

OREGON WILDLIFE

JULY - AUGUST 1987



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Volume 43, No. 3

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Oregon Wildlife (ISSN 0094-7113) is published every other month by the Oregon State Department of Fish and Wildlife at 506 S.W. Mill, Portland, Oregon 97201. Volumes 1 through 28 were entitled Oregon Game Commission Bulletin. Oregon Wildlife is circulated free of charge with second class postage paid at Portland, Oregon. Copyright 1986 by the Oregon Department of Fish and Wildlife. All rights reserved. No part of this magazine may be reproduced without written permission of the editor.

Readers and POSTMASTER: Send address changes to:

OREGON WILDLIFE
P.O. Box 3349
Portland, OR 97208

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The Cover

A cool summer morning on Tahkenitch Lake north of Reedsport is an excellent time and place to cast a lure for warmwater game fish. Photo by Jim Gladson

HUNTER EDUCATION PROGRAM

Months of April and May 1987
Instructors Approved 27
Total Active 1,071
Students Trained 897
Total to Date 328,029
Hunting Casualties Reported
in 1987
Nonfatal 3
Fatal 1

Snow RETIREMENT LEAVES Void

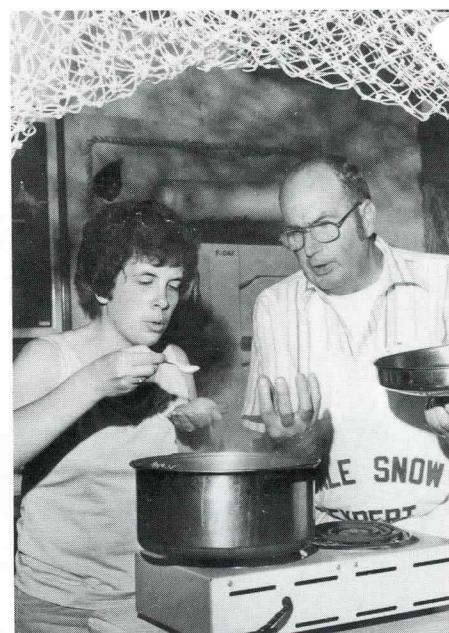
Dale Snow likes to talk to people, and he can usually draw a crowd willing to listen and learn. Whether it's a cooking demonstration at an exhibit, or a televised segment on how to dig clams; he has been a patient promoter of resource conservation while also teaching how to enjoy this natural bounty.

How do you replace a guy who knows how to cook and eat seaweed, dig unerringly for razor clams, and tell the life history of just about any creature associated with the Oregon coast? The answer . . . you can't. You just try to get by without that unique mix of talents, and do the best you can.

The June retirement of Dale Snow, assistant regional supervisor of the department's Marine Region, definitely leaves a void in the organization.

Regular readers of this publication know his name. Over the years he has written dozens of articles on every conceivable subject dealing with marine life. He has informed, entertained and educated us all with his work.

For radio, TV and newspaper reporters, he has been the ultimate information source. Media interviews became a regular part of his job. He has also been there



Photograph: Bob Kuhn

to tell school kids about life in the tidepools, and show beginning clammers the ropes. After more than thirty years of perfecting his techniques, the prospect that he might want to do something else with his time seems a misuse of a valuable resource.

That is his choice to make, but we hope his article on halibut in this issue of *Oregon Wildlife* is not his last contribution. Simply going off the state payroll does not remove certain obligations to loyal readers, or dependent editors.

We wish Dale well in retirement, but hope he decides to keep on with some of his old habits — like his seemingly irresistible urge to tell us interesting stories about neat things.

JLG

Answers To Quiz On Page 15

Western Hemlock 500-3500 ft. West Side	Douglas Fir Valley Floor — 4000 ft. West Side	Noble Fir 3000-5000 ft. East Side	Subalpine Fir 4000-7000 ft. Both Sides	Gray Jay 4000-8000 ft.	Steller's Jay 500-4000 ft.	Pacific Silver Fir 3000-5000 ft. West Side	Mountain Hemlock 4000-7000 ft. Both Sides	Ponderosa Pine 1500-4000 ft. East Side	Grand Fir 3500-5000 ft. East Side	Scrub Jay Valley Floor — 1000 ft.
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UPDATE

Budget Includes Elk Viewing

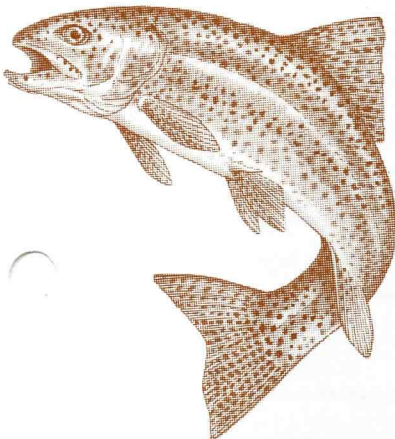
Development plans are progressing at or ahead of schedule for Oregon's newest wildlife viewing area. A manager for the popular Dean Creek Elk Viewing Area three miles east of Reedsport on Highway 38 was approved by the 1987 legislature. The BLM received a special budget allocation for access and off-highway parking. Engineering studies and highway turn lane modifications will be completed by the Oregon Department of Transportation. To the theme of "Join the Herd", the Reedsport community and the Oregon Wildlife Heritage Foundation are seeking donations for visitor facilities including a visitor's shelter, interpretive materials, signs and a radio information station. Individuals or groups giving \$500 or more will be recognized on the site. For information, or to send your donation, contact the Oregon Wildlife Heritage Foundation, PO Box 8301, Portland, OR 97207.

Trout Plan Comment Sought

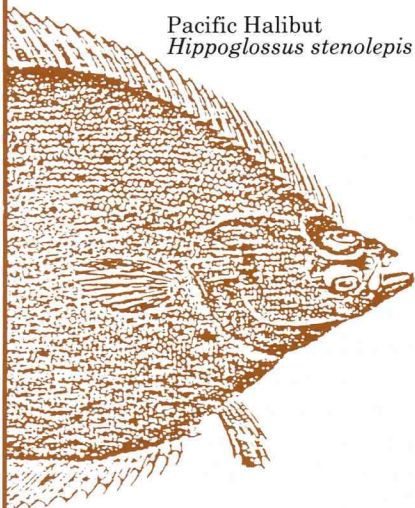
An umbrella plan to guide Oregon's statewide trout management will be completed this summer and presented to the Fish and Wildlife Commission for adoption in October. Guidelines are presented for managing fisheries under the three options of the Wild Fish Policy (wild, wild and hatchery, and hatchery). In addition, guidelines and criteria are listed to allow the classification of trout waters under one of six management alternatives: wild fish, featured species/water, trophy fish, basic yield, intensive use, and private waters. By mid-July, an informational flyer capsulizing the Trout Plan will be available to the public. Interested anglers should request a copy from Jim Griggs, Oregon Department of Fish and Wildlife, PO Box 59, Portland, OR 97207.

