Bear and Cub Slaughter Termed Wanton Killing William L. Finley, D. Sc. and Ed F. Averill Write These Wild Life Articles Gray Digger's

Almost Death

en fire of the study. That on he was moving a little shot snipe. He heard him shooting as as stiff in the joints as a ditic old man. He realized that ing had happened. In 24 he was fully awake but still put him in a cozy warm bed, dup in the dark and, like an Winkle, he dozed off to up his 20 or more weeks of winter sleep.

c o m m o n spermophile or squirrel eats ravenously and windle shot snipe. He heard him shooting shown near the blind, joined him and in a short time they killed 35 more wood ducks, making 100. This was the legal limit. He said they got one teal by mistake, making 99 mood ducks."

"Every Sunday during September, 1907, he got a good string of wood ducks. Some days he could easily have bagged 200."

"Later in the season other"

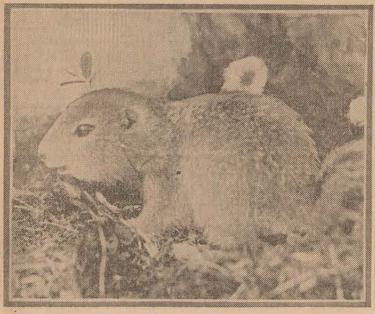
Gray Digger's Thirty Years Ago Bag of 100 Ducks in Few Hours Common; John Law Stopped Slaughter

rotted beam bedded in rington are the owners of 452 acres on the lower end of Sauvie's sport and commercial fishing, Ches-underneath in a round, island. This has been a worderful place for shooting wood ducks for McCarty, president of the state island. This has been a wonderful place for shooting wood ducks ter McCarty, president of the state of hay, curied in a ball, island. This has been a wonderful place for shooting wood ducks ter McCarty, president of the state ommon ground squirrel or during September. They begin feeding ducks about the middle of division of the Izaak Walton League of America, insists the building of additional structures should be for-

"Later in the season other species were abundant. He said he and another man killed 165 widgeon in 40 minutes. They began shooting at 6:50 a. m. By 7:15 he thought they had the limit. They had not picked up the birds, and his partner was sure they hadn't killed 100. The birds kept coming in continuously and for 15 minutes they stood outside the blind in plain sight and continued shooting. When the birds were picked up, they counted 165, which he said was 65 more than they should have killed. Although ducks were abundant, Rowe favored cutting down the bag limit and shortening the season from September 15 to January 1."

In 1913 the federal law for protection of migratory birds was asseed.

Gray Digger Fattening Up



Further Dam Construction Held Needless

New Duck Law bidden. In a recent address delivered on the NBC Farm and Home Hour he said in part:

Harnessed Water Cloud on Tranquillity Hunter Gains



Big Census of Duck Populace Will Be Taken

Dog Adopts Foxes
The Bear Lake, Mich., timber wolf mother, which is rearing four police dog pups, has its counterpart in South Carolina, where Judge W. S. Toler of Society Hill has a dog mothering four baby foxes.

The four orphaned foxes were adopted by Judge Toler's pet with little hesitancy, and are thriving as well as if their own mother were caring for them.

Skeet for Archers

Oregon has only one poisonous snake, the rattler. It is no where numerous and if you see him first there is no cause for alarm. The there is no cause for alarm. The

near Dodge park regarded by true sportsmen as menace to salmon. Fish in this stream lunge to untimely fate as no screen has been provided. The Scaup or Blue Bill duck is becoming rarity because of limited breeding space in north. Black bear and cub-in the tree—one of most humanlike animals of the wilds. Slaughter of bruin at this time of year deemed futile as both meat and fur are worthless.

Cure for Bite of Widow' Found

Nothing, and Bruin's No More

titude of having a lot of time on his hands and he can't figure out just what to do next. He eats grass as a horse or cow does, also digs for roots, grubs, mice

But perhaps his greatest joy ind a bee tree and scoop out oney. Fish or fruit also is a

Pilchard Just a Big Sardine; Tons Being Caught—William L. Finley, D. Sc. and Ed F. Averill Write These Wild Life Articles

No Threat to Sportsmen in Huge Catches

Next to questions pertaining to the weather, this query regarding the source of Oregon's latest large industry has probably been propounded more often than any other the last three months. The questioner is always surprised to learn that the fish in question is a sardine.

