

## Biennial Report

Montana Fish and Game Commission.

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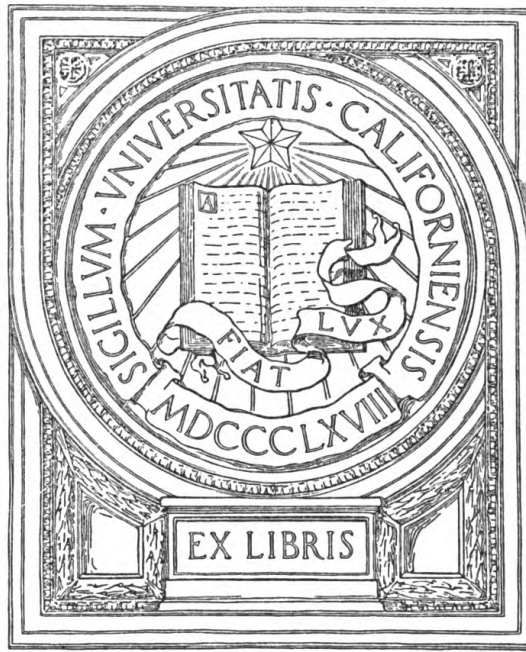
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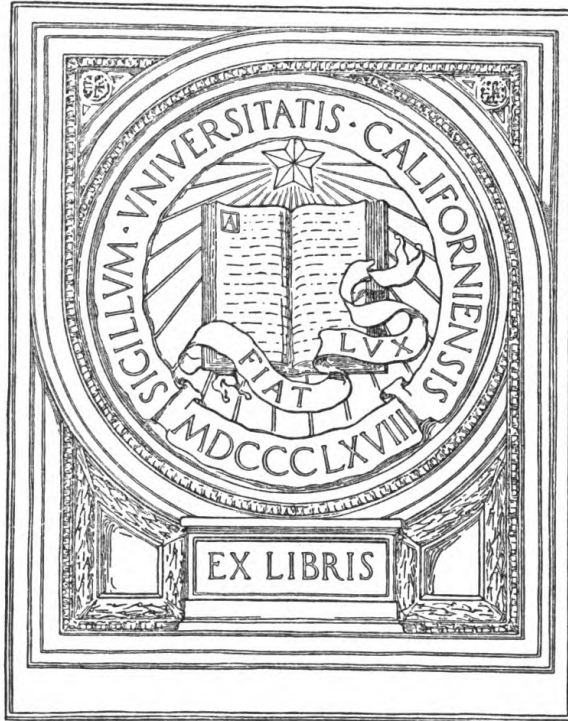
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**BIENNIAL REPORT**

OF THE

STATE

**Game and Fish Warden**

**MONTANA**

*Fish & Game  
Commission*

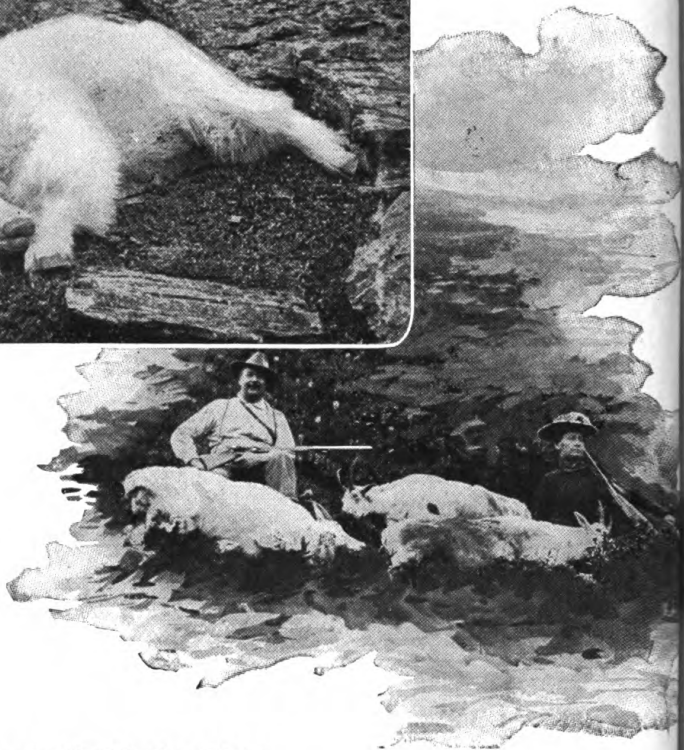


"INDEPENDENT PUBLISHING COMPANY, HELENA, MONTANA."