Rogue Chinook Face Problems

There was another good run of spring chinook into the Rogue River system this spring and summer. However, water conditions in the river have been causing problems that may get worse. Biologists report that low, warm water is making the fish vulnerable to bacterial infections. By July 1, several hundred spring chinook carcasses had been discovered in the Rogue Canyon and lower river. These fish were infected with a bacterial disease called furunculosis. Now, fishery managers are concerned that fall chinook which will be migrating into the bacteria-laden Rogue waters during August and September, face even greater danger of contracting the disease. Biologists will be monitoring the fall run closely. They expect a record return; possibly exceeding 100,000 chinook. Although fish have been lost in the spring run, returns to Cole Rivers Hatchery are sufficient to assure at least a full hatchery program this year. The supply of additional eggs for other programs, such as STEP, is in doubt. There are plenty of fish holding in the upper river below the hatchery, but water conditions have delayed entry into the hatchery.



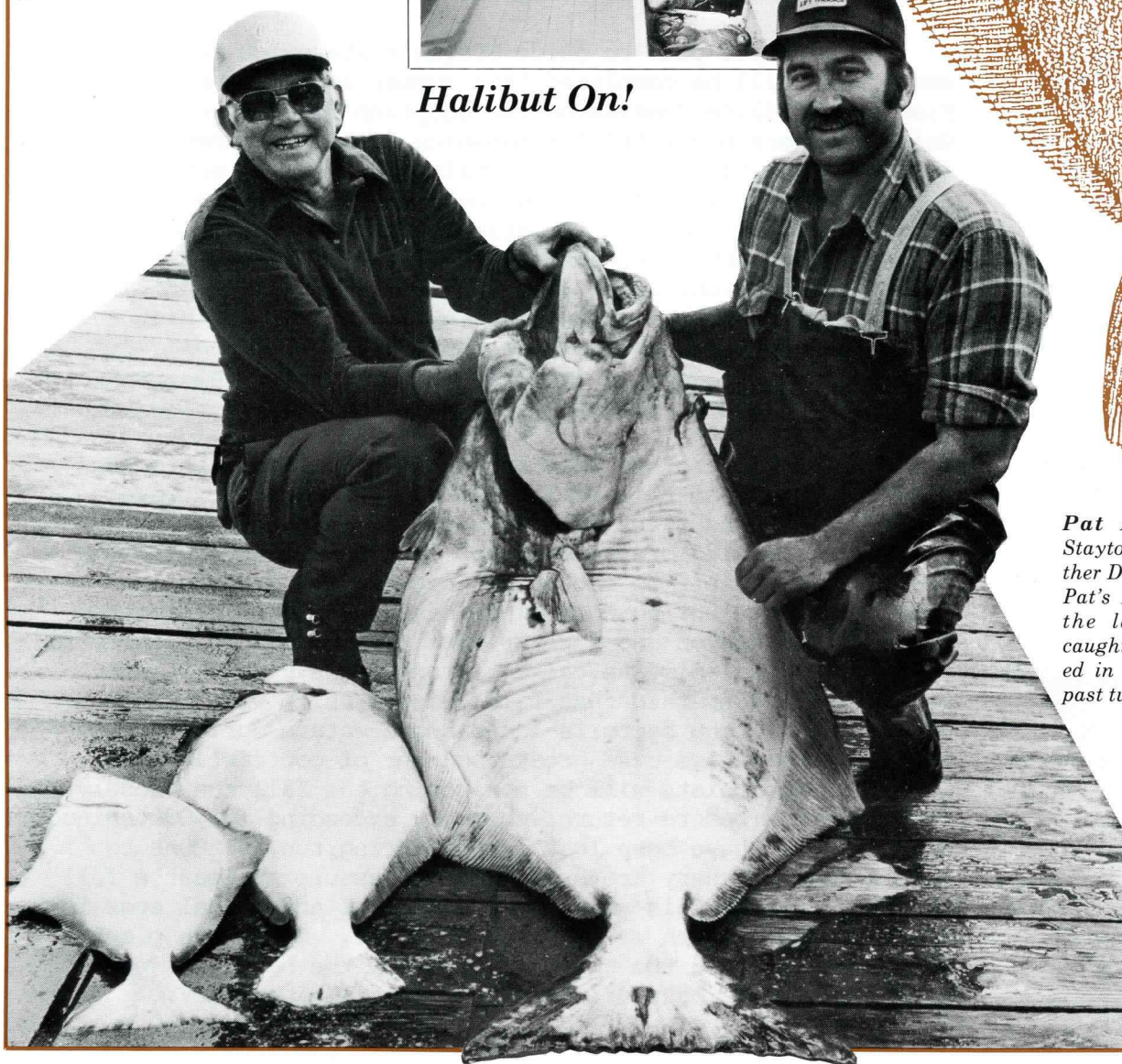
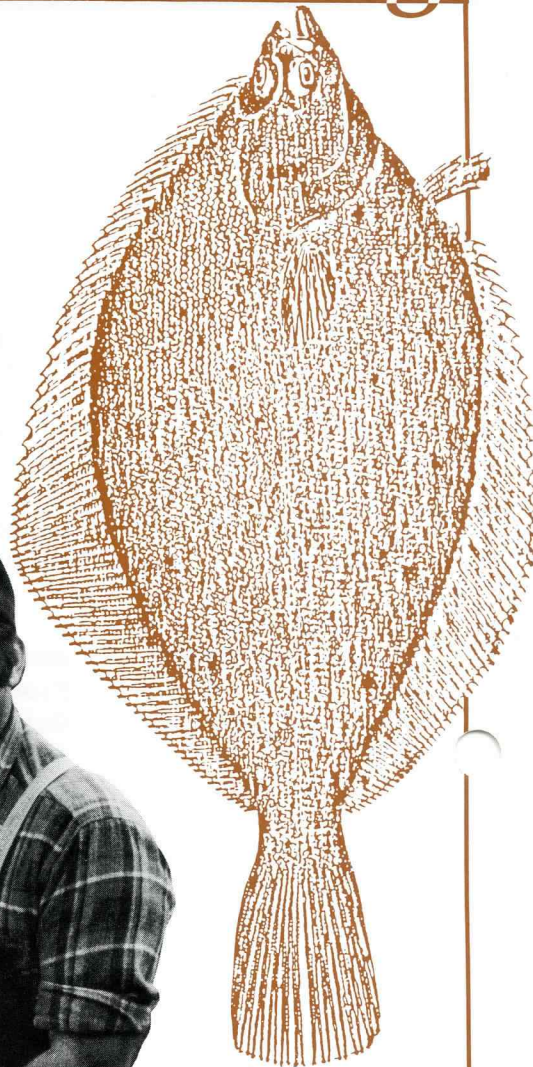
"Barn Doors" Are For Eating



Pacific Halibut
Hippoglossus stenolepis

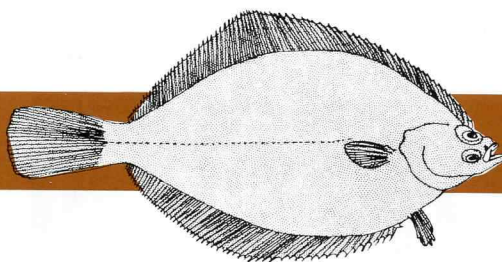


Halibut On!