The answer always comes as a rude shock to the man who has been reading in the daily papers that as many as a thousand tons of pilchards have been taken in a single night off the coast in the vicinity of Coos bay. Usually his conception of a sardine is that of a tiny minnow in a small flat can with a Norwegian label. It would take a score of them to weigh a pound and it is next to impossible to comprehend 1000 tons.

But the pilchard of our Pacific Coast, being a cousin of the herring and the shad, is a larger fish. It ranges in length from 8½ to 13 inches when mature. Those being taken off the Oregon coast are the largest size. On the average five of them weight 2 pounds, according to M. T. Hoy, master fish warden for the state of Oregon, and Hugh Mitchell, superintendent of hatcheries for the fish commission,

Although this is the first year for the industry in Oregon it is 15 years old in California. With the well es-tablished reputation our Southern neighbors have for appropriating everything in sight no one will be surprised to learn that in that state surprised to learn that in that state the fish is known as the California Soon to Begin

This department was signally favored by a personal visit from N. B. Scofield and W. L. Scofield of the California fish and game commission. The former is in charge of the bureau of commercial fishers. His brother directs laboratories and investigations. They told us that individually the pilchard is one of the vestigations. They told us that in-dividually the pilchard is one of the least conspicuous of the fishes swim-Gresham. Skimming over the fields,

Commercial and sport fishermen alike have been much concerned over operation of purse seines for taking the pilebards off the ing the pilchards off the Oregon coast. It just did not seem possible that the use of so many nets averag-ing 1200 feet in length, extending to a debth of 200 feet into the sea and circulation as to the wholesale de-struction of the game and commer-cial food fishes seemed entirely

Investigations conducted by this Apparently the pilchard is a be-liever in the adage that birds of a feather flock together. All reports from British Columbia to Southern California are to the effect that an unbelievable small percentage of other fishes is taken in the big nets.

Fishing is done almost exclusively at night during the dark of the moon. The schools of fish are located by the phosphorescent glow in the water—hence the reason for dark night hence the reason for dark night work. There is one notable exception to this rule. The fleet of boats operating out of the Columbia river from their base at Flavel are catching most of their tonnage off Destruction island near the Washington coast, and most of that fishing is done in deright. done in daylight.

UNDISCLOSED SECRET Why they fish during the day and

how they succeed seems to be one of the undisclosed secrets of the fish and fishers. The same men operating out of Coos bay near the mouth of the Umpqua river have been unable to make worth-while catches in the daylight hours.

One other fear voiced by North-

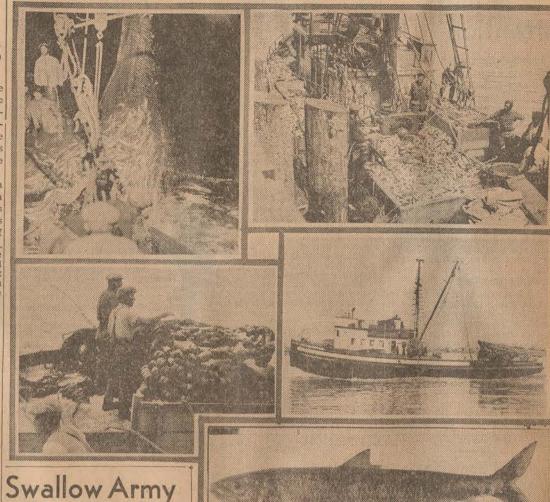
west salmon fishermen and packers was that the taking of so many small fish from the ocean would seriously deplete the salmon food supply and eventually result in the destruction of the industry. In discussing this phase of the subject in our office W

Scofield said:
"Our salmon have been depleted till they are almost gone, but sar-dine fishing has played no appreciable part in this tragedy. Nor can our sardine fishery be accused of destroying other fishes. The sardine net hauls are usually pure sardines with remarkably few individuals of any other species. At certain times of the year, some other fish are caught but these are usually of little value and relatively small in quantity. Sharks, jellyfish and anchovies are sometimes taken in quantity with a sprinkling of mackerel, kingfish or an occasional individual of many other species, but the amounts are

relatively small.
"Examinations of the food of our ocean-caught salmon have shown that they eat sardines readily when other foods are scarce, but that they eat squid, anchovies or whatever other fishes are most available. They are not dependent on sardines for food so there is no evidence to indicate that the sardine industry has had or will have any appreciable effect on the

FOR DAYS AND DAYS A queen honey bee can lay 1500 eggs a day and maintain this rate for days at a ways when most pro-

Pilchards by the Net and Boat Load



least conspicuous of the fisher swimmer and that it travels great distances is not readily apparent. It seldom takes a hook, is not fished for by sportsmen, does not prey on other fishes and consequently is not condemned as an enemy of more desirable species.

