

# OREGON WILDLIFE

September-October 1985



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OREGON FISH AND WILDLIFE COMMISSION

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Ron E. Shay, Editor

**Cover** — Oregon State Police Cadet Janice Reeher explains how to check for legal-size crab.

*Photo by Jim Gladson.*

## HUNTER EDUCATION PROGRAM

Months of June and July, 1985

Instructors Approved ..... 41

Total Active ..... 1,388

Students Trained ..... 741

Total To Date ..... 321,222

## HUNTING CASUALTIES

(Reported in 1985)

Fatal ..... 1

Nonfatal ..... 6

## Statement by Governor Vic Atiyeh

The conservation movement was founded by anglers and hunters, and they became Oregon's first environmentalists. They have traditional held strong views about clean air, clear water, and a livable habitat for wildlife, and have been in the forefront of efforts to maintain these qualities in our state. Millions of dollars have been channeled into the improvement and maintenance of Oregon's wildlife habitat through taxes on hunting and fishing equipment, with the full support of sportsmen's organizations.

Oregon's magnificent outdoors and its abundant wildlife are among its most precious resources, and our citizens are justifiably intent upon maintaining sound use of their environment. Many individuals may not be aware of the contributions hunters and fishermen make to the cause. Others might not be aware that all wildlife populations benefit from scientific management as do all of our natural resources.

Therefore, as Governor, in recognition of these historic and continuing contributions, I welcome the opportunity to proclaim September 28, 1985, as the 13th annual recognition of

**"HUNTING AND FISHING DAY"**

in Oregon and commend these individuals and organizations for their contributions in preserving our precious fish and wildlife resources.

Victor Atiyeh  
Governor

## So Goes Wildlife — A Guest Editorial

Recently the Western Association of Fish and Wildlife Agencies met in Colorado. James Ruch, Director of the Colorado Division of Wildlife was president of the organization and gave the introductory address.

President Ruch's address is too long for total inclusion here. He talked of the past assessments of the wildlife situation and how folks fourteen years ago looked to the future. He then looked ahead. Following are a few of his comments.

"Our test is going to be how well we maintain a balance. How well we live within our resource base. How well we provide the resources we need to fuel an advanced, sophisticated technology without destroying our basic wealth — land, water and soil.

"That seems philosophical and esoteric. However, in the western United States, the bottom line is also a matter of cold, hard reality — economic reality.

"The West is a major producer and repository of the nation's wealth. The economies of many western states rely heavily on mining, energy production and agriculture. At the same time, many of the western states, like Colorado, have an economic stake in tourism and outdoor recreation. The decisions which will be made to balance this fragile equation will be economic decisions. Fish and wildlife are either going to have to be incorporated into this decision-making process or they will be left outside the scheme altogether.

"The case for including wildlife in this decision-making process is a strong one. Wildlife is an integral part of the tourism and recreation segments of our economies. Wildlife is one of the reasons the West has become such a hot spot for development. People come here because they are seeking a higher quality of life. That means they want good jobs, good places to live, and surroundings which provide the opportunity to enjoy the outdoors, to see wildlife, to hunt or fish, to look upon wide, open spaces.

"Our role is to understand and work with the economic decision-making process to see that fish and wildlife are not only considered, but emphasized. (continued on page 12)





A night vision scope mounted on a camera captured this image of two Game Division troopers on Columbia River patrol. They can see without lights and depend on radar to spot illegal activities.

## Oregon's Wildlife Protectors — The State Police Game Division

They travel by boat, by air, by horseback, pickup and foot. They cover Oregon's 96,000 square miles of land, and ocean waters three miles seaward. Their job is to enforce the fish and wildlife laws of the state, whenever and wherever that need arises.

They answer to a variety of names including game warden and game cop. Officially, they are troopers and officers of the Oregon State Police Game Division.

Their white, four-wheel-drive trucks are a familiar sight in Oregon's outdoors. Anywhere sport, commercial or illegal use of state fish and wildlife resources might occur, they are there to watch, help or arrest.

This special unit of 120 State Police officers is one of only two in the U.S. not attached to state fish and wildlife management departments.

Fish and game protection laws have been on the books in Oregon since the late 1800's. However, until 1931, there was no effective, broad-based means to enforce these laws. In that year, the state legislature created the Oregon State Police (OSP) system. A requirement that the force include wildlife enforcement officers was part of the legislative package.

The game enforcement arm of the OSP holds equal status within the organization to criminal and traffic divisions. Headquarters is in Salem with five regional offices in population centers around the state. Additional field officers operate from more than forty district offices or posts.

The division is equipped with an airforce of four fixed-wing craft (see related article "Night Flight"), and a navy ranging from ocean-going inflatable Zodiak boats, to a jet-powered boat used on the Col-

umbia and Willamette rivers.

The division budget for the 1985-87 biennium is \$13.1 million. One-fourth of that total comes from the state General Fund, to pay for enforcement of commercial fishing laws. The Oregon State Parks Division and the State Marine Board provide a smaller portion to Deschutes River patrols and other boating-related work.

The bulk of the Game Division operating funds come from angling and hunting license revenues allotted to the division by the Oregon Department of Fish and Wildlife. This budget share reflects the coverage emphasis on sport fishing and hunting, and illegal activities involving fish and game.

During the fiscal year 1983-84, game officers issued more than 10,000 written warnings and made a similar number of arrests for fishing and game violations. More

*(continued on next page)*

than one-third of those actions were hunting or angling without a proper license.

Within that same year, the officers made 200,000 checks of legal licenses.

The officers and fish and wildlife biologists often work together gathering both enforcement and biological information. Many biologists are deputized to enforce game laws, but primary arrest responsibility rests with OSP.

Likewise, officers regularly contribute to information-gathering programs such as sportfishing creel census. During the 1983-84 fiscal year, game officers turned in almost 35,000 creel census reports.

The troopers and officers receive special training in fish and wildlife management principles, species identification, and sophisticated criminal investigative techniques. All are essential ingredients in conducting a unique form of law enforcement. □



Coastal and Columbia River game officers monitor commercial activity as well as recreational. Working the docks and the waters to check on commercial operations is a large part of the job for some officers.

## So You Want To Be a Game Warden?

Does being a member of the Oregon State Police Game Division sound like a good job for you? Well, get in line. About 30 to 40 current members of other State Police divisions also want in. They are on a waiting list for transfer opportunities to the 120-member Game Division.

Once an officer gets a game assignment, he or she is unlikely to leave. The annual turnover rate hovers just above three percent. Still not discouraged about your chances? Okay. Here is what you must do.

First, you must be accepted as a recruit into the Oregon State Police — no easy task. You must be 21 years of age or older, a high school graduate, and “have good health, good moral character and exhibit the maturity, integrity and responsibility necessary to exercise police powers,” according to the OSP applicant fact sheet.

Your eyes must be sharp (at least 20/80 uncorrected in each eye). You must also pass a tough written exam, thorough physical and an agility test, “which may include, but not be limited to, testing of your running, push-ups and sit-up abilities,” again according to the

fact sheet.

Recruits may be appointed directly to the Game Division, but many current members served in other divisions, such as traffic, before transferring in.

The competition is tough. Forty-nine of the current Game Division members have college degrees. Almost half of those are in Fish and Wildlife Science. Twelve more are in criminal justice. Almost all game officers have completed some course work toward a college degree.

If you are willing to settle for a foot-in-the-door, part-time position, there is a bit more hope. Every year, the division hires 19 cadets for three to six-month assignments in high-use recreational areas.

Jobs include operating patrol boats on the Deschutes River, checking anglers at lakes, and checking crabbers, clammers and anglers along the coast.

One more discouraging word — State Police Superintendent, J. C. Williams recently announced a department-wide hiring freeze because of budget problems. This may affect all hiring for at least fifteen months. □



This young angler gets some instruction on how to fill out his salmon-steelhead tag.



