

# Opossum Invades Oregon; Conditions Favorable

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Write These Wild Life Articles

## Pennsylvania Shows How to Protect Game

Pennsylvania is always pointed to as the state which has demonstrated what can be done in the way of game and wild life restoration when once the sportsmen and conservationists become sufficiently aroused. The Quaker state may be "boss-ridden" and politically torn asunder in other respects, but for 40 years the politicians have been compelled by force of public opinion and organized sportsmen to keep their hands off administration of game affairs.

The result has been that with its game laws integrated and codified, and the state in possession of over 450,000 acres of game land purchased with proceeds from the sale of hunting licenses which amount to over a million dollars a year, Pennsylvania has a game refuge system which is being studied by other states and is recognized as an important phase in national conservation.

### GAME INCREASES

The state game commission was created by the legislature in 1895 to protect the diminishing deer. Since then, under their constructive program, a series of laws have been passed, building up a protective system which has resulted in a plentiful supply of deer and bear, an increasing elk herd, wild turkeys sufficiently plentiful to allow an open season, beaver so numerous that trapping restrictions were withdrawn for a month last year, and an enviable supply of rabbits, squirrels, raccoons, pheasants, partridge, ruffed grouse.

A bureau of protection has been established which receives and sells firearms confiscated from aliens or law violators, and receives penalties for violations which amount to \$50,000 a year or over.

### FARMERS SAFEGUARDED

Because of the exceptional protection afforded wild life, a fund of \$3000 is required to reimburse farmers and property owners for damage done by bears alone, and farmers are furnished deer-proof fence by the state, if they will provide posts.

Pennsylvania's eight game commissioners, who serve without pay, are not hampered by political interference. They serve for six-year terms, meet four times a year, and have final authority in determining hunting seasons, bag limits, license regulations and penalties for law violations.

Removal of caddis fly and other insect larvae and insects from any of the state's trout streams, excepting under permit from the director of conservation or for personal use in fishing the trout stream where taken, is forbidden by action of the 1935 Michigan legislature. As a result bait dealers supplying caddis fly larvae to winter bluegill and perch fishermen are faced with seeking new sources of supply, says the Detroit News.

Sponsors of this piece of legislation declared the ruthless activities of those seeking this type of bait to keep up with the growing popularity of winter bluegill fishing during recent years have constituted a serious menace to the state's trout resources.

Their extensive combing of trout streams, it is pointed out, has led to the destruction of much of the water cress and other forms of aquatic vegetation which provided food and cover for this fish species.

## Freeze Tough on Farmer But Boon To Oregon Birds

The hard freeze the early part of November destroyed crops of many farmers. Grapes and apples that were left hanging turned out a feast for robins and varied thrushes. While frosted fruit cannot be marketed, it makes little difference to the birds.

Grapes that still hang have a withered look, but they also have a sweet taste. Some have the flavor of wine. Around these vines the robins and thrushes collect and seem to be having hilarious parties. Under such circumstances, one need not be surprised to hear an attempt to put on a spring or summer concert.

Even the old flicker or woodpecker that digs in the ground for worms like a robin has a taste for winey grapes. An unusual turn of nature made a season of Thanksgiving for the birds.

## Fish Journeys Down-Stream Trek of Death

Electric fish screens designed to save the lives of young fish during down-stream migrations have been the subject of experimentation and discussion for 10 or 12 years. Many conservationists and engineers believe that in the perfection of these devices is the salvation of the salmon industry and the sport of game fishing.

Professor F. O. McMillan of Oregon State college and Harlan B. Holmes of the United States bureau of fisheries will discuss this subject at the Portland Chamber of Commerce Wednesday evening, December 18.

There was a time in the history of Oregon when young fish on their journey to the sea met with few if any obstacles in any of the streams of the state. Now there are yawning, treacherous irrigation ditches which lead them out on to the fields to die. There are intakes for turbine wheels that tear them to pieces or leave them so badly wounded they fall an easy prey to their predatory enemies. The smaller diversions are handled successfully by use of self-cleaning revolving screens.

In earlier years when it was realized that industry and irrigation were proving a serious menace to fish life, thought was given only to making it possible for the upstream migrations to reach their spawning grounds. It is now realized that if the young fish can not get back to the sea the runs will be destroyed just as certainly as though the parent fish were not able to attain to the head waters.

**SOVIET GOES "HORSEY"**  
Dublin, I. F. S., Dec. 7.—A Russian commission, headed by M. Alechin of the ministry of agriculture, has purchased a large number of Irish stallions with the announced object of improving the standard of horses in the Soviet.

