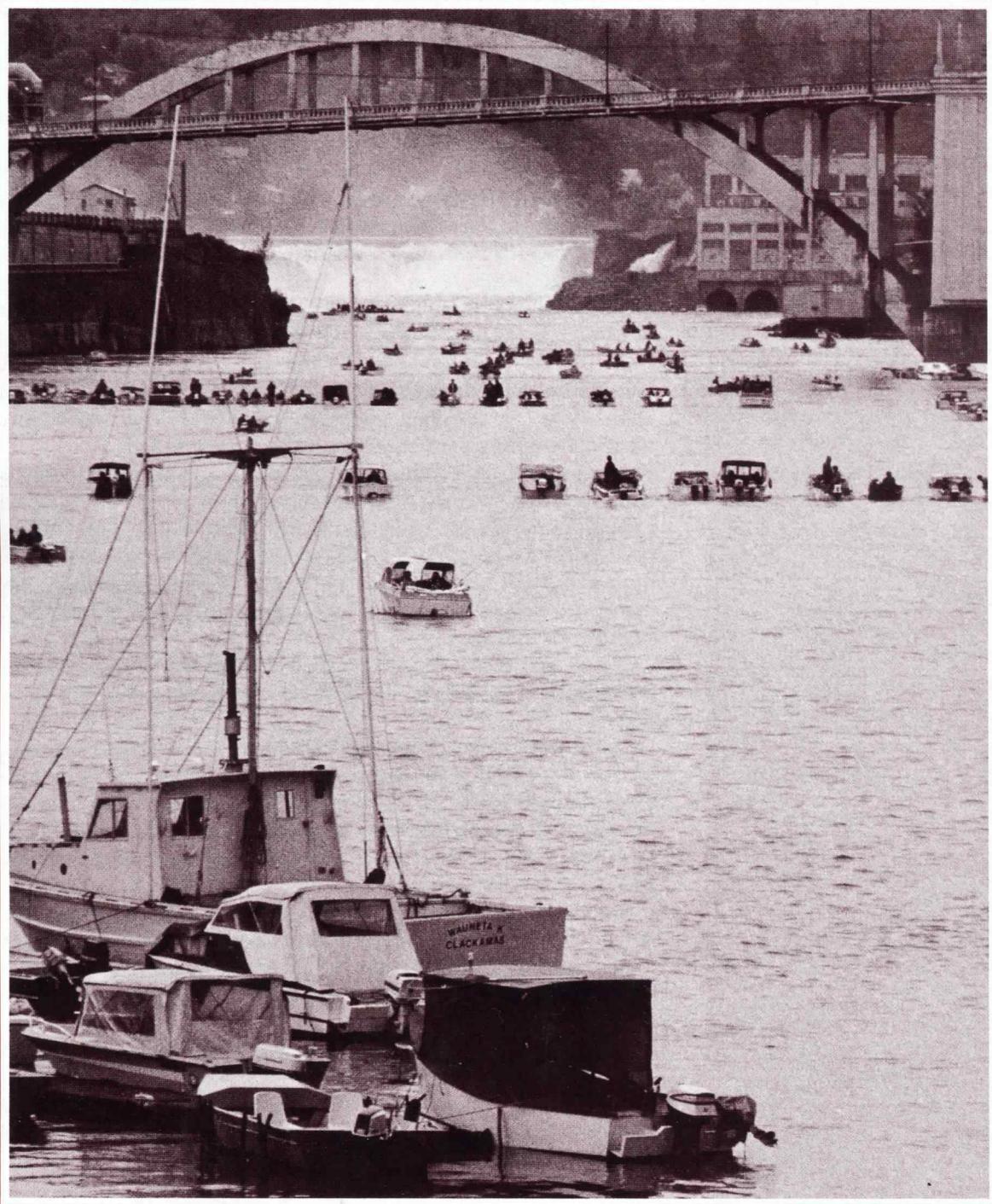


OREGON WILDLIFE

November-December 1988



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The Cover

Anglers in the hoglines at Oregon City fished on the strongest spring chinook run in decades during 1988. Photo by Jim Gladson

HUNTER EDUCATION PROGRAM

August-September 1988

Instructors Approved 42
Total Active 1,051
Students Trained 3,510
Total to Date 338,347
Hunting Casualties Reported in 1988
Nonfatal 6
Fatal 0

Horn Tooting — Part 2

In the last issue of *Oregon Wildlife* I used this space to talk about some recent successes in fishery management. Directly or indirectly, I praised the work of people within the Department of Fish and Wildlife. As we are entering the traditional season for giving thanks, I would like to recognize another group of people doing great things for Oregon's fish and wildlife resources.

They do not work for the department, but with us. They labor for no pay, and many times pay us for the opportunity to help. These people who volunteer their time, money, equipment and materials now form critical links that enhance some management programs and hold other efforts together.

The following figures are difficult to measure with great accuracy, but rough estimates indicate that in 1987, volunteers contributed almost 150,000 hours of their time and well over \$2 million in equipment, materials and funds to fish and wildlife projects and programs. The Salmon and Trout Enhancement Program (STEP) accounted for a sizable share of those contributions, but certainly not all.

For example, an estimated 24,000 hours and nearly \$700,000 went to wildlife programs; including donations to the Nongame Tax Checkoff. Land donations were valued at nearly \$200,000 last year. *Oregon Wildlife* readers gave more than \$90,000 following a simple request to help keep the publication subscription free. The annual beach clean-up effort generated 12,000 hours of volunteer time and \$10,000 in donated services and supplies.

It does not take a rocket scientist to figure out there is a lot of work being done here that the department could never afford to do on its own.

In October, a group of STEP volunteers in the Depoe Bay area hosted a dinner for the Fish and Wildlife Commission and some department staff people. Their intent; to thank us for our support. Earlier that same day, people testifying at a commission public hearing in Coos Bay made a special effort to praise a department biologist in the area for his work with volunteers.

We all appreciated this recognition, but somehow it seemed upside down. Here were people who volunteered their time and money thanking us. I could only conclude that their commitment was so complete, their generosity so ingrained, it never occurred to them how special they were.

The folks in Coos Bay and Depoe Bay — or in Bend, Burns, Brookings and Beaverton for that matter — may not be willing to toot their own horn. So I will do it for them. The work they do makes a real difference in the protection, restoration and enhancement of our fish and wildlife resources. Thanks is too small a word.



Randy Fisher
Director

November-December 1988

UPDATE



Oregon Wildlife

Woodland Wildlife Booklet

Woodland owners can now improve fish and wildlife habitats and populations on their lands by using a new publication titled "Woodland Fish and Wildlife." This 12-page booklet tells how wildlife needs can be met in conjunction with forest management activities.