A little later, as insects grow scarce, the call of the Southland takes possession of the white-breast condemned as an enemy of more desirable species.

But collectively the pilchard plays the leading role in the fisheries of California, according to the Messrs. Scofield. The tonnage of the sardines landed in California each year is greater than the combined catch of all other species of fishes, mollusks and crustaceans. In addition, the tuna, mackerel, barracuda and yellowtail fisheries are largely dependent on sardines for bait and many files, mosquitoes and other insects.

A little later, as insects grow scarce, the call of the Southland takes possession of the white-breast when the frost is in the air you will hear the twittering of swallows in the sky. Other flocks join the traveling myriads. Darkness hides their numbers from the dangers of hunting hawks and the twittering keeps for hear than the combined catch of all other species of fishes, mollusks and crustaceans. In addition, the tuna, mackerel, barracuda and yellowtail fisheries are largely dependent on sardines for bait and many tons of sardines are used annually by sports fishermen.

SPORTSMEN CONCERNED

Commercial and sport fishermen

Commercial of the Southland takes possession of the white-breast coars, the eall of the Southland takes possession of the white-breast coars, which are nothing more than overgrown sardines. Up-field-my fisher men read the seas of Pilchards, which are nothing more than overgrown sardines. Up-field-my fisher men read the seas of Pilchards, which are nothing more than overgrown sardines. Up-field-my fisher men read the seas of Pilchards, which are nothing more than overgrown sardines. Up-field-my fisher men read the seas of Pilchards, which are nothing more than o

as nearly as possible the real thing 20 to 30 yards away

Boon to State Game Life

agement that open at the Oregon State college with the fall term are he most practical step yet taken to levelop Oregon's wildlife resources. This co-operative plan has been fi-

wildlife conservation, oregon is the only state selected so far in the West. More than 20 students already have enrolled and others are expected to take advantage of this training from different Pacific Coast states.

Instructional work is designed to train persons for federal and state service in wildlife conservation, game managers of estates, land-using industrics and fur and game farming as private undertakings.

Game farms, fish hatcheries and game refuges near Corvallis will be used in teaching the practical aspects of developing wildlife resources.

A wildlife conservation summer camp will be maintained for a few weeks each year in strategic locations such as Wallowa mountains, Malheur Wildlife refuge, Eastern Oregon range experiment station, etc.

There's a Reason For Bird Dearth

dents are quiet and songless. Their coats are rather ragged as if they were moth-caten. The birds are moulting. The worn feathers are dropping out and new ones are growing in. This change to new coats is necessary to keep out the dampness

and cold.

As the moulting season passes, the birds are more active again. After the first rains, they sing more and begin flocking. This is both for companionship and the feeling that there is better protection in numbers. With many eyes alert, the approach of an enemy is quickly passed from one to another.

Quail Has Brood Long After Season

As a rule, birds are through nesting by August, however sometimes a econd or third brood is raised. This is perhaps the case of a bobwhite uail nest which was found at Jennings Lodge August 8. There were 2 fresh eggs. The young birds were ut of the nest August 30.

O. S. Courses Misses Lunge of Hurrying Spots on Back Salmon at Umpqua Dam Reveal Trout,

Roseburg Man Urges Commercial Fishing Ban to Preserve Thrills for Coming Tourists

Real or Bogus

W. C. Harding, secretary of the Roseburg Chamber of Commerce, has written the following letter about the fish resources in Coast ern Brook, a German Brown and a streams:

"I should like to call the attention of your readers to the fact the difference between the Eastern This co-operative plan has been financed by the state college, state game commission and the biological survey of the department of agriculture. It has recently been authorized by the state board of higher curricula.

