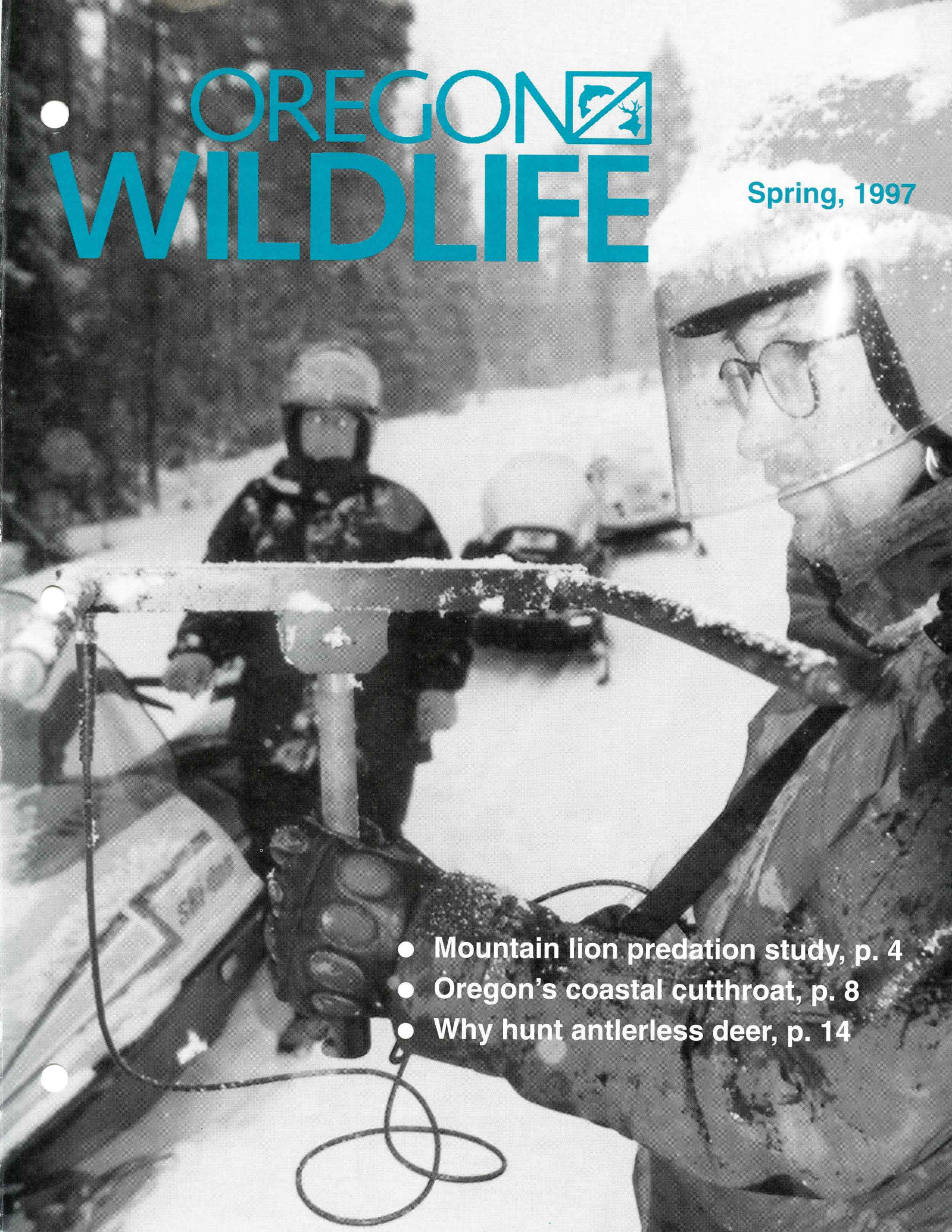


OREGON WILDLIFE

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OREGON WILDLIFE

Spring 1997
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The Cover

Researchers Cathy Nowak (L.) and Brett Lyndaker use radio telemetry equipment to track cougar in Oregon's Wallowa Mountains (page 4). Photo by Pat Wray

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FROM THE DIRECTOR

Been there, done that...

Three years ago Director Randy Fisher resigned. I was appointed as Acting Director while the Commission recruited a new director. The department staff picked up additional activities and managed to get through that period of transition with little impact on department activities. We will again gather together to move forward to deliver programs and services in a consistent and timely manner.

However, there is a higher degree of difficulty and more challenges facing the department this time around. We are in the middle of a legislative session and our proposed budget for the next biennium has some serious funding reductions in fisheries programs. We are challenged with the prospect of maintaining strong staff leadership as a number of senior and mid-level managers retire over the next year. The strategic operational planning process will give us the direction we need to move the management of fish and wildlife resources into the 21st century in an efficient and effective manner.

Can we succeed given these challenges? Yes! I firmly believe we can do it with your help. I have no doubt that we will move forward. We have some of the best employees in the state and the nation who are completely dedicated to the fish and wildlife resources of the state. Our volunteers, numerous partners and diverse constituent groups continue to provide excellent support

on an increasing number of fish and wildlife issues and programs. Their efforts are not only appreciated but essential to the department's progress.

Our priorities remain the same and we will reap the rewards of these efforts. We are working closely with the Legislature and the Governor's Office on a variety of issues. An excellent example is the enhancement package that will aid in the recovery of coho salmon populations along the coast. The Commission is proceeding with the recruitment of a new Director and hope to have a final candidate selected by June. Our Personnel staff is developing strategies to maintain strong leadership and build workforce diversity within the department. I have asked Neal Coenen (who was heavily involved in the plan) from our Marine Program to undertake implementation of the Strategic Plan so that this essential effort does not falter.

