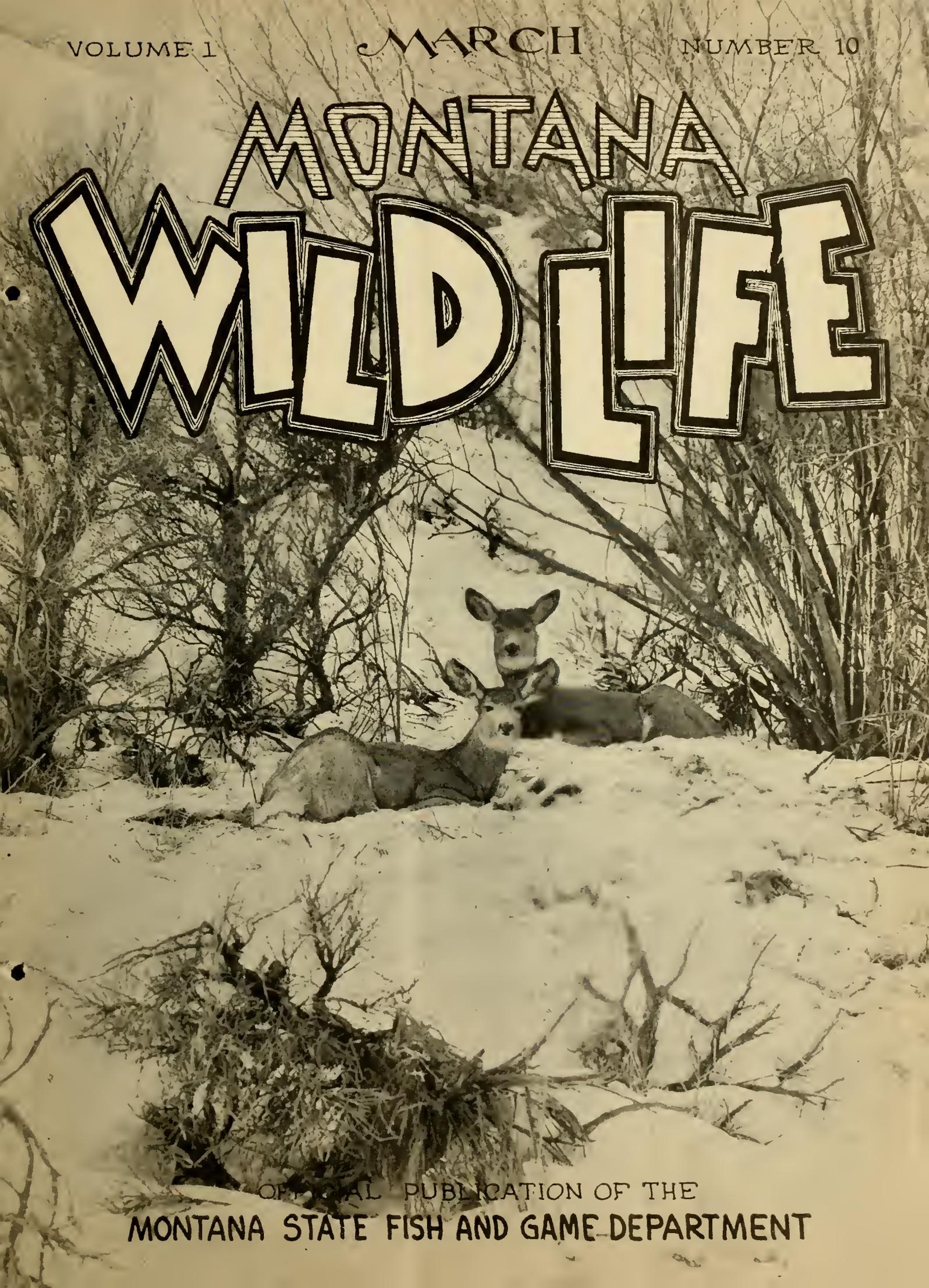


VOLUME 1

MARCH

NUMBER 10

MONTANA WILD LIFE



OFFICIAL PUBLICATION OF THE
MONTANA STATE FISH AND GAME DEPARTMENT

Fer 'Billy an' Fer Me



*Dad, your gun is in its case
Your rod is on the wall—
Daddy, when you shooted ducks
Did you shoot 'em all;
When you killed the deer an' fox
An' cut the balsam tree,
Couldn't you a' left a few
Fer Billy an' fer me?*

*Dad, your factory's on the creek—
Makes a lot o' noise,
Churnin' up the water
Where you played when you was
boys;
Daddy, when you built it there,
Couldn't you, maybe,
Jest a' saved a swimmin' hole
Fer Billy an' fer me?*

*Daddy, wouldn't you suppose
That if you really tried
You could save a little woods
An' fields an' countryside?
Kind o' keep a' savin' up—
You an' Uncle Lee—
Just a little out-of-doors
Fer Billy an' fer me?*



MONTANA WILD LIFE

The Official Publication of The State Fish and Game Commission

VOL. I.

HELENA, MONTANA, MARCH, 1929

No. 10

Montana's New Fish and Game Laws

By FLOYD L. SMITH

SEVEN important bills, passed by Montana's 21st legislative assembly, which adjourned March 7, and which have been signed by Governor J. E. Erickson and become state laws, comprise the complete grist of fish and game legislation introduced and enacted during the session. Eight bills were proposed and seven have become laws. The only bill which failed to pass had to do with shifting the open season on muskrats to meet differing climatic conditions in the state. All have to do with conservation movements and are intended to cope with situations arising within the state demanding remedial measures. Montana's program of conservation of wild life, which has attained national recognition, was many times complimented on the floor of house and senate in discussion of these bills, as were the sincere, progressive efforts of men who comprise the State Fish and Game Commission.

Montana is among the first states of the nation to take advantage of benefits accruing under passage of the Norbeck bill creating, developing and maintaining refuges for migratory waterfowl. Under the provisions of the federal act each state legislature must ratify state cooperation. Before the bill was finally signed by President Coolidge the measure was under way, and when, during the legislative session, President Coolidge made the Norbeck bill a law, Representative Ben Nelson of Phillips county, chairman of the house committee on fish and game, made the announcement on the floor of the house. Final passage of the measure followed within a few hours, hence Montana will share in the initial federal appropriation of \$75,000 for surveys and preliminary work.

Senator F. T. McCormick of Musselshell county, chairman of the senate committee on fish and game, was likewise instrumental in fostering legislation desired by sportsmen of Montana.

For the benefit of readers of MONTANA WILD LIFE, these seven bills are herewith published in their entirety, with changes noted when compared with the former laws.

Migratory Waterfowl

THE BILL introduced by the senate committee on fish and game relating to cooperation with the federal government in providing and maintaining refuges for migratory waterfowl reads as follows:

For the purpose of more effectively cooperating with the United States, in the acquisition, development and maintenance of refuges for migratory wildfowl as provided in Senate Bill No. 1271, passed by the second session of the 70th Congress of the United States, and commonly known as, and called, the Migratory Bird Conservation Act, permission is hereby granted to the United States to acquire by purchase, gift or lease, lands and waters within Montana, which the Secretary of Agriculture of the United States may deem necessary and suitable for the purpose provided in said act, provided that the jurisdiction of Montana, both civil and criminal, over persons upon areas acquired under this act shall not be affected or changed by reason of their acquisition and administration by the United States, as migratory bird reservations, except so far as the punishment of offenses against the United States is concerned, and provided further that nothing in this act is intended

to interfere with the operation of the game laws of Montana applying to migratory game birds, insofar as they do not permit what is forbidden by federal law.

Judith River Preserve

THE BILL creating the Judith River game and bird preserve was introduced in the house. The preserve was originally created by the State Fish and Game Commission, the new measure changing the boundaries slightly. It reads as follows:

For the better protection and propagation of game animals and birds, the following described area in Judith Basin county is hereby set aside as the Judith River game and bird preserve.

Beginning at a point which is the intersection of the boundary of the Jefferson national forest and the center of the Middle Fork of the Judith river, thence up the center of Middle Fork to the mouth of Weatherwax creek, thence up the center of Weatherwax creek to the mouth of Cottin's creek, thence up the center of Cottin's creek to the west boundary of Judith Basin county, thence southeasterly along the boundary of Judith Basin county to the nearest point of the South Fork of the Judith river, thence to source of said South Fork, thence down the center of said South Fork to the intersection with the boundary of the Jefferson national forest, thence north along the boundary of the Jefferson national forest to the place of beginning.

It shall be unlawful for any person to hunt for, trap, capture, kill or take, or cause to be hunted for, trapped, or killed any game animals or birds of any kind whatever, within the limits of the said preserve; or to carry or discharge any firearms, or to create any unusual disturbance, tending to or which may frighten or drive away any of the game animals or birds or to chase the same with dogs or hounds in said preserve; provided, however, that permits to capture animals or birds for the purpose of propagation, or for scientific purposes or to destroy mountain lions, wolves, foxes, coyotes, wild cats, or other predatory animals or birds, or for carrying firearms, may be issued by the State Game Warden upon the payment of such fees, and in accordance with such regulations as may be established for the said pre-

Subscription Price Is \$1 On June 1

ON JUNE 1 the subscription price of MONTANA WILD LIFE will be increased from 50 cents to \$1 per year. Because of the increasing demand throughout the nation for the official publication of the State Fish and Game Department, and in justice to the great number who have already paid the subscription, the price will be advanced and names on the complimentary roll dropped from the mailing list. Checks and money orders received up to June 1 will be entered at the introductory price of 50 cents per year. This action is taken by direction of the State Commission.

serve by the State Game and Fish Commission.

Any person violating any of the provisions of this Act shall be guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not less than twenty-five dollars (\$25), nor more than three hundred dollars (\$300), or by imprisonment in the county jail for not less than thirty days (30) nor more than six months (6), or by both such fine and imprisonment.