A group of 15 private and public organizations cooperated to publish the brochure. Copies are available by writing or calling the World Forestry Center, 4033 SW Canyon Rd., Portland, OR 97221: (503) 228-1367.

Get Your Wildlife Calendar

The new Oregon Wildlife Calendar is now available. Full color and Oregon wildlife illustrations done by Oregon artists compliment the calendar's wealth of information on dates and events related to fish and wildlife.

This latest addition includes season dates for 1989, best times and places to see many kinds of wildlife, plus timely information on everything from bird houses to elk bugling.

The 1989 Oregon Wildlife Calendars can be purchased for \$6.00 at Department of Fish and Wildlife regional offices, department headquarters in Portland and some field stations around the state. Send mail orders to Wildlife Calendar, Oregon Wildlife Federation, 2753 N. 32nd, Springfield, OR 97477.

Successful Bighorn Season Reported

It was a good year for Oregon's bighorn sheep hunters, with a reported success rate of more than 90 percent, according to the Department of Fish and Wildlife.

Forty-two hunters braved some of Oregon's roughest country and bagged a bighorn, including one Rocky Mountain bighorn whose horn measurement will likely make the record books, says department big game staff biologist Al Polenz. Four other hunters worked hard, but did not bring home an animal.

The success rate this year is well above the average, which normally ranges from 75 to 80 percent, according to Polenz. One reason for the increase may be due to better prepared hunters, says the big game biologist.

In the past, some hunters have shown up for their hunt, then realized they could not handle the effort required to reach and bag a bighorn.

"It's one thing to see the animals at a distance, and another to get close enough for a good shot. Bighorns live in very rugged and steep country, especially on Steens Mountain. Some hunters just aren't physically prepared for the challenge," he said.

"There are other factors that lead to success, but being in shape is certainly an advantage," says Polenz. "I think most hunters now understand that hunting bighorns is not like any other big game hunt in Oregon. I suspect we had people this year who were better able to do what had to be done, and the success rate reflects that."

The Willamette

Keeping a clean river is also a requirement. "We must maintain at least the water quality and quantity we have now. That will be a challenge as our population expands."

Harry Wagner

The fishing line cut

a small vee through the water. Below the surface, a flashing spinner offered what appeared to be a meal fit for a king — the king of salmon that is.

On the surface stirred an increasingly restless angler, watching his line and waiting for some action. It had been hours since he put his boat into the Willamette River and began trolling for spring chinook. People fishing near him landed some fish during the day, but, so far, the most

interesting experiences for this solitary angler included watching wet-suited water-skiers braving the chilly water and a rower stroking a knife-like racing boat downstream.

As a passing April shower cratered the water surface, his thoughts drifted to summers on the river; boating with the family, picnics and swim parties. He thought of how cities in The Valley had once turned their backs on this waterway, but now embraced it; making it part of a very livable environment.

Then, the familiar rhythm of the rod vibrating in his hands changed — drawing his instant attention. The wobble and spin of that almost-forgotten lure near the bottom seemed to be making some new moves. Only then did it occur to him — a chinook! Daydreams evaporated. Adrenaline surged into his system. He had to calm down. "Don't rush it," the angler muttered to himself before setting the hook. "Let it get a good taste . . . easy . . . okay . . . Now!!"



Bob Kuhn

In recent years, this scene has been repeated more than 100,000 times annually by people fishing on the Willamette River, its tributaries or on the Columbia River. From February to well into June, the Willamette run of spring chinook supports a premier sport fishery. This spring season, and the tremendous fishing effort it attracts, also symbolizes something else: the ability of people to face problems head-on, and devise solutions.

This year, the total Willamette spring chinook run into the Columbia was 118,000 fish. Well above the management goal of 100,000 chinook annually. Such excellent returns were not always the case.

Today, the Willamette River itself is a relatively clean waterway where fish can thrive and people pursue a variety of water-related recreation. This was not always true either.

There was a time, not long ago, that the Willamette served mainly to carry away human and industrial

wastes. The pollution was so bad that fish could not survive in its waters during low summer flows. Only fools considered swimming in its foul contents. But Oregonians spoke up, calling for a cleaner, more usable river. Slowly, these wishes were met (See related story on page 7).

By the late 1960s, the river was a better place. However, the spring chinook run was having problems still. Dams on many of the major Willamette tributaries had blocked nearly a third of the wild chinook spawning habitat, and hatchery fish were not making up for the losses.

A variety of problems kept hatcheries from producing up to potential. And many young salmon that did migrate downstream were lost as they passed hydro-electric dams. As recently as 1976, biologists were forced to cut short seasons to meet hatchery spawning needs upstream. Adult returns were poor again in 1980.

Now, chinook returns are substantial. And a completely new fishery for summer steelhead also has been created since 1970. This success story has many chapters.

Putting It All Together

"There isn't any one thing you can point to and say 'This did it,' " says department fishery biologist Max Smith in Springfield. "A variety of actions we took to improve chinook production culminated at nearly the same time. It was the synergy of these efforts that allowed us to achieve what we did," he said.

Two major components that improved chinook returns were better production techniques at department-operated hatcheries, and fewer losses of migrating smolts at dams.

Pinhead Dropouts

The term sounds like a name for a group of juvenile delinquents. In fact, the pinhead dropout syndrome describes poorly developed salmon fry that have large heads and tiny bodies. One fishery manager compared them to "the runts of the litter." A few runts are acceptable, but at McKenzie Hatchery for example, this condition led to losses as high as 70 percent of the young fish.

Modification of hatchery equipment and practices in the early 1980s has now reduced those losses to less than nine percent annually. That improvement alone has allowed significant increases in total smolt releases. But how good were those smolts? How well could they survive in the ocean and return as adults?

Spring chinook anglers land more than 30,000 salmon annually on the Columbia and in the Willamette system. Catches start early in the year and continue through June in the lower Willamette as well as the Clackamas River and other tributaries above the falls.