Other institutions in the West have been seeking these federal funds for a direct and practical application to wildlife conservation. Oregon is the only state selected so far in the West. More than 20 students already have that salmon and steelhead fishing in our coastal streams will soon Brook and the other two, but it is

"The steelhead, native of our costal streams, is a game fish widely known from one end of our country to the other. It is not a salmon and should never be classed as a salmon and permitted to be canned. With the equipment used by commercial fishermen today, most steelheads and salmon cannot escape the fishnets in these costal streams that one permitting the salmon cannot be salmon cannot escape the fishnets in these costal streams

fishnets in these costal streams that are narrow in many places.
"I hold no brief for various sportsmen's clubs or visiting tourists, although all are entitled to their day in court in connection with saving the fish resources of our state. My primary urge looks to the people of future generations.

urge looks to the people of fu-ture generations.

"There are comparatively few commercial fishermen at the mouths of these rivers. Every time this question comes before the legislature or the people of

Oregon for settlement, 99 per cent. of our population are ignored because of the tears of a few who claim the right to live at the expense of these disap-

at the expense of these disappearing species.

"A large amount of money is now being spent to complete the coast highway bridges. We all realize that this highway will be a tremendous attraction to tourists. A good part of this attraction is from travelers who are seeking the recreational value of our costal streams. Through tourist patronage, these commercial fishermen will reap a bigger harvest in spreading their fish-nets. We can on longer drift with the tide, because our fish resource must be conserved; otherwise, both salmon and steelheads will soon be things of steelheads will soon be things of

Fly Caster's Creel



Here's proof that a fly caster can catch fish. Picture shows L. V. Smart, member of the Portland Casting club, with six rainbow trout, the largest of which dressed from 51/4 to 61/4 pounds. They were caught in Waldo lake on a bucktail fly.

The question has been asked: "How an one distinguish between an East-Loch Leven trout?" It is easy to tell

coming from Loch Leven, hence the name given it in America. There is said to be still much confusion on the other side the Atlantic as to whether the fish is a separate species or merely a land locked sea trout. The so-called Brown trout which is more often referred to as German Brown trout because the fish was first introduced into America from Germany, like the Loch Leven is a true trout, while our Eastern Brook trout is not a trout but a char.

SPOTTED ALONG BACK SPOTTED ALONG BACK

All true trouts are spotted along the back, like the rainbow. The chars, on the other hand, do not have spots on the back but the back is "vermicon the back but the back is "vermiculated"—worm track—little curls and twists of color darker than the ground. This is the family to which the Dolly Varden, Oregon nature, belongs. Eastern Brook trout were introduced into Oregon waters about 1912 and are found in many of the mountain lakes throughout the state. With a few notable exceptions plantings of these fish in the streams have not proved profitable because they have disappeared. However, the lake planting seems to have been the lake planting seems to have been

the lake planting seems to have been successful.

The same seems to have been true of the Loch Leven. Wherever given an opportunity, these fish seem to have gone to the sea and have been unable to find the way back.

The beginner among trout fishermen will have little difficulty in distinguishing between Loch Leven, Eastern Brook and Rainbow if he will remember the scales of the Brook are not visible to the naked eye and that it has orange or red spots along the sides. The scales of the Loch Leven are visible, giving it the appearance of being a coarser fish. The Rainbow has horizontal red spots along its sides, forming a broad red band and gives the impression of being a coarser fish than the sion of being a coarser fish than the

Dr. David Starr Jordan, who named Dr. David Starr Jordan, who named the Rainbow in describing it, said: "This trout is a thing of beauty, a joy forever. Its back is well sprin-kled with ocelot-like spots. Its color is a deep green, the lower surface silver. All over seems drawn a filmy gauze of old rose fabric of infilmy gauze of old rose fabric of in-expressible delicacy and beauty, in-tensified along the median line in a band of pink and rose, with other tints that produce all the colors of the rainbow and give this creature rank among the birds of brilliant plumage."

