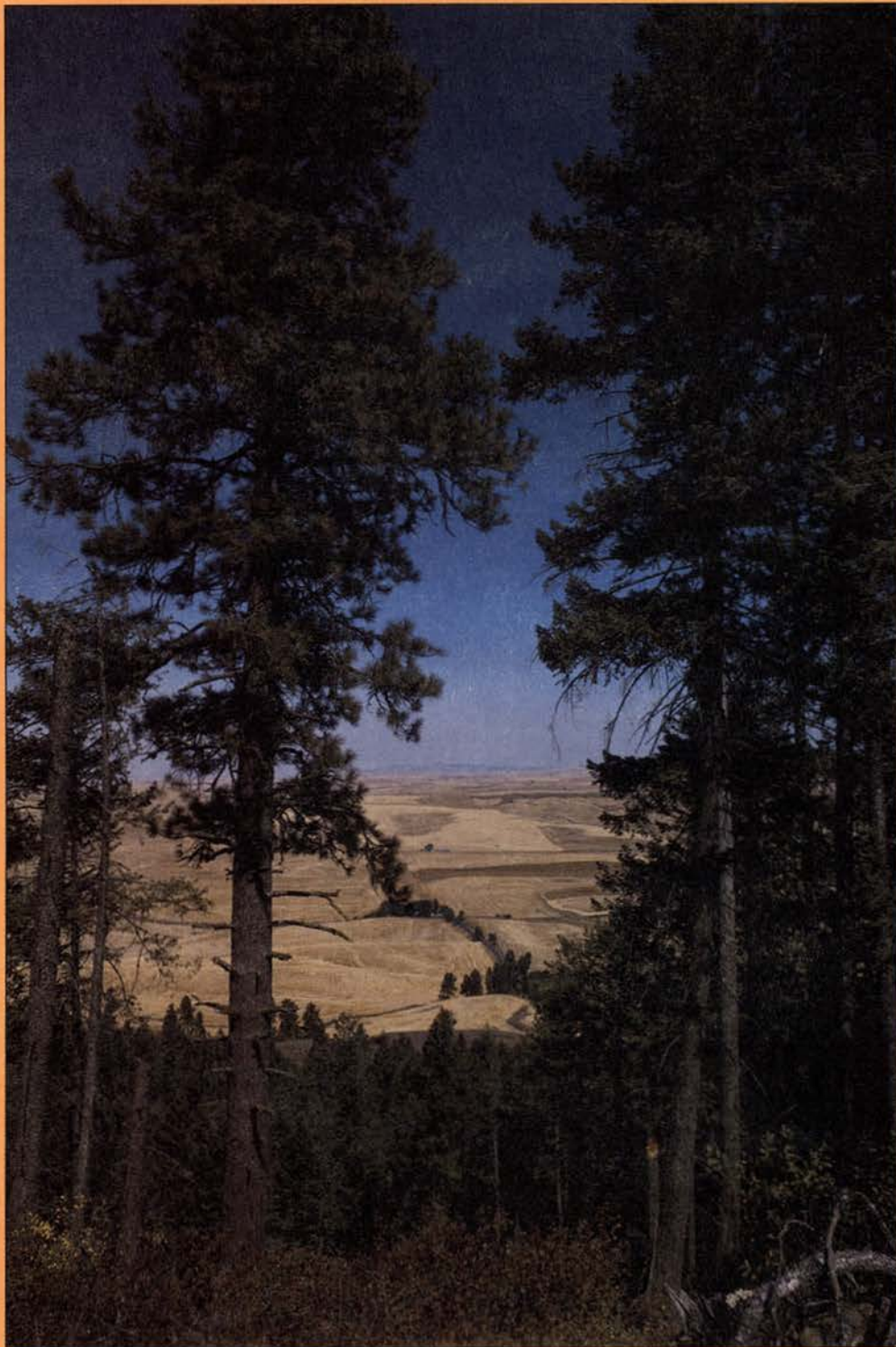


Idaho Forester



SD
12
12
125
1997

Magazine of Natural Resources
1997

ISSN 0270-7616



2nd prize
Sawtooth Mountains
Photo credit: Fred Johnson

3rd prize
Lochsa Country
Summer 1996
Photo credit: James R. Fazio



Cover
1st prize
SE of Moscow
Photo credit: Keya Collins

Idaho Forester



A Magazine of Natural Resources
1997

Table of Contents

Editorial	3
<i>by Stacey Wales</i>	
Memorial to Richard C. Konopacky	4
<i>Submitted by Christine Moffit</i>	
Professor Arthur "Doc" Partridge Retires	5
<i>by Joseph Ulliman</i>	
CFWR Welcomes Three New Faculty	7
<i>by Snag staff</i>	

FEATURE ARTICLES

Timber Sale and Logging Agreements	10
<i>by Roderick D. Johnson</i>	
The Role of Snow in Animal Evolution and Ecology	12
<i>by Dennis Murray</i>	
Livestock: A Powerful Wildlife Management Tool	14
<i>by Karen Launchbaugh</i>	
Roger Tory Peterson 1908-1996	16
<i>by Nathan Burkepile</i>	
POEM: Finally Spring	16
<i>by Denise Ortiz</i>	
Fire Rejuvenates Midwestern Oak Savannas	17
<i>by Rich Patterson</i>	
A Little History	18
<i>by Col. Ancil D. Baker</i>	
What I Learned During Summer Vacation	20
<i>by Dennis Sasse</i>	
POEM: Strictly Functional	22
<i>by Denise Ortiz</i>	
POEM: An Idaho Perspective	23
<i>by Ron McFarland</i>	

DEPARTMENTS

Student Employment Survey Data	27
Forest Resources	28
Forest Products	29
Range Resources	30
Fishery Resources	31
Wildlife Resources	32
Resource Recreation and Tourism	33
Faculty & Staff	34

COLLEGE FOCUS

1996-1997 Calendar of Events	42
1st Annual CFWR Open House	43
<i>by Stacey Wales</i>	
CFWR Recognized by Vice President Gore	44
<i>by Denise Ortiz</i>	
1995 George H. Savage Excellence in Writing Contest Winners	
First Place: Sacred Ground	46
<i>by Travis Wall</i>	
Second Place: Becoming an Ancient Culture	48
<i>by Nancy Wright</i>	
Third Place: Living, Working and Playing in Bear Country	50
<i>by Pamela J. Town</i>	
Outstanding Faculty & Staff Award Recipients	53
<i>by Denise Ortiz</i>	
Where Do We End Up?	56
<i>by Jennifer Jacobson</i>	
Alumni News	57
<i>by Stacey Wales</i>	
CFWR Students 1996-1997	61

STUDENT ORGANIZATIONS

American Fisheries Society	66
Forest Products Club	67
Resource Recreation and Tourism Association	67
The Range Club	68
Logger Sports Club	68
Student Management Unit	69
Swu'nmp'twa	69
The Wildlife Society	70
Student Affairs Council	71
Xi Sigma Pi, Epsilon Chapter	71
The Idaho Forester	72
The Snag	72
Food for thought	73
In Memory	74
Thank You, Forester	75
<i>by DelMar Jaquish</i>	
POEM: Whiteness	76
<i>by George La Bar</i>	
Index to Advertisers	76
POEM: Hourly Prayers	(back cover)
<i>by Denise Ortiz</i>	

SD
12
I2
I25
1997

Editorial

by Stacey Wales

It has been a long and challenging year for myself and the rest of the staff in the production of this year's edition of the *Idaho Forester*. I have learned a lot from the production of the magazine. I have met so many new people within the college and have learned much from them. This task has been harder than I was expecting it to be. I didn't realize what I was getting myself into when I volunteered to take over as editor. I am glad that I had the opportunity to have this experience, it will be a great asset to me in the future. I personally wanted to thank the staff of the *Idaho Forester*. I appreciate all the hard work and time that you have put into the production of this year's magazine.

This year's edition has been jam packed with interesting and exciting articles, artwork, and updates on student activities. I hope that you enjoy this edition as much as we do.

I will be graduating from the College of Forestry, Wildlife, and Range Sciences (CFWR) with a degree in Wildlife Resources and will become an alumnus of the college. What does it mean to be an alumnus? Well, I hope that it means that I will continue to support the University of Idaho and the CFWR throughout the years. It will mean that I will be dedicated, hard working, and be a good representative of the college. It is my goal to be a good representative of the college in whatever I do and be able to be a good example for those who will follow in your footsteps, and mine. I will continue to support programs and activities, such as the *Idaho Forester*, for students of the college because they are rewarding and educational experiences.

I want to thank a few people who have helped in this year's edition.

To the alumni

This year's edition is dedicated to you for your outstanding commitment, hard work, and achievements. Your support of the University of Idaho and the College of Forestry, Wildlife, and Range Sciences has proven to be a great benefit in programs and funding for activities, like the *Idaho Forester*, within the university and college. I personally want to take the time to thank those who contributed to the *Idaho Forester* through donations, artwork, and articles. Your contributions have been greatly appreciated. Without your endless support to the *Idaho Forester* this magazine could not exist. I hope that you will continue to support the *Idaho Forester* throughout the years. It is a great opportunity for students to learn about communicating effectively and working with other students, faculty, and staff.

To the faculty, staff, and students of the CFWR

I want to take the time to thank you for all the help and support you have given to me and the staff of the *Idaho Forester*; we couldn't do it without you. You have given great advice and comments and have helped make this year's edition the best that it can be. Thank you for having the patience and taking time out of your schedules to contribute to the *Idaho Forester*.

There was tremendous support from many people. I would like to recognize a few individuals who have dedicated time, energy, and committed themselves to the production of the *Idaho Forester*

throughout the years.

Dr. Joe Ulliman has been the faculty advisor for the *Idaho Forester* for many years. He has been a great help to me and other editors. His comments and encouragement have been greatly appreciated. Thank you for having the patience and time to help me with this project.

Vanessa Dobbins has been a great help to me for her encouraging words and expertise. She has helped me in the layout and design of this project without her help I couldn't have finished.

Denise Ortiz is a tremendous help in many areas. She has great networking skills and always has many wonderful ideas for me. She has helped in many ways with this project and her support has been greatly appreciated. ▲



Memorial to Richard C. Konopacky

Submitted by Christine Moffitt

Born in Stevens Point, Wisconsin, Rick was raised in a Catholic family of five children devoted to the outdoors and each other. Rick mastered the skills and competition of fishing and hunting from his father and uncles.

After graduating from college and a stint in the service, Rick attended Tennessee Technological University and worked under Dr. Ron Estes at the Cooperative Fishery Research Unit on a project in which he established age and growth of brook trout from thirty two populations from eastern and western North America. This thorough study was published in *Transactions of the American Fisheries Society*.

Rick came to the University of Idaho to study with Ted Bjornn late in 1978. His work at UI consisted of laboratory and field work addressing fish production and trophic relations. Rick also investigated the effects of fine sediment on fish size, diet and distribution.

Following completion of his dissertation in 1984, Rick worked for several consulting firms before starting his own business with his wife Lisa. Rick worked on a variety of projects that utilized his many talents for field work and statistical analysis, including a

study of rare mollusks of the Snake River, and logging-stream ecology studies in Alaska.

Rick displayed a dynamic command of his audience. He enjoyed life to its fullest and all of us remember the fun times that we spent with him and his "Point beer, cheese curds and kilbasa," the trademarks of his Polish ancestry. His humor and melodious Wisconsin accent still fill the air. He will be missed. 🍷

Christine Moffitt is Associate Professor in the Department of Fish and Wildlife Resources.



Professor Arthur "Doc" Partridge Retires

by Joseph Ulliman

The boy from Brooklyn retired in Moscow, Idaho after a 37-year distinguished career at the University of Idaho. For one who started out as a demolitionist for an airborne unit in WWII and carried that skill with him through his professional career, he is far from being considered someone who destroys things, although he may not be adverse to trying to blow some holes in viewpoints about such things as forest health and ecosystem issues. Actually Art began his demolitionist career in high school when he started playing with chemicals and explosives and making rockets to shoot off to who knows where. As a student in the early 1950's at Maine and New Hampshire he did some other interesting things you may not associate with "Doc" Partridge, such as: logging, more explosive work, being a registered Maine guide, and a part-time high tree climber (spar and other trees).

Dr. Partridge came to, at that time, the "College of Forestry", in 1960 after completing his Ph.D. in Plant Pathology at the University of New Hampshire and a three-year stint as a research scientist with the Central States Forest Experiment Station in Columbia, MO. He looked like a dapper Sherlock Holmes and wore a bow tie most of his career when he dressed up (see pictures).

Teaching and research occupied most of Art's time early on, but extension and service activities quickly gained hold. He taught 14 different courses here, mostly related to Forest Pathology, but also such courses as Fundamentals of Research, Darkroom and Photo Techniques, Field Use Explosives, Wildland Resources Conservation, and Urban For-

estry. His research revolved around insect/disease interactions, nursery problems and urban tree problems and resulted in numerous publications including significant monographs on major wood decays and insect/disease problems. Many of his publications were extension types, useful to private citizens, nonindustrial private land owners and professional resource managers. Over the years Art also helped develop extensive specimen and slide collections of diseases and insects for the college.

"Doc" spent many of his summers with Vern Burlison and Frank Pitkin on the road in the state of Idaho teaching workshops to natural resource professionals, homeowners, educators, local governments, civic groups, industrial representatives, environmental groups and citizen committees. He has taught over 150 workshops and continues to do so even in retirement. Now his students are environmental lawyers and foundation personnel seeking to understand both the positive and negative aspects of forestry. In 1988 Doc was nominated for the College's Outstanding Continuing Education and Service Award for his extensive career in such work.

His disdain of administrative work and meetings is well known among the faculty. He had a lapse of a few years though - three years as coordinator of Graduate Programs, 18 years as manager of the college's general biological lab, and over 16 years as president of his own company TREAZ (Trees from A to Z, a venture begun in 1971 and finally incorporated in 1980). The records reveal that Doc actually attended a faculty meeting on February 27, 1976 and agreed to be



Photo: UI Photo Services

on a committee to work up a statement on research priorities.

One retired colleague, Jack Schenk, wondered how anyone was able to talk Art into retiring ... or anything else. "He swore on a stack of fungi every week for years that he couldn't stand the place anymore and was going to pack it in. Of course here he was the next week, and the next . . . in the lab, and swearing, and swearing, and swearing . . ."

One story goes that Art shot a bear and was going to make a beautiful rug of it for his daughters. So he took a 50-gallon drum and filled it with a potassium hydroxide solution, dumping the bear hide in, skull and all. But air trapped in the skull would not permit it to sink, so with his bare hands Doc inverted the skull to release the air bubbles and then submerged it. Needless to say, he was an interesting sight around the



1960

forestry building with his hands and arms flaking away. But he was good natured about it and laughed every time he had to explain to colleagues or students what had happened - he who should have known.

"Doc", the name affectionately bestowed on him by the students sometime in the 1960's, was known to take part in student-faculty events early in his career here. So speaks the Idaho Forester of 1962 in talking about the "Steak Fry" event that started the year off for faculty and students. The author, Tom Heinz,



1965

notes that: "Dr. Partridge showed the young fellows how to work that single buck by winning that event. Then to make sure that everyone didn't think it was a fluke he teamed up with John Hunt and won the double buck event." In 1977 Doc gave a demonstration for the Forestry Club at the Orofino Lumberjack Days on stump removal with explosives, a real blast according to those who attended. Club members were also happy that "Doc and Mrs. Partridge polished off the semester with a dinner at their place." Partridge also served as faculty advisor to the Idaho Forester staff from 1960 to at least 1966.

Art's greatest pride was in the accomplishment of students he worked with and he often bragged of the many who went on to successful careers: Dr. Ming-Jen Lee, now Dean of a college in Taiwan, with potential to become a university president; Dave Kulhavy, known as Dr. Bug or Dr. Dave's Bugs, who recently received the UI Alumni Hall of Fame Award; and other former students. Doc had a little to do with their success: he received excellent evaluations from students throughout his career; was selected as the Outstanding Teacher in the College; was nominated for the ASUI Outstanding Faculty Award; and just received the Outstanding Teacher for Forest Resources Award this past year.

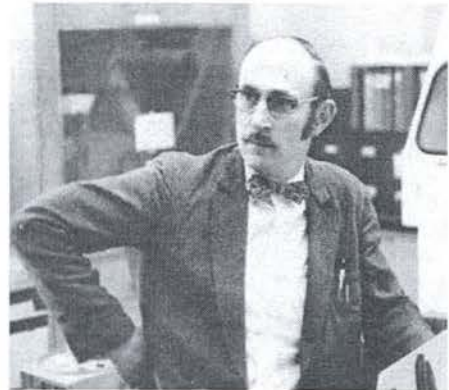
Professor Art "Doc" Partridge officially retired from the University January 24, 1997 although he is not retiring from his profession. He will continue to consult and give workshops about what he has learned over his career and he leaves us with an advisory comment for the college and the profession: forestry is more than trees and if people in the profession of forestry don't open their eyes, environmental groups will push forestry aside and claim the domain. That comment reflects the Partridge character undoubtedly responsible for Forest Service Chief Thomas' description of Doc as "The Renegade Forester".



1963

All of us in the college wish Art Partridge good health and success in his continuing career, and thank him for a job well done. And we will all remember him for what one colleague fondly calls him, an ornery old goat. He never did plant a tree in Brooklyn! ▲

Joe Ulliman is a professor in the Department of Forest Resources and was department head from 1989-1996.



1971

CFWR Welcomes Three New Faculty

by Snag Staff

Larisa Ford, Assistant Professor of Fisheries, comes to University of Idaho from Leetown, West Virginia where she was employed by the National Biological Society at the National Fish Health Research Lab. She primarily worked with Atlantic salmon restoration and health management. Larisa came to Idaho because of the good reputation of the fisheries department here at the University of Idaho, the fact that Idaho is the state with the leading trout production, and the opportunity to teach while researching. She earned her Bachelor's and Master's Degrees at Texas A&M in Marine Biology and Microbiology, respectively. She did her Ph.D. work on vaccine development for bacterial disease in channel catfish at Louisiana State University.



Larisa Ford, Assistant Professor of Fisheries.

Larisa currently is conducting a fish health assessment on dace in Paradise Creek, and also has a graduate student working on a cold water disease project through Clear Springs Trout Incorporated. In addition, she has an ongoing project in Russia researching immunostimulants in carp, rainbow trout, and sturgeon in association with the All-Russian Research Institute of Pond Fisheries. Larisa is also the editor of the *Fish Health Section* newsletter, and secretary/ treasurer of the International Association of Aquatic Animal Medicine. Larisa taught "Introduction to Aquaculture" this past fall and will teach "Fish Disease Management" this Spring.

Karen Launchbaugh, Assistant Professor of Range Resources, comes to the University of Idaho from Texas Tech University where she was a Range Professor. Karen is originally from North Dakota where she grew up on a sheep and cattle ranch, and earned her Bachelor's in Range Management at the North Dakota State University. She went on to earn her Master's and Ph.D.



Karen Launchbaugh, Assistant Professor of Range Resources.

in Range at Texas A&M and Utah State, respectively. Both her Master's and Ph.D. work were on nutritional behavior.

Karen currently has one graduate student who is transferring from Texas and is looking for another graduate student for nutritional behavior research. Most of the research will be done in southern Idaho.

She has always enjoyed studying why animals eat what they do, and their diet selection in order to modify habitats to best suit the animal's use of the land. This spring Karen will be teaching "Integrated Range Resource Management & Planning," as well as "Rangeland Vegetation Inventory and Analysis" next fall. She will also be teaching a graduate



Dennis Murray, Assistant Professor of Wildlife Resources.

course, "Foraging Behavior of Rangeland Herbivores."

Dennis Murray, Assistant Professor of Wildlife Resources, is a native of Canada where he grew up near Montreal. Dennis was previously a lecturer at the University of Massachusetts. He came to Idaho because of the great reputation of the Wildlife Department, and the teaching opportunity accompanied with researching in a diverse environment. Dennis earned his Bachelor's degree in environmental biology at McGill University in Montreal. He then earned his

Master's at the University of Alberta studying the foraging behavior of lynx and coyotes. He did his Ph.D. work at the University of Wisconsin on interactive effects of parasites and nutrition.

Dennis is currently developing local research projects for graduate students, while working on ongoing research in Quebec and Minnesota. In Quebec, his research is on behavioral ecology energetics of coyotes, while his research in Minnesota is focused on survival and reproductive rates in a declin-

ing moose population. Dennis enjoys the outdoors and the dynamics of studying wildlife. He taught "Introduction to Wildlife Management" in the fall and will be teaching a graduate seminar in the spring. Dennis might be teaching a behavioral ecology, or multi-species interactions course next year. ▲



Drawing by Henry Kipp



Drawing by Helen Kettle

Feature Articles



Timber Sale and Logging Agreements



by Roderick D. Johnston

The increased value of timber has prompted landowners to consider logging their property. Unless a property owner has enormous land holdings or elects to partially cut over a period of time, logging is usually not a repeat business. It is therefore crucial to build an agreement that protects your client's timber and land interest. Remember that properly written logging agreements should reference both logging and construction. Logging, yes. Why construction?

Construction expertise is essential because haul road and skid trail construction come with timber removal. Drainage, earthwork, erosion control and road surfacing should be considered. Fire control and emergency equipment include bulldozers and excavators. At times temporary bridges are needed. Other factors such as slash abatement, hydroseeding, site restoration, and street cleaning can be conditions of your client's permit to log. Construction factors supplement logging.

Timber removal involves linking competent representation to qualified contractors under an umbrella contract that best represents your client. If the timber has been evaluated and all permits are issued, the following items should be considered for inclusion into your logging or timber sale agreement:

1. Document only process addresses such as a business or resident location.
2. Attach a site map that is not only readable but up to date. Include meets and bounds. Delineate all wetlands clearly and note how they are field marked. Any other resource protection

must be explained inclusive of any standards to be attained. Identify all skid trails and haul road locations. Note how the trails and roads are located or flagged in the field.

3. The legal description will establish jurisdiction and has precedence over any maps. This is important because varying jurisdictions require different slash removal techniques.

4. The product being cut and approximate volume being removed should be noted. Include how the timber is

estimated in consistent performance with minimal site impact. Include verbiage that will allow machinery substitutions only when your client is convinced that changing logging machinery will not compromise quality of work. Document the cutting prescription and type of logging system agreed upon to attain the desired cut. Note, for instance, when and where hand felling is to be used instead of mechanized harvesting. If you are protecting residual trees, include how they are to be protected and any penalties that will apply if they are destroyed.

7. If you have a preferred logging sequence and schedule, include these in narrative and graphic form. Hold all work to a specific timetable. Since events beyond the control of the owner or logger happen, it's wise to provide a vehicle for time extensions if needed.

8. Clearly delineate construction debris from logging debris while specifying how it is to be handled. It is better for the owner to ensure permit compliance than a state or local inspector.

9. Consider requiring a performance bond. In some cases, the owner may require that the logger make performance deposits or the owner may elect to hold a performance retainage from mill receipts. Generally, as the project continues, risk decreases. This should be reflected by requiring gradually decreased performance deposits of the logger. Clearly explain all mechanisms for releasing bonds and retainage.

10. Require the logger to submit all copies of records including mill receipts, time slips and potential change orders. Stay on top of this one. It's easy to lose

“Construction expertise is essential because haul road and skid trail construction come with timber removal.”

marked or by what means the logger will be directed to cut. Timber size (whether dead or alive) and species should also be included.

5. If you are selling standing timber and not paying a logger based on mill return, indicated the price per measure. Measure can be by the board foot, cubic foot, weight or lump sum. If your timber is in poor condition and marginal in value, it may make sense to sell by the acre. Identify how logs are to be graded and understand scaling procedures. Be sure to identify when ownership of logs passes from seller to purchaser. Remember, trees and logs are personal property. Land is real property.

6. Specifically identify the type of machinery expected to be used. Note the equipment make, model, capacity, and size. Your client should be inter-

track of records while logging.

11. Specify hours of work and any other constraints that must be adhered to.

12. Payments: How often do they come and to whom are they made? Payments should be made only in exchange for appropriate logger lien releases. For this reason alone, it's wise to pay one individual or company and let that person pay all trades and subcontractors within his operation. Require the logger to submit to your client copies of all subcontractor paid receipts. It is also good policy for all cash flow from the mill to go through the landowner. Do not rely on the logger to collect and transfer any mill payment to your client. Some contractors realize that a threshold exists beyond which most clients will not pursue fighting them for payment. Set up all cash flow to go from the mill through your client to the logger.

The other option is to trade a percentage of timber volume for a performance. This avenue provides a clean method of payment and easy bookkeeping. It is also more speculative than paying the logger by the unit. Your client is dealing with a logging firm that knows its production capability and the current value of timber. They know what you don't know concerning haul and skid trail construction. As land parcel and value of timber increases, it makes more financial sense to avoid a percent split.