## People Are Key To Enforcement Work

Working conditions could not be more different for Oregon State Police Senior Troopers, Kim Rainey and Jim Hatch.

Rainey and one other trooper patrol the 10,000 square miles of mountains and deserts that make up Harney County in southeastern Oregon. Based in Burns, Rainey covers some of the most spectacular country in the state, including the Steens and Trout Creek mountains.

Hatch's territory is mostly water. From his office in Newport, he patrols the commercial docks and spends a large portion of his time at sea checking commercial boats and fishermen.

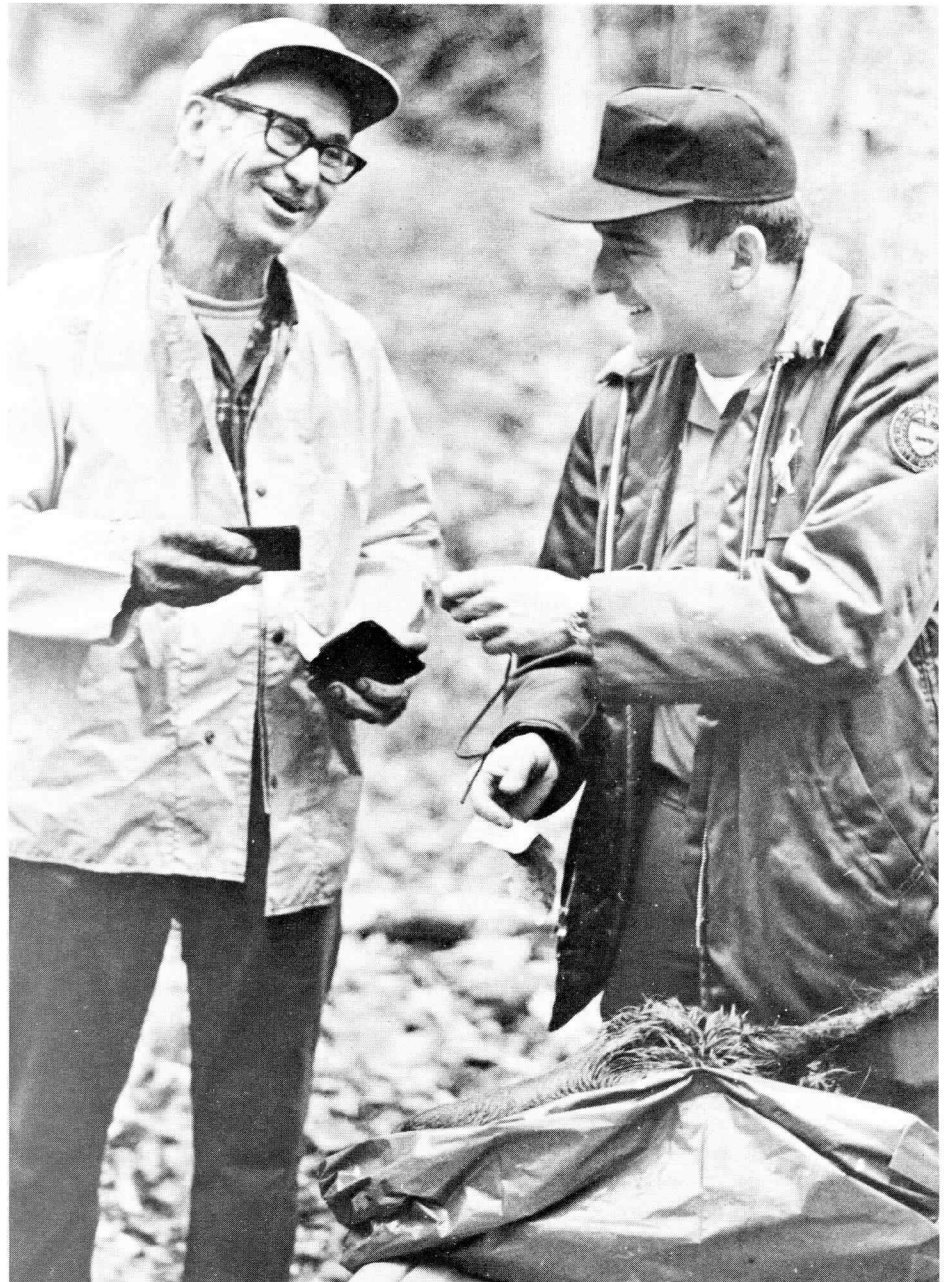
Although their locales and work requirements contrast, their reasons for doing what they do are remarkably similar. Love of the outdoors, a strong desire to protect Oregon's natural resources and the enjoyment of positive public contact motivate both of these men.

Like many of the Game Division members, Rainey is a graduate of the school of fish and wildlife at Oregon State University. After graduation he spent six years as an officer in the U.S. Air Force before joining the Oregon State Police in 1974. He was assigned directly to the Game Division at Burns, and has been there ever since.

What guides him when he is out there? His view is clear. "I feel responsible for the wildlife in this area. I want my son to grow up and be able to hunt out here," he said.

After more than a decade in the desert, he knows the cycle of his job. "The busiest time is the late summer and fall. It starts with antelope season in August, followed by the archery and bighorn sheep hunts. Then it's deer season, upland birds, elk season and trapping. February through mid-April is the slowest period. Then things pick up when fishery seasons start. As that winds down, I start again with the antelope," he said.

Most of his job involves contacting sportsmen for license and permit checks punctuated by case



It is the contact with a lot of good people that many officers feel is the most rewarding part of their jobs.

investigations and search and rescue activity.

There is a perception held by some that police officers are forced to become cynical about people because most of the association is with law violators. For this game trooper, at the very least, that is not the case.

"The most interesting part of my job is contacting people. The sportsmen are out here to have a good

time. Almost all the people I meet are good folks. They are involved with these resources and care as much as I do. I enjoy visiting with them. They have their stories, I have mine. I do a lot more of helping-type work than I do the contacts involving citations," he said.

It is also the people that make the job for Jim Hatch over in Newport. "The large majority of contacts I have are with good, hard-

working people who are at home in the outdoors. These people support the work I am doing and let me know they appreciate my helping to protect the resource. Some of the biggest cases I've made would not have happened without assistance from the public," he said.

Hatch has been at Newport since 1973, coming there after a summer working on the Rogue River for the Wildlife Commission, and a brief time with the OSP Traffic Division in Medford.

This Iowa native with a business degree from Northwest Missouri State University spent four years in the Coast Guard before settling in Oregon. His knowledge of the sea is certainly useful.

During the peak of the commercial groundfish and salmon seasons, he spends up to half his time on the ocean, checking licenses and catches.

