

This continual market gain by Canadian producers has occurred virtually all across our country. Canadian markets' share in softwood lumber in such states as Florida and Georgia exceed 70 percent. Meanwhile, U.S. producers faced with such stiff competition have increased productivity in order to reduce unit costs.

In Idaho, in spite of the substantially reduced work force, the production of lumber remains at levels similar to those in the late seventies when nearly one-third more people were employed. There has been much debate on the Canadian lumber issue with threats of import restrictions raised frequently over the last five years. At the same time, Canadian lumber production has substantially increased. In 1982, softwood lumber production in Canada stood at a little over 15 billion board feet; it increased to 26 billion in 1984.

To complicate matters further, a new age of business takeovers engulfed the industry in general. Some of the companies in the forest products industry became a target. A classic example in Idaho involved Diamond International which was taken over by a British financier only to be resold in segments a short time later—at a huge profit. Potlatch was recently the target of a takeover by a wealthy Canadian family who unsuccessfully bid for the company. The positive or negative effects of these major takeovers are not clear. However, the tempo will probably be reduced due to sophisticated approaches now adopted by various companies which will make it difficult for potential raiders.

How about the exports? Much has been written on the potential of exports, especially to the Pacific Rim nations. Could the overcapacity be remedied by increasing the export of lumber and other wood products? In the export arena, the major action has involved logs and chips. It has been very difficult to increase exports of lumber and panel products for a variety of reasons, including restrictions imposed by these nations. For example, U.S. softwood lumber and plywood exports to Japan—by far the largest wood trading nation in the world—have remained flat over the painful period of the eighties. The strong U.S. dollar over the same period made it especially difficult to increase export volumes in much of the world.

Has the Volker medicine had any beneficial effects? It is my considered judgment that the medicine not only has had much positive effect in controlling inflation, it has also forced change in the forest products industry for the better. It has led to lower stumpage costs and efficient utilization of labor and capital, and has given the industry a sense of market orientation that will be a benefit for some time to come. The process of forest to market has been gradually reversed so that market realities will decide what is needed in the commercial forests. Some of the old mills built at the turn of the century have been replaced by new, highly efficient sawmills capable of profitable utilization of small logs. A more complete use of the wood raw material, whatever size and shape, will become a reality.

The Northwest timber industry has gone a long way over the last five years to become lean, modern, and highly efficient. With the recent decline in the U.S. dollar and interest rates, demand is likely to be strong. The big question remains whether Canadian lumber mills will sustain or increase production levels.

Although no one can be certain, it is becoming apparent that British Columbia—where much of the Canadian softwood is produced—will not be able to sustain the production needed to hold on to the current market share. Timber in British Columbia is being overcut in accessible areas. By the end of this decade, the Canadian share of the U.S. softwood lumber market may indeed begin to decline. It will possibly fall from its present 33 percent to 25 percent sometime during the next decade. An additional favorable factor is the reported declines in the sawlog inventory in the southern pine regions of the U.S. Furthermore, rail transportation of western lumber into eastern markets is becoming more competitive. It is also conceivable that Canadian mills will begin exporting an increased share of their production overseas due to the decline of the Canadian dollar against the

The forest products industry will remain lean and highly competitive.

Japanese yen and other world currencies. These factors point to the next decade as a strong and positive one for the northwest timber industry.

Yes, the medicine is working. In the words of Charles Bingham, "We are slowly returning to health, and to a future that, over the long term, is far more promising."

Meanwhile, 'culture shock' of reduced employment is likely to remain. The forest products industry has learned to use labor efficiently and will remain lean and highly competitive. The logging culture of the Pacific Northwest, including Idaho, will be with us in future decades, although in a modified form. The tradition left by our logging ancestors is strong.

Dr. Ali Moslemi is a professor and head of the Department of Forest Products. He also serves as the Coordinator of Graduate Programs in the College of Forestry, Wildlife and Range Sciences.

Chris Vetter

Jay Marshall.

THE SMELL OF SAWDUST

Take attar of roses, imagine cologne,
Oh, each has an odor, a smell of its own,
The lilac, the lily, arbutus in May
They all have their perfume, all right, in a way,
But nothing can equal, can equal or will,
The smell of the sawdust that comes from the mill.

I've walked in the meadows, I've wandered the wood,
I've picked all the posies a man ever could,
I've smelled the verbena, it surely is fine,
But nothing can equal the smell of the pine.
I know where the nectar the richest'll spill
It comes from the sawdust that comes from the mill.

There's something about it, it's hard to say what,
There's something about it the rest haven't got.
Your honey is sickish, your perfume is faint,
But sawdust is all that the other things ain't;
It's cool as the breezes, as moist as the rill,
The smell of the sawdust that comes from the mill.

I'm sick of the city, I'm tired of the town;
I think I'll go back and settle me down
Some place there is timber, some place there is saws,
A band and an edger and trimmer because
There isn't a tonic, when someone is ill,
Like the smell of the sawdust that comes from the mill.

And when I pass over, and when I am thru,
Up yonder in heaven I know what I'll do;
I'll stand by the gate and keep watching for those
Who come with the smell of the pine on their clo's,
For even in heaven, I'll want it, I will—
The smell of the sawdust that comes from the mill.

Walter M. Leuthold,
One-time president of the National
Lumber Manufacturers Association

Snags and John Muir: Teachers in Conservation

by Eddie Sue Judy

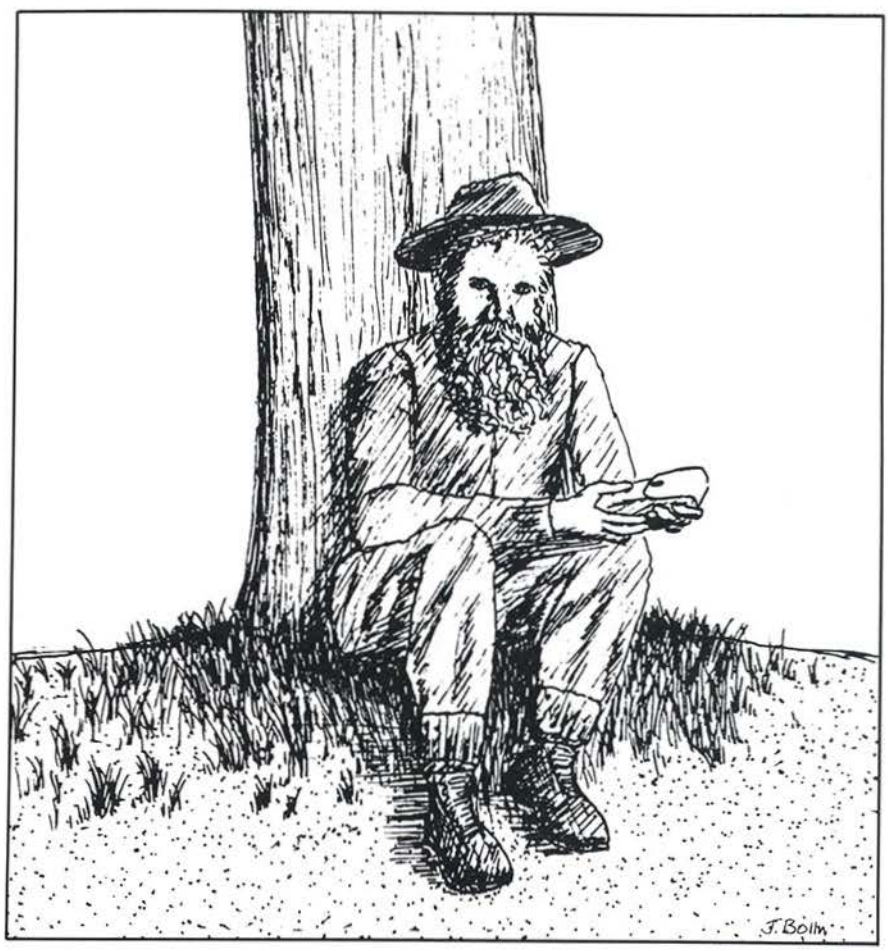
Writing in 1898 about the forest reserves of the Bitterroot Mountains, John Muir urged, "Wander here a whole summer if you can. Thousands of God's wild blessings will search you and soak you as if you were a sponge, and the big days will go by uncounted." Eighty-five years later, I had the fine fortune to act out his advice, although I had not read it at the time. Like Muir, I found those mountains full of life and wonder, and going to them was, indeed, going home.

Now, reading accounts of Muir's work and struggles, I find other similarities, more disturbing, between conditions Muir faced in his lifelong campaign for wildlands and those confronting parts of the Bitterroots I love best. Many of the same dilemmas challenge modern conservationists' efforts to maintain this land's integrity, and our own. While the forces which threatened Muir's beloved wilds remain mighty, so does his example of commitment, of his belief that the forest is worth the fight and of his faith in the power of wilderness to move the human heart.

Like Muir, I funded my first full summer in the mountains by means with which I quickly became uneasy. Muir first ventured into the Sierra Nevada as a sheep herder, but soon decried sheep as "hoofed locusts," destroying the delicate alpine gardens which were his delight. I moved onto the North Fork of the Clearwater to split cedar posts. A family friend, a rancher from southern Idaho, had secured a small, personal-use cedar sale in the old 1919 burn. I worked most of the summer there alone, converting the old fire-shorn druids to the utilitarian faith of sage-country stock corrals.

The snags soon had a convert of their own. As Muir had done in California, I counted annual rings on some of the larger stumps. I found that, while their ages could not compare with those of Muir's sequoias, these cedars had sprouted decades before Lewis and Clark pushed down the main Clearwater. The cedars' remains had stood in death longer than many trees now are allowed to grow. The larger snags were spires towering thirty feet above the new growth, itself becoming a well-established forest in places. Hiking back into remote canyons in my leisure time, I found whole groves which the fire had sculpted into fantastic, eerie monuments to itself and the trees they had been. With the storms of that autumn, wind gave voice to the hollowed boles. Those old warriors, who once had clacked consonants of flame, now moaned all in vowels, chanting centuries of cold.

Impressive though they were as standing skeletons, it was the snags' support of life, not their reminder of death, that was most striking. Fallen trunks and great roots seemed to have helped hold soil while new growth established itself. The older windfalls wore a rich shag of moss and mushrooms, slowly reverting to topsoil. Big hawks perched on snags situated up the slopes, while pileated woodpeckers, songbirds and small mammals fed and nested among trunks in the draws. I am told that the hollow stumps and logs are favorite



dens of bears and other winter homebodies. On occasion, I sought refuge there, when sudden storms menaced me with dangerous chill or at least a miserable soaking.

John Muir loved a good natural disaster. He reveled in the power destruction held for the renewal of life. Although he mourned the desolation wrought by human-caused fires left unchecked, he recognized the role fire played in forest renewal in Yellowstone and the Sierra. He wrote, "Storms of every sort, torrents, earthquakes, cataclysms, 'convulsions of nature,' etc., however mysterious and lawless at first sight they may seem, are only harmonious notes in the song of creation, varied expressions of God's love." Could he see today the legacy of the 1919 burn, he would have another example of nurture through natural catastrophe.

The study of wild places was a spiritual exercise for Muir.

The joy with which Muir described such dynamic nature expressed a boyish delight in wanderings of discovery. Yet, Muir's relationship with the wilds ran much deeper. Roderick Nash writes that, through transcendentalism, Muir reconciled his strict Christian upbringing with his love of nature. The study of wild places and the life within them was a spiritual exercise for him. Nash quotes Muir as writing that natural beauties were "the terrestrial manifestations of God," the wilder the holier. "Indeed, he conceived himself similar to John the Baptist in attempting to immerse 'in the beauty of God's mountains' the 'sinners' imprisoned in civilization," Nash writes. The mountaineer merged his transcendentalist beliefs with keen scientific observation. Claiming an intrinsic worth for creatures abhorrant to most people and recognizing the relationships among living things, he formed a link between the Romantics who preceded him and the ecologists who would follow.

Muir's philosophies and love of the land fueled his outrage at the destruction of wildlands and his fight to stop it. Most of the last chapter of his book "Our National Parks" is devoted to a description of the devastation and a call to halt the desecration of his temple. "Clearing has surely gone far enough; soon...not a grove will be left to rest or pray in," he wrote in 1897.

Eighty-nine years later, millions of additional acres of forest have given way to clearcuts, many of them replanted perfunctorily and ineffectively, if at all. Now the North Fork's snag country is threatened with saw and bulldozer. The Clearwater National Forest's draft forest plan calls for roading, cutting, and "even-age management" in magnificent stands of snags and regrowth, such as those in the valleys of Weitas Creek and its major tributaries. Roading and some cutting also is proposed in the uplands those creeks drain. The story of encroaching on pristine forest, rather than effectively managing cutover lands, harkens back to Muir's day. So do the obstacles to checking that intrusion.

As in Muir's lifetime, the federal government is abetting the timber companies' push to cut on fresh ground. Then, the government's role was one of default, forfeiting public lands at bargain-basement prices and allowing corporations to abuse land laws purportedly intended to benefit the common settler. Now, the government takes a more active part, providing the lumbermen with roads at public expense in the name of "capital investment."

But perhaps more disurbing is the remaining willingness of mainstream conservationists to sacrifice areas like the Weitas, nearly a century after Muir said "enough." Nash writes that, in the work for the first forest reserves, Muir pulled in tandem with utilitarian conservationists such as Gifford Pinchot. Pinchot long had advocated more "wise use" of the lands than had Muir. However, in the face of continuing opposition to the reserves, Pinchot made concessions to commercial interests which Muir said the forester previously had opposed. A rift developed between the two men. Nash writes, "This personal break symbolized the conflict of values that was destroying the conservation movement."

Today in Idaho, mainstream groups such as the Idaho Wildlands Coalition have been willing to settle for preservation of about 3 million acres out of more than 8 million acres of defacto wilderness. A hefty portion of the snag lands draining into the North Fork is part of the sacrifice. In their responses to the Clearwater draft forest plan, groups such as the Wilderness Society and Idaho Conservation League went on the defensive for preservation of what they deemed a few key areas, rather than pressing the burden of proof on the Forest Service to justify development in other high-quality wildlands. The Weitas drainage is among the areas to be surrendered.

My bones have grown out of this land as surely as the cedar shafts.

One argument I have heard for developing the Weitas country is that parts of the area already bear conspicuous marks of Forest Service activity. For example, in the 1960s, the agency terraced portions of several buttes and planted trees. Witnesses previously intimate with the area say much of the terraced terrain had been grass and brush breaks, bare of trees in its natural state.

When I last walked through the terraces adjacent to Cook Mountain and Fox Butte in the summer of '84, plantings had vanished from much of the project. The majority of survivors were stunted, commonly less than three feet tall. Native grasses and shrubs had reclaimed the terraces.

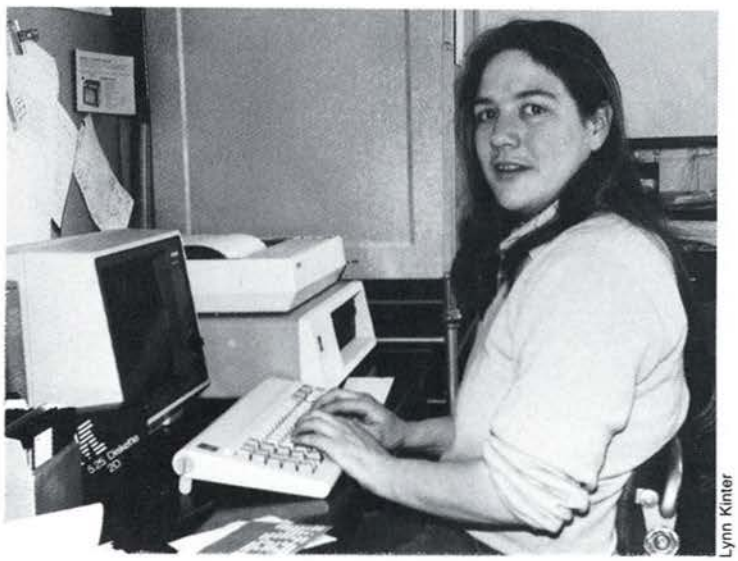
Undoubtedly, the terraces and their access road will remain visible for years, possibly centuries. However, the project left great reaches of the Weitas drainage untouched, and the disrupted sites are on the mend. To the argument that the terracing already has opened the east side of the drainage to development, I counter, should we allow one ill-conceived fiasco to beget a dynasty?