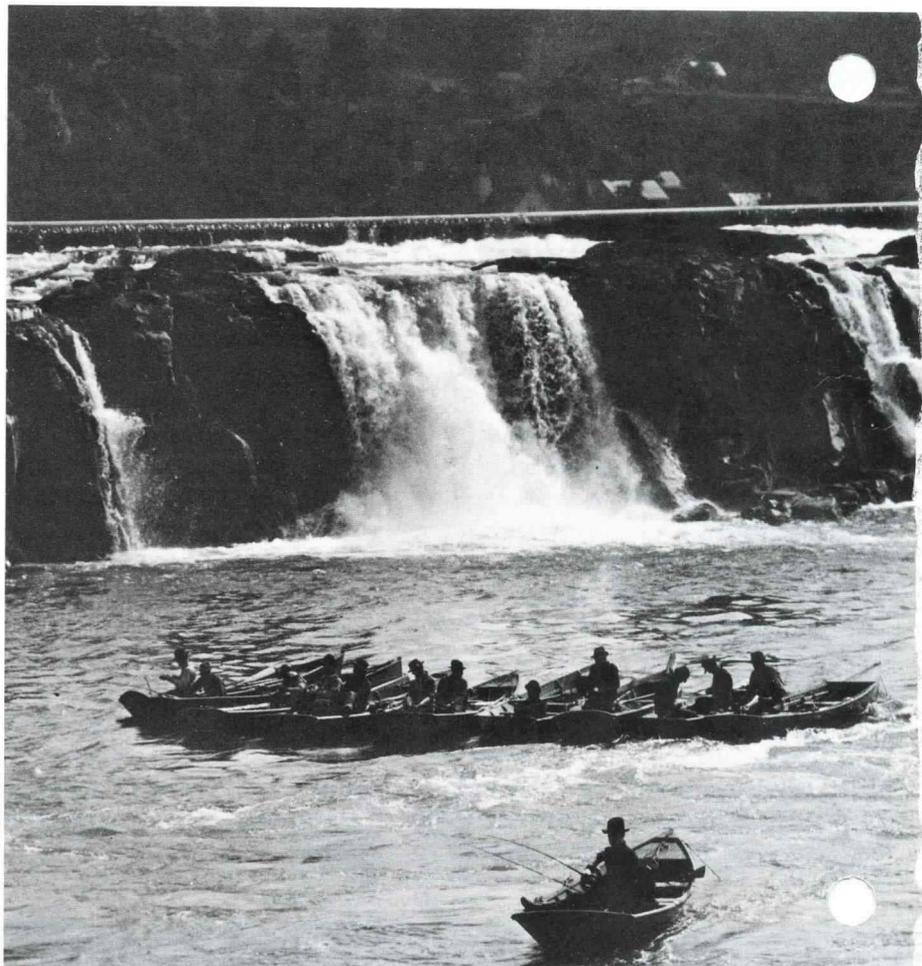
Giving these young salmon a better start was a tremendous contribution to adult survival.

Fishing for spring chinook in the "hogline" is an old tradition as the 1914 photo attests. →

Between January and September, 1988, the Willamette Falls fish counter tallied about 68,000 spring chinook, more than 35,000 summer steelhead, and a variety of other fish species by the Willamette Falls viewing window. ↓



Bob Kuhn



William Finley

Research programs at salmon hatcheries in the Willamette system studied effects of different diets, management techniques within the facilities, and how smolt size and time of release affected adult returns. Study results allowed hatchery managers to focus on which approaches produced the best survival rates.

"In combination, these changes and improvements were major breakthroughs," says department fish culture chief Chris Christianson. "Giving these young salmon a better start was a tremendous contributor to adult survival," he said.

Water Over the Dam

Even the healthiest smolt can still have problems making it to sea, however. Power plants at Leaburg Dam on the McKenzie River and Willamette Falls at Oregon City were literally grinding up smolts in

spinning power turbines.

Again, coordinated efforts of the involved parties have led to improvements. The Eugene Water and Electric Board installed screens over the turbines at Leaburg to divert downstream migrants. Portland General Electric shuts down its Willamette Falls powerplant during a critical portion of the spring migration period.

These actions save fish. Greater downstream survival of healthier smolts equates to more adults coming back. More fish means better fishing opportunities and enough hatchery returns to keep the production program on track. But maintaining this smooth cycle has not always been that easy.

Pre-spawning Mortality

Getting adult fish back to the hatchery holding ponds is one thing, keeping them alive until spawning

is another. Spring chinook return to holding ponds, such as the facility at Dexter, beginning in mid June. The females are not ripe for spawning until September. For decades, diseases and stress caused by crowded conditions and poor water quality claimed from 60 to 85 percent of the returnees before they could be spawned.

"It was very difficult for the spring chinook program to reach full potential because we simply did not have enough eggs," says Max Smith. "Without a reasonable ability to keep adults alive, we couldn't achieve our production goals."

In recent years, fish pathologists have developed vaccines to lessen the incidence of disease. Each fish is given a shot of medication once it enters the pond, and results have been dramatic. Now, pre-spawning losses total less than 20 percent.

Since hatchery operators need not assume that most of the fish will die before spawning, not as many fish are held. Nor do managers hold one male for every female as in the past. Today, the holding pond ratio is one male for every three females. Keeping fewer fish has also reduced the overcrowding problem that was a major cause of disease and stress.

Protecting the Investment

Department fisheries chief Harry Wagner is pleased with the results of the last ten years, but cautions that getting too comfortable with success would be a mistake.

"The potential for additional enhancement of fisheries in the Willamette basin is still great. There is much we can do. We must also recognize there are still problems that must be dealt with," he said.

Fish passage, both up and downstream, at Willamette Falls is still a serious bottleneck, according to Wagner. The fish ladder system that allows adults to move upstream needs work, and losses of ocean-bound smolts in the power turbines is still a concern.

"The Willamette Falls fishway is almost 20 years old now and in need of renovation and modernization. That's an expensive item. The downstream passage problem must continue to be addressed. All of this will require cooperation and a sharing of costs among industry and government," he said.

Keeping a clean river is also a requirement. "We must maintain at least the water quality and quantity we have now. That will be a challenge as our population expands," Wagner said.

..... and so, after nearly 20 minutes of alternating anxiety and thrills, the Willamette angler slips a net under his bright spring chinook. He may not know the history of this fish, nor the problems it has overcome. He does know he has a good fish in the boat. For the hundreds of people involved in the spring chinook program, that's recognition enough.

THE WILLAMETTE RIVER CLEANUP

by Shirley P. Kengla

Oregonians are noted for a strong environmental ethic. We believe that responsible pollution management is essential to a good quality of life. Public concern over the Willamette River's water quality in the 1930's led to the nation's first pollution control laws and earned Oregon the reputation as a champion of environmental protection.

It wasn't always so. Before water quality regulations, rivers served as a way to get rid of wastes. Nearly a million Oregonians dumped their raw sewage into streams. The Willamette River reeked with human sewage and unprocessed waste from canneries, industries and slaughterhouses.