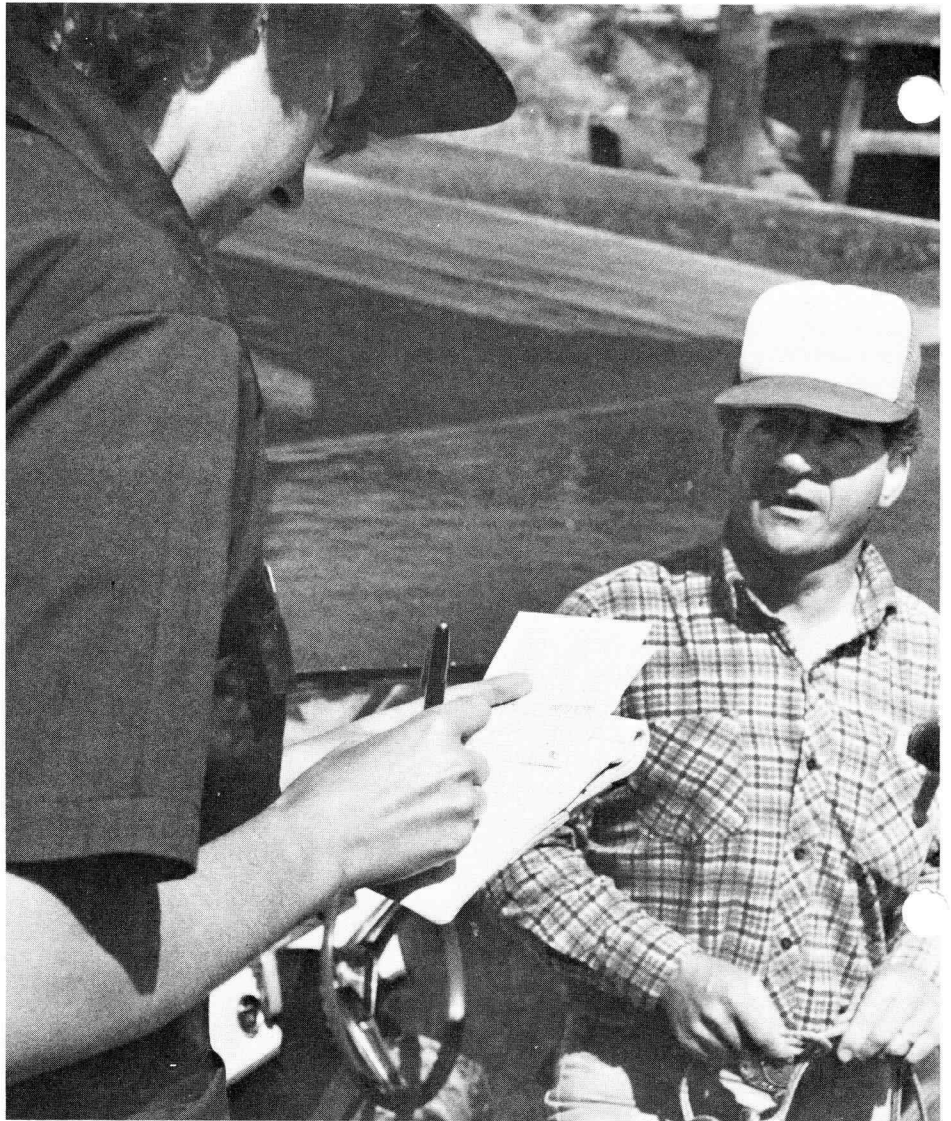
Much of the sea duty involves moving from boat to boat using a 16-foot inflatable craft made by the Zodiac Company. "They are like the ones Jacques Cousteau uses," Hatch says.

Despite occasional remarks by some people about getting a "real" boat, he supports the Zodiacs. "Personally, I'm very impressed with them. They are well equipped with electronics, and are really better than a hard-shelled boat. They are a tremendously efficient enforcement tool," he said.

Hatch also spends time on much larger boats operated for cooperative enforcement efforts by the National Marine Fisheries Service and the U.S. Coast Guard.

His job today is not what it was when he started. "The new, complex commercial fishing regulations take most of my time these days. I don't see much of the woods anymore," he said.

When he is not on the water, Hatch comes as close as any game officer to walking a beat. "I spend a lot of time on the waterfront at the fish plants and the docks. I work hard at communicating with people. I would much rather have a phone call from somebody with a question than have something go wrong. There's a lot of self-satisfaction in knowing you are helpful," he said. □



Whether it is checking salmon anglers on the coast (above) or sturgeon anglers on the Columbia River (below), game officers go where the activity is to observe, to help when needed and to arrest violators.





# NIGHT FLIGHT

*By Ron Shay*

A soft, full, yellow harvest moon made its way above the eastern horizon. The air was warm and calm. Lines of blue lights stood out along the blackness of the tarmac and an occasional jet slid quietly by in its approach to Portland International Airport. It was a glorious autumn evening.

Sound like the setting for a romantic novel set in Oregon? That was not quite the situation. I was leaning against a Cessna waiting for my two companions for the evening — two members of the Fish and Game Division of the Oregon State Police. We were going on a night flight to supplement the ground surveillance that regularly takes place.

At a few minutes past 9:00 p.m., Sergeant Don Roberts arrived and shortly after that our pilot, Senior Trooper Ray Granning came out of one of the nearby buildings to join us. He had arrived quite a bit earlier to do the necessary checking of the aircraft and filing of the flight plan. Our location was the Troutdale Airport; our destination was Troutdale Airport several hours and a number of miles later. Our flight would take us along the western foothills of a portion of the Cascades and up the Columbia River to Bonneville and back. It was just a day or so prior to the opening of a hunting season in the Cascades and it was the night following the closure of a gill net season on the river.

As we taxied down the strip getting ready to take-off, I could hear the pilot talking with the tower and could also carry on a conversation with the two officers in the front seats. The big ear-muff-like headphones not only made this communication possible, but also shut out much of the engine noise as Ray poured on the power for our take-off.

Since virtually all of our night flight would be in the approach pattern of Portland International, we all three kept a sharp look-out for other aircraft and Portland tower was constantly apprised of our location. As we headed south-

east to take a look at some of the popular hunting areas in the foothills, it was reassuring to look to the east and be able to see Mt. Hood looming up quite brightly in the light of the full moon.

Along with the radio contact with the tower, was contact with

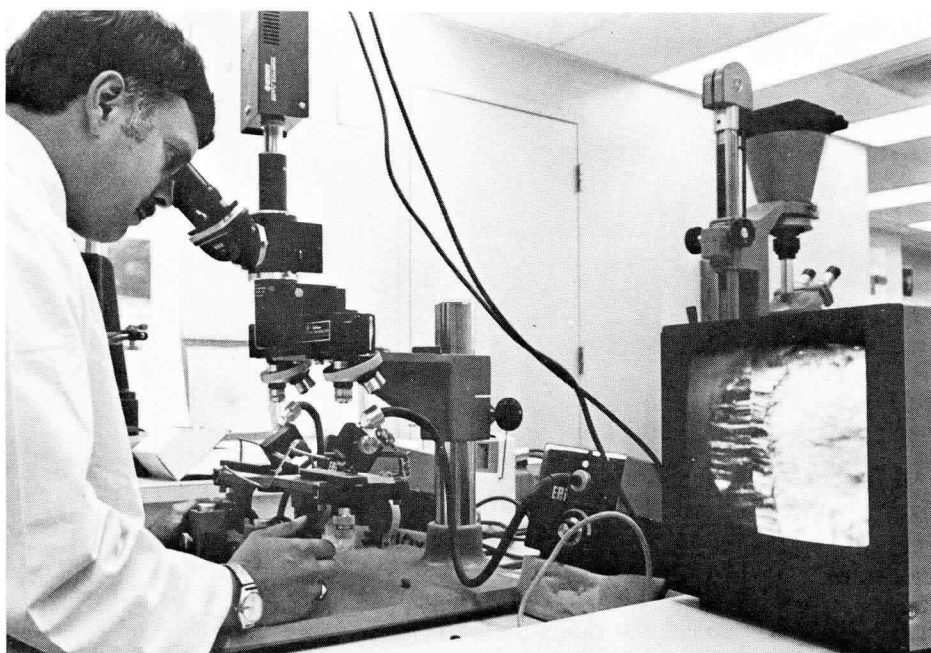
the fish and game officers located on the ground. From our position in the sky it was possible to talk to a number of units plus the Salem headquarters. This communication is the key to the effectiveness of the aerial patrol. According to Major Roy Hyder, commander of



Day and night, State Police Game Division pilots use the airplane to cover a lot of ground quickly and assist officers on the ground.



The metal detector can find a bullet in this illegally-killed elk (above). The OSP crime lab can then help track down the law violator.



the Fish and Game Division, the aircraft in the sky working with the ground units are equal in effectiveness to two or three times as many ground units working alone.