Open Season on Deer

EFFORTS were put forth by Representative Fulsher of Mineral county to foster a bill changing the open season on deer in his county to conform with winter conditions existing in Idaho, which adjoins, but the measure leaves the dates the same as in the previous statute and adds Blaine, Petroleum and a portion of Big Horn counties to the list of counties in which the killing of deer is forbidden. The district in which deer of either sex may be killed is changed by inserting Gallatin county and removing Beaverhead. In other counties where there is an open season only buck deer may be killed. The measure reads as follows:

The open season for deer shall begin October 15 and shall end November 15, both dates inclusive, of each year. The closed season for deer shall begin November 16 of each year and end October 14 of the following year, both dates inclusive; provided, however, that in all of that portion of Ravalli county drained by the West Fork of the Bitter Root river, the open season for deer shall begin with the 20th day of September and end with the 20th day of October, both dates inclusive, of each year; and provided, further, however, that it shall be unlawful and a misdemeanor, punishable as in this act hereinafter provided, for any person to shoot, hunt, kill, take or capture, or cause to be shot, killed, taken or captured, any deer, at any time within the counties of Yellowstone, Rosebud, Custer, Musselshell, Powder River, Carter, Richland, Roosevelt, McCone, Dawson, Carbon, Phillips, Prairie, Garfield, Petroleum, Treasure, Blaine and Valley, and within all of that portion of Fergus county lying north of the township line between townships 18 and 19 and east of the range line between ranges 24 and 25 in said county, also all of Glacier and Pondera counties lying within the Lewis and Clark national forest; and also all of that portion of Gallatin county lying and being north of the south line of township 4, north, M. P. M., and that part of Big Horn county lying east of 107th meridian.

During the closed season for deer it shall be unlawful for any person to take, hunt, shoot, kill or capture, or cause to be taken, hunted, shot, killed or captured any deer; during the open season for deer it shall be unlawful for any person to shoot or kill or cause to be shot or killed any deer other than one male deer with horns not less than four inches in length above the top of the skull. Provided, however, that it shall not be unlawful to take one deer of either sex in Mineral,

Raymond Is Leader



Claud Raymond

November near Pompey's Pillar. Aside from being a splendid field shot Mr. Raymond is an ardent fisherman, and despite the agitation against the Eastern Brook, he defends him as one of the gamiest Montana fish. In concluding a recent letter to the editor Mr. Raymond says: "Every Montana sportsman should be a subscriber to MONTANA WILD LIFE and as president of the Musselshell club I expect to make an earnest effort to encourage every member to take the magazine and keep in touch with the Department. I have enjoyed every issue."

Madison, Glacier, Lake, Flathead, Lincoln, Sanders, Gallatin and Ravalli counties. It shall also be unlawful and a misdemeanor punishable as in this act hereinafter provided, for any person responsible for the death of any deer to willfully waste any portion or portions of said deer suitable for food.

Open Season on Elk

REPRESENTATIVE HODGSKISS of Teton county fathered the bill which changes the dates on the open season for elk in portions of Teton and Lewis and Clark counties in the Sun River district. The old law provided the open season dates as October 15 to November 15. The new law extends the open season to December 1. The law reads as follows:

The open season for elk in Teton county, not included within a game preserve, and all that portion of Lewis and Clark county lying north of the North Fork of the Dearborn river, and not included within a game preserve, shall begin October 15 and end December 1, both dates inclusive, of each year; provided, however, that the Montana State Fish and Game Commission shall in its discretion have power to shorten such season in said territory and declare said territory closed

to the hunting or killing of elk at any time during the open season therein upon giving not less than five days' notice thereof, by publishing such notice in at least one newspaper of general circulation circulated in said counties, which said publication shall be at least five days prior to the time fixed by such Commission for the closing of such season.

During the open season for elk in the territory described and set forth in Section 1 of this act, it shall be unlawful and a misdemeanor punishable as hereinafter provided, for any person to shoot, kill, take, or cause to be shot, killed, taken, more than one elk, or for any person during the closed season for elk to pursue, hunt, shoot, kill, take, capture, or cause to be pursued, hunted, shot, killed, taken or captured, or attempt to shoot, kill, or take any elk within said territory or for any person responsible for the death of any elk to willfully waste any portion or portions of said elk which are suitable for food.

Any person violating any of the provisions of this act or any of the orders, rules, or regulations of the Montana State Fish and Game Commission relating hereto, or made pursuant to the authority given it by this act, shall be guilty of a misdemeanor and upon conviction thereof, shall be punished by a fine of not less than two hundred dollars (\$200) nor more than five hundred dollars (\$500), or by imprisonment in the county jail for not less than thirty days nor more than six months, or by both such fine and imprisonment.

Fur Dealers

FUR DEALERS and their agents will hereafter be more strictly regulated by the State Fish and Game Department through passage of the bill fathered by the senate committee on fish and game, which requires them to keep separate records of furs handled, names and addresses of trappers, open their books to the game warden and his deputies and in other manner aid in the prevention of illegally taking Montana furs. The new law reads as follows:

Any person or persons, firm, company or corporation engaging in, carrying on, or conducting wholly or in part the business of buying or selling, trading or dealing, within Montana, in the skins or pelts of any animal or animals, designated by the laws of Montana as fur-bearing or predatory animals, shall be deemed a fur dealer within the meaning of this act. If such fur dealer resides in or if his or its principal place of business is within the State of Montana he or it shall be deemed a resident fur dealer. All other fur dealers shall be deemed non-resident fur dealers.

Every fur dealer shall keep a book in which shall be recorded separately on the date of each transaction the following facts:

The number and kind of all skins or pelts purchased or sold by such fur dealer.

The place where such skins or furs were killed or trapped and a separate record of all such skins or pelts as

were killed or trapped outside the State of Montana.

The trapping license number under which such furs or pelts were taken in cases where a trapper's license is required for the taking thereof.

The names and addresses of the persons to whom such skins or pelts were sold or from whom they were purchased.

Said book shall be open at all reasonable times to the inspection of the State Fish and Game Warden or any of his deputies, or any United States Game Warden, and shall be preserved and accessible for one year after the expiration of any license granted to said fur dealer.

All fur dealers as defined in this act shall before buying, selling or in any manner dealing in the skins or pelts of any fur-bearing or predatory animal within Montana secure a fur dealer's license from the State Fish and Game Warden, provided that no license shall be required for a hunter or trapper selling skins or pelts which he has lawfully taken, nor for any person not a fur dealer who purchases any such skins or pelts exclusively for his own use and not for sale.

The following classes of licenses shall be issued:

Resident fur dealer's license.

Non-resident fur dealer's license.

Fur dealer's agent's license, and the following fees charged therefor:

Resident fur dealer's license, one (\$1) dollar; non-resident fur dealer's license, twenty-five (\$25) dollars; fur dealer's agent's license, ten (\$10) dollars.

Any person who is employed by a resident or non-resident fur dealer as a fur buyer shall be deemed a fur dealer's agent. Application for a fur dealer's agent's license must be made by the fur dealer employing said agent and no agent's license shall be issued until the necessary fur dealer's license has first been secured by the employer of said agent.

The license required by this act shall be issued annually and shall expire on April 30 of each year and no reduction in the fee charged for said license shall be made in any case where said license runs for less than one year.

Any person, firm, company or corporation violating any of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof shall be fined not less than twenty-five dollars (\$25) nor more than three hundred dollars (\$300) or shall be imprisoned in the county jail for not to exceed thirty days or shall suffer both such fine and imprisonment.

Night Fishing in Lake

DIFFICULTIES arising through night fishing in Georgetown Lake, where the Department is operating the largest spawn-taking station in the world at the mouth of Flint creek, were covered in the house bill making 9:30 P. M. and 5 A. M. the hours between which fishing shall not be allowed. Complaints have been made of night seining for trout and other nocturnal violations. The new law follows:

AN OPINION

"Well, it's queer," said he, "but you seldom find

A lover of trees in a prison cell
Or doing a wrong of any kind;
It's in stuffy rooms the criminals dwell.

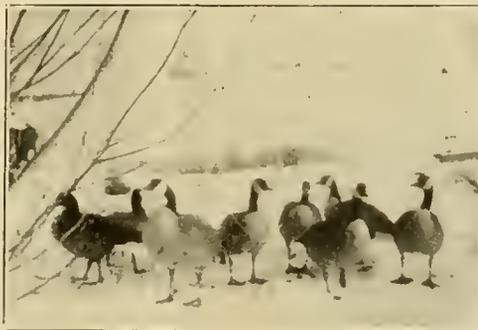
"I've watched the world and the ways of men,
And those who are bronzed by the summer sun
And know the secrets of field and glen
Aren't apt to be near when wrong is done.

"For crime is bred in the crowded streets,
But the man who bothers with plant and tree
And is friend to the humblest flower he meets,
Is likely a friend to man to be.
—Edgar Guest.

It shall be unlawful and a misdemeanor punishable as in this act hereinafter provided for any person to fish for or attempt to take in any manner any fish from the waters of Georgetown Lake in Deer Lodge and Granite counties, Montana, during the hours intervening between 9:30 o'clock P. M. Mountain time of each day and 5:00 o'clock A. M. Mountain time of each following day.

Any person violating any of the provisions of this act shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars (\$25) nor more than three hundred dollars (\$300), or by imprisonment in the county jail for not less than ten days

Honkers on Parade



SPORTSMEN of the Norris country know their geese. When the Canadian honkers wend their way southward with the tang of winter in the air, the Norris sportsmen cherish the friendship and crave the acquaintance of W. B. Johnson, proprietor of the Norris garage, who has eight domesticated decoys. There are two mated pairs and four birds that will be a year old in May. They were hatched in captivity and seldom fail to chatter and honk down the big boys in the "V" piercing the gray dawn of late autumn.

nor more than 100 days, or by both such fine and imprisonment, and in addition thereto, shall in the discretion of the court, forfeit his or her license to hunt or fish within Montana for a period of one year from the date of conviction.