Pat Forthing of Stayton, and his father Dennis, show off Pat's 155 pounder — the largest sport-caught halibut landed in Oregon in the past two years.

Photographs: Mike Bickler



by C. Dale Snow

High sea adventure, an exciting angling experience and the best fish for eating in the Northwest await people who fish deep ocean water for halibut.

Shortened salmon seasons in recent years have led ocean anglers to seek other fishing opportunities. The upswing of sport fishing over nearshore reefs for bottomfish such as lingcod and rockfish has been dramatic.

The expanding sport fishery for halibut shows that anglers are willing to go some extra miles for yet another new experience.

Halibut beds, or grounds, are found all along the Oregon coast. However, until recently, the taking of these big fish had been left mainly to commercial fishermen. This was due in part to the distance of the beds from shore, and the depth at which these fish are found.

About ten years ago, charter-boat skippers began promoting recreational halibut fishing. About three years ago, people started to get excited about fishing for "barn doors." (Fishermen refer to halibut weighing over 100 pounds as "barn doors" and smaller halibut as "chickens.")

There are good reasons for this surge of interest. First, you never know how big the fish is going to be. Second, you never know if your tackle or your arms will hold together long enough to land it.

Even a small, 15-20 pound halibut will put up a good fight. These fish are nearly all muscle and their flat shape gives them maximum resistance in the water. Once a halibut gets its head aimed down and decides to go back to the bottom, there is little the angler can do to stop it.

Halibut have been caught all along the Oregon coast, but the most productive areas are found off shore from Newport.



A day-long ocean trip can take anglers to where the fish are, especially halibut. This voyage brought back nearly 1,000 pounds of halibut, lingcod and other rockfish species.

The only thing to do then is to start all over again — pump and reel, pump and reel!

These fish are found from the Sea of Japan to the Bering Sea, and to Santa Rosa Island in California. They are wide-ranging, often migratory over a variety of bottom types to depths of 3,600 feet.

One fish tagged near Juneau, Alaska, was recovered near Winchester Bay, Oregon, a few years ago. This fish weighed an estimated 350 pounds, and had been free for seven years following tagging.

Halibut have been caught all along the Oregon coast, but the most productive areas are found offshore from Newport.

Halibut can grow to over eight feet in length and reportedly weigh up to 800 pounds. Halibut of this size are always females. The largest male ever measured was only four feet seven inches long.

These fish spawn from November to January in 900-1,350 feet of water. Females mature at 12 years of age on the average. Males mature considerably younger. A large female produces 2-3 million eggs annually. Halibut feed on fishes, crabs, clams, squid and other invertebrates.

The Western Pacific fishery, both commercial and recreational, is managed by the International Pacific Halibut Commission. This group establishes seasons, quotas, size limits, gear restrictions and catch limits. The increased recreational halibut harvest coastwide prompted the commission to tighten sport regulations last year. Now, anglers are not allowed to keep halibut under 30 inches in length. ■

The first couple of fish boated on the grey overcast day in late May were salmon grouper in the 11 to 14—pound range. Certainly nice fish, but not quite what we were after. Eight, sleepy-eyed anglers had not climbed aboard the Rain Song at 5:30 a.m. and spent the next hour and a half running out 30 miles in the ocean for rockfish — we were after halibut.

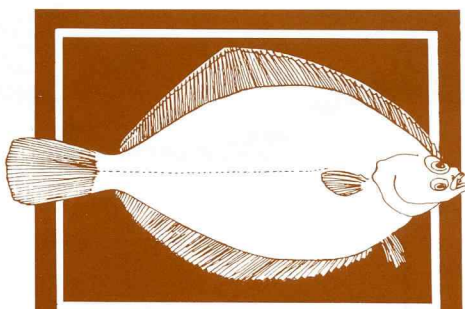
My next fish felt a little different, a little stronger and a struggle all the way to the surface. Maybe this was one of the “flat ones” we had come after. That expectation slipped away as the shape of a 30-pound lingcod appeared from the deep blue waters off Newport.

Ten minutes later, the tell-tale bump of a fish taking my bait, or the sinker slipping over the edge of a rock, signaled me to set the hook. This time the rod tip came up about 18 inches and stopped dead. My first reaction was “another ‘rockfish’, and this one was attached to the bottom.”

That impression lasted maybe two seconds. Suddenly, the rod was bucking in my hands and the line was peeling from the reel. Joe Rohleder, the Rain Song’s deck hand, shouted “halibut on” as if to let me know what I had hooked. But, it really wasn’t necessary. It was clear this fish was not like any of the others I had caught.

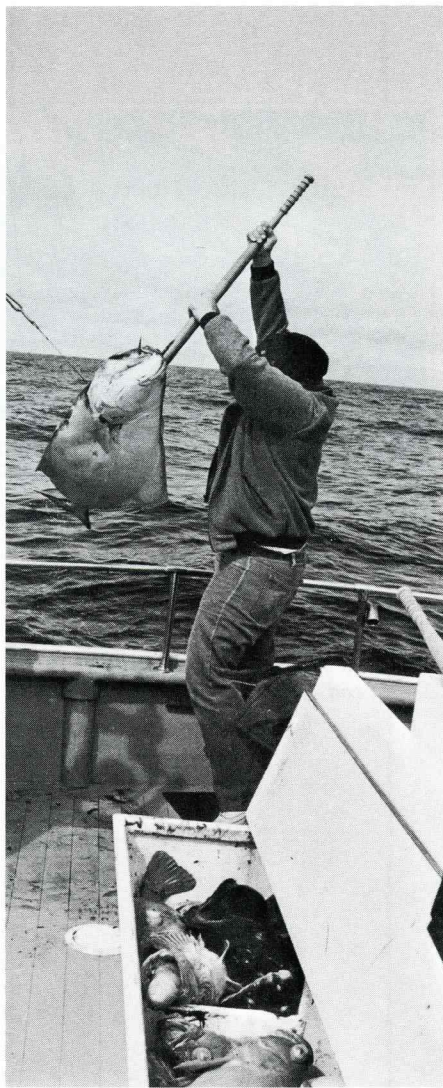
For the next 15 minutes, I pumped the rod and cranked in line only to watch chunks of it melt away as the fish would make another bullish run. Finally, the huge platter-like shape flashed by, and the boat’s skipper and owner of the Sea Gull Charters, Dick Overfield, had stuck the halibut with a flying gaff and the 65-pounder had been hauled over the side.

Completely exhausted, I sat down on the fish box and watched the largest fish I had ever caught flapping on the deck floor. I



Halibut On!

by Michael J. Bickler
ODFW Public Affairs



Rain Song skipper hoists a large halibut over the transom.

remember mumbling something about “if they get any bigger, I wouldn’t want to catch it.”

But fortunately, (or unfortunately), they do get bigger. Another angler on board later landed a 155 pound “barn door.”

On the way back into port, I had a chance to reflect on the day and this fishery that has developed over the past couple of years. The eight anglers on board had landed 13 halibut and numerous assorted rockfish totalling nearly 1,000 pounds — all in all a pretty successful trip.