13. If the logger is to perform construction, specify exact quantities of import rock per ton, length and diameter of culverts and lineal footage of haul

and skid road to be constructed. Tie all construction contract items together. Be exact in all your quantities. If changes occur, your contract will have already included an established watermark on quantities.

14. Your client must remain free of unnecessary risk and damages resulting from logger activity. Cover responsibility of, and damage payment due to fire, negligent logging and personal injury on your client's property.

15. The logger must carry comprehensive general liability, auto, and property damage insurance.

16. Include clauses that allow the client to alter the terms of the contract at any time. Compose a clause that allows the owner the right to terminate the agreement if breach of contract or notice of intent to default occurs.

17. Provisions for disputes, arbitration, and related fees should be included.

18. If your client has agreed which mill(s), or log buyer(s) are to receive all timber, include this information in the contract with a provision that allows the haul destination to change, depending on market conditions and your client's satisfaction with mill or buyer policy.

19. If your client is developing a property and has other contractors and trades on site, it is sound management policy to contractually require the logger to attend weekly project meetings.

20. Specifically describe in addendum form what your client expects the result of this logging to look like. Insist

that your client speak honestly and openly with the logger about this subject before you generate a statement of expectations. Landowner misconceptions concerning the visual result of logging are common and should be avoided. It is a good idea that your client support this addendum by periodically walking the site with the logger during working hours to discuss what's happened, what's happening and what's going to happen.

21. Agree upon, and include in the contract who will make bad weather calls and what time of the day.

22. Define all flagging used on site, specifying what each color means.

23. Attach a list of definitions to the contract to keep you, your client and the logger tuned to the same language. I see this as especially important when dealing with leave trees, protective fencing and when specifying a cut, other than a clear cut.

These are general guidelines and may not specifically apply to all logging activity. One item does apply to all logging agreements and that is the need to invest in planning. Your clients may only get one shot at maximizing their return from selling timber. Keep on top of their contract and you will have earned a client. ▲

Roderick D. Johnston, an alum of CFWR and a project management consultant, is president of Venture Scope, Inc. and editor of the newsletter, Project Logic. He specializes in land development and construction control. Venture Scope, Inc. is located in Fall City, WA at (206) 222-6868.



The Role of Snow in Animal Evolution and Ecology



by Dennis Murray

Winter can be a difficult time for animals, with cold temperatures, short daylight, reduced food availability, and deep and soft snow, being characteristic of many northern regions during several months of the year. In some areas, winter's harshness can be significant to animals, and individuals that are unable to adapt to such

Snow can be an important component of the winter environment, potentially causing serious problems for mammal locomotion and survival. Indeed, terrestrial mammals likely expend considerable energy when traveling through snow, and this cost may result in alterations in foraging behaviour, daily travel distance, food intake, and possibly survival.

However, many northern mammals appear to have adapted specifically to the presence of snow: for instance, snowshoe hares have large hind feet that give them a low foot-load (ratio of body mass to total foot surface area) and thus enables them to travel on the snow's surface without

sinking excessively. The snowshoe hare's primary predator, the lynx, also has large feet and a low foot-load, which undoubtedly facilitates the capture of hares when they are chased through snow. Since both snowshoe hares and lynx have resided in northern areas for thousands of years, it is not surprising that they have had sufficient time to evolve beneficial morphological features such as a low foot-load. However, what about more recent immigrants to northern areas? For instance, coyotes have only recently immigrated to the north, having been found almost exclusively in the mid-western United States and Canada prior to the turn of the century. Coyotes have shown a strong adaptability to a changing environment, and now can be found virtually throughout North America. One

important ecological problem regarding coyote range expansion concerns their potential adaptation to these new habitats. For instance, because coyotes are recent immigrants to northern areas one would predict that they have a higher foot-load relative to species that have resided in the north for longer periods, and that this foot-load should impede their traveling abilities and movement patterns in snow. However, is this really the case?

To examine these questions, I studied coyotes in the Yukon, Canada, as part of a team of researchers addressing the role of the snowshoe hare in the northern boreal forest ecosystem. Initially, I measured the foot-load of coyote, lynx, and snowshoe hare carcasses collected from trappers, by dividing the weight of each carcass by the surface area of the four paws. I found that coyotes had a foot-load that was about seven and ten times heavier than that of lynx and snowshoe hares, respectively, indicating that coyotes were at a clear disadvantage rela-

“Snow can be an important component of the winter environment, potentially causing serious problems for mammal locomotion and survival.”

conditions may die or fail to reproduce. This process, known as natural selection (survival of the fittest), favors animals that are best suited for life in northern areas. For example, thick fur and small extremities are characteristic of many northern mammals, and likely evolved as a result of differential survival following exposure to cold temperatures. According to evolutionary theory, individuals with morphological features best suited for cold survived and reproduced at higher rates than those without such features, and over time they contributed disproportionately to the genetic makeup of subsequent generations. Through time, this led to the evolution of adaptations to cold that are now so common in existing northern animals. Numerous other morphological features have evolved to facilitate survival in harsh environments, and ecologists generally consider northern species to be well adapted for life at high latitudes.

“One important ecological problem regarding coyote range expansion concerns their potential adaptation to these new habitats.”

tive to the other species when traveling through snow. An interesting question that remained, however, was the degree to which this high foot-load could affect coyote movements and hunting behaviour. To examine this question my assistants and I followed coyote and lynx tracks in the snow during two winters

and documented hunting behaviour and choice of prey of each species. As a result of trailing these predators for about 1000 km in the snow, we found that both species relied almost exclusively on snowshoe hares as prey, but that both used very different hunting techniques to catch hares. The tendency was for lynx to travel in areas where snow was both deeper and softer than areas used by coyotes. Lynx often ambushed hares by lying in wait in dense vegetation until a hare ambled to within striking distance. Alternately, lynx sometimes stalked hares for short distances before initiating a chase. In contrast, coyotes pounced on hares from very close distances, and seemed to use dense vegetation as a means of remaining concealed while approaching hares. We were somewhat surprised by this latter hunting behaviour, because most wild members of the dog family (canids) do not use vegetation in the hunting sequence but rather chase prey for longer distances in relatively open habitats. However, in this case we suspected that snow was affecting coyote hunting technique and forcing them to use an atypical strategy. This suspicion was supported by the fact that coyotes rarely chased hares for long distances or in habitats lacking dense vegetative cover, and when they did they almost never caught hares. Also, coyotes were less successful at catching hares when snow was deep and soft than when it was shallow and hard. These results indicated that the presence of snow probably was advantageous to snowshoe hares when being chased by the heavy-footed coyote, and that the only way coyotes could catch hares was by adapting their behaviour to minimize the potential effects of snow on the encounter.

However, what about coyote foot load? Despite their strong behavioural adaptations, is it not possible that northern coyotes are also evolving a lighter foot-load? Clearly, such an adaptation, like that of the lynx, would facilitate the capture of hares during the winter.

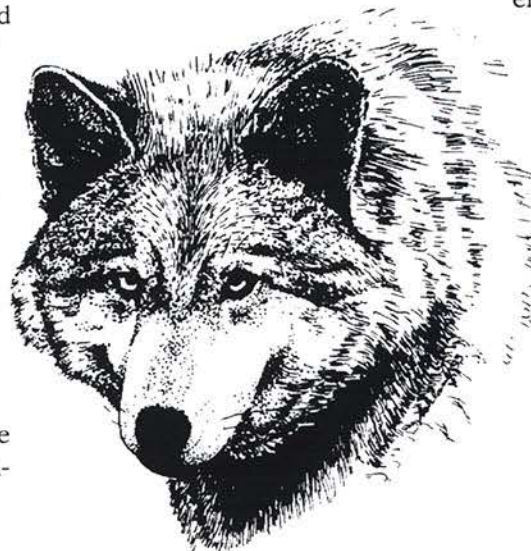
This question is challenging because ecologists generally have found it diffi-

cult to detect ongoing adaptation in animals, probably due to the slow pace at which it tends to be manifest. Nevertheless, I wished to address this question and decided to collaborate with colleagues at the University of Saskatchewan and Utah State University to measure the foot-load of wild canids across the continent. Our idea was that species found strictly in the north (i.e. arctic fox), and northern populations of wolves, coyotes, and red foxes, should have a lower foot-load than southern animals. Over the last 4 years, we collected and traced the unskinned paws of more than 500 wild canid carcasses collected by trappers, and calculated the foot-load of each. Preliminary results show that arctic foxes have light foot-loads, as do northern populations of red foxes. However, so far we have failed to detect a lighter foot-load in northern versus southern populations of coyotes, and therefore tentatively must reject the hypothesis that snow is causing morphological adaptation in this species. This conclusion is difficult to reconcile in light of evolutionary theory, but may suggest that coyotes have not been present in northern areas long enough to have evolved a significant reduction in foot-load, or that high rates of migration by southern coyotes into northern areas is diluting the gene pool and causing foot-load to remain constant. However, another possibility is that the strong behavioural adaptations to snow shown by coyotes in the previous trailing study are sufficient to reduce or eliminate se-

lective pressures for low foot-load. In other words, the effect of snow on coyotes, after behavioural changes have been factored in, may not be significant.

In order to examine the hypothesis that coyote behavioural adaptations are sufficient to limit the effect of snow, I am collaborating with a colleague from Laval University, in Quebec, on a project assessing the costs of locomotion in snow of northeastern coyotes. For the last two winters, we have monitored winter movements of coyotes in an area where snowfall typically is soft and exceeds 1.5 meters, and thus may pose a constraint on coyote locomotion and survival. In previous winters we documented the short distances traveled in winter by radio-collared coyotes as well as their preferred use of hard and shallow snow. This winter, we wish to quantify the effects of snow on locomotion by using domestic dogs as models of coyotes and equipping them with heart rate monitors. These dogs will be walked through different snow conditions and their heart rates will be measured. Because there is a direct correlation between heart rate and energy expenditure, we hope to calculate the energy expended by dogs during these trials and to assess the impact of snow. This will give us an idea of the potential energy costs of locomotion through snow in wild coyotes. Next year, we hope to equip free-ranging coyotes with heart rate monitors and to evaluate the accuracy of our energy demand estimates by calculating the actual energy required to accomplish their daily travels. This will allow us to evaluate winter locomotory costs in animals faced with deep and soft snow, and enable us to quantify the possible importance of behavioural adaptations to snow. Thus, as a result of these research efforts, I hope to soon have a clearer picture about the role of snow in animal evolution and ecology. ▲

Dennis Murray is Assistant Professor in the Department of Fish and Wildlife Resources.



Livestock: A Powerful Wildlife Management Tool

by Karen Launchbaugh

Habitat is an area that provides forage, water, cover, and space; it is basically the "home" of a species. The question at hand is: Can livestock and wildlife share the same home without conflict? Many would say "no" viewing livestock as greedy creatures that steal resources needed by defenseless wildlife. However, rangeland scientists and managers realize that there are many instances when livestock can graze an area without detrimental and sometimes even positive effects on wildlife.

Livestock as Habitat Management Tools

There is no doubt that the mismanagement of livestock can degrade rangeland habitat for wildlife and livestock. However, livestock may also be powerful management tools if used properly. Dr. Fred Guthery, of the Ceasar Kleberg Wildlife Research Institute, went so far as to say that "No habitat management tool is more powerful than the cow. Give her a little salt, supplement and water, and she manages millions of acres of (bobwhite) cover. Like any powerful tool, she can be harmful or helpful depending on how she's applied." A large body of scientific literature now supports this contention.

Livestock, when *improperly* managed can:

- Reduce nest sites for upland game and waterfowl.
- Trample nests for waterfowl.
- Disturb big game during fawning.
- Reduce cover that permits wildlife to hide from predators.

"With careful management, the beneficial effects of livestock grazing can be arranged into planned grazing systems to benefit wildlife."

- Reduce biomass of desirable wildlife forage.
- Reduce floral diversity for bird, mammal, and insect communities.
- Attract predators, parasites, or disease.

There are many ways that an individual cow, sheep, or goat can improve habitat value for wildlife. Species such as deer, sharptail grouse, pronghorn, and elk prefer habitats with considerable diversity. This diversity can be created by livestock grazing. Of particular importance is the creation of feeding, nesting, and hiding sites created in short proximity of one another.

Cattle and horses can be expertly used to open dense vegetation and remove rank grass. This creates travel corridors for small wildlife, like turkeys, and encourages high quality regrowth of grasses to improve forage quality for deer.

If stands of high quality browse are desired for cover and forage, livestock can do that too. The removal of grass by grazing of cattle and sheep encourages the establishment and growth of shrubs. At higher stocking rates, livestock may browse existing shrubs which encourages lateral sprouting causing the growth of tender, nutritious shoots and creating more dense "bushier" shrubs for excellent hiding cover.

Finally, the close grazing of specific areas can create small open weedy patches. These succulent weeds are high quality forage for deer and upland game birds. Livestock can also be used to create bare areas around water sources and wells that are necessary for feeding, dusting and courtship displays by upland game birds and song birds.

Livestock, when *properly* managed can:

- Create patchy habitat with high structural diversity for:
 - Feeding
 - Nesting
 - Hiding
- Open up dense vegetation canopies to create travel corridors for wildlife.
- Remove rank course grass to encourage regrowth and improve abundance of high quality forage.
- Stimulate browse production by reducing grass biomass.
- Improve nutritional quality of browse by stimulating plant regrowth.
- Create weedy patches as feeding sites for upland game birds and deer.
- Create bare ground as feeding, dusting, and display areas for upland game birds and passerines.

Grazing Management for Habitat Improvement

With careful management, the beneficial effects of livestock grazing can be

arranged into planned grazing systems to benefit wildlife. *Strategic grazing* can be used to meet specific wildlife habitat management goals such as creating areas for wildlife cover and other areas of high quality forage.

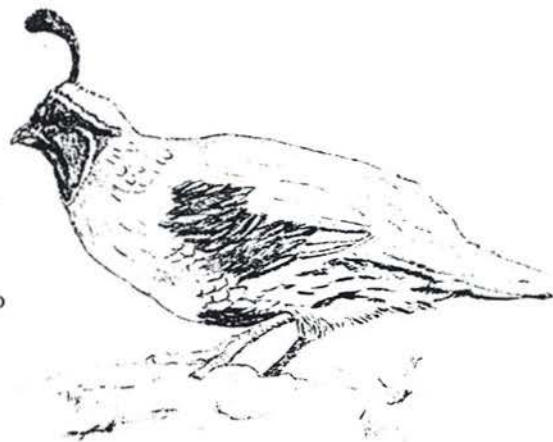
The potential of a planned grazing system to improve wildlife habitat is great. However, successful systems require a thorough understanding of how livestock grazing changes plant communities and an intimate knowledge of the habitat requirements of specific wildlife species. A manager must carefully select a wildlife species to direct management objectives because various wildlife species can differ greatly in their habitat needs. In other words, managing land for sage grouse may not be good for prairie dogs.

Strategic grazing - use of livestock as manipulative tools in wildlife habitat management to create specific habitat conditions.

Grazing systems can be designed:

- Using strategic rest and deferment to improve nesting cover for upland gamebirds and waterfowl.
- Removing livestock from important fawning areas to reduce competition.
- Using heavy stocking in some pastures to create weedy open areas.
- Stocking other pastures at moderate rates to create high quality regrowth.

When developing schemes to employ livestock in wildlife habitat management, one must also consider the effects of this on livestock production. For example, the removal of dead course grass may benefit deer but it won't put many pounds on the cow.



Drawing by Helen Kettle

Conclusion

Can livestock and wildlife share the same *home* without conflict? Some competition between livestock and wildlife for natural resources is inevitable. However, much of this competition can be mitigated with careful livestock and rangeland management. Thus, the answer to the question depends on skill of the manager. ▲

Karen Launchbaugh is Assistant Professor in the Department of Range Resources.

One Stop Shopping

- New and used textbooks ● Art supplies
- General books ● School supplies
- Computer supplies ● Course packets

check us out!

www.bookstore.uidaho.edu

885-6469

UNIVERSITY OF IDAHO
BOOKSTORE



Roger Tory Peterson 1908-1996



by Nathan Burkepile

Rarely does one experience the passing of an individual who has influenced the way we view natural resources. Our generation can only read about people like Aldo Leopold, John Muir, or Isaac Walton. This past summer, a man who changed the way we view wildlife and nature passed away. His name is a common household name. Most people have one of his books or at least heard of him. This person is Roger Tory Peterson.

To some Roger Tory Peterson is known as a great artist and illustrator, but most of us know him from the 1934 publication "A Field Guide to the Birds." This field guide has sold more than 5,000,000 copies.

His interest in nature began when he was a young boy. After drawing a blue jay, his teacher asked him to paint it. The blue jay that he painted showed a quality that was beyond one so young. A little later, he and a friend came upon a dead flicker. Roger went to pick it up and the flicker came to life and flew off. The impression the flicker left on him and his teacher's encouragement shaped Peterson into the man we know.

While many of us only know him for his contributions to birdwatching, Peterson also was ahead of his time in understanding conservation and environmental issues. He was a great spokesman for the environment. For his ef-

forts, Peterson was awarded twenty-two honorary degrees and the Presidential Medal of Freedom.

Peterson left us with a legacy of birdwatching and protecting habitat. Although we do not feel his loss directly, he will be missed. As I sit here writing this article, I wonder who will take his place? It could be you or the person next to you. We should remember his love for nature.

Roger Tory Peterson died July 28, 1996, at the age of 87. ♣

Nathan Burkepile is a senior in Wildlife Resources. He graduated in December 1996.

Finally Spring

Maybe it's like my mom used to be.
She'd get bored
and need a change...
and find it in a hair dye box

honey gold wheat, cinnamon red mahogany
copper sunset, ebony black

Maybe the hill gets tired
of three-foot snow and thaw floods,
the aging gray sky
the humdrum tracks of truck and deer

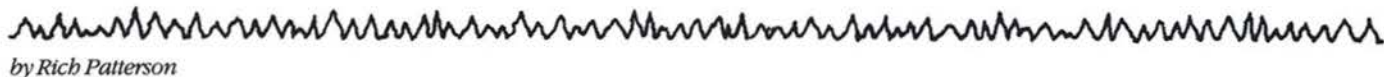
so she shops the sky
and looks toward town
thinking--

I'm going green today.



D. Ortiz

Fire Rejuvenates Midwestern Oak Savannas



by Rich Patterson

About a dozen years ago, a University of Iowa botanist examined a seven foot deep core of bog soil from the Indian Creek Nature Center.

He found white oak and hickory pollen continuously from about 6,700 years ago to the present.

His findings puzzled me. The Nature Center's woods consist of a near solid canopy of massive white oaks, with an occasional hickory and red oak mixed in. But, not a single young oak existed in the understory. Obviously, successful oak reproduction had taken place for thousands of years but had now stopped.

The answer was fire control, which started around here with settlement in

"Fire is becoming an increasingly recognized element of forest management..."

the 1840's. Massive oak savannas, in the absence of fire, gradually filled with an understory and shade tolerant ash, elm, prickly ash, and sugar maple. Dense shade caused by the combination of both understory of shade tolerant ash was simply too much for young oaks to handle. Acorns sprouted. Seedlings died.

In 1989 we let our prairie fire creep upward into the woods. Each year since we've burned under the oaks, and an amazing transformation has taken place.

Nearly all shade tolerant invading tree species proved to be susceptible to

fire, yet the oaks were not affected.

In some areas the vista of the grand savanna has emerged from the ashes. Desirable wildflowers are increasing and oaks are again

reproducing.

Fire is becoming an increasingly recognized element of forest management here in the Midwest as well as in the far west. ▲

Rich Patterson graduated from CFWR in 1971. He has been Director of the Indian Creek Nature Center, 6665 Otis Road SE, Cedar Rapids, IA 52403, since 1978. He is married to Marion Patterson, also an Idaho graduate. They have two children.



Drawing by Helen Kettle

Ed Stauber, Territory Manager



Nutrena Feeds
A Division of Cargill, Inc.

P.O. Box 20462, Billings, MT 59104

Bus: (406) 245-3003

Res: (406) 245-3977

Cell Phone: (406) 860-1291

Wats: 1-800-332-7800

Mobile: (307) 672-4149

Hm Fax: (406) 248-4616

A Little History

by Col. Ancil D. Baker

In the summer of 1932 I worked on the Camas Prairie wheat farm belonging to the McLeod Family and sewed up sacks of wheat on a horse-powered combine.

At that time of year daylight came early enough that lanterns were not needed to feed, harness, and water all the horses and then lead them from the barn and to the combine in the field.

Occasionally, I was privileged to load an International Truck with sacks and drive it to the nearby tramway where the sacks were emptied and the wheat lowered to the railroad along the Clearwater river some 2,000 feet below. In 1991 there was little evidence on the McLeod farm that the tramway ever existed.

Crawler-tread tractors were not yet within the budget of the wheat farmers and the round-wheeled tractors did not have enough traction to negotiate the rolling Camas Prairie wheat fields; they

only dug their wheels down to their axles.

Following the harvest I plowed the fields with nine horses hitched three abreast in tandem pulling a three-bottom plow. In August a call went out from the Kooskia Headquarters of the Selway National Forest for volunteers to fight a fire on the upper reaches of Fish Creek in the Locksa Ranger District. I was transported by the Forest Service truck from Kooskia to the Pete King Ranger Station and from there a bunch of us hiked up Canyon Creek to Canyon meadows in Lewis and Clark territory and then on toward Boundary Mountain and the fire. Cecil H. Boller was with on that trek.

Ranger Leroy Lewis had just been assigned to the Locksa Ranger District and this was his first fire. Pack trains of mules had already supplied the new

“I remember passing the Obia Creek cabin and reading the plaque attesting to the passing of the Lewis and Clark expedition.”

kapok sleeping bags, a field kitchen, food and tools. Kapok bags were first made available the year before. The Pulaski tool had been introduced for fighting forest fires in 1924. The string of eleven mules and a saddle horse brought in by the Ranger Lewis' alternate was still there.

The fire was soon brought under control and the Ranger Alternate asked around to learn if there was anybody familiar with the handling of mules. I volunteered that I had handled burros down in Arizona and I immediately was named “Arizona”. Without revealing that I was a brought up among horses in Oklahoma I was assigned to take the pack string



back down Fish Creek to the Locksa Ranger Station; they were down to their last bale of hay. I remember passing the Obia Creek cabin and reading the plaque attesting to the passing of the Lewis and Clark expedition.

No sooner did I arrive down the there that I was asked to continue with them on down to the Black Canyon of the Locksa to Pete King, a two-day trip. The high trail from the Locksa Ranger Station down to Pete King had been opened only five years before; in some of the hairier spots it had to be cribbed with timbers. It was a long way down to the river. This trail was a fairly steady stream of pack trains all summer long.

Then it was time to pick up my gear at the McLeod farm, go to Craigmont, Idaho and catch a bus to Moscow for the spring semester. The summer of 1933 I pulled currant bushes to control white

pine blister rust in the Coeur d' Alene National Forest near Big Creek in the Pritchard Ranger District. I remember a railroad that terminated at Pritchard. There was evidence of Winton Lumber Company logging railroads all over the place.

That winter of 1933-34 I worked on a Forest Service Crew out in Cataldo, Idaho. Then in the summer of 1934 I was hired to pack mules out of the Honneysuckle Ranger Station on the Little North Fork of the Coeur d' Alene river. My job was to pack in about a dozen blister rust camps and then supply them with food for the rest of the summer.

The Ohio Match Company operated the only remaining logging railroad which connected Chilco with their logging operation near Horse Haven on the Little North Fork by way of the Burnt Cabin Creek. The railroad was standard

gauge but the stream locomotive they used was a three-cylinder shay which sounded like it was going ninety miles an hour when actually doing maybe twenty. The logging was exclusively horse-powered and that beautiful draft horses they employed to skid logs down to the railroad loading dock! The area had long ago been stripped of its easily-accessible choice white pine which was floated down the river to the Coeur d' Alene Lake. Now they were taking the stuff which had been left higher on the slope.

But before moving into the camps I joined up with a couple of other packers to move several lookout cabins; one that comes to mind was Taylor Peak. Lookout cabins were portable but some of the components made very interesting loads for the side of a pack mule. ▲



What I Learned During Summer Vacation

by Dennis Sasse

W Are The Future

As the future of the environment goes so do we. We, the students of today, will follow the problems of the times as the professionals of tomorrow....

Redefining what it means to be an environmentalist, refining harvest practices, slowing erosion, dealing with the effects of over a century of water diversion in an arid west, foresting in urban sprawl, ad infinitum. The singular constant in the never ending management challenge is change. This singular dichotomy—constant change will follow all of our careers into the 21st century. If it is a problem that hasn't been faced we will be the ones charged with resolving it. These problems may be complex and convoluted or simple and straight forward. I guess the point I am trying to get to is this: every environmental problem faced is a human problem.