Artificial Fish Ponds

TO ENABLE the establishment of artificial fish ponds of larger area, Senator Keeley of Powell county fathered the bill which finally became law. It increases the area from 100 acres as provided under the old law to 500 acres of surface water. The law follows:

Any person who owns or lawfully controls an artificial lake or pond may stock the same with fry procured from the federal or from the state government at the prevailing market price, providing there is a surplus of said fry, or from any other lawful source, and shall thereafter have the right and privilege to take from said lake or pond in any manner, except by the use of poison or explosives, the fish therein contained, and to sell and dispose of said fish and of eggs and fry therefrom. The words "artificial lake or pond" as herein used shall not be construed to include any natural pond or body of water created by natural agencies, but shall be limited only to such bodies of water as are created by the artificial diversion or storage of water and shall not exceed 500 acres of surface area. Provided, however, that such owner shall procure a license in the manner provided by the laws of the State of Montana, and shall furnish a good and sufficient bond to Montana, in the sum of two hundred dollars (\$200), conditioned to the effect that he will not sell fish caught in any of the public waters of this state, and also conditioned to the effect that such owner or holder will report to the State Game Warden the quantity of fish, fish eggs and spawn taken from said lake or pond, and sold from and planted in, said lake or pond during any calendar year. Said report to be made under oath annually in the month of January of each year.

MUCH SMOKE, NO POWDER

"If you kiss me again, I shall tell father."

"That's an old tale. Anyway, it's worth it," and he kissed her.

She sprang to her feet. "I shall tell father," she said, and she left the room.

"Father," she said softly to her parent when she got outside, "Charlie Riley wants to see your new gun."

"All right, I'll take it in to him," and two minutes later father appeared in the doorway with his gun in his hand.

There was a crash of breaking glass as "Charley" dived through the window.

A man of diminutive proportions sat down at the restaurant table.

"I want some salad," he said.

"What kind, shrimp?" asked the waiter.

"Don't get funny with me, young man!"

Public Aroused to Fish Conservation

EVER BEEN THERE?

YOU men who go hunting and fishing,
Or long to live in a camp,
Have you ever slept in the open
Tired from a long day's tramp;
Then just as the day is dawning,
And you lie on your bed awake,
With only the trees as an awning,
As still and as calm as the lake
For even the birds are silent
Asleep in their lovely nest;
A silence that God alone has sent
To sweeten and deepen our rest.
Awe'd by the beauty of nature
That comes at this hour of the morn
To fill every living creature
With a thanks that he was born?

—W. C. Shewmon.

AN AROUSED public conscience to the need for proper husbandry of our fisheries resources is the most encouraging feature of the present fisheries situation, Henry O'Malley, United States Commissioner of Fisheries, sets forth in his annual report. Montana's State Fish and Game Commission is engaged in a vast program of game fish conservation similar to the federal plan in commercial fishing.

The commercial fisheries of the United States are in a stronger economic position today than those of any of the other large fish-producing countries, according to Commissioner O'Malley. This favorable status is due in no small degree to the scientific research work conducted and the practical aid rendered by government experts. Commercial fishing interests, state and private enterprises engaged in large-scale fish propagation and organizations and individuals interested in having good fishing and enjoying the use of lakes and streams for recreational pursuits—all are in accord as to the importance of conserving our fishery resources.

Notwithstanding the present prosperity of the fishing industry as a whole there are certain factors which are cause for grave concern for its future welfare. While the total yield has increased steadily for the past half-century until it now amounts to over 2½ billion pounds annually, valued at more than \$103,000,000, there is convincing evidence that many of our great fishing grounds are suffering actual depletion. The growing importance of sea food in the diet; the rapid increase in the population of the country; recent developments in refrigeration, preservation and distribution of sea foods; together with revolutionary changes in methods of marketing, all show unmistakably that we are entering upon an era of exploitation of the fisheries greater than ever before. The urgency and importance of the practical problems of conservation, the report sets

forth, make it imperative that the bureau center the attention of its research staff upon their earliest solution.

For the past ten years, the report discloses, there has been a steady downward trend in the total fish catch of the Great Lakes. The fisheries in this area represent an investment of more than \$15,000,000 and furnish employment to about 15,000 persons.

A new record for fish culture was established by the bureau's stations during the year 1927 when more than seven billion fish and fish eggs were produced, an increase of half a billion over the previous high record of 1926. The number of co-operative fish nurseries increased from 55 in 1927 to 86 in 1928, distributed in 11 states. As a consequence of this expansion in hatching and rearing facilities, many more fish are reared to a length of three or four inches before being released in natural streams and ponds.

An item of unique interest in the report is that in connection with the loss of young salmon each year in irrigation ditches. From 80 to 90 million salmon fry, it is pointed out, are released in the Columbia river each year and it is estimated that fully 90 per cent of these which migrate seaward are lost in irrigation ditches. An appropriation looking to an investigation and remedying of this situation was made by congress.

The average annual landings of fisheries products in the United States have a value of more than \$100,000,000; about 118,000 men are engaged in commercial fishing and 300 are employed on vessels directly connected with the fishing industry. In 1927 the production of canned fishery products amounted to more than 475,000,000 pounds valued at \$81,384,000 and the output of by-products was valued at \$12,793,000. The value of salted, dried and smoked fishery products may be estimated at \$12,000,000.

What Reduces Game?

WHILE some Montana folks contend that greater shooting restrictions represent the only means of preventing depletion of game, shooting is only one of the many factors responsible for such reduction, and in some cases it is not the chief factor, it is set forth in a bulletin of the American Game Protective Association.

Complete prohibition of shooting would be of little avail, it is set forth, without food, cover, sanctuary, brood stock, control of predatory species, and adequate range.

Wild life always is reduced in proportion to the reduction of its range and natural habitat conditions.

"The plow and the cow made it impossible for a herd of wild buffalo to

MOUNTAINS

I know not if they may have been
flung Heaven high
By some primordial throe of Nature's breast.
I only know how still . . . how
vastly still
They stand against the sky . . .
Gray crag, green slope, and snow-crowned crest.
I know not if chaotic thunders
crashed and rumbled
'Round their ragged peaks,
I only know their far still silences,
And I am hushed . . . God speaks.

find range anywhere in the United States," the bulletin points out. "The ax and the saw played havoc with the roosting and nesting groves of the wild pigeon.

"Just so the displacement of the worm rail fence, the stone wall and the hedge row by the wire fence has obliterated the cover of the bob white; the steam shovel and the ditching machine have sucked out the water and dried up the homes of the waterfowl and the muskrat; the same engines have caused an impenetrable crust to form where the woodcock was wont to bore for food; fire, pasturage, deforestation and cultivation have ruined the resorts of the grouse, deer and moose; all these agencies, added to poisonous pollution, have obliterated the streams or made them untenable for fish.

"These things can not be charged to sportsmen, though the man with the gun must bear his rightful share of the blame, because gunners are not always sportsmen. A few hoggish individuals have brought odium on the whole fraternity.

"It is up to the man who is not recoiled to hang up his gun and rod for keeps to help solve this problem in a constructive way. He must work through organization, local and national, to put effective methods into operation. More restrictive laws will not suffice. There must be more food, more cover, more sanctuary, more breeding and stocking and better law enforcement."

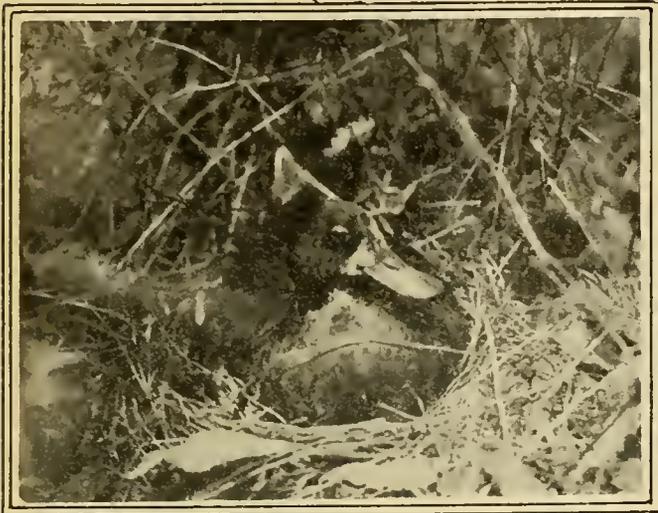
WORLD RECORDS

"This is a good restaurant, isn't it?" said the customer to the waiter who had brought his order.

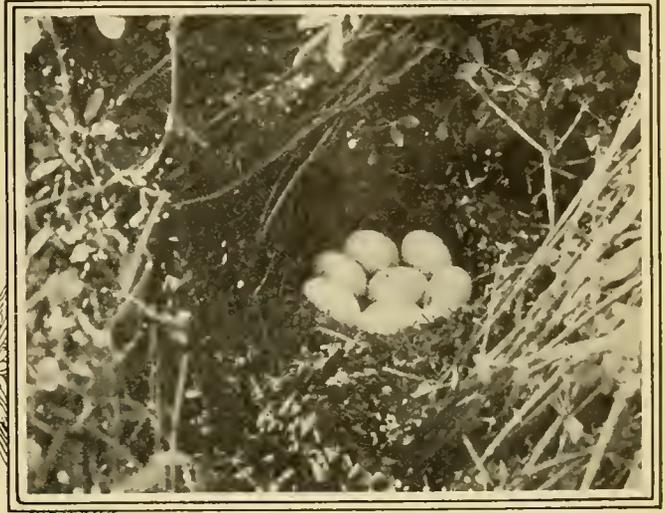
"Yes," replied the waiter. "If you order a fresh egg here, you get the freshest egg in the world. If you order a good cup of coffee, you get the best cup of coffee in the world, and—"

"Yes, I can quite believe it. I ordered a small steak."