A BILLY OF THE GLACIERS.

BIENNIAL REPORT  
OF THE  
STATE  
Game and Fish Warden

OF THE  
STATE OF MONTANA

1909-1910.



HENRY AVARE, Warden.



"INDEPENDENT PUBLISHING COMPANY, HELENA, MONTANA."

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**STATE OF MONTANA,  
DEPARTMENT OF GAME AND FISH.**

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Henry Avare .....State Game and Fish Warden  
Helena

S. F. Ralston .....Deputy State Game and Fish Warden  
District No. 1, Kalispell

H. D. Vance .....Deputy State Game and Fish Warden  
District No. 2, Ovando

Jas. R. Froman .....Deputy State Game and Fish Warden  
District No. 3, Missoula

J. E. Clifford .....Deputy State Game and Fish Warden  
District No. 4, Anaconda

Sherman Cushman .....Deputy State Game and Fish Warden  
District No. 5, Great Falls

Henry L. Sherlock .....Deputy State Game and Fish Warden  
District No. 6, Boulder

Henry Ferguson .....Deputy State Game and Fish Warden  
District No. 7, Bozeman

Thos. A. Berkin .....Deputy State Game and Fish Warden  
District No. 8, Lewistown

P. W. Nelson .....Deputy State Game and Fish Warden  
District No. 9, Livingston

T. J. Thompson .....Deputy State Game and Fish Warden  
District No. 10, Forsyth

Harry Cosner .....Deputy State Game and Fish Warden  
District No. 11, Malta

A. R. Boyer .....Deputy State Game and Fish Warden  
District No. 12, Billings

W. W. McCormick .....Deputy State Game and Fish Warden  
District No. 13, Missoula

D. H. Morgan .....Deputy State Game and Fish Warden  
District No. 14, Helena

Wm. J. Dorrington .....Deputy State Game and Fish Warden  
District No. 15, Chouteau

**STATE FISH COMMISSION.**

E. P. Mathewson, Chairman .....Anaconda

Geo. E. Doll, Secretary ..... Pleasant Valley

Henry Avare, State Game and Fish Warden, ex-officio member...Helena

C. F. Healea, Superintendent State Fish Hatchery .....Anaconda

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**DEPARTMENT OF GAME AND FISH.**

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Helena, Montana, December 1, 1910.

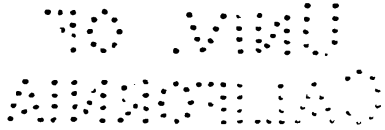
To His Excellency,  
Edwin L. Norris,  
Governor of the State of Montana,  
Helena.

Dear Sir:—

I have the honor to submit herewith my biennial report  
for the years 1909 and 1910.

Respectfully,  
HENRY AVARE,  
State Game and Fish Warden.





## Biennial Report.

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The last report of this department was compiled by Hon. W. F. Scott, State Game and Fish Warden, for the years 1905-6. In 1907-8 there was no report published.

In January, 1909, I was appointed as the head of this department and it is upon the conditions of the game of Montana and the laws governing the same during the years 1909-10 that this report will touch.

There has been a healthy sentiment growing among the citizens of the state favoring the protection of game and the enforcement of the game laws. In a few isolated communities, the old rule of ruthless slaughter of deer and elk prevailed a few years ago but this sentiment has undergone a marked change by reason of local opinion of settlers publicly expressed or has been stifled by one or more successful prosecutions of flagrant violators.

No state in the union affords the hunter the diversity of game that Montana does and no state has a more liberal code of game laws, both for local and non-resident hunters. To the fisherman there are no restrictions except that he must be provided with a license of the proper class—resident citizen, non-resident citizen, or alien.

### DEPUTIES.

In the selection of deputies it has been my aim to select good, conscientious men, who would perform their duty without fear or favor and play no favorites. Of these there are fifteen to cover the twenty-eight counties of the state or approximately two counties to a deputy, and Montana counties, even the smallest, are larger than some of the eastern states so that it may be readily understood that it is impossible for any deputy to always be in the right place at the right time to make arrests for violations. However, the number of convictions and amount of fines collected is largely in excess for 1909-10, over that of any two previous years in the history of the department. There has been no change in the personnel of the deputies since my first appointments with the exception of District No. 1, where Mr. L. J. Lownds

resigned on account of removal from the state and was succeeded by Mr. S. F. Ralston of Kalispell.