The so-called sulphur sponge, a pest that bores into shells of oysters and stunts their growth, is being made the subject of present investigations by government scientists.

Since serum treatment for snake bites has been developed, deaths due to snake bite in the United States have been reduced from over 14 per cent. to less than 4 per cent., Science Service states.

## Laws Aplenty, But Pollution Goes On Apace

Many fishermen who make a living catching salmon along the Columbia have reached the conclusion they have been "sold down the river." Valuable fish resources on which they depend are gradually strangling to death. Fingerling salmon cannot thrive in poisoned waters any better than people can in a gas tank.

A month and a half ago it was reported the pulp mill at St. Helens dumped a stream of brown liquid acid in the Willamette slough that spread a 15-mile blanket of death over the various species of fish that inhabited those waters. Photographs were taken of the Steelhead and Silverside salmon killed from the waste of the mills and samples of the poisonous waters were taken. The state game commission sent a special letter ordering the mill to cease polluting the Willamette river. The fish commission called the mill on the telephone.

The state game and commercial fish codes are full of legal restrictions to conserve fish. If an angler or a commercial fisherman violates a regulation, he is quickly arrested and fined. The pollution law is plain and clear. Various cities daily violate this law. Every day mills along the shoreline dump poisonous fluids into public waters. There are no arrests, no fines for violators. The pollution law just sleeps in the hands of a hundred state officers from the governor down, who are sworn to enforce it.

The Columbia River Fishermen's association has heralded the fact that it intends to take court action to enjoin cities, mills and factories from further polluting of salmon streams. Since the Izaak Walton league, other sportsmen's groups, civic organizations and women's clubs, the state board of health and thousands of individuals have been unable to put a dent in the hard old pollution nut, this army interested in conservation of fish and the protection of public health should gather its cohorts and back up the fishermen in their attack on private and municipal corporations.

### MIGHT AS WELL KNOW

It's not an easy battle. The truth might as well be known. The war munitions of the enemies of clean streams and pure water are supplied by the taxpayers who are unwilling to put up the cash for corrective measures.

It is well known that citizens of Portland voted to install a sewage system when they thought the government would dig up the funds. When these funds were not forthcoming, they voted against the same measure when it was recommended that the money be taken from the pockets of property holders.

It is well known that corrective measures cannot be taken immediately by mills, factories and cities when they have been permitted to violate a state law for many years. Yet there is no reason why each case should not be taken into court. Let a period of from two to four years be established by the judge for necessary changes to be made, after which each corporation is to cease violating the state pollution law.

The fishermen's union is going to name a committee to discuss ways and means of clearing up the two streams with representatives of the Oregon division of the Izaak Walton league of America.

**KNOTS POINT THE WAY**  
A method occasionally used by Ethiopian natives in marking trails is to tie knots in flexible saplings along the way.

## New Mammal Resident of Oregon—River Pollution Causes



Old logs and lumber on the rocks near Oregon City falls, which rot and decay, and are carried into the river are shown on the upper left and on the right a female opossum with one of her young. Center—A young opossum. Below—Pulp waste from a paper mill flowing into the Willamette river.

## Chicadees Do Eat 'Em With Glee, Gusto

Chickadees do like sunflower seeds and they do eat them. So says Mrs. May V. Nordstrom of Route 1, Box 7, Portland, in a letter to this department. Her statement was brought forth by quotation in these columns last week from Harold Gilbert. It will be remembered Gilbert observed the chickadees seemed to prefer sunflower seeds above everything else but as they carried them away from his window ledge he did not know whether they ate them. Here is Mrs. Nordstrom's letter:

The most entertaining feathered friends I have had this fall is a family of five chickadees. One of the young generation is very friendly. It will stand on the window cafeteria and talk with me as it eats. But when Papa Chickadee flies back for a seed and notices me so close to his offspring he gives vent to a terrible scolding and with wings spread routs the young blade.

Observing the way members of this family eat sunflower seed is really a treat. With a trip-hammer movement of the head the shell is pecked away on one side and the kernel eaten in two bites. Their preference of a perch while opening the seed is the lattice fence as they can cling to the lattice and hold the seed securely in both feet.

## Farmers Irked By Ice Fishing Restrictions

Michigan anglers—or possibly we should say fishermen—are all stirred up over a new regulation. It pertains to ice fishing. The new order of the conservation commission prohibits use of more than two lines which must be under personal control at all times. Heretofore each person was allowed five lines and he need not sit by the hole in the ice and give them his personal attention.