Certainly, there are conservationists in the state who do not wish to be as acommodating as some of the mainstream groups. They, however, have not gained the hearing accorded those willing to settle for less. Perhaps the more demanding conservationists could benefit by studying Muir's methods. Although he suffered some drastic defeats, splendid acreages in several national parks and other preserves remain as testimony to his effectiveness.

Muir was a prolific publicist for wildlands. He persistently urged greater public contact with the wilds and involvement in their preservation. Much in demand as a contributor to the most popular periodicals of his time, he wrote not as a desk-jockey with an abstract conservation ideology, but as a man immersed in that which he struggled to save. While he beseeched the masses, he did not neglect the lofty. He was a campfire lobbyist, drawing leaders like Pinchot and Theodore Roosevelt to his own turf and speaking frankly with them about his notion of proper policy.

Finally, he approached his work with an optimism that bespoke his faith in the potential of awareness and the power of the land. "There will be a period of indifference on the part of the rich, sleepy with wealth, and of the toiling millions, sleepy with poverty most of whom never saw a forest," he wrote in 1897. "But light is surely coming, and the friends of destruction will preach and wail in vain." In view of the past two decades' awakening among at least a significant minority, one can read Muir's words with some measure of his hope. Yet, considering how long ago he wrote them and what has transpired since, one asks, "How long must it take?"

Still, reading Muir and remembering the snags, it becomes increasingly clear to me how my life needs to be. My bones have grown out of this land as surely as the cedar shafts. I want, in some way small or large, to support the diverse forms of life around me and to grow into something so deep-rooted that it does not fail in death, but provides solid ground and nesting for new growth. This is not a new way. The snags and people like Muir have established the possibility. But commercialism and compromise still threaten the forests of the Bitterroots and much else that Muir fought for and loved. It is time, again, to say "Enough!" It is time to greet the shadow of John Muir among the shadows of the snags.



Lynn Kinter

Eddie Sue Judy is a senior in journalism and history. She is employed under College Work Study at the Forestry Herbarium.

The Multiple Uses of Rangelands

by Deborah Cooper

The field of range resources deals with conservation and management of a large diversity of land. Rangelands include nearly every type of vegetation zone. Coniferous forests, plains, pinyon-juniper regions, intermountain shrub lands, deserts, chaparrals, woodlands, and a variety of other ecosystems are all forms of rangeland. These lands must be efficiently managed in order to maximize the benefits of various multiple uses.

Rangelands act as watersheds and must be managed for high water quality. Timber can be produced on much land designated for livestock grazing through multiple use management. Recreational uses of North American rangelands are of crucial public concern and must be managed accordingly. Concern for wildlife thriving on non-forested lands illustrates increased public awareness of our dwindling natural resources, though much of our public land today is managed to yield abundant forage supplies for livestock grazing.

One important range conservation practice taught in our Range Resources Department is soil and watershed protection. Sensible range management can lessen the effects of soil erosion to aid in water quality protection and high water production. Most rangelands, including forested lands, either directly or indirectly influence the hydrological cycle by retaining varying amounts of moisture. This delays the eventual evaporation of precipitation received. Better range management means better soil conditions, soil coverage, and therefore, better water holding capacity (less water lost directly to evaporation).

Although few timber species have forage value for livestock, both herbaceous and woody vegetation are successfully harvested in many areas. Departments of forest resources and forest products must often deal directly with forested rangelands subject to grazing. Integration of forestry practices into rangeland management training is therefore crucial to present-day wildland managers. At the University of Idaho, the curriculum required for understanding range resources also gives students an understanding of the conservation and successful management of forested stands. These stands can then be managed to yield timber and forage for livestock without one use negatively impacting the other.

Recreational values currently demand strong consideration in range management. Dwindling supplies of these resources along with an increasing demand for the recreational use of rangelands has served as one of the primary motivating factors for multiple use management. Recreational uses include activities varying from hunting, fishing and backpacking to snowmobiling, motorcycling and downhill skiing. Both consumptive and non-consumptive forms of recreation require portions of rangeland. Consumptive recreational activities require not only land, but resources that the land produces, as well. Managing for the production of timber, wildlife, fisheries, water quality and forage therefore relates directly to recreational management. Instruction in range resources management attempts to integrate optimum production of all wildland recreational resources while harvesting percentages of the forage to invest in livestock production.

Another crucial resource of our range is the abundant wildlife inhabiting virtually every square acre. Protection here, is of utmost importance and public concern. Range managers today, more than ever before, are under increasing pressure to account for wildlife in their management practices. This includes all game and non-game species. The decline of many populations of animals due to past habitat manipulation makes wildland management today an ever-increasing challenge. Alternatives to historic grazing practices are being closely examined to ensure provisions of suitable habitat for wildlife species. Many endangered or threatened species require top priority in management efforts to stabilize declining populations. In these cases, wildlife management might be confined specifically to habitat manipulation for the benefit of one species. This tactic is usually a last resort when stabilizing all declining species populations and is clearly crucial. Education in wildlife protection is integrated into the curriculum of the range resources student to ensure future wildland management for a diversity of wildlife species.

Finally, rangelands are managed as they have been historically — for livestock grazing. If directed properly, livestock of high quality can be produced simultaneously with timber and viable wildlife populations while protecting watershed values, aesthetic properties and recreational sites.

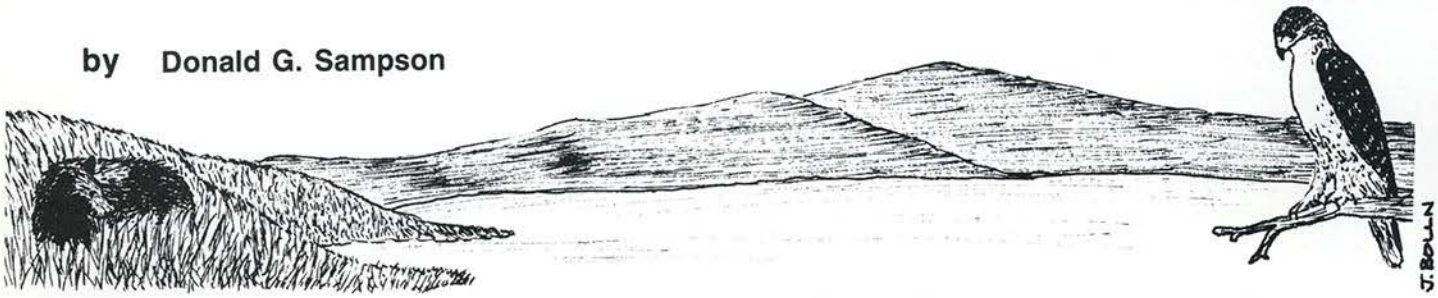
Range management priorities differ depending on the social and economic factors of a particular state or country. Less developed countries often manage specifically to meet the need for protein or timber for fuel. The United States manages its public lands in a multiple use philosophy because we can afford to do so. The goal of this philosophy is to accommodate all land uses for which there exists demand. We know, however, that no one use of rangelands can be optimized without impacts on other uses. This form of land management can be understood as a kind of "multiple use compromise."

Livestock grazing can affect other possible uses of rangelands to various degrees, either positively or negatively. Therefore, the range manager's crucial task is to enhance complementary relationships between rangeland uses and minimize any potential conflicts.

Deborah Cooper is a graduate student in the Range Resources Department studying cattle and wildlife interactions as they relate to browse utilization in northern Idaho.

Multiple-Use Land Management—A Traditional Native American Concept

by Donald G. Sampson



What do we mean by 'multiple-use'? According to John Zivnuska, "In a restricted economic sense, the term simply means that forests and wildlands have more than one use—that the typical forestry enterprise produces more than one product. But multiple-use is more than an economic term. It also describes a particular philosophy and method of land management."

The multiple-use concept in North America existed long before the 'civilization' of this continent. The Native American people practiced and lived this philosophy since time immemorial. There was no ownership of land, water, plants, or animals. All of these entities, including the people, lived in equality—none greater, none less. It was a philosophy born in the religion and lives of the people and upheld by the Creator's unwritten law.

Today, that same concept and philosophy is being renewed and implemented in natural resource management by many Native American tribes throughout the United States. The old ways have combined with the new to create a balance between economics and preservation of the culture which is intrinsically tied to the land. Reservation forest, range, and agricultural lands are relied upon to provide economic stability and income to the tribes. At the same time, however, these lands are used in a traditional sense. Hunting, fishing, camping, gathering of roots and berries, and the practice of traditional religion are still an important part of contemporary Indian life. In order to preserve our culture and traditions and exist in the fast-paced society of today, we must find our place within the 'circle' so that we can live in both worlds.

Management of tribal natural resources by the Yakima Indian Nation of central Washington is a good example of the influence of this multiple-use tradition. Tribal leaders, in conjunction with innovative, professional foresters such as Karel Stoszek of the University of Idaho, have developed forest management plans which address both economic and traditional land uses.

The Yakima Indian Reservation contains approximately 589,000 acres of timber-producing land. The ten-year management plan for these forests includes a variety of alternatives from strict optimization of revenue to optimization of nonmarketable benefits. The alternative which best represents a balance between economic and cultural benefit to the tribe has largely been accepted. This alternative emphasizes diversity and traditional multiple uses of the forest.

The plan provides that 49 percent of the forest land will be available for sustained high levels of timber production with an annual allowable harvest of 149.2 million board feet. Twenty-six percent of the forest would be preserved for wildlife winter range, with only a moderate yield of wood and forage from these areas. Under this plan, designated winter range would provide over 90 percent of the potential carrying capacity for deer and elk. Approximately 15 percent of the forest would be allocated to undeveloped uses such as traditional camping, berry picking, root digging, cultural and historic sites, and unique pristine areas.

Nine percent of the forest would be managed as major watersheds to supplement the streamside buffers and enhance water quality. This protection of the watershed is very important to the anadromous fisheries on which the tribe relies heavily for subsistence and livelihood. Scenic corridors would be utilized to protect and enhance visual quality along major roads. Natural foods and medicines of virtually all types would be available and often abundant as a result of habitat diversity.

This management scheme recognizes and implements a total multiple-use concept that reflects a wise and conservative approach to land management. Tribes are now able to make critical land use decisions for their own economical, social, political, and cultural benefits. Future generations who must also inhabit this land will depend on our wise management today. The renewal and implementation of traditional Native American concepts of our lands and resources may prove to bring us all to a closer and lasting relationship with our mother earth.

Don Sampson is a member of the confederated tribes—Umatilla, Walla Walla, and Cayuse. He graduated with a Fisheries degree in December and now works as a biologist for the tribes in Oregon.

The Legacy of an Educated Generation:
Open Options for Land and Resources

by Michael Frome

More than 25 years ago I came out from the East for a 10-day pack trip in the high rockies that proved a turning point in my life. I already thought that I knew something about conservation. Yet now I felt overcome by the raw natural marvels that surrounded me. The fact was that I had had nothing to do with placing or arranging them as I found them. But in my hands, and in the hands of others like me, lay their fate and future. It was a day of reckoning, perhaps even an instant of truth, where sky and mountains meet. I decided it was my obligation to learn how these lands are managed, and by whom, and why, and to involve myself in determining their direction for the future.

Environmentalism, after all, is not concerned simply with solving problems of our own time, but rather with foreseeing the future and caring for it. I can't think of a better legacy to leave for tomorrow's generation than open options in the use of land and resources. Thus, I have continually asked my readers, and in recent years my students, to join in commitment to protect and perpetuate our most precious heritage, the American earth.

I chose my course: to spread as best I could a gospel of eco-awareness and activism.

I recall that soon after returning to the East, I heard an intensely impressive speech by Gaylord Nelson, then a new Senator from Wisconsin, in which he warned a Washington, D.C., audience that conservation of woods, lakes, streams and other natural resources constitutes the most urgent and crucial domestic issue facing the nation. But to find a report of his remarks in the *Washington Post*, I had to look to the bottom of the obituary page, where it lay buried below the deceased, like a very dead issue.

It struck me then, as now, that the preference by the media for the glossy and glamorous is a sorry commentary on our times. As long as the media treats conservation — the issues of water, timber, soils, wildlife, grazing, mining, pesticides, toxic wastes, and overall values of the shrinking land — as an incidental "story" to be covered now and then, the public will remain in the dark, unable to participate intelligently in the process of decision-making.

I chose my own course: to spread as best I could a gospel of eco-awareness and activism. I have never fancied that I alone would be able to move (or, rather, to save) whole mountains, but that, when joined with others, there might be a fighting chance. Yes, in many cases a particular cause may seem hopeless in the face of powerful political and commercial forces. But when there's something worth saving one must never give up, certainly never give up hope.

There is always hope as long as there is a cadre of people, or even a single individual, with commitment and conscience and a willingness to stand in defense of nature. The odds, to be sure, are formidable, but that only heightens the sense of challenge, and the reward from exercising the courage to face it.

The crisis is world-wide. Over-expanding civilization, sheer technological overkill, has created excessive waste that is poisoning plants, wildlife and humankind itself. Almost every month brings new warnings of ecological upsets — Love Canal and Three Mile Island in India are called Bhopal; oil spills, hauls of inedible fish, mysterious animal sicknesses, and the extinction of bird species are apt to plague one continent as another.

Through insatiable demands for goods, we affect massive consequences to land and people.

Our globe is only a small planet. Surrounded by infinite space of the universe, we are all joined together: all of us, the "civilized" and "primitive" of humankind, together with birds, mammals, fish, plants, all derived from common origin and facing a common future. I read now and then of how the unenlightened poor through sheer insensitivity are destroying nature's resources, but in visiting Africa and Latin America I tend to place the responsibility elsewhere.

I consider, for example, the case of three game-bird poachers caught in the act of setting snares along the fence of a nature reserve in Africa. The evidence showed they worked for a nearby farmer. While poaching had always been a way of obtaining extra meat, it had lately become even more

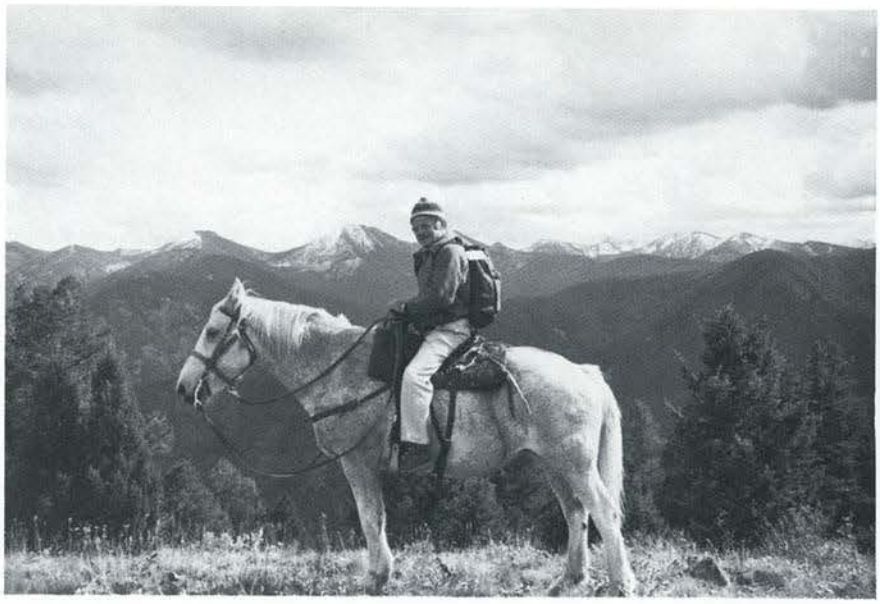
important since their wages had not kept pace with rising food prices. Thus this question: Who is to blame, the poacher, the farmer, or the advanced external society for creating such a demand for red meat that prices no longer can be afforded by the poor?

Certainly the poor destroy natural environments as part of their battle to survive, but affluent societies pose at least as great a threat. Through insatiable demands for consumer goods, we not only push food prices out of reach of the poor, but affect massive consequences to land and people. The Karroo, an arid plateau covering one-third of South Africa, has been subject to escalating exploitation by domestic stock for more than 150 years — to produce wool and mutton for local and overseas markets. Overgrazing has transformed a once productive environment to near desert, but shall we say the farmers are alone to blame?

The "Hamburger Connection" is the term now applied to the process whereby Central American beef ranchers convert forests to grasslands for beef production, largely to sustain appetites in affluent North America. Not only are tropical forests decimated, but the profits from it all go to a handful of wealthy ranchers, while local peasants eat less meat per capita and are pushed into marginal areas so that cattle ranches can be extended.