#### AUTHORITY TO APPOINT SPECIAL DEPUTIES AT CERTAIN SEASONS.

I would urgently recommend the enactment of a law authorizing the State Game and Fish Warden to appoint special salaried deputies in certain communities for a limited period during the year, or better still, authorize the expenditure of a certain amount of money for the payment of special deputies in selected communities within the discretion of the warden. This department is yearly in receipt of hundreds of communications relating to violations of the game laws, by either residents of the various communities or strangers. It has been my earnest policy to investigate every report of violations received but in the majority of instances the guilty parties have not been brought to justice on account of the reluctance of the writer to testify against a neighbor, or because of the unknown identity of the violator. Similar reports come from the same community every year just before the opening of the hunting season.

While there are thousands of earnest sportsmen among the residents of Montana, few of them are in a position to be actuated in the prosecution of violators by the love of sport alone. They cannot afford to neglect their work or business to procure sufficient evidence for conviction, while on the other hand, were it possible for this department in certain instances to expend a small amount as a compensation or reward for conviction, the number of convictions and fines thus secured would much more than reimburse the fish and game fund for the expenditure.

#### TRAVELING EXPENSES OF DEPUTIES.

Until the middle of October last, the several railways in Montana provided the members of the department with free transportation. This concession was granted, without the possibility of favors being shown in return and operated as an immeasurable assistance to the deputies in covering the territories of their respective districts. As the amount allowed by law for traveling expenses of the deputies is limited to a sum inadequate to pay railroad fare and do any considerable field work, the department is crippled under the present system and will be unable to carry on the work effectively

as heretofore without an increase in the amount of deputies' traveling expense accounts.

ALL WOMEN AND BOYS UNDER FOURTEEN YEARS OF AGE SHOULD BE EXEMPT FROM THE PROVISIONS OF THE LICENSE LAW.

Under the present hunting and fishing license law, as enacted by the Eleventh Assembly, every one, men, women and children, are obliged to be in possession of a hunting and fishing license if desiring to hunt or fish. As our criminal statutes forbid any child under the age of fourteen carrying firearms unless accompanied by parent or guardian, I believe that boys under this age should be exempt from license both for hunting and fishing and that all women should be exempted from the provisions of the license law, and would respectfully recommend an amendment to this effect.

ALL MALE HUNTERS TO HAVE LICENSE.

I would also recommend that any person who goes hunting in Montana should be compelled to first be in possession of a license which would consequently do away with the excuse so often given to a game warden after a long chase of a suspected hunter that he was not hunting protected game—"was out after rabbits," or bear, for instance. Instances are numerous especially among the foreign element where the hunter goes out to kill whatever game he may find, and takes his chances on having to show his license. If accosted by a game warden before he has killed any protected game, then the old excuse of rabbit hunting is offered.