In the early 1970's, the Game Division acquired their first aircraft. Since that time, the fleet has expanded to four planes with two operating in western Oregon and two working east of the Cascades. Hyder pointed out that the planes give the division a tremendous amount of flexibility. They are scheduled to be used 75 percent of the time on fish and wildlife work. Of this time, about half of it is law enforcement, such as the flight I was on, and the other half is classed as wildlife management when the pilots fly biologists of the Department of Fish and Wildlife for various census and other biological work.

Incidentally, if you've heard stories from individuals who claim they have seen the aircraft with state police markings on them harassing game prior to the opening of seasons, discount the tales. All of the planes have standard factory design with regular numbers as required by law. They have no markings indicating they are police aircraft and no such harassment is carried on by either the police or by the Fish and Wildlife Department.

In addition to the fish and game work, the planes can be used for emergency search work, the tracking of fugitives and a variety of other chores according to Major Hyder. He added that the recent installation of Loran C navigational equipment has greatly added to the ability of the "eyes in the sky" to locate objects on the ground whether they be suspected poachers or tagged and marked big game animals.

The lights of the various valley towns faded behind us as we gradually gained altitude and headed over the dense black of the timberlands along the Cascades. Though we were up several thousand feet, the main highways were visible in the bright moonlight and any car moving along with headlights on stood out like beacons.

We spotted several sets of headlights moving slowly along some



of the back roads and circled the area to see what might be going on. A fire soon became visible and turned out to be the focal point of the headlights. Either a slash fire was burning too well or a small fire of some other kind had grown bigger than it should have. At any rate, none of the vehicles were using spotlights to scan the areas adjacent to the roads and eventually ended up in the area of the fire.

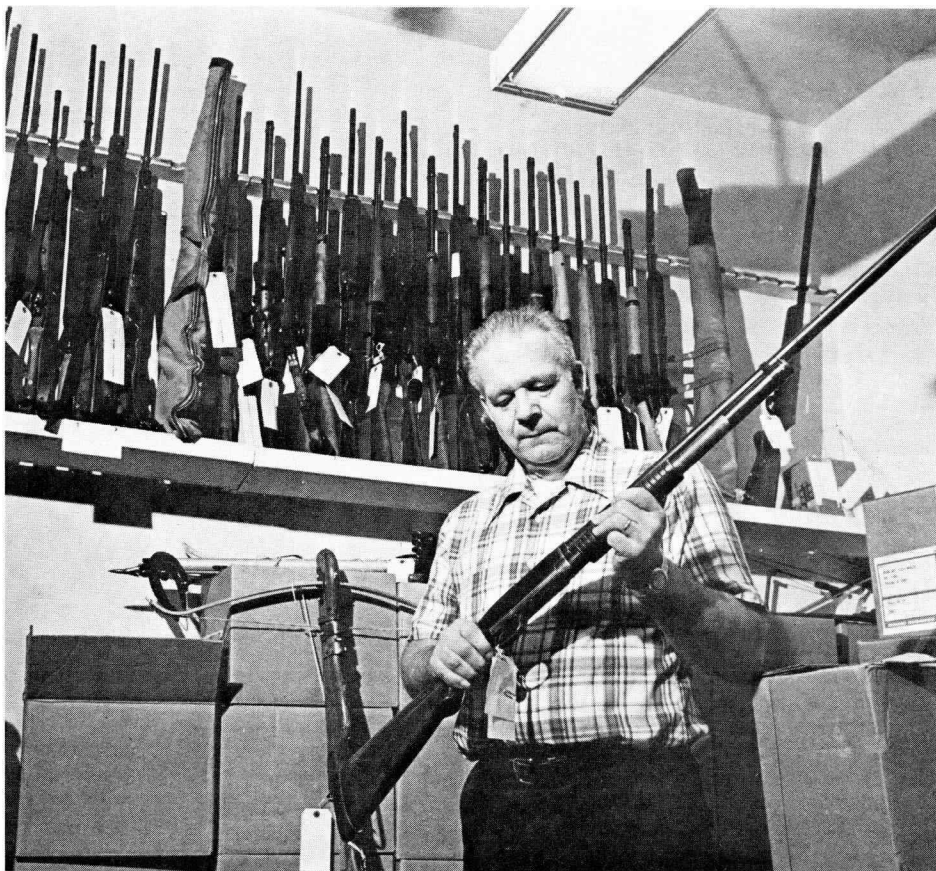
It was surprising to me how much detail could be seen. Also, because of the experience of the two officers with me, it was possible to keep quite close tabs on where we were. We talked with two other officers in their vehicles on the ground, and as they heard us fly over, it was easy to locate them as they shined their spotlights skyward. Had the need arisen, it would have been easy to direct them to any suspicious action on the ground.

With things apparently under control along the foothills, we headed north for a run up the Columbia River. A gill net season had just ended, so it was decided a check for any nets that might be illegally left, would be in order.

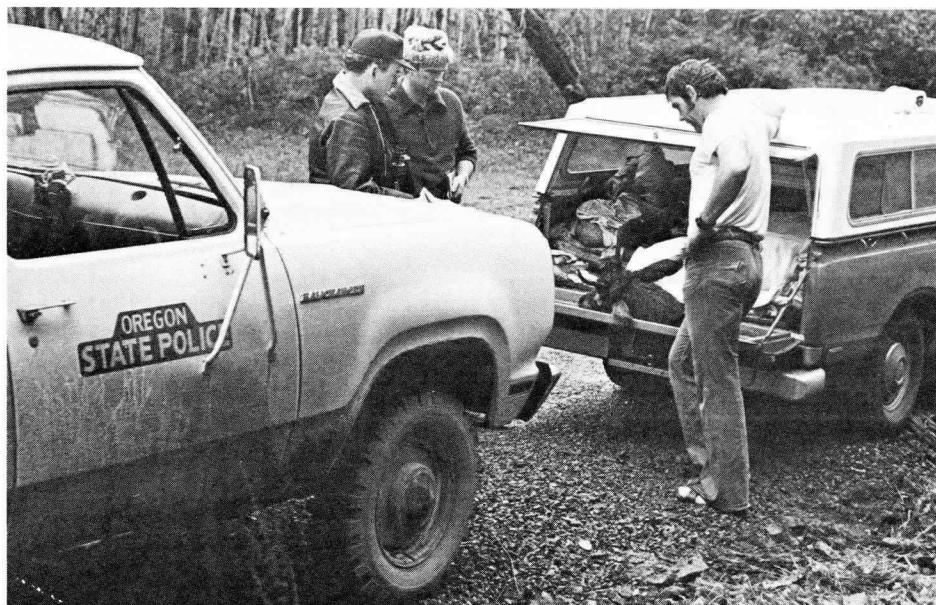
As we dropped over the hills and leveled off about 500 feet above the water, contact was made with another officer just leaving the dock in a patrol boat.

With the moon reflecting off the water it was possible to see an incredible amount of detail as we cruised up the river. In my mind, I was trying to remember if there were any wires crossing the river between where we were and Bonneville. Pilot Granning put my mind to ease when he brought up the subject and said we would have lots of elevation when we got to Bonneville. Again, while we flew along he was in constant contact with the Portland tower so they would know where we were and where we were headed.

After a quick flight up to Bonneville we did a 180-degree turn and headed back down the river scanning the shorelines and other locations where nets might be set. Small boats moored along the bank were apparent and even  
*(continued on next page)*



Every year, judges not only fine fish and game violators, but confiscate hundreds of rifles, rods and other equipment — including boats.



Only a fraction of the contacts game officers make result in arrests. Many officers consider the friendly contact with law-abiding sportsmen the most interesting part of their work.

quite a bit of detail of items on the shore itself. Shortly we heard from the patrol boat that we were headed right at them and as we passed over they gave us the spotlight treatment. However, it would have been difficult not to see them under the ideal conditions we had.