The river was unfit for drinking or swimming and killed fish within minutes of contact. If people overlooked the "unsafe for swimming" signs on the banks of the Willamette River, they could not ignore the floating rafts of sludge and bacterial slime. The waste consumed so much oxygen in the river, that fish suffocated from the lack of it.

In 1938, outraged citizens overwhelmingly supported an initiative petition creating a State Sanitary Authority to clean the Willamette and control water pollution statewide.

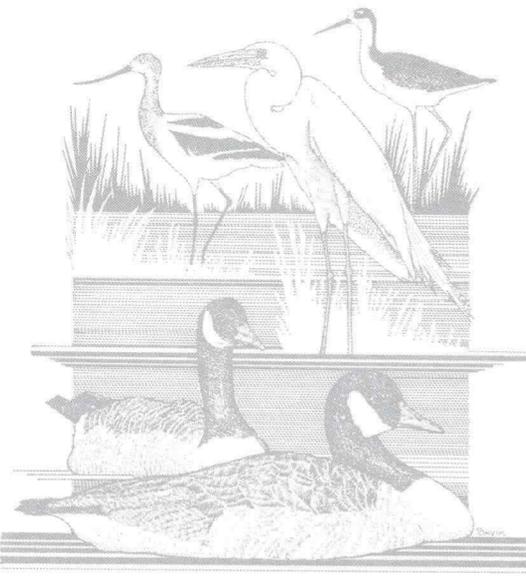
The Willamette cleanup began after WWII. Within 10 years, every community along the Willamette had "primary" treatment, the removal of at least 30 percent of the organic waste from sewage. By 1972, the Willamette was safe for water contact sports. The fall salmon run in 1973 increased to 22,000 from a meager 79 in 1965. Stronger regulations assured that, by 1977, all cities and industries had "secondary" treatment, removal of 85 percent of the organic waste, before it entered the Willamette.

Much of the Willamette River's beauty lies along its bank. A protective strip of parkland, known as the Willamette Greenway, was set aside for access to the tree-lined river between Eugene and Portland for recreation and fishing. It also provides a buffer zone for pollution.

Today, the river supports impressive numbers of steelhead and salmon and is a recreation center for the Willamette Valley. This happy ending comes with a warning. Oregonians should never assume that all water quality problems have been solved. As communities grow and new chemicals are introduced into use, Oregon's waterbodies face new problems. Pollution control programs must be constantly evaluated to assure that they are working.

Preventing water quality problems is one of the most important jobs the Department of Environmental Quality (renamed from the State Sanitary Authority in 1969) and all Oregonians face for the future. The success of the Willamette River cleanup teaches a lesson. If people want action, they have the power to demand changes.

Shirley P. Kengla is a public affairs representative in the Water Quality Division of the State Department of Environmental Quality (DEQ).



Big Marsh

By Pat Wray



Once a marsh, now a cattle pasture. Shall it be a productive marsh again? That decision is being made now.

t Wray

The potential resurrection of a large Oregon wetland is exciting, but must be balanced against resulting gains and losses in grazing rights, water quality, fish and wildlife habitat and a hundred other factors.

In an era when wetlands are being drained and converted to raise crops at an alarming rate, an historic Oregon marsh, drained for pasture 40 years ago, may be among the first dried out American wetland to become a marsh again.

Big Marsh, a 1,100 acre wetland near Crescent Lake on the east slope of the Cascades, is undergoing a U.S. Forest Service environmental assessment (EA) to determine the most appropriate method of future management. The EA, which may be complete by the time of this magazine's publication, must take into account a variety of options, all of which are attractive to some people and disturbing to others.

A bit of history will help to understand the choices that must be made. Big Marsh first received written mention in 1865 when surveyor Bynon Pengra came upon an open wetland where the water backed up from a series of beaver dams to overflow the entire meadow to a depth of up to 20 inches. He "... found it all overgrown with a common species of marsh grass. It could be easily drained by opening these dams, and made available for meadows or grazing purposes."

It was an accurate and prophetic description.

Cattle grazed the wetland in a haphazard fashion from the late 1800's until World War I, when sheep were substituted. They continued to utilize Big Marsh until World War II. The owner in 1946 (Big Oregon Wildlife

Marsh had become private property in 1906) decided to improve the grazing potential of his land by draining the property. This he accomplished by digging deep channels on the east and west edges of the marsh and diverting the primary water source, Big Marsh Creek, into them.

As the marsh dried, aquatic vegetation was replaced by terrestrial grasses. Gradually most of the marsh became accessible to cattle.

In 1982, a land exchange brought Big Marsh into public ownership and the first public meetings were held as preliminary steps in determining its future. The environmental assessment is a continuation of that process.

The choices of the EA team range from continuing to manage the marsh as a pasture to letting the marsh just be a marsh and taking whatever that gives you and everything in between.

Re-establishment of Big Marsh as a viable wetland, while a very popular course of action in some circles, is not without its drawbacks. It would involve redirecting the creek to its natural watercourse through the center of the marsh. At least initially this would cloud the water. It might also raise the temperature of the water that leaves the marsh on its way to Crescent Creek and the Little Deschutes.

It is helpful to think of the marsh as a large sponge. A dry sponge absorbs almost nothing and particles

stuck to it wash off easily. A dry marsh or meadow is the same, causing murky or turbid water downstream. A saturated marsh, like a wet sponge, is a flow regulator; it reduces high water surges and delays the summer drying trend. It is also a very large filter, trapping sediment and cleansing the flow of water through it.

The potential effect of upcoming decisions on fish and wildlife is extensive, also. Although fishing in the twin channels is marginal and just a shadow of what once existed in the natural marsh, some fishermen have grown used to "fishing in the ditches" and might be concerned with a redirection effort that meant the end of long used spots.

Waterfowl would almost certainly benefit from any decision which increased the amount of water in the marsh but the same is not necessarily true of all wildlife species. This is part of the dilemma facing the EA team.

The team will be guided by the Oregon Wilderness Act directives concerning the Oregon Cascades Recreation Area, of which Big Marsh is a part. They must balance the needs of fish and wildlife with the desires of sportsmen and ranchers, all the while keeping in mind water quality and the benefits of disappearing wetlands.

It will be interesting to see the outcome . . . and whether or not the sponge gets wet.





The biggest brown in Oregon caught at Paulina Lake in 1965. Ike and his dad, Darren Fox hauled it in.

Lela Baker

The Big

by Ron Shay

Several million years ago, according to geologists, a mountain grew out of the plain southeast of Bend. Lava continued to flow until the shell of the mountain collapsed inward, forming what is known as a caldera. Over the ages, the caldera or bowl — which was divided by a later lava flow — filled with water and two lakes were formed.