Change can be difficult, but we are committed to moving forward and will bring the management of fish and wildlife resources into the 21st century in a responsible and deliberate fashion. We will continue to build on the legacy of past leadership and look to new leadership to enhance and strengthen the excellence of natural resource stewardship in the State of Oregon.



Rod Ingram
Acting Director

UPDATE

Interim Director Appointed, Commission Chair Nominee Announced

Department Deputy Director Rod Ingram is serving as acting director during the search to replace former director Dr. Rudy Rosen. Rosen announced his departure in February to become executive director of Safari Club International, based in Arizona. Ingram took over the duties March 1.

Oregon Fish and Wildlife Commissioners have been conducting a nationwide search for a replacement. The application deadline was March 28.

Commissioners also announced nominees for the position of Commission chair and vice-chair. They nominated Dr. Susan Foster as chairperson of the Commission and Paul McCracken as vice-chair. Final selection will be made during the April 25 Commission meeting.

Free Fishing Weekend Plans Underway

Oregon's annual Free Fishing Weekend is coming, with numerous events planned at hatcheries, parks and other facilities across the state.

Free Fishing Weekend falls on June 7 and 8 this year. During that weekend, no license or tags are required to fish in Oregon. It's an excellent opportunity for anglers to "take a friend fishing" who may not normally buy a fishing license.



For events near you, contact John Yaskovic, ODFW, 503-872-5464 ext. 5359; or check local sporting goods stores, local media, or the ODFW home page (www.dfw.state.or.us)

Tip Of The Hat



Not all fish and wildlife infractions are major news events. In fact, most violations involve relatively simple actions that deplete our resources and rob legitimate hunters of opportunities. As a reminder, Judge Branford, of Lincoln County, sentenced a Newport man who had been cited for shooting at the Oregon State Police deer decoy after dark during deer season. He was fined \$750, received a two-year hunting license suspension and was placed on probation for three years.

In another case, the judge sentenced a McMinnville resident for shooting at the OSP elk decoy with an SKS assault rifle during bow season. The offender was ordered to pay \$1,500 in fines and costs, sentenced to 10 days in jail, and placed on probation for five years and forfeited the rifle.

Licensing System Faces Major Change

The "Point Of Sale" licensing system that hunters and anglers have used to buy licenses and tags for the last three years will change in 1998. The contractor, GTECH, who has delivered the system since it began, has informed the department that it will not carry the contract another term. Service will end sometime in 1998.

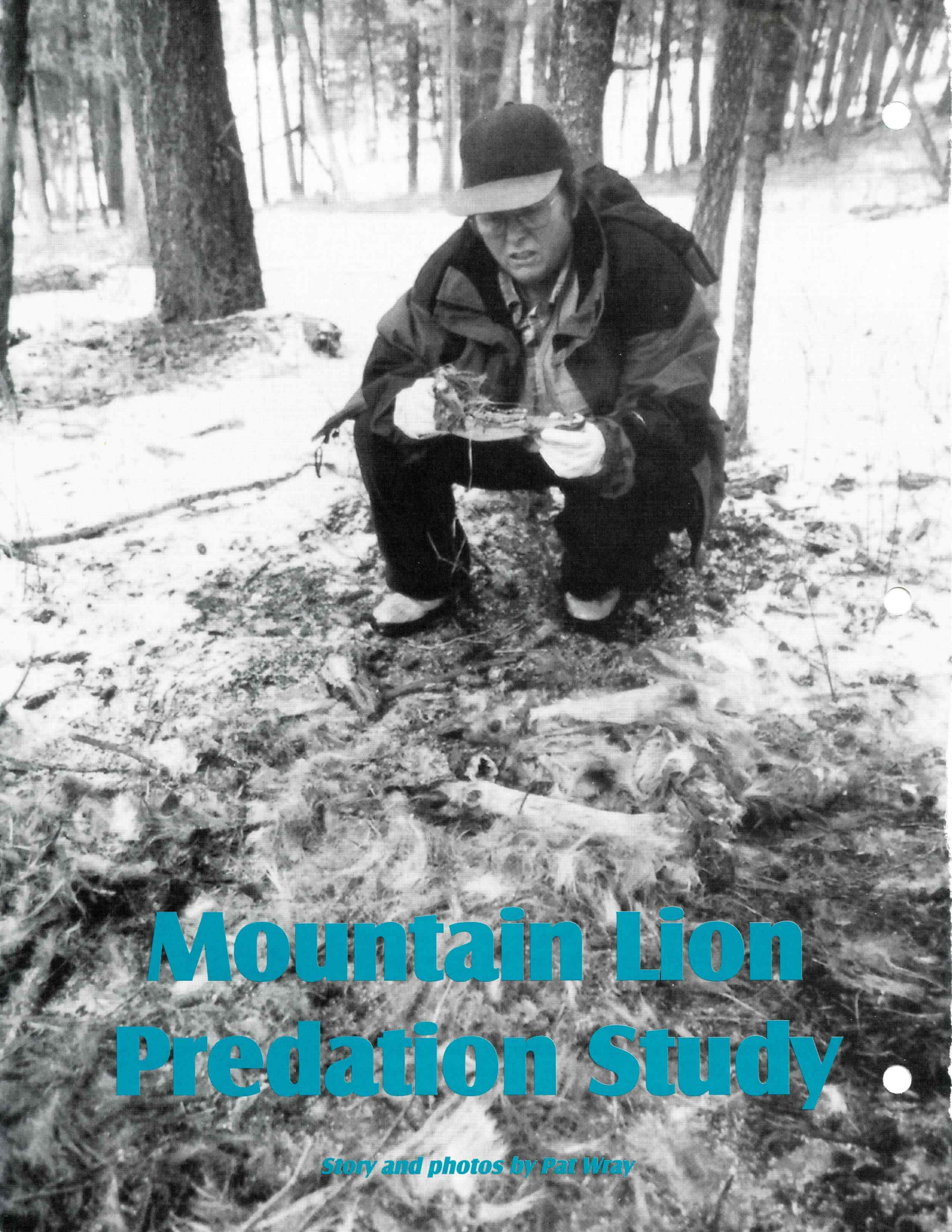
The announcement was a surprise to the agency. GTECH is the only vendor who has bid on the contract. The contract ends in March, 1998, but the