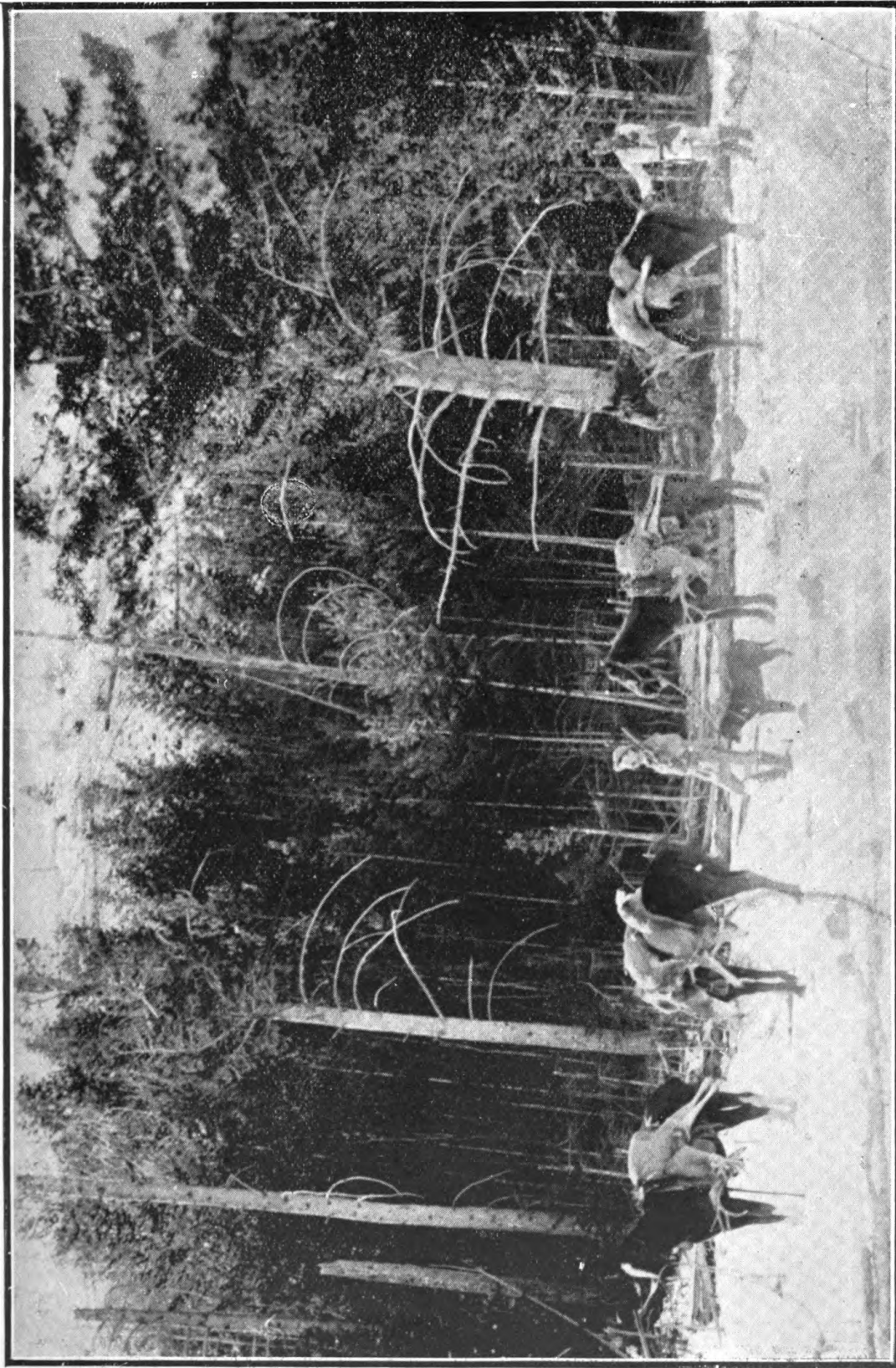
TO CHANGE DATE OF EXPIRATION OF LICENSE.

Under the present law all licenses expire December 31st. Every other year, when the legislature is in session, it is impossible to issue new licenses until after adjournment and then it usually takes a month longer to have the supply printed. Thus leaving three months of the fishing season when no licenses are available for would-be purchasers. On this amount I would recommend that the law be amended to make all licenses expire March 31st of each year, instead of December 31st.

RESTRICTIONS FOR TRAPPERS.

Many of the older states have stringent laws upon trapping and few, if any, of them offer the attractions to the trapper

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BACK TO CAMP.

TO THE  
ASSEMBLY

that are presented in Montana, where at present there are no restrictions except upon beaver and certain sections abound in bear, martin, lynx, the highest priced fur at present, otter and other fur bearing animals as well as the mountain lions, wolves and coyotes upon which bounties are paid by the state. I do not favor placing a price upon a trapper's permit for resident trappers of the state, but do believe that non-resident trappers should pay for the privilege of taking our fur bearing animals and that all trappers should have a free or purchased permit granted by this department upon proper application and that such permit should confine them to certain territory selected by themselves so that the trapping field may be visited at any time by game wardens and the traps inspected to ascertain if protected game is used as bait. Then the shipment of furs should be subject to inspection to prevent the shipment of furs taken illegally, as beaver for instance. The practice of shipping a few contraband beaver skins in a bale of non-protected furs has been a custom among some trappers during the past few years.

#### BEAVER.

I believe the present law upon beaver is generally satisfactory. While it affords protection to these animals, it does away with the obnoxious red tape necessary in securing a permit to destroy beaver that are actually damaging the trees, ditches or meadows of a bona fide owner and taxpayer upon land.