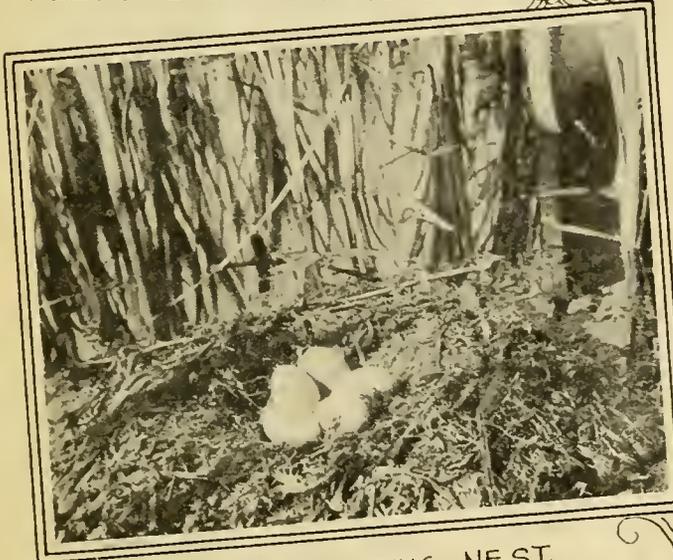
Nesting Time Is Near at Nine Pipe



A SCAUP OR BLUEBILL ON HER NEST AMONG THE THISTLES



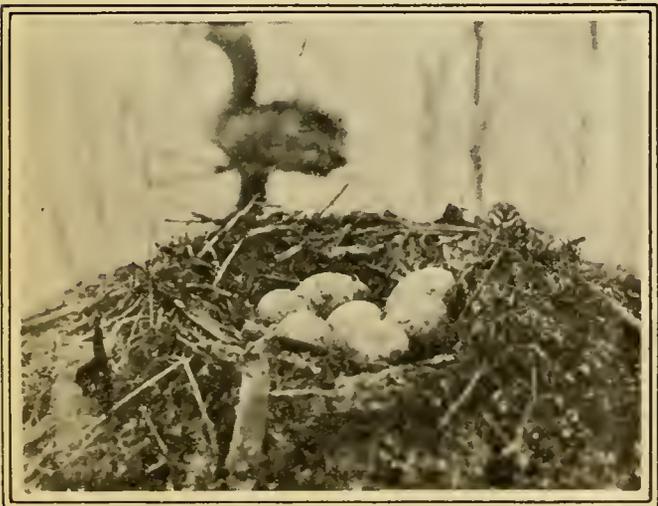
A BLACK MALLARD'S NEST IN ALFALFA FIELD



A MERGANSER'S FLOATING NEST.



MRS. MALLARD AT REST.



A PIED BILLED GREBE LEAVING HER FLOATING NEST ON A POT HOLE NEAR NINE PIPES - BABY GREBE ON EDGE OF NEST.



AVOCET AT NINE PIPE

MONTANA STATE FISH AND GAME COMMISSION

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G. T. Boyd, Great Falls.
Joseph L. Kelly, Anaconda.
W. K. Moore, Billings.
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ROBERT H. HILL, Helena
State Fish and Game Warden
Secretary.

MONTANA WILD LIFE

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VOLUME I MARCH, 1929 NUMBER 10

SUBSCRIPTION PRICE GOES TO \$1

MONTANA'S State Fish and Game Commission has decided that the subscription price of MONTANA WILD LIFE, official publication of the Department, which has been greeted with enthusiastic acclaim among sportsmen as well as other commissions of the United States and Canada, shall be increased to \$1 per year after June 1, the start of the second year of the publication. Hence, in keeping with the order of the Commission, sportsmen of the state and nation who desire to secure the magazine at the introductory price of 50 cents per year, must have their checks in the office of the editor at Helena before June 1. That date likewise will mark the discontinuance of complimentary copies which have been mailed to possible subscribers, state officials, members of the legislature and others. The first year of the existence of the magazine has proven it a success, hence, because of the necessity of meeting publication costs and production expenses, it has been mandatory that this step be taken. On the mailing list of MONTANA WILD LIFE, as paid subscribers, are the names of men prominent in conservation of natural resources in every state in the Union. Others have been placed on the paid mailing list through the activity of Montana sportsmen, and to those who have paid the fee it is manifestly unfair to continue mailing monthly copies free to others. At the last annual meeting of the Montana State Sportsmen's Association it was agreed that the magazine is worth far more than the price now charged. It's the wise feller who gets out the check book now and puts his name on the line for a subscription of several years. June 1 is the dead line for the four bits subscription. After that it's a buck.

Take Your Choice—Song Bird or Cat—You Cannot Have Both.

SPORTSMEN'S ARTICLES WELCOME

MEMBERS of the Montana State Sportsmen's Association, as well as men and women generally who are interested in the conservation of wild life, are again earnestly requested to submit articles and photographs of interest for publication in MONTANA WILD LIFE. Through foresight and enterprise of the State Fish and Game Commission this magazine has been established to aid in spreading the gospel of conservation. Cooperative efforts of sportsmen in sympathy with the vast program of the State Commission are sincerely sought and welcomed. Results

achieved during the first 10 months of its existence are already apparent. Every Montana sportsman should be a subscriber. It behooves him to keep in touch with activities of the Commission which he is aiding in making possible. He should consider it a duty and a pleasure to see to it that friends in other states are likewise subscribers. They enjoy the Montana contact. On June 1 the subscription price goes up from 50 cents to \$1 per year. Now is the time to act.

Let us unite in taking the "rest" out of restoration.

ANOTHER UNIVERSITY GAME COURSE

STATE universities are gradually developing an interest in establishing courses of study in conservation and propagation of game animals and birds. One of the latest to establish a course is the State University of Idaho, which has introduced a course of study in game propagation in its poultry department of the School of Agriculture. Experimental work in propagation is to be carried on, especially with the view of developing methods involving less expense than those in common use. Incubators and artificial brooders are used in these experiments.

Another thing needed for wild life perpetuation is less wishbone and more backbone.

WISCONSIN BUILDS FISH HATCHERIES

WISCONSIN has 24 fish hatcheries and will build three more this season, one for pike perch and two for the propagation of black bass. This state has long been famous for the efficiency of its fish cultural work, which was established many years ago on a firm and practical foundation by the late James Nevin, who had charge of fish cultural work in Wisconsin for more than thirty years. His successor, B. O. Webster, has continued to carry on with equal success and has, since the death of his predecessor, made marked progress in the propagation of the many species of fine food and game fish indigenous to Wisconsin.

Mr. Webster is convinced that the propagation of black bass and other nest-building fishes can be materially encouraged and promoted by the establishment under state supervision of a large number of breeding ponds along the Mississippi river. He is preparing to make a thorough survey of suitable areas for such ponds during the coming summer along the 140-mile length of the Mississippi river where it borders on Wisconsin.

Every business profits from fish and game, but fish and game profit from precious few businesses.

DID YOU KNOW?

AT Fort Leavenworth federal penitentiary there are clubs of all kinds organized among the prisoners: bankers clubs, realtors clubs, manufacturers clubs—but there isn't a fisherman within the walls. Statistics on major crimes show that in 25 years there has never been a man convicted who loved to fish, smoke a pipe and owned a dog. No man without a clear conscience can be a fisherman or a lover in any way of the great outdoors. Our crooks are found where the lights are brightest, where there is a crowd and music and hustle, where they can forget consciences.

BEAVERS TO IMPROVE FISHING

THE EFFECT of beavers on fishing streams has always been a moot question and doubtless the effect varies according to conditions and locality. It remains, however, for the Sportsmen's Association of Seattle to inaugurate a plan for systematically directing the energies of these industrious builders so as to contribute to the improvement of fishing in Washington streams. It is intended to divert the beavers from their unorganized program of building dams and put them to work constructing dams at carefully selected spots, thus forming artificial pools useful for the propagation and encouragement of trout and incidentally the improvement of trout fishing.

The man who spends several hundreds of dollars each year for his hunting and fishing, then refuses to support a sportsmen's conservation organization, is indeed an unwise investor.

KILL OF WILD GAME EQUALS 10,000 STEERS

FOOD VALUE of wild game killed last year in South Dakota equals, from the standpoint of quantity, the meat from 10,000 steers, according to C. H. Johnson, state game and fish commissioner. This includes four million pounds of pheasant meat, 31,600 pounds of venison and three-fourths million pounds of wild duck, or a total of nearly 4,900,000 pounds of dressed game. Estimating a dressed steer at 500 pounds, it would take 10,000 of them to equal the meat of the game. Fish are not included in the commissioner's figures as the number caught during the year is so large and their weight so varied that no accurate estimate could be made of the total.

Don't forget your hunting license. It should be carried on every hunting trip.

GAME AS AN ASSET

IN THIS country the thought of game as an asset, as a commodity of economic value, is fairly new. It has been pointed out that the annual kill is worth millions of dollars to a state from the standpoint of food values alone and entirely apart from its recreational value or its value in tourist trade, but this idea is new to the mass of Americans.

In Europe such values have long been recognized and conservation practiced for years. Europe, in short, has recognized that a continued production of its game crop can not be left to chance but must be worked at as any other crop, and we are beginning to realize this ourselves.

In this light it is not surprising to find that France, a country where all waste must be eliminated in order to take care of its huge population, is keeping abreast of the times on conservation matters. We quote from the Baltimore, Maryland, Morning Sun:

"France is interested to some extent at least, in Virginia's work in wild life conservation. This is indicated by a request made to M. D. Hart, executive secretary of the Virginia State Commission of Game and Inland Fisheries, by a French editor for an article dealing with game and fish laws. Following recent communications with A. Fiot, attache to the French embassy at Washington, Mr. Hart has received a letter in which Mr. Fiot informs him that the editor of *Chasseur Francais* is eager to get information on wild life conservation work."

The weakest alibi for decreasing game and fish is "ease of transportation"—modern transportation provides equal facility for maintaining the supplies.