Helping People

I remind you all of this because as the future of resource management and we are the future of resource management, we need to remember that every environmental problem is a human problem. All the time we spend in labs, seminars, conferences, fields, airplanes, training sessions and even the office has a purpose. The purpose is to improve the human condition.

The simple realization that every action we undertake is an attempt to improve the human condition has come to me because over the past several months I have spent a lot of time in the field, and even more in the lab. The work I have been involved with is part of a human health study to determine how much lead and cadmium residents

of the Coeur d'Alene river basin are exposed to. I could tell you about the Superfund site in Kellogg, the crew I worked with this summer, all the friends I made, or even about my experience in the lab. But I won't. I have found through experience that most people don't find potential exposure pathways to heavy metals nearly as interesting as I do.

Reality Check

But back to the people. The reason the subject comes to me is because there are three of us that work in the lab. The work is repetitive, redundant, time consuming and not very mentally taxing, but it needs to be done. My partners and I vacuum dust mats and collect the dust for digestion sampling. By the time we are done we will have vacuumed well over 1,000 dust mats. It is almost funny in a sick and twisted way that my partners and I get kind of excited when they find a really dirty mat, one that shows signs of lead contamination.

We get excited at the prospect of having found a contaminated mat—it is like seeing that spike in the XRF (X-ray fluorescence) readings—we know it is bad—we know we shouldn't be happy about it, but it is what we have been looking for. It gives meaning to the work we have been doing. What we forget when we find a contaminated sample is that it came from a person's home. A family lives in the contamination we are so thrilled to find.

Three undergrads in a quiet corner laboratory, a room with no windows and concrete walls, find a small thrill in contaminated samples. Perhaps five out of a hundred samples show signs of heavy loading. We find a deadly toxin and a

small thrill in contamination removed from another human being's home and seem to enjoy it.

It somehow seems wrong that it is more rewarding to find what is wrong than it is to find what is right.

We should revel in the fact that there are the 95 clean samples from the batch not in the five contaminated ones. After all, there are people on the other end of our samples. We should be ashamed of ourselves.

Remembering People

I could spend a lot of time arguing the best way to protect the environment, but when it is said and done with all the noble sounding reasons I could present—it is for the animals—all species have a right to exist—the reason we will do our job boils down to the fact that we want to improve lives. It could be selfish and we may want to improve the environment for ourselves, or children. It could be altruistic and we wish to create a better environment for an improved society. Or it could just be because it is the right thing to do. But whatever the reason the ultimate reason we work is to improve lives. Period.

My original reasons for wanting to be a resource manager were to make things better to make lives better yet; I embarrass myself by my behavior.

A History Lesson

This long and seemingly pointless introduction serves as a springboard to transition into a story. The realization and explanation that all the work anyone does in an environmentally based business/industry/service is to improve lives. The lesson was taught to me by a

crusty older gentleman with tired eyes who probably couldn't have known that his influence led one kid to the discovery of his humanity.

Kellogg, Idaho is home to one of the United States all too common Superfund sites. Mining has been part of this river valley for almost as long as European influence. The mining has caused some problems, stream erosion, localized soil disturbances and the like. But in the '70s one mining company had an accident and a baghouse burned to the ground. Baghouses filter air on its way out of a mining operation to remove dust, etc. When the baghouse burned down silver prices were at an all time high. After some cost/benefit analysis the company decided that with the price of metals high it could afford to pay-off any damage caused by the release of contaminated dust. Five thousand dollars per child was the price the company decided it could afford to pay - while still remaining profitable.

Five grand in trade for a child's health. If there is indeed a God in heaven, I am certain there will be a special place reserved elsewhere for the men and women who decided that \$5,000 is worth a child's health. For months the mining continued and by the time the mine stopped over 20 years worth of heavy metal pollution had been spewed out of the bowels of the Silver Valley in about six months.

Lead levels at the base of the burned out baghouse were higher than the ore being mined. And with that, the birth of the nation's first Superfund site was assured.

Enter The Kids

Lead affects red blood cell function, the nervous system and is particularly damaging to children. Therein lies the reason for superfunding and the Kellogg cleanup.

Today we are approaching the 21st century and the funding for the 21 square mile Kellogg Superfund site cleanup is drying up and the cleanup is nearly over. But much remains unknown. It is childish and naive to assume that all the emissions were deposited within the arbi-

trarily assigned lines that make up the Superfund site boundaries.

What are the effects of metals contamination outside the randomly designated confines of Superfund site?

A group of kids under the guidance of a crusty old codger with tired eyes who ran a health district in a forgotten part of the state was charged with finding out. The Panhandle Health District serves a small population and is located far away from the political powers in Boise. Its claim to infamy is that children within the confines of this health district have historically had some of the highest blood lead levels ever recorded in the United States.

As you can imagine, the task of tracking human health and responding to the needs of the people who live in such an area must be daunting to say the least. One summer a bunch of kids went into the Coeur d'Alene river valley armed only with a questionnaire, XRF gun and some soil sampling equipment. The mission of these intrepid children was threefold: 1) get some socio-demographic data 2) determine lead levels in the soil and paint of households and 3) try and convince the people of the area, especially the kids, to have their blood tested for lead and cadmium.

The Lesson

After an exhausting six weeks of 10 hour days, bizarre happenings and having been cooped up with the same two people for more hours than should be allowed, we were reaching the end of the data gathering phase of the basin study.

On the last day of our huge undertaking I had the opportunity to speak with the boss candidly, and alone for the first time all summer.

The Moral

The crew I had been assigned to was sometimes difficult to work with...to say the least. I was a college kid, "a non-traditional" senior, majoring in environmental science; the other two crew members were locals who made their living off area resources. One didn't agree with, or want, us there but was willing to take the paycheck. The other was a single

mother with a pair of kids to support and a list of medical problems a mile long.

Our crew had been broken up for the last day. One of us went out helping collect the mats that I now vacuum, one went home and I was finishing off a mountain of paperwork that had accumulated over the weeks of field work.

The single mother was out collecting mats in her boyfriend's 1973 Ford pick-up that had been driven hard over thousands of miles of logging roads. I will never forget that truck. It was a faded light blue with dual whip antennas, a stainless steel truck tool box in the bed, great big monster truck tires and 27 silver naked ladies pasted in strategic locals. There should have been 28 silver naked ladies, but one had fallen off the rear right mud flap at some prior date - probably on a muddy dirt road leading to a logging camp. The outline of an impossibly proportioned female was permanently ingrained in the faded rubber of that mud flap. Anyway.

The old "reliable" blue Ford had left Mom stranded about 3 miles up Ninemile canyon. Mom called in to ask for a ride or a tow. I had left my Jeep at the house, but it wouldn't have mattered because I had no tow rope in it. So I asked the crusty old codger with the kind heart and tired eyes (that was ran the study) if he had a tow rope. Which of course he did. This was of (course) North Idaho and in the grips of winter it is expected that every able bodied male be ready and able to help out stranded motorists.

We climbed into his standard white state issue health department pick-up and headed toward the house I was staying in for summer. It was only a two minute drive and we spoke. For the first time all summer this guy opened up a little and let me see what it was that made him special and unique.

It is strange how brief encounters made possible only by unforeseen circumstance can have a profound and lasting impact upon our stay here on earth.

"I feel sorry for Mom, she's a single mother with two kids, a bad leg, no hus-

band, no future job once this summer is over an old broken down car and no place to live," the man with the tired eyes says to me. I responded that we spent some lunch hours looking for a new place to rent and that I feel that Mom had to take some responsibility for her own life. And that even though she was in a bad position, some of it had to have been her fault. And when I looked into those tired eyes I was sorry that I had said what I did.

The comments I had so carelessly thrown out after hearing many of my peers using the same logic suddenly seemed petty and spiteful.

The man with the tired eyes looked at me briefly, and for a moment I saw that this seemingly crusty old guy who had been working in a health district where few of the inhabitants cared about his work even though he was working to reduce the poisons in their blood didn't believe me. He truly believes in

people, and has an honest desire to make lives better.

I guess that what I learned this summer is something that can never be put on a transcript or a job application. What I learned this summer is that there still are people who honestly are altruistic, people who want to make the world a little better before they pass, and that I want to be one of them. ♣

Dennis Sasseisa is a senior in Environmental Science and plans to graduate in May, 1997.



Strictly Functional

Posts are for roosting
fat round bird breasts

fences for catching tumbleweeds
and *The Daily News*.

The sky is for God to hang His ruby necklace on
a blinding, glossy red
August sun in evening

the wheat fields fold round
like a sashed gold dress

and He dabs perfume
on her chest---our field,
like wisps of fading cloud.

D. Ortiz



An Idaho Perspective

Back in '72 you could by God just about making a living in the woods driving an 18-wheeler, Silver Dome, Big Burn, Little Baldy, names on a map some bunch of hippies found somewhere in San Francisco. Next thing you know they're out here strung across the road in sleeping bags, chained up to trees, slamming spikes into any cedar worth putting a saw to. One of them dumped a bag of sugar into the tank of Jim Metsker's Cat, about two thousand dollars worth of damages and him with the three kids and a sick wife and no insurance.

Marge says they're hypocrites like the ones in Luke who can see the sky and the sun but don't know the time of day, whispers. "As if they didn't sit on wooden chairs and write their nasty letters on paper made of pulp with cedar pencils and on tables made of walnut."

This one little gal, dishwater blonde but wasn't bad lookin' after they cleaned her up. cute little thing, like Marge says, "somebody's daughter," pipes up in court, we gotta have perspective. *Perspective*. The trees was here before Columbus, some of them anyways, and they got a right to live, she says. Says we oughta think of our grandchildren. She's what—twenty? Hell, I'm sixty-two and I got grandchildren, got four of 'em, two girls, two boys, and the boys are by God going to be loggers if I have anything to say about it, and both them girls could by God do a lot worse than marry loggers.



Then
this little gal from Pasadena or wherever starts to carry on, gets mad, and you shoulda heard the words come out of that sweet little mouth. And hell, I've heard 'em all. Two years in Korea with the 82nd Airborne. Then suddenly she starts into cryin'. You never seen the like. Marge looks like her face is gonna fall off. The courtroom gets quiet as a tomb, and all you can hear is this little gal sobbing like there was no tomorrow.

I look down
at my hands, study the stub of my left little finger and think of the day I wrenched it off setting choker somewhere around Quartz Ridge. I think about how the fishing used to be down on the South Fork, before the silt. Some days I got too good a memory for my own good, but I'm lucky. I got a real high tolerance for pain.

by Ron McFarland
Professor, University of Idaho, English
Former Poet Laureate of Idaho

Did you know that...

- 50% of CFWR alumni graduated in 1976 or later.
- 50% of CFWR alumni are younger than 45 years of age.
- All women graduates except for 3, graduated in 1985 or later.
- There was 20 graduates of CFWR during 1911 to 1920. From 1991 to 1996 there were 706.
- One-quarter of CFWR's graduates during the 1990's have been women.
- The Resource Recreation and Tourism Department has a Master's level alumni in every Central America country.
- Every man, women, and child in the US uses 80 cubic feet (over 1 ton) of wood each year.
- By weight, total US wood consumption exceeds the combined consumption of concrete and steel.
- Americans use 3.5 times as much wood as do consumers in the rest of the world.

Quotes

"Never does nature say one thing and wisdom another." *Ed Krumpe RRT professor*

"Conservation is a state of harmony between men and land. Harmony with land is like harmony with a friend; you cannot cherish his right hand and chop off his left." *Also Leopold, Sand County Almanac*

Departments



Knowledgeable and Experienced Graduates For Careers In Renewable Natural Resources



Fishery Resources

The fisheries biologist is knowledgeable about the 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 the physiology of fish.

Forest Products



The forest products graduate is well grounded in all phases of forest business operations, including timber harvest, logging-engineering, processing, computerized sawmill operations, wood construction and design, 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 communications, besides being knowledgeable in forest biology, natural history, forest protection (entomology, pathology, and fire), reforestation, forest ecology, and silviculture.

The University of Idaho is an equal opportunity/affirmative action employer and educational institution.

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.



Photo by Gerry Snyder

Resource Recreation and Tourism



The resource recreation and tourism graduate is skilled in parks and recreation resources management, natural sciences, geography, land economics, conservation of natural resources, human behavior, public administration, communication and tourism. Specialization is available in resource communication, outdoor leadership, resource-based tourism, and wilderness management.

Wildlife Resources

The modern wildlife graduate is interested in all species of wildlife 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 know of job openings, or plan to hire someone in these fields, please contact Riva Morgan, Placement Office, College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow, Idaho 83844.

Phone (208)885-6441



University of Idaho

STUDENT EMPLOYMENT SURVEY DATA
COLLEGE OF FORESTRY, WILDLIFE AND RANGE SCIENCES

One-Year Employment Survey Averages for 1991-1995 Graduates

College/Dept	JOBS IN FIELD*			SURVEY RESPONSE RATE		
	BS	MS	PhD	BS	MS	PhD
CFWR	74%	94%	96%	72% (239/330)	70% (101/144)	82% (23/28)
Fisheries	89%	100%	100%	71% (37/52)	60% (18/30)	100% (2/2)
Wildlife	67%	84%	100%	71% (76/107)	81% (25/31)	100% (5/5)
RR&T	57%	89%	75%	68% (42/62)	78% (18/23)	67% (4/6)
Range	63%	100%	100%	76% (16/21)	50% (3/6)	67% (2/3)
For. Res.	86%	100%	100%	77% (49/64)	72% (34/47)	100% (9/9)
For. Prod.	84%	100%	100%	79% (19/24)	43% (3/7)	33% (1/3)

Three-Year Employment Survey Averages for 1988-1992 Graduates

College/Dept	JOBS IN FIELD*			SURVEY RESPONSE RATE		
	BS	MS	PhD	BS	MS	PhD
CFWR	80%	95%	100%	66% (143/216)	73% (91/124)	83% (24/29)
Fisheries	74%	100%	100%	74% (23/31)	69% (20/29)	100% (1/1)
Wildlife	80%	90%	100%	67% (40/60)	78% (21/27)	75% (9/12)
RR&T	63%	92%	100%	69% (24/35)	72% (13/18)	75% (3/4)
Range	100%	100%	100%	59% (10/17)	80% (4/5)	100% (2/2)
For. Res.	83%	94%	100%	65% (30/46)	76% (32/42)	88% (7/8)
For. Prod.	94%	100%	100%	59% (16/27)	33% (1/3)	100% (2/2)

* Jobs in Field: permanent/temporary degree-related jobs or graduate school

STUDENT EMPLOYMENT SURVEY DATA
COLLEGE OF FORESTRY, WILDLIFE AND RANGE SCIENCES

One-Year Employment Survey Averages for 1991-1995 B.S. Graduates

College/Dept	Permanent Jobs	Temporary Jobs	Graduate School	Total (Jobs in Field)
CFWR	30%	27%	17%	74%
Fisheries	16%	41%	32%	89%
Wildlife	22%	24%	21%	67%
RR&T	19%	29%	10%	57%
Range	38%	13%	13%	63%
For. Res.	43%	34%	8%	86%
For. Prod.	68%	5%	11%	84%

Three-Year Employment Survey Averages for 1988-1992 B.S. Graduates

College/Dept	Permanent Jobs	Temporary Jobs	Graduate School	Total (Jobs in Field)
CFWR	61%	10%	8%	80%
Fisheries	52%	13%	9%	74%
Wildlife	58%	10%	13%	80%
RR&T	29%	21%	13%	63%
Range	80%	10%	10%	100%
For. Res.	73%	7%	3%	83%
For. Prod.	94%	0	0	94%

Forest Resources

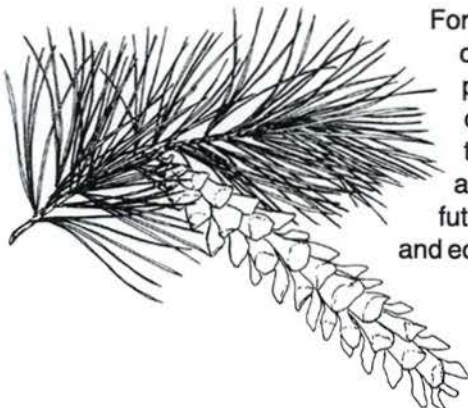
YOUR FUTURE IN FOREST RESOURCES

If you decide to major in Forest Resources, your path will lead to the proud profession of forestry.

Forestry is defined as "the science, art and practice of managing and using for human benefit the natural resources which occur on and in association with forest lands." This definition includes all natural resources on forested lands such as forage, wildlife, fish, soils, waters, recreational opportunities and esthetic values. The forester must be first and foremost an ecologist and manager who understands the interrelations of all of these environmental and human components.

Today's forester is knowledgeable in forest biology and natural history; the modern forester is a sophisticated scientist, well-versed in economic theory, skilled in computer technology, and proficient in communicating with the public. The image of a Paul Bunyan character stalking the woods in wide suspenders and calk-soled boots, or of the more modern version wearing a wide-brimmed hat and living in a fire tower, may have romantic appeal but is as outdated as the horse and buggy.

It is difficult to summarize the daily duties of foresters because the field is so diverse. Some graduates work in cities as urban foresters charged with the care of trees in parks and along avenues. Others work for states and counties as advisors to farmers and other woodland owners. Still others may supervise recreational uses of forest land, appraise land values, act as a consultant, buy timber for sawmills or pulp and paper companies, or be in charge of public relations programs. Some foresters pursue international careers, advising on firewood plantations in the Himalayas or fighting the spread of deserts in North Africa. Most foresters at some point in their careers are involved with forest inventories, supervising planting and reforestation projects, planning and supervising timber harvests, protecting the forest from fires, insects and diseases, enforcing laws, assessing environmental impacts, establishing wildlife habitat, working with legislators, and surveying roads or trails, to name a few activities.



Foresters enjoy the respect of their communities and the professional unity of the Society of American Foresters. They are the stewards of our woodlands and play an essential role in the future of our nation's environment and economy.

CAREER OPPORTUNITIES

Aerial Photo Interpreter
Arborist
Biometrician
City Forester
Community Forestry Specialist
Conservation Educator
Consulting Forester
Engineering Assistant
Environmental Impact Analyst
Environmental Organization Executive
Environmental Researcher
Extension Forester
Forest Land Appraiser
Forest Economist
Forester/Forest Manager
Forest Fire Specialist
Forest Property Appraiser
Forestry Educator
Forest Social Scientist
GIS Applications Engineer
Hydrologist
Interpretive Naturalist
Land Acquisition and Exchange Manager
Land and Claims Adjusters
Land Reclamation Specialist
Landscaper/Tree Care Specialist
Land Use Specialist
Land Use Supervisor
Lobbyist
Log Sort Yard Foreman
Logging Safety Specialist
Natural Resource Coordinator
Natural Resource Scientist
Nursery/Greenhouse Manager
Peace Corps Worker
Plant Quarantine Inspector
Real Estate Sales-Timber and Development Specialist
Regeneration Specialist
Remote Sensing Specialist
Research Forester
Sales Manager
Sanctuary Manager
Science Writer/Editor
Seed Orchard Manager
Silviculturist
Soil Conservationist
Soil Scientist
Special Projects Forester
Technical Forester
Timber Buyer
Timber Cruiser
Timber Records Specialist
Timber Sale Administration
Tree Care Specialist (Urban)
Tree Farm Family Forester
Tree Improvement Forester
Urban Forester
Water Resources Manager

Forest Products

YOUR FUTURE IN FOREST PRODUCTS

The program will prepare you for an exciting, well-paying career in the forest products industry. Depending upon your interests, we have options in:

- Timber Harvesting
- Forest Products Business Management
- Wood Construction and Design
- Pulp and Paper

Wood is a constant part of the lives of the people in this country and throughout the world. Nearly 80 percent of the material going into the construction of a home in the U.S. is wood based. Wood is also in the paper we use as newspapers, money, books, and packaging. In the U.S., every man, woman, and child consumes over 2,000 pounds of wood per year in the form of various products. The forest products industries rely on a renewable resource—trees—to produce over 5,000 different products for shelter, communications, packaging, and chemicals. Wood not only forms the raw material for the product, it also supplies a large portion of the energy needed by these industries.

Many wood-using industries generate more than 50 percent of their energy requirements from wood residues. The industry utilizes almost all the wood fiber that is delivered to the mills and the innovation and modernization now taking place will assure a higher degree of efficiency and a greater level of utilization of the wood fiber.

Because of the cooperative relationship between the department and the forest products industry students frequently have an opportunity to hear top industry executives speak on the problems and possibilities of their industry. During these short seminars, students are invited (and expected) to ask questions. The industry also supports our students through a number of undergraduate scholarships available to entering freshman, transfer students and to returning undergraduates.

Who should consider a career in Forest Products?

Students who value forests and the challenges, both ecological and technical, of harvesting a natural resource while protecting the land that produces it. Students drawn to the sciences in general and chemistry, engineering, and mathematics, in particular. Students who enjoy the challenges of business, and of creating new products and improving old ones. Students interested in construction and design. Students who value wood as one of the nation's most important and versatile resources — and a renewable one at that. And students interested in a career in one of the nation's most diverse industries.

CAREER OPPORTUNITIES

Logging Engineers
Logging Supervisors
Forest Road Engineers
Forest Resource Managers
Timber Sales Administrators
Wood Procurement Agents
Quality Control Specialists
Production Managers
Plant Supervisors
Process Superintendents
Sales Representatives
Business Analysts
Custom Service Supervisors
Exporters
Design Specialists



Range Resources

YOUR FUTURE IN RANGE RESOURCES

Range Resources is a major often not known to students who would otherwise be very interested in what it has to offer. In addition to learning to manage one of the world's most important resources, here is a profession that puts you in touch with the traditional western lifestyle idealized by many but pursued by few. Let's look at the subject of range resources more closely.

Native grazing lands constitute approximately 47 percent of the earth's land area and comprise the largest single category of land in the United States. Western grazing lands support the range livestock industry in the United States. These lands provide forage for domestic livestock; furnish food and cover for important big game herds and many upland game birds; contain a major portion of our watersheds; provide water for agricultural, industrial and domestic use; overlie important energy reserves such as coal and oil shale; and have tremendous potential for recreational use. Nearly all of these lands are managed under the concept of multiple use.

A range manager-or, *range conservationist*, as they are often called-should be able to function well in many sub-disciplines and must have a strong base ecology. Some typical assignments you could expect as a professional include administering grazing leases, determining land capabilities, developing land-use plans, assisting other land managers with their problems, rehabilitating mine spoils, performing soil surveys, appraising land values, studying nutritive requirements of animals, participating in and directing research activities related to natural resource use, and communicating with ranchers and the public.

The future of range management looks exceptionally bright. Demands placed on rangelands for increased meat production, wildlife habitat, utilization of energy reserves, increased water yields for urban needs and crop production, and a multitude of public recreational pursuits will dictate more intensive future management of the nation's rangelands. Traditionally range managers have primarily worked for state and federal agencies, but currently many more opportunities exist with private industry and in the international area than ever before. If you are looking for a challenging and a highly rewarding natural resource management career, you owe it to yourself to look further into majoring in Range Resources.

CAREER OPPORTUNITIES

Agroforestry Specialist
Teacher
Range Resources Manager with
Agribusiness
Bureau of Land Management
U.S. Forest Service
Bureau of Indian Affairs
Soil Conservation Service
Fish and Wildlife Departments
State Forestry Departments
Department of Energy
Department of Defense
Indian Tribal Agencies
Cooperative Extension Agent
Researcher
International Resource Specialist
Rehabilitation Specialist with
Mining and Energy Firms
Range Manager
Range Consultant
Land Appraiser
Peace Corps Worker
Loan Officer



Fishery Resources

YOUR FUTURE IN FISHERY RESOURCES

Here is a program designed to help you learn about aquatic environments and aquatic organisms and the application of this knowledge to managing ponds, lakes, reservoirs and streams for sport fishing opportunities, commercial fish for human consumption, biological diversity and aesthetic enjoyment.

Traditionally, graduates of this program have worked primarily for state and federal agencies. This is still an important avenue of employment. The increasing importance of water quality and the growing number of fishing enthusiasts require dedicated men and women with the right kind of academic preparation. However, in recent years there have been exciting developments in fish farming, or aquaculture, an industry that is helping to meet the world's growing need for food. Efficient fish farming, like management of hatcheries for sport fish, requires an application of computer technology and a thorough understanding of disease control, nutrition, and other aspects of fish culture. This field offers important career potential both at home and overseas.

There are other employment routes open to fisheries graduates. Some of these include law enforcement; others include the monitoring of water quality with such diverse employers as mining or timber companies, power companies and various government agencies.