#### GROUSE.

There has been some criticism upon the present "one month" limit upon grouse, prairie chicken, etc., during the month of October. The claim is made that the young birds are too old at that season to be as palatable as they would be earlier. Upon due consideration and after watching the effect of the present law, I believe it well to let the same stand as it is for at least two more years. It must be remembered that when this law was passed, there was a dearth of grouse and prairie chicken in Montana. A bill was introduced in the Assembly protecting them at all seasons and the present law was a compromise offered by residents of the northern part of the state. In October the grouse are on the high mountain ridges and the other members of the pheasant family may not be as palatable as in September so there is

not the same ardor in and incentive for shooting them, consequently the present law operates in a sense to protect them. While these birds have increased somewhat during the past two years, especially during the long dry season of 1910, they are not by any means as numerous as they formerly were and should be in Montana.

There is, however, one phase of the present law affecting grouse and like game that should be modified and that is the severe penalty attached to violations. At present a violation of this section of the game laws constitutes the commission of a quasi felony as the penalty is not less than \$50.00 nor more than \$1,000.00 fine or imprisonment for not less than ninety days nor more than twelve months, thus removing the jurisdiction to try these cases from Justices of the Peace and vesting the jurisdiction solely in the District Courts. I believe in modifying the penalty to such an extent that offenses under this provision will constitute misdemeanors and thereby vest final jurisdiction in the Justice Courts.

As the license law now stands, anyone who has resided in Montana six months and holds papers of declaration of citizenship is entitled to resident citizen hunting and fishing licenses. The provision touching upon first papers has been largely abused by many foreign laborers who repair to the nearest Clerk of the District Court and take out the first papers for a nominal fee and are thus entitled under the present law to all the hunting and fishing rights of a native born resident citizen. In a large majority of the cases it is utterly impossible under the present stringent Federal Statutes for these declarants to complete their citizenship by receiving final papers. I would therefore recommend that if aliens are compelled to procure a license separate from the resident citizen's class that full citizenship be made one of the requirements of a resident citizen's license, except in instances where the applicant has purchased real estate in Montana or has made filing upon land by virtue of his first papers. In Utah the alien license for hunting and fishing is fixed at the sum of \$100.00.

The sale of alien hunting and fishing licenses during the two years that the law has been in vogue, has not rendered the income to the Department that it should have done. Very few hunting licenses have been sold to this class. Some revenue

has been derived from the sale of alien fishing licenses but this has been mostly from the Japanese railroad laborers. Large numbers of these foreign laborers are possessed of firearms. Shot-guns and pistols are the favorite weapons of these classes. Several of the deputies in this department have narrowly averted shooting scrapes when making arrests of foreign violators. I believe that the Montana codes should prohibit all aliens from being in possession of firearms, except when they are possessed of hunting licenses for so doing. There should be a severe penalty attached to a violation of this proposed provision which would operate as a preventative of many fatal shooting scrapes among themselves as well as protect the game of the state.



Bull Elk of the West, Gallatin Basin.

### ELK.

The pride of our game animals is the elk. For a fleeting glance at the tossing antlers and the sound of the whistle of a frightened bull elk, many lovers of nature and her animals would travel across a continent. In Montana, hundreds of these kingly animals are killed by the sportsmen every year,