HIGHWAY SAFETY VALVES

MOTORING visitors approaching Bonners Ferry, Idaho, over main traveled roads meet with a peculiar roadside sign. From a distance he makes out only a square white space from which stand out a row of three regulation rifle targets. Getting nearer the reader may make out the legend, "Donated to the Sign Shooters." Then is revealed the name of the proprietor of an ignition service station. The trenchant satire of the signs has preserved them from the silly assaults of the shooters.

PUBLICITY PREVENTS VIOLATIONS

THERE is a great difference in policy in states with reference to giving publicity to prosecutions for violations of conservation laws. Some states publish all such prosecutions, giving names, dates and full facts concerning each case. In other states such information is withheld from publicity. Publicity seems to be the better policy because it has a deterrent effect on would-be violators.

Executive Secretary M. D. Hart of the Virginia Commission of Game and Inland Fisheries recently advised all game wardens of that state to give facts relating to such prosecutions and violations to their newspapers. This is a new departure in Virginia and Mr. Hart is fully convinced that a policy of pitiless publicity is what is needed. He believes it will have a salutary effect and will at the same time inform the public as to the activities of the wardens.

Let us not overlook the fact that predatory animals and semi-wild house cats have a year around open season on game, song and insectivorous birds.

A PATRIOTIC SERVICE

THERE is no branch of the public service, either state or federal, in which a greater patriotic devotion to duty and the public welfare is displayed than in the fish cultural work of the United States Bureau of Fisheries and the various state departments.

Fish propagation is a highly technical work, requiring close attention to every detail and thorough training. It involves long hours, heavy labor, unremitting vigilance, scientific and practical knowledge and few vacations.

Were it not for the marked progress made in the science of fish culture and the resulting large output of fish from hatcheries, there would be many less fish for angling purposes in the lakes and streams of the country. In other words, the fish culturist has made it possible to continue to enjoy angling for trout in a great part of the country which would otherwise be barren of fish. The supply of many other varieties also depends to a great extent on artificial propagation.

Fish culture is a life profession, requiring many years of study, experience and intense application, yet it is without exception the poorest paid branch of the public service. The federal government and most of the states are niggardly in providing for these faithful servants. Most of them are compelled to subsist on the salary of a common laborer or less. They continue in their chosen work because of their love for it, despite its unattractiveness from the standpoint of compensation.

Some people are unable to understand that the sentence, "a public office is a public trust" is anything more than a line in the copy book.

INTERESTING DATA ON HUNGARIANS

TOM NASH of Ohio wrote a letter read at the meeting of the Washington State Association of County Game Commissioners and Game Wardens by Charles Meyers, chairman of the commission. Mr. Nash claims from 40 years' experience with Hungarian partridges in Europe that the scarcity comes from inbreeding and unless new blood is introduced into the bands of these birds every three or four years the covies decrease in size, and the birds do not survive hunting. He further advises that banded birds have not been found farther away from where they were liberated than eight miles. Relative to the flight of Hungarians, the general impression is, in the United States, that Hungarian partridges travel much farther than eight miles from the place of liberation. It is hoped that further banding of this species will definitely settle this fact.

"Human life is absolutely dependent upon wild life and forests. Without these things we would become extinct as a race. If all vegetation should disappear tomorrow, the human race would become extinct upon the face of the earth within one year."

Montana's State Game Farm

SCIENTIFIC experiments among Montana's neighboring states have proven that acclimated game birds, artificially propagated, have been a successful venture and it won't be long now until the Montana state game farm at the hospital for the insane at Warm Springs or the state prison at Deer Lodge will be turning out Montana-bred Chinese pheasants and Hungarian partridges for stocking fields and hedges of the Treasure state.

At the last meeting of the Commission at Helena, March 14, Chairman Thomas N. Marlowe was instructed to proceed in the employment of a game farm expert, the erection of pens, acquiring of brood stock and other details. The expert to be employed is to be entrusted with the selection of the site and the construction of pens and houses.

Members of the Commission insisted that a start be made this year. Nebraska will doubtless aid in supplying a part of the breeding stock because of the offer of the commission of that state to trade 400 pairs of Chinese pheasants for 1,000,000 trout eggs, the birds to be considered worth \$4 per pair and the trout eggs \$2 per thousand in making the swap. An investigation looking toward establishing the game farm has been conducted by Game Warden Robert H. Hill for several weeks.

Members present at the meeting were: T. N. Marlowe, chairman; E. A. Wilson, W. K. Moore, G. T. Boyd and J. L. Kelly, Commissioners; Dr. I. H. Treece and J. W. Schofield, Field Assistants, and Robert H. Hill, State Game Warden.

Mr. Hill presented a request from John Tressler of Malta asking that Lake Bowdoin in Phillips county be closed to the trapping of muskrats for five years. In view of the fact that the trapping season is over April 15th and it is necessary to give a 15 days' notice before closing the trapping season, action was deferred.

Mr. Hill advised that John W. Woodcock and Mr. Gordon, members of the legislature, had requested him to present to the Commission the matter of opening the Highwood Forest to the hunting of elk. Several complaints of damage have been received from that locality, and last year's open season proved unsuccessful in diminishing the herd. Mr. Hill read a complaint of damage by elk from Thomas Streit of Highwood, and read Deputy Roushar's report of existing conditions. Mr. Hill was instructed to investigate conditions in the Highwood and report his findings at the next meeting of the Commission.

Mr. Hill asked the field hatchery assistants concerning egg-taking operations at Lake Francis, in Pondera county. John W. Schofield advised that he believed operations for taking rainbow eggs could be started this fall, and that permanent fixtures for the taking of these eggs would have to be built.

WILD LIFE PROGRAM

Platform and Principles Adopted By the International Association of Game, Fish and Conservation Commissioners

WE BELIEVE in and recommend the observation, by sportsmen and conservationists, of unmo-
lestated areas where wild life may find rest and nest so their reproduction of like species may forever continue.

We believe in a census of all species as accurately as can be had and that the bag limits and open seasons thereon be regulated on a basis commensurate therewith.

We believe in the taking of all game, fish and fur-bearers if the supply justifies in such sparing quantities that the continuation of the interesting and valuable wild life may exist in needful abundance.

That these principles be taught to boys and girls of America in the most effective manner.

Mr. Schofield and Dr. I. H. Treece were authorized to proceed with the building of permanent fixtures in completing the egg-taking station at Lake Francis this fall after the water recedes sufficiently.

Mr. Hill advised that M. W. Wickware of Valier, a member of the legislative assembly, had made a request for A. J. Simmons for an all-year open fishing season on Lake Francis. He read letters making a similar request from the Valier and Shelby Rod and Gun Clubs. The applications were denied because the Department is endeavoring to build up the lake for a rainbow spawn-taking station.

The Secretary read a letter from the Hill County Rod and Gun Club requesting that Beaver Creek in Hill county, which has been closed to fishing for three or four years and which is stocked with rainbow trout, be open to fishing during the regular open season, but that the tributaries of the creek remain closed, and the petition was granted.

Mr. Hill read a request from the Deer Lodge Anglers' Club that Cottonwood Creek in Powell county be opened to fishing the year around, inasmuch as it is almost overstocked with eastern brook trout. The closed season was suspended until further order of the Commission.

Mr. Hill read a letter from the Red Lodge Rod and Gun Club asking that the Commission close to fishing, for three years from the time of stocking, September Morn Lake, Basin Creek Lake and Third Rock Creek Lake on the Second West Fork, all of which are in Carbon county, and the request was granted.

The Secretary advised that Sylvan J. Paulv, a member of the house of representatives, had made a request from Dr. Kilburn of Ovando that Cooper's

Lake in Powell county be opened to fishing. Dr. Treece advised that eggs have been planted there in great numbers but that the eggs taken from the lake were too inbred. Action was deferred in view of the fact that it would interfere with the spawning season if anything was done at the present time.

Warden Hill asked Commissioner W. K. Moore for his report on allowing Mr. McCracken to seine in Hollins Lake, which matter had been referred to Mr. Moore at the last meeting. Mr. Moore advised that he wished to make further investigations.

A petition was presented from settlers in the Medicine Lake district asking that they be permitted to seine in that lake without paying a license or seining fee. A letter from Deputy Krost advised that seining expenses in Medicine Lake were not high. The petition was denied.

Mr. Hill read a report of the conditions in the Red Rock Lakes, in Beaverhead county. At the last meeting Senator Pearl I. Smith, a member of the legislature from Beaverhead county, had requested that ling be seined out of this lake. Mr. Hill advised that under the law ling may be fished for through the ice and may be commercialized. The closed season was suspended in the Upper and Lower Red Rock Lakes and the channel connecting them.

Mr. Hill read a letter from William Adams, director of the Department of Conservation of Massachusetts, thanking the Commission for action relative to shipping sharptail grouse to that state to breed with the heath hen, which is disappearing. Mr. Adams advised that they did not believe it would be advisable to cross the birds.

Mr. Hill advised that the sportsmen in Toole, Glacier and Pondera counties are anxious to have a warden for that district. Mr. Marlowe read correspondence which he had in connection with this matter. No definite action was taken.

Mr. Hill asked the desire of the Commission in appointing a game warden for Big Horn county for eight or nine months of the year and Charles Hutton of Hardin was reappointed special deputy for Big Horn county, his appointment to be effective April 1, 1929, and to continue at the option of the State Game Warden.

It was decided that from and after the June publication of MONTANA WILD LIFE the subscription price shall be increased to one dollar a year; that all issues of this magazine published between now and that time carry a notice to that effect; and that a notice also be published conveying the idea to those who have not actually subscribed to this magazine, but who are now receiving it, that they will not receive any issues of MONTANA WILD LIFE free after the May issue.

Mr. Hill advised that the U. S. Bureau of Biological Survey had put Mon-

tana on a list making it possible, with the permission of the Department, for persons to secure permits to kill robins which are injuring cherry and other berry crops. Mr. Hill asked the sentiment of the Commission. The Commission declined to authorize the killing of robins in any place in Montana.