The farmer fisherman seems to be doing the most hollering, according to the Detroit News. One farmer is quoted as saying:

"The farmer is hit worse than anyone else by these new rulings affecting ice fishing. He has no time to fish in summer, but in the winter he could formerly set five lines, leave them long enough to do a few chores and go back again. Now he is not only limited to two lines, but must remain with them if he is to do any ice fishing at all.

"The feeling in this community, is that the hunter will suffer because of this from now on. For the farmers blame the cities for this ruling and will doubtless post their lands against the hunters more than ever."

## Applies Well to Oregon

### Saturday Post Article Warning on Game Preservation Timely; Writers Eyed Conditions Here

Two widely known writers, Cary Ford and Alastair MacBain, visited Oregon and other Western states last summer at suggestion of the Saturday Evening Post to write an article on game conditions. This story appears in the present issue, December 7, entitled "No Hunting or Fishing."

Eastern streams are pictured as completely dead from the standpoint of producing trout that spawn and propagate naturally. The idea carried out in Connecticut is to raise the trout in hatcheries until they are of legal size, and then dump them into the rivers. The game of the sportsmen is to follow the hatchery truck so as to hook out the fish as soon as they are liberated.

In some places the same method has been used by the game commissions regarding birds.

Pheasants are raised from the hunters' license fees. These half-tame birds are taken out at the opening of the hunting season and released so the hunters may have targets.

Any expert knows it is a waste of money to liberate trout in a stream poisoned by pollution. Pollution destroys the oxygen in the water and the trout strangle to death.

Warnings in the Post article that apply clearly to Oregon are that game birds, mammals and fish disappear right under our noses as the state builds commercially unless precautions are taken. Reforestation is necessary to hold a permanent water supply in streams. Without forests the soil erodes and the floods rip out the spawning beds. Waste from mills, factories and cities soon kills the streams and they are useless for fish or recreation.

## Odd Creature One of Oldest In the World

Oregon may soon have a new mammal resident, for the opossum is on its way. He is a hardy animal, native all through the Southern states, and has proceeded as far North as Eastern Nebraska, Wisconsin and New York. He has been introduced into California and is well settled there, and is satisfied with the sycamore canyons, the sunshine and the abundant fruits and other foods. A few have been reported in Oregon, probably as transients.

It is suspected the opossum also will like our mild climate and plentiful store of food, for he is not choosy but eats almost anything animal or vegetable that is edible. He loves especially the vicinity of water and is most numerous around swamps or wet lowlands and along bottom lands bordering streams. His den is usually in a hollow tree or in a similar corner where he can hide away in the daytime.

The opossum is one of the oldest mammals on earth and the oldest one in America. Only two others, the porcupine ant-eater, or echidna, and the duckbill, or platypus, began farther back on the evolutionary trail. The echidna and duckbill are partly bird or reptile and partly mammal. Like all mammals, they have hair but they lay eggs and hatch their young as birds do.

The opossum is the American representative of the ancient order of Marsupials, a wonderfully-varied group of mammals now limited to this country and Australasia. Numerous species of opossum are known, all native of America. The Virginia opossum, largest of all the species, has coarse hair, pig-like snout, naked ears and long prehensile tail. Its toes are long, slender and so widely spread that its footprints on the muddy border of a stream or in a dusty trail show every toe distinctly and are unlike those of any other small animal.

The opossum has from five to 14 young which, when born, are so immature that they look like small white beans and weigh only three grains. They are pale, frail, pulsing mites, utterly unaware that they are born. So their mother, about the size of a raccoon, sees that they are immediately transferred to the nursery, where each one attaches himself to his own milk supply and sleeps and grows while his mother goes about climbing and hunting.

The nursery is a fur-lined pouch on her abdomen, quite like a carpenter's apron for carrying tools. When grown, opossums are slow-moving, stupid animals which seek safety by their retiring, nocturnal habits and by non-resistance when overtaken by an enemy. This last trait gave origin to the term "playing possum." When come upon suddenly, the opossum drops limp and apparently lifeless, with a sickly grin on his face. Despite this, his vitality is extraordinary, making him difficult to kill.

The opossum has always been a favorite game animal in the Southern states and figures largely in the songs and folk-lore of the Negroes. In addition, its remarkable peculiarities have excited so much interest that it has become one of the most widely known of American animals.

### This Fox Precious

A beautifully marked black fox at the State stock farm at Tobolsk, Russia, is being carefully guarded in the hope that a valuable new variety may be bred.

The club has long, curving stripes of white hair over its entire body, a coloring never found before, and animal breeders consider it a rare case of mutation.

### Honey Side Issue

Honey bees, Science Service states, are about 50 times as valuable for their work of cross-pollination in orchards and fields as they are for the honey they make.