But the two impressions that really stuck in my mind were how strong halibut were once hooked and how important proper equipment is. The halibut fishery is not one for small, slow boats or inadequate tackle.

Biologists estimate that anglers landed more than 500 halibut at Newport last year during the season that runs from mid-May through August. But each year the boat operators learn a little more about where the halibut beds are and their migration patterns. They are also using faster boats to get out to the beds quicker (which means more time with your bait in the water) and better tackle and landing techniques. The end result is increasing catch rates every year.

It is not hard to understand the sudden interest in halibut. They are exciting to fish for and provide some of the finest table fare available. Halibut are also one of the best fish for freezing. They maintain their quality much longer than any other species — a real important consideration given the size of these fish, and the fact the halibut’s body cavity is small causing little waste when cleaning the fish.

And when you are filleting your catch, do not forget the two choice pieces of meat in the head. The “cheeks” from a large halibut, served with fried potatoes, can provide a meal unto itself for a small family. ■

Photograph: Mike Bickler

Garbage Can Bears

by Jim Gladson
ODFW Public Affairs

It appears that once a bear develops a taste for garbage though, it's very hard to change its ways.

It can start small — an egg-shell here, a grapefruit rind there. Soon, that bowl of dog food on the back porch is not enough. That garbage can full of edibles is only an appetizer. Whole dumpsters become the target.

Bears on Oregon's central coast have developed an addiction to man's garbage, and biologists who must deal with these animals gone astray are stumped for workable solutions to the problem.

These animals are afflicted with what might be called "The Yellowstone Disease." In addition to its scenic wonders, that national park also became known for bears with a taste for people food and garbage, and little fear about approaching humans to get a meal. This image became so fixed it inspired a cartoon series — "Yogi Bear" of "Jellystone Park."

Bears are omnivores, meaning they will eat almost anything. And they have a large appetite, especially following hibernation in May, June and early July. It appears that once they have tasted good garbage, berries and insects just don't rate anymore.

The black bear, Oregon's only bear species, is common in forest lands throughout the state. Until about ten years ago, complaints to department wildlife biologists usually dealt with bears stripping bark off commercial timber, raiding man-made beehives, damaging fruit trees or attacking livestock.

Damage problems increasing

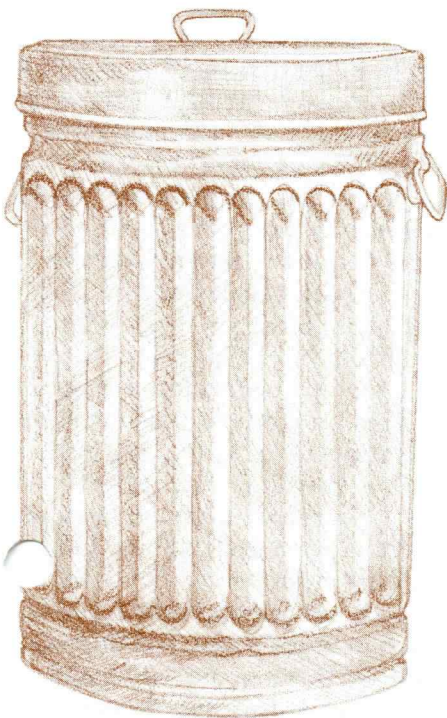
These problems, especially bark stripping, are generally on the rise, but the most dramatic increase has been in complaints from coastal residents about bears entering communities to raid trash cans.

Harold Sturgis, a department district wildlife biologist based in Corvallis, reports that complaints about "nuisance" bears in his district have jumped from only two in 1976 to 83 last year. Most of those come from the communities of Waldport and Florence, but bear complaints are common from Newport to Lincoln City as well.

In the last two years, the department has trapped and moved 29 problem bears from these settled areas to the backcountry. However, this approach may not be all that effective.

Sturgis put a collar on one such bear last year in Florence and moved the animal well inland to a remote area more than 25 miles from Florence and about 10 air miles from Waldport. The problem was solved in Florence, but less than two weeks later the same bear was browsing and abusing garbage cans in Waldport.

"While we don't have a lot of information on how effective trapping is, it's currently the best, non-lethal way we have of handling the problem," he said. "It appears that once a bear develops a taste for garbage though, it's



Illustrations: Sharon Torvik

very hard to change its ways. There just isn't a lot of backcountry to move them to anymore. That collared bear at Waldport showed they are willing to travel quite a way to get back to their food supply. We feel that a fair share of these relocated bear eventually return to become nuisances again."

The likely cause for rapid expansion of the problem in recent years is two-fold, says Sturgis. "In part, the complaints reflect a high bear population in the central coast area. Also, the older bears are teaching their offspring to forage in garbage cans instead of in the woods. The problem is being handed down from generation to generation," he said.

Unwanted visitors

A closeness to nature is one of the many advantages to living on the coast. But many coastal residents would prefer for some creatures of nature to keep their distance.

Glen McDonald, a Sergeant with the Oregon State Police Game Division in Newport, also hears from people with bear problems. Many of the stories do have an amusing side, but the people involved can be understandably upset.

He tells of one woman who called to report a bear at her backdoor. She was seated on the living room couch when she noticed a bear looking in through a sliding-glass door.

When she stood up to leave the room, the bear also stood on

its hind legs. When she sat down, the bear returned to all fours. This routine was repeated a few times until the woman crawled over the back of the couch, across the living room and then upstairs to call for help.

"The bears have developed this habit of looking into houses. I've heard of people finding big nose prints on their windows, and bear tracks on the ground outside," McDonald said.

Such direct encounters are not as typical as the animal who visits at night to pry open garbage cans and search for other edibles. The incidents of bears pursuing their activities in daylight are relatively common however, says Sturgis.

Sturgis notes, and McDonald confirms, that biologists, game officers and other people who spend time in the woods are seeing more bear than ever. "Last spring, we saw 33 bears in 13 working days while we were looking for elk calves," says Sturgis.

This is not to say that bears are freely roaming the streets of coastal towns. They are not. The number of animals involved is still relatively low, says Sturgis. But the occasional arrival of a problem bear does create concerns.

There are no known reports of black bears actually harming or attacking people on the coast. This bear species is much more inclined to run away than its relative the grizzly.

"That is still not much comfort for a parent worried about their kids playing in the front

yard or walking to school," Sturgis said.

Since even a minor run-in with a bear could be painful, the safest approach is to respect the power of this creature and give it a lot of space.

In Search of Solutions

Sturgis also has advice for people who do not want bears as backyard wildlife. Simply don't leave food or food refuse out where bears can gain access to it. Bears have even been known to break into garages where garbage cans are stored.

This caution includes pet food: which, by the way, can also attract other visitors such as opossum, raccoon, rats and neighbors' pets.

Some solutions would include a garbage disposal to get rid of wet garbage, putting the cans in a high place or rigging a pulley system, or using some form of repellent. One supposedly effective method is pouring chlorine bleach over and in the garbage can. A good-size dog is also a deterrent.

Long-term solutions for the overall problem are hard to find, according to Sturgis. Since trapping and transplanting is time consuming, and perhaps not effective; that leaves killing the animals as the final alternative.