In the massive exploitation of natural systems, there is plenty of blame to go around. I realize that as I sit here using an electric typewriter in a comfortably heated dwelling. The only possible and lasting solution to many of the world's environmental problems lies in reduced consumer demand. The United States, with all our science, sentiment and expertise, can lead the way as a model for the world. We have nothing to lose, everything to gain through a more efficient and healthful life-style.

As an American, I equate conservation activism with national pride. I want to sustain America the Beautiful from sea to shining sea. The future physical well being of the nation depends on maintaining and restoring a healthy, wholesome environment, with clean air, clear water, and stable soils; and the mental well being upon providing for the people recreation opportunities spanning a broad spectrum, with plenty of land nearby as well as distant, where people can stretch their limbs and replenish their spirits.



Holly Akenson

Michael Frome explores the Frank Church-River of No Return Wilderness.

The frontiers are gone. The frugal use of diminishing natural resources, including the conservation of energy, should be the personal goal of those who care as the first step toward acceptance by the nation. We must alter the life-style that makes us enemies of ourselves and reassess the value system by which we confuse super-consumption for the quality of life.

Idaho furnishes a choice illustration. All of this state's resources are natural — majestic mountains, pure water, clean air, grand scenery and, above all, decent, industrious and intelligent people. The people are the most important resource, for they hold the power to either conserve or destroy all the rest.

Which shall it be? I pray that Idaho will not allow itself to be lured into bartering its quality of life for any quantity that could result in deterioration of the environment. The protection of high elevation lands, to be specific, ensures protection of watersheds, of wildlife and fisheries habitats, and of indigenous flora. Soils in the highlands aren't sufficiently deep, stable or fertile over large enough areas to justify extensive road building, intensive timber management, or other forms of exploitation. But qualities that make these areas a liability for production make them natural for human enjoyment; I visualize those untouched high ridges affording breathtaking views, protective cover and food for wildlife, and the source of streams for fishing.

If an industry, whether new or old, will increase incomes, raise living standards, strengthen Idaho institutions, and enhance the quality of life in general, then it should be wanted and welcomed. On the other hand, if it pollutes a stream, Idaho cannot afford it. If it dirties the air, we don't need it. If it defaces a mountain, we cannot tolerate it. If it reduces the dignity of the citizenry, it should be resisted to the end.

If Idaho is to plan the development of a tourist industry, it must first build the tools with which to work. The last tool to be used must be the first one developed. That tool is the method to call a halt when growth has reached maximum efficiency, the point at which resources are used but not abused. The cold hard fact is that once resources are spent they cannot be replaced. Never have penalties been as devastatingly tragic as those ex-

perienced in areas of unplanned growth. Idaho is singularly blessed with the rare opportunity to view the mistakes made by other, more developed states and to avoid them.

I hope that education in general, and my students in particular, may contribute constructively to this process. This leads to an expression of belief that all education is not in the classroom, and that the best of it, in fact, is away from the classroom. Perhaps I should modify that statement to indicate that all of life is learning and the whole world a classroom. John Muir wrote that he left the University of Wisconsin for broader studies in the "university of the wilderness," while Walt Whitman contemplated universality in a blade of grass.

"But let children walk with Nature," wrote Muir, "let them see the beautiful blendings and communications of death and life, their joyous inseparable unity, as taught in woods and meadows, plains and mountains and streams of our blessed star, and they will learn that death is stingless indeed, and as beautiful as life, and that the grave has no victory, for it never fights. All is divine harmony."

Muir wrote those lines after sleeping in a cemetery in Georgia during the course of his thousand-mile walk to the sea. Well, we all ought to sleep in the cemetery sometime and listen to the voices there. I see myself with a group of students spending the night, quietly, without a lecture or lesson, and next morning each one reporting the messages that came to him and her, from cemetery sounds and stillness. I feel that I should teach in the out-of-doors classroom, absorbing divine harmony as the basis for restoring harmony to human society.

All being is learning. Thus learning is being. My learning is the search for the ancient, lost reverence and passion for human personality, joined with the ancient, lost reverence and passion for the earth and its web of life. This is best achieved through simple, direct contacts with nature, unencumbered by superfluities. The extent to which people flock to the prettiest lakes, the shadiest glens and the most attractive scenery emphasizes the human desire to perceive the marvels and mystery of unspoiled nature. But this in itself is not enough, more like a superficial physical activity, incomplete without the connection to mind and soul.

In the old days everything necessary for a camper's comfort and survival he had to provide for himself; it was part of the culture, demanding but invigorating. Today the trick seems to be to spend enough money so that everything is done for you, with mechanical contrivances and conveniences of indoor life at home adapted to outdoor life away. There is scant emphasis on self-reliance or on the need to respect the environment of nature. Trampled vegetation and exposed tree roots are common sights, proving that recreation can be as damaging as road building, logging, mining or grazing. little wonder, when recreationists scarcely recognize their campsites to be alive, delicate and fragile.

I need the wilderness as a place to be with students where we may learn together about resource husbandry and about ourselves.

I'm not sure that "professionalism" makes too much difference, not when it derives from narrow technical training and computer-bred rules and regulations, rather than from consistent and continuing field experience and a reverence for life. In autumn 1985 the Forest Service invited me to participate in a management workshop in the Pecos Wilderness of New Mexico. As it happened, a staff writer of the *Albuquerque Journal*, Nolan Hester, was along. "If rangers are to understand the wilderness and its users," began his subsequent account in the paper, "they must head for the hills and take to the woods. For a week, they leave desks and uniforms behind, carry backpacks, sleep outdoors, get wet."

But then, disillusionment. As Hester continued:

"Heading up the trail, the image of woods-wise rangers is quickly shattered. For many, this is their first real hike in years. They huff and puff even though an outfitter has already packed in their food . . . "

"Everything from trail construction to firefighting, air pollution and campsite abuse gets debated during a series of trailside stops led by agency specialists. The rangers debate the exact pressure a cow's foot exerts on a meadow — such details are the currency of ranger conversations."

"Yet they cannot name shrubby cinquefoil, a common Southwestern plant. And there is little talk of the surrounding country's sheer beauty."

Of course, they can't identify plants without commercial value, except perchance as unwanted weeds, or perceive natural beauty. It's not in the parameters of their training, either in the agency or in the vocational technical schools from whence they came. They deal in closely defined linear patterns and statistics, rather than in poetry. The analytical type of thinking of western science may have given us power over nature, but it has smothered professional technicians in ignorance about themselves as part of it.

"For Frome, the incident highlights the agency's blind spot — all head, little heart," wrote the *Albuquerque Journal* correspondent." He complains that the Forest Service sees wilderness as far more than that.

"Wilderness is the heart and soul of America. All our art, literature, poetry derives from the natural world,' he says one night by the fire."

I began to consciously feel that way in my instant of truth around another campfire more than 25 years ago. I need the wilderness as a source of

personal enrichment and enlightenment, and as a place to be with students where we may learn together fundamental lessons about natural resource husbandry and about ourselves. "We can be ethical," as Aldo Leopold wrote, "only in relation to something we can see, feel, understand, love, or otherwise have faith in." Or to cite Carl Rogers, the behavioral psychologist, in his definition of heuristics: "a passionate, highly personal, self-searching commitment to inner truth — a disciplined but intuitive search that explores, by every possible subjective means, the essence of personal experience, thus generating personal truth . . . "

For what shall we, as individuals and as a generation, be remembered in time? I wrote earlier in this little essay that environmentalism is concerned with foreseeing the future and caring for it. Our greatest gift will be not in a record of devouring resources for ourselves, but in earth preserved and protected, the more of it the better: the redwoods yet standing in California; the wild rivers flowing in Idaho; clean oceans supporting the whales; clear blue skies across America where eagles fly; an Africa and Alaska supporting migrations of the herds. And they will say of us, "Verily, *that* was an educated generation."

For the past four years, Michael Frome has been a Visiting Associate Professor in Wildland Recreation Management. He also writes and speaks nationally on conservation issues and enjoys hiking with his students.

RIVER

Mother
Why is the river laughing?

Why, because the sun is tickling the river.

Mother,
Why is the river singing?

Because the skylark praised the river's voice.

Mother,
Why is the river cold?

It remembers once being loved by the snow.

Mother,
How old is the river?

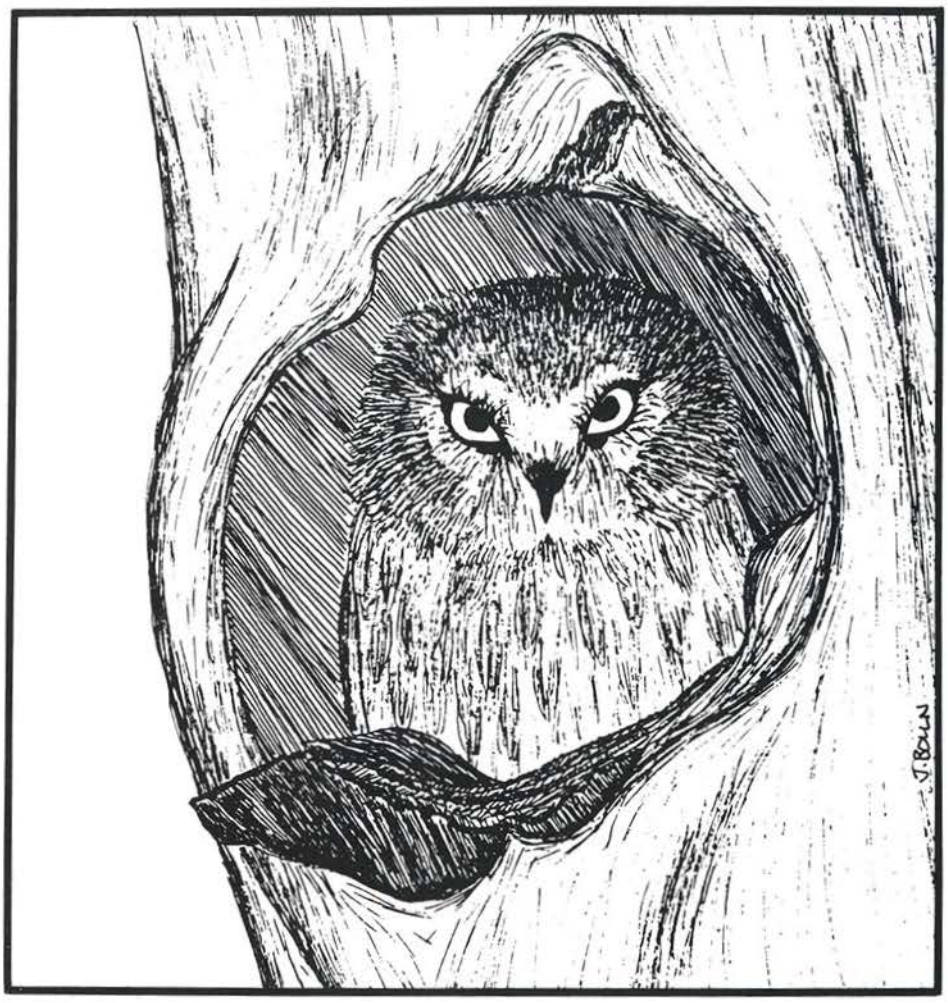
It's the same age as the forever young springtime.

Mother,
Why does the river never rest?

Well, you see it's because the mother sea is waiting for the river to come home.

Shuntaro Tanikawa

College



Focus

State of the College—

Managing Change

by James R. Fazio

In reflecting on the school year as it nears its end, one thought keeps coming to mind that sums up the events of this year: "Manage change or be managed by it."

Few would argue that the natural resource professions are undergoing significant changes in just about every respect. For many of us, the shock of this realization has now passed and we have entered the next phase — acceptance. But what about the step after that? How do we go about managing change rather than sitting back and letting ourselves be subjected to whatever might happen?

Jeff Bolin

In his first year, our new dean has given us a good example of how we can guide our own destiny and remain in the leadership of natural resource education. First, to the amazement of everyone, on virtually his first day at work, Dean Hendee insisted that every department head, the associate deans, and the director of administrative services go on a retreat with him to our Clark Fork Field Campus in the northern panhandle. It was the first week of school as well as John Hendee's first week on the job — and you just don't do things like that! But he did. Moreover, it was the first of several sessions using professional, outside facilitators to help the college's administrators learn more about themselves, each other, and how to function as a team rather than as competitors.

Under Dean Hendee's leadership, another outcome of the Clark Fork retreat was to plan what became known as our Quest for Excellence, or Q4E. The underlying reason for this planning process was to make certain the college *does* change so that it will remain at the *leading* edge of teaching, research and public service. Beginning with the faculty and ranging all the way to the governor's office, scores of individuals associated with the college — including students — were asked to help each department outline a few specific, vital areas of endeavor toward which their energies and limited resources will be focused in the years ahead. The results are a blueprint for achieving excellence and placing the College of Forestry, Wildlife and Range Sciences in a position of leadership during these tumultuous times.

But what about students? Are they simply watching what the tide brings in, or are they, too, taking charge of their future? I saw the answer early one morning in the Kibbie Dome. A spring snowstorm had given us the kind of day when the faint of heart stay at home. But there on the track were two of our students — one struggling along trying to overcome a weight problem, the other running in full battle gear preparing to participate in a 10-mile race with his ROTC team.

I am proud of those two people, and as I think about it I believe they illustrate an attitude held by most of our students. This is a realistic assessment of where they are in life and where they want to go. They refuse to be like so many older folks who come up to me at public gatherings and say, "Forestry, eh? Boy, that's what I wanted to go into but . . . " (and the reasons range all over but always belie timidity and lack of commitment). They invariably conclude with, "I sure wish I would've." One of the benefits of today's lower number of students is that, on the whole, those we do have are probably the most dedicated and determined lot ever to go through a natural resource program. They will truly be the leaders of tomorrow.

There is other evidence in the college that we are collectively managing change. During the year a faculty-student committee was appointed to review the structure of our curricula.

Their charge is to look at several alternatives, with careful attention to the advantages and disadvantages of each. Is it best to have the opportunity to declare a major as a freshman, or should there be a common experience in the early years followed by specialization? Should a minimum grade point average be required for upper division courses? Is it time to admit that the degree is really a 5-year commitment and structure each major accordingly? We are also grappling with the question, what is *integrated* resource management, and how might this best be achieved as one of the important outcomes of education? Our goal is to make sure the educational system we use is the best possible to prepare future resource managers who understand not only the science of their field, but the larger world in which they will practice.

One sign of needed change that just won't go away is reflected in the rhetoric at professional meetings and in the professional media in all of our disciplines. This is the deficiency of social science education in most "forestry school" graduates. I am happy to report that here in our college more opportunity for study of the human dimension of natural resource management is being provided than ever before. In many ways we have become a model for natural resource colleges nationwide, some of which are barely awakening to this need. Our traditional courses in economics, policy and wildland recreation management are now supplemented with courses such as the sociology of natural resources, and public relations problems in natural resource management. There have been special topics courses in tourism, environmental education, and Native American resource issues. The range seminar included programs on improving communication and building coalitions with non-range publics to gain broader support. The Department of Forest Resources even published a flier announcing graduate studies in Forest Social Sciences. Appropriately, it features a portrait and quote from Gifford Pinchot, anchoring the needs of change to the traditions of a proud and successful past.

My brother-in-law, a doctoral student who helps develop artificial organs in the field of biomedical engineering, sent me a theme t-shirt with the wording: "The Challenge of Change." I think it fits well with the title of this year's natural resources week: "Integrated Resource Management — Striking a Balance for Idaho." The two concepts are inseparable. Leaders of tomorrow must recognize the need for change, accept it rather than fight it, and do all in their power to prepare for it. The result *will* be integrated, balanced, resource management — the very concept that underlies our college and which has occupied the thoughts of both students and faculty throughout the 1985-86 school year. It is a focus of attention that is sure to benefit our students and the stewardship of natural resources.

We live in exciting times. The usual pressures on natural resources are being supplemented with fiscal austerity and sweeping changes in how we manage, utilize and market the many resources from forests and rangeland. New career opportunities are opening up (ranging from contract management to leadership roles in the tourism industry), new technologies are emerging, new philosophies of resource management are being offered, and new interest groups are forming on *both* sides of the fence-of-balance. In the College of Forestry, Wildlife and Range Sciences we are aware of these challenges and welcome the opportunities they offer. To manage change is a goal of the resource professional, and the past year has shown that we are capable of the task.

Dr. James R. Fazio is the Associate Dean for Academics. He has recently authored The Woodland Steward, *a guide for woodlot owners.*

Lynn Kinter

Dr. Jim Fazio introduces a new freshman to the college.