actual date to terminate the system is negotiable. Department staff have already begun working with consultants to find a way to replace the system in the next 12 to 18 months.

Computerized Point Of Sale has worked well for the agency, streamlining accounting and reducing staff effort needed to process licenses and applications. It reduced errors and was generally appreciated by license vendors because it required much less accounting than the manual system.

Important Dates to Remember

- April 25 - Commission meeting in Portland
- April 26 - Traditional opener for trout fishing (lakes, ponds, some moving waters).
- May 15 - Controlled Hunt application deadline
- May 24 - 2nd opener for trout (most moving water)
- June 6-7 - Commission meeting in Portland
- June 7-8 Free Fishing Weekend



Mountain Lion Predation Study

Story and photos by Pat Wray

I knew for certain the day was not going smoothly just after I got my snowmobile stuck. I stepped off the machine to begin digging it out and sank up to my waist in snow.

"You might wonder why we brought snowshoes," deadpanned Brett Lyndaker from the seat of his snowmobile, which was also stuck just behind me. Since he was out of punitive reach and I needed my energy to crawl out of the snow, I didn't pursue the conversation but it did occur to me that this was one helluva way to find cougars.

Department of Fish and Wildlife (ODFW) is providing logistical support and known study animals for this study being funded by WSU and the Animal and Plant Health Inspection Service.

In many ways, the situation is ideal. There are a number of cougars in the Catherine Creek country still wearing collars from the days when ODFW biologists Mark Henjum and Jim Akenson were conducting extensive research into the home range, habitat use and reproductive performance of the big cats. They have continued to replace radio collars of the surviving

We knew generally where the cat was; Cathy had been following her for several days, but intermittent blizzard and whiteout conditions now made it almost impossible to get close to her. No matter how well you read a map, it's tough to figure out where you are if the visibility is only 40 yards.

Trail after trail petered out completely, leaving us to reverse course on our snowmobiles as best we could, which was not very well. I soon identified a shortcut, which involved running the machine over my foot. This seemed to speed up the

"Snow...lets you track the cats, re-create situations, backtrack to their kills, find their scat, do all the things that are very difficult to do on bare ground." Cathy Nowak, Cougar Researcher

I was to experience that thought even more intensely a few hours later, after we had gotten stuck three more times without getting where we were going...and we still didn't have an idea where the lion was.

I was accompanying Cathy Nowak and Brett Lyndaker into the Catherine Creek drainage southeast of LaGrande searching for mountain lions. Cathy, a graduate student from Washington State University, is conducting a study for her masters degree on the feeding habits of mountain lions. Brett, an experienced field biologist between jobs with the Washington Department of Fish and Wildlife, is assisting her. The Oregon

animals so the cats can still be tracked and pinpointed. Nowak is putting those collars to good use.

Unfortunately, using telemetry gear in cougar country is almost as much art as it is science. First, you have to get in range, which might be as much as several miles in line of sight but is often less than 300 yards in the rocky outcroppings and forested hillsides here on the western reaches of the Wallowa Mountains. Signals bounce off the rocks, diminish in the trees and disappear completely in the canyons...and that's if you can get close enough to receive the signal.

process but had its drawbacks.

Finally, after multiple attempts, with the weather getting worse by the minute, we declared defeat, turned tail and retreated back to the truck, secure in the knowledge that we were neither the first nor the last crew to be handled roughly by Mother Nature.

Winter surveys like this one are inherently difficult. The phrase, "you can't get there from here" is almost a given. But for all its challenges, Nowak prefers cougar work in the winter to any other time of the year.

"It all comes down to the snow. It lets you track the cats, re-create situations, backtrack to their kills, find their scat, do all

Continued on page 6

Researcher Cathy Nowak examines the teeth and jawbone of a mule deer doe which had been recently killed and eaten by a mountain lion and two kittens.

Continued from page 5

the things that are very difficult to do on bare ground."

The format of Nowak's study requires that she closely monitor the movements of a single animal for a 25 day period, or until the cougar has made four kills, whichever occurs first.

"We try to pinpoint the cat's location as closely as we can without scaring her," Nowak said. "We operate on the assumption that lions will stay in the general area of a kill until it is consumed and then move off toward another part of their range. When we see that the animal has moved, we go in and try to find the kill. In the winter

we can often backtrack the lion's prints from the location where it laid up back to the kill. Without snow, we learned to depend on magpies and ravens to help us find it."

Once found, Nowak and Lyndaker try to identify the prey species, its age, sex and its condition prior to death.