Even that is difficult. Oregon has had a general fall bear hunting season for years, and occasionally spring seasons targeting overpopulated areas. But success rates for these hunts are usually 10 percent or less. For hunters



Photograph: Dean Wheeler



without dogs, current success rates are even lower.

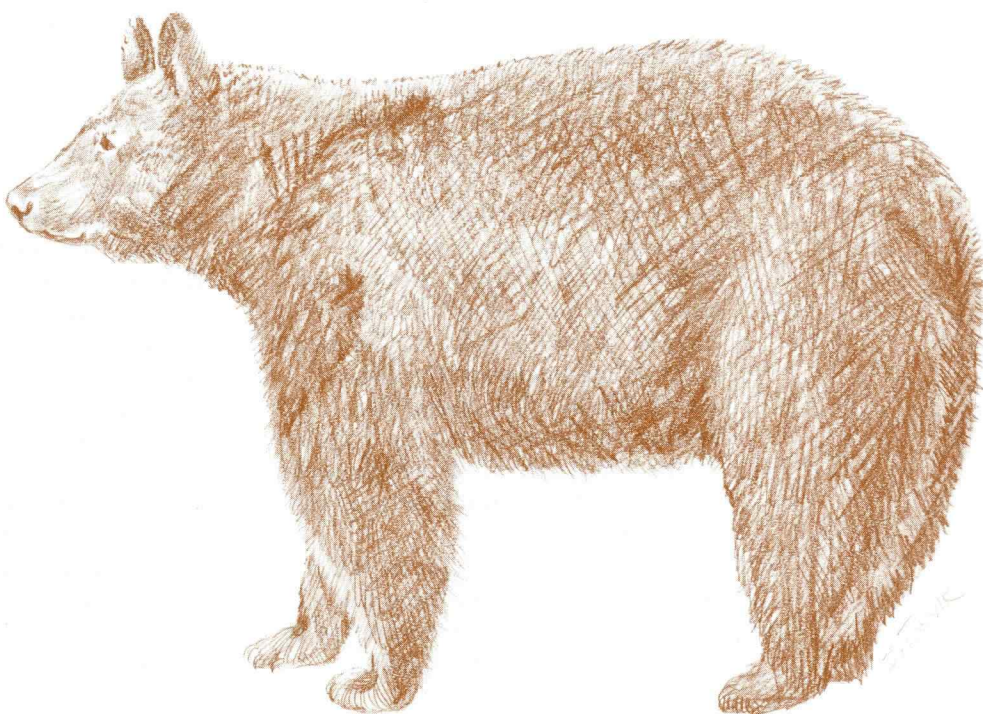
Some people have shown that putting out bait or using predator calls can be effective, but not many hunters use those methods in Oregon, says Sturgis, although interest is growing.

Harvesting surplus animals is not only difficult, but also controversial. Animal rights activists have protested recent hunts designed to reduce bear numbers in the coast range, as well as control efforts aimed at bears causing tree damage on commercial forests.

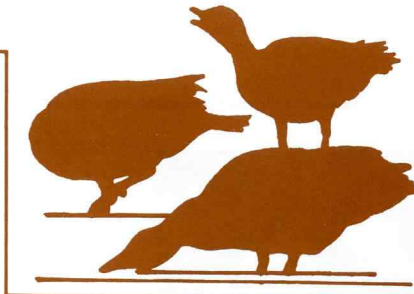
All information the department has gathered points to healthy bear breeding populations and expanding numbers in the coast range. While not a scientific measure, increased sightings and a growing number of damage and nuisance problems support the biological data.

While people ponder alternatives and seek solutions to the problem, "Yogi" and his friends continue to defy the old saying that "There's no such thing as a free lunch." ■

Black bear are common in Oregon, but in recent years they have become too common for the comfort of some coastal residents. Complaints about bears causing damage or creating a nuisance have increased dramatically in communities south of Newport.



They are also nicknamed the “laughing goose” by some . . .



“Break up” is normally a happy event for those of us in the research camps.

Nesting Whitefronts

At home on the Delta

By David Budeau
University of Idaho

Greater white-fronted geese are called by many names including “speckbellies” or “specks” because of the dark barring on the breast of adult birds. They are also nicknamed the “laughing goose” by some, because of their distinctive call and not necessarily sense of humor. Whitefronts get their most common name from a distinctive white patch on the forehead.

Whatever you prefer to call them, these Pacific Flyway geese nest almost exclusively on the Yukon-Kuskokwim (Y-K) Delta in western Alaska. This year will be the fourth summer I have spent on the delta working on a research project for my Masters Degree, and assisting with other studies.

The outer Y-K Delta is a huge expanse of subarctic tundra braided with sloughs, rivers and many scattered shallow lakes. A map of the area looks as if it were heavily splattered with blue paint. Much of the delta lies within the 20-million acre Yukon Delta National Wildlife Refuge. In size, the refuge would cover about one-third of Oregon.

I arrive at the delta in early May, about the same time the geese do. The birds are believed to fly non-stop from their major

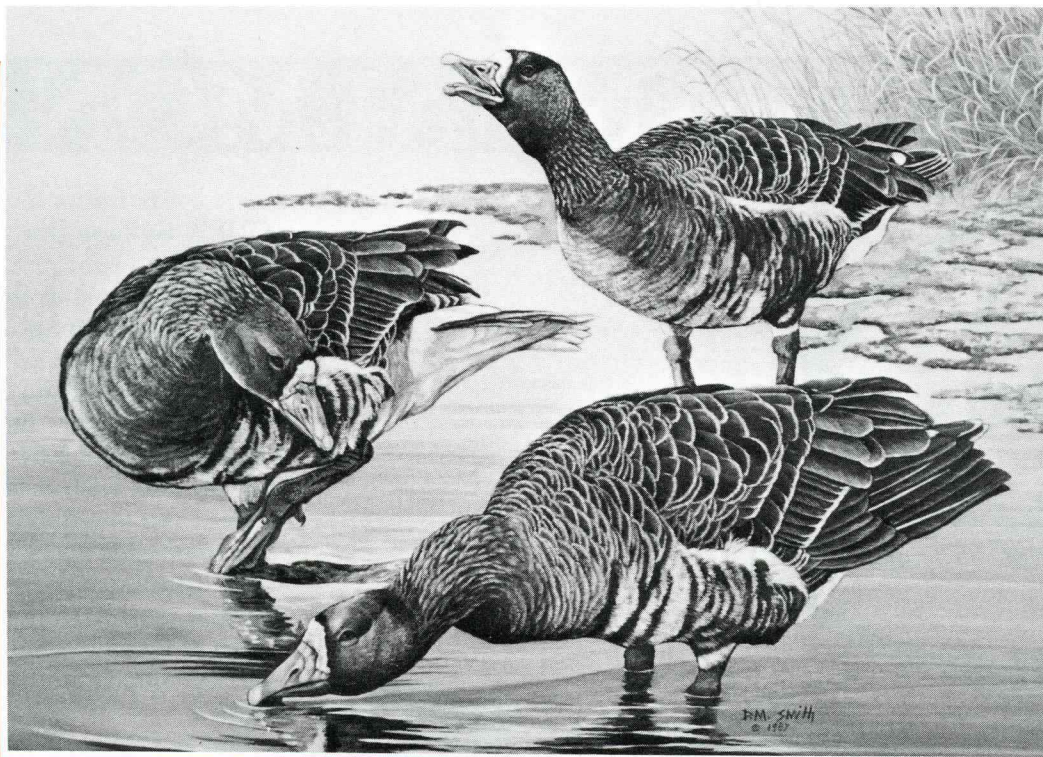
staging area in Oregon’s Klamath Basin. That basin is also an important resting stop during the fall migration south into California.