Continuing on down the Columbia, we turned south as we reached north Portland and followed the Willamette looking for possible illegal fishing action in areas of past violations. Again, nothing to report, but the trip over the middle of Portland at about 11:00 at night was a never to be forgotten sight.

At the end of the Willamette run, we swung around to the east again to see Mt. Hood looming up in the distance. And one more run along the foothills revealed the fire seen earlier was under control, there was little activity elsewhere and the ground forces were about to call it a night.

At somewhere around midnight we touched down at Troutdale, I had had the privilege of going on a beautiful night airplane flight. A full moon, remarkably smooth air and good companionship. But that really is not what it is all about. We didn't happen to get involved in any cases that night, but from what my fellow fliers told me, the flight was the exception rather than the rule. The effectiveness of this kind of patrol was apparent. The ability we had to cover large amounts of territory and the almost amazing detail that was revealed on the ground and water made it obvious that this is an effective operation. Statistics in the books telling of the activity during other flights verifies the assessment.

There is another aspect to the aerial patrol. The sound of the aircraft overhead might well be a deterrent to a potential poacher on the ground. A spotlight or even a strong flashlight directed out across a meadow or field is like an arrow pointing to the person using it. Conditions aren't always as ideal as the night we flew, but in this observer's eyes, there is little doubt that night flights are not only fascinating, but also are an effective and efficient means of enforcing Oregon's fish and wildlife laws.□

## Court Restores State Game Law Authority

Oregon's fish and game regulations apply to all persons who hunt or fish on 620,000 acres of former Klamath Indian Reservation land the U.S. Supreme Court ruled July 2. The high court decision capped almost three years of legal action over a claim that Klamath Tribe members were exempt from observing state-set seasons, bag limits and other rules.

The Supreme Court ruling overturned decisions by two lower courts that allowed tribal members to observe only rules adopted by Klamath Indian authorities.

The land in question, which totals almost 1,000 square miles, extends from the east, north and west sides of an existing reservation boundary. That line encompasses 1.2 million acres.

Tribal attorneys originally filed suit in U.S. District Court in 1982 claiming that Klamath Indians had not surrendered hunting, fishing and trapping rights when the tribe sold the 620,000 acres to the federal government in 1901.

The District Court agreed, and so did the 9th Circuit Court of Appeals when the Oregon Department of Fish and Wildlife appealed the earlier decision. Despite two setbacks, the Oregon Fish and Wildlife Commission directed the department to take the appeal to the Supreme Court. Arguments on the case were heard by the seven-member panel last February.

Attorneys for the state argued that nothing in the 1901 agreement transferring the land from the tribe to the government preserved special tribal fishing and hunting rights.

In a 6-2 vote, the high court agreed. Justice John Paul Stevens wrote that the hunting and fishing privilege "... was not intended to survive as a special right to be free of state regulation." He also noted that the 1901 agreement showed no intent "... to preserve special off-reservation hunting and fishing rights for the tribes."

Ralph Opp, department district biologist in the area, says the ruling will benefit deer herds in Klamath and Lake counties.

"That acreage includes portions of several deer winter ranges. The Klamath regulations allowed tribe members to hunt during the winter on some of these areas, and also permitted night hunting with spotlights. The court decision will allow us to better protect animals using these ranges," he said.

The state has not been applying state rules to Klamath Indians hunting on the contested lands since the 1982 District Court ruling, Opp said.

Major Roy Hyder, head of the Oregon State Police Game Enforcement Division, says that practice will now change. "It will now be necessary to enforce equally for all persons. We will be in contact with Klamath Tribal authorities to assist in informing tribal members about the change in enforcement procedures," he said.

According to department accountants, the total cost to the department for court and legal fees during the three years of litigation comes to \$57,000.□

## Tip of the Hat

Three men bought some very expensive meat in July and didn't even get to keep it.

Justice of the Peace Gaillard Biggs of Burns fined two of the men \$555 each, plus court costs, and fined the third man \$955 plus court costs for illegal possession of a deer.

The three men were working in the woods north of Burns when one shot the deer for camp meat. The other two were involved but did not pull the trigger according to Justice Biggs.

No hunting licenses were revoked because the two men did not do the killing and the shooter was from out of state. The meat was confiscated by the State Police.

A tip of the sportsman's hat to Justice Biggs and thanks to the *Burns Times-Herald* for the article.□



# This and That

## Oregon Boy Wins

Jeffrey Wayne Crozier of Albany won a Merit Award in the 1985 National Hunting and Fishing Day Poster Contest. His poster illustrating the contest theme "Why Wildlife Need America's Sportsmen" had already been selected as a winner in a local contest sponsored by the Benton County 4-H Club before being entered in the national NHF Day Poster Contest. Jeffrey, a seventh grader at North Albany Middle School, received a \$50 U.S. Savings Bond for his winning entry.

Information on how to sponsor or enter the National Hunting and Fishing Day Poster Contest is available free from NHF Day Headquarters, P.O. Box 1075, Riverside, CT. 06878

## Duck Stamp Prints

The 1985 Oregon duck stamp showing three snow geese over Central Oregon will be reproduced on high quality, acid-free paper using fade-resistant inks. The page size will be 6½" by 9" with overall size of the paper 12" by 14". The print and a mint stamp will be encased in a protective folder. Edition size is 11,825.

If ordered before October 1, 1985, print numbers matching those obtained may be requested. The price will be \$140.

Also available will be a silver medallion edition and a bronze sculpture edition.

The prints are available from a number of art galleries throughout the state or may be ordered directly from Frontier Publishing Company, P.O. Box 366, Eugene, OR. 97440

## Eagles Holding On

Bald eagles are holding their own after years of decline according to the National Wildlife Federation's annual midwinter eagle surveys. In 1984, 11,819 of the birds were found in the 42 states participating in the survey. This is up from 10,903 tallied in the same states in 1983. Only 9,815 bald eagles were found in 48 states in 1979, the first year of the survey.

*P.A. Game News*

## A Reminder

Students under 18 years of age must have a certificate of competency indicating they have completed a hunter education course if they are afield hunting on land other than their own or that of a parent.

Now is the time to enroll. Don't wait until a week before hunting season starts and expect to complete the course in time to go out. Check with the local office of the Fish and Wildlife Department for a course being given in your area.

## Putting Some Back

Lloyd Whitford of Roseburg sends us a story of two of his compatriots who went that "extra mile" for Oregon's upland birds.

Ruel Phillips Jr. and Clarence Paul received some pheasant chicks from the department as part of the program to distribute excess chicks and eggs to folks interested in raising them. The only proviso when people receive the birds or eggs is that they release half of them into suitable habitat.

Phillips and Paul really went a piece to find that suitable habitat. According to writer Whitford, they left Roseburg at 11:00 p.m. and arrived at Vale at 6:05 a.m. the next morning. They spent the Saturday releasing 81 pheasants they had reared from the chicks received and then drove back home on Sunday.

## Dollars Up, Sales Down

American hunters and anglers spent over half a billion dollars in license and permit fees, a new record, to pursue their sports in 1984.

According to data from state fish and wildlife agencies, \$552 million was spent in 1984 for the purchase of hunting and fishing licenses, tags, permits and stamps. The total number of license holders dropped slightly from 45,503,447 in 1983 to 45,034,168 in 1984.

*U.S. Fish & Wildlife Service*

## Tough Guys

Rats are tough. How tough? According to INTERNATIONAL WILDLIFE magazine, rats can; plummet five stories to the ground and scurry off unharmed; swim half a mile and tread water for three days; wiggle through a hole no larger than a quarter; and even survive being flushed down a toilet as well as enter buildings by the same route!

## Scary Statistics

According to R. Neil Sampson, executive vice-president of the National Association of Soil Conservation Districts, "Every hour, with 200 new Americans to feed, the U.S. loses 220 acres of our food-growing farmlands to townhouses, shopping centers and coal mines. And every day, 26 square miles of U.S. top soil wash and blow away from the farmland that is left.