Nowak's study may begin to answer important questions. Given the increasing populations of lions across the state, wildlife managers need to know

more about their dietary habits. What animal species do they depend upon? What is their average rate of predation? Do lions prefer certain types of habitats for their caches? Are there

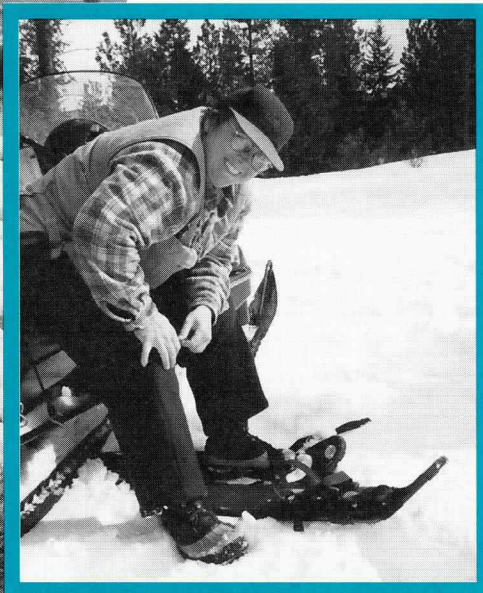
implications for deer and elk management?

There will be much more to learn as well. Nowak's study deals with female lions only. Male lions may be twice as large, with home ranges exceeding 100 square miles. Their prey choices and rates of predation may be significantly different from those of females. Although ODFW biologists are very interested in conducting such a study, declining funding may preclude it.

It's a new day, literally and figuratively. We've recovered mentally and physically from our ordeal the day before; only my boot still bears the scars. The sky is occasionally clear and even the intermittent snow showers are nothing like the marshmallow conditions of the day before.

Even better, Jim Akenson and Ken West, an Oregon State Police pilot, have found the cat from the air and radioed her location to us, giving us the best route to her as well. We get as close as possible in the pickups, then unload the snowmobiles and take off, heading for the high ground from which we hope to pinpoint her location. I am careful to keep my feet out from under the machine.

"...we see two tawny forms ghosting into the trees..."



To wear or not to wear...that is the question in snowshoe country for Brett Lyndaker (left) and Cathy Nowak.

Near the top of the hill we disembark from the snowmobiles and take off across country. This time I put on snowshoes first. Then we begin an hour-long journey across the hills, following Lyndaker, who is armed with the telemetry receiver. We go back and forth a few times, following signals which are bouncing off rocks, but soon Brett confirms the cat's direction and we are off.

Although the telemetry gear we are using does not provide distance information, Lyndaker is able to estimate our distance to the cat by the strength of the radio signal. "The closer we get," explains Nowak, "the more the cat's transmission bleeds over to other frequencies."

Soon we are moving slowly, quietly. The wind is in our faces but even so, as we top a small rise we see two tawny forms ghosting into the trees, loping noiselessly away, 75 yards away. We hadn't wanted to scare them off but as we approach it becomes obvious that our timing probably couldn't have been better.

The female and two kittens were still at the feeding site when we'd arrived. The prey is a mule deer doe, though it takes a while to make that determination. Essentially nothing edible remains and the cats would certainly have departed the area soon.

Recent snow has obscured the area but the tracks we can see seem to indicate that the deer was killed only a few feet from where the cats fed and rested.



Scrapes from four directions toward the center are classic signs of a mountain lion scat site.

Nowak and Lyndaker begin to examine the site carefully, measuring, weighing, writing everything down. The teeth are well worn; their initial guess is that the deer was at least six years old. An examination of the bone marrow shows it to be reddish yellow and liquid, an indication of poor physical condition, though this late in the winter many deer have begun to decline as a result of their limited diet.

Cougars are ambush predators. Unlike wolves, which tend to select old, sick or otherwise weakened prey by testing their endurance, lions take the animal that is most convenient, not necessarily the slowest or weakest.

Nowak and other researchers have found evidence that cougars often kill their prey by breaking the animal's neck. Claw marks seem to indicate that cats drag the animals' heads around as they flee, causing them to fall and break their necks.

Young cougars, and those which attack large deer and elk, may kill with bites to the brain or bites to the throat, causing strangulation.

The condition of this carcass makes the cause of death impossible to determine. Nowak moves over to the scat site, recognizable by scrape marks from four directions to the center. After some careful digging, she hits pay dirt, in a sense, and begins to bag her findings.

"Poop is my life," Nowak says with a smile. It is a statement perhaps, on the commitment required of graduate students in the field of wildlife biology. These samples will be analyzed and have already yielded dietary insight. In addition to deer and elk, which make up the bulk of the lions' diet, scat samples have shown some dependence on porcupine, snowshoe hare and ground squirrel.

Although Nowak's findings are still very incomplete, she has accumulated some interesting information.

The average interval between kills has been 6.3 days, with heavy dependence on mule deer does. The only males taken have been young of the year. In one instance Nowak was unable to confirm a kill for 13 days, and the next kill, an adult doe, was completely consumed in 2 and one-half days.

There is much to learn about this most secretive of Oregon's large mammals, but Cathy Nowak's work will give us a good start in understanding more about their feeding habits. 🐾

Oregon's Coastal Cutthroat Trout



Russ Stauff

Searun cutthroats can reach lengths of 20 inches or more. Resident cutthroat, which stay in fresh water, rarely exceed 12 inches.

By Randy Henry

A once prolific native of Oregon's coastal rivers has declined precipitously in the last few decades, alarming anglers and biologists alike.

When the gavel fell closing the Oregon Fish and Wildlife Commission meeting in September, 1996, anglers were faced with something that was once unimaginable: cutthroat trout in Oregon's coastal rivers would be officially off limits in 1997.

Although questions were flying hard and fast—answers were a lot harder to come by.