The delta is still largely covered with ice and snow when the birds first arrive. The geese lay three to six eggs in nests made of feathers, down and plant material as nesting sites are available. Most of the geese are incubating eggs by the time the river ice finally breaks up in late May or early June.

“Break up” is normally a happy event for those of us in the research camps. It usually means a float plane will arrive soon with fresh food (and mail!), our first since snowmobiling into the area. Airplanes are the primary means of travel on the delta. The only “roads” are within the few Yupik Eskimo villages.

Summer on the delta is not unlike winter on the Oregon coast; persistent winds, overcast skies and daytime temperatures in the 40’s and 50’s. A few nice days with highs around 70 degrees do arrive, but so do the mosquitoes. Our camp claims the unofficial world record for the number of mosquitoes (47) slain with a single hand slap.

The Y-K Delta is located



Whitefronts
1987 Oregon
Waterfowl
Stamp
By D.M. Smith

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below the Arctic Circle, so the sun does set for a short time during the summer, though it never really gets dark. Just as the red of sunset begins to fade, the horizon brightens with the coming sunrise.

After 24-26 days of incubation, eggs begin to hatch. The young goslings grow rapidly, taking advantage of almost 24 hours of daylight to feed and rest. Both parents care for the chicks after leading them from the nest a day after hatching.

The goslings are usually able to fly by mid-August. In flight, the juveniles are easily distinguished by the lack of barring and belly speckling that marks adult birds. Southward migration begins soon after. A few geese begin arriving in the Klamath Basin by late August, but most birds do not arrive until late September and early October.

White-fronted geese in the Pacific Flyway numbered more than 400,000 in the late 1960's. The population declined to about 85,000 birds in 1983. Reasons for the decline are still not fully

understood. However, regulations and agreements to reduce harvest on the California wintering grounds and the nesting grounds in Alaska have apparently curtailed this decline. Since 1983, the population has been relatively stable near 100,000 birds.

In an effort to better understand this species, a number of studies supported by the U.S. Fish and Wildlife Service are currently underway. With my research I hope to determine the importance of food acquired on the nesting grounds to the energy reserves necessary for reproduction. Objectives of other studies include determining nesting success and habitat use during brood-rearing.

These studies require that some geese be trapped and fitted with collars for individual identification. A few are even equipped with radio transmitters so they can be located at a distance from either a boat or plane.

Sometimes, particularly after an unsuccessful attempt to trap them, the call of the white-fronted geese really does sound like laughter. ■

OCEAN SALMON

By Laimons Osis
ODFW Salmon Staff — Newport

The report in the local newspaper may go something like this . . . "Salmon fishing was good off the central coast last week. Anglers fishing out of Newport landed 1,548 coho and 200 chinook with a catch rate of better than one fish per angler. The coastwide sport catch last week hit almost 20,000 coho. So far this season, anglers fishing south of Cape Falcon have landed 150,000 coho from a 269,200 fish quota."

And so it goes, week after week during the ocean salmon season — the numbers keep rolling in. Those weekly counts first serve as an indicator of fishing success, but later become even more critical if catches start approaching quota limits. Then, anglers watch

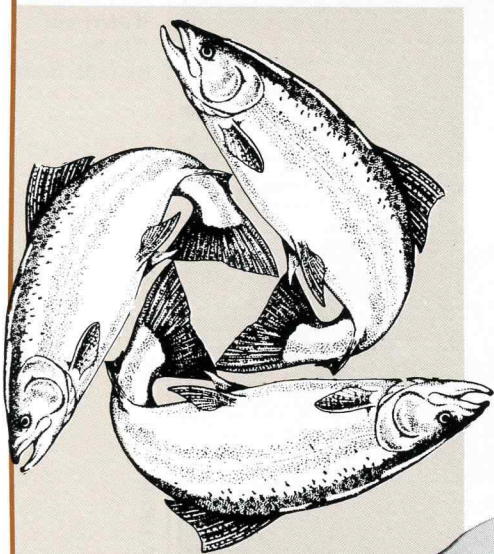
Keeping track of the salmon harvest is a vital part of the fishery management program.

*How
we
count
the
catch*

Those weekly counts first serve as an indicator of fishing success, but later become even more critical if catches start approaching quota limits.

Illustrations: Sharon Torvik

Photograph: Ron Shay





the counts as closely as big investors would watch the stock market performance.

But where do all these numbers come from? Who gathers them, and how? These have been general concerns since the length of ocean fishing seasons has been tied to catch quotas.

The answer to the first question — Where do these numbers come from? — is easy. They are compiled by the Oregon Department of Fish and Wildlife, often in cooperation with fisheries agencies in Washington and California.

But who gathers the data? And how do they do it? Let me tell you about it.

How are these numbers collected?

This year, the department has 23 seasonal employees, we call “samplers”, stationed at ports all along the coast. These people, often called “fish checkers” by the angling public, monitor the ocean recreational fishery.

We also have north-coast and south-coast crew chiefs that help in field supervision, and bring data and tag recoveries back to me, the sampling coordinator, in Newport each week.

The end result of this process is the weekly catch report that may ultimately show up in your local newspaper.

That covers who — now let’s turn to how. These samplers are out there to gather three, basic pieces of information that lead to weekly catch and effort estimates.

- *1. The number of charter and pleasure boats that went fishing during each week
- *2. The average number of anglers per boat (separated by charter and pleasure boats)
- *3. The average catch per angler (again, separated by vessel type)

In addition, we further separate the data by trip-type, such as salmon or bottomfish, and by week day or weekend, because it is likely that catch rates will be different among these categories.

For example, we multiply the total number of weekday salmon charter trips times the appropriate catch rate to come up with a catch estimate for weekdays, and do the same for weekends.

We then go through the same procedure with pleasure boat counts and catch rates, and then sum all these estimates into a weekly catch estimate.

How do we get effort counts? In most ports, we count boats that cross the bar every day from dawn (that comes very early during the summer) until 1 pm, and keep a separate tally of charter and pleasure boats. When significant afternoon effort develops, we try to get additional counts, or use Coast Guard data if available.

To get catch per angler data, the samplers interview returning ocean anglers at charter docks, boat ramps and moorage slips. At the same time they gather information on the number of anglers per boat, look for tagged fish, and collect random scale samples.

The samplers try to get a representative sample of activity at their assigned locations so the data they gather accurately reflects what really happened in the fleet as a whole that day and that week. Checking every angler and every fish at every port would be extremely expensive and impractical. Especially since the statistical methods used in the sampling program yield virtually the same results.