More education can help us if it produces more wisdom.

E.F. Schumacher

Career Transition:

Becoming Dean at Idaho

by John C. Hendee

Dr. John Hendee was named dean of the College of Forestry, Wildlife and Range Sciences in August 1985 when Dean Ehrenreich stepped down from the position. The Idaho Forester *staff asked Dean Hendee to tell readers about previous career experiences that have shaped his views, and his reactions to the first few months on the job and the challenges ahead.*

Lynn Kinter

Carol Boyd, Ed Winn, and the dean.

The most important influences on my natural resource views come from being a second generation forester and having the chance to live many places in the country as my father pursued his Forest Service career. I lived briefly in Ironwood, Michigan, then Duluth, Minnesota, through kindergarten, first and second grade in Portland, Oregon, to the beginning of junior high in Denver, Colorado, and then through high school in Oakland, California. My father took me to the field whenever possible and even today I remember forest experiences in all those regions. It never occurred to me to be anything else but a forester. High school summer jobs in California, helping cruise and scale timber for a consultant and fight fires for the state, cinched my decision.

I was fortunate to receive a baseball scholarship to Michigan State University where my father had graduated and my sister and other family members had attended. I have to be honest in admitting that my focus as an undergraduate was as much on baseball as forestry, the highlights being a lesser player on a 1959 team with 3 players who became major league stars and then winning the MVP myself the next year. Then my focus on forestry became more intense as I completed summer camp, graduated and spent a fall quarter in graduate study before joining the Forest Service on the Siuslaw National Forest at Waldport, Oregon.

Only "west side" foresters can really appreciate those magnificent Douglas-fir forests that seem constantly cloaked in fog, mist, rain and wet brush. You just need to get over putting on wet, "corked" boots every morning. During a year's transfer to Corvallis, Oregon, I cruised, surveyed and appraised timber sales while completing my master's in forest management. In summer of '62 I returned to Waldport for more work in reforestation and sale planning before becoming a timber sale contract administrator. Those were great times wrestling with spur road layout, fire inspections, check scaling, logging plan design, and a chance to learn about woods work from loggers who had spent a lifetime at it.

In January 1964 I transferred to Berkeley, California, where they were expanding fire research at the Pacific Southwest Forest Experiment Station to deal with prescribed burning in the Douglas-fir region. That fall, following the advice of Station Director John McGuire (who later became Chief), I left for the University of Washington to pursue a Ph.D. in forestry focusing sociology, political science and economics on people aspects of resource management. This focus led to studies of evolving people concerns-wilderness and other forest recreation uses including hunting and fishing. That was the mid-60s when wildlands were being discovered and rediscovered by the public although the numbers seem small today in comparison. But it was then that I first became aware of how much Americans love their forests and wildlands — and for so many reasons ranging from economic and lifestyle dependencies to avocational interests such as recreation, hunting and fishing. Somewhere in the middle of all this I rejoined the Forest Service to lead a research unit studying recreation and people problems in forestry, also serving as an adjunct forestry faculty member at the University of Washington. I had some good scientists and graduate students on my research team and there were several highlights over 8 years including some research awards related to litter control and public involvement study, co-editing a book on *Human Dimensions*

in Wildlife Programs, co-authoring a *Wilderness Management Textbook* and a book on *Wildlife Management in Wilderness*.

In 1976 I was selected for a Congressional Fellowship, which meant moving to Washington, D.C., where, after a brief orientation, I worked for six months on the staff of Senator Frank Church of Idaho and then for eight months on the staff of Congressman Jim Weaver of Oregon, Chairman of the House Subcommittee on Forests. Those were some of the most exciting and longest days of my life. While I was with Senator Church, the sealed bid timber sale controversy was in full swing and concern about wilderness and the allocation of roadless lands was growing daily. With Congressman Weaver I helped staff over-site hearings in every region of the country on the Renewable Resources Planning Act (RPA) and worked on legislation to strengthen respectively renewable resource extension, research, and state and private cooperative assistance — bills that were signed into law in 1978.

I learned some important lessons during my Congressional Fellowship. Resource professionals are needed but in scarce supply on Capitol Hill. The political level is the most important point of generalization for resource issues. If we expect to play a larger role in setting the agenda for renewable resources, we need to develop better people skills and greater understanding of the legislative and political processes so professional resource concerns can be more fully considered.

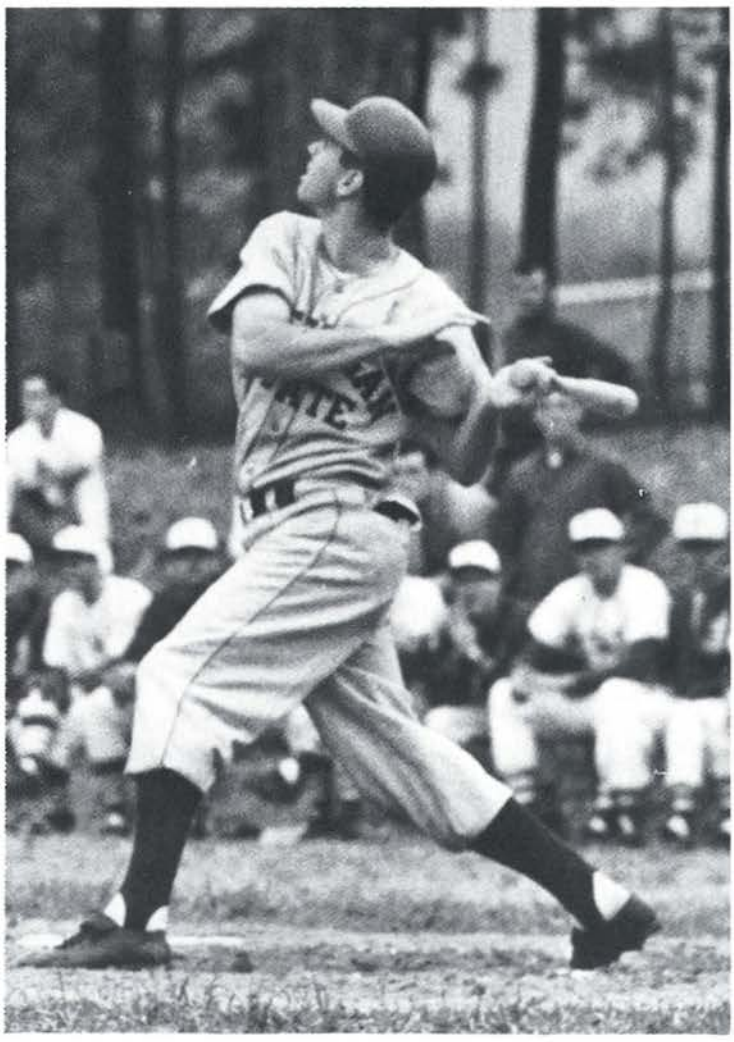
I returned to the Forest Service in January 1978 and worked on the Legislative Affairs staff in Washington, D.C., until September of that year when I was reassigned as Assistant Director of the Southeastern Forest Experiment Station in Asheville, North Carolina. I was surprised at the similarities between western North Carolina and the familiar Pacific Northwest. Both have steep mountains, lots of rain, many rivers, and dense forests, although they are hardwood forests in the Appalachians and Smokies. Asheville was a highlight. We settled on a small farm which provided important continuity with the land since my job focused on administering scientific programs and people. Our small cattle operation provided more lifestyle than economic returns, and we loved it. And since my wife, Fran, was raised on a farm near Asheville, you'll have to pardon a tear or two if you're around us when Ronnie Milsap (another Tarheel) sings "Smoky Mountain Rain" or someone plays "Rocky Top."

My work in the Southeast was exciting, too. I administered Forest Service research programs across a full spectrum of topics in North and South Carolina, Virginia, and part of Georgia. My projects included everything from timber management and endangered species to resource economics, entomology, and urban forestry. I learned about acid rain, too, as my last 18 months were spent organizing cooperative research programs on that topic involving the Forest Service, universities, and the forest industry.

What are my views on the future based on this background?

Reflecting back on my career, I'm most impressed with the changes affecting renewable resource management. Genetic improvements, computers, public involvement, land management planning, productivity increases, international production and markets, transportation improvements, environmental awareness, legal constraints, interest rates — so much has changed.

Looking to the future the only thing



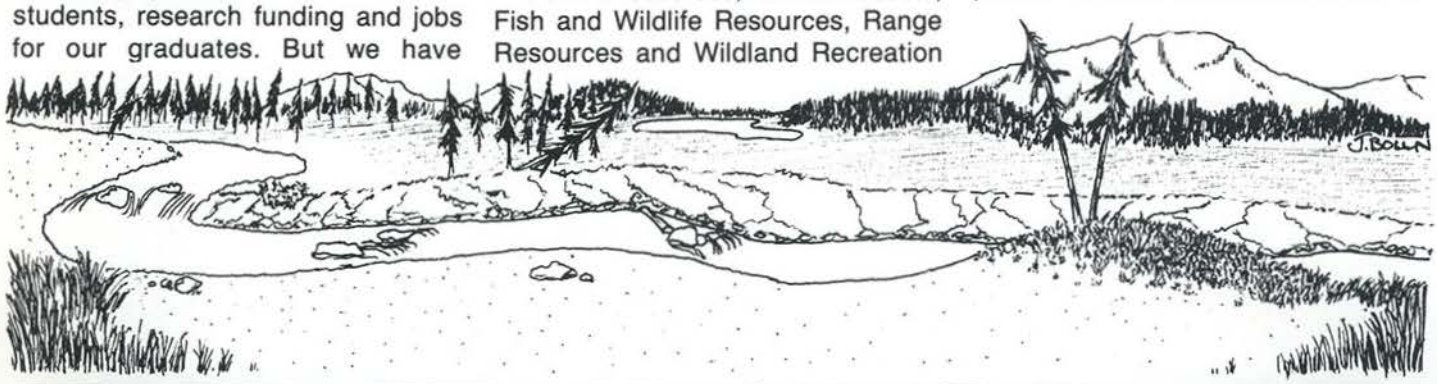
John Hendee—in his younger days at Michigan State.

certain is more change. Our biggest challenge as resource professionals will be adapting to change — and we must develop the skills, methods, knowledge, leadership and perspective to evolve with change if we want more say in guiding America's natural resource agenda. People skills, economic understanding and leadership training are a key. Without diluting the importance of technical training we need resource professionals who can help solve the people problems, and provide leadership toward sound resource use under evolving social and economic conditions.

As a college, we also face change and a highly competitive situation for students, research funding and jobs for our graduates. But we have strengths, too. Foremost will be a commitment to excellence in teaching, research and service and increased involvement with the renewable resource managers of Idaho and the Inland Northwest so we can help educate them for their growing involvement in resource management. Those are all directions emerging from the "Quest for Excellence" plan we've developed for the future.

The Idaho tradition is also an important strength that attracts students from all over the nation and world — 36 states and 23 countries this year. We are distinct in having 5 renewable resource departments under one roof — Forest Resources, Forest Products, Fish and Wildlife Resources, Range Resources and Wildland Recreation Management. By working more closely together we can provide the integrated perspective on renewable resources that is needed.

Being dean of our college is the biggest challenge of my career. The future seems uncertain and more change is inevitable. But it's a chance for us to provide leadership and make a difference. Natural resources are important to Idaho, the region, our nation and world. That won't change! We can make a difference by building on the Idaho tradition with a focus on excellence, an integrated perspective, people skills and commitment to an "information-based and reasoned approach" to renewable resource issues.



Quest for Excellence

Our Quest for Excellence is a process implemented by Dean Hendee to develop a renewed sense of purpose and direction in our college—a commitment to excellence for the future.

Rob Daley

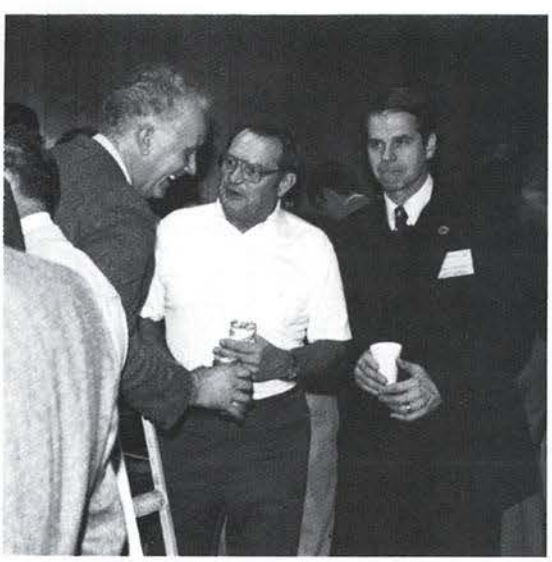
Dr. Jim Peek leads the wildlife program discussion.

Lynn Kinter

FWR students had an opportunity to learn about the Quest.

Lynn Kinter

Dean Hendee reveals his new campaign



Rob Daley

"What do you think of the dean's Quest for Excellence, Karel?"

Rob Daley

The excitement builds in another tense Q4E session.

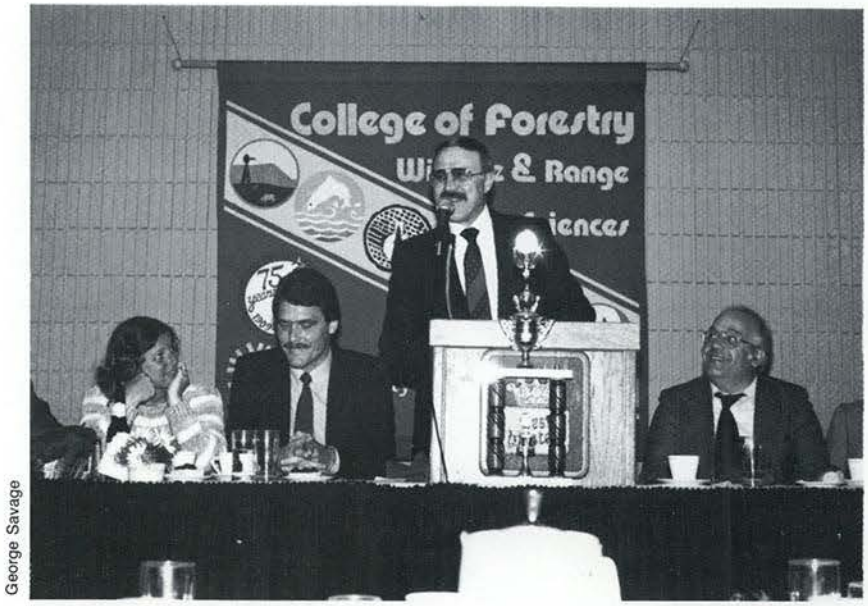
Natural Resources Week 1985

by

Carol Boyd

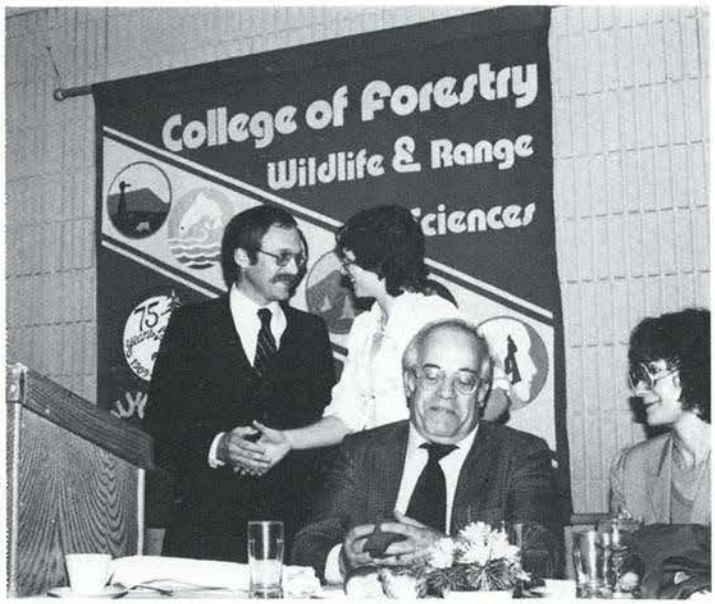
In the tradition of past years, 1985's Natural Resources Week was a full week, structured around the theme "Technology: Research to Reality." We began the festivities on Saturday, April 13, with an alumni meeting, an open house/demonstration at the loggers sports site, and the 2nd Annual College Banquet. The open house was a success with faculty and families stopping by to try their hands by birling, crosscut sawing, annd axe throwing. Amazingly enough, Mother Nature cooperated and the weather was quite nice for outdoor activities.