Upland Game Bird Preservation Is Serious Issue—William L. Finley, D. Sc. and Ed F. Averill Write These Wild Life Articles Write These Wild Life Articles

Road and Dam **Held Liability** To Wild Rogue

wild and undeveloped region in this state to have any other thought than that their future depended on good roads, increase of traffic and commerical development. Today many are thinking that more wealth and

More and move interest centers in a river like the Rogue as one of the most valuable streams in Oregon. For many years it was known far and wide as one of the best trout and salmon streams in the country. It is also known that commercial fishing, the two dams in the Rogue river valley and pollution of its waters have greatly reduced its crop of fish.

from Gold Beach to Grants Pass have been talked of. The course that this river has cut from the Rogue river valley through the Coast range to the sea is still one of the primitive areas in the state. The question naturally arises as to whether these proposed commercial developments will be more valuable than detrimental in future to the people of Oregon.

Where there is only a limited number of rivers with fish resources that exist in no other place in the world, which when once destroyed cannot be replaced, should there not be thoughtful and careful planning? In developing one natural resource, why destroy another resource of equal or greater value?

Lure Many Sportsmen to Field and Stream



Once; Pigeons Entirely Gone

Hummer Tops in Feathered Racers

will be staged.

The purposes, in 1809 from the form marked purposes, in 1809 from marked purposes, in 1809 from the form marked purposes, in 1809 from the form marked purposes, in 1809 from the form marked purposes, in 1809 from marked purposes, in 1809 from the form marked purposes, in 1809 from the form marked purposes and the marked purposes and the marked purposes and the marked purposes and the marked purpose marked purposes marked purposes and the marked purposes and the marked purpose marked purposes and the marked purpose marked purposes and the mar

Blind Shooting Rule in Duck Law Modified

Nut and Seed

Eaters Aid to

Oregon Woods

Hunters in blinds or legal floating craft may shoot within 100 feet of natural vegetation that may be some distance from shore, according to an amendment to the federal regulations approved in a proclamation by President Roosevelt. The original provision limited hunting to areas within 100 feet of vegetation continuous with the shore, a degree of restriction not essential to the regulation's purpose of preventing open-water shooting of the diving ducks, which have been found to be more seriously depleted in numbers than other

depleted in numbers than other species.

The proclamation also included amendments to clarify regulations that inadvertently made restrictions not intended. The new amendment provides that in those states having open season on such birds, rails (other than coots), woodcock, mourning doves, and band-tailed pigeons may be shot from 7 a. m. to sunset. The original regulation would have stopped such shooting at 4 o'clock in the afternoon, the hour at which shooting ducks and geese must stop.

In Oregon shooting of band-tailed pigeons is prohibited by state law. The apparent opening of the season by federal regulation, therefore, does not affect this state.

Populace Gain Grave Threat; 2 Alternatives

ment and the increased population in ficult problems facing the state game commission. Five different species of

Oregon game authorities are intrusted with the protection, preservation and propagation of these resources. Three state game farms have been maintained, According to the printed reports the last six years, \$224,920 has been then to propagation of foreign spent on propagation of foreign game birds.

sneaked over, cleared away the covering of dry leaves and dug out 23 nuts.

Before I could replace these and get away, I was discovered and the squirrel was as mad as an old hen when her chicks are bothered. He sputtered and chattered. When I retreated a few yards, he ran down, uncovered the store and got the nuts out in a hurry. He was so excited that he grabbed one, ran off a short distance, shoved it under the leaves and grass and went back for another. Soon he had nuts scattered in a dozen different places. I was satisfied he would never find them all again, yet he stood to win in either case. Those he found later he could eat when he needed them, and those he failed to find would produce more bushes for a future harvest.

New Road High Up And One of Beauty

The McKinley - Roseburg forest road, which goes via the Tloga country, shortening the present Myrtle Point route to the inland town by approximately one third, will open a recreational possibility hereiofore undeveloped in Coos county—that of winter sports, according to the Coos Bay Times.

Climbing to an elevation of 2700 feet a few miles west of Williams river, the road penetrates an area covered with several faet of snow at least two months of nearly every year. Last year the snow was nearly year. I have made this trip year. Last year the snow was nearly year. I have made this trip year. Last year the snow was nearly year. Last year the snow was nearly year. Last year the snow was nearly year. I have made this trip year. Last year the snow was nearly year. I have made this trip year. Last year the snow was nearly year. I have made this trip year. Last year the snow was nearly year. Last year the snow was nearly year. Last year the s