As it is, department samplers managed to check 44 percent of the coastwide catch last year. That’s more than 100,000 salmon. You must really like people, and fish, to survive in this job.

It’s not perfect, but it’s good

I don’t want to give the impression that our sampling program is without challenges. Even our effort counts, which are meant to be complete and not a sub-sample, can be a problem in thick morning fog. In some ports, the sampler can move to a location closer to the jetty and keep count of outbound boats. More often, we end up using a tally of incoming boats once the fog lifts.

When fog is persistent, we do tend to underestimate effort (if you can’t see them, you can’t count them). However, charter office logs do offer backup for charter boat effort as well as trip types.

At the present staffing level, we have coverage of most areas and times when ocean-caught salmon are landed. It is particularly a challenge to get a representative sample of the pleasure boat fleet. Some ramps and moorages are scattered, and a rough ocean or “hot bite” can inspire all the boats to come in or go out at once.

How do we deal with these sampling problems? Well, we can’t control fog, nor do we plan to put traffic signals on the bar to ensure an even flow of anglers.

Instead, we try to employ the most qualified samplers available. This year we interviewed 50 candidates for 12 vacant positions. Most of the samplers have fisheries or wildlife backgrounds, or are interested in careers in those fields.

We give them extensive training and orientation before the season, a set of specific sampling instructions and in-season supervision. The result is a sampling program that, while not perfect, is good. We welcome your scrutiny and feedback on how we can do better. See you on the docks. ■

The Cascade Range

by Jim Gladson

If you take a simplified view of Oregon's geography, it is easy to say that the western third of the state is green and wet, while the other two-thirds is high and dry. In this scenario, the Cascade Mountain Range becomes little more than a wall marking the division between east and west.

Traveling the Mt. Hood or Santiam highways at 55 mph can easily leave this impression. The western base has abundant greenery and tall trees; the eastern flats — sagebrush and junipers. The dividing mountains take little more than an hour to traverse.

Taking the same trip on foot from the western valley floor, up and over Mt. Hood, reveals that quick impressions can be very misleading. In truth, The Cascade Range changes with every mile. As the habitats change, so do the wildlife species found there. What first appeared to be only a wall without character covered by a thicket of trees, has now become a transition zone with ecosystems based not just on amount of moisture, but also altitude.

Many wildlife species, particularly deer and elk, pay little attention to which side of the range they occupy. Elk telemetry studies have shown that animals frequently move back and forth across the summit line that divides east and west. Deer found on the east slopes of Mt. Hood include an intermingling of western Oregon black-tailed deer and eastern Oregon mule deer.

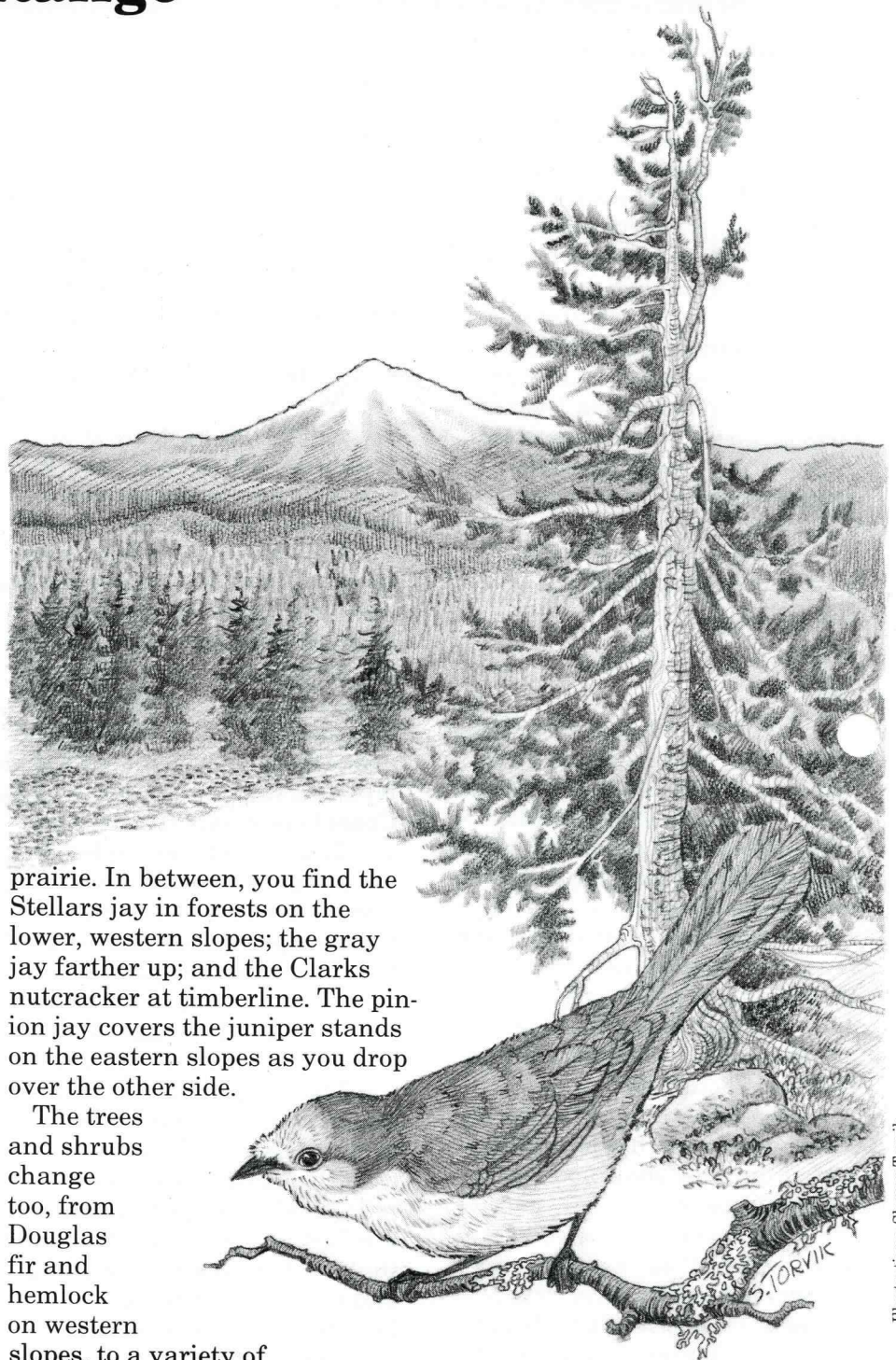
The wildlife species that best shows the transitional nature of the Cascades is the Corvidae bird family that includes jays and crows. Where you are will determine which of the jays you are likely to see. The scrub jay is at home in western valleys, while the magpie prefers the sagebrush

prairie. In between, you find the Stellers jay in forests on the lower, western slopes; the gray jay farther up; and the Clarks nutcracker at timberline. The pinion jay covers the juniper stands on the eastern slopes as you drop over the other side.

The trees and shrubs change too, from Douglas fir and hemlock on western slopes, to a variety of pines on the east side. Did you know, for instance, that rhododendron grow as native wild plants only between two and three thousand feet in the Cascades?