The banquet was a smashing success with over 130 people attending. The University Inn did a very nice job with dinner and Dr. Evan Vlachos from Colorado entertained everyone with his vision of technology transfer in the future. The departments followed with their outstanding student awards—Fish and Wildlife: Eric Schenck; Forest Products: Brian Mulvihill; Forest Resources: Candy Parr; Range Resources: Carol Boyd; Wildland Recreation Management: Nancy Ray. Candy Parr also received the college's Outstanding Senior Award. The students in turn presented Dr. Fred Johnson with Outstanding Teacher and Dr. Ed Krumpe with the Boot in the Butt Award (for the biggest foulup). The Range Club and Associated Foresters from UI and the Range and Forestry Clubs from WSU joined efforts and sponsored a dance featuring Cabin Fever following the banquet. A long and busy day but a fitting start for a hectic week.



George Savage

Dr. John Ehrenreich was honored for his 13-year position as FWR dean.



George Savage

Dr. Steve Bunting presents an award to Carol Boyd.

In commemoration of the 75th anniversary of the College of FWR, students and faculty turned out on Sunday to begin planting a new addition to the Shattuck Arboretum. This area features native northwest species. Monday was dedicated to ur-

ban and community forestry with two interesting talks given by Gary Merrill, an urban forester from Utah. On Tuesday, we dedicated the bateau (the boat on the east patio of the building) used in Potlatch's final log drive. That evening was the film festival with movies from the UI and WSU ranging from Walt Disney and Smokey Bear to a NOVA program. Wednesday morning Dr. Bev Driver from Colorado State University presented a talk on social science research. This was followed in the evening by a very enjoyable campfire program in the Shattuck Arboretum on Lewis and Clark's travels. By Thursday, everyone was getting geared up for the weekend. We had Dr. John Baden from Montana State University give a talk on resource economics which was very well attended and the discussion ended only when Dr. Baden had to leave for the airport.

George Savage

Brian Mulvihill—outstanding senior in Forest Products.

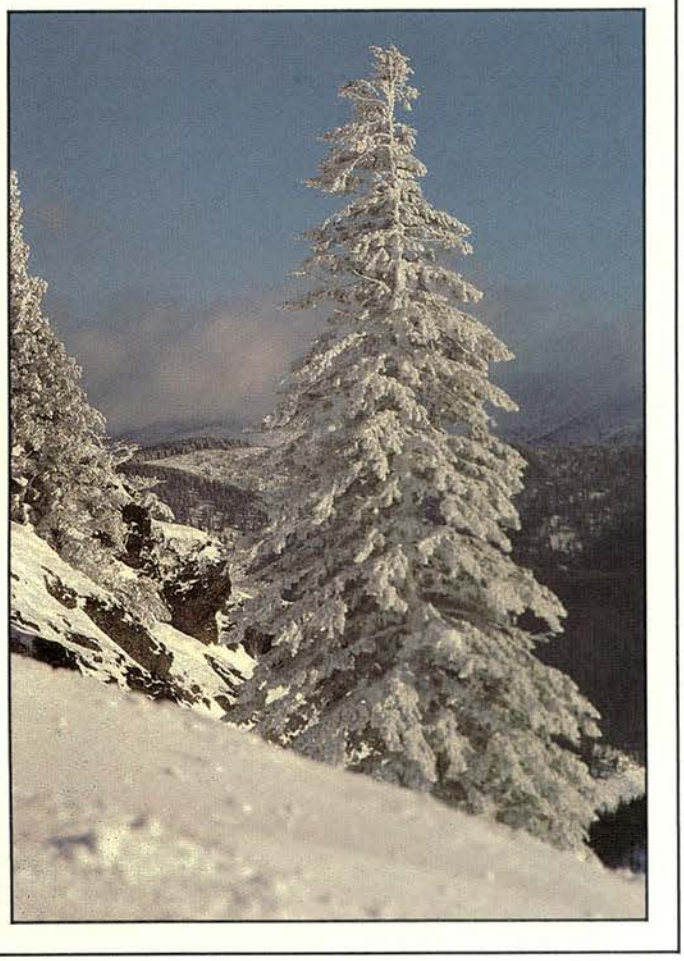
On Friday, Mother Nature had her revenge for the previous days of nice weather. Our outdoor activities were threatened with rain, snow, and hail. Nevertheless, the Loggers Sports Team braved the weather and provided some demonstrations. The Wildlife Society had its annual chili cookoff and SAC sponsored the "What is it?" contest. In an attempt to revive old practices, we challenged the College of Ag to a tug-of-war. Unfortunately, they never showed so we won by forfeit. Since everyone was psyched up for a tug-of-war, we challenged the Marines and beat them. Then the clubs took each other on and the Range Club came out triumphant. With some serious doubts about Saturday's weather, we made tentative plans to hold the barbeque indoors. Our fears were founded as we had worse than normal weather that day. We held the barbeque in the Ag research pavillion and the turnout was good and the food was great. While such traditional activities as the limber pole had to be cancelled, some brave students did try the stogie smoke and more tug-of-war. The Moscow Mountain Mud Run was that morning with quite a few brave souls challenging not only the mountain, but Palouse Springs as well. There may be some doubt among participants as to who triumphed in that challenge.

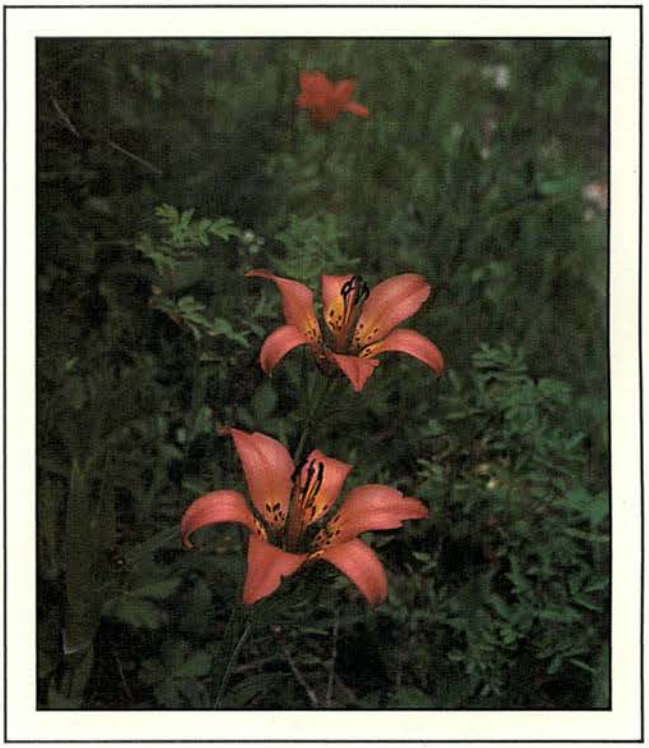
Lynn Kinter

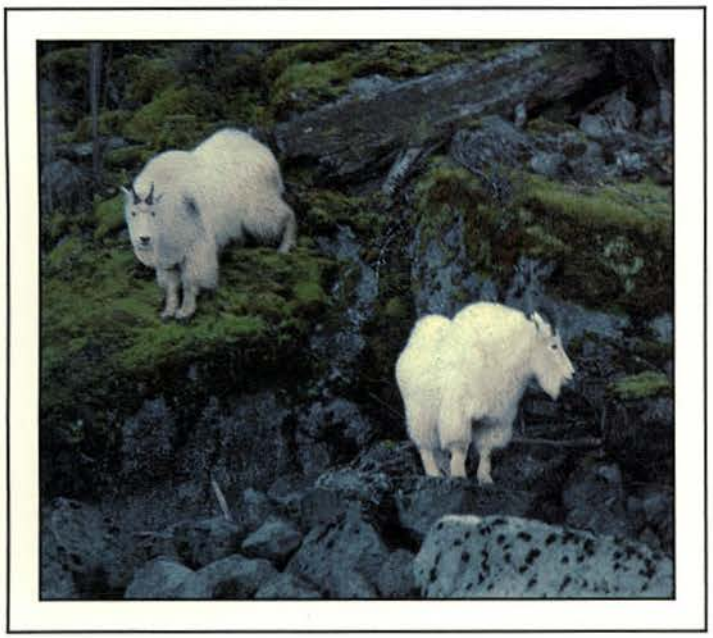
What Is It? Tay Briggs, Bonnie Lambers, and Doug Smith can't decide.

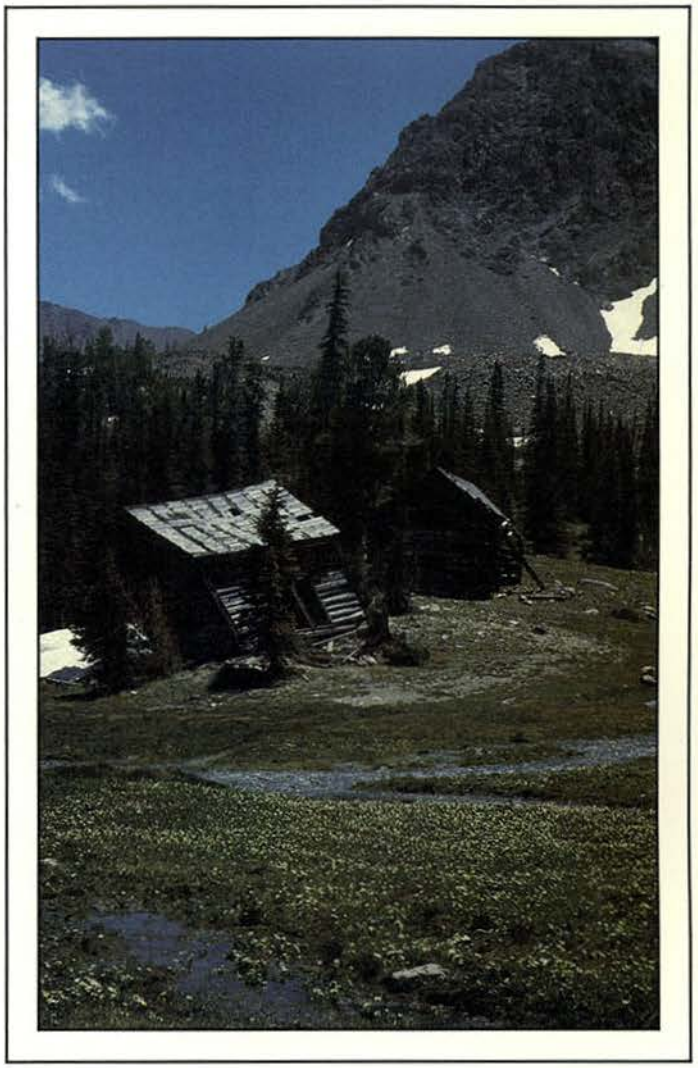
Despite only partial cooperation from Mother Nature, the 1985 Natural Resources Week was a success. This was due to very good cooperation and participation from students, faculty, and staff and, of course, the ever-present lack of sleep.

Carol Boyd is a graduate student in Range Resources.









When we see land
as a community
to which belong,
we may begin to use it
with love and respect.

Aldo Leopold

Sam Ham

Linda Odenborg, Chris Helton, King Kong.

Lynn Kinter

Mark Jonas models his own hat design.

Lynn Kinter

Brian Keithly, Ervin Brooks, Bob Yule, Larry Amell, Karen Doyle.

Lynn Kinter

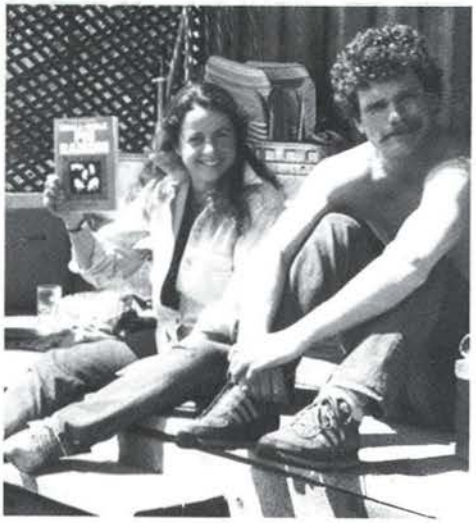
What great country!—Catherine MacRae surveys a canyon by the Snake River.

Bruce Higgins

At the SAF convention, Susan Bernatas and Dr. Jo Ellen Force presented data from Susan's research.

Karel Stoszek

Brian Draper, Aram Eramian.

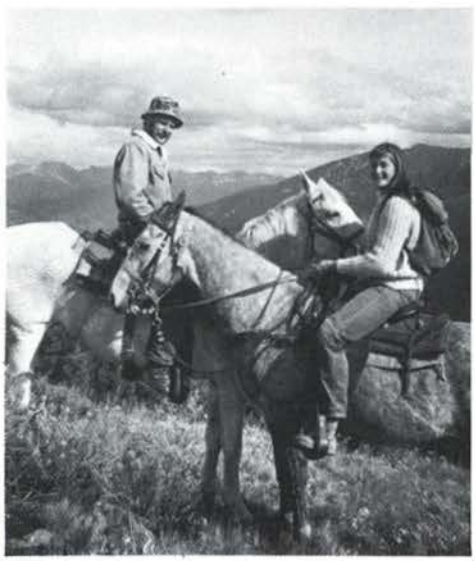


Lynn Kinter

Pig lovers Roberta Rene and Robert Pierce.

Lynn Kinter

Mary Rellergert-Taylor, and Robin Hartmann plot to free the North Fork.



Jim and Holly Akenson near their home in the River of No Return Wilderness.

Nick Cittadino on one of only four occasions ever seen with a woman.

Lynn Kinter

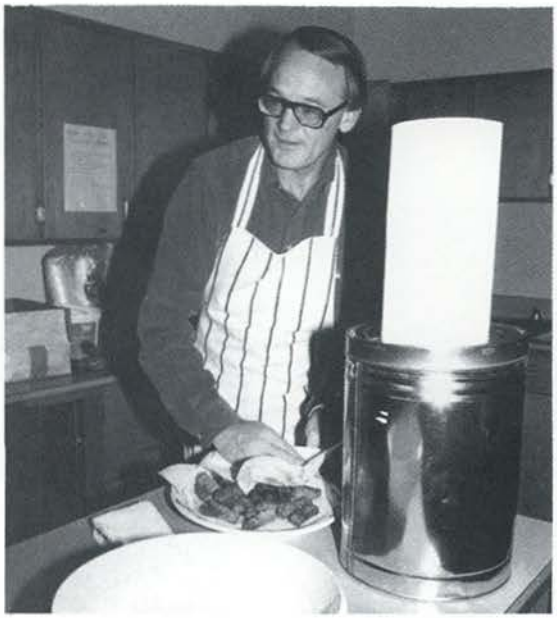
Front: Aram Eramian, Tim Charles, Dr. Jack Schenk. Middle: Mark Lesko Marci Gerhardt, Mike Morigeau. Saleswoman, Loren Heiner, Brain Draper. Back: Pat Evans, Brian Quinn, Tay Briggs, Ed (BLM), Gary Woods, Gary Darington, Jim Reinholt.

Lynn Kinter

'Ours not to reason why . . . ' Beth Kersey, grad student who's nearly finished.

Jeff Bolin

Kyran Kronkel, Ron Newton, Ray Guse.



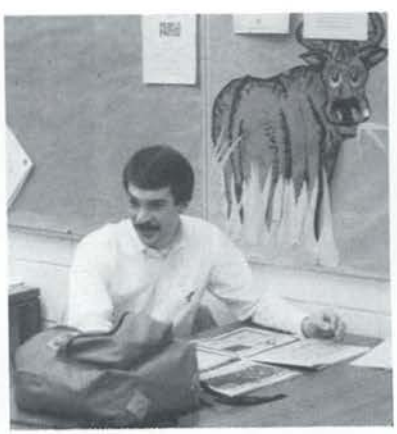
Gutten tag, Joe! Hope you're having a good time in Germany.

Jeff Bolin

Forest Resources student Steve Mims.

Bruce Higgins

Louisa Evers—Forest Resources grad student.