"... at the current loss rate, all of America's cropland will be destroyed in less than 100 years."

*Wildlife Management Institute*

## Turkeys Save Trees

A tree native only to the island of Maritius, in the Indian Ocean, may be saved by the turkey. There are only 11 of these huge trees remaining on the island, partially because the crops of seeds won't germinate.

Scientists recently found the explanation — the seeds won't germinate unless passed through the crop of a dodo bird. Unfortunately, dodo birds have been extinct for 300 years, so year after year the seeds have been waiting in vain for the bird that will never come. There is still hope for the tree, however. A naturalist has got several of the seeds to germinate by passing them through a turkey.

*Illinois Outdoor Highlights*

## Eating Like a Bird?

Before starting your next diet, consider the appetite of a hummingbird. In a single day, a hummingbird may consume more than half its total body weight and eight times its weight in fluids.

*National Wildlife*

Excerpts from James Ruch  
Speech con't from page 2

"How will we ensure that intelligent land and water-use decisions are made? First, we must understand that wildlife is not a charity case. It is as important economically as it is aesthetically. We must communicate this message to the individuals and entities — public and private — which make the economic decisions.

"Second, we must pursue ways of building the costs of preserving, enhancing, or mitigating wildlife habitat into the cost of development, whether for a ski resort, a dam, a power plant, a housing development, or a shopping center. This concept of placing the burden for social costs which arise as a result of development is already well established. Developers are routinely required to donate land and/or money for schools and parks. Wildlife habitat should be treated the same.

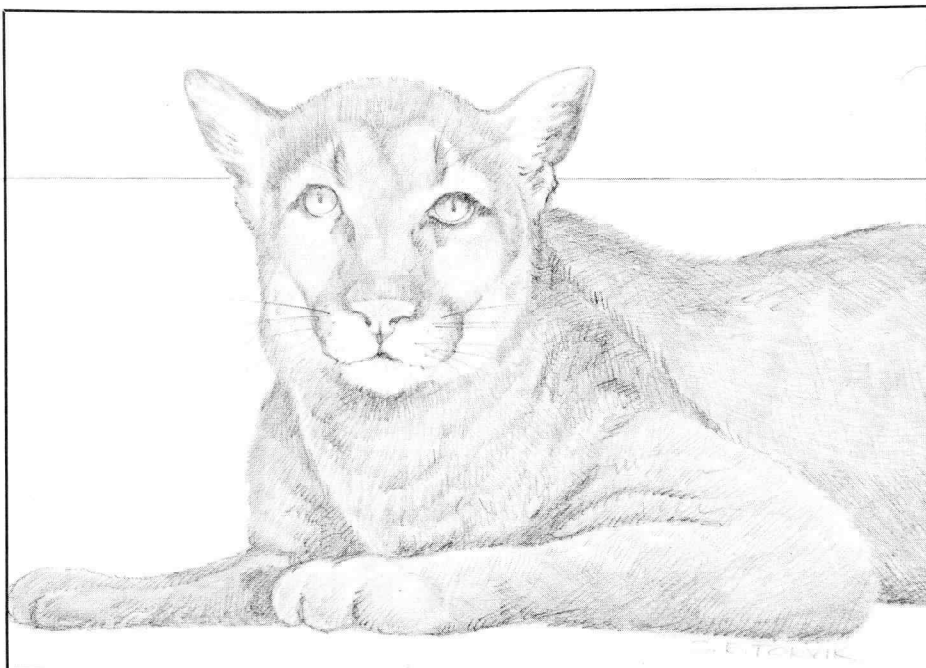
"Finally, we are going to have to learn to work with a variety of allies and partners.

"In the '70s, many people truly believed that government could do everything. . . . We have learned that there are finite limits on what government can and should do and that we must operate within these.

"Thus, partnerships between public agencies and private institutions are not only desirable, they are crucial. There is simply not the kind of wealth in this region or nation for government to go it alone.

"We have our work cut out for us, but we also have much in our favor. Most importantly, we can draw upon the strong and powerful universal human attraction and concern for wildlife. This cuts across political and economic boundaries, whether it's the wonder we feel in hearing a bird singing or the thrill of the chase inherent in hunting.

"It is this universal appeal which will allow us to gain the public support we need to become a more significant factor in the economic decision-making process. It is also this universal appeal which will help us form the partnerships we will need."□



## Cougar

It is known by many names — mountain lion, puma, panther or painter. In Oregon, *Felis concolor* is generally called the cougar. By whatever name, it is the largest full-time carnivore in the state.

Cougar once had the widest distribution of any mammal in the western hemisphere found from Canada to southern South America, including all of the lower 48 states of the U.S. Today, after some 200 years of progressive habitat loss and unrestricted killing, they are found only in the western states, British Columbia and Mexico in North America.

A remnant population of one sub-species does inhabit the swamp lands of southern Florida where it is classified as an endangered species. Western cougar populations are considered generally healthy, and carry no federal protection, but are classed as game animals in most states.

These big cats create a generally unfounded fear among humans. Reports of attacks on humans are extremely rare. In fact, the only humans likely to see this wary and secretive animal are those that seek it, usually with the aid of dogs.

Deer, and sometimes elk, are the cat's favored prey. The kill is usually made by a cat jumping on an animal's back, digging claws into the shoulders and flanks, then delivering a deadly bite to the back of the neck. Birds and other animals also make up a portion of the diet.

Cougar inhabit timbered areas in both eastern and western Oregon. The fur color varies from a yellowish-brown to a darker reddish-brown and gray depending on the locale. Male cougars stake out a large hunting territory — more than one female may live within this boundary. These largely solitary animals seldom meet except to mate.

These cats may breed throughout the year. A normal litter is two or three kittens. Dens are usually simple. A nook beneath a rock outcropping or under a log are common sites. Kittens leave the mother after about one year and mature sexually at about 2½ years.□

Jim Gladson



# SAR

## Search & Rescue Needs Your Help!

By Lt. Col. David Bowman, USAF

"It'll never happen to me," is the prevailing attitude about anything negative or painful. In the State of Oregon last year however, over 250 Search and Rescue (SAR) missions were generated according to Mr. Bill Gottlieb, the State Emergency Management Division SAR Coordinator. The subjects of those searches can no longer say "It'll never happen to me." Most of the missions (215) involved lost persons of all ages and in many different locations. One of the most important factors in each mission is the degree to which the potential survivors can help themselves.

### What Can You Do To Help?

The old Boy Scout Motto, "Be Prepared," is the best adage. Appropriate equipment and the right attitude can make all the difference. First and foremost, let someone know exactly where you're going. If you vary from your pre-planned routes and locations try to let someone know. Then insure that if you don't return or make contact in a reasonable time, that someone notifies the county sheriff's department. On many searches, the sheriff is advised that the subject of the search was "hunting in eastern Oregon", or "fishing down near Klamath Falls." Obviously, if searchers know the specific location of your camp, the response time is greatly minimized.

While you're waiting for a rescue effort, what do you have with you to help insure your survival? Different terrain, different weather and different outdoor activities will dictate the amount and type of survival equipment that you carry on your trip. A suggested minimum survival kit is listed below:

- Water purification ability
- Lensatic compass
- Whistle
- Food (high energy)
- Candle
- Knife
- Mirror
- Waterproof matches

- Personal first aid kit
- Space blanket (or leaf bags)
- Small flashlight
- Survival instruction book/manual

These items can easily be carried in a small fanny-pack. Any number of other items such as flares, rope, assorted tools and signal panels can be added, depending on the number of people in your party and your carrying capability.