Mr. Hill read a letter from the Flathead Fur Farms of Kalispell wherein they requested permission to sell some of their male muskrat stock before the two-year period terminated in order to have a better increase for the coming year. Discussion followed as to the productivity of muskrats. The matter was laid on the table until later in the meeting.

Mr. Hill presented the matter of paying the prizes in the predatory animal contest and he gave a report of the winners.

Mr. Hill read a letter from the Izaak Walton League chapter at Plentywood asking the Commission to furnish them with duck food and Chinese pheasants for planting in their locality. He also read a similar letter from Warden Krost. The game warden was instructed to advise them that the Department is not planting duck food this season, but that negotiations are now being made for the purchase of birds, and as soon as results are at hand birds may be available for distribution.

The Secretary read a letter from Sweet Brothers at Butte offering to sell their hatchery at Wilder, and the offer was filed.

Deputy J. H. Chartrand complained that a number of fish had died at the Miles City station and Field Assistants Treece and Schofield were sent to Miles City to look over the station. It was also suggested that they send some of the water at the station to the U. S. Bureau of Fisheries for examination.

Mr. Wilson advised that the A. W. T. Anderson hatchery at Emigrant, which the Commission considered buying, had been sold.

The matter of installing a fish wheel or ladder over the dam at Bonner was considered. The Deer Lodge Anglers' Club had requested the building of such a fish ladder. Deputy Warden Hill at Missoula was instructed to investigate the dam in the Big Blackfoot river, near Milltown in Missoula county, and report his investigations to State Game Warden Hill. The matter of installing fish ladders over three other dams—one in the West Gallatin near Gallatin Gateway, one in the Tongue river and one in the Yellowstone river below Glendive, was discussed and Deputy Marshall at Bozeman ordered to investigate the dam on the West Gallatin and see whether or not it needs a fish ladder.

Mr. Marlowe reported on the quotations which he had received for metal signs, one being from the Everwear Sign Corporation at Glendale, Calif., and the other being from the Department of Welfare of the State of Pennsylvania. Both quotations are 25c per sign. Mr. Marlowe advised that he would order the 5,000 signs being purchased by this Department from the Pennsylvania Department of Welfare.

Chairman Marlowe advised that Dr. M. J. Elrod of the University of Montana had recommended a man to plant

eyed eggs for this Department in the inaccessible streams of the state. He had planted eggs in Glacier Park for four years and had done satisfactory work. His charges would be merely for expenses and the hire of some one to look after his stock while he was away from home. Mr. Marlowe was instructed to arrange taking care of this work.

Mr. Marlowe suggested that, inasmuch as it is necessary to feed game birds during the severe winter months, it would be more economical to purchase wheat in the sheaf in the summer time and keep it in storage until the winter months. Mr. Marlowe was authorized to determine the locations in which it will be necessary to feed game birds and animals during the winter months, and to purchase the necessary food.

Mr. Marlowe suggested that the Department should have some record of the sale of fish eggs. Mr. Hill suggested that when a trade is being contemplated it should be brought up for approval by the Commission.

Mr. Marlowe read a petition from the citizens of Mineral county asking that Big Creek, tributary of the St. Regis river, from its mouth, near Haugan,

to the forks (a distance of less than three miles) and Twelve Mile Creek, also a tributary of the St. Regis river, in its entirety, be opened for fishing during the regular open season. Both these creeks are in Mineral county. The petition was granted.

Mr. Marlowe read a letter from the Judith River Rod and Gun Club asking for another warden in that territory for Judith Basin county alone, inasmuch as the territory covered by the warden there at the present time is too large. The Secretary of the Commission was instructed to answer this communication and state the condition of the Department, that there are several places where wardens are needed but that funds are not available to make more appointments.

Mr. Marlowe advised that he had received a letter from the Great Falls chamber of commerce asking whether the state had ever purchased aquarium tanks for the Great Falls hatchery, and if so, where they now are located. Mr. Schofield advised that he had never known of such a purchase, but that the U. S. Bureau of Fisheries had once sent some tanks to Montana, which tanks proved useless, and that perhaps this had caused confusion in the minds of Great Falls sportsmen.

Mr. Marlowe read a letter from Byron DeForest, wherein he asked if the Department would not put loch leven, which are in the Great Falls hatchery, into rearing ponds before planting them in the Missouri river, so that they will have a chance to grow. Mr. Schofield advised that these fish will be two years old when planted and that there is not a suitable place on the Missouri river for natural rearing ponds. Mr. Marlowe was authorized to write Mr. DeForest, advising him that the Department would appreciate finding a site along the Missouri river suitable for a natural rearing pond, where the fish will not have to be fed.

Mr. Marlowe read a letter from the Western Montana Fish and Game Association of Missoula, asking that the Grass Valley Migratory and Game Bird Preserve in Missoula county be abolished and that it be kept for only a game bird preserve. The farmers in that district however are opposed to such a change and submitted a petition to this effect. The request was tabled.

Mr. Marlowe advised that Clyde Terrell of Terrell's Aquatic Farm had offered to send a man to this state this summer to ascertain the results of the duck food which the Department has planted.

Attorney Wiggenhorn of Billings took up the matter by letter of the stand taken by the game warden that all shipments of fur-bearing animal skins outside the state must be accompanied by a shipping permit. He is counsel for W. L. Weaver whose six fox skins were confiscated for shipping without a permit. The Commission voted that Chairman Marlowe be instructed to write Mr. Wiggenhorn that the position taken by Warden Hill is correct and in accordance with the laws.

It was decided that Chairman Marlowe should confer with photographers in an endeavor to secure another mov-

Subscribe Now!

The subscription price of MONTANA WILD LIFE will be increased from 50 cents to \$1 per year on June 1, the first anniversary of the official publication of the State Fish and Game Department. Checks for subscriptions at the rate of 50 cents per year will be received until that date. The complimentary list will be eliminated. Help the cause. Do it now! Attach your check to the following list of friends and mail it to the editor at Helena:

Name.....

Address.....

Name.....

Address.....

Name.....

Address.....

Name.....

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Name.....

Address.....

ing picture reel of wild animal life of Montana.

Chairman Marlowe brought up the resolution passed by the Montana Sportsmen's Association asking a secretary in common with the Department and the adoption of MONTANA WILD LIFE as their official publication. He read a letter from Glen Smith in this connection. It was suggested that the advisory board of the association meet with the Commission at some future time to discuss their problems.

Dr. Trece and Mr. Schofield advised that they needed more fish tanks for transporting fish in both the western and eastern divisions. Mr. Marlowe read a letter from Mr. Parvin of the Colorado fish and game department, wherein Mr. Parvin explained that they had had tanks built by the Thompson Company of Denver, which tanks had proved satisfactory, and the Commission ordered two tanks, one for eastern and one for western Montana.

The Commission ordered a new Standard Buick coupe to be used by Dr. Trece in his work, a sedan for J. W. Schofield in his district and a Chevrolet sedan for the use of Jack W. Carney, assistant game warden. The Department authorized buying a Model A Ford truck, with a stake body, for use at the Missoula hatchery.

Commissioner W. K. Moore asserted that several years ago the Department had turned over to the Red Lodge American Legion, for the sum of \$1, the hatchery at Richel Lodge, which was to be used for government purposes, and that the hatchery had not been taken care of in the last few years and is deteriorating rapidly. The Lions' Club at Billings is sponsoring a boys' club and they have made request for the hatchery building for club purposes. Mr. Moore was authorized to take care of arrangements for disposing of the old Richel Lodge hatchery, with full authority to act.

Chairman Marlowe advised that the Missoula sportsmen are planning on sowing barley and wheat around the Nine Pipe Reserve and leaving it for the birds. He was given permission to buy new fence posts to mend the fences surrounding this preserve, so that the grain would be unmolested.

Mr. Schofield was authorized to build a pond to cost about \$100 at the Big Timber hatchery, for the purpose of experimenting in keeping a few fish until they grow to a larger size before planting.

The annual meeting of the Commission will be held about April 15.

BIRDS OF A FEATHER

A woodsman was conducting a friend on his first game hunt. The new man was fully equipped for the expedition. He had a brand new corduroy suit and a new and shiny gun. As they approached a swamp a pair of ducks flew up. The would-be Nimrod in his enthusiasm fired both barrels, and when the smoke cleared away the air was empty. He rushed excitedly over to the tall grass, and after poking around a while held up a large frog.

"Well," he boasted, "that's not so bad for the first time. I shot all the feathers off."

Curious Facts About Fish

WHAT is a fish? It is an aquatic animal, the lowest in the order of the vertebrates, or back-boned animals. It is distinguished from the higher forms of animal life in that it breathes through gills and its limbs take the forms of fins.

The earliest fossil remains of fishes are estimated to date back 400 million years. The characteristics are somewhat the same. While scientists are not sure whence they came, it is quite certain that many of the important and essential characters of the higher vertebrates made their first appearance among the fish and that they were the forerunner of all higher forms of life.

The variety of fishes is almost beyond comprehension. There are over 13,000 species. Among these thousands are tiny fellows and giants, fat ones and thin ones, round ones and triangular ones.

The smallest fish known, and perhaps the smallest vertebrate in the world, is the tiny Goby which lives in the Philippine waters. It is only about one-half inch long; in fact its name is longer than it is. Then there are the Carplings which live in most tropical waters. These little fellows are about the same size as the Goby. These fish feed upon the larvae of dangerous mosquitoes. Most of the brilliantly colored fish are only from two to four inches long.

The largest fishes are found among the sharks. The largest is perhaps the Basking Shark, found in sub-Arctic waters, which reaches a length of about forty to forty-five feet. Then there is the dreaded Carcharodon of tropical waters, about the same length. The Vampire Ray of the West Indies reaches a width across the wings of some twenty-five feet, while the great oarfish is over twenty feet long and weighs over 500 pounds.