Jeff Bolin

Greg DesLaurier, wildlife student

Bruce Higgins

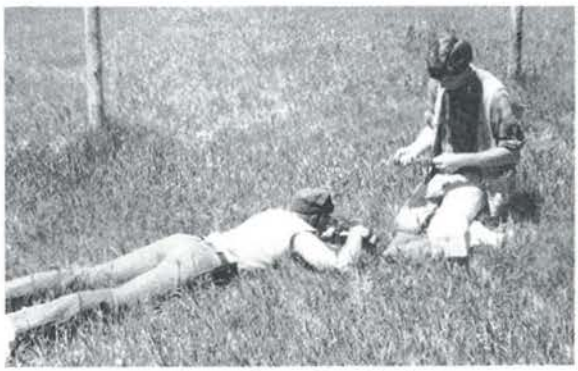
Mohamed Khatouri—Models TA.

Aram Eramian

Sunny Days at Summer Camp


Susan Bernatas

Keith Dixon, Steve Flood, Dr. Jim Kingery, Guy Taylor.


Susan Bernatas

Gary Ray, Ron Rathfon.

1985 Wildland Ecology Participants

Kevin Bott	John Links
Mary Bowdon	Glenn Olshefski
Pat Brown	Larry Pritchett
Keith Dixon	Ron Rathfon
Brynna Evans	Gary Ray
Steve Flood	Guy Taylor
Ben Henson	Susan Bernatas, TA
Jeanne Higgins	Dr. Leon Neuenschwander
Bruce Higgins	


Jeanne Higgins

Leon goes swimming in Payette Lake!


Susan Bernatas

Kevin Bott, Larry Pritchett.


Susan Bernatas

Dr. Neuenschwander looks for lunch.

"Real-Life" Education on our School Forest

by Jeff Scott

Natural resource management students at the University of Idaho have an excellent opportunity to gain "real-world" experience on the 7,158-acre Experimental Forest that is administered by the College of Forestry, Wildlife and Range Sciences. Whether it's observing and participating in management or harvesting practices, studying wildlife or analyzing recreational use, students can be involved with all aspects of the management process on a special Student Management Unit of the forest. The University of Idaho Experimental Forest is located about 15 miles northeast of Moscow, Idaho.

The Student Management Unit, established in 1980, consists of 150 acres of previously unmanaged forest land. It includes a wide range of forest and habitat types and terrain conditions. Such a wide variety is advantageous because it helps students become familiar with working in different situations, whether in a level forest of ponderosa pine or in a steeply sloping stand of grand fir and Douglas-fir.

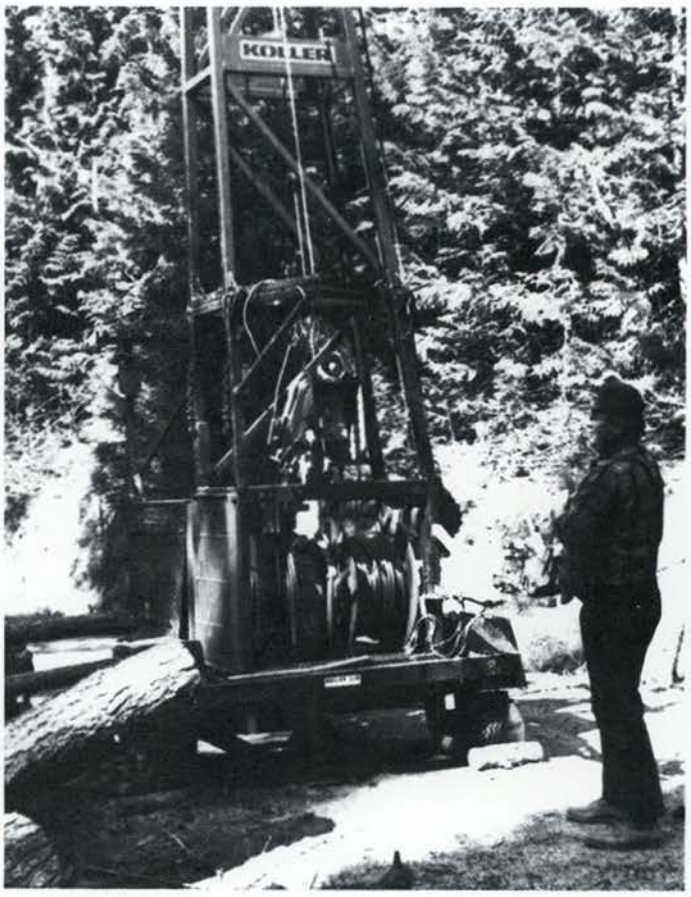
The Unit is managed by the student organization known as the Associated Foresters and is under the guidance of the manager of the Experimental Forest. College faculty members serve as advisors and enrich the students' learning experiences with their expertise. Students perform all the steps in the management process, from identifying objectives and devising management plans to carrying out the harvesting operation itself. Each student can be involved in forest planning, inventory, timber marking, administration, marketing, public relations, research, surveying, and mapping.

The current year's project on the Student Management Unit involved having students conduct a 3-acre thinning with the help of a Koller small-log yarder. Those involved helped set up a cable-logging system, operated a yarder, and learned how to fell trees, not to mention participation in all the other management work associated with an operation such as this.

Three major goals are considered as plans are made for activities which will be carried out on the experimental

Randy Hollander

Roni Fortun, Jeff Scott, Brian Carroll, Jeff Wilbanks, and Dave Gordon discuss the school forest plan.



Jay Marshall

Dr. Harry Lee at work.

forest each year. They are:

1. Education—because today's students will someday be responsible for the proper management and care of valuable forest resources.

2. Research—to increase student knowledge of natural resources and how to best take care of them.

3. Demonstration—to improve the general public's awareness of what actually happens on public forest land and help them gain a better understanding of what forestry is.

The biggest advantage of the Student Management Unit is the opportunity it provides for students to study natural resource management at an excellent university while they gain valuable field experience. It is hard to imagine a better asset for learning. This is especially true for students who have just entered college and are required to take numerous general courses before they can formally pursue courses in their chosen fields of study. Because they acquire good backgrounds through field experience, students are better prepared for their higher-level college classes.

The hands-on experience which students gain by working in the Student Management Unit of the University of Idaho Experimental Forest helps them better learn the importance of using the nation's natural resources wisely.

Randy Hollander

Jeff Scott is a student in the College of Forestry, Wildlife and Range Sciences at the University of Idaho in Moscow, Idaho. He is an officer in the Associated Students organization within the college. Jeff is a native of Ohio.

Student Affairs Council Update

by

Bruce and Jeanne Higgins

The Student Affairs Council (SAC) is the communication link between student organizations within the college, as well as between students and faculty. It is comprised of representatives from each club, the *Snag*, and the *Idaho Forester*. Members of SAC also include a representative from the freshman Forestry Orientation class and graduate representatives.

Officers of SAC are: Jeanne Higgins — chair; Judy Strassman — treasurer (fall); Mary Bowden — treasurer (spring); Ed Sellers — secretary; Bruce Higgins and Pat Hylton — Executive Council undergraduate representatives; and Jack VanDeventer and Randy Balice — Executive Council graduate representatives. Other members include: Chuck Bowey, Jan Pence, Chris Vetter, Casey Meredith, Cleveland Steward, Claire Rausch, Ron Hinthorn, Darwin Baker, Brian Carroll, Randy Hollander, and Brent Nixon. The time and good counsel of SAC advisors Dr. James Fazio and Dr. Charles Harris are much appreciated.

Jeff Bolin

Front row—Jeanne Higgins, Bruce and Brandy Higgins, Jan Pence, Patti Crawford, Dr. Jim Fazio, Brian Carroll. Back row—Brent Nixon, Mary Bowden, Ed Sellers, Chris Vetter.

Jeff Bolin

SAC members hard at work—Patti Crawford, Cleve Steward, Dr. Fazio, Brent Nixon, and Mary Bowden.

Besides being the voice for student concerns, SAC members work to provide events throughout the year. To start off the fall semester, we welcomed the new dean during the first annual college-wide fall picnic. Attendance was good, the food was great, and Dean Hendee inspired students with his fireside talk.

Another newly initiated event this year was the Dean's Seminar. This provided an opportunity for students to voice their concerns and opinions directly to the dean, who was open and receptive. Those who attended were appreciative of Dr. Hendee's willingness to interact with the students.

Our Annual Pancake Breakfast was a success, thanks to Charlie Kessler, who took over the spatula in Joe

Ulliman's absence. (Watch out, Joe!) No one left hungry, and the homemade sorghum molasses donated by Dr. Hendee and family added a touch of down-home, southern flavor.

During the Quest for Excellence Review, SAC members and other students helped out as hosts for the review team. Jeanne and Bruce Higgins and Jack VanDeventer acted as student representatives on the review team. Many reviewers stated that they were impressed with the professional manner and attitudes of the students participating.

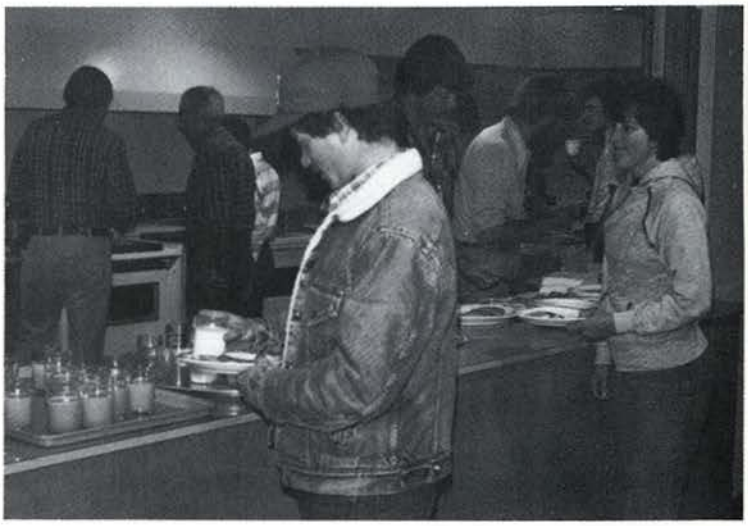
Projects which SAC has completed include construction of the suggestion box, placement of a current events board, and revision of the College of Forestry, Wildlife and Range Sciences *Student Handbook*. Our fund raisers are FWR hat and t-shirt sales, and 'Forestry Pitchers' at a local pub.

The main SAC event of the year — Natural Resources Week — is currently taking shape, thanks to all those students who are involved in the planning. The theme this year is "Resource Integration: Striking a Balance for Idaho." A panel of speakers, the Mud Run and barbeque, an evening campfire program, and the FWR banquet will be featured. It's been a busy spring for all of us who are working to make the week a success.

Bruce and Jeanne Higgins are juniors in Forest Resource Management. Both are active in other professional organizations including Society of American Foresters, Associated Foresters, and the honorary fraternities Xi Sigma Pi and Phi Sigma.

Lynn Kinter

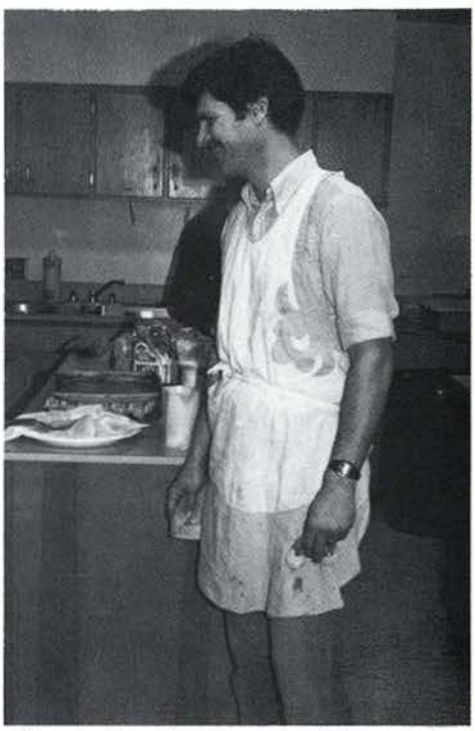
Stacey Vineberg and Dr. Ali Moslemi slave over the hot griddles.



Lynn Kinter

Lynn Kinter

Chairperson Jeanne Higgins worked to keep everybody, including her daughter Melissa, happy at the pancake breakfast.



Lynn Kinter

Charlie Kessler supervised the rowdy kitchen crew.

News of the American Fisheries Society

by Jack Van Deventer

Jeff Bollin

Top: Ralph Myers, Chris Hrusa. 2nd row: Jake Kahn, Bruce Rieman, Frank Shrier, Dani Klontz. 3rd row: Rod Diehm, Rudy Ringe, Ted Bjornn, Christine Moffitt, Julie Schreck, Gwynne Meyer. Bottom row: Tevis Underwood, Jack Van Deventer, Bill Stutz, Cleve Steward, Gary Asbridge, Brian Hoelscher.

The American Fisheries Society is an organization dedicated to the advancement of fisheries science and the wise use of natural resources, particularly those resources affecting fish and aquatic life. This year, it is led by President Jack Van Deventer, Vice President Cleve Steward and Secretary-Treasurer Dani Klontz.

The Palouse Unit of the American Fisheries Society held monthly program meetings featuring guest speakers who are leaders in their fields. Recent topics included a discussion of the biological decisions that prompted the dramatic increase in fish stocks in Coeur d'Alene Lake, techniques for preventing streambank erosion, aquaculture in Europe, fisheries in Alaska, and preparation for a career in fisheries. Video presentations were made as well covering such subjects as livestock grazing impacts on streams and early life histories of fish.

Several social events took place this year. The highlight was the annual Wild Game Feed (a giant potluck featuring home-cooking, skits, gags, jokes, and loads of fun). Two picnics and a chili feed were among the other popular activities which took place.

The Palouse Unit reviewed federal, state, and private development proposals which affected aquatic resources. Through this process the unit took an active public stance on issues of environmental concern. The unit has also provided a forum for student-faculty communication aimed at improving our professional abilities as individuals and as an organization.

In an effort to promote an awareness of fisheries as a profession and of the need for environmental conservation, the Palouse Unit constructed a presentation-quality photographic display of fisheries researchers in action. The display was AFS's contribution for Forestry Week last fall. The ex-

Jeff Bollin

Duke Kress, a sophomore, cleans the kamloops tank.

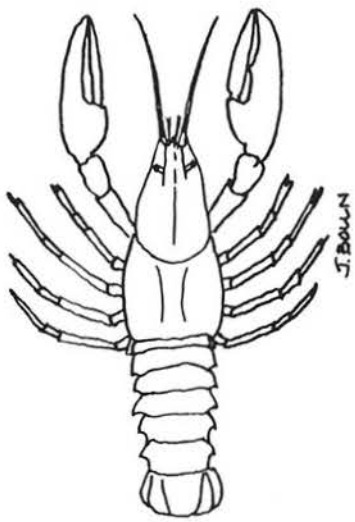
hibit will serve as an environmental education tool for years to come.

The American Fisheries Society has provided an opportunity for students to actively participate in one of the nation's oldest professional societies. The Palouse Unit, furthermore, has the distinction of having its members speak at several prominent natural resource conferences including the state AFS meeting in Boise, the regional AFS meeting in Portland, the national AFS meeting in Providence, Rhode Island, and the North American Lake Management Society meeting in Portland.

Lastly, the Palouse Unit of AFS played a preeminent roll in the affairs of the College of Forestry, Wildlife and Range Sciences by participating in the College's Executive Council, Student Affairs Council, and Forestry Week. The college's major planning effort, the Quest for Excellence, was aided by a sizable number of AFS Palouse Unit volunteers.

Through these varied activities, the Palouse Unit of the American Fisheries Society provided a training ground for the students of today to become the professionals of tomorrow.

Jack Van Deventer is a doctoral student in the Department of Fish and Wildlife Resources. He is currently working on a computer model to assess the influence of livestock grazing on riparian habitat and fisheries populations.



Forest Products Club

by Dave Cohen

The Forest Products Club had another successful year. A combination of educational guest speakers, information exchanges and purely social activities managed to enhance the diverse interests of the club members. These interests include forest harvesting and engineering, wood science, pulp and paper technology and business management.

Guest speakers were brought in from industry, government agencies, and educational institutions. These informal talks allowed in-depth discussions of a wide range of topics from log exporting to the direction of forest products research. These discussions also acquainted students with the personnel and problems occurring outside the university environment.

Students are encouraged to participate in and attend the Inland Empire Forest Engineering Conference, the Northwest Wood Products Clinic, and other seminars. This year club members are involved with the Forest Product's Research Society 1986 Annual Meeting to be held on June 22-26 in Spokane, Washington. When possible, club funds help defray costs of attending these events.

Social activities sponsored by the club are always well attended. These include the Chili Feed in the fall and the annual Pig Roast held in the spring. The international variety of the Forest Products Department, with over 7 countries represented, ensures a mouth watering array of food at the various potluck functions throughout the year.