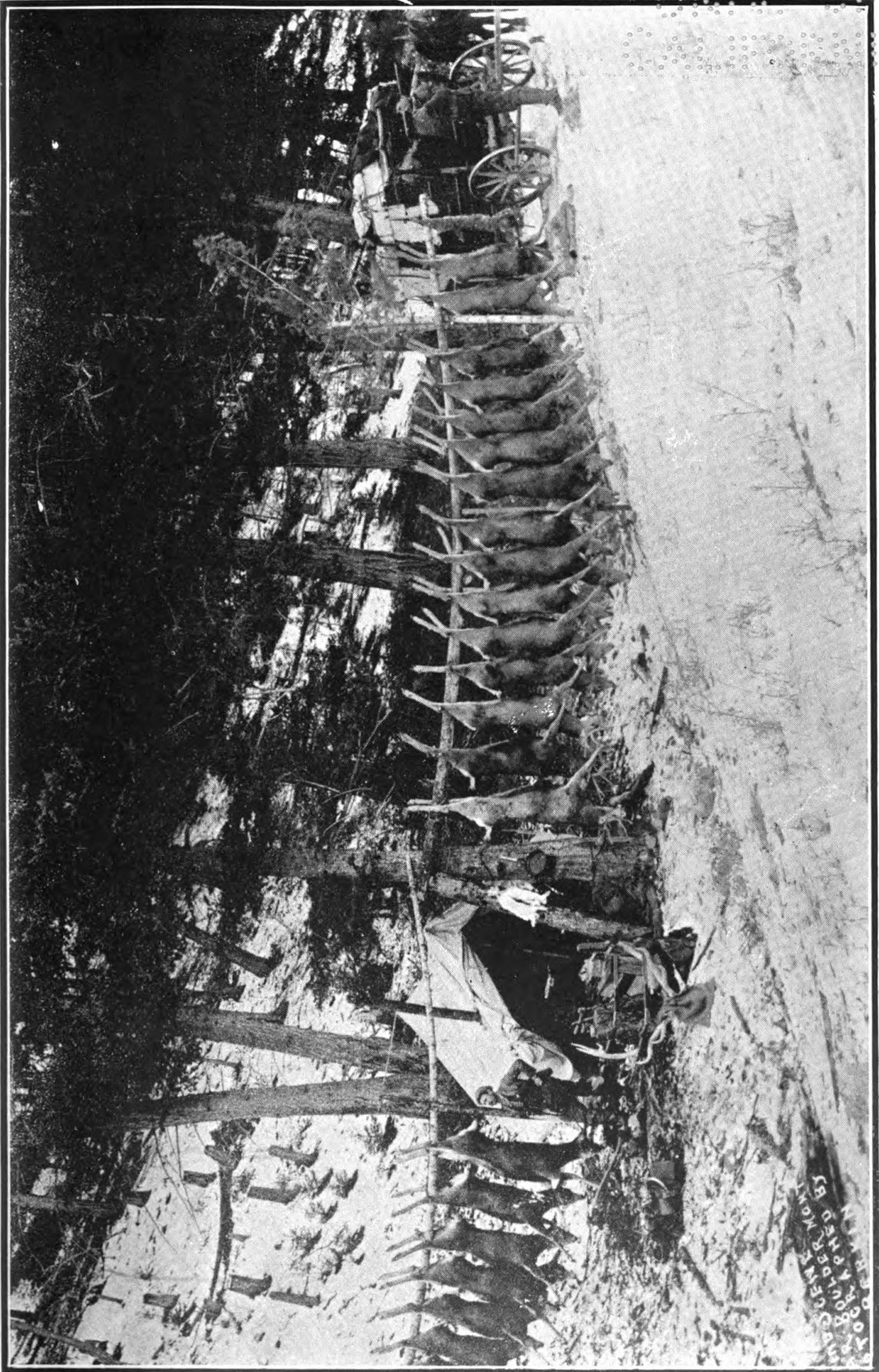
but under the wise provisions of our game laws, limiting the number to one per year for each hunter, the elk are increasing. During a severe winter many times the number of these animals fall victims to starvation and predatory animals, than do to the bullets of hunters during the open season. While elk are scattered in many herds throughout the state, by far the largest numbers are in the Yellowstone National Park during the summer and come out upon their winter ranges on the approach of storms and cold weather. On account of the encroachment of cattle and sheep in the vicinity of the Park line and the winter ranges of the elk, many of these animals perish each year of starvation, the loss being principally old animals and calves. The same conditions exist in Wyoming. Two years ago the legislature of our sister state upon the south appropriated a sum of money for the purchase of hay to feed the elk in severe winter weather. This plan I am advised by the officers of the Game Warden's Department of Wyoming, has been a success and resulted in saving many hundreds of elk. I would respectfully request consideration by the Montana legislators of the Wyoming plan with a view to making an appropriation for that purpose in Montana.

#### DEER.

Large numbers of deer have fallen beneath the bullets of hunters during the seasons of 1909 and 1910. At present the limit per person annually is three. This is a larger number than is allowed in any other state and I believe the best interests of the game require that the number be reduced to two per person annually, and those two to be of the horned variety. In many states only horned animals may be killed. Here we have no such restrictions and frequently I have had the unpleasant experience of viewing the remains of a thirty pound fawn recently before slain by a hunter. I therefore favor an amendment to our present laws, reducing the limit of deer per person annually from three to two animals, with the above restrictions as to age and sex.