THEY'RE COMPLICATED

Amphidromous is the word graduate student Tommy

Williams prefers to use when describing coastal cutthroat trout. Working closely with the U.S. Forest Service on his doctorate, he is studying cutthroat trout throughout their range—from California to Alaska. In a nutshell, his studies show that cutthroat trout are among the region's most complex fish.

By comparison, salmon have a less involved life history. For instance, salmon rarely include landlocked populations (sockeye salmon are an exception), enter freshwater only for spawning,

and die after spawning. "Not that salmon have simple life histories," said Williams. "It's just that cutthroat trout exhibit high variability in life histories."

They may spawn more than once, they have overlapping generations, some stay in freshwater, some migrate to the estuary, some make it to the ocean, some are landlocked. "That may be one way they persist in spite of being found in low numbers," said Williams. "This variability may well be a result of habitat diversity and

environmental variation. Reduce the diversity of habitat and the loss of life history diversity, such as the sea-run life history, could result."

Thus the word "amphidromous." Anadromous fish like salmon migrate between salt and freshwater as a vital part of their development. An amphidromous fish migrates between fresh and salt water, not specifically for breeding but for some other phase of life history. The term "sea-run cutthroat" may not be accurate. Instead, a better description might be "cutthroat who happen to spend a portion of their life in salt water."

Department Fish Management Program Leader Bob Hooton says that's where the problem arises. It's not so much the scarcity of cutthroat trout in Oregon - "We've got good populations in many coastal streams. For a variety of reasons,

"We've got good populations in many coastal streams...we just don't have many cutthroat returning from the ocean."

Bob Hooton, ODFW Biologist

we just don't have many cutthroat returning from the ocean."

CONSERVATIVE DECISION

Searun cutthroat were once a mainstay of Oregon's coastal sport fisheries. The feisty, aggressive trout takes bait easily and ranges in size from 12 to 20-plus inches.

Searun cutthroat trout in the Umpqua Basin declined so much since the 1950s that the federal government listed them last fall as an endangered species. Protective measures will cost huge sums of money. If other coastal searun cutthroat populations decline in the same

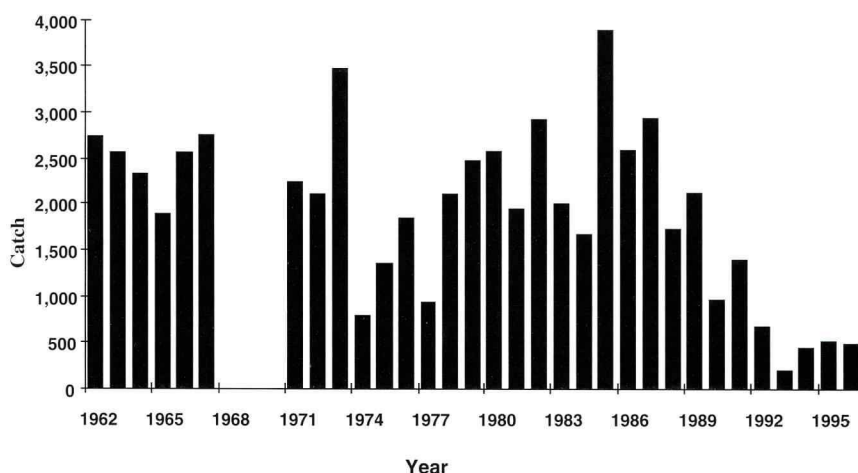
way, similar conservation and recovery efforts could be required coast-wide.

Unfortunately, most questions about searun cutthroat trout remain unanswered. What is the relationship between searun cutthroat trout and other cutthroat populations? Williams speculates that all cutthroat have the capacity to be amphidromous. If so, then why are so few seeking it now? Oregon's estuary habitat for searuns is on the southern edge of cutthroat range and is subject to more variation than northern areas - habitat is of lesser quality, and land and water use and development in estuaries has degraded critical habitats even more. Perhaps ocean conditions have been so poor that there is no reason for searuns to visit the ocean - it's safer and healthier to stay in the streams. Perhaps the cutthroat trout's aggressive nature, and their popularity with anglers, is one reason for the decline. Perhaps some other condition is reducing the opportunity for some cutthroat to go to sea where they grow bigger and stronger.

Biologists Russell Stauff, of Gold Beach, and Bob Buckman, of Newport, say streams in their respective districts have good numbers of cutthroat trout. Stauff reports that a study last year showed good numbers of

Continued on page 10

Catch of Sea-run Cutthroat Trout, C&D Marina, Siuslaw Basin, 1962-1996.





ODFW photo

Seining near Gold Beach has provided important data about searun cutthroat trout.

Continued from page 9

searun cutthroat trout in the Winchuck River and he believes the area south of Cape Blanco is generally better for searuns - possibly because ocean conditions on the south coast have been better than the north coast. In other areas, such as the Siuslaw and Alsea river basins, searun cutthroat returns are mere remnants of years past and population declines are obvious and drastic.

Stauff and other department biologists continue gathering data to answer basic questions about cutthroat trout. But with a puzzle as complex as the cutthroat trout, every river and every river reach is a separate

piece. Researchers need many more pieces before a clear picture can begin to emerge.

Bob Hooton recently completed a "Status of Coastal Cutthroat Trout in Oregon," a 30-page review of the issue. In the report, he looks at known data, identifies areas of insufficient data and points out possible contributions to declining populations. He also outlines current conservation strategies. Hooton says the commission's concerns for declining numbers of searun cutthroat trout are entirely warranted. "We're all wrestling

with the question of what to do," said Hooton. "Can we preserve the searun life history? There are many things we don't know, but in the interim, there are management actions we can take until we have more answers. We can reduce the risk to wild searuns by terminating releases of hatchery cutthroat trout. We can gather more data to help us understand these fish and their needs. We can monitor populations more thoroughly. We can work cooperatively with private and public land managers to protect and restore habitat."