As a rule the fish of the tropics are more brilliantly colored and show more variations than the fishes of the temperate zones. But even in the latter some remarkable species may be found. There are the blind fishes of Mammoth Cave, Kentucky; once they had eyes but from years of disuse the organ of sight has decayed. There are curious species found in ocean depths that likewise have little or no organs of sight.

One of the most remarkable fish known is the salmon, which lives in fresh water and in salt water. As a general rule to suddenly change fish from ocean water to fresh water, or from fresh water to ocean water, is to condemn them to death, for their delicate gill-membranes are so nicely balanced to the outer conditions that a change of water acts like poison. But not so with the salmon. It travels anywhere from twenty to a hundred miles through salt water in the course of a season and then when spawning season comes ascends some river to lay its eggs.

Other remarkable fish is the climbing-perch, which occasionally travels short distances over land and has also been known to climb trees. There is the chub which buries itself in the mud in the fall and hibernates. There is the pickerel which reverses the general order and is active and hungry in winter. There are the parrot fishes of the Mediterranean Sea of gorgeous hues. And there is the great weever which is protected by poisonous spines; the swordfish and sawfish with their strange jaws; the electric eel which is powerful enough to stun a man.

The struggle for existence among the fishes is indeed fierce. Not only is there a continuous battle being waged in the depths of the ocean where hundreds of species, great and small, feed upon one another, but there are likewise struggles continually taking place in our lakes and rivers and ponds. Not only do many fish feed upon other species, but a number feed upon their own kind. The little minnow must ever be on the alert for the bass or the pickerel or the perch which is seeking to pounce upon him. The perch and smaller bass in turn must look out for the pickerel and the pike, the pike and pickerel for the muskalonge, and so on. Not only is man, above the water, seeking him, but there are enemies on every hand in the murky depths about him. Life for most fish is ever chasing after food and being chased.

The more active fish are usually the flesh-eaters and are exceedingly voracious. Many of them have elastic stomachs into which they crowd a large number of smaller fish; a few species, like the deep-sea Gastrostomids, allies of the eels, can extend their stomachs and thus swallow a victim larger than themselves. Few fish take time to chew their food. As a rule, the booty disappears as rapidly as possible, probably to prevent a rival having a share. This has led to curious consequences. Eels have been taken with another eel in their mouth which had wriggled its way between the gills and thus suffocated its captor. And live fishes have been taken in the stomachs of others. It is on record that on occasions the live booty has cut its way through the lining of the stomach and either escaped or embedded itself in the tissues of its captor. Some few fish, among which are the sharks, take a pleasure in killing far more than they can devour at a time. One species combines this lust with such a morbid appetite that it is said to eject the contents of its stomach when full in order to go on feeding.

COOPERATION

It ain't the guns nor armament,
Nor funds that they can pay,
But the close cooperation
That makes them win the day.
It ain't the individual,
Nor the army as a whole,
But the everlasting team-work
Of every bloom'n' soul.

Migratory Bird Bill Is Now Law

AFTER a strenuous and protracted campaign of eight years, the Migratory Bird Conservation Act, known in various sessions of Congress by different names and generally referred to as the "Game Refuge Bill," was finally passed near the close of the last session of the 70th Congress and approved by President Coolidge on February 18, 1929. It has especial significance to Montana sportsmen. It was officially recognized by the Montana legislature which has just adjourned.

This measure was first introduced in May, 1921, by Senator Harry S. New of Indiana and Representative Daniel R. Anthony of Kansas. The bill was passed in the Senate in December, 1922, but was defeated in the House the following February. It was successively introduced in the 68th and 69th Congresses by Mr. Anthony and Senator Brookhart. During these two Congresses the bill reached a vote only once, when it was passed in the House of Representatives during the 68th Congress but failed to reach a vote in the Senate.

In the 70th Congress, the bill was introduced by Senator Peter S. Norbeck of South Dakota and Congressman Anthony and was finally passed in the Senate on April 18, 1928, after being amended so as to eliminate provisions for raising funds by sale of federal shooting licenses and for public shooting grounds. The bill as passed by the Senate authorized an appropriation of one million dollars per year for the purchase of refuges and their maintenance. The two provisions eliminated had been the chief bones of contention in Congress and to some extent among its proponents during its entire history.

INTO THE OPEN

OUT of the din, the dust of the street,
 Out of the Jail of the stifling heat,
 Out in search of a cool retreat,
 Into the open.
 Out of the gray and smoky night,
 Out of the hurry, and scurry, and fight,
 Out of the mass that crowds you tight,
 Into the open.
 Into the laughing cooling breeze
 Into the music of the trees,
 Into the heart of drifting ease,
 Into the open.
 Into the soul of natural things,
 Into the hills on Joyous wings,
 Where sky, and earth, and nature sings,
 Into the open.

—May Arno.

Following the passage of the bill in the Senate, a successful effort was made on the part of game officials and organizations interested to come to an amicable understanding with reference to the provisions of the measure, which resulted in the creation of a National Committee on Wild Life Legislation, to which committee was entrusted charge of the interests of the bill and it is due to the campaign waged by this committee that the bill was passed during the last short session of the 70th Congress and became a law. Before passage, the bill was amended in the House committee to substitute a graded series of appropriations for a flat million dollar a year provision, beginning with \$75,000 for the first year to be used in making a survey to determine what areas may be suitable for pur-

chase or lease under the bill. Appropriations are also authorized amounting to \$200,000 for the second year, \$600,000 for the third year, \$1,000,000 a year for seven years thereafter, and \$200,000 each year subsequently for maintenance. Another amendment was made which restored federal control of the refuges which had been given in part to the states by the Senate bill. There were several other minor amendments. All the House amendments were accepted by the Senate, which repassed the bill, as amended, unanimously. Congressman Andresen of Minnesota was active in securing final action in the House.

The Chief of the Biological Survey announces that he is making preparation to begin operations under the Act about July 1, 1929, when the survey provided for will be commenced. It is estimated that from 100 to 125 refuges will eventually be acquired and these will be distributed throughout the country wherever they are most needed and where suitable areas can be found. The exact location of this great system of sanctuaries will closely follow the main migratory flight lines and concentration areas of the birds.

The passage of this act completes our federal system of protection of migratory birds which was begun by the passage of the original Migratory Bird Law, followed by the Migratory Bird Treaty with Canada and later by the Migratory Bird Treaty Act of Congress, under which regulations are made fixing seasons, bag limits, etc. By taking this step, the United States has moved to fully meet its obligations under the treaty and the act is undoubtedly the most important conservation measure affecting wild life passed by Congress since the enactment of the Migratory Bird Treaty Act in 1918.

Montana's Magnificent Distances Lure Eastern Folks



Eastern lovers of the out-of-doors will soon be flocking to Montana again for the 1929 season to take advantage of fishing, hunting, hiking, mountain climbing and the countless attractions of wild life in the Treasure State.

The photograph shows a camping party on a Montana skyline with their pack horses and fishing equipment, headed for mountain trout streams.

Who Owns the Game?

This is a question asked innumerable times and is one which results in many discussions. The man who owns the land on which the game is found feels he has a proprietary interest in it and often claims absolute ownership on the ground that he provides the feed necessary for the existence of the game bird or game animal. Many sportsmen contend that since the work of game protection and propagation is maintained by the fees received from the sale of hunting and fishing licenses that the game belongs to the sportsmen.

Neither of these positions is correct. The game belongs to the state. It is the property of all the people and belongs to no one individual until it has been reduced to ownership by taking in the manner prescribed by law. The man who owns the land on which the game is found undoubtedly has just as much claim to ownership as the man who makes it possible for the game to exist by providing adequate protection. Likewise the citizen who does not own that particular land area or possibly owns no land at all, and who may not hunt or fish but who is nevertheless an integral part of the citizenship has an equal equity with each of the others.

An interesting court decision bearing on this question has just been handed down by the supreme court of the state of Missouri. This is the case of the state versus Savage and the opinion rendered in addition to having a bearing on the question of ownership of game makes it plain that a deputy game warden has a right to inspect the game bags of hunters.

We deem this to be a very important case because of the principle involved. This is the first time this point has ever been decided by a supreme court in the United States.

It seems that one J. H. Savage was arrested by a deputy game warden of the state of Missouri for refusing to allow said warden to inspect and count his game as provided for in Section 5645 R. S. Mo. 19, which section reads as follows:

"It is hereby made the duty of every person participating in the privileges of taking or possessing fish, birds, animals, and game, as permitted by this article, to permit the game and fish commissioner or his deputies to inspect and count such fish, birds, animals, and game, to ascertain whether the re-

quirements of this article are being faithfully complied with. Any person who shall refuse to comply with a demand to permit such inspection and count by any authorized officer of this state, or who shall interfere with such officer or obstruct such inspection or count shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than twenty-five dollars (\$25.00) nor more than one hundred and fifty dollars (\$150.00)." (Laws 1915, p. 295.)

Savage was quail hunting and the game warden asked him to show his quail for count; he refused to do so; charges were filed against him in the circuit court of Benton county, Missouri. The information was quashed by the circuit court for the following reasons:

1. Because Section 5645 is in conflict with the provisions of the constitution of the state of Missouri "that the people shall be secure in their persons, papers, homes and effects from unreasonable search and seizures," and therefore, unconstitutional and void.

2. Because Section 5645 is in conflict with the provisions of the constitution of Missouri "that no person shall be compelled to testify against himself in a criminal cause."

3. Because Section 5645 deprives the defendant of the equal protection of the laws and is therefore unconstitutional and void.

This decision was appealed to the supreme court of Missouri and the judgment of the lower court was reversed and the cause remanded. This then

means that the lower court was wrong in sustaining the motion to quash the information and that Section 5645, requiring the hunter to produce his game for inspection and count, is a valid and constitutional statute.