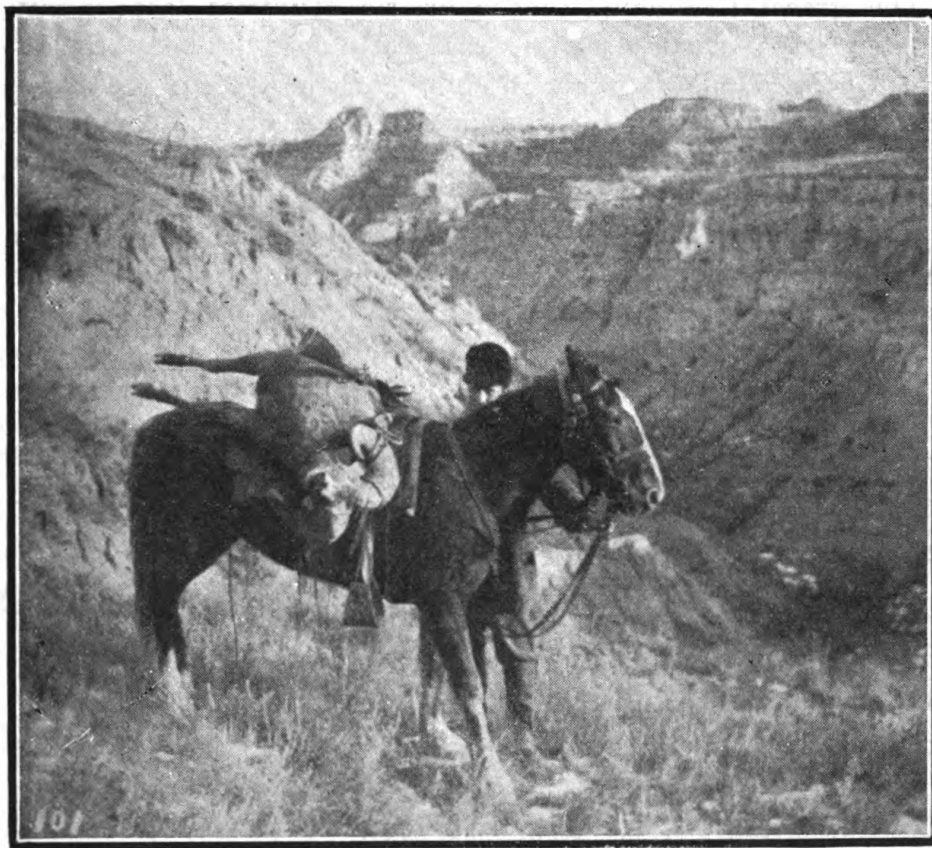
#### ROCKY MOUNTAIN SHEEP.

Of sport requiring patience and endurance, the pursuit of Rocky Mountain sheep or "big horns" furnishes the hunter the keenest pleasure. Of those carrying the largest horns of this scarce species of the game animals, Montana has within



HUNTERS' CAMP.

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Packing a Bighorn.