The most important survival tool that you have is your own will to survive. Without your brain and it's reasoning power, all the equipment and knowledge in the world is useless. When you do lose your way and become disoriented, it is most important that you deal with your situation logically. Stop walking, sit down, review your progress and analyze possible alternatives. If it is apparent you are lost — admit it, and deal with it. If you're not absolutely certain of where to go, go only as far as you need to obtain suitable overnight shelter. Make this decision early in the day; it's easier to construct a shelter in the daylight. Then develop a plan for your own immediate survival needs, and the next big step, how to communicate your needs to air and ground search parties.

### Survival — a Fight To Save Your Life

Each survival situation is different, but two major aspects must be addressed. Your own physical condition; and your exposure to the elements of nature. If you've been injured in some way, your survival situation will be more complicated, but there are many case histories of people who have survived for extended periods of time with serious injuries. Their reason for surviving . . . their will to survive prevailed over the other obstacles.

With all of the varying climates and weather in Oregon, it is difficult to assess each individual case. There is however, one common killer present in almost all unsuccessful survival attempts . . . hypothermia, or exposure. Even in reasonably temperate areas, continued exposure to wind and rain can decrease your body temperature much more rapidly than you may expect. The human body can do

many things, but if your body temperature drops out of tolerance, you begin to lose your reasoning abilities, eventually the body must concentrate solely on maintaining a proper temperature. At that point, through exposure and exhaustion, hypothermia has set in and you have lost the ability to help yourself.

The best solution to the hypothermia problem, is of course preventing or minimizing exposure to heat-robbing moisture. In other words — stay dry.

### Help! — and How To Say It

Many different methods of transmitting a message can be utilized by a survivor. One of the simplest and most effective signals is the use of a mirror to reflect the sun's rays or just reflect sky-light on a cloudy day toward an aircraft. Search pilots have seen a mirror flash over 20 miles away.

Ground to air-signals can be constructed from contrasting color fabric panels, stomped snow, or gouged out dirt. The important aspect in signaling of any kind, is to make the signal appear to contrast or look out of the ordinary to searchers. Once an aircraft or ground team sees you, the hand or body signals can be utilized to convey specific messages. Strobe lights, incendiary flares, and signal fires can also be used. However, as with any fire, use extreme caution so as not to further complicate your survival situation.

One request to hunters . . . If you see an aircraft searching the terrain, please don't look at the aircraft with the telescopic sight on your rifle. It causes mild panic in the cockpit to see a rifle aimed at you. If you see an aircraft and you aren't in trouble just raise one hand and wave . . . it's a lot more acceptable.

*Please turn to back page  
for signalling method.*

### Lt. Col. David W. Bowman, USAF

*Lt. Col. Bowman has been an Air Force pilot for over 16 years, accumulating over 4000 hours of flight time. He is currently serving as the Air Force Liaison Officer to the Oregon Wing of the Civil Air Patrol. He has worked closely with various Search and Rescue agencies through the Oregon State SAR Advisory Council.*

# There is More to Running Than Exercise

Bob Loeffel, Oregon Department of Fish and Wildlife Marine Region Supervisor, is an avid jogger and serious birder. In his present position he has learned to combine his hobbies.

Loeffel runs regularly on the beach south of Newport, and while running, keeps count of beached and stranded birds on 4.6 miles of beach. These counts have resulted in the recovery of several bird bands, and in one case, the recording of the only known North American occurrence of the rare Murphy's petrel. Loeffel's most recent finding was a banded common murre which gave us new insight into the longevity of these birds.

The common murre, *Uria aalge* is found in both the North Atlantic and Pacific oceans and is probably our most abundant sea bird. Murres nest on cliffs, offshore islands and stacks in dense colonies of several thousand birds. The colony at Three Arch Rocks in Oregon one year was occupied by an estimated 750,000 birds. The common murre looks very much like a

by  
C. Dale Snow

small dark brown and white penguin and literally flies underwater using its wings to swim. Murres have become entangled in nets 240 feet deep while diving for fish and can stay under water for a minute or more while feeding. Murres feed on any small fish including herring, anchovies and salmon smolt.

The common murre migrational pattern can best be described as a movement. They come inshore in the spring from March to July to nest and spend their winter one to five miles offshore. The one to two

## News from the Coast

pear shaped eggs are deposited on a flat spot on the rocks and incubated in turn by the parent birds for 28 to 34 days. The young birds stay at the nest site for 18 to 25

days then leap from the cliff to the ocean below.

According to the Audubon Society Encyclopedia of North American Birds, by John K. Terres, 1980, one common murre that was banded in the U.S. lived seven years and seven months before recovery. The Bird Banding Laboratory in Maryland, where all bird band data is housed, reported that the bird found by Loeffel had been banded near Otter Rock, Oregon (13 miles north of the recovery site) on May 6, 1969, by Dr. J.A. Weins, University of New Mexico. The bird and band were recovered by Loeffel on May 5, 1985, or 16 years after banding. Reportedly, the bird was at least one-year-old at the time of banding in 1969. This shows that the bird was at least 17-years-old when it met an untimely end. How long this bird would have lived is anyone's guess. Unfortunately, the bird had become entangled in a length of monofilament fishing line and presumably died either from drowning or starvation. □

## Mass Stranding of Krill off Bandon

Millions of little shrimp-like animals, called krill or euphausiids, *Thysanoessa spinifera*, were reportedly washed up alive on the beaches and into tidepools near Bandon, Oregon on May 21-25 and on June 1 this year. On May 25, Oregon Department of Fish and Wildlife biologist Mike Hosie found them dead in windrows two to three feet wide and up to two inches thick from 1½ miles south to ½ mile north of Bandon. Hosie saw "chocolate brown" water along the coast on this day, indicating a dense bloom of phytoplankton which euphausiids feed on. Western gulls were glutted on the dead euphausiids, and murres, pigeon guillemots, gray whales, harbor seals and killer whales were all seen in the area.

There was a large commercial chinook salmon troll fleet working off Bandon during May, with 50-100 boats catching up to 140 salmon per boat per day. According to Oregon Department of Fish and

Wildlife ocean salmon biologist Bob McQueen, the Oregon offshore chinook salmon landings in May were the second highest on record, with the "hot spot" for catches being off Bandon. Trollers reported that the chinook salmon from this area had fed almost exclusively on euphausiids. These salmon had to be gutted quickly or they would have "belly burnt" because of the rapid rate of euphausiid decomposition in stomach contents.

All of the euphausiids collected were females of the one species and were about 1-1¼ inches long, according to Dr. Bill Percy, oceanographer at Oregon State University. Dr. Ed Brinton of Scripps Institute of Oceanography, who also examined specimens, said that most of these females had recently spawned.

Euphausiids are extremely important food for many commercially important fishes off Oregon, including chinook and coho salmon,

rockfishes, Pacific whiting and albacore tuna. They are also the main prey for some baleen whales, including humpback whales, and seabirds.

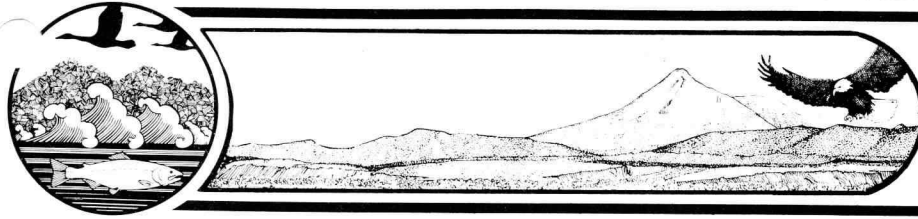
Only one other record of a mass stranding of this euphausiid species could be found in the scientific literature. A huge swarm of spawned-out females was washed onto a beach at La Jolla, California in June 1948. Surface swarms of live *T. spinifera* have been reported several times off California, but never off Oregon.