This year the executives for the Forest Products Club are:

President: Mike Reggear
Vice President: Luke Aldrich
Secretary/Treasurer: Ken Pratt

Dave Cohen is a senior in Forest Products.

Where's the Beef?

by Jan Pence

The highpoint of this year for our Student Chapter of the Society of Range Management (SRM) occurred when the Undergraduate Comprehensive Range Management Exam Team placed 2nd in international competition at the National SRM meeting held in Orlando, Florida, February 10-14. Team members consisted of Ben Hensen, Pat Brown, Steve Jirik and Kirk Nilsson. Range Department Head Dave Bryant and student Jim Harvey also attended the meeting. Min Hironaka received the National Outstanding Achievement Award for the SRM.

The Idaho Section SRM meeting was held in Boise on November 22-23. Both the comprehensive range exam and plant identification teams competed at the meeting. Many of the speakers were department members. Dave Bryant managed to attend both the section meeting in Boise and the Quest for Excellence program in Moscow slated for the same weekend. A winter snowstorm greatly complicated things. We would like to thank those people from southern Idaho who braved slick roads to represent range management in the Quest for Excellence program.

The Range Club adopted Wendy's "Where's the beef?" slogan during their major fundraising project of the year. The club purchased four beef cattle and, after a cutting and wrapping job by the UI Meat Lab, sold and delivered the meat one quarter at a time. A few unsuccessful elk hunters ended up with Range Club beef in their freezer.

Thanks to much time and effort contributed by Carol Boyd and Ron Robberecht the *Information Guide to Range Science* was sent to the publishers in February. This guide is a directory of all of the range professionals in the world. A loan from the college was granted to finance publishing costs. Revenue from the sale of the *Information Guide to Range Science* will be used for updating the Range Library.

Don Moniak and Casey Merideth initiated and organized a range seminar class dealing with the topic of public rangeland policy. The class was attended by range management majors, other resource majors and even people from outside of the college. An informative set of speakers gave us a chance to see a side of rangeland policy that we may not otherwise see in normal classroom lectures. Denzel Fergusen, author of *Sacred Cows at the Public Trough* presented the last lecture.

It was a busy year but the Range Club still managed to find time to have some fun. Most of the meetings were adjourned to the Capricorn for some dancing and drinking. The first social event of the year was the annual Goat Roast and softball game at Big Meadow Creek. The newly appointed dean, John Hendee, attended the event. We had a pizza party in December and a potluck/goat roast in February. The Range Club will also be running the concession stand at the annual Loggers' Sports Meet in May.

The Society of Range Management is a national organization that is open for eligibility to anyone interested in range management. The UI Student Chapter is proud to be one of only three student chapters nationwide. Involvement in the chapter gives us an opportunity to expand our knowledge and experience of range management. It also increases a student's employment opportunities by providing contact with various professionals. All interested students are welcome to attend our meetings or contact Chairman Scott Henderson; Vice Chairman Barbara Wight; or Secretary/Treasurer Jan Pence.

Jan Pence is a junior majoring in Range Resources.

Jeff Bolin

Front row—Barbara Wight, Jan Pence, Scott Henderson, Deborah Cooper. Back row—Ben Hensen, Pat Brown, Margaret VanGilder, Carol Boyd, Dr. Jim Kingery, Dr. Steve Bunting, Don Moniak.

Associated Foresters—
On Top with Logger Sports

Lynn Kinter

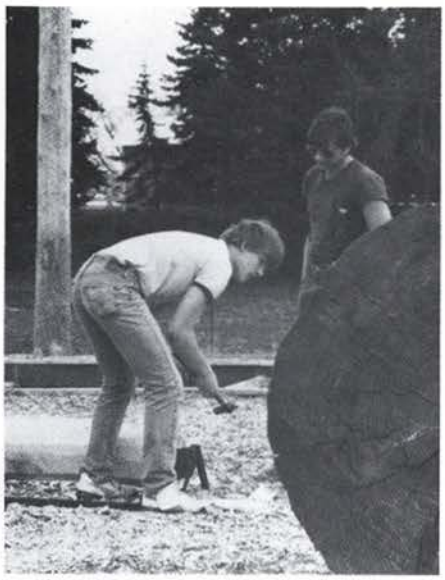
Deb Stage and Chris Vetter enjoy the sunshine.

Lynn Kinter

Front to back—Bob Bealin, Mark Lesko, Dr. Harry Lee.

Jeff Bollin

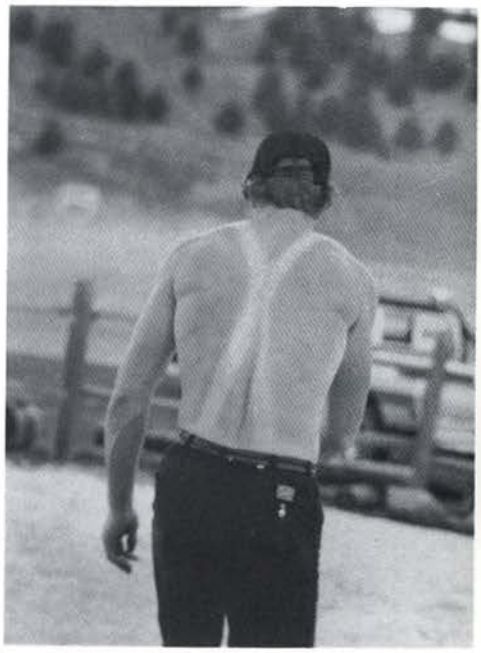
Front row—Program chairman Ron Hinthorn, Vice-pres. (logger sports) Chris Vetter, Secretary Terry Fairbanks, Morgan Stage. Second row—Jay Pence, Team steward Darwin Baker, Jan Pence, Lynn Pence, Pres. Deborah Cooper, Carl Harrison. Back row—Dr. Harry Lee, Jay Marshall, Vice-pres. (SAF) Bruce Higgins, Student mgmt. unit chairman John Links, Jon Berreth, Carol Boyd, Ken Nygren.



Lynn Kinter

Carson Bosworth

Chris Vetter.



Chris Vetter

Mark Lesko shows his logger tan.

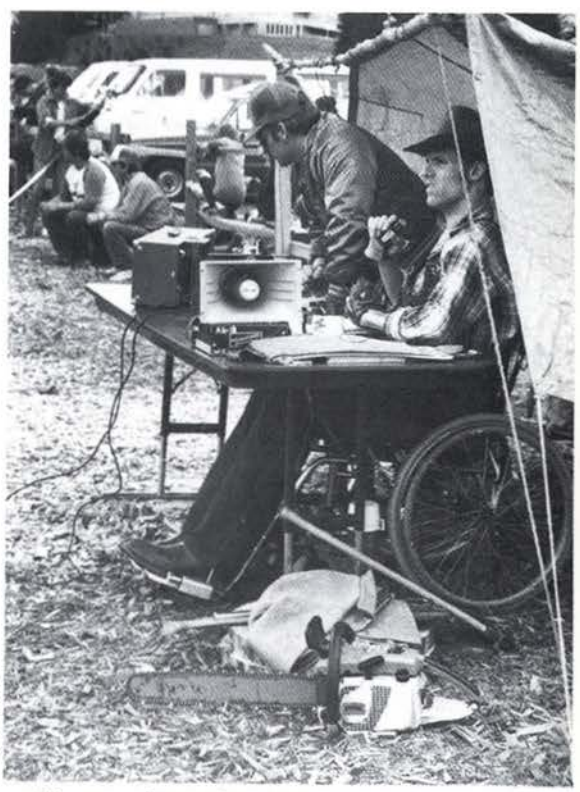
Lynn Kinter

Lynn Kinter

Bob Bealin winds up for a bull's eye.

Lynn Kinter

Julie Sherman.



Lynn Kinter

Morgan Stage kept us up on the events.

The Student Chapter of the Wildlife Society

by

David A. Stevenson

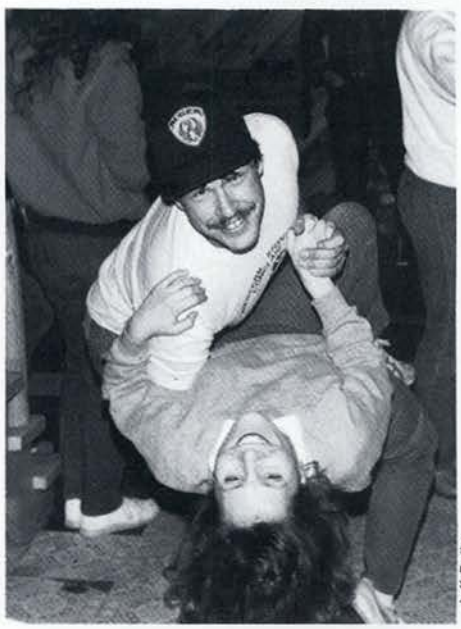
The Wildlife Society (TWS) is a non-profit scientific and educational organization whose members are professionals in natural resource fields. It is organized into over fifty regular chapters and sixty student chapters.

Here at the University of Idaho, we have a very active student chapter of TWS. The members of TWS this year have had a full schedule of both professional and social activities. Our student chapter strives to participate in local professional activities which not only better the participating members' knowledge of resource fields, but also give the members opportunities to become active in the field and to meet prospective employers. Our social activities allow students in the major to get better acquainted with each other—and to have a good time doing it.

This year, headed by President Chuck Bowey, Vice President Patti Crawford, Secretary Debbie Paxton and Treasurer Bert Hoffbeck, we begn with the wildlife picnic. The picnic is an annual event which allows new students to meet other students and their future instructors in a non-academic environment. It also allows old students to catch up on what they have been doing since they last saw each other. We also held a game banquet at the Elk's Club. The evening held more than the usual quota of excitement for a few of our members who found themselves locked in the club after the banquet. In the process of trying to get out, a silent alarm was tripped which brought the Moscow Police Department to the scene immediately.

Though we like to have social events, we realize that there is work to be done in the field. Soon after the fall semester started, it was decided that the deer enclosures on the university forest needed work. We spent one Sunday removing the lower section of wire screening from one of the twenty-acre enclosures. This prevents hunters from herding the deer into the enclosures during hunting season. In addition, we helped the Idaho Department of Fish and Game set up and run check stations. The student chapter members volunteered their time to work the big game check station out of Kooskia and the pheasant check station out of Lapwai. We also helped build bird feeders with wood bought by the Idaho Non-game Wildlife fund. To draw in help, we started the day off with some delicious blueberry pancakes. Who needs more incentive than that?

The society also sponsors guest speakers, usually professionals in the field. This year we have sponsored people such as Frank Nesmith, Chief of Enforcement for the Idaho Fish and Game Department; Neil Johnson, Regional Wildlife Biologist for the Fish and Game Department out of Coeur d'Alene; and Ron Spomer, a well-known wildlife photographer and journalist.



Jeff Bolln

Chuck Bowey and Patti Crawford swinging at the wildlife party.

Jeff Bolln

Front row—Jeff Bolln, Debbie Paxton, Charlotte Forbes, Craig Perham. Back row—Fred Leban, Chuck Bowey and friend, Rob Daley, Bert Hoffbeck, Judy McDonough, Dr. Kerry Reese, Mike Schrage, Vicki Unrah, Pat Hylton.

For the second semester, we are planning a video party at a cabin in Bovill; a small mammal survey at the McDonald school; a Canada goose survey on the Clearwater River Wildlife Refuge; a day of constructing wood duck boxes; and some fund raising events. This year we'll be selling calendars and posters to raise funds for additional activities.

Every year student chapters of the Wildlife Society sponsor teams to attend the Wildlife Conclave's Wildlife Bowl. The teams answer questions in the field of wildlife resources and the team that answers the most questions correctly wins the bowl! The conclave is held every year in a different state, this year being in Fort Collins, Colorado. This year's team looks good and we wish them the best of luck. Being a part of the student chapter of the Wildlife Society can broaden your horizons in the field and allow you to enjoy yourself at the same time.

So, there you have it. We are involved in many activities, both social and professional. The Wildlife Society is recommended to all wildlife resource majors but you do not need to be a "wildlifer" to join. We encourage everyone and anyone with an interest in the natural resource fields to join.

David Stevenson is pursuing a degree in wildlife resources while working part time for the Idaho Fish and Game Department.

Jeff Bolln

"Think we need a little more sawdust in here?"— Ed Winn and Chris Vetter after our all-night party.

Jeff Bolln

Ray Guse and Craig Perham contemplate wildlife.

Rob Daley

Lisa Wakefield, Mike Schrage, Patti Crawford, Vicki Unrah, Jeff Bolln, Fred Leban, Bert Hoffbeck, and Chuck Bowey preserve wild *life*

Jeff Bolln

"How many feathers *does a gadwall have?" Ed Winn, Vicki Unrah, Lisa Wakefield, and Dr. Kerry Reese practice quiz bowl.*

Rob Daley

Jeff Bolln hawks wildlife calendars.

The Scoop on WRMA

by Jeff Wilbanks

Traditionally, the Wildland Recreation Management Association (WRMA) is a model organization, and this practice continues through the efforts of a dedicated Wildland Recreation Management student body. The leadership this year has been provided by: President Jeff Wilbanks, Vice President Brent Nixon, Secretaries Robin Naugler and Debbie Wilkins, Public Relations Officer Susie Vogt, and Student Faculty Representatives Nick Cittadino and Brian Carroll. Student Affairs Council representatives have been Claire Rausch, Brian Carroll, and Randy Hollander. We are grateful to Dr. Chuck Harris, our advisor, for his support, guidance, and participation.

Several projects have kept the association active this year. These include interpretive sign construction for the school forest, ground work for a new Wildland Recreation Management scholarship, and research for the Hells Gate recreation guide. WRMA is also involved in planning and developing an environmental learning area on the McDonald Elementary School campus.

Brown bag seminars sponsored by the club have provided an entertaining break in our daily schedules and added diversity to our professional training. This year, the brown bags included: Orcas of the Puget Sound, Interpretation on the Alaskan Marine Highway, Army Corps of Engineers and Conflict Interpretation, the Framework for Learning, Job Searching in Wildland Recreation Management, and Mount McKinley Expedition 85.

To fulfill one of WRMA's most important goals — generating an enjoyable and productive environment for enhancing the college experience (kick back and take it easy) — the association cosponsored the first annual Wildland Recreation Management outreach at Clark Fork, floated the Salmon River, and had a Christmas party potluck. During spring semester we enjoyed the exciting River of No Return films, thanks to river-historian Cort Conley. We're also organizing the Natural Resources Week Mud Run. To wrap up the year, we'll put together an overnight raft trip, possibly down the upper Grande Ronde.

WRMA's financial endeavors are supported by the members' baking and coffee making skills. Also, a thank you goes out to former president Claire Rausch and previous members for starting us off with such generous funds. We hope that proceeds from the upcoming WRMA Photo Contest will leave next year's group with a sizeable account.

Everyone involved with WRMA this school year deserves a standing ovation for maintaining the fine tradition established by past students.

Club president Jeff Wilbanks will be graduating in May. He looks forward to working for the Bureau of Land Management in Wyoming this summer.

Jeff Bolin

Front row—Brent Nixon, Robin Naugler, Brian Carroll, Jeff Wilbanks, Debbie Wilkins, Dr. Chuck Harris. Back row—Chris Vetter, Susie Vogt, Wade Brown, Randy Hollander, Ed Sellers, Lynn Kinter, Deb Rawhouser, Cathi Bailey.

Ed Ohlweiler

Randy Hollander chows in true Wrec style.

Jeff Bolin

Wade Brown, Susie Vogt, and Jeff Wilbanks— cookie pushers for the club.

Wrec retreat at Clark Fork. Kneeling—Ed Ohlweiler, Dr. Chuck Harris, Dan Kencke. Standing—Dr. Bill McLaughlin, Jeff Wilbanks, Dr. Ed Krumpe, Cathi Bailey, Daphne Sewing, Robin Naugler, Joe Glatz, Jared Ham, Debbie Wilkins, Claire Rausch,Dr. Sam Ham, Mary McGown, Randy Hollander, Karen Doyle, Susie Vogt, Ed Sellers, Brian Carroll, and Michael Frome.