Settlers of the area during the 19th Century called the volcanic bowl Newberry Crater. The deeper, western-most lake was named after a local Indian leader called Paulina. The other lake to the east of Paulina Lake was, logically, called East Lake.

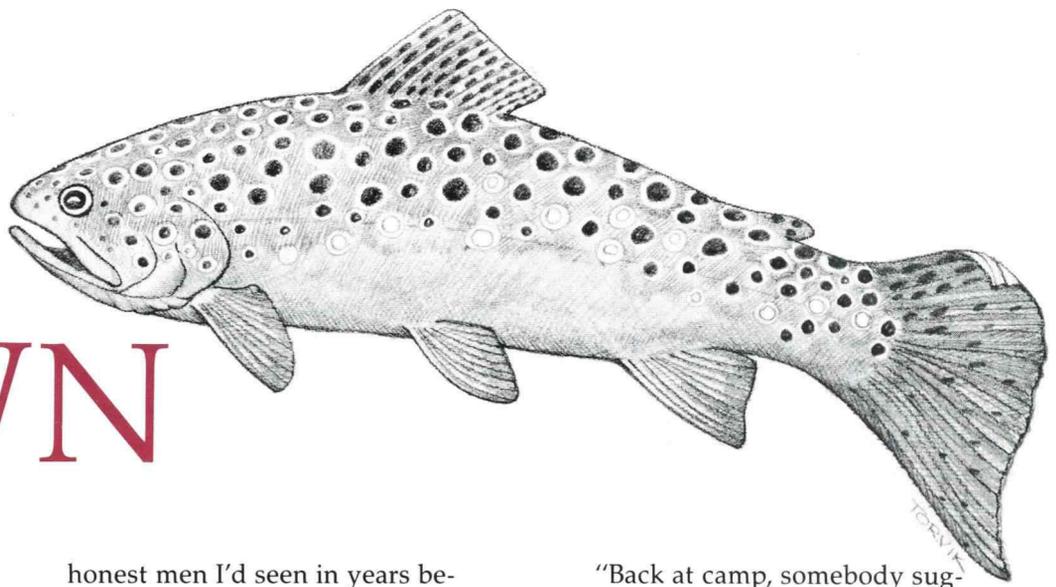
But this is not intended as a detailed history of the lakes. This is a story about an event that made Paulina Lake famous. It was there, in 1965, that anglers captured the largest brown trout ever taken in Oregon . . . indeed, one of the largest ever taken in the United States or the World.

Background on lake development and the landing of the big brown was provided by Howard Reed during a recent interview. Reed's parents, Jesse and Ray, built the original resort and lodge at Paulina Lake.

According to Howard, his father was originally interested in Diamond Lake as a resort site, but eventually received a U.S. Forest Service permit to build at Paulina. He and his parents moved into the crater on March 17, 1929.

Howard recalled the trip saying, "Three of us walked up carrying

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BROWN

about 500 pounds of stuff on a homemade sled that we built with a pair of skis. We walked about four and one-half miles up the hill to get to the lake hauling a stove and stove pipe.”

As the resort developed and angling pressure increased, the once barren lake received a variety of fish species from the Oregon Game Commission hatcheries. Some plantings worked better than others. Howard recalled one effort.

“Four years before we moved here, they planted a rather good supply of silver (coho) salmon in the lake. During the fourth and fifth year they came to their spawning age and died around the edge of the lake. It was one stinking mess,” he said.

Rainbow trout were the mainstay of the lake, but the Game Commission also stocked brook trout, brown trout, kokanee and — as mentioned — silvers. Over the years, Paulina Lake has produced tons of trout and uncounted limits of average-sized fish. However, the story of the big brown trout has to be unique.

It was July 3, 1965. Howard was busy handling the crowds at the lodge when someone came in and told him there was a man outside with a big fish. Expecting something in the 18 to 20-inch class, the lodge operator went out to take a look. On seeing the fish, he immediately went back to get a camera. Howard takes the story from there.

“When I came back out, someone was asking how he caught the fish, and he was certainly one of the most

honest men I’d seen in years because he said, ‘I didn’t catch it!’

“He said, ‘My son and I were over on the southeast side of the lake. It was rather a calm day and we were trolling. My son saw something floating off to the side and asked what it was. I couldn’t see anything but a chunk of something in the water. My son said ‘Let’s go look.’ For lack of something better to do, I turned the boat and we went over and found this fish lying on the surface, apparently dead.

“It had a four-bladed spinner with a three-foot leader on it, a plain worm stuck in its jaw and five or six feet of 20-pound test line fastened on the other end. That was all hanging down from the mouth of the fish.”

Howard says the father and son thought the fish was dead, and decided to bring it in to salvage the spinner. “When the man reached down to get the spinner out, the fish came to life and started to head for deep water. But it was so exhausted they managed to hold on to the line and the fish soon gave up and floated back up to the surface.

“Then they decided to try and land the fish,” said Howard. “But that presented a problem since all they had was a small dipnet. They finally got the smart idea of getting all of their weight on one side of their 14-foot aluminum boat until the gunwale was at water level then quickly slid the fish over the side into the boat. The man said it just about beat them to death before they could finally kill it.

“Back at camp, somebody suggested to the father that despite the fact they had just scooped the fish out of the water, he should take it in and have it weighed officially. He could win lots of prizes and tackle for taking such a big fish. The father turned around and looked at the man and said, ‘I would never be able to look this 15-year-old boy (his son) in the face again.’ He turned and walked away as we took pictures of the fish,” Reed said.

The unofficial weight of the big brown brought in by Ike and Darrell Fox was 35 pounds 8 ounces. It was 39 inches long with a 26.5-inch girth. The current Oregon brown trout record, weighed on an official scale, is 24 pounds, 14 ounces taken on hook and line from Crane Prairie Reservoir. The listed world record brown, taken in 1952 in Argentina, is 35 pounds, 15 ounces.

The fate of the fish was in doubt a number of times after it was caught. However, it was finally mounted and is now owned by outdoor writer Ed Park of Bend. It is on display at a local sporting goods store.

And the other part of the story . . . Who did originally hook and lose the fish? Howard Reed says he kept the gear, but never put it on display. While several people were quite sure they had fought the big trout, only one man said convincingly that his wife might have been the one to tussle with the fish.

“But he really didn’t make a big story out of it,” said Reed. “We were never able to locate him or her again, or find out more about it.”

The Law and You

Can I hunt on any land that is not posted?