Many steps have already been taken, and more research is underway now than at any other time in history. In the meantime, harvest is the one thing the department can control. "We need to make sure we don't over-harvest them, and with these regulations, we know that's not happening," said Hooton. "Then maybe we can find some solutions." ■

"There are many things we don't know, but in the interim, there are management actions we can take until we have more answers."

Bob Hooton, ODFW Biologist

Biologist Russ Stauff checks a screw trap for migrating steelhead and searun cutthroat trout.



ODFW photo

A recently completed study by the Oregon Department of Fish and Wildlife and the Northwest Bass Club has confirmed something bass have always known and something that bass fishermen have always suspected — sunken logs provide great bass habitat and salvaging them from coastal lakes removes bass habitat.

"We didn't like the log salvage activity," says Kin Daily, ODFW's warmwater fishery biologist for western Oregon. "We

thought that most woody material should remain in the lake."

Anyone can apply to the Oregon Division of State Lands for a permit to salvage logs from lake bottoms. Because the Oregon Department of Fish and Wildlife comments on permit applications, staff biologists thought it would be a good idea to collect some specific data about how bass use sunken logs and other underwater habitat in Oregon's coastal lakes, where some of the state's best largemouth bass fishing can be found.

ODFW fishery biologists had tried diving in Tahkenitch Lake in the late 1980s in an attempt to visually monitor the kinds of habitat bass were using. Unfortunately, because of the lake's high concentration of plankton and other fine material, the

divers' visibility was hampered, making data collection difficult.

So the biologists decided to radio-tag bass instead. The only

Oregon Department of Fish and Wildlife and volunteers from the Northwest Bass Club complete a two year largemouth bass habitat study on Tahkenitch Lake

problem was that tagged bass needed to be monitored for at least a year to get the necessary data. "We didn't have the resources to have someone on the lake following the fish around," explains Daily. "That's when the Northwest Bass Club stepped in and volunteered to do it."

Together, they applied for and received a \$28,000 grant from the Fish Restoration and Enhancement Program (R&E) to fund the project. The Restoration and Enhancement Program was created by the Oregon Legislature in 1989 and is funded by a surcharge on sport and commercial fishing licenses and commercial poundage fees. The program identifies and recommends funding for fish restoration and habitat enhancement projects throughout the state.

The radio-tagging project began in 1994. Members of the Northwest Bass Club caught the fish for the study by hook-and-line. A club member, who is also

a veterinarian, implanted the radio tags in eight largemouth bass. Tag batteries expire in about six months, so another seven bass were tagged in 1995 in order to provide a full year of data.

Much of the day-to-day monitoring work fell to bass club volunteer Jim Pearson, of Florence, who braved many

cold, rainy days in his boat tracking the fish as they swam beneath him. But it was all worth it as far as Pearson

was concerned. "We wanted to get the proof of the pudding that the fish use this type of habitat," he says.

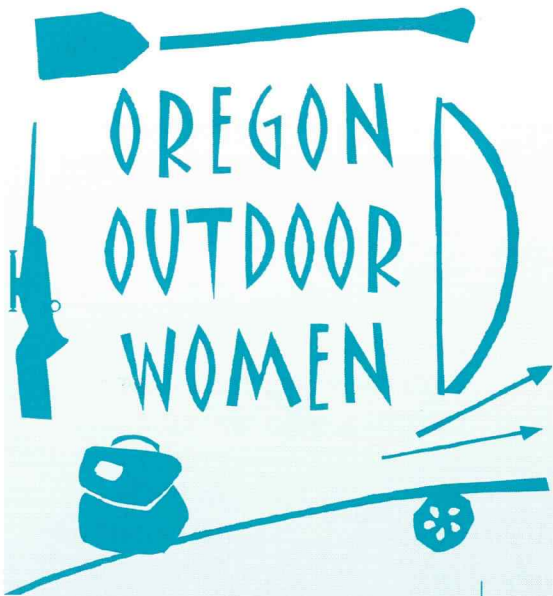
Although fieldwork is now completed, it will be another year before the formal report is issued. Initial results show that the largemouth bass in Tahkenitch Lake use weedlines, dropoffs and creek channels at various times of the year. The data collected also demonstrated extensive bass use of sunken logs for cover throughout the year. These findings can be applied to other coastal bass lakes with similar habitat.

"We'll use these data if there are more requests for log removal in coastal lakes," says Daily. "We collected a lot of solid scientific data as well as some information on the behavior of bass." ■

Bass Watch

By Jim Yuskavitch





skills, basic fishing, deer and elk hunting, canoeing, shotgun skills, clamming and crabbing, and bow-hunting participants gained the confidence to "get out there" and enjoy all that Oregon's forests, lakes and streams have to offer.

In 1997 Oregon Outdoor Women has been expanded to reach more women with a greater variety of outdoor skills training. In addition to another five Basic Seminars, which feature the same half-day workshop choices as those offered last year plus waterfowl hunting and wildlife identification, Oregon Outdoor Women is also offering four Single-Focus Seminars. These single focus seminars will devote an entire day to a single activity, such as **turkey hunting, coastal clamming, crabbing and fishing, pheasant hunting and boat handling, from a-z.**

Seminars are best suited to women age 14 and older, although at the August 2 seminar there will be separate classes for children (age 8-13) of participating mothers for no extra charge.