In general, the fish biologist is involved with a variety of activities such as estimating fish populations, assessing productivity of waters, manipulating the habitat, protecting the watershed, monitoring for pollutants, studying fish food habits and preparing environmental impact statements. For the manager of a fish farm, not only is an extensive knowledge of nutrition and disease required, but also expertise in managing business enterprises.

CAREER OPPORTUNITIES

Aquaculturalist
Commercial Fishing Operator
Computer Programmer/Modeler
Conservation Officer
Environmental Organism Executive
Fish Farm Operator
Fish Pathologist
Fisheries Biologist
Fisheries Manager
Foreign Fishery Observer
Hatchery Technician/Manager
Ichthyologist
Laboratory Technician
Limnologist
Marine Resources Technician
Outdoor Writer
Peace Corps Worker
Public Aquarium Director
Research
Technical Writer/Editor
Toxicologist
Water Quality Analyst
Water Quality Planner
Water Pollution Biologist



Wildlife Resources

YOUR FUTURE IN WILDLIFE RESOURCES

Wildlife occupies a special place in the hearts and lifestyles of Americans.

The term "wildlife" includes all animals that are not domesticated. Traditionally, heavy emphasis has been placed on those animals harvested for sport, food or for animal damage control. But a major change is now taking place in the profession with non-consumptive uses - such as photography, observation for enjoyment, and role in the ecosystem - receiving greater emphasis. The modern wildlife professional is interested in all wild animals, both game and non-game species, and in their roles as components of natural systems.

Wildlife management is the manipulation of wild animal populations and their environment for the benefit of both wildlife and humans. The best interests of the resource receive major considerations. The wildlife manager gathers data through research and formulates and applies scientifically sound solutions to wildlife species or habitat problems. The wildlife manager conducts censuses, assesses productivity, protects and improves habitat, studies food habits and establishes limits and seasons, controls animal damage, protects endangered species, and enforces laws. The modern wildlifer must be an astute observer of nature, but certainly does not fit the image of an oldtime naturalist armed only with notebook and binoculars. The modern wildlifer is skilled in the use of sophisticated instrumentation, uses the latest knowledge of mathematics and computer technology in probing the secrets of nature, and knows how to communicate with the public through a variety of media.

Most wildlife jobs are with state conservation departments or with federal agencies such as the U.S. Fish and Wildlife Service, U.S. Forest Service, Bureau of Land Management, Corps of Engineers, National Park Service, and other agencies. Opportunities in private employment have expanded rapidly in recent years. Private conservation organizations, engineering and consulting firms, and even oil companies are among the many employers of wildlife resource graduates in the private sector. In fact, perhaps the greatest mistake the wildlife graduate makes is assuming that worth while jobs exist only with public agencies. Also, many students enroll in this major purely from an interest in wildlife even though they have no intention of working as professionals in the field.

Wildlife programs are among the most popular in natural resources today and the job market for graduates is highly competitive. Successful employment depends on dedication, perseverance, hard work and careful planning. But for students with the interest, the University of Idaho offers a highly respected faculty and the kind of field opportunities that result in the best education available.

CAREER OPPORTUNITIES

Animal Care Technician
Animal Control Supervisor
Animal Laboratory Aide
Aquatic Ecologist
Biologist
Biology Technician
Computer Programmer/Modeler
Conservation Educator
Conservation Officer
Conservation Organization Executive
Crop Protection Advisor
Ecological Modeler
Environmental Assessment Coordinator
Environmental Biologist
Environmental Education Specialist
Environmental Impact Analyst
Environmental Protection Specialist
Extension Specialist
Film Maker
Fish and Wildlife Technician
Guide/Outfitter
Health Researcher
Information and Education Specialist
International Wildlife Biologist
Laboratory Animal Technician
Laboratory Assistant
Lobbyist
Medical Laboratory Technician
Museum Specialist
Natural Resources Specialist
Naturalist
Outdoor Writer/Editor
Park Naturalist
Peace Corps Worker
Pest Exterminator
Pesticide Investigator
Plant Ecologist
Plant Quarantine Inspector
Public Health Technician
Research Assistant
Teacher/Naturalist
Technical Information Specialist
Wetlands Ecologist
Wildlife Biologist
Wildlife Conservation Technician
Wildlife Manager
Wildlife Researcher
Writer/Photographer
Zoo Director



Resource Recreation and Tourism

YOUR FUTURE IN RESOURCE RECREATION AND TOURISM

Resource recreation and resource-based tourism are now well established among the array of majors in the College of FWR. These are interdisciplinary fields involving tourism, parks and recreation resource management, natural sciences, geography, land economics, marketing, conservation of natural resources, human behavior, public administration and communication.

Resource-based recreation management differs from municipal recreation in that protective management of the natural environment is balanced with providing recreational opportunities. It deals specifically with management of people in wildland settings: wilderness areas, national forests, national parks, state parks and large non-urban areas and private lands. Equally important are the tourism industry and private enterprises related to and dependent on natural resources. Of particular concern are the impacts of tourism on rural communities.

Some of your responsibilities would include: administering parks and other recreational facilities; interpreting natural and historic features through developing and maintaining self-guiding trails, exhibits and visitor centers; conducting trips and educational programs; planning recreational sites; developing outdoor programs for school and youth groups; enforcing recreation laws; planning and marketing outdoor recreation or tourism facilities. Positions include recreation resource specialist, park ranger, interpretive specialist, recreation and tourist destination planner, resource manager, tourism marketer and director, to name a few.

Employment can be with federal agencies such as the U.S. Forest Service, Bureau of Land Management, Corps of Engineers, Bureau of Reclamation, U.S. Fish and Wildlife Service, and National Park Service. Employment opportunities are also with state parks and recreation departments, tourism bureaus, and fish and game departments; with regional and county parks, with chambers of commerce and visitor and convention bureaus, and with private enterprises in outfitting and guiding, tour operations and other related businesses. The private sector is becoming an increasingly important source of employment, especially to those electing a minor in tourism.



CAREER OPPORTUNITIES

Backcountry Manager
Camp Director
Campground Manager
Convention Bureau Director
Conservation Association Executive
Cruise Director
Environmental Impact Analyst
Environmental Planner
Exhibit Designer
Information and Education Specialist
Interpretive Specialists
Lane Use Planner
Marketing Director
Market Researcher
Museum Specialist
National Park Ranger
Naturalist
Off-Road Vehicle Park Ranger
Outdoor Recreation Instructor
Park Historian
Park Planner
Parks and Recreation Planner
Peace Corps Volunteer
Preserve Manager
Public Affairs Specialist
Public Involvement Specialist
Recreation Facilities Manager
Recreation Management Contractor
Recreation Staff Specialist
Resort Manager
River Recreation Manager
Ski Area Manager
State or County Park Manager
Tour Guide/Trip Leader
Tourism Promotion Director
Trains Coordinator
Visitor Center Director
Wilderness Manager
Winter Recreation Manager
Writer/Photographer
Zoo Interpreter

Department of Forest Resources Faculty & Staff



David L. Adams
Professor



Ross Appelgren
Assistant Manager
Experimental Forest



Kas Dumroese
Research Associate



Jo Ellen Force
Professor



Brenda Haener
Senior Secretary



Michelle Hemsely
Secretary



Diana Jennings
Sr. Research Tech.



Charley McKetta
Associate Professor



Lee Medema
Associate Professor



Craig Miller
Adjunct Asst. Professor



Jim Moore
Professor



Penny Morgan
Associate Professor



Sue Morrison
Sr. Research Tech.



Leon
Neuenschwander
Professor



Harold Osborne
Assoc. Ext. Prof.
Mgr., Exp. Forest



Art Partridge
Professor



Geneva Pym
Laboratory Manager



Kenneth Quick
Sr. Research Tech.



Chuck Stiff
Assistant Professor



Molly Stock
Professor



Karl Stoszek
Professor



Joseph J. Ulliman
Department Head
Professor



Dave Wenny
Nursery Manager
Professor

Not pictured:
Susan Jones
Secretary

Department of Forest Products Faculty & Staff



Richard Folk
Research Asst.
Professor



Thomas Gorman
Associate Professor



Leonard Johnson
Department Head
Professor



Harry Lee
Asst. Extension
Professor



Jan Mahal
Senior Secretary



Al Moslemi
Professor



Kandy Nelson
Senior Secretary



Francis Wagner
Professor

Department of Range Resources Faculty & Staff



Steve Bunting
Professor



Wally Butler
Instructor



Kendall Johnson
Department Head
Professor



Jim Kingery
Assistant Professor



Karen Launchbaugh
Assistant Professor



Kirk Lohman
Assistant Professor



Kathy Mallory
Senior Secretary



Ronald Robberecht
Professor

*Not pictured:
John Ehrenreich
Professor*

Dept. of Fish and Wildlife Resources Faculty & Staff



Ernest Ables
Professor



David H. Bennett
Professor



Ted Bjorn
Professor
Wldf. Coop. Unit



Elisabeth Brackney
Project Assistant
Wldf. Coop. Unit



Jim Congleton
Associate Professor
Wldf. Coop. Unit



Michelle Feeley
Senior Research Tech.



Larisa Ford



Oz Garton
Professor



Mike Jepson
Research Analyst 2



George LaBar
Department Head
Professor



Karla Makus
Senior Secretary



Sue McMurray
Office Secretary
Wldf. Coop. Unit



Kathy Merk
Secretary/Office
Coordinator
Wldf. Coop Unit



Christine Moffitt
Research Scientist &
Adjunct Asst. Professor



Dennis Murray
Assistant Professor



Jim Peek
Professor



Kerry Reese
Professor
Wldf. Coop Unit



Mike Scott
Professor



Boling Sun
Scientific Aid 2

Not pictured:
Elwood Bizeau
Blair Csuti
Brian Dennis
Pat Keniry
Research Tech.
William LaVoie
Scientific Aid Sr.
Venetia Sokoloski
Secretary

**Dept. of Fish and Wildlife Resources
Faculty & Staff
Aquaculture**



Gayle Bryngelson
Office Secretary



Selma Carney
Special Projects
Coordinator



Keya Collins
Sr. Research Tech.



Joyce Faler
Scientific Aide



Bonnie Jacobsen
Administrative
Assistant



Madison Powell
Postdoc Research
Fellow

Not pictured:
Ernie Brannon
Director/Professor
Aquaculture Research
Institute

**Dept. of Resource Recreation and Tourism
Faculty & Staff**



James R. Fazio
Professor



Sam Ham
Professor



Chuck Harris
Associate Professor



John Hendee
Professor



John D. Hunt
Department Head
Professor



Ed Krumpe
Professor



Nick Sanyal
Asst. Research
Professor



Gerry Snyder
Manager, NRC Lab



Lilly Steinhorst
Senior Secretary

Not pictured:
Angela Burton
Secretary
Bill McLaughlin
Professor

Dean's Office Faculty & Staff



Richard Bottger
Director
Admin. Services



Alton Campbell
Associate Dean
Professor



Willard George
Motorpool
Coordinator



Chuck Hatch
Dean
Professor



Nancy Matthews
Administrative
Secretary



Lynn Mineur
Development Officer



Riva Morgan
Secretary
Program Coordinator



Carol Spain
Coordinator
Continuing Education



Sherri Sweeney
Senior Secretary

Not pictured:
Liza Fox
Remote Sensing
Lab Manager

CFWR Accounting



Pam Bell
Administrative
Assistant



Judy Biller
Accounts Technician



Mary Enser
Accounting Clerk



Lynne Kittner
Accounting Unit
Supervisor



Sue Reisenauer
Account Technician

Cooperative Park Studies Unit



Sandra Watson
Administrative
Secretary

Not pictured:
Glen Gill
Research Associate
Gary Machlis
Professor

Policy Analysis Group



Philip Cook
Research Associate



Sharon Gray
Secretary/Office
Coord.

Not pictured:
Jay O'Laughlin
Director

Wilderness Research Center



John Hendee
Director
Professor



Susan Goetz
Administrative
Secretary

Extension Forestry



Yvonne Carree
Extension Associate



Ron Mahoney
Extension Forester
Professor



Sandy Osborne
Secretary

Forestry Services



Vanessa Dobbins
Supervisor



Jory Shelton
Copy Center Tech.



Tina Tindall
Word Proc. Specialist

CFWR Publications



Lorraine Ashland
Graphic Artist



Denise Ortiz
Editor

NORTHWEST MANAGEMENT, INC.



Natural Resource Management

A full service Natural Resource consulting
firm in northern Idaho
Assisting in:

- ☛ *Log Marketing*
- ☛ *Harvest Administration*
- ☛ *Forest Management Plans*
- ☛ *GPS Services*
- ☛ *Timber & Timberland Appraisals*
- ☛ *NEPA Documentation*
- ☛ *Timber Trespass*
- ☛ *Slash Management*
- ☛ *Aquatic Resources*
- ☛ *Forest Inventory*

"Providing a Balanced Approach to Natural Resource Management"

PO BOX 9748 · MOSCOW, IDAHO 83843 · (208) 883-4488 · FAX (208) 883-1098

A Tremendous Field Guide Manual

What kinds of trees grow outside the towns and farms of Idaho? Which ones are actually native to Idaho? How does one I.D. a tree by its leaves? This book by noted forestry professor Fred Johnson is about wild trees—native, escaped, and naturalized trees one might encounter in Idaho. The volume is illustrated with life-sized reproductions of actual leaves for easy identification. Readers learn about the most accessible places to see particular trees, the size/location of the largest known tree of each species, the range of the species, and more. **WILD TREES OF IDAHO** is a 288-page field guide with over 100 illustrations, maps, and color plates featuring the wild and beautiful natural environment of Idaho. It is available for \$40 plus \$4 shipping and handling from the College of Forestry, Wildlife and Range Sciences at the University of Idaho. To order simply fill out the attached form or call (208) 885-6673 or 885-6674. Payment is by check or credit card. AND. . . 25% of your total goes back to college educational programs.

Name _____
Address _____
City _____
State _____ Zip _____

____ #copies of *Wild Trees of Idaho*
@ \$40.00 per copy = \$ _____

Shipping and handling \$4.00 per book
TOTAL \$ _____

Web Address to order books:

<http://www.uidaho.edu/cfwr>

Check Visa MasterCard

Discover Card

Card # _____

Expiration Date _____

Signature _____

Make checks payable to College of Forestry

Mail to: College of Forestry, Wildlife & Range Sciences

University of Idaho

Moscow, ID 83844-1130

College Focus



1996-1997 CFWR ACTIVITIES

1996

- | | |
|-------------|--------------------------------|
| September 6 | CFWR Open House and Picnic |
| October 10 | Natural Resource Education Day |
| November 9 | CFWR Pancake Breakfast |
| December 6 | CFWR Christmas Club Bazaar |

1997

- | | |
|-------------|-----------------------------|
| February 27 | CFWR 3rd Annual Career Fair |
|-------------|-----------------------------|

1997 CFWR Natural Resources Week (April 19-25)

- | | |
|----------|--|
| April 19 | 2nd Annual Picnic and Field Day |
| April 21 | Burger Day/Tug o war with the Aggies / Logger Sports Demo |
| April 22 | Natural Resource Week Speaker
Dr. Bill Wall of Potlatch Corp.
"Forestry Practices and Wildlife Interactions" |
| April 23 | Natural Resource Week Speaker
"Natures Supermarket: The Nez Perce Utilization of Trees and Plants" |
| April 24 | Philip Habib Symposium |
| April 25 | Club Bazaar
Wall of Fame Dedication
2nd Annual CFWR Natural Resource Week Awards Social |



1st Annual CFWR Open House

by Stacey Wales

On September 6, 1996 the College of Forestry, Wildlife & Range Sciences held the first annual open house. The Staff Representative Committee (SRC) sponsored the event. The purpose of the open house was to get students, faculty and staff in the college together. It was a great opportunity to acquaint the students with the college's different academic departments, service units, student clubs and activities. Attending the open house were CFWR student organizations, faculty, staff, and students. Each student organization set up a booth and had an opportunity to recruit members and to do some fundraising.

The schedule of events were as follows:

- 12:00 - 3:30p.m. Lab Tours
 Analytical Lab
 Bio-Technical Lab
 Fisheries Lab
 GAP Lab
 Remote Sensing /GIS Lab
 Herbarium
 Forest Ecophysiology Lab
 NRC Lab
 Wood Shop
- 1:00-3:00 p.m. Academic Departments
 Forest Products
 Forest Resources
 Fish and Wildlife Resources
 Range Resources
 Resource Recreation & Tourism
- 1:00-3:30p.m. CFWR Service Units
 CFWR Dean's office
 Forestry Services
- 3:45-4:30p.m. Tour of nursery
- 4:00-7:00p.m. Barbeque/Games/
 Raffle Drawing at the Agricultural Farm.



Photo by Denise Ortiz

A barbecue took place at the end of the day at the Agricultural Farm. Vans took out anyone who wanted to go to the barbecue and anyone who wanted a tour of the Forest Nursery. Food and beverages were provided. Games included a nail driving contest, animal calling, plug casting, with a Tug-of-war between the faculty, staff and the students as a grand finale. The winners of the games received awards donated by the different clubs and departments. The winner of the raffle for a weekend at the



Photo by Denise Ortiz

college's Clark Fork Field Campus went to A.J. Helgenberg.

Congratulations, to the students for winning the tug of war. Great Job! ▲

Stacey Wales is a senior in Wildlife Resources with an emphasis in Biology. She will be graduating in May, 1997, and plans to attend veterinary technology school.

CFWR Recognized by Vice President Gore

by Denise Ortiz

Picture this. Tax dollars being used to ask taxpayers what they want on tax-funded lands to make a tax-funded government more efficient for future generations of taxpayers. And the college plays the lead role.

The Vice President of the United States recently recognized a unit in the college for its cooperative work helping make our government more efficient. The Cooperative Park Studies Unit (CPSU), staffed by CFWR faculty and students, was honored with the Hammer Award June 13, 1996. The award, one of which now hangs in Forestry Room 200, is a glass-encased \$6 hammer with a handwritten note of thanks from Vice President Gore.

An answer to yesterday's government-purchased \$600 hammer, the Hammer Award is Vice President Gore's special recognition to teams who have made significant contributions in support of the President's National Performance Review principles. Those principles include putting customers first, cutting red tape, empowering employees, and getting back to basics.

"Reinventing government encourages new ways of accomplishing public service," said Gary Machlis, head of the CPSU. "Combining the capacities of the federal land management agencies with research universities makes sense—good

science, more efficiency, and more research for the taxpayer's dollar." At a time when budget-squeezing legislators question the value of universities, it's pleasantly ironic that a university is helping the government operate more efficiently. Machlis and his team use a simple tool on a grand scale, and they do so pretty democratically too. They use on-site interviews and mail-back questionnaires to ask citizens what they want from and for their own national parks. The parks host over 269 million visitors each year, on average.

The ongoing program that actually conducts the surveys is the Visitor Services Project (VSP), a program within the Cooperative Park Studies Unit, housed in the College of Forestry, Wildlife and Range Sciences. Since 1988 two rangers have been stationed at the unit to conduct VSP studies under the di-

"Reinventing government encourages new ways of accomplishing public service..."

rectorship of Forest Resources and Sociology Professor Gary Machlis, also recently appointed Chief Social Scientist for the U.S. Park Service. Through the CPSU, the university and the NPS have conducted more than 80 visitor studies in as many U.S. national parks, monuments, and historical sites, going directly to visitors for ideas about saving tax dollars.

The purpose of the VSP studies is to provide park managers with accurate information about visitors to better meet their needs. Managers have used these

The purpose of the VSP studies is to provide park managers with accurate information about visitors to better meet their needs.



CPSU Staff (left to right): Margaret Littlejohn, Sandy Watson, Jean Haley, David Morgan, Nancy Medlin, Gary Machlis, Chris Wall, Glen Gill, Mark Patterson.

studies to improve visitor services, protect resources, manage parks more efficiently, and build partnerships with local communities. For example, a VSP study at Death Valley National Monument in 1990 found that 72 percent of total visitors were international, so the monument's managers translated their safety brochures into different languages, especially French and German—the languages of the visitors surveyed.

The 1991 White House Tours study found that children make up 30 percent of summer visitors, so staff there now provide more child-friendly presentations and publications, and have modified for convenience to visitors with baby strollers. The study was so influential it even spawned the construction of a White House Visitor Center. Bent's Old Fort National Historical Site in La Junta, Colorado today uses more cultural demonstrations and animals in response to visitor comments.

This honor is more than just a plaque in the UI President's office. "This partnership makes us unique," said Machlis. "This is the first time a research



Left to right: Gary Machlis, Robert Hoover (UI President), Roger Stevenson (NPS and Vice President Gore's office), and Dean Charles Hatch.

project developed by a university in conjunction with a federal agency has received this honor, a recognition of the value of universities in this process. This is what I think the real significance of the Hammer Award is. It's also an award to the College of Forestry for supporting the agencies our unit works with the college has made the unit very welcome—this is a benefit you get from having agencies work cooperatively with academic/research units in a university."

Machlis went to the Labor Department in Washington, D.C. June 13 to accept the award and to present a day-long workshop for 250 employees from

85 federal agencies wanting to learn from the VSP how to better serve their own customers. They included NASA, the IRS, and the Bureau of Indian Affairs. Machlis' co-presenters for the workshop were VSP staff, a professor from nearby Washington State University, and other national experts including John McLaughlin, a UI alum and Director of Customer Services at Toyota (U.S.).

This cooperation extends to more than just park visitors too. "Our students get to work all over the U.S. on projects that matter,"

says Machlis about the FWR students who assist in the studies. And it reflects on the reputations of alumni with degrees from our college.

Machlis' Cooperative Park Studies Unit is funded by the NPS and the U.S. National Biological Survey. VSP staff at the university who conduct the studies were also awarded and include Glen Gill, Margaret Littlejohn, Chris Woods, and Office Coordinator Sandy Watson. Graduate students Jean Haley and Jean McKendry also received little "hammers" for their part in the VSP studies. ▲

Denise Ortiz is Editor in the Department of Publications, CFWR.

SPOMAC

SPOKANE MACHINERY CO.
MACHINERY AND SUPPLIES

(509) 535-1576
E. 3730 TRENT AVE.
SPOKANE, WA 99202

Sacred Ground

by Travis Wall

Reaching the bottom of the draw, I turn left and attack the steep ridge head on. Using every branch, tree, and anything I can grasp, I slowly pull myself up the steep pitch. This is the hardest I've hiked all day and as my breathing becomes labored and sweat beads upon my face, I question why I've decided to return.

The elk have moved deep into the timber to avoid the heat that is intensifying my vigorous workout. I take this detour from hunting them to explore the ridge in hopes of finding "the spot". It has been a year since, and I strain to recognize familiar surroundings, I angle right and push higher to the upper reaches of the ridge. The blown down timber thickens as I remember it should. Feeling I am in the vicinity, I slow my pace and begin to search.

In twenty yard increments I zigzag slowly across the ridge. Reaching the spring, I turn up the ridge and zigzag back. Midway across on my upward search I glimpse what might be a tine in the downfall. Leaping from log to log, I move closer, my heart takes an extra beat in its already labored pace as I realize I have found him. Swinging my legs over a downed tree, I step onto the only flat spot on the ridge. He lies on this small bench.

My search has been noisy and difficult yet now I find myself walking on eggs. Approaching slowly, I feel a sense of being on hallowed ground. I killed this bull last fall; this is where he collapsed and died. Why had I returned? Curiosity? To admire past success? No...I have returned to pay my respects.

Several feet from him, I sit down in



the duff while leaning my bow against a tree. Surprisingly, he is largely intact. No black bears or coyotes had discovered his location after I left. His skull and antlers still lay upright with the spine and rib cage connected back to his pelvis. When boning him out I had separated

"It was an intense and amusing game of hide and seek."

his large hind leg bones at the joints. They are still piled behind him. His hooves are intact but have faded to a dull gray. His jaw has split and lays in two pieces off to the side of his skull. Tufts of hair and dried sinew remain across his head plate and at the bases of his antlers. His ribs are clean and white and his rack is as spectacular as it was a year ago. The sweeping beams and curving tines have faded from a year of snow, rain, and sun, but the points are all sharp and distinct. The absence of gnaw marks suggests that the porcupines had also missed him.

It is remarkably quiet and calm as I sit here. No chickadees, nuthatches, or turrets flitter from tree to tree. The more attention I pay to the surrounding the quieter it gets. Everything is still. Soli-

tude filters around me and the bull, and the reverent atmosphere satisfies me greatly. My mind begins to wander and recollect how the hunt unfolded.

His cows rose late in the afternoon when the rains ceased; probably to stretch or satisfy small hunger pains. A deep, clear bugle let everything in the forest know he had also risen. My wife and I were directly above the elk when he sounded off. He was the first bull Rebecca had ever heard bugle and for the next hour he put on a boisterous show. We moved closer and could hear his cows call occasionally. A breeze moved up the ridge preventing them from catching our scent. Placing a reed in my mouth, I gently cow called. He moved closer. For an hour he tried to circle up the ridge and get behind us. We would counter by paralleling the ridge with him.