No. Under Oregon law it is illegal to hunt or fish on anyone's enclosed land without permission. "Enclosed land" does not necessarily mean just a fence; it can also mean a ditch, a hedgerow or any change in the vegetation that would indicate a property line. In Oregon, it is the responsibility of the trespasser to know whose land they are on.

Can I carry a sidearm while hunting deer to finish off a wounded animal after I have shot it with a rifle or a bow?

No. If you are bowhunting you may not carry any type of firearm. While rifle hunting, you are allowed to carry a sidearm, but cannot use it to finish off a wounded animal unless your deer tag is specifically validated for use of a handgun. But if you do have a handgun tag, then you can't carry or use a rifle.

Can I carry a pistol under the seat of my truck?

Under Oregon law, individuals are exempt from the concealed weapons rules when going to or from certain functions — hunting and fishing are two of those activities. However, it's probably not a good practice. In addition to being unsafe, you might find yourself facing the pavement if a traffic officer pulled you over and saw a barrel sticking out from under the seat or the tell-tale bulge of a shoulder holster under your coat.

Do I need a license to hunt unprotected species such as skunks, porcupines, or opossums?

Yes. In order to hunt any form of wildlife, a license is required. There are two exceptions: (1) a hunting license is not required for any person under 14, unless they are hunting big game. Regardless of what you hunt and what weapon you use, a hunter education certificate is required if you are under 18, (2) land-

owners and their immediate family may hunt all species except big game on property they own. (All other hunting regulations, including season dates and bag limits, apply even on person's own land).

Can I fish in a stream that flows through property that is posted if I don't step above the high water mark?

Yes and no. Yes if the water is classified as navigable waters. No if they are not. Most waters classified as navigable probably were large enough to have had log rafts on them at one time. To be safe — stay away from smaller streams where the land is posted or you don't have permission.

If I hit a deer with my car, what should I do?

If the animal is dead and traffic permits, drag the animal off the road and then call the Highway Department or the Oregon State Police (OSP) for removal. *Do not* bring the animal to an OSP or ODFW office. Because of meat inspection regulations, it is no longer the practice to salvage road killed big game.

If my car hits a hawk or owl, what should I do?

If the bird is dead, leave it alone — **DO NOT TAKE IT HOME**, you would be in violation of federal regulations. If it is injured (broken wing, etc.) leave the bird where it is and call an OSP Game Division or ODFW office. They will take care of getting the bird into an animal rehabilitation facility.

Is it illegal to kill a blackbird with an air rifle?

Yes! All birds except the starling and house sparrow are protected by federal law. Even for starling and house sparrow, you need a valid license to hunt with a BB gun if you are 14 years of age or older. Additionally, you are required to carry a hunter education certificate if you are under 18 years of age. 



Parasite Plagues Coastal Chinook

The rains of November may have come just in time to head off additional losses of chinook salmon in several Oregon coastal streams, according to the Department of Fish and Wildlife.

Since early October, anglers and biologists have been finding dead adult chinook on several streams, including the Trask, Nestucca, Siletz and Applegate rivers. Dead fish have been reported on other coastal streams as well. While no firm figures are available, biologists estimate the total could run into a few thousand chinook, or more.

Department fish pathologist Rich Holt, of Corvallis, says the deaths are being caused by a parasite called *Dermocystidium*, which attacks the gills of returning adults. He says this parasite has been seen in past years, but has not had such severe impact on fish survival.

"We don't know exactly why these losses are occurring. Possibly the low water and the crowding of fish in pools has encouraged rapid development of the organism," says Holt. "It appears conditions have been just right to allow the parasites to cause more serious damage than usual."

Rains that began on schedule November 1 may take care of the situation. "If the low water conditions were part of cause, then this input of fresh water should help reduce or eliminate the problem," Holt said.

While losses have been relatively high in some rivers, chinook are abundant in most of the affected systems. Natural spawning production and hatchery returns should not be seriously impaired, according to fishery managers. 



On the Beach

As the old Tennessee Ernie Ford song goes. . . "You load 16 tons, and what do you get?" Well, for 2,200 people who fanned out along Oregon's coast October 8, the result was a clean beach from Astoria to Brookings. These volunteers picked up and bagged almost that much in this annual event that began in 1984 on the Oregon coast and has now spread to 21 other states.

The Fifth Annual "Get the Drift and Bag It" beach cleanup was judged a success by event organizers both for what people were able to collect, and for what was not there.

"Volunteers from all along the coast commented that the beach was the cleanest they had ever seen it, even before they started picking up debris," says Judie Neilson of the Oregon Department of Fish and Wildlife.

Lack of storms and wave action to uncover the trash was part of the reason for the cleaner environment; as was the spring cleanup sponsored by the Oregon State Parks Division, according to Neilson. "But I would also like to think this reflects an increased awareness of the problem, and the dedication of Oregonians to packing out their beach trash," she said.

Neilson coordinated the first Oregon beach cleanup in 1984, and has been involved every since, delivering the message that beach trash and marine debris harm fish and wildlife.

This year, participants bagged plastic material separately from other debris, and filled out questionnaires that will help identify what types of trash washes ashore, and its likely source. The Environmental Pa-

cific Corporation and Amoco Foam Products collected and analyzed the plastic to see how much of it could be recycled or reused.

Once again, volunteers did get a free lunch — courtesy of United Grocers, Armour Foods and local

specialty suppliers along the coast. Event co-sponsors were the Oregon Department of Fish and Wildlife, Stop Oregon Litter and Vandalism (SOLV), Oregon Telephone Pioneers and the Oregon State Parks Division. 

TIP OF THE HAT

When people commit illegal acts and receive little or no punishment for their deeds, there is not much reason for them to change their ways. In the John Day area, however, those who plan to violate game laws have every reason to consider the consequences before they commit a crime.

Oregon State Police Game Division officers in John Day recently received information that a man had killed a cow elk and two buck deer illegally. After an investigation, the man was cited and pled guilty to Illegal Possession of Elk, two counts of Illegal Possession of Deer, Borrowing an Elk Tag and Hunting in the City Limits.

In addition, he was charged with hunting while his license was suspended. It seems an earlier violation had not discouraged continued poaching. He may have a different attitude now after receiving his sentence from Justice of the Peace Patricia Temple.

His sentence included the following:

- Two years of bench probation
- 180 days in jail suspended as a condition of probation
- Ten days in jail to be served immediately
- Ten days in jail to be served during the Christmas Break
- A fine of \$400
- An additional two-year suspension of hunting privileges
- Serving the open weekend of every big game season in jail for the next two years

Oregon Wildlife offers a "Tip of the Hat" to Judge Temple for dealing firmly with game law violators, and for sending a clear message that repeat offenders can expect stiff justice in her court.