In 1996, over 330 women, many with little outdoor experience, hiked through the woods using a map and compass, paddled a canoe across glossy waters, or learned to field dress a deer or elk. In so doing they took the first step in making outdoor activities an important part of their lives.

These women took part in one of the five Oregon Outdoor Women seminars last year. In workshops which included **rifle skills, fly fishing, survival**

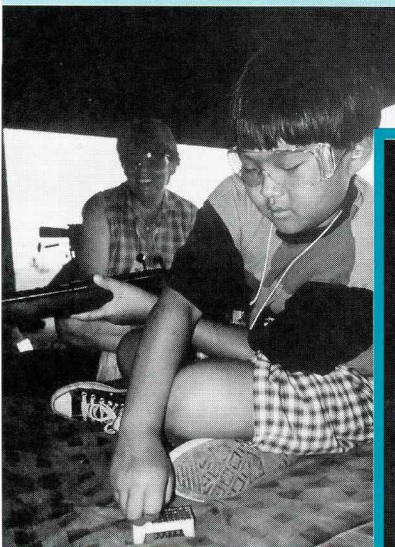
BASIC SEMINARS

Medford	May 17
La Grande	June 28
Klamath Falls	July 12
Portland	August 2
Eugene	August 23

New for this year are the Single-Focus Seminars. Participants will spend the day learning about a single outdoor activity. There are four events planned for '97. Women can learn to hunt turkeys, safely trailer, launch, and drive a boat, catch clams, crabs, and fish on the coast, or go on a guided pheasant hunt.

SINGLE-FOCUS SEMINARS

- Turkey Hunting**, Roseburg–April 5
- Boating and Fishing from A-Z**, Portland–April 12
- Capture the Coast**, Garibaldi–July 19
- Pheasant Hunt**, Corvallis–September 13



The Stream Scene

Watersheds, Wildlife and People

by Patty Bowers, Eastern Oregon STEP Biologist

WATERSHED EDUCATION PROJECT

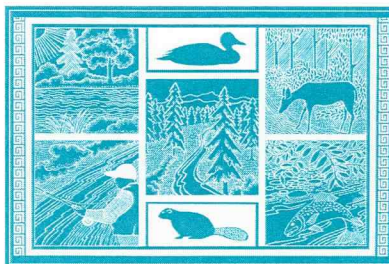
If you are looking for interesting and appropriate curriculum materials that will involve your students in the natural environment, and if you are seeking an opportunity to teach our future decision-makers how to make a difference, then *The Stream Scene: Watersheds, Wildlife and People* is for you!

The Stream Scene: Watersheds, Wildlife and People was produced to look at watersheds from many perspectives. The arrangement of the curriculum will guide the user from the broad spectrum of watershed systems, riparian areas and their respective components to the specific nature of streams and the aquatic life they support.

Students in grades six through 12 will benefit most from the concepts presented in the guide, although many of the activities can be adapted for use with younger students.

ACTIVE LEARNING

Each unit includes a content (or background information) section generally written for the teacher, but it may be presented to students as a reading assignment or in lecture/discussion format. Each unit also includes activity extensions, bibliographic entries, and activities to develop



and illustrate the concepts presented.

Activities are found in the "teacher" version and the "student" version which is ready for duplication or can be modified to suit specific course needs.

The Stream Scene is designed to prepare students to perform field investigations, although classroom activities can be used individually or in combination, without a field experience. Individual investigations can be used for short field trips or the entire procedure can be completed on a longer trip.

What your students touch and feel as part of their experiences with this program will remain with them throughout their lives. We hope *The Stream Scene* is a meaningful and enjoyable guide as you develop watershed awareness in your students, school and community.

For further information, contact Information and Education, Oregon Department of Fish and Wildlife, P.O. Box 59, Portland, Oregon 97207. ■

CREEKS AND KIDS '97 WATERSHED EDUCATION WORKSHOPS FOR EDUCATORS

MOUNTAIN LAKES CAMP (45 MINUTES FROM MEDFORD NEAR KLAMATH LAKE) JUNE 30-JULY 3

JACKMAN YOUTH AND NATURAL RESOURCES CENTER (LAKE CREEK CAMP - SOUTHEAST OF JOHN DAY) JULY 7-10

Oregon Department of Fish and Wildlife's popular watershed education workshops are being held again in 1997 - all educators are invited to attend. The workshops are designed to give educators the skills and confidence to use their local streams as learning sites. Field experiences involving stream surveying and monitoring will be highlighted, as well as classroom activities from *The Stream Scene*.

The cost will be \$40 per person which includes lodging and meals for this three day workshop, copies of *Stream Scene* and other resources. Graduate credit will be available.

For more information and to receive a registration packet, contact Patty Bowers, Workshop Coordinator at 541-573-1703.



ODFW photo

Although many deer die in winter, their deaths often occur because they enter winter in poor condition, having had to compete with too many other deer for too little food on the summer and fall ranges. A management program which includes antlerless hunting can help keep deer numbers in balance with available habitat.

Why Hunt Antlerless Deer?

*by Danielle Crop
ODFW Intern*

Small white flakes are drifting slowly through the air. There is no sound, as if this whole great scene lived in a vacuum. A fawn, nearly a yearling now, emerges from the underbrush with its mother. They desperately need to find the tender shoots that are beginning to

sprout, for it has been a long winter. It has been a hard year for this mother and fawn, but not as hard as it has been for many others.

The doe is pregnant with a fawn that is in great danger. The doe has lost 25 percent of her body weight over the winter. If she loses much more she could

lose the unborn fawn and perhaps die herself.