The reason for these mass strandings is unknown. Perhaps the female euphausiids found near Bandon died after spawning, or they were adversely affected by the dense phytoplankton bloom. □

Bill Percy; Oregon State Univ.,  
School of Oceanography  
Mike Hosie; Oregon Dept.  
Fish & Wildlife, Marine Region



# THE WAYS OF WILDLIFE



## Learning By Experiencing

### Match The Hatch

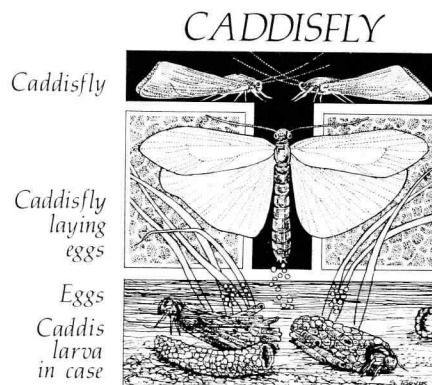
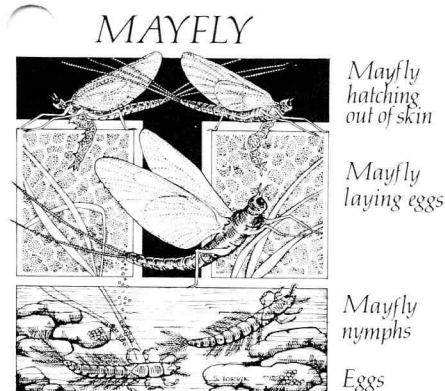
Bill Hastie

SPLOOSH! The surface of a mountain stream is broken by a trout. The fish is rising for a dinner of AQUATIC insects (insects that live part of their lives in water). In this case, the insects are mayflies and hundreds of them are sitting on the surface of the water; they have just emerged from their watery homes ... the mayfly hatch is on!

is on! The adults fly off and mate, lay eggs, and die within a few weeks.

Most other aquatic insects go through life stages similar to mayflies and caddisflies. These insects make a meal for a trout in almost any stage but it is the hatch that attracts a hungry trout most.

Hatches also attract hungry



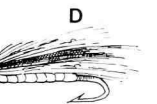
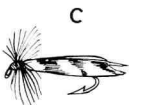
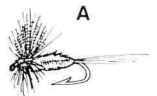
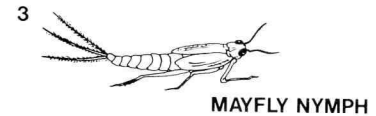
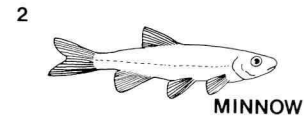
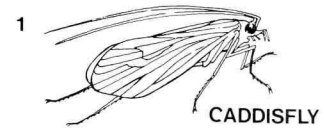
Mayflies aren't the only insects that have summer hatches. Take caddisflies. The adults lay their eggs on or below the surface of the water. Small caterpillar-like LARVAE (lar-vee) hatch from the eggs in a few weeks. Then the larvae build a protective case out of pebbles, twigs, bark, or grass. They live in these cases for about a year. Then one day, the larvae close their cases and change into pupae (paw-pee). The pupa looks much like an adult caddisfly. It emerges from its case and floats to the surface, where it changes into an adult, and another caddisfly hatch

fishermen. This is because the fish are actively feeding during the hatch and will bite an ARTIFICIAL (not real) fly, if it IMITATES (looks like) the insects that are hatching at the time.

Flyfishing is one of the oldest kinds of sportfishing. Artificial flies have been used to imitate all kinds of insects and even small fish. Fly fishermen only need to know what the fish are eating, and then fish with a fly that looks like the real thing. Some artificial flies are fished on the surface to imitate an insect that is hatching (dry flies) or one that has fallen on the

surface of the water, while others are fished below the surface (wet flies) to imitate insect larvae or small minnows.

How much do you know about artificial flies? Can you MATCH THE HATCH? Try it! □



Adapted from *Tracks*, Vol. 5, Issue 8, Apr. 1983, Michigan United Conservation Clubs, Lansing, MI., by permission. Art by Sharon Torvik.

Answers:

1-C, 2-D, 3-E, 4-F, 5-A, 6-B

SAR (continued from page 13)

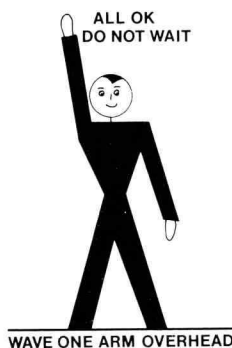
**Search and Rescue Signals.** Figure A10-2 shows standard SAR ground-to-air signals. These signals should be done as large as possible, 2-3 feet wide and 6-12 feet long, using colors that contrast to the background if possible. Some of these signals are for use by survivors and ground teams to communicate with the aircraft.

#### INSTRUCTIONS:

1. Lay out symbols by using strips of fabric, pieces of wood, stones, etc.

2. Provide as much color contrast as possible between material used and background.
3. Symbols should be at least 10 feet high or larger.
4. Use additional signals such as flares, radio, etc., to attract attention.
5. When ground is covered with snow, signals may be made by dragging, shoveling or tramping the snow. The depressed areas appear darker from the air.
6. The pilot should acknowledge the message by rocking wings side to side.

1. Require Assistance	V
2. Require Medical Assistance	X
3. No or Negative	N
4. Yes or Affirmative	Y
5. Proceeding in This Direction	↑



## Beach Clean-up, September 21.

The 1985 beach clean-up will take place between 9:00 a.m. and noon on September 21. If you are interested in participating or want more details, contact Linda Shuee, ODFW, P.O. Box 3503, Portland, OR 97208. Or if the time is too short, call 1-800-322-3326 to get more information.

Last year, on October 13, some 2,100 volunteers collected 26.3 tons of plastic debris from Oregon's coast in just three hours. Not only is the tons of litter aesthetically obnoxious, but it poses a real threat to various forms of wildlife. Birds get tangled in monofilament and six pack rings, and they and other creatures seem to have a great appetite for styrofoam and other small bits of plastic. Needless to say, such a diet doesn't do them much good.

So, if you have ever been greatly offended by the junk on the beaches, or want to work toward saving some wildlife, get the details on the September 21 beach clean-up. □

## 1985 Upland Game Bird Seasons

(WATERFOWL SEASONS HAD NOT BEEN SET AT PRESS TIME)

	OPEN AREA	OPEN SEASON (all dates inclusive)	DAILY BAG LIMIT	POSSESSION LIMIT
Blue and Ruffed Grouse	Eastern Oregon	Aug. 31 — Oct. 20	3 each	6 each
	Western Oregon and Hood River & Wasco Counties	Aug. 31 — Nov. 6 AND Nov. 23 — Jan. 12, 1986	5	10
Sage Grouse	NO OPEN SEASON			
Chukar and Hungarian Partridge	Eastern Oregon	Oct. 12 — Dec. 15	4	8
Cock Pheasant	Eastern Oregon (Except Columbia Basin Counties)	Oct. 12 — Nov. 24	2	8
	Columbia Basin Counties	Oct. 12 — Nov. 24	3	9
	Western Oregon	Oct. 12 — Nov. 10	2	6
	Special Season	Nov. 25 — Dec. 15	3	9
Valley Quail	Eastern Oregon (Except Columbia Basin Counties)	Oct. 12 — Nov. 24	10	20
	Columbia Basin Counties	Oct. 12 — Dec. 15	10	20
	Western Oregon	Oct. 12 — Nov. 10	10	20
Mountain Quail	Eastern Oregon (Except Columbia Basin Counties)	Oct. 12 — Nov. 24	2	2
	Columbia Basin Counties	Oct. 12 — Dec. 15	2	2
	Western Oregon and Wasco & Hood River Counties	Aug. 31 — Nov. 6 AND Nov. 23 — Jan. 12, 1986	10	20
Mourning Doves	Entire State	Sept. 1 — Sept. 30	15	30
Band-Tailed Pigeon	Entire State	Sept. 1 — Sept. 30	5	5



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