The Perfect Predator

By Pat Wray

Let's design the perfect predator. We'll give it every attribute that a good predator needs. First, we'll make it strong and courageous. It should be willing to attack without hesitation but intelligent enough to avoid confrontations.

It should be able to fly. Effective as many land-based predators are, those that can fly cover more territory in a shorter time.

Our perfect predator should be invisible. Not in the rules, huh? Well, then, let's make it able to see and hunt at night, when it will be all but invisible to most of prey species.

Our creation should be able to move silently, so that it can approach an intended victim without causing alarm. Like most predators, its eyes should be mounted forward on its head, but it must also be able to see in all directions, to find potential dinner companions and watch out for enemies. When all of these characteristics are combined, chances are the result will look a lot like an owl.

Consider: owls have enough strength in their talons to kill without the use of their beaks, and the beaks of larger owls are strong enough to bite through a large man's finger. As a hunter and family protector, owls are fearless. Yet they will rarely commit to a fight they might lose.

Besides being graced with the superb eyesight common to raptors, owls' eyes contain a unique cellular makeup which also allows them to see well in the dark. Contrary to popular belief, owls are not blind during the day; they are capable of functioning during daylight hours by reducing the size of their pupils and minimizing the amount of light admitted to the eye, just like humans do.

Owls have a third eyelid, called a nictating membrane, which can also

be used to reduce the amount of light admitted, although its primary purpose is to protect the eye from dust and the struggles of prey.

One of the more interesting characteristics of owls is their ability to rotate their heads more than 180 degrees. This helps to compensate for the fact that owls' eyeballs are fixed within the sockets and cannot rotate in the same way that those of mammals can.

Not all owls are equally capable of hunting at night. Some, like the burrowing owls, are daylight hunters, and have nocturnal eyesight no better than humans.

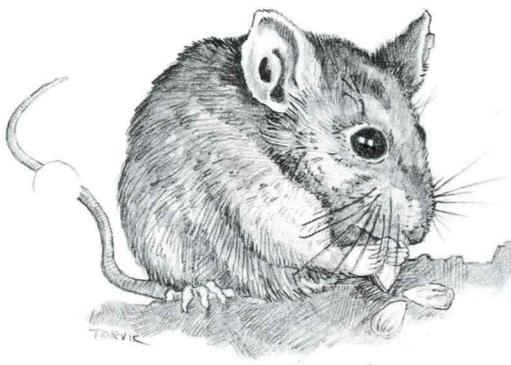
Flat-faced owls like the barn owl are most capable of hunting in darkness. Their facial feathers are designed to reflect and redirect sounds into the ears. Such flat-faced owls are able to catch prey in *total darkness*, using only the sounds made by the victim to direct the attack.

This incredible sense of hearing, so important to the owl, is heightened by the asymmetrical placement of the ears on its head. This asymmetry (one ear is actually higher on the head than the other) results in a slight time differential in the impact of sound on the ears and allows pinpoint position estimates of noise.

Additionally, owls have evolved characteristics which minimize their own noise. Feathers on the trailing edges of the owls' wings are soft and flexible; helping to silence wing noise while the bird is hunting. Another help is that most owl attacks are made from a glide to reduce sounds still further. Most owl victims never have any idea they are in danger until the talons close on them.

So, if the owl is not the perfect predator, the only thing it lacks is the ability to turn invisible. And so far, at least, that isn't in the rules.





MOUSE KITS



By Bill Hastie

A British Spitfire. The U.S.S. Constitution. A "32" Ford Roadster. A Stearman PT-17. Most model builders at some time or another have built one of these from a kit. But have you ever tried your hand at building a mouse?

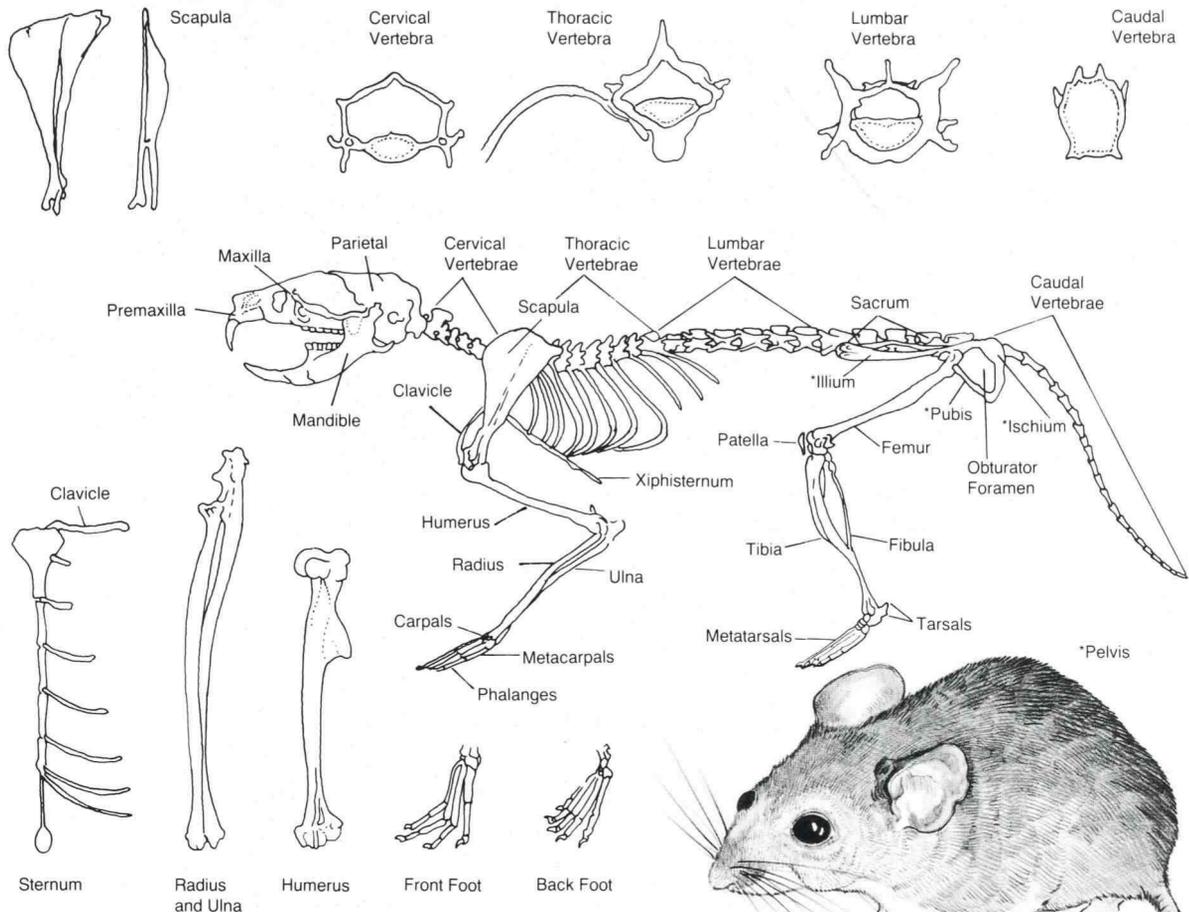
Mouse kits have been around as long as owls. In fact, owls make mouse kits; here's how they do it. When owls capture a mouse for dinner, they swallow it whole in one big gulp. Their stomach does all the work of digesting the mouse. But, since mouse fur and bone is hard to digest, owls simply regurgitate (ree-GUR-jeh-tate), or "cough up" those parts of the meal in a compact mass