She and her fawn entered the winter with a reserve of body fat stored while feeding on the rich summer range. That reserve was her only hope of surviving the low temperatures and poor quality food available during winter. Their survival depends

on how much high quality food produced and available on the summer range, but last spring and summer were very difficult.

The doe is not a high ranking female in her society; she and her fawn had to get by with lower quality habitat. She was reduced to feeding on grasses instead of the growing tree shoots and broad-leaved herbs that her digestive system needs for sufficient nutrition; and even in these secondary areas she had to compete with other does and fawns for the scant lower quality food.

Her fawn is in even worse condition than she. The fawn's smaller body size allows greater heat loss during the cold weather so she needs more energy to survive. If there are any late season blizzards or cold temperatures it is likely that these two deer along with the unborn fawn will die.



The situation described above can be prevented. We can help to ensure healthier deer populations and better fawn survival by imposing a management scheme which includes antlerless deer hunting. A population that is in balance with the available habitat and food will develop stronger animals, healthier fawns and will cause few negative effects on the environment.

Wildlife Biologist Steve Kohnmann commented, "Antlerless deer hunting can help to maintain productive

herds. If the density is reduced, a deer population often responds with a higher reproductive rate. Individuals are healthier, risk of disease outbreaks decreases, and there are more high quality animals."

It has been shown that healthier deer produce more fawns, approximately 1.3 per doe, while at high density deer produce approximately 1.2 per doe.

Healthier deer herds are not the only reason to hunt antlerless deer. Other species of animals and plants as well may suffer when deer are overcrowded. In parts of the south Umpqua Valley the high population of deer suppresses buck brush so substantially that there is no additional growth in size over the year.

Research has also found that some bird species may decline or even disappear as deer populations in the area swell. In the Eastern United States, heavy deer feeding on the lady slipper orchid has contributed to it being listed as a protected species.

Hunters will also appreciate the increased recreational opportunities of antlerless hunting. "Hunters have a higher probability of taking a deer home, if they can legally harvest does...and the meat is often much higher quality." said Doug Cottam, Wildlife Biologist. There will also be better buck hunting because there will be more high quality, healthy animals in the population due to better nutrition.

Damage to homes and other property also decreases near deer populations held in check with antlerless hunting.

"Increased hunting pressure will reduce density as well as deter certain animal behaviors. An important benefit [of antlerless hunting] is animal damage control" according to staff big game biologist Dan Edwards.

Which means there will be fewer deer in your garden chewing on your roses and fewer deer on the roads. As the density of the animals decreases, so will the probability of hitting one with your car. The animals will not need to invade human inhabited areas because there will be enough high quality habitat for them outside those areas.

Although antlerless hunting is not always necessary, deer populations with favorable climate conditions and few natural predators often exceed the carrying capacity of their habitat unless the population is artificially controlled. When overpopulation occurs, the price exacted, not only from the deer but from animals that surround them and the plants that support them, can be excruciating...and long lasting.

The judicious use of antlerless hunting can help preserve healthy, stable populations of deer and habitat diversity for future Oregonians. 🌲

Oregon Outdoor Women

The Oregon Department of Fish and Wildlife invites women age 14 and older to attend the outdoor skills training seminars planned for 1997.

BASIC SEMINARS

Medford May 17

La Grande June 28

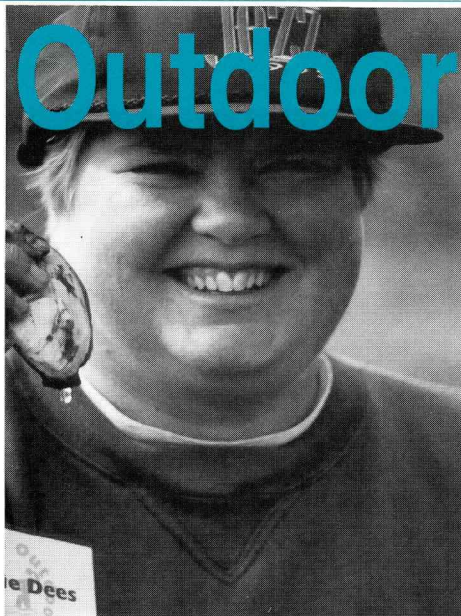
Klamath Falls July 12

Portland August 2*

* Children's workshops also offered at this location

Eugene August 23

At each of the basic seminars participants will receive training in two of the following subjects:



Shotgun Safety and Shooting •
Survival Skills • Basic Fishing
• Flyfishing • Waterfowl Hunting
• Canoeing • Wildlife Identification •
Archery • Walleye Fishing •
Rifle Safety and Shooting
• Handgun Safety and Shooting •
Deer and Elk Hunting

SINGLE-FOCUS SEMINARS

- Roseburg, April 5—Turkey Hunting
- Portland, April 12—Boat Handling
- Garibaldi, July 19—Capture the Coast (Clamming, crabbing and coastal fishing)
- Corvallis, Sept. 13—Pheasant Hunting

FEES

\$50 for Basic Seminars and "Capture the Coast Seminar"

\$35 for other single-focus seminars

Cost includes box lunch, barbecue dinner and all necessary equipment.

Some scholarships are available.

For further information call (541) 757-4206, FAX (541) 757-4252, or Internet: wrayp@peak.org

(may be photocopied)

YES, I'm interested in receiving further information about ODFW's 1997 Outdoor Women Program.

Name _____

Address _____

Phone _____

Please mail to ODFW, NW Regional Office, 7118 NE Vandenberg, Corvallis, OR 97330-9400, Attention: Kendra Callahan; or call (541) 757-4206, FAX (541) 757-4252, or Internet: wrayp@peak.org



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