The court said in part as follows: "The license issued to the defendant authorized him to hunt and kill, subject to the regulations and restrictions of the law. This is a reasonable police regulation to prevent evasions of and for the effectual enforcement of the act; the defendant had no interest whatever in the quail that he may have taken, he simply had a privilege to kill or have in his possession a limited number on any one day. He has accepted his license under the terms, restrictions and limitations of the law and consented in advance that the game warden might at any time count the quail in his possession and that such inspection and count of quail in the defendant's possession is not an unreasonable search and seizure and such requirement is a reasonable and necessary regulation for the enforcement of the statute."

Cases were cited which stood for this proposition: "The ownership of wild animals so far as they are capable of ownership is in the state, not as a proprietor but in its sovereign capacity as the representative and for the benefit of all its people in common. It is therefore the duty of the legislature to enact such laws as will best preserve the subject of the trust and secure its



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Further quotation from the decision: "The defendant by taking out a license to hunt and kill game, the title to which was in the state, acquired a mere privilege to hunt, subject to the restrictions and limitations of the statute; that the statute requiring him to permit the game commissioner or his deputies to inspect and count the fish, birds, animals and game in his possession to ascertain whether the requirements of the statute were being faithfully complied with, is a proper and necessary police regulation to discover and prevent easy evasions of the statute. The statute, being of general application to all persons alike, is not repugnant to the due process and equal protection clauses of the constitution. By accepting a hunter's license he waived the constitutional rights involved so far as applicable to the facts in this case."

More Feed for Ducks

SPRING is the time of year when sportsmen's thoughts should turn to waterfowl and their care. We see nearly all the wild ducks, geese and shore birds wending their way into the far mysterious north. Time was when our prairies were vocal with the call of mating wildfowl in the spring. That condition can be restored in a measure by restoring conditions which will entice the migrating birds to stop and take up their abode where they were wont to do generations ago.

Such swamp and marsh land as has not been destroyed by man's insatiable greed for more plow-land should all harbor nesting colonies of many species of waterfowl. Since we abandoned the destructive habit of shooting these birds in the spring, there is nothing to prevent their tarrying along the route of flight, except the lack of congenial surroundings. To meet this need there has grown up within a few years a useful and thriving business of supplying seeds and roots of suitable plants for stocking these water areas with food for birds.

Let us quote one of the best authorities on duck food in the country—George D. Hamilton of Detroit Lakes, Minnesota—who says:

"Ducks can not subsist upon laws. What they must have is more pure water with more natural growing plants in it; better feeding places; more quiet retreats where they may fill up on wild rice and other seeds and tender grasses and tubers; places where as night comes on they may perch on the floating bogs and lily roots and the sandy shores and gravel points confident that there will not suddenly burst on them from hidden cover frightful explosions and streaks of fire and leaden hail."

He says further: "The waters have been diverted from their natural courses; timber removed; miles upon miles of ditches have been dug; vast areas burned over, all combining to destroy the natural reservoirs which served to maintain the water levels of lakes, streams and marshes, the habitat of countless waterfowl. Thousands of acres of wild rice, wild celery, sago, pond weeds and various other aquatic plants which provided food in seemingly unlimited and indestructible quantity have been rendered useless for the purpose for which they were intended by nature."

Remaining waters, including marsh and swamp, must be maintained and others which have been destroyed by drainage without beneficial results must be restored. Planting of such areas is entirely practical and much of such planting can be accomplished in the spring. Dealers in wild waterfowl food, seeds and plants, have found how to preserve their stocks through the winter so that planting can be done

in the spring. No better use can be made of sportsmen's funds either through state department activities or sportsmen's clubs than in devoting a substantial amount each season to the restoration of attractive food conditions for waterfowl.

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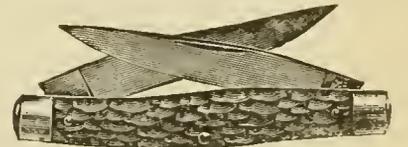
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Deer and the Grazing Problem

By J. J. MEANY, Deputy State Game Warden, Plains, Montana

TO THOSE of us who have lived in Montana during the last 25 or 30 years, in portions of the state where deer and other game animals are abundant, comes the deepest appreciation of strides made toward conservation of game through the efforts of the State Fish and Game Department. To those of us who are today upon the firing line in the battle for game conservation comes the knowledge that although a great deal has been accomplished, there is still much to do. New developments bring about new conditions. New conditions bring into being new problems, and new obstacles which must be overcome.

Of all the game animals that abound in Montana's vast game country there are none to equal the deer and it is to his welfare that this article is dedicated.

From the beginning of time the deer has withstood the ravages of more natural enemies than other animals and has survived conditions which have caused many of the more powerful species of the animal kingdom to become extinct. He has survived the demands of the Indian for food and clothing. The white man has killed wastefully of deer. The mountain lion has killed large numbers for food, and the coyote slinks upon his trail constantly.

The deer has survived these, his natural enemies, and during the last few years shows a marked increase in numbers, but, entering upon the scene is an enemy which if permitted to go unchallenged will mean, eventually, the wiping out of our stock of deer.

This enemy, which so seriously threatens the deer, is the sheep being permitted to graze off in the summer the food supply so necessary for deer forage during the winter months.

The killing of deer by the white man and the Indian has been brought under control, the mountain lion has been reduced in number until he is no longer a serious menace, and commendable efforts have been made toward eradication of the coyote.

Montana has witnessed serious disasters in her livestock industry, due to the combination of severe weather conditions in winter and the lack of sufficient feed. Sooner or later this combination of circumstances is going to strike our herds of deer. When it does it is going to be too late to do anything but stand helplessly by and see thousands of these beautiful animals sacrificed.

During the summer months the deer drift back into the higher ranges of the mountains. It is during this season, when nature's scheme of things is not interfered with, that grass and other forage grow in abundance in the lower mountain valleys, building up a vast supply of food which enables the deer to endure severe winter months.

The practice of permitting sheep to be grazed in large numbers during the summer months on these lower ranges is becoming general and it means that the winter food supply for the deer is threatened.

Unless some action is taken to neutralize this condition Montana is going to see her herds of deer follow the buffalo, antelope, and mountain sheep into the happy hunting grounds.

Like Fried Carp?

DONALD R. CRAWFORD, M. S., assistant professor of fish culture at the College of Fisheries of the University of Washington at Seattle, has addressed the following communication to the editor of MONTANA WILD LIFE:

"In a recent issue of MONTANA WILD LIFE is an article entitled, 'Carp, Poor Fish, Horrible Example.' This article is a sample of opinion of the carp. While I don't attempt to defend the carp, it is interesting to note that many thousands of pounds of carp are eaten in the United States every month. In the states of Washington and Oregon the fishermen along the Columbia river catch large quantities of carp and sell them without apparent difficulty.

"If carp are to be controlled, why not take advantage of their spawning habits? Carp are known to lay their eggs on submerged vegetation when the temperature of the water is about 70 degrees F. After carp spawn the weeds could be raked up and dried on the banks of the pond or other places where carp spawn. Many fishes eat young carp.

"Of course, it is useless to convince most people that the carp is edible, although if properly prepared young carp of about a pound in weight are as good as other fishes which are regarded more highly. In this connection it might be mentioned that most people know only one or two methods of preparing fish to eat and so condemn all fishes which do not give satisfaction when thus prepared. Frenchmen can not make good apple pie, nor can the usual American chef properly cook a fish. Our friends the Chinese often prepare fish in palate-tickling ways. I have some Chinese recipes, one of which is as follows:

"Fried Carp (a la Chien)—Some one-pound fish dressed and washed. Trim off heads and fins. Score sides across, about one-fourth inch deep. The Chinese fry with oil, but any fat may be used, the method being that of deep frying. The fish are removed when almost done. Pour off most of the grease and finish frying the fish

with one ounce soy sauce and one-fourth ounce sugar. The fish are turned constantly while frying. Before removing the fish add some pieces of cibol (green onion), mushrooms, and one-half ounce vinegar. If you can develop commercial fisheries for carp, you will have no carp problem."

I Am a Fisherman

I AM A fisherman,—
 I HAVE a rod,—
 AND A basket,—
 AND A fly book,—
 AND A flannel shirt,—
 AND YELLOW pants,—
 AND HOBNAILED Boots,—
 AND EVERYTHING.
 AND THEY smell
 LIKE THE water
 AND MY hands
 ARE ALL filled
 WITH PRICKERS
 FROM BERRY bushes,
 AND ROSE BUSHES.
 AND MY knees
 ARE RAW like a steak
 FROM SLIPPING down
 ON ROCKS
 THAT WERE covered
 WITH GREEN goo,—
 OR SLIPPERY ELM,—
 OR SOMETHING.
 AND—FOR TWO nights
 I SLEPT on the ground,
 WITH MY stomach
 FULL OF hard boiled eggs.
 AND GOT up
 BEFORE DAYLIGHT,—
 AND DRANK something
 THAT SOME other boob
 SAID WAS coffee.
 I COULDN'T SEE IT.
 I COULD just taste it.
 AND MAYBE it was.
 I DON'T KNOW.
 I WAS sort of numb.
 AND I love the country,—
 AND THE open air,—
 AND NATURE,—
 AND THE babbling brooks,
 AND CALVES,—
 AND LITTLE pigs,—
 AND EVERYTHING.
 THEY LOOK nice
 FROM AN automobile,
 WHEN YOU'VE got a flat,—
 THAT'S NICE AND warm,—
 AND A BIG chair,—
 AND A bed,—
 THAT DOESN'T cripple you
 WHEN YOU sleep in it.
 AND I LIKE camp fires
 WHEN YOU don't have to eat 'em.
 I AM A fisherman,
 AND A wreck,
 AND I'VE got six little fish
 ABOUT SIX inches long,—
 ON ICE.
 AND I'M going to eat 'em.
 AND IN two weeks
 I'M GOING back
 AND GET six more—
 OR LESS.
 I'VE GOT A new place.
 IT'S A secret.
 AND NOBODY knows about it
 BUT ME—
 AND A THOUSAND OTHERS.