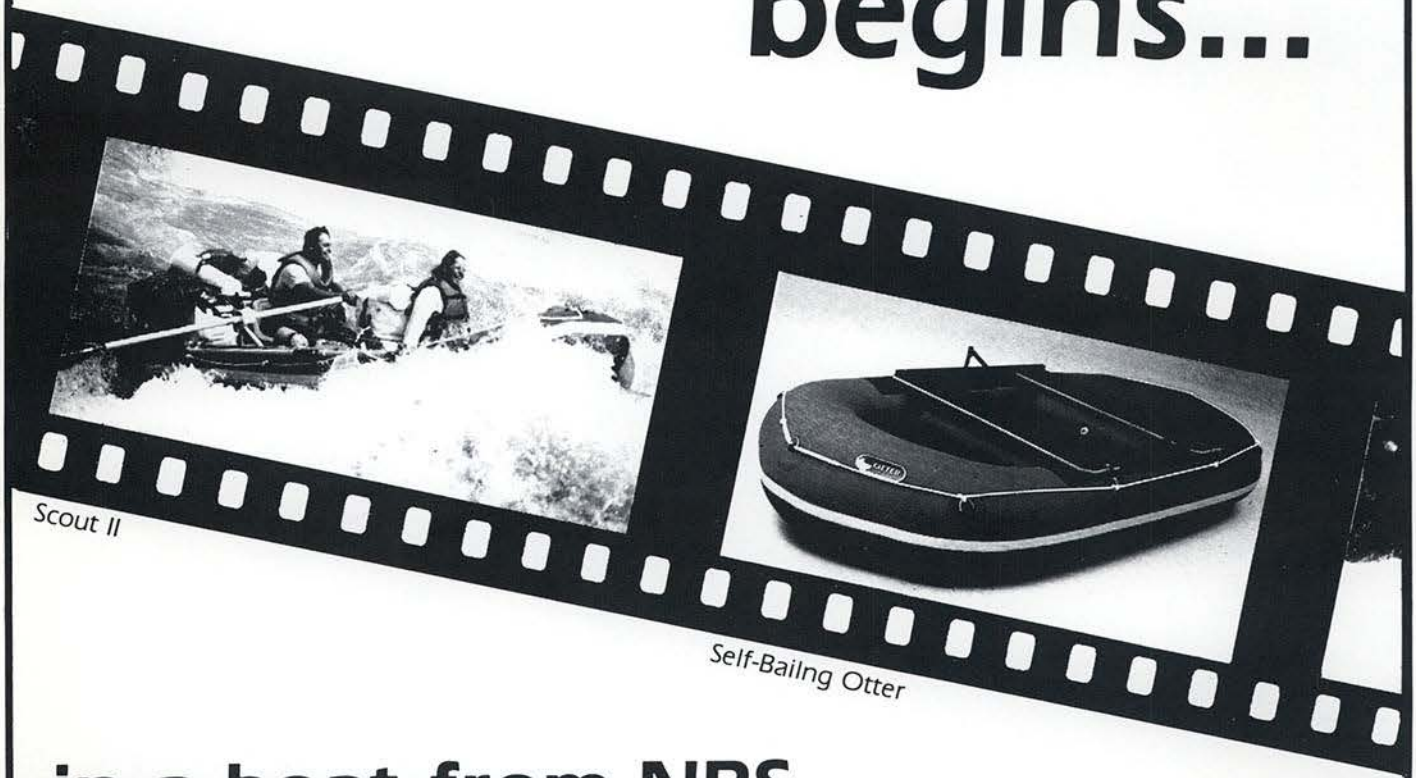
Nick Sanyo

Dr. Sam Ham.

Chris Vetter

Dr. Bill McLaughlin.

where the fun begins...



Scout II

Self-Bailng Otter

in a boat from NRS.

The NRS Scout II pictured above is the perfect choice for those that want a raft but don't want to empty their pocketbooks. We also have all of the essential accessories like the Otter and Bills Bags shown at right, to make your river running fun!

Bills Bags

Northwest River Supplies

P.O. Box 9186
Moscow, Idaho 83843-9186

Stop in and visit our retail store located at 2009 South Main across from the Chinese Village or call 882-2383 for our free 40 page 4-color brochure.

Alumni News

Roger Guernsey—Class of '29
Garden Valley, Idaho

George Lafferty ('42), Bob Rowen ('48), Duff Ross ('48), and I have been playing much golf at Borrego Springs, California.

Ernest Lavelle Thompson—Class of '38
Albuquerque, New Mexico

I am still quite interested in resource conservation activities and spending time in conservation organization activities. Golf and travel are important on our agenda for the year.

Otto Baltuth—Class of '39
Cincinnati, Ohio

I officially retired as of October 1, 1985, however, I do a bit of consulting in the appraisal of old timber framed buildings (by architects and engineers), as well as in court cases involving wood products.

Carl C. Wilson—Class of '39
Berkeley, California

I retired from the U.S. Forest Service 8 years ago and have since served as a part-time fire management consultant with the California Department of Forestry, Ontario Ministry of Forestry and others. I am currently a volunteer for the U.S. Forest Service.

Steve Abels—Class of '83
Twin Falls, Idaho

This past January we received our first tax deduction—Zachary Mark. It's been a real challenge, but so far so good, I really enjoy teaching here at Twin Falls. The kids are great and my opportunities seem to continue to open.

So we saunter toward the Holy Land, till one day the sun shall shine more brightly than ever he has done, shall perchance shine in our minds and hearts, and light up our whole lives with a great awakening light, as warm and serene and golden as on a bankside in autumn.

Henry David Thoreau, *"Walking"*

Broaden Your Outlook

Your skills are needed in the Developing World. There are millions of people around the world who live on the edge - barely meeting their basic needs for subsistence. Extensive deforestation, soil degradation, and destruction of habitat is threatening the survival of these people. Many of the local governments are lacking educated or trained personnel to deal with these problems. In desperation they turn to Peace corps and seek our help. Peace Corps strives to provide the necessary technical assistance to address these problems and enable the people to achieve a level of self-sufficiency in harmony with their environments.

The skills that Peace Corps is seeking include: forestry, fisheries, wildlife management, range management, and environmental education. As a Peace Corps Volunteer, you will not only be putting your skills to work where they are most needed but you will be gaining valuable experience your domestic or international career.

In Peace Corps, you will receive a monthly living allowance equivalent to the monthly salary of governments employees in your country of assignment. You also receive complete medical, dental, and four weeks of paid vacation per year. At the end of a two year assignment Peace Corps pays each person $4,200 to help them settle back into the U.S., plus provides 12 months of "non-competitive eligibility status" for those who wish to pursue government jobs.

Peace Corps is currently working in some 60 different countries. It's a unique opportunity - give it some thought.

For more information, contact Peace Corps at 208-885-6757 or 1-800-424-1022.

Aram Eramian

Mike Morigeau, Gary Darington—getting gas money.

Jeff Bolin

Jeff Drongesen, fisheries senior

Jeff Bolin

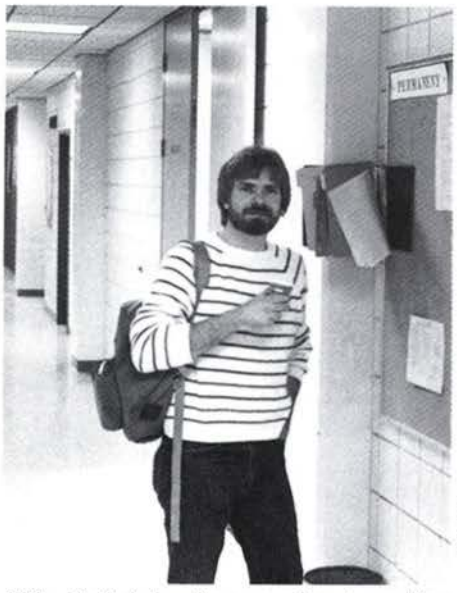
Hi, Mom!—Darwin Baker.

Jeff Bolin

Bruce Ackerman.

Mike Rutledge

Lynn Kinter hammers a tune.



Jeff Bolin

Mike Baird daydreams about working in the tall timber.

Lynn Kinter

Karen Doyle and Terry Shaw work on botany collections.

Our Graduates Are Highly Trained in Renewable Natural Resources

Fishery Resources

The fisheries biologist is knowledgable about aquatic environments and aquatic organisms and can apply this knowledge to managing ponds, lakes, reservoirs and streams. Areas of expertise include aquatic pollution, fisheries management, population dynamics, limnology, and the behavior, culture, diseases, ecology and physiology of fish.

Forest Products

The forest products graduate is well-grounded in all phases of forest business operations, including timber harvesting, logging-engineering, transport of goods to market, processing, computerized sawmill operations, manufacturing, marketing, and research and development for a variety of forest-related industries.

Forest Resources

The modern forester is well versed in economic theory, skilled in computer technology and proficient in public communication, besides being knowledgable in forest biology, natural history, forest protection (entomology, pathology, fire), reforestation, forest ecology, and silviculture.

Range Resources

The range conservation graduate has a strong base in ecology and can assess land capabilities, develop land-use plans, rehabilitate mine spoils, perform soil surveys, administer grazing, leases, appraise land values, study nutritive requirements of animals, and participate in research on use of natural resources.

Wildland Recreation Management

The wildland recreation graduate is skilled in parks and recreation resources management, natural sciences, geography, land economics, conservation of natural resources, human behavior, public administration and communication, and has received specialized training in management/administration, interpretation/communication, or planning/design.

Wildlife Resources

The modern wildlife graduate is interested in all species of wild animals and their roles as components of natural systems, and can gather data, conduct censuses, assess productivity, protect and improve habitat, study food habits, establish limits and seasons, control animal damage, protect endangered species, and enforce laws.

If you plan to hire someone in these fields, please contact Chris Helton, College Placement Office, College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow, Idaho 83843.

Lynn Kinter

Dr. Ed Krumpe

Lynn Kinter

Secretary Pat Scott after a rough day in the Wildland Rec Department.

Lynn Kinter

Cathi Bailey, Jeff Wilbanks.

Chris Vetter

Larry Gregory.

Aram Eramian

Tim Charles, Jim Reinholt.

Bruce Higgins

Mickey Stehr always has a smile handy.

Jeff Bolin

Integrating the Disciplines.

Special Thanks

We're especially grateful to the following friends for their help and encouragement on the 1986 *Idaho Forester.*

Lou Abbott, FWR Custodial Staff

Leo Ames, UI Publications

Marty Fromm, UI Photo Center

Chris Helton, FWR Dean's Office

Cindy Johnson, Western Printing

Jeff Kent, UI Photo Center

Jennifer Levanger, Argonaut

Mike Miller, FWR Publications

Tom Paulson, Idahonian Daily News

Randy Pixley, Western Printing

Jim Rennie, UI Outdoor Program

Kim Sarff, UI Photo Center

Carmen Savage, FWR Publications

George Savage, FWR Publications

Debbie Stage, FWR Copy Center

Bill Woolston, College of Communications

Index to Advertisers

Idaho Forester **Staff**

Jeanne Higgins

Ed Ohlweiler, Deborah Cooper, Dr. Mike Falter, Jeff Bolln, Susie Vogt, Mike Schrage, Lynn Kinter, Levi Broyles, Cathi Bailey.

Jeff Bolln	Graphics Editor
Mike Schrage	Literary Editor
Lynn Kinter	Production Manager
Levi Broyles	Production Assistant
Cathi Bailey	Business Manager
Deborah Cooper	
Rob Daley	
Len Forkner	
Ed Ohlweiler	
Susie Vogt	
Dr. Mike Falter	Advisor

In Memoriam

Daniel Robert Collins

June 2, 1959 - March 30, 1985

Dan Collins is remembered as an easy-going, sunny young man with a good sense of humor. He enjoyed his studies here in tourism and thought "the people are real friendly."

Dan received his Bachelor of Science degree in Lodging, Restaurant, and Tourism from Northern Arizona University in 1983. In January 1983, he came to Moscow where he played on the UI rugby team and was a member of the Wildland Recreation Management Association. He enjoyed running rivers and "always wanted to publish the river notes my brother wrote as a guide"—the memoirs of his deceased brother.

Dan was returning from a spring break visit to his parents in Phoenix, Arizona, when his van was struck by a vehicle driven by a drunk driver.

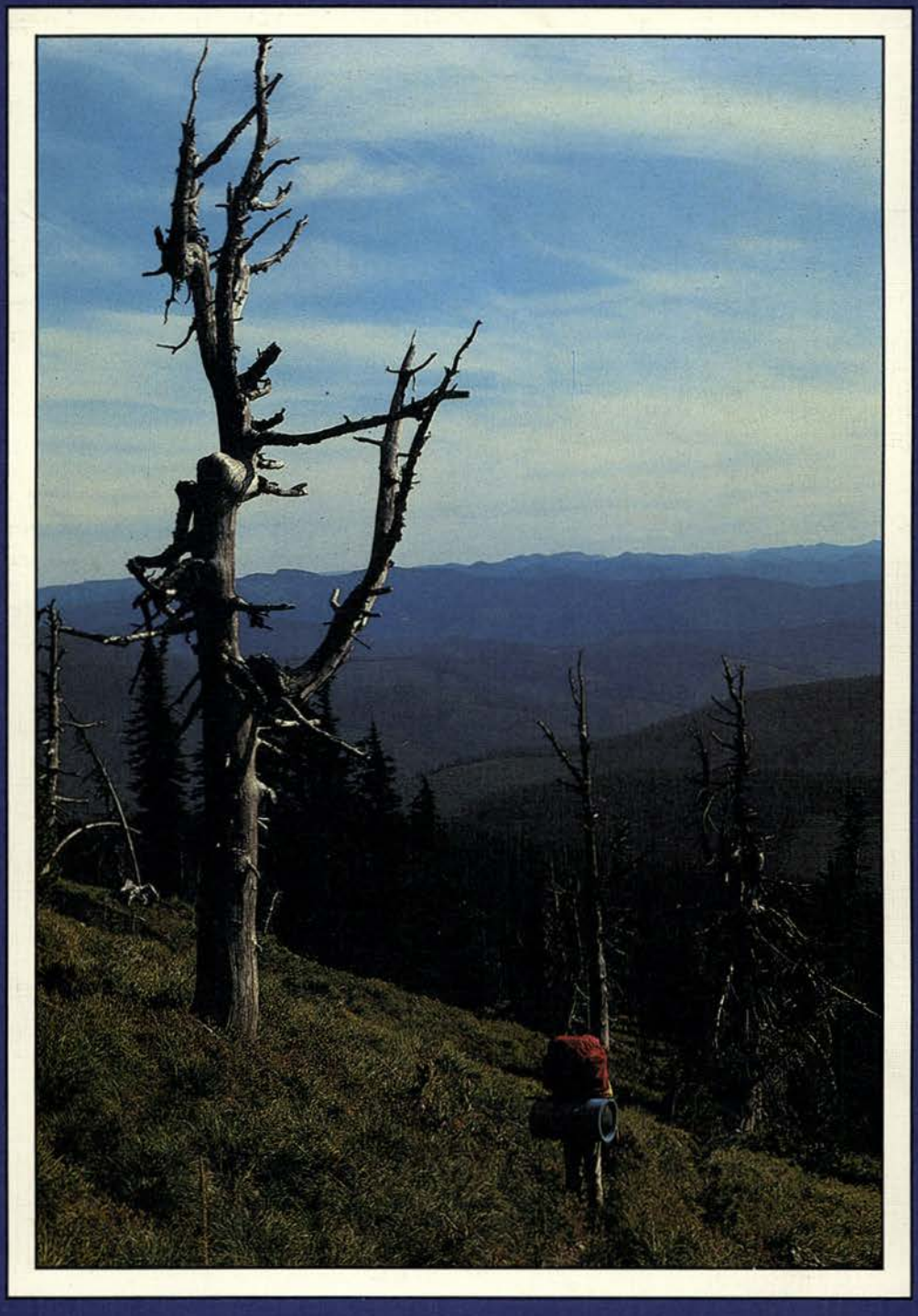
Eric Calvin Godshall

June 11, 1960 - July 24, 1985

Friends say that Eric Godshall was "a real good guy"—thoughtful and vivacious. He was a senior here in Forest Products who liked to hunt and reload shells.

Eric was born in Newfoundland and grew up in Annapolis, Maryland. He attended Anne Arundel Community College near Baltimore, and had been a UI student since 1981. He was engaged to Naureen Kienbaum of Moscow and hoped to "start a little sawmill in my backyard when I settle down."

Eric died in an automobile accident near Orofino. He was on his way to work as a timber cruiser for the Idaho Department of Lands. A Forest Products Scholarship has been established in his memory.



An annual publication by the students
of the College of Forestry, Wildlife and Range Sciences
at the University of Idaho