He went left, we went left; he went right. we went right. He would bugle, I would cow call. Occasional glimpses of him and the cows prevented us from being discovered. It was an intense and amusing game of hide and seek. Finally, leaving my backpack with Rebecca, I moved in.

Hiding in silence, I joined the elk as they continued to feed. With patience and proper positioning, my arrow was unexpected and fatal. He slowly moved down the hill not knowing I followed. His legs gave out and he collapsed. I stood only a few feet away when he lifted his head and looked into my eyes. He knew I was there. Then the light faded from his eyes and he died. Mentally and physically exhausted, I sagged to the ground. His brief gaze affected me

greatly. I had taken his life; this experience was the closest I had come to witnessing death. I felt intense sadness, more than all other times combined. We had both acted appropriately and the hunt had been fair, yet a feeling of losing a friend prevailed. For twenty minutes I collected my thoughts, rested, and admired this majestic bull. I whistled so Rebecca could locate me, and she soon arrived. Two hours later and loaded down, we turned towards camp with the falling sun.

I could not bring myself to take his head and rack. The idea of displaying them to my friends and myself seemed disrespectful. They were left to stand as a symbol, to mark his existence and death on the ridge.



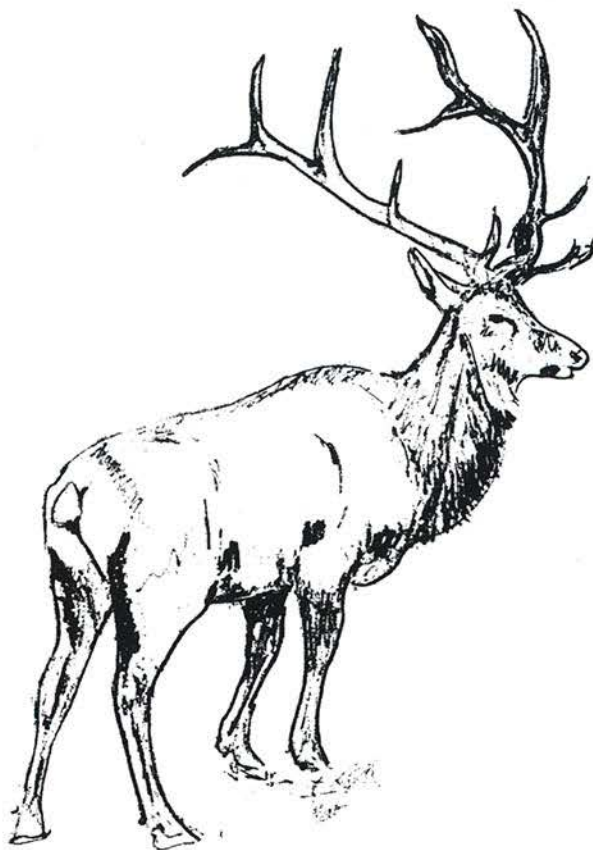
Today his antlers remain as a monument to where he lived and died. I hope no one will ever find and remove them. Due to the location the bull selected, I doubt anyone will. Pinegrass weaves its way amongst his bones as it attempts to cover and hide them. Over the months and years, these bones will rot and decay. The calcium in his antlers will break-down and be recycled by rodents. Soon, nothing will remain.

The vividness of the experience is still very distinct and I hope the passing of time will not rob me of its clarity. This visit is medicine to my soul and I am at peace with myself. Each of us has our own ideals, morals, and reasons for hunting. Mine are being shaped and molded with each new experience. I find it important to be sensitive and aware of my

surroundings, to let such experiences alter and affect my life. Lessons are taught in the out-of-doors that can be taught no where else. It is the classroom for the heart and soul.

When you go into the woods, your presence makes a splash, and the ripples of your arrival spread like circles in the water. Long after you have stopped moving, your presence widens in rings through the woods. After a while this fades, and the pool of silence is tranquil again. You are either forgotten or accepted- you are never sure which. Your presence has been absorbed into the pattern of things, you have begun to be a part of it, and this is when the learning begins (John Madison). Being numb or closed-minded to such learning moments will only result in a person with few treasures. ▲

Travis Wall is a Junior in Range Ecology. Sacred Ground was written to show the struggles, thoughts, and lessons of a hunting experience.



Drawing by Helen Kettle

Becoming an Ancient Culture

by Nancy Wright

The hush of a cool, damp night still lay across the path where I gathered a handful of Westerners for my morning interpretive program. The sun would not rise for another hour, but we had eight miles to walk, and the North Indian desert sun would soon be hot on our backs. I had prepped the group the night before, so there was little need for conservation. We started silently, barefoot, down the wide path that had been walked by Hindu pilgrims for a thousand years. This circumambulation of the holy village of Vrindavana took Western visitors on a solemn pilgrimage and allowed them, for a few brief hours, to join the ancient dance that linked India's natural environment to her rich, complex, and ancient culture.

The peacocks called, breaking the silence and waking the monkeys who peered down from their trees to see if we carried any breakfast they might steal. A hand-pump squeaked as an old man drew water for his bath, and next to his hut a hundred bats settled in their massive pepal tree after a night of feeding. Brahma cows and their calves lay unperturbed in his path, knowing they had the right-of-way, and we walked around them obediently. Bells tinkled in the village temples as faithful devotees woke their beloved deities and began another day in an ancient ritual that ties India to her land and its mult creators.

The four hour circumambulation of Vrindavana village included discussions on climate and vegetation, birds and wildlife, aquatic species and irrigation, temple worship practices, rituals of the river cremation sites, and water quality. Moreover, it was a look at the people



who inhabit an ancient holy land. The influence of the deeply spiritual Indian culture made the program a study in dance - a picture of the way people move through their environment when every living organism is considered divine.

"On every journey there was a story to tell, like the day a cart driver's camel decided he had walked his last mile."

For five years I held this program whenever a handful of Western visitors gathered in Vrindavana. Although I was the guide, I was always the participant as well. On every journey there was a story to tell, like the day a cart driver's camel decided he had walked his last mile. The beast lay down across the path to die, and no amount of prodding could move him to a more convenient place. The distraught cart driver went off to negotiate the value of a dead camel with the village carcass buyers, leaving his three young children to attend the death of the animal. First they brought the camel a pail of water and placed it by his

head. They raised a small mound of grass and cane next to the pail should he want a final meal. Then they set about gathering wildflowers from the woods. They strung a garland of marigolds for the camel's neck and covered his mangy body with frangipani and narcissus blossoms. A feeble stick of incense burned beside the failing animal, and the children settled into simple songs of prayer to ease the passing of their friend. Life and death commingled for a time, and then the night fell upon us all. There was no mourning, only a deep and abiding respect for all things natural.

This scene was not unique. Throughout Vrindavana and across the sub-continent there are constant reminders of the sacredness of natural processes. Rocks, trees, rivers, seasons, reptiles, clouds, birds and soil all have divine connection with a mythology profound enough to sustain the Indian people through 2,000 years of social progress. Theirs is a worldview broad enough to encompass man and mysticism, science and spirituality, primitivism and progress.

Does that worldview, however, provide a foundation for conservation of natural resources? One answer, the Western opinion, is no. India's large rural population has overwhelmed her resources to the point that water, land, and everything produced in their combination stays in critical scarcity. If the Indian population will be fed, the country can not afford to conserve productive land. The correct answer, however, is yes. There is conservation of natural resources. Scarcity, coupled with the Indian worldview of the divinity in all

natural phenomenon, has produced an unique type of conservation in which all resources are used, but nothing is ever wasted. The camel was respected in life for his labor and valued in death for his meat, skin, organs, and bones. So it is with every drop of water, blade of grass, or particle of soil.

Now in America, I continue to interpret the natural environment for park visitors, tourists, and children. However, the job is much harder here. We are a brilliant, young culture. The average American knows a great deal about vegetation and animal species, about land use and water quality, about the impact of man on his own natural environment. As an interpreter, I add to this knowledge-base with additional fascinating facts meant to stimulate his intelligence or intrigue his mind. But I cannot share the sacred mystery of nature as I learned it in India. Unlike the Indian, the American has no reference point for visualizing the animate spirituality of nature. As a culture, we have no mythology in which powerful rivers spring from the minds of demigods, or forests offer themselves in sacrifice to fire gods. There is no goddess to protect the secret nectar of the ocean, no divine chariot to pull the sun through the sky. Although our own native people have stories to equal these from the Asian East, we give them scant attention when evaluating our natural resources. Thus,

we are left with a very literal and scientific appreciation of our natural environment. We understand the ecological value of clean water and fertile soil and the practical, monetary value of trees and minerals. We appreciate the power of nature only because we continually try to harness it for our own benefit.

Does our educated worldview provide a foundation for conservation of natural resources? One answer is yes. We have the knowledge and the technology to maintain ourselves using sustain-

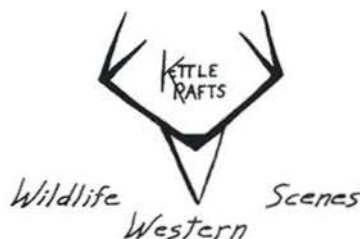
"I fear that knowledge of natural resources is not enough."

able resource management. Or land is abundant and our population is not so great that we must extract every resource just to survive. The correct answer, unfortunately, is no. As a culture, we seem to have no deep or abiding love for native plants, animals, soil, and water as sacred gifts. We do not tell many stories about forefathers who have protected the intrinsic value of our land. In fact, compared to India, we have very few generations of forefathers from which to draw a deep and meaningful natural heritage. Sadly, our most revered forefathers were those taught us the pioneer ethic that we could take unlimitedly from this rich land. Now we take too much, conserve

too little, and waste every resource we can exploit. We have few historical references for enlightened land management, and we have no land ethic to guide us as our own culture matures.

When I reflect on India's 2,000-year old history, I wonder if our functional, science-based, American worldview is broad enough to sustain *our* culture for two millennium. I fear that knowledge of natural resources is not enough. We need to love the land and incorporate its spiritual and cultural stories into the mythology we are making now, as our comparatively young country develops. We need to acknowledge natural resources as they shape us, not as we shape them. Moreover, we need communicate the mystery and magic of our land to our children and their children. In this way, young cultures grow old and wise. Perhaps in a thousand years, some future interpreter can take small groups of foreigners on pilgrimage through our towns, telling them the stories of how our land became sacred through the love and sacrifice of a hundred generations of Americans. ▲

Nancy Wright is a Junior in Resource Recreation and Tourism. "Becoming an Ancient Culture" is to encourage readers to look deeply at our spiritual and cultural ethic, and to communicate our American land ethics to our children.



Handcarved, Painted

Ceramic mugs and plates
Canvases
Sculptures

Kettle Krafts • phone (208) 337-3332

Helen Kettle • Rt. 1 Box 1154A • Homedale, Id. 83628

Living, Working and Playing in Bear Country

by Pamela J. Town

It was a beautiful day to be working in the back country as a wildlife technician. Mitch, my co-worker, was excited to be spending his first summer away from the city. Although I was hesitant about having a city slicker for a partner, I did look forward to sharing my woods-lore. During lunch, Mitch asked about bear encounters. I really "puffed up" at the opportunity to address this very important question when working in bear country. I began by telling him: "First do not panic and run." Just as my words were spoken, Mitch's face paled, his eyes widened, he spoke a few colorful metaphors, and took off running! Alarmed by his actions, I stood up, turned around, and saw a 400 pound black bear running in my direction. . .

Unless bears are habituated to humans (as black bears in Yosemite campgrounds are), encounters with bears are uncommon. In the numerous years that I have spent in bear country, I've considered myself lucky to glimpse the butt of a fleeing bear before it reached protective cover. However, when I do find fresh bear sign, my heart skips a beat and I find myself more alert. Whether living, working, or playing in bear country, one should always remain alert to potential bear/human encounters even if a fresh sign is not visible. Although there is no specific fail-safe formula for reacting to a bear encounter, knowing how to avoid bears, deter bear attacks, and what to do if attacked could save your life, as well as the bear's.

Avoidance is knowledge. Learn what species of bears, if any, are in the area (the Pacific Northwest has black



bears and grizzly bears), how to identify bear sign, bear behavior, bear ecology, and seasonal habitat use. You do not have to become a bear biologist to enter bear country; however, I recommend using available educational resources. Libraries, wildlife departments, ranger stations, campground hosts, and park attendants

"...knowing how to avoid bears, deter bear attacks, and what to do if attacked could save your life, as well as the bear's."

can provide oral and written information on potential dangers. The information they provide also covers proper camping techniques, food storage and disposal, general bear biology and behavior, and emergency contacts. For those people who live in bear country, you want to be especially careful of garbage disposal, compost piles, outside animal feeds, and other tempting food sources (beehives, gardens, fruit trees).

Avoidance is remaining alert. When hiking in open country, pause occasionally to scan the landscape for movement. This will allow you to see a bear in the distance, giving you plenty of re-

action time. In addition, a pause permits a quick rest period and provides the opportunity to view the scenery and other wild animals. If you do see a bear in the distance, and the bear has not sensed you, you have a few options. First, if you can avoid the area, keep your eyes on the bear while slowly and quietly moving back the same way you came.

Then, hike in another direction avoiding the bear's location. Second, if you need to go in the direction of the bear, back away slowly and quietly while moving up-wind of the bear. When a safe distance has been placed between you and the bear, sing or make other noises to alert the bear of your presence. Unless the bear is feeding, this will most likely cause it to flee. A feeding bear may be so intent on eating that it does not sense you or may be unwilling to move away from the food source (many grizzlies will aggressively protect their food).

When hiking where visibility is reduced due to vegetation, weather, or topography, the best bear avoidance tactic is noise. Sing, whistle, talk, honk a horn, or have a bell on your backpack to alert bears to your presence. Wind, streams, and topography can muffle your noise tactic, so it is important to remain alert. There is also safety in numbers. If you hike in large groups, the smells and noises of the group will send most bears running for cover long before you see it.

Avoidance is also acting responsible. Photographers moving closer for that *great picture* will cause most wild animals to feel threatened. If you come between a mother bear and her young,

you can stir maternal protective instincts you probably do not want to witness. Bears habituated to human activity (around campgrounds, landfills, popular fishing streams) may have less fear of humans and, if threatened, may choose to fight rather than flight. For black bears, flight to safety may consist of climbing a tree, especially if the bear is young. Instead of staying around to observe the bear, leave the area immediately.

“Whether or not to re-direct an attack is a difficult decision.”

The treed bear may have a mother nearby, or decide to climb down to begin an aggressive confrontation.

Deterrents are necessary if the bear senses you. The most important deterrent is — **do not panic!** This may be difficult when you have a close encounter with a 200+ pound bear, but remaining calm is the key. I find it useful to talk to myself, which appears to have a calming affect on both the bear and me. If the bear is far away and aware of you, keep the bear in sight and move slowly upwind while putting more distance between the two of you. Wave your arms, shout, and perhaps look for a good tree to climb. The disadvantage of climbing a tree is black bears can also climb trees. Grizzlies do not usually climb trees, but have been known to continue to charge up trees, reaching heights of 33 feet. If you climb a tree to avoid an attack, you may deter the bear from following, or you may be forced to fight in the tree.

If you are close to the bear and it is aware of you, and does not appear aggressive, slowly back away. Keep the bear in view but **DO NOT MAKE EYE CONTACT**. Talk calmly to the bear and wave your arms. You may want to look for a good tree to climb, although bears can move a lot faster than you (up to 30 mph) and as noted previously, you may be forced to defend yourself in the tree.

Recognizing bear posture may help you determine how agitated an animal is. When a bear stands upright on its hind

legs, it is trying to determine how much of a threat you pose. It will sniff the air, look, and listen. Generally this is not an aggressive posture, although, it may cause you to shake in your boots. On all fours, the bear may sway its head side to side, snort, huff, and open and close its mouth. At this point the bear is agitated and will fight or flee. The actual seriousness of a charge is often indicated by the ear position. As with dogs, the further back the ears (flattened to the neck) the more aroused the animal. The hackles may be up presenting a rather awesome opponent. Before examining what to do if an at-

tack is imminent, there are few other deterrent methods available.

Dogs can provide early detection of bears, allowing you to implement avoidance tactics. In close-range confrontation, dogs may also serve as an effective deterrent to bears, or their aggressive behavior may trigger an attack. Trained and loyal dogs may keep a bear at bay, giving their owner time to escape; however, untrained, free roaming dogs will more likely challenge a bear into an attack. The use of guard dogs around livestock often proves successful in warding off hungry bears. Although grizzly bears are harder to repel, the guard dog's presence has been shown to reduce livestock mortality.

Horses can also provide early detection of bears. In addition, it is difficult or impossible to find documented cases where a bear attacked a horseback rider. However, nervous horses sensing danger may throw their rider.

There are commercial repellents available to deter bears. Repellents with capsaicin, an active ingredient in cayenne peppers, have shown the most promise. The repellent, when sprayed into the eyes of the bear, will temporarily blind it providing escape time. “Skunker” has also shown to be effective on black bears. The disadvantages of chemical repellents are that they have a short range, may be dif-

ficult to deliver if the user is excited, are easily dispersed by wind, and tests on aggressive animals are limited.

In many cases the noise of a gunshot may be enough to scare a bear away, although firearms may give a false sense of security. Firearm users should be practiced in the use of their weapon and have good target skills. A misplaced shot could injure the bear and increase the intensity of the attack. *Accidentally* shooting a non-threatening bear is considered poaching. As with other deterrent methods, firearms can be effective but you must remain calm and alert while using them.

In the very few cases when the bear decides to fight, knowing **how to protect yourself** could save your life. Circumstances surrounding the attack may affect your response. If an attack occurs where bears are accustomed to receiving food, give up the food and report the incident to the appropriate person. If you are hiking in a large group, stay together and make a lot of noise. If you are alone or in a small group, drop an object such as a hat or jacket as the bear approaches (keep your backpack on if you are wearing one), and slowly put distance between you, the bear, and the object. This may re-direct the bear's interest, providing escape time. Some people have been able to ward off charges by shouting,

“Recognizing bear posture may help you determine how agitated an animal is.”

climbing trees, keeping trees between them and the bear, or silently standing still. Bears may bluff charge, — a charge that is broken off before reaching the target.

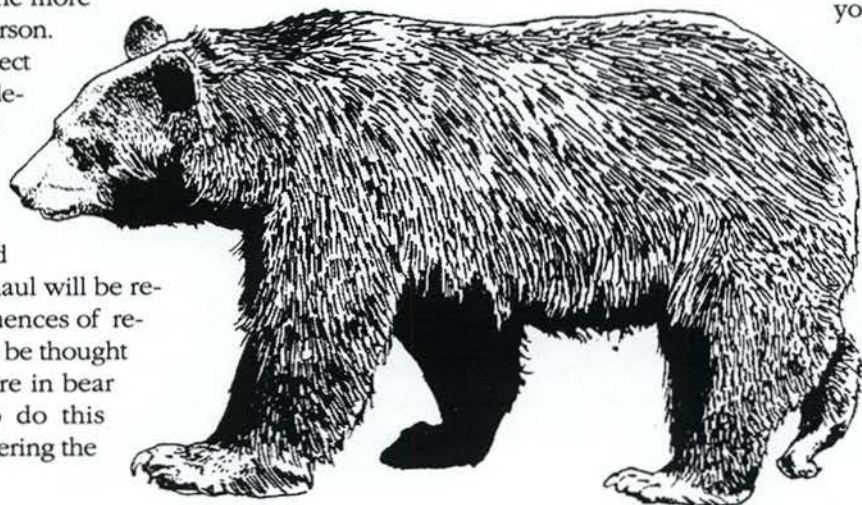
Some people have even successfully fought an attacking bear; however, numerous case studies have shown that if physical contact is imminent, the best alternative is passive resistance (for both black bears and grizzlies). Drop to the ground in a fetal position (legs to chest,

head down) with your arms locked around the back of your neck. Keep still and quiet. If you are wearing a backpack or thick clothing, keep it on because it provides an extra layer of protection. Physical contact generally lasts only a few seconds or may be completely avoided if you resist passively. A shouting partner during *your* mauling may redirect the attack to a more aggressive, shouting person. Whether or not to re-direct an attack is a difficult decision. There is no guarantee the bear will not return to its first victim after attacking a second person. First-aid and rescue after the maul will be required, so the consequences of re-directed attack need to be thought out carefully. If you are in bear country, the time to do this thinking is *prior* to entering the bears' domain.

After a maul, before moving or making noise, be very sure the bear has left the area. Occasionally the bear will back off and watch you. If the bear sees you move, its second attack will be more intense. When you are sure the bear has left, slowly look around before getting up. Administer or receive first-aid (always a good idea to carry a first-aid kit) and leave the area.

Although they make front pages, bear maulings are uncommon. An even more uncommon type of bear encoun-

ter is when the bear decides you are not just a threat, but a food item. This happens most frequently with children, but there are documented cases of black bears beginning to consume adults after an attack. One indication you have become a food item may be that the mauling does not stop when you resist passively. Since



mauls are generally brief, when the seconds become minutes on the first attack, you may assume the bear has decided you are a food item. If you believe this is the case, your aggression may be your only weapon. Once again, these incidents are extremely rare.

If you have successfully warded off an attack by climbing a tree, be sure, as with passive resistance, that the bear is gone before climbing down. Always report dangerous encounters to appropriate personnel (park ranger, ranger sta-

tions, conservation officers, biologists).

As more people visit and move into bear country, there is an increasing chance of bear encounters. This article is not written to scare people into eliminating bears, nor does it provide a recipe for all bear encounters. The individual bear, place, and situation surrounding a bear encounter determines how you should react. The intent of this article is to discuss options that have been successful in the past and to hopefully reduce the incidence and seriousness of bear encounters. In all situations in bear country, if you stay alert and know your options, you will have a safer and enjoyable time.

As for my bear encounter in the back country . . . I saw a 400 pound black bear running in my direction. I don't know who was more surprised — the bear or me. The bear stopped mid-stride, turned 180 degrees and ran back the way it had come. As with most of my bear encounters, I viewed another bear butt fleeing over the horizon. I did finally catch up with Mitch - he had run eight miles back to the truck and was whimpering how he would never leave pavement again! ▲

Pam J. Town is a graduate student in Forest Resources. Living, Working, and Playing in Bear Country, was written to reduce public fears of bears by providing an entertaining and educational article on dealing with bear/human interactions.



PENCE CONTRACTING Forestry Consulting

Don Pence, Forester, (208) 667-2796 (home/fax)

Ned Pence, Forester
Arleen Pence, Business Manager

(208) 882-0833 (home/fax) P.O. Box 8484 Moscow, ID 83843

Outstanding Faculty & Staff Award Recipients

by Denise Ortiz

For the past 3-4 years, every UI Researcher or Teacher of the Year has been a faculty member from the College of CFWR, reported Dean Hatch at commencement time this past May. In addition, four of the 10 students honored by the UI in 1996 for academic and extra-curricular activities were future CFWR alumni: Nathan Basford (Wildlife Res.), Outstanding Freshman; Meribeth Lomkin (Range Res.) and Alisa Muth (Forest. Res.), Outstanding Sophomores; and Calli Daly (Forest. Res.), Outstanding Senior.

CFWR students this year added to the regular awards with presentation of the Clint Gross Memorial Scholarship award in honor of one of their former classmates. Clint Gross, native of Meridian, Idaho and a range resources major, died of cystic fibrosis complications March 25, 1995. His classmates established a scholarship in his honor "in the hope that others could benefit from his memory, dedication, and strong beliefs," according to classmate Lucy Jones. "He believed with his heart and was always prepared to defend his views. Clint had a love for the outdoors, a desire to learn, and enthusiasm that he passed on to all." He was active in the Range Club (president 1993) and attended SRM conferences. The CFWR Range Club donated a computer fund to the establishment of the Clinton Bradley Gross Scholarship Endowment Fund and has made it an annual project to contribute to the cause in the hopes of creating an award of a substantial amount. Already the fund has begun to grow with a significant donation from the Gross Family and from Meridian residents. The first recipient was Marni Dickard of Kimberly, Idaho, a range student who accepted the award this past May.

Alumni Awards

Winner of CFWR's 1996 Honor Alumnus Award was **Carl Wilson (BS For. Mgt. 1939)** for his career-long efforts. "It all started on that hillside," recalls Wilson of his calling to study forestry in Idaho. Sixty-some years ago he was on a "cold wet slope on the Payette National Forest" in the CCC with 12 tin-coated young men planting trees. "They weren't walking, they were supervising," recounted Wilson. "I was

"I feel very fortunate that I sought an education here..."

impressed...I thought, I want to live like they do," so he asked them where they went to school. "I feel very fortunate that I sought an education here...If we have young people like this [Faith Robertson, 1996 student commencement speaker] coming out of my alma mater, then I don't worry about forestry."