Not many people are willing to take a walk over a mountain range. But even a car can offer

condensed opportunities, if you stop now and then to smell the rhodies and get out the bird book. Western Oregon is more than trees. Eastern Oregon is certainly more than desert. And the Cascades are more than just a wall of mountains.

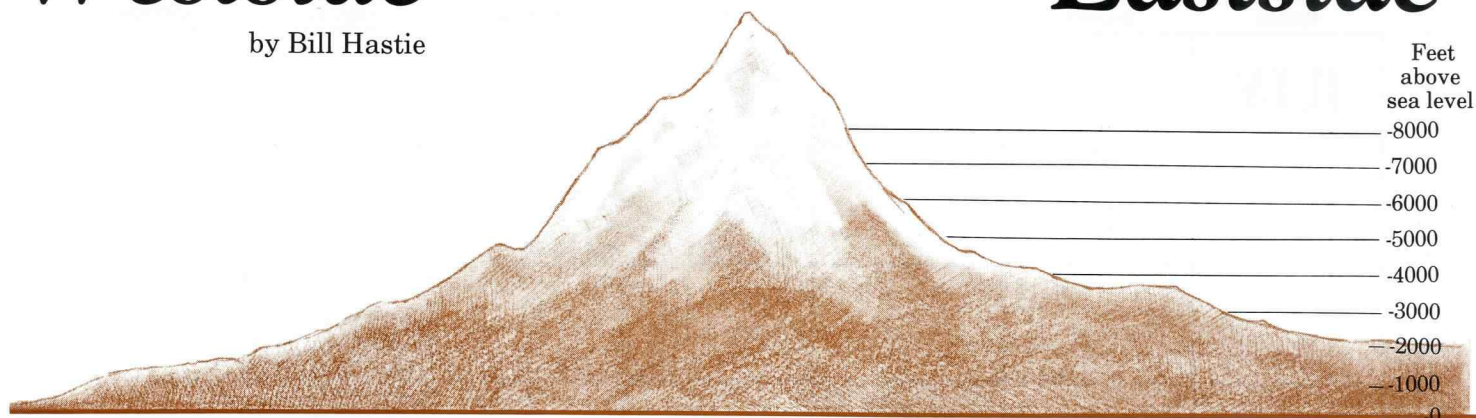


Illustrations: Sharon Torvik

Westside

by Bill Hastie

Eastside



One of the most beautiful trips you can take in our state is across the Cascade Mountain Range. From the floor of the Willamette Valley (near sea level) to the mountain passes, you climb almost five-thousand feet, and still the mountain peaks tower far above you!

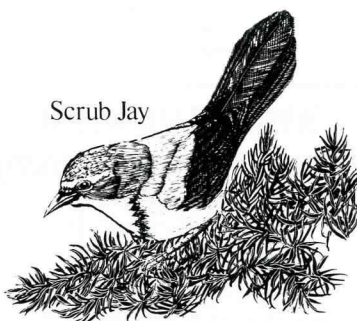
If you took a trip, say from Salem to Bend, you would be in a forest almost all the way. Did you know that you can tell roughly what elevation above sea level you are by looking at the plants and animals around you? This is because many plants and animals can only live between certain elevations in the mountains. These “zones” exist because as elevation increases, rainfall, snowfall, soils, and temperatures change too. So each zone has its own unique environment, and only certain plants and animals can live there.

Take forest trees. Some scientists have named plant zones by using the tree or trees that live there when the forest is mature (western hemlock zone, ponderosa

pine zone, etc.). Jays are another example. The scrub jay, Steller’s jay, and gray jay all live at different elevations in the Cascades. Of course, these zones blend together for both trees and jays, depending on many factors. But, in general, if you know what tree or jay you are looking at, you can get a rough idea of the elevation where you are standing.

To help you learn about these zones, you can construct a diagram of the Cascade range with the dominant trees and jays at the level they would live. Above is a model of the Cascades, with elevations on the right. Cut out and glue or tape the jays and trees in the correct zones on the mountain diagram. Or, if you want to make a larger model with lots of trees and jays, draw an identical diagram on a larger piece of paper, and make as many copies of the trees and jays as you want to go on your diagram. Either way, you’ll have a good model of our Cascade Mountain forests and the jays in them!

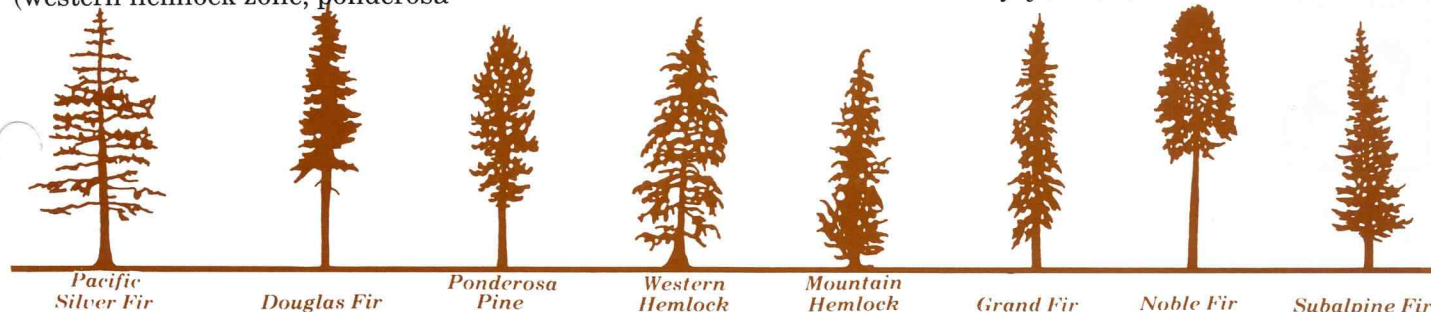
Scrub Jay



Steller's Jay






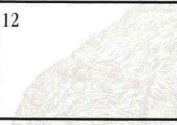




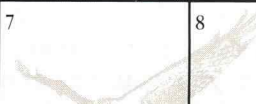







Gray Jay



Illustrations: Sharon Torvik

Oregon Fish and Wildlife Calendar

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
JULY			1 Emergency Hunt applications accepted beginning today	2	3 	4 
5	6 	7	8 Minus Tide Series PFMC meets in San Francisco	9	10 	11 
12 	13 	14	15	16	17 Fish & Wildlife Commission pigeon and dove seasons	18
19 	20 	21 Minus Tide Series	22	23	24 Look for brown pelicans at coastal bays	25
26	27	28	29 Join a wildlife biologist on an Upland Bird Count	30	31	
AUGUST	AVOID THE RUSH Get your hunter education course completed this month.					1
2	3 	4	5 Minus Tide Series	6	7 	8
9	10 	11	12	13	14 	15 Antelope seasons begins
16 Spring chinook spawning begins; visit a hatchery	17 	18 	19	20 Minus Tide Series	21 Fish and Wildlife Commission upland bird seasons	22 1988 angling proposal review — no public hearing
23	24	25	26	27	28	29 Probable grouse season opener
30	31 					



506 SW Mill Street
PO Box 3349
Portland, OR 97208-3349