known as an owl pellet. These "mouse kits" usually contain a complete set of bones from at least one mouse.

Fresh pellets have a shiny, wet coating, but they soon turn a grayish color and dry. They can be found under any owl perch (resting place), including the floors of barns, beneath a grove of tall trees, or any place that offers shelter from daylight. The pellets are clean of all flesh, and odorless. They can be kept for a long time if placed in a jar or plastic bag. In just one study, biologists took apart all the pellets they found under an owl perch and found the bones of 1,987 field mice,

656 house mice, 210 rats, 92 black-birds, and four frogs!

The drawing below shows the bones you are likely to find in an owl pellet after a field mouse dinner. Collect some owl pellets (or purchase some from a scientific supply house) and separate the bones from the fur. The pellet will be easier to work with if it is soaked in a small bowl of water. Using the guide below, lay the bones out to form as complete a skeleton as possible (you may have the bones of several animals in one pellet). Then glue them on a piece of poster board to form the skeleton. You'll find nature's mouse kits are easy and fun to work with.

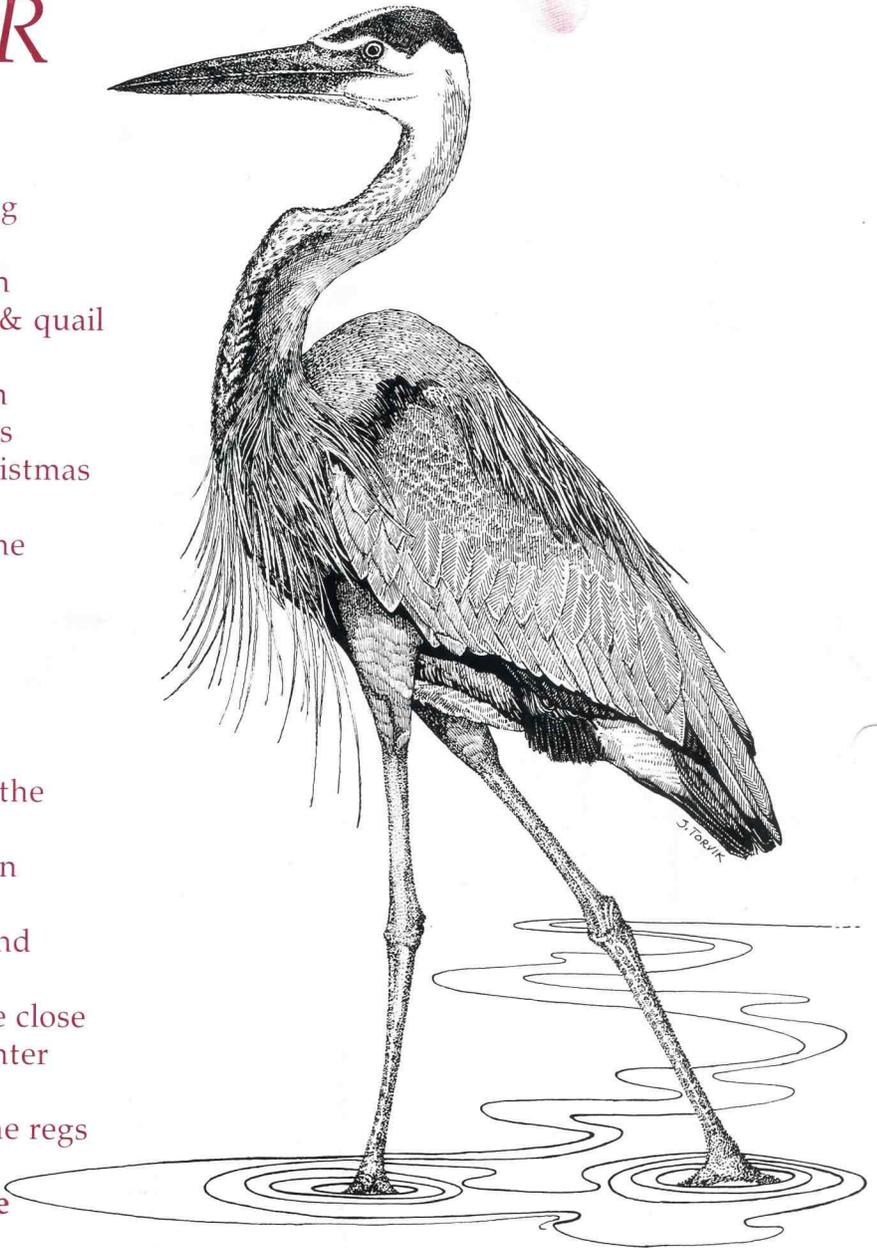


Oregon Fish and Wildlife
1988-1989
CALENDAR
DECEMBER

- December 9— Fish & Wildlife
Commission Meeting
- December 10— Morrow & Umatilla
duck seasons reopen
- December 11— Extended pheasant & quail
seasons close
- December 17— General duck season
reopens, Brant opens
- December 19— Buy licenses for Christmas
- December 25— **CHRISTMAS**
- December 27— Winter steelhead time
- December 31— Duck season closes

JANUARY

- January 1— **NEW YEAR**
Brant season closes
- January 5— Whale watching along the
coast
- January 8— West side grouse season
closes
- January 10— Elk viewing at Jewell and
Dean Creek
- January 15— Chukar, Hun and geese close
- January 19— Columbia Compact winter
seasons
- January 20— Commission to set game regs
for antelope etc.
- January 23— **Tax time, remember the
Nongame Checkoff**



506 SW Mill Street
PO Box 3349
Portland, OR 97208