Wilson, born in eastern Oregon and a member of the Civilian Conservation Corps in Idaho in the 1930s, earned a B.S. in Forest Management (1939) from the UI and an M.S. from the University of California (1941). It was Smoky Joe Wohletz (dean 1953-1971) who encouraged him to do some work in California. "What happens in California is often a forerunner of what happens in the rest of the country" resource-wise, says Wilson who has stayed in the West despite numerous opportunities to move elsewhere. But he enjoys being in "hot spots" like California, with the constant challenge of fire danger for homes built near forests. He works to convince

people to do fuel management now rather than lose their homes five years later.

Wilson started working for the U.S. Forest Service in the 1940s in fire management positions on three national forests, becoming chief of the Division of Forest Fire Research at the Pacific Southwest Forest and Range Experiment Station in 1956. After working on the development and field application of the chemical retardant, air tanker, Helitack,

and Fuel-Break systems during the 1950s and 1960s, he was transferred in 1973 to Washington D.C. as the National Fire Specialist of the Cooperative Fire Program until his 1978 retirement.

He had advice, memories, and praise for the school that gave him his start. "I have known every dean here since Dean Jeffers," he admitted at Commencement last May. He knew John Ehrenreich in Arizona before he became dean in 1971. "Dean [John] Hendee worked for us at the Pacific Northwest Station," he continued. "The school of forestry here is in good hands."

Wilson's knowledge has been used both before and after retirement by the United Nations and Canada's Ministry of Natural Resources, as well as in the development of fire management plans for Central America, the Mediterranean, and Central Africa. He has lectured on fire at many western universities and at the University of Freiberg in Germany. He has published extensively on forestry and fire matters and was associate editor for the *Journal of Forestry* for eight years. In 1984 the Society of American Foresters awarded him the Golden Membership and elected him a fellow. Wilson has received awards in forest fire management

Faculty and Student Awards

CFWR Outstanding Teaching Award	Arthur "Doc" Partridge Professor, Forest Resources
UI Outstanding Teacher Award	Gary Machlis, Professor Forest Resources, and Sociology Project Leader, Cooperative Park Studies Unit
UI Outstanding Researcher Award	James M. Peek Professor, Fish and Wildlife Resources
CFWR Outstanding Research Award	Dennis Scarnecchia Associate Professor, Fish and Wildlife Resources
CFWR Outstanding Continuing Education and Service Award	
Lauren Fins, Professor, Forest Resources, and Director, Inland Empire Tree Improvement Cooperative (IETIC)	
Marc Rust, Assistant Director, IETIC	
Michelle Hemsley, Secretary, Forest Resources	
Harry Lee, Assistant Professor, Forest Products	
Leonard Johnson, Professor and Department Head, Forest Products	
CFWR Outstanding Advisor Award	Harold Osborne Associate Extension Professor and Manager, UI Experimental Forest
CFWR Outstanding Staff Award	Lilly Steinhorst Senior Secretary, Resource Recreation and Tourism
Honor Alumnus Award	Carl Wilson
Alumni Achievement Award	Deborah Rawhouser
Honor Associate Alumnus Award	James Weathers

Outstanding Senior Awards

Department of Fish and Wildlife Resources

Fisheries	Michael C. Quist
Wildlife	Kerry L. Hughes
Department of Forest Products	Chad E. Schonbeck
Department of Forest Resources	Raini C. Rippey, Greg E. Gollberg
Department of Range Resources	Marni L. Dickard
Department of Resource Recreation and Tourism	Faith F. Robertson
Outstanding Senior in the College	Faith F. Robertson

Outstanding Graduate Student Awards

Department of Fish and Wildlife Resources	John H. Giudice
Department of Forest Products	Blair H. Wilding
Department of Forest Resources	Kathy L. Rose
Department of Range Resources	Steven J. MacRae
Department of Resource Recreation and Tourism	Krista L. Morten
Outstanding Graduate Student in the College of FWR	Kathy L. Rose
George Savage Excellence in Writing Awards	
First Place	Travis Wall, Range Resources
Second Place	Nancy Wright, Resource Recreation & Tourism
Third Place	Pam Town, Forest Resources

from the Forest Service, the American State Foresters' Association, and the California Department of Forestry. He now serves as Commissioner on the Berkeley Fire Assessment Commission created after the 1991 firestorms in Berkeley and Oakland, California. "I'm excited about the future of forestry in this country," said Wilson, "I'm going to tell my friends: I wish you could go up to the school of CFWR—you'll be optimistic about forestry today."

Deb Rawhouser (MS Wildld. Rec. Mgt. 1987) won the 1996 Alumni Achievement Award for earning distinction early in her career. Her memories of CFWR include a coffee pot and long study nights with Nick Sanyal (MS Wildld. Rec. 1985, Ph.D. For. Wildl. & Range Sci. 1991), now assistant research professor in resource recreation and tourism. "We'd love to come back; we love the West," says Rawhouser and her husband. "In Idaho it always feels like coming home, even though I'm not from Idaho. Going down the rivers is good for my soul."

Deborah Rawhouser, Nebraska native, got to Idaho from the University of Nebraska by working in Idaho Falls for the Student Conservation Volunteer Association. Once here, she found the people, the resources, and the recreation curriculum she liked. Deb has a B.S. in Business Administration (Natural Resources Minor) from the UI (1984) and an M.S. in Wildland Recreation Management (1987). During her college years she worked as a volunteer for agencies in Idaho and Nebraska, managed the Hells Canyon Dam Recreation Facility for the Hells Canyon National Recreation Area, and coordinated all aspects of the Second Annual Idaho Tourism Training Institute at the UI, among other duties. As an outdoor recreation planner for the BLM's Bishop Resource Area from 1987-1989, she developed a public participation program that resulted in an 80% consensus by a citizens technical review team studying proposed off-highway vehicle designations. In Montana she implemented a computerized "Pilot Wilderness Permit Reservation System" which was later used on three other na-

tional forests and the Sequoia-Kings Canyon National Park.

From 1990 to 1992 on the BLM's California Desert District, she was performing the functions of the lead recreation planner in programming and budget, and increasing the agency's contributed fund program by \$1 million in one year. From 1992-1994 she was the program lead for the BLM's Eastern States-State Office for recreation, wilderness, and interpretation programs for the 31 states east of the Mississippi River. By 1994 she was at the BLM Washington Office as project manager for the 1994 BLM Summit, the first ever all-manager meeting of the BLM. Still at the Washington Office, Rawhouser now coordinates recreation program information needed by the BLM Budget Office for its \$26 million annual recreation budget.

"I miss the campus," muses Rawhouser...and the Salmon River breaks, and the support from faculty she says "are always here, day or night." Over the years she has maintained a relationship with the department, encouraging the faculty's practice of "taking the students on the ground" and assigning "applied research." Her own career started with the "connections" she made in her volunteer and paid positions, and in "meshing practice and schooling, and trying new things."

The Honor Associate Alumnus Award is presented to one who, although not an alumnus, has given valuable support to the college and its programs—for 1996 it went to **James Weathers**. "I have spent most of my career in the West because the people are very friendly and willing to help others in need," says Jim Weathers, Region Manager of the Boise Cascade Corporation's Timber and Wood Products Division (Idaho Region) in Emmett, Idaho. "I also love the forest

"In Idaho it always feels like coming home, even though I'm not from Idaho."

products industry because of the people in it. They care about each other and the natural resources that all of society depends on." Currently, Jim is responsible for three sawmills, a plywood plant, a co-generation power plant, and 200,000 acres of timberland which collectively employs 700 people.

Weathers got his start with a B.S. in Business Administration from Oregon State University in 1967 and an M.B.A. in Quantitative Analysis from the University of Southern California, 1970. He spent five years as Financial Analyst for the Mobil Chemical Company and Mobile Oil Corporation, and then a year in

the early 1970s as Senior Staff Assistant for Bendix Corporation in Southfield, Michigan, developing the financial analysis supporting a \$28 million acquisition of the Autolite Spark Plug Company from the Ford Motor Company. His next position was as Controller of American Forest Products in Cerritos, California where he oversaw accounting activities for 19 wholesale distribution yards. He was Assistant Director of Planning during the late 1970s for Boise Cascade reviewing long range business strategies and developing recommendations for five wood products operating regions in the Pacific Northwest. By 1984 he was Region Timberlands Manager over 190,000 acres of north-west Oregon timberlands for Boise Cascade. Before assuming his current position with Boise Cascade, he spent 1984 to 1988 managing 375,000 acres of western Oregon timberlands as Area Timberlands Manager for Boise Cascade's Timber and Wood Products Division, Western Oregon Area. "I want to contribute to meeting society's need for shelter while managing our natural resources for future generations to enjoy," commented Weathers last spring. Why does he support the college? "The college is developing well-rounded graduates through its integrated curriculum. These graduates will contribute to finding balanced solutions to our natural resource problems." ▲

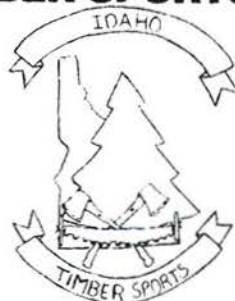
Denise Ortiz is Editor in the Department of Publications, CFWR.

NORTH IDAHO TIMBER SPORTS

CARSON BOSWORTH

Timber Sports Equipment
Saws • Axes • Misc.
Timber Sports Exhibitions
Equipment Repair

P.O. Box 963 • Bonners Ferry, Idaho 83805
Phone: (208) 267-2725



Where Do We End Up?

by Jennifer Jacobson

As a future alumnus of the College of Forestry, Wildlife and Range Sciences (CFWR) I often wonder where I will plant my roots. For a lot of natural resource jobs, you tend to be transient for a period of time. Whether it is more school or just working temporary jobs, it does indeed seem like forever until you have a place you can call home. Well, looking at the current CFWR alumni, most graduates end up calling Idaho home. Out of the living alumni of CFWR, 1547 are now working in Idaho. The next state in total numbers is Washington with 584, followed by Oregon with 391 graduates.

CFWR alumni live and work in 50 states in the U.S. and Canada, and in 45 nations around the world.

When looking at the placement of graduates overseas, there is quite an array of countries the CFWR influence has made its presence in. Here's a small sample of those countries: 5 Burkina Faso, 4 Chile, 7 Costa Rica, 11 Honduras, 3 Indonesia, 2 Ivory Coast, 2 Republic of Korea, 3 Lesotho, 5 Mexico, 5 Nigeria, 4 Norway, 9 Pakistan, 5 South Africa, 6 Taiwan, 10 Thailand, 2 United Arab Emirates, and 1 in the United Kingdom.

Our classmates in Canada reside: 10 in Alberta, 27 in British Columbia, 2 in

Manitoba, 2 in Ontario, and 1 in the Yukon. On a local level, the top ten states are as follows for the CFWR alumni population sizes:

1. Idaho 1547
2. Washington 584
3. Oregon 391
4. California 230
5. Montana 213
6. Alaska 130
7. Colorado 104
8. Utah 77
9. Wyoming 71
10. New Mexico & New York 49 each

Source: *CFWR Alumni Newsletter Spring/Summer 1996.* ▲

Jennifer Jacobson is a senior in Wildlife Resources with an emphasis in communications.



Alumni News

by Stacey Wales

1931

Fred R. Newcomer
Troutdale, Oregon
B.S. Wood Utilization

USFS hired me as a CCC foreman at the start of CCC in 1933 on Bighorn National Forest, transferred me to another labor relief project on the Harney National Forest in South Dakota. When that expired I was assigned by the National Forest to a CCC camp. On August 1, 1934, I became a Ranger on the Nebraska National Forest, Halsey District. That National Forest has since been absorbed as part of the Harney National Forest, or the Black Hills National Forest. Twice I was told I should change my voter registration from Republican to Democrat! So, failing to do it I was busted in late 1937 back to a CCC camp on Bighorn National Forest in Wyoming, then transferred to Shoshone National Forest at Cody, Wyoming, where I stayed until CCC died out. I moved back to my hometown Sheridan, Wyoming, where I worked at a plant nursery company. A former buddy at the University of Idaho wrote me advice to go to Portland, Oregon and applied for work at the start-up Bonneville Power Administration, where he was then a surveyor for the power line construction. I went in July 1940, was not hired by BPA, so I got survey work with Weyerhaeuser at the base of Mt. St. Helen, then went in December to work for Weyerhaeuser at the Longview sawmill. I was discharged for some work error the next November, then I went to Portland, found a job at the US Corps of Engineers a month before Pearl Harbor. I helped make construction drawings for military airports. Other work

kept me there until late in 1950. Then started my 24 year good job at Bonneville Power Administration. Most of my work there was calculating and ordering steel for power line towers. However, the last ten years were spent figuring and ordering hardware and cables for constructing 500 thousand-volt power lines.

1936

Joseph Orlando Fore
McMinnville, Oregon
B.S. Forest Management

He is fully retired.

1937

John F. Douglas
Lakewood, Colorado
B.S. Forest Management

I would like to hear from some of my old classmates. It has been a long time, but surely some must be alive yet! I see Ray Lyons quite often, but as far as I know we are the only '30 graduates in Colorado.

Lionel P. Miller
Port Angeles, Washington
B.S. Range Management

I was five years in forestry at the University of Idaho from 1932-1937. Money was scarce in those days so I elected ROTC as it paid for a small stipend. I also stayed out a year with the help of my friend and teacher Liter Spence and worked as a foreman in a new soil conservation service CCC camp in Beulah, Oregon. I met my wife at the UI, Miss Wilma Post, who was planning a teaching career.

In the summer of '37 I was a part of an SCS range survey crew determining the carrying capacity of certain public domain areas, starting in Hermiston, Oregon and ending on the Simnasho Indian Reservation in Oregon. I transferred to the grazing service (BLM) because I felt it better served the needs of the ranchers. I was also following my ideal Marvin Klemme.

In 1941 Uncle Sam didn't forget me as a reserve Second Lt. They couldn't get along without me!! It hurt my ego terribly to be told that at 30 years of age that I was too old for the infantry. Five years later I returned from the south pacific as a major in the transportation corps. Lucky me I never fired a shot at an enemy soldier in those five years. The old BLM job didn't appeal to me so I took over as manager and owner of the Buhl Floral and Landscaping in Buhl, Idaho.

In 1969, I accepted a job offer from the Parks and Recreation Department in Anchorage, Alaska. Those were the pipeline years and I watched Anchorage grow from 50,000 to 200,000. During all those years I stayed in the military reserve, completed my command and general staff and was promoted to Lt. Colonel.

I retired in 1970 and have found the military background very helpful considering hospital and doctor availability and in 1980, I retired from the city to one of the better places in the USA, Sequim, Washington along the Juan De Fuca Strait and with the Olympics in my background. Now, sixteen later I am active in the Cooties (an honorary of the VFW) calling bingo for the Lions Club, playing fair weather golf, so healthy I can hardly stand it and as happy as a hog in a corn patch.

1939

Chas E. Poulton
Gresham, Oregon
B.S. Range
M.S. Range - 1948

We still are very active travelers, motorhome and otherwise. Have some writing projects, central to which is a memoir which both my wife and I are working on. Also authoring, with one of our sons, an "idiot proof" manual and user's guide for a very complex and involved software he has written for a segment of the financial and banking industry. For me it has been a real stimulating "blast." Also finding time for pure enjoyment things that I never seemed to have time for when totally immersed in my profession, sailing and a bit of dabbling in watercolor and oil painting.

William H. Mason
Henderson, Nevada
B.S. Forestry

Went to work from the Class of 1940 to earn money to complete degree work, I got side-tracked by WW II, and stayed in the army for thirty plus years. Never graduated from the U of I, but had ROTC commission. Retired in 1972 as Colonel.

1940

Robert H. Rusher
Worcester, Maine
B.S. Forest Production

In 1937, I was employed on the Boise National Forest on a trail construction crew building trail to the headwaters of the Middle Fork of the Boise River in the Sawtooth Primitive Area. We were camped near two snow-fed lakes — Big Spangle and Little Spangle. The reflected colors in these alpine lakes were breathtaking. The best bed I ever had was on a "mattress" of Alpine fir boughs. Fragrant, and oh, so comfortable.

Once, we came upon an alpine meadow that was riddled with elk-tracks. We never saw an elk, but I am sure more than an elk saw us!

Our "grub" was packed in our pack horses. We lived on bacon, eggs, and

sourdough, canned tomatoes, potatoes, and beans.

That's how it was sixty years ago!!

Barton O. Wetzel
Dixon, Montana

B.S. Forest Management

He is retired.

1942

Paul Easterbrook
Emmett, Idaho
B.S. Forest Management

Since my retirement in 1977, I have been very active as a volunteer Urban Forester for my town of Emmett. I have learned much, and some frustrating experiences with trees and parks. An Urban Forester must deal with both people and trees — especially people. Growing populations call for new parks, and more trees. Planting a tree is like having a baby — both take a lot of care and a lot of work.

I see a big demand for professional Urban Foresters in the future. It is an interesting and challenging opportunity with a growing need, and financial rewards.

1947

Eldon C. Beus
Boise, Idaho
B.S. Range management

Retired from BLM in April 1976.

1953

William Gleaves
Philomath, Oregon
B.S. Forest Resources Management

He is a current employee of Bordon Chemical which produces wood adhesives and chemicals.

1954

Larry O. Smith
Sandpoint, Idaho
B.S. Forest Resources Management

It's been a wild winter up here in the North Country, and correspondence

along with other things important have a tendency to be pushed aside.

1958

Richard T. Hauff
Salmon, Idaho
B.S. Forest Resource Management

I really enjoy the Idaho Forester plus I feel it is a great opportunity for those involved in its production.

1960

Henry W. Kipp
Olympia, Washington
B.S. Forest Resource Management

Participating in the 7th American Forest Congress from February 20-24, 1996 was a rare challenge. Our table 56 was diversified with respect to the persons around it. The Director of the Arbor Day Foundation, two extension foresters, a tree farmer, a urban Washington DC developer, a US biological survey employee and a retired BIA forester (me). The 1500- person delegation agreed upon 61 principles to guide American forestry. The regional implementation is ongoing!! The Sheraton Washington, Congress HQS was jammed!

Found the 1996 SAF Convention in Albuquerque, New Mexico another challenge. From plenary sessions through workshops and finally a field trip to see cooperative management on the BACA Spanish Land Grant (north of Jemez Pueblo). I kept taking notes. Digested 43 pages for a report to my southwest Washington Chapter of the SAF. I am active on the WSU Extension-Native Plant Salvage Team. We recycle vegetation for stream zone protection etc., from sites awaiting development.

1964

Gary Evans
Herdon, Virginia
B.S. Range Management 1964
M.S. Range Management 1967

After seven years as Chief Scientist to Secretary of Agriculture for the Global Change Issues, I have been reassigned

as the Director of the National Resources Institute at the Beltsville Agriculture Research Center of the Agriculture Research Service. I manage seven laboratories that include remote sensing, crop modeling, hydrology modeling, pesticide and environmental chemistry and sustainable farming systems, among others.

Edward D. Hansen
Everett, Washington
B.S. Wood Utilization

Still working for Kimberly Clark (formerly Scott Paper) in Everett and looking after the water treatment areas. 1996 was a transition year as we learned the Kimberly Clark way and tried to forget the Scott Paper conducted business. 1997 has every indication of being another year of transition.

We are waiting and waiting for the EPA to promulgate the new environmental cluster rules. Then the work begins to change the bleach plant from elemental chlorine, start a massive water conservation plan, and modify primary and secondary treatment.

1971

Richard A. Patterson
Cedar Rapids, Iowa
B.S. Fisheries Management

He is currently the Director of the Indian Creek Nature Center. He manages a privately funded nature center and is responsible for the financial development, budgeting, facilities, programming, supervision, and public relations. He has been recognized and received many rewards. Most recently, he has won the Chevron/Times Mirror Magazine's Conservation Award and Outstanding Board Member of the OWAA. In 1990, he won the Theodore Roosevelt Conservation Award from President Bush. He is active in many organizations and has volunteered time to the Boy Scouts and the Audubon Society.

1972

Steve Anderson
Elko, Nevada
B.S. Wildlife Resources

I sort of followed my father's footsteps to the University of Idaho, College of Forestry in 1972. My father attended the UI during the late 30's but did not return to finish his degree as he had to return home after two years with money having run out. He is still active in reading about conservation issues, including those in the Alumni newsletter from the UI and is often an advocate of various issues. I know he had an influence in my career choice and definitely my college choice. Thanks, DAD (Bryon Anderson).

I was lucky enough to begin my natural resource career while working seasonally with the Forest Service during my college and also as a work-study student for Dr. Hungerford. After graduating I volunteered for the Peace Corps. I spent two years in Kenya in a Fisheries program. Technically the experience was challenging. Culturally the experience was rewarding. I hope the host country nationals that I became acquainted with learned about the USA. I learned much about Kenya and twenty years later I still present programs to schools and groups and have displays in public buildings as I continue to bring occasionally the world back home.

I returned to Idaho in 1979 and have worked with the Forest Service since then in a variety of positions as a biological technician, forestry technician, and professional wildlife/fisheries biologist. I've worked on the Clearwater National Forest in Idaho, the Klamath National Forest in California, and since 1990 I have been on the Humboldt-Toiyabe National Forest in Nevada.

I married Kathy Besecker in 1987 and our daughter, Camas (she surprised us once and told people that she was named after a winery, not the lily) was born in 1989.

Gary Wooldridge
Salem, Oregon
B.S. Forest Products Business

Since March of 1993, I've been permanently employed here with Boise Cascade Corp. as a Forester/Timber Cruiser. It is a great job with some travel involved. I have some beautiful areas from Medford up to Port Angeles, Washington. Timber and stands are very different from Central Idaho where I also worked for various employers. Although everyone (99%) of the people I work with are Oregon State grads, I'm very proud to say I'm an Idaho Vandal! Go Idaho! I-D-A-H-O Go-Go-Go!

1978

Roderick D. Johnston
Fall City, Washington
B.S. Forest Management

Roderick is a project management consultant and president of Venture Scope, Inc. He is editor of the Newsletter *Project Logic*, and specializes in land developments and construction control.

1995

Diane Ledlin
Coulee Dam, Washington
B.S. Range Resources

She is an ecosystem team member training in Holistic Resource Management under the Kellogg grant and the Rangeland Planner for the Colville Confederated Tribes.

Rita Dixon
Moscow, Idaho
M.S. Wildlife Resources

I am continuing on at the University of Idaho for my doctorate in wildlife.

Gerry Snyder
Moscow, Idaho
M.S. Resource Recreation and Tourism

It's been another fun and exciting year for me and the NRC Lab. There's plenty of good and some bad news to report. One of the biggest highlights and achievements this year is the completion of my Master's degree. I had a great

project and really enjoyed the tradition and pageantry of marching through commenment. As for the NRC Lab, we have greatly diversified our services the past two years. We are deeply involved with the development of multimedia into the classroom and promoting education and information on the Internet (check out our site at www.uidaho.edu/cfwr/rrt/). Lately we are helping students in using the computer-based presentations for many projects. Our promotion of teaching graphics and digital imagery is making learning fun and understandable. My latest project is in conjunction with the Forest Service in documenting the decline of the Western White Pine. We plan to publish several articles in 1997.

Other alumni that contributed are:

Ancil D. Baker
San Rafael, California
B.S. Forestry-1936

R. T. Bingham
Kendrick, Idaho
B.S. Forest Management - 1940
M.S. Forest Pathology - 1942

John Bohning
Prescott, Arizona
B.S. Range Management - 1948

Carson Bosworth
Bonner's Ferry, Idaho
B.S. Forest Products

Norman D. Bratlie
Bratlie Forestry Inc.
Coeur D' Alene, Idaho
B.S. Forest Resource Management - 1958

Don Brislain
Vancouver, Washington
B.S. Wood Utilization - 1948

Donald P. Campbell
Missoula, Montana
B.S. Forest Resource Management - 1950

Charles Gibbons
Apple Valley, Minnesota
B.S. Wildlife Mangement - 1962

Charles Johnson
Baker City, Oregon
B.S. Forest Resource Management - 1967
M.S. Forest Management - 1972

Charles J. Kiljanczyk
Lewiston, Idaho
B.S. Forest Management - 1939

James E. King (1947)
Centralia, Washington
M.S. Silviculture - 1947

William P. Knispek
Grass Valley, California
B.S. Forest Resources Management - 1964

Cliff Lathen
Moscow, Idaho
B.S. Forest Management - 1940

Thomas H. Laurent
Douglas, Alaska
B.S. Forest Resources Management - 1950

Dennis G. Nelson (1966)
Stone Mountain, Georgia
B.S. Range Management - 1966

Greg Outcalt
Scenic Landscapes & Tree Management LTD.
Lancaster, Ohio
B.S. Forest Resources Science - 1977

Joe Pechanec (1932)
Boise, Idaho
B.S. Range Management - 1932

Lew Pence
Gooding, Idaho
B.S. Range Management - 1964

R. C. Perez
Montclair, New Jersey
B.S. Wood Utilization - 1956

David Scott
Portland, Oregon
B.S. Forest Resources Management - 1953

James R. Soeth
Young, Arizona
B.S. Forest Resources Management - 1969

Duane Town
Vale, Oregon
B.S. Range Management - 1942 ♣

CFWR Students 1996-1997

Fish & Wildlife

Resources

Undergraduates

Adams, Michael Lee
 Adams, Tammy Jo
 Allen, Kelly John
 Alley, Gwen Louise
 Anderson, Craig Robert
 Anderson, Jeremy Lawrence
 Andresen, Jodi Beth
 Bailey, Colin Reid
 Baldwin, Todd Edward
 Basford, Nathan Andrew
 Bates, Dain Creighton
 Baumgartner, Erik Robert
 Bender, Jonathan Paige
 Best, Karyn Lorayne
 Biladeau, Rebecca Anne
 Bischel, Roberta Ann
 Bjornstrom, Greg Allen
 Blandford, Derek John
 Bockino, Nancy Karin
 Boldman, Christopher Michael
 Bonner, Aaron Ryan
 Booth, Darrell Lynn
 Borchert, Nicholas John Harold
 Bowers, George Jerome
 Braddock, Darci Nicole
 Bransford, Joshua Jack Ray
 Bretz, Justin Kelby
 Bronson, James Preston
 Brooks, Ronald Shawn
 Brown, Kassandra Ann
 Bryngelson, Cole Michael
 Buhler, Susan
 Cadwallader, Benjamin David
 Canney, Melissa Anne
 Carpenter, Rebekah Snow
 Carrothers, Luke Nolan
 Carter, Marjorie Helen
 Cavender, Wade Patrick
 Chamberlain, Larry Stuart
 Chowen, Trevor Ray
 Churchwell, Roy Thomas
 Clayton, Jason
 Cloud, Ryan Dean
 Cole, Ian William
 Collins, David Richard
 Conkey, Lisa Ann
 Corbett, Stephen Carmichael
 Crespi, Kristin Danelle

Crossley, Brian Reed
 Davila, Shane
 Deaton, Ashley Marie
 Demarco, Matthew Francis
 DePriest, Jeremy Daniel
 DePue, John E
 Dessert, Gabriel Paul
 DeYoung, Adam John
 Dick, Travis Leonard
 Dickerson, Andrea Leigh
 Dietz, Michelle Marie
 Dodds, Rebecca Jo
 Dostal, Kurt Lewis
 Drago, Michelle Ann
 Edwards, William Harvey
 Eldred, Dustin Wade
 Elliott, Justin Allen
 Erling, Jes William
 Estep, Kimberley Dawn
 Ferguson, Holly Lynn
 Ferro, Cindi Ann
 Fickle, Matthew Wayne
 Flemer, Benjamin
 Foster, Colleen Elizabeth
 Fox, Mark Robert
 Fryer, Derek Stewart
 Gardiner, Michael Young
 Garst, Marc Cole
 Garton, Eric Jon
 Gelok, Christian Richard
 Gibbs, Matthew Selby
 Gilliland, Mark Allen
 Glennon, Robert Patrick
 Greenwalt, Garry Shayne
 Greenway, Jason Russell
 Hansen, Douglas Alvin
 Hardy, Ryan Scott
 Hartley, James Robert
 Hayden, Virgil Lloyd
 Heinrich, Megan June
 Henderson, Hallie Anne
 Henson, Chad Ellis
 Hildebrand, Gregory Adam
 Hillman, Bryce Christopher
 Hinson, Dustin Riles
 Hobson, Kenneth John
 Hole, Amanda Jane
 Holloway, Joshua John
 Holzer, Ryan George
 House, Travis Lee
 Hundrup, Wyatt Ronald
 Igelman, Mike David
 Jackson, Chad Stephen
 Jacobson, Jennifer Lynn
 Jennings, Lori Jane
 Johnson, Eric Kenneth

Johnson, Shelly Ann
 Jones, Eric Edwin
 Kampster, Matthew Lewis
 Karchesky, Christopher Michael
 Keetch, Curtis Vance
 Kellar, Dale Scott
 Kester, Rodney Lynn
 Kinzer, Ryan Neil
 Kissner, Krista Lynn
 Klingler, Amy Elizabeth
 Knapton, Brandon Lee
 Kuhlmann, Nickolas Allan
 Kunkel, Emil Curtis
 Lawson, Shona Louise
 Leslie, Lyle Scott
 Lewis, Spencer Damon
 Lindstrom, Alex Mark
 Logue, Shay Scott
 Lowman, Charles George
 Lucia, Matthew Bruce
 Lynn, William Travis
 Madsen, Jennifer Evelyn
 Maes, Angela M
 Martens, Kyle Douglas
 Martens, Royden Scott
 May, Kimberly Dawn
 McConnaughey, John Kendall
 McConnell, John Alexander
 McMullen, Carrie Danielle
 Meshell, Lyle Joseph
 Messer, Mathew Adam
 Middleton, Kimberly
 Moore, Gregory King
 Morales, Lucio
 Murphy, Melanie April
 Nalder, Clayton Lee
 Neil, Jodi Cathleen
 Nelson, Benjamin Thomas
 Norton, Phillip M
 Oswald, Eric Landon
 Overman, David James
 Oviedo Guillen, Martha Ivonne
 Owens, Rosemary Eva
 Owsley, Dennis Eugene
 Page, Jarrett Lynn
 Pappani, Justin Anthony
 Parks, Zachary Allen
 Patten, David Daniel
 Perleberg, Brian Lee
 Perugini, Carol Christine
 Piehl, Robbie Allen
 Post, Jason Wesley
 Putnam, Scott Alan
 Raitanen, Eric John
 Richards, Jeffrey Edwards
 Rodrigues, Catherine Emily

Rogers, Stephen Shoun
 Rudeen, Carl Edward
 Ryan, Robert Glenn
 Sam, Kameron Chase
 Scheffel, Jeremy Lester
 Schultz, Travis Russell
 Schulz, Rachel Laurie
 Scott, Jason Adam
 Sellman, Jake Robert
 Shea, Jake Jeremiah
 Sjostrom, Sven Rae
 Smith, Hilary Dawn
 Smith, Jason Allen
 Smith, Michele JoAnn
 Smith, Shawn Michael
 Specht, Thomas John
 Stanford, Michele Diane
 Steele, Craig Allen
 Stephan, Kelly Jo
 Stephenson, Jeff J
 Stewart, Laura Catherine
 Stigge, Wayne David
 Story, Jason Earl
 Stranahan, Aric Terry
 Struhs, Scott M
 Stup, Todd Daniel
 Stusek, Blake Thomas
 Sukauskas, Brian Anthony
 Sullivan, Daniel Paul
 Swanson, Carolyn Maria
 Swift, Aaron Ray
 Symons, Wade Martin
 Thomas, Brian Victor
 Thomas, Joseph Gregory
 Thompson, Angela Jane
 Thompson, James Patrick
 Tinderholt, Amy Jo
 Venard, Jacob Allen
 Wachtel, Mark Lloyd
 Wagner, Tyler
 Wales, Stacey Lea
 Walker, Jeffery Scott
 Walters, Ben L
 Warner, Robert John
 Wendling, Bradley Randall
 Williams, Erik Kalani
 Williams, Pamela Ann
 Wilson, Walter Louis
 Wyma, James Boyd

M.S. Graduates

Abbott, Ann Marie
 Alldredge, Mathew W
 Anglea, Steven
 Bailey, John Charles

Beaver, David Earl
Begich, Robert Nicholas
Bell, Pamela June
Bishop, Chad Jeffrey
Brimmer, Arnold Frank
Bynum, Kimberly
Collins, Catharine M.
D'Elia, Jesse
Davis, Matthew Alan
Dunnigan, James
Eaton, Craig Alan
Elmer, Michael Troy
Everett, Scott Richard
Fedrizzi, Jeffrey Lewis
Frost, Frank O.
Gardner, Scott C.
Heekin, Patricia E.
Hossack, Blake Roger
Isaacson, J. Allen
Johnston, Heather Loring
Karl, Jason William
Kruzic, Lance Michael
Leban, Frederick A.
Leonard, Kara Marie
Lindbloom, Andrew Jonathan
Marco, Jeffrey Dale
McDonald, Matthew William
Miyasaki, Hollie Melinda
Monello, Ryan Joseph
Muhlfeld, Clint Cain
Naughton, George Patton
Nelle, Richard David
Nightengale, Timothy Lincoln
Nohrenberg, Gary Alan
Piaskowski, Richard M.
Rabe, Craig Denton
Rocklage, Stephen J.
Sell, Scott
Shiflett, Cynthia
Small, Susan Ann
Spangler, Robert E.
Storror, Ann TenBroeck Smith
Szepanski, Michele M
Todd, Steven Wayne
Vidergar, Dmitri Tobias
Walker, Robert Paul
Walter, Hanspeter
Whitwill, David K.
Yost, Andrew Charles

Forest Products

Undergraduates

Andersen, Heather Joleta
Baker, Tara Dawn
Barnes, Ryan Willard
Bornhoft, Chris Stewart
Brent, Kerry E
Cochran, F. Mark
Dahlberg, Eric William
Dickson, Allan Dale
Donahue, Mark Joseph
Donnelly, Robert Martin
Dryden, Derek Mathew
Emerson, Lanson Stephen
Funderburg, William Robert
Grose, Jeremy Lee
Haviland, Drew Eugene
Hegedus, Russell Duane

Hutchinson, Michael Lynn
Jacobsen, Scott Franklin
Jacoby, Eric Lane
Koberstein, Edward Anthony
Leavitt, Brandon Wade
Lefebvre, Matthew Borg
Leisinger, Todd Andrew
Linville, Jeffrey D.
Ludwig, Jenny Kay
Mahon, Mark Thomas
Marone, John Charles
Miller, Brandon Eugene
Nemeck, Erik Paul
Ortner, Jill Larae
Pratt, Keith Ludlow
Reggear, Bryan Ivan
Robb, Timothy Edward
Schultz, Steven Michael
Schwab, Jennifer Louise
Shaffer, Alex Joseph
Smith, Virgil Eugene
Strohmeyer, Dennis Lee
Taylor, Arne Matthew
Thiemens, Jacob Morgan
Wagner, Alison Elizabeth
Wagner, Robert Francis
West, Michael Charles
Wetmore, Kyle R.
Wienclaw, Leona Marie
Wong, Robb Gui

M.S. Graduates

Coulter, Keith M
Erikson, Robert George
Roche, David Michael
Shea, James Glenn
Teixeira, Divino Eterno
Turpeinen, Pekka Tapio

Forest Resources

Undergraduates

Allen, Julie Leilani
Allmaras, Marjorie Anne
Anderson, Fredrick Dean
Angell, James Ross
Atwood, Robert M.
Ausborn, Christopher Raymond
Austin, Brady George
Austin, Brian Darrell
Babineau, Donald Adams
Bacon, Russell Milton
Baker, Marle Dean
Bennett, Amy Sunshine
Bevan, Lora Lynn
Bice, Wesley Joseph
Bledsoe, Fasha Dee
Boguslawski, Julie Dawn
Bowman, Cory D.
Bowmer, James Andrew
Bresee, Mary Katherine
Brinkley, Joshua H.
Carlson, Lane Brian
Carter, Nickalos Martin
Chapman, April Lynn
Cochran, Jamie Kay
Courtney, Andrew C
Czerwinski, Amy Yoneko

Davis, Jefferson David
DeMent, Robert Wayne
Dodson, Elizabeth Marie
Donnelly, Julie Louise
Duetting, Patrick Scott
Eggers, Gary Vance
Ephraim, Shayne Allen
Fabbi, Daniel Joseph
Foster, Angela Jaylyn
Fox, Kathryn Rae
Frisk, Robert C
Fuller, Rebecca Anne
Garton, Travis Cain
Green, Russell Louis
Hammar, Joshua Dean
Happe, Jeffrey J.
Harbour, Devin Michael
Hatfield, Ryan Blaine
Hawkins, Bruce Hadley
Henry, Jennifer Joy
Herridge, Clinton Dee
Hileman, Christy Lou
Hill, Amy Jean
Hixon, Amy Miriam
Hurtine, Kevin Richard
Hurst, Peter Allen
Jenko, Robert John
Jennings, Earl Howard
Johnston, Phillip George
Kimsey, Mark James
Kotkey, Kirk Mathew
Kucirek, Matthew James
Larson, James Edward
Lezama Pineda, Ricardo Nelson
McLaughlin, Marie
Meyer, Donald Stephen
Minshall, Gina Marie
Morgan, Eric Brian
Muth, Alyssa Rachel
Muzatko, Marcus Ryan
Newton, Lonnie J
Norenberg, Trevor George
Poulter, Benjamin
Powell, Loren Patrick
Prinz, Mark Todd
Prisock, Brian J.
Puchlerz, Molly Elizabeth
Ramirez, Christian
Regan, Donald James
Ritz, Darcy Lynn
Robinson, Frank Christopher
Rost, Benjamin David
Ruckman, Randy Lee
Sampson, Jeffrey Andrew
Sandall, James H.
Shuler, Kyle Craig
Smith, Annette Marie
Smith, David Thomas
Spaulding, Renea Annette
Steffen, Jessica Brooke
Stephens, Wesley Allen
Stone, Jennifer Michelle
Strand, Michael James
Styer, Jacob William
Svancara, Jason Lee
Teague, David Patrick
Teske, Casey C.
Thomas, Roger O'neal
Thompson, Jeffrey Paul
Thornton, Lawen
VanMiddendorp, Freddie

Vamer, Julian Morgan
Vamer, Slaton
Wapato, Philip Harvey
Warr, Bradley James
White, Carl A
Wicks, Della D
Wilson, Toby Aaron
Wingert, Edward Franklin
Witz, Steven Charles
Wyatt, Douglas Allen
Zelch, Karen Sue

M.S. Graduates

Appelgren, Ross Stuart
Baldwin, Calib
Caldwell, Lawrence Edwin
Farris, Calvin Arthur
Feary, Karen
Fizzell, Gregory Scott
Gollberg, Gregory Edward
Graves, Douglas Alan
Grey, David Robert
Harkins, Kobe Christopher
Hayes, Stephen Nicholas
Hedrick, Ryan Wallace
Helgenberg, Albert James
Hightower, Nancy
Johnson, Mara Patrice
Long, Donald Garland
Mackey, James Richard
McDowell, Nathan Gabriel
McLean, David Roger
Morgan, David Thomas
Myszewski, Jennifer Helen
Nelson, Jennifer Ane
Patten, Ann M.
Paul, Marcy Lynn Dickerson
Rippy, Raini Corrine
Rodriguez, Norberto Francisco
Rohweder, Mark Robert
Sanders, Chad Thomas
Sanogo, Zie
Shaw, Terry M.
Smith, Jonathan Paul
Stewart, Susan Ann
Swartz, Linda Marie
Vander Schaaf, Curtis Lee
Walker, Dorothy A.
Wu, Yingqin

Range Resources

Undergraduates

Bourne, Lori Jean
Brown, George Michael
Cotter, Angela Elaine
Doloughan, Kerrin William
Franklin, Michael Steven
Hoobler, Nancy R.
Lomkin, Meribeth Lynn
Lovec, Laria Joy
Martin, Codie John
Oleson, Shawn Jay
Philipsen, Chris Frederick
Rademacher, John August
Swanson, Joseph D
Thomas, Claudia Lynn
Wall, Rebecca JaNene

Wall, Travis Gene
Westfall, Timothy Charles

M.S. Graduates

Arisawa, Tsutomu
Erixson, Michaela Mary
Jones, Lucy A.
Kouns, John Charles
MacGregor-Carpenter, Constance
Scholten, Danielle Lynnette
Webster, Lori Anne
Winchester, Lyman Gene

Resource Recreation & Tourism

Undergraduates

Amador, Wendy Susan
Barrett, Mandi Kay
Bass, Andrew John
Beacham, Jason William
Benbough, Christen Lee
Benjaminsen, Noreen Michelle
Bennett, Kathleen Denise
Branscomb, Deanna Lorraine
Burnett, Robert Brian
Bush, Kenneth Alan
Byrd, Karen Marie
Campbell, Jonathon Michael
Castillo, Elsa Maria
Christopherson, Heidi Lee
Claytor, Shawn Patrick
Condon, Patrick William
Cooper, Rebecca Rae
Cox, Michael L
Crawforth, Todd Leland
Davis, Nathaniel Edward
Dearborn, Bart Jan
DeBolt, Gregory David
Denison, Scott Edward
Derethik, Mark Haines
Devereaux, James David
Dickison, Ryan Robert
Donaldson, Margaret Marie
Dooley, Greg Scott
Dorsey, Peggy Ellen
Douglass, Terah Alexander
Dumm, Gabriel Christian
Dustin, Clinton Reed
Eliason, Ethan Adam
Engen, David Christopher
Estrel, Eric Richard
Finken, Jeffrey Miles
Fletcher, Matthew Charles
Flett, Ryan Brys
Focht, Sara Beth
Franz, MaryAnn
Fry, Jarett Scott
Gilbert, Rocky Daniel
Goodin, Benjamin James
Goosman, Rebecca Ann
Grant, Connie Rae
Grimes, Drew Mitchell
Halligan, Sonja Renee
Hayes, Geoffrey Carlton
Heimerl, Michelle Ann
Helmuth, Zachary Thompson

Hertzog, Ryan Peter
Hoffman, John Jacob
Homan, Ryan Theodore
Hopkins, Jennifer Elaine
Hruska, Ryan Christopher
Hueber, Lynne Marie
Johnson, Aaron Dean
Kamp, Matthew Hoyt
Karoblis, Chad Hayes
Keach, Karl Frederick
Kelly, Danielle Marie
Klingenberg, Wendy R Hager
Lawrence, Kelly Diane
Leithead, Heather Malia
Linch, Christina Carol
Lungren, Sarah Dawn
Luper, Christine Dawn
Lustig, April Maria
Madison, Kerry Lee
Mahar, Jonathan David
McCully, Monte
Medina, Abraham Napoleon
Meers, David Stanfield
Meier, Jonathan Caleb
Morris, Mountie Ellis
Mueller, Gina Rae
Mulvihill, David Barton
Nanny, Benjamin Joseph
Nielsen, Scott Kenneth
Noland, Fred H
O'Connor, Justin Patrick
Olmstead, Kristy Kay
Olson, Jennifer Dawn
Olson, Keith David
Olson, Shane Bryan
Pence, Dusty Lee
Phillips, Richard Ryan
Rogers, Jennifer Eileen
Saito, Yusuke
Sand, Margaret Mathilda
Sanders, Amy Elise
Santos, Joseph Edward
Sawatzky, Nikalus David
Schafer, Rob Ryan
Schroeder, John Brent
Servatius, Ryan Anthony
Smith, William James
Spinosa, Daniel Gregory
Stover, Marc William
Symms, William Davies
Thompson, Arin Lynn
Troutman, Jennifer Marie
Tysdal, David Paul
Verenna, Tara Lynn
Ware, Andrew Ryan
Warren, Roger James
Wedeking, Mark Noble
Wedeking, Matthew David
Williams, Marcus Allen
Williamson, Suzanna Diane
Withers, Angela
Wolfe, Kimberley Ann
Wood, Michael Edger
Worthington, Michele Gay
Wright, Nancy Mae

Graduates

Becker, Kurt Gustav
Culp, Rocklynn Heidi
Edwards, Stephen Neal

Frost, Steven Richard
Garcia Tagliani, Laura Andrea
Gettinger, Dean S.
Havens, Luisa Maria
Hoffman, Christopher Young
Jakobsen, Christine Haugaard
Johnson, Jeffrey Louis
Lankard, AnneMarie
McGuire, Kevin
Nyberg, Gary Thomas
Osler, Heidi Suzanne
Randall, Kathy Ann
Schantz, Heidi Anne
Schiepan, Katherine Marie
Thomas, James Alan
Whipple, Robert Allen
White, Dave Douglas
Wishart, John Patrick
Wright, Michael Victor
Yocum, Darren Michael
Young, Breck Dene

Forestry, Wildlife and Range Sciences

Undergraduates

Bolick, Ryan Edward
Chojnacky, Brian Lee
Elison, Vernon Wade
Fitzpatrick, Brian Joesph
Grabowski, Robert Michael
Graves, Eric Alan
Jones, Jennie Kay
King, Justin Tran
Lemke, Travis Mykal
Mansell, Lisa Caroline
Perez, Alisa Joy
Pettinger, Craig Andrew
Powers, Sally Nadine

Ph.D. Graduates

Advincula, Benny Andicoy
Anders, Paul Jerome
Avila, Roberto A.
Balster, Nick J
Black, Anne E.
Burgess, Caitlin
Carnes, John
Cavalcanti, Lindalva Ferreira
Chambers, Nina
Chippis, Steve Russell
Cho, Seong hoon
Connor, William Paul
Crist, Patrick James
Dixon, Rita Dianne
Durfey, James Edward
Fan, Zhaofei
Flanagan, Paul Thomas
Gergely, Kevin Jerome
Gillmore, Michael Wayne
Giudice, John Henry
Green, Joel Anson
Green, Patricia Eileen
Hay Smith, Leslie A.
Hayes, Stephen
Izard, Susan Ellen
Jabbes, Mohamed

Jain, Theresa Benavidez
Jensen, Robert Edward
Jin, Fengbin
Kiryu, Yasunari
Lim, Young Taik
Logan, Kenneth A.
Mattson, David
McConnell, Steven
McGrath, Kathleen E.
Moore, Susanne Therese
Nielsen, Bonnie Michelle Berg
Olson, Steven Marcel
Porter, Pamela Elizabeth
Reid, Edward David
Russell, Keith C.
Ruth, Toni Karen
Schnepf, Christopher C.
Schnurr, Jeffrey Paul
Shen, Guanghong
Stannard, Mark Edwin
Tonn, Jonalea R.
Vales, David J.
Wang, Xiaohui
Welker, Thomas Lee
Welker, Timothy Leon
Welton, Tracie Leigh
Wisdom, Michael Joseph
Woo, Kwan-Soo
Yassemi, Shahram
Zahoor, Adnan

Daddy's Forest Stew (Cutting Winter Wood)

We always entered the woods
like raspberry pickers

in the season of
sugar cane
and chose our flavors
fir, spruce, pine

Daddy stalked through the canes
like a cat in a cornpatch,
a spider in the raspberry rows

harvest of towering cinnamon sticks
that stirred forest air
to syrup

took a skilled knife
Daddy with chainsaw, picky now

the downed ones napping
like dropped bananas
hoping to blacken

he plucking the stems
we kids
dicing them like sausage
on cutting board of moss
and mushrooms.

We knew they'd been polinated
with the scratch of coyote
spiced with owl song

our work made
light,
dreaming hidden elk
and spruce elves
wonder if the timber ants
bathe in that
streamlet
faces reflected
like mine
like bay leaves on soup
thinking:
will my mate love the woods as I do?

so afternoon
peels our coats and gloves
exposing
sweaty fruit of
plaid shirts and skin
toughened by bark, dirt
leave offering of lunch crumbs
sprinkled for squirrels

pack pick-up
with sides
woven like basket
bursting its stitches
as cow fat with calf

drive home again
to a Grande Ronde valley
mountain-rimmed
dark, like a big black pot
where the town bubbles over
with the froth of winter

and Daddy's forest stew.

D. Ortiz

Student Organizations



American Fisheries Society

The American Fisheries Society (AFS) is a non-profit, professional organization dedicated to supporting and promoting programs that lead to the intelligent use of our aquatic resources. As an example of this commitment, the Palouse Unit sponsors free monthly seminars dealing with topics of current interest to students and the public. The Palouse Unit of AFS is also a proud sponsor of National Fishing Week and the Idaho Adopt-A-Stream program.

The Palouse Unit has been very active this academic year on projects to benefit our members and CFWR. The Unit initiated an effort to solicit funds to purchase a new aquarium for the college. This aquarium will benefit all students of CFWR. To provide valuable field experience to our members, the

Palouse Unit has been active with the Idaho Department of Fish and Game. This year the unit participated in two IDFG projects; a cutthroat trout survey and a bull trout redd count exercise. The Palouse Unit also participated in a Natural Resource Education Day for local fifth and sixth graders. Six members of the unit explained anadromous fish to the students as they observed a chinook salmon and a steelhead in an aquarium. Both the students and our members gained a lot from this experience.

As spring approaches, the Palouse Unit looks forward to our Annual Wild Game Feed, CFWR Natural Resources Week and the State Meeting of the Idaho State AFS Chapter. ▲

Officers

Co-Presidents

Matt Davis
Lance Kruzic

Vice-President

Tom Welker

Secretary/Treas.

Tim Welker

Undergrad. Rep.

Robert Glennon

Graduating Members

Bachelors Degree

Travis Horton
Brian Perleberg
Chad Jackson
Wade Symons

Masters Degree

Jim Dunnigan
Tom Cichosz

Forest Products Club

The Forest Products Club is a professional student organization and is part of the nation-wide Forest Products Society. Through guest speakers and tours, students learn what will be required of them upon entering their careers. Conferences and tours are paid for by various fundraisers throughout the year. ▲

Officers

President

Erik Nemeck

Secretary/Treasurer

Beth Dodson

Vice President

Jenny Schwab

Faculty Advisors

Fran Wagner

Harry Lee

Resource Recreation and Tourism Association

The goals of the Resource Recreation and Tourism Association (RRTA) are to keep students informed about developments in the field and to develop working relationships between students and faculty. RRTA achieves these goals through meetings, seminars, social events, and field trips.

The association began with noon-time seminars given by graduate and undergraduate students. These seminars soon expanded to include professors and outside professionals. Speakers shared their philosophies of recreation, their work experiences, and other matters.

RRTA activities of recent years include sponsoring Earth Day celebrations, trail work at Spring Valley and Idler's Rest Nature Reserve, and developing an outdoor learning site at a local elementary school.

Fund-raisers help to send members to conferences of professional societies such as the National Association of In-

terpretation and the Idaho Recreation and Parks Association. These fund-raisers range from bake sales to work projects, combining fun and practical lessons in profit making.

RRTA sponsors social activities, including backpacking trips, river trips, ski trips, and potluck dinners. The discussion and planning of these excursions takes place at meetings that are twice a month.

The student chapter of the National Association for Interpretation (NAI) is a new addition to RRTA this year. NAI is a professional organization which emphasizes audio/visual programs, living history events, thematic talks, exhibits, environmental education and more. The club will work on interpretative projects at the University of Idaho and the surrounding community. This is a great opportunity to gain experience in the field of interpretation. ▲

Officers

President

Jon Meier

Vice President

Wendy Amador

Secretary

Sarah Lungren

Treasurer

Mike Wood

Historian

Willie Symms

SAC Representative

Ben Flemer

Faculty Advisor

Nick Sanyal

The Range Club

The University of Idaho Range Club is an organization which is affiliated with the College of Forestry as well as with the International Society of Range Management. The Range Club strives to fill the needs of students who are interested in the use and management of rangelands, both public and private. The Range Club participates in social activities within the department and the college, while also making it possible for students to attend the International Society for Range Man-

agement meeting every year. This is accomplished through various fundraising activities throughout the year. This organization offers a wide diversity of people, personalities, and activities. Involvement in the University of Idaho Range Club provides students with opportunities to meet other students with similar interests, learn from professionals in the field of range management, and participate in activities, college and public, which are both educational and enjoyable. ▲

Officers

President

Meribeth Lomkin

Vice President

John Rademacher

Secretary

Kahne Jensen

Treasurer

Lori Bourne

Faculty Advisor

Jim Kingery

Logger Sports Club

Known as the Associated Foresters of the University of Idaho in 1912, the Logger Sports Club has since become a social and service organization in the department of Forest Products that draws its student membership from many colleges. A competitive side of the club is the Logger Sports Team that participates in intercollegiate woodsmen's shows throughout the Northwest and Canada during the Spring Semester. Two scholarships from the UI Experimental Forest are used to help recruit team members. Lumberjack competition for men and women in regional contests include traditional events such as burling, pole climbing, axe throwing, cross-cut sawing and chopping.

Two club highlights each year are the UP Logger Jamboree held on campus and the AWFC Forestry Conclave that rotates within the region from California to Colorado. Travel and equipment funds are largely generated through private donations and work projects within the College of FWR and neighboring communities. The club continues to maintain a close association with area loggers and professional logging competitors in the region. These individuals provide technical services, instruction and training in the learning of the art and science of becoming a skilled woodsman. ▲

Officers

President:

Beth Dodson

Secretary/Treasurer

Dusty Pence

Advisor

Richard Folk

Student Management Unit

Students in the College of Forestry, Wildlife and Range Sciences have an excellent opportunity to hone their management skills by taking charge of a portion of the Experimental Forest. On the 182-acre Student Management Unit (SMU), students from each of the

college's five disciplines inventory, plan, implement, and monitor various land management activities. Students planning shelterwood cuts and thinning operations on the unit's Tamarack Road area work with others planning interpretative trails and picnic facilities at the

SMU's Big Meadow Creek Recreation Area. By working together, students not only learn multiple-use management skills but also develop the valuable communication, teamwork, and leadership skills needed by today's resource professionals. ▲

Swu'nmp'twa

Swu'nmp'twa is the Native American Club of the College of Forestry, Wildlife and Range Sciences. Our mission is to understand and educate others about Native American natural resource philosophies and management approaches. Each year the club invites speakers into the college during Natural Resource Week to speak about such issues. Another activity of Swu'nmp'twa is to actively recruit prospective Native American Students to attend the College of Forestry, Wildlife and Range Sciences.

Members visit local reservatons and speak to Native American students about our experiences at the University of Idaho and the benefits of attending CFWR.

The club also provides an atmosphere in which members can discuss classwork, natural resource issues and just plain have fun with other members with common interests. An added benefit is the willingness of Associate Dean Alton Campbell to open his home to our potluck dinners.

Swu'nmp'twa is also active is the planning, promotion and support of the University of Idaho Pow wow. The Pow wow is held each fall in conjunction with Native American Month and other activities planned by the UI Native American Student Association.

The current members of Swu'nmp'twa are grateful to our alumni for initiating the effort to start the club three years ago. Without them Swu'nmp'twa would not be and could not have grown to the organization we are today. ▲

Officers	Secretary	Members	Alumni
President	Marle Baker	Marle Baker	B.J. Kieffer
Jeff Sampson	FFAdvisors	Phil Wapato	Ike Cawston
Vice President	Larisa Ford	Jeff Sampson	Leigh Pond
Phil Wapato	Alton Campbell	Robert Glennon	Aaron Miles
Treasurer		Carl White	
Robert Glennon			

The Wildlife Society University of Idaho Student Chapter

The main goal of the Student Chapter of the Wildlife Society is to (I) provide members with opportunities to gain experience in the wildlife profession, (II) help members gain professional contacts for summer and full-time employment, and (III) promote the proper stewardship of the natural resources which we will soon be managing. Over the past year, we have been active in many projects and activities. Some of our ongoing projects include: private land improvement for wildlife through the Conservation Reserve Program, management of the society's adopted reservoir (Spring Valley Reservoir), game check stations, and other club projects. The society makes use of our "Project Leader" program, enabling all members to be active in leadership roles within the club.

In addition, we have been involved in many other unique projects throughout the past year. We are currently trying to receive a grant for a "Bird Box" to be utilized by all local community elementary schools. This bird box contains many educational tools and references for elementary students to learn about the importance of wildlife in our natural ecosystem. Our fund raising profits go to help cover our travel costs to attend professional wildlife meetings.

Last spring, society members attended the Northwest Section Meeting of The Wildlife Society in Banff, Canada. We are currently raising funds to attend the Student Wildlife Society Conclave Meeting at the University of Arizona this spring.

Traditionally, we have volunteered a lot of work to the Idaho Department of Fish and Game. In continuing that tradition with goose nest surveys, big game and waterfowl check stations, and various other projects, we have begun to diversify our efforts with other professional agencies such as the Nature Conservancy.

We always enjoy a little competition with the Palouse Unit of the American Fisheries Society as well. Past activities have been snow football, and basketball. The society plans to increase our inter-club activities within the college, challenging the Range Club, Society of American Foresters, and various other student organizations within the College of Forestry, Wildlife and Range Sciences.

Keeping up with modern times, our society has a new Internet homepage! Check us out on the world wide web at: http://www.uidaho.edu/student_orgs/wlfsoc/ ▲

Officers

President

Jeremy Scheffel

Vice President

Shane Davila

Treasurer

Melanie Murphy

Secretary

Wyatt Hundrup

SAC Rep.

Jen Jacobson

Faculty Advisor

Kerry Reese

Student Affairs Council

The Student Affairs Council (SAC) coordinates the college's student activities and serves as a communication link between students and faculty, staff, and the administration. The council expresses student's opinions, complaints, and suggestions, and receives feedback. The SAC promotes and coordinates college activities and represents student interests.

Each year, SAC sponsors the college's major student activities. In fall, faculty and staff cook and serve pancakes at the annual pancake breakfast. In the spring there is Natural Resource Week. It is held in the third or fourth week in April, the event brings the college distinguished speakers and seminars. ▲

Officers

Chairman

Robert Glennon

Secretary

Meribeth Lomkin

Treasurer

Jen Jacobson

Reporter

Amy Bennet

Club Representatives

AFS Robert Glennon
 Forest Products Heather Andersen
 Idaho Forester Stacey Wales
 Logger Sports Russ Hegedus
 Range Club Darin Law
 RRTA Ben Flemer
 Snag Chuck Lowman
 SAF Howard Jennings
 SMU Nathan Basford
 Swu'nmp'twa Robert Glennon
 Wildlife Society Jen Jacobson
 Xi Sigma Pi Lucy Jones

Members At Large

Lisa Mansell
 Jeremy Scheffel
 Hallie Henderson

Xi Sigma Pi, Epsilon Chapter

Xi Sigma Pi is the national forestry honorary society. The society strives to improve the quality of natural resource management and to promote a spirit of fellowship among all workers in the natural resource fields. Society chapters exist at many universities across the nation and link students with common interests and goals.

The society inducts students whose scholarship and personality suggest success in natural resources careers. With some exceptions, invitations to join the

society are issued to juniors, seniors and graduate students who have maintained a 3.0 cumulative grade point average or better. Initiates take part in all society activities and carry out a service project to promote the importance of natural resources.

The Society of Xi Sigma Pi draws its members from all departments of the college. Therefore, society activities tend to be interdisciplinary and to benefit the entire college. Because the society stresses development of leadership skills

through extracurricular activities, members are encouraged to participate in their own departments' clubs. ▲

The Idaho Forester

Each year, a group of highly dedicated students produces the Idaho Forester: A magazine of the Natural Resources. This is a tradition in the College of Forestry, Wildlife and Range Sciences since 1917. The magazine has become an award-winning magazine, placing in the top three for the past ten times at the Society of American Forester's annual student publication

contest.

The Forester provides a forum for the students, faculty, and other natural resource professionals to express their views on current natural resource issues through essays, poetry, and artwork. The Idaho Forester also provides a link with the alumni of the college. It provides the alumni to contribute through

articles and a way to communicate with other alumni.

The Idaho Forester is a great way for students to become involve with the college and work with other students, faculty, and staff. It provides the students a way to communicate effectively, build journalism skills, and work together as a team and meet other people. ▲

Editor

Stacey Wales

Feature Articles Head

Jennifer Jacobsen

College Focus Head

Hallie Henderson

Student Organization Head

Charles Lowman

Layout and Design

Stacey Wales and Vanessa Dobbins

Photography

Denise Ortiz & Gerry Snyder

Graphics

Lorraine Ashland & Helen Kettle

Staff Writers

Jeremy Scheffel
Howard Jennings
Nathan Burkepile
Bobby Glennon
Marni Dickard
Dennis Sasse

Faculty Advisor

Joseph J. Ulliman

The Snag

The Snag, the student newsletter of the College of Forester Wildlife and Range Sciences, it comes out every other week. The newsletter provides a way for students to voice opinions about current issues, become invloved with activites with the college's student organozations, and other up-coming activities within the college.

The snag is produced by a staff of writers and an editor. The Snag lets students to increase their skills in comminication and journalism, time management skills, and team work skills. ▲

Editors

Jeremy Scheffel
Charles Lohman

Staff Writers

Jennifer Jacobsen
Stacey Wales
Gina Mueler
Howard Jennings
Della Wicks
Bobby Glennon

Food for thought...

Idaho Friendship Soup

1. Go out and buy a bunch of beans.
2. Fill several zip-lock bags with 2 Tbsp. each of:
St. Maries Wild Rice, Split Peas, Lentils, Pinto Beans,
Red Beans, Navy Beans and Pink Beans.
3. Give the packages to your friends with the following directions:
Wash contents of package in cold water and put in a 3-quart kettle, add 6 cups water, 2 chicken bouillon a cubes, 1 ham hock, 1 bay leaf, 1/2 tsp. thyme, and 1/4 tsp. pepper. Bring to a boil for 2 minutes, then turn off heat and let set for 1 hour.

Return to boiling, heat, cover and simmer 2-3 hours, or until beans are tender.

Makes 4 servings that are better than you can imagine.

Submitted by Karen Launchbaugh, Asst. Professor, Dept. of Range Resources

Crustless Snitz Pie

Peel 8 or 9 medium size apples (I prefer Criterion or Jonagold), and cut into eights. Put apple pieces in a large saucepan and add 1 cup of water, 1 cup of granulated sugar, and 2-3 teaspoons of cinnamon. Cook and stir at medium-high heat for 10 minutes then reduce heat to simmer.

Cream 3-4 tablespoons of margerine in a skillet at low heat then add 1 teaspoon of salt and 1 teaspoon of baking powder. Gradually incorporate 1/3 to 1/2 cup of brown sugar.

Pour the sauce over the apples and gradually add 3/4 to 1 cup of sifted flour. Mix together thoroughly then pour into two 9-inch ungreased pie plans (I use recycled aluminum ones from store-bought pies). Preheat the oven to 425 degrees and bake for 35 minutes. Remove the pies from the oven and cool outdoors. Cover and refrigerate.

Submitted by Richard L. Folk, Asst. Professor, Dept. of Forest Products

In Memory



1992

Robert Schmitt BS Forestry 1946

1993

James E. Mattox BS Forestry 1947

1994

William Allison BS Forestry 1972

Paul Richelson BS Forestry 1937

Henry Sauselen BS Forestry 1944

1995

Kenneth Baldwin BS Forestry 1939

James H. Clack BS Forestry 1940

Durwood F. Coats BS Forestry 1959

Thomas J. France BS Forest Resource Mgmt. 1962

Howard E. Johnson BS Forestry 1939

Royal H. (Jerry) Johnson BS Forestry 1927

Marvin Marshall BS Forestry 1937

John Erza Rinhard BS Forestry 1950

Dale Foster Robertson BS Forestry 1939

Peter W. Taylor BS Range Management 1941

Franklin Schoeffler BS Forestry 1940

John Woo MS Forestry 1967, Ph.D. 1979

1996

James W. Betts BS Forestry 1950

Warren H. Bolles BS Forestry 1926

Stephen D. Butler BS Forestry 1962

Glenn Crouch BS Forestry 1959

Lloyd G. Hayes BS Forestry 1934

Rick Konopacky Ph.D. Fish Resources 1984

Maxwell T. Lieurance BS Range Management 1950

Lance Nelson BS Fish Resources (1980's)

George Ernest Nietzold BS Forestry Management 1940

C. Terry Payne BS Forestry 1942

Richard C. Presby BS Forestry 1960

Ernest Lavelle Thompson BS Forestry 1938

Harry Vogt BS Forestry 1941

Larry R. Wimer BS Fish Resources 1974

FWR Honor Alumnus (for 1985)

Brian A. Miller BS Range Resources 1974

1997

Herman Kopper BS Forestry 1939

Mary (Perley) Melbye BS Fisheries Resources 1980

No Date Available

Betram Baker BS Forestry 1941

Warren G. Miller BS Forestry 1940

Thomas R. VanKleek BS Forestry 1952

Thank you, Idaho Forester

by E. Delmar Jacquish

What a wonderful and humble honor to have this issue the Idaho Forester dedicated to the alumni of our college. Most often the students concern with the "after life" of college is a job and the outlook for future. The fact that students will be alumni of a great university and an outstanding college doesn't become a reality until they are graduated and meet other, usually older, graduates on the job, at a meeting or some other strange place.

A career in public forestry gave me the opportunity to meet many CFWR alumni in our more traditional lines of work. I have found them in many other places too. One was a physician I met on an airplane, several are science or biology teachers in high schools, several are lawyers, one was Captain John Black '50' who was in charge of a training team I was assigned to when I was at Fort Benning in 1955 and there were many others. The point is that CFWR alumni are 4,350 strong. We are every where in society doing a lot of things to make this world a better place.

About 12 years ago a group of CFWR alumni gathered together because they wanted to give something back to the college that was so important to their personal and professional lives. Their good intentions resulted in the formation of the CFWR Constituent Alumni Association.

(The "Constituent" part indicates that the Association is officially recognized by the University of Idaho Alumni Association.) From the very beginning, the primary interest of the CFWR Alumni Association was to support students of the college and to encourage them to be a professional through out their careers.

The association actively supported the move to an integrated curriculum. The Trustees talked with students and faculty, offered their assistance when it was appropriate and began to build a good relationship with both students and faculty.

When the University's Centennial Celebration came along, the CFWR Alumni Board of Trustees was asked to lead the effort to raise funds for the University from the CFWR alumni. The Board did not believe that the fund drives were an appropriate thing for it to do and declined. A few other alumni thought that, if the funds could be earmarked for scholarships for CFWR students, our alumni would respond. They, and our many friends did respond in the amount of more than \$4,982,000 for support of CFWR scholarships and programs.

The Board of Trustees was encouraged by the response of our alumni to support our students. They established the CFWR Alumni Student Fund (AASF) as a primary activity for the Association. The purpose of the fund is to assist the various student clubs to send representatives to the meetings of their professional organizations. As the fund grows, we also hope to provide some funds to the Student Activities Council or individual student clubs to promote seminars, prepare exhibits and demonstrations or other activities which will give students professional experience outside of the classroom.

The concept of the Alumni Student Fund appealed to the owner and employees of Northwest Management, INC., (most of whom are CFWR alumni) a

forest management consulting firm in Moscow. They have pledged \$1000 a year to be added to the moneys distributed by the CFWR Alumni Board of Trustees. In just three years, the Alumni Association has assisted over 200 students with than \$7,000 to support their professional development. Keeping the CFWR Alumni Student Fund growing will be the primary push for the Alumni Association for many years to come.

I sincerely thank all our Alumni that contribute to the the support of the College of Forestry, Wildlife and Range Sciences. Your support is making a difference.

I also encourage those of you who have not yet had the pleasure of supporting our students to do so. Let me suggest an easy way to get involved. Write a check to the University of Idaho Alumni Foundation for \$5 plus \$1 for each year since you graduated. Write, "CFWR Alumni Student Fund" on the memo line. Then, every year, add one more dollar to your contribution. Watch for the stories in the CFWR Alumni News on how your gift helped those students who are coming after you. You'll enjoy the pleasures of knowing that you too are making a difference.

Once again, on behalf of all CFWR Alumni, let me thank the staff of the "Idaho Forester" for dedicating this issue to us. We will try to be deserving of our tribute. ▲

E. Delmar Jacquish is president of the CFWR Alumni Association (B.S. Forest Resources 1953).

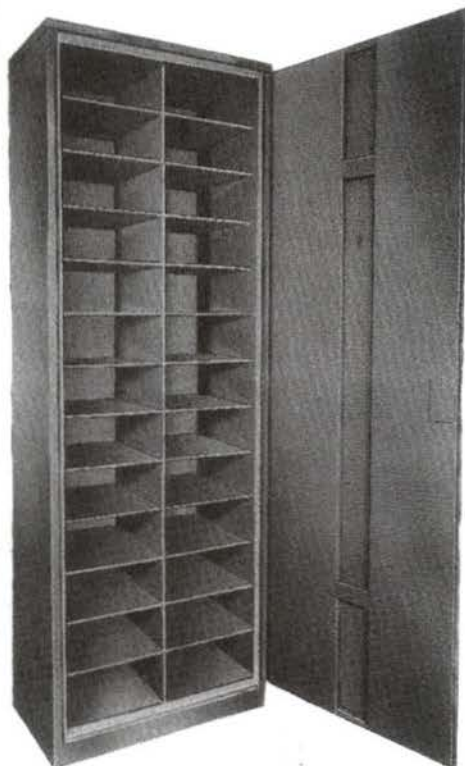
Whiteness
Although we're told that
White's the mix of all the colors,
When it's all you see around you,
When there is no form, no shape
To fix upon,
When the swirling snow blends
Perfectly with the lowering clouds,
And earth and sky meet, somewhere,
Then it might as well be black.
Presence and absence of color,
Light and darkness, can be equally
Unenlightening.

G.J. - Genessee, ID
 January 29, 1996

Index to Advertisers

UI Bookstore	15
Nutrena Feeds	17
UI, College of Forestry, Wildlife and Range Sciences	26
Northwest Management, Inc.	40
CFWR Publications	40
Spokane Machinery Co.	45
Kettle Krafts	49
Pence Contracting	52
North Idaho Timber Sports	55
Lane Science Equipment Corp	Inside back cover

NEW! Lane Science Cabinets now feature durable Neoprene Door Seals and Powder Paint Finishes.



Herbarium Model 1-A

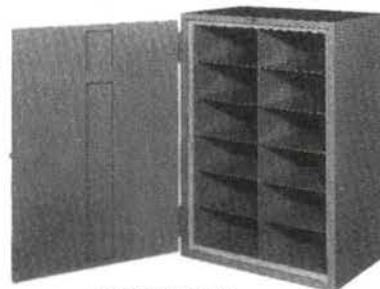
*Safe-guard your
valuable
specimens with*

Lane

**HERBARIUM
CABINETS
PERMANENT SPECIMEN
PRESERVATION**

Lane Herbarium Cabinets provide maximum protection, completely air sealed with the finest neoprene resilient seal, double wall construction and equipped with the Lane exclusive lift-off door.

- Double wall construction
- Pest proof & air tight seal
- Double panel door
- Lift-off safe type hinge
- Fumigant compartment
- 3-point locking mechanism



Herbarium Model 2-A

FOR ILLUSTRATED BROCHURE, WRITE

Lane

SCIENCE EQUIPMENT CORP.
225 W.34th Street New York, N.Y. 10122

Lane Science Equipment Corp.
225 W.34th Street
New York, N.Y. 10122

Dept C
Phone:
212-563-0663
FAX: 212-465-9440

Name _____ Title _____
Institution _____
Address _____
City _____ State _____ Zip _____
Tel No. _____

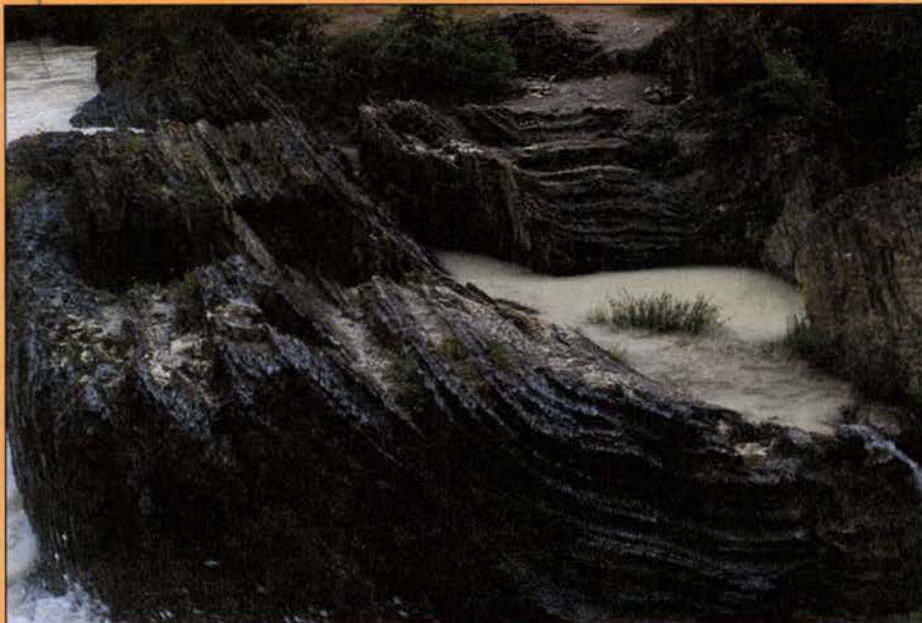


Photo credit: Keya Collins

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

Hourly Prayers

*I saw a pheasant's green-headed cough
wake the field today.*

Morning.

*I saw the hawk pluck the sparrow
like pea from pod, over the hill today.*

Late Morning.

*I saw poppy-breasted robins
hunt the lawn today.*

Noon.

*I saw two Canada geese
draw shadows on the stream today.*

Afternoon.

*I saw a barn-brown owl
skim the lentil rows today.*

Evening.

*I saw God hovering over His world
today:*

hummingbird at lilac.

D. Ortiz



Photo credit: Fred Johnson