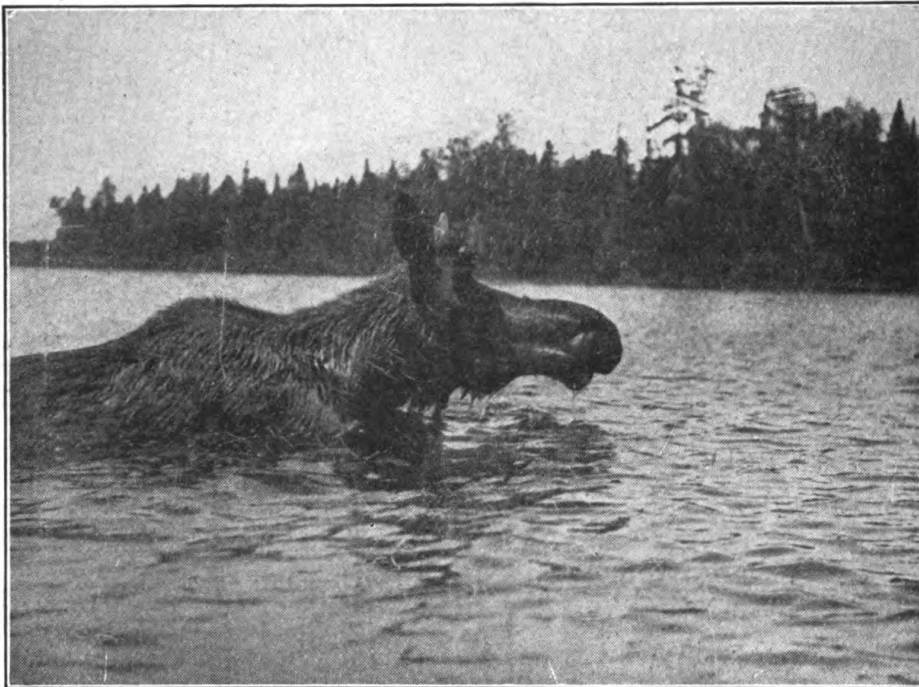
her boundaries by far the largest number. Every year hunters come from eastern points and some from Europe to hunt the "big horn." I recall several instances of eastern hunters, who have hunted sheep in Montana for the past six or seven years. Under the present law, the number of these animals is not decreasing. The largest loss in sheep is attributable to the ferocity of mountain lions.

#### ROCKY MOUNTAIN GOATS.

Goat hunting is another form of sport that attracts many non-resident hunters. These animals exist in considerable numbers in certain mountainous sections of our state and while not particularly hard to bag, when once their haunts are reached, yet on account of the inaccessibility of their native feeding grounds, not many are killed each year, so that they are slowly increasing in numbers under the protection now afforded them by our laws.

## ANTELOPE.

The graceful antelope of the prairie countries largely outnumber any variety of game animal that is protected at all seasons in Montana. On account of the recent influx of settlers to the prairies of Montana, the area of feeding ground of these beautiful creatures has been largely curtailed. Some complaint has been received from settlers upon dry farming lands of damages done by antelope to winter wheat crops. Upon investigation of these reports it has invariably been found that the reported damage was but nominal. The real motive of such reports being based upon a desire to secure permission to hunt these animals with immunity from prosecution.



Cow Moose, Swimming.

## MOOSE.

Certain localities in Montana were at one time favorite haunts of moose. When the Game Warden's department was created ten years ago, these animals were practically extinct in the state. Today, after ten years of careful protection, there are probably three hundred moose in Montana in a few sections. The largest herd is on the upper waters of Ross Fork of Rock Creek in Granite County, where there are more than forty head. This department and the people

of Montana owe a debt of gratitude to Mr. M. E. Kent, a prospector in that section, who has jealously guarded this herd for the past sixteen years, when the bunch numbered but four.

Last year three defendants on Boulder River above Big Timber were convicted of killing a moose and paid heavy fines. Then in October, 1910, two residents were convicted and fined for the same offense, on the Upper Madison River. In Maine, where moose hunting is the favorite sport, the State Game Warden reports an increase for the past twenty years. I believe that with the rigid protection now afforded these animals in Montana, an open season may be declared at some distant date without endangering the species in this state.

#### CURLEWS AND SNIPES NOT PROTECTED.

There are two varieties of game birds not protected by our laws and yet they are found in Montana in considerable numbers. They are the curlew and snipe. Curlews and snipes are found in nearly all parts of the state. Neither of the two are mentioned in the sections of our statutes referring to game. I believe it is through an oversight of the original framers of the law and would respectfully suggest that the law be amended to procure protection for both, and also suggest giving the scarce swan perpetual protection, and including curlews and snipes in the same season as wild ducks and geese from September 1st to January 1st.

#### DUCKS.

There is a protest from some hunters against maintaining a limit on the number of ducks to be killed in a day. To this I would answer that while many of the ducks found in Montana are migratory and not protected to the same extent south and west of us, yet there is a movement on foot among the game wardens of these states to procure legislation fixing a bag limit on these aquatic fowl and to remove the limit in Montana at this time would operate to prevent similar protection in these wide open states. I believe that before long there will be a statute similar to the Montana law in most of the states. Otherwise there is danger of the species becoming practically extinct. Many hunters in the middle states remember the flight of wild pigeons which occurred

annually by the millions. Today it is claimed there is not a single specimen of the wild pigeon excepting three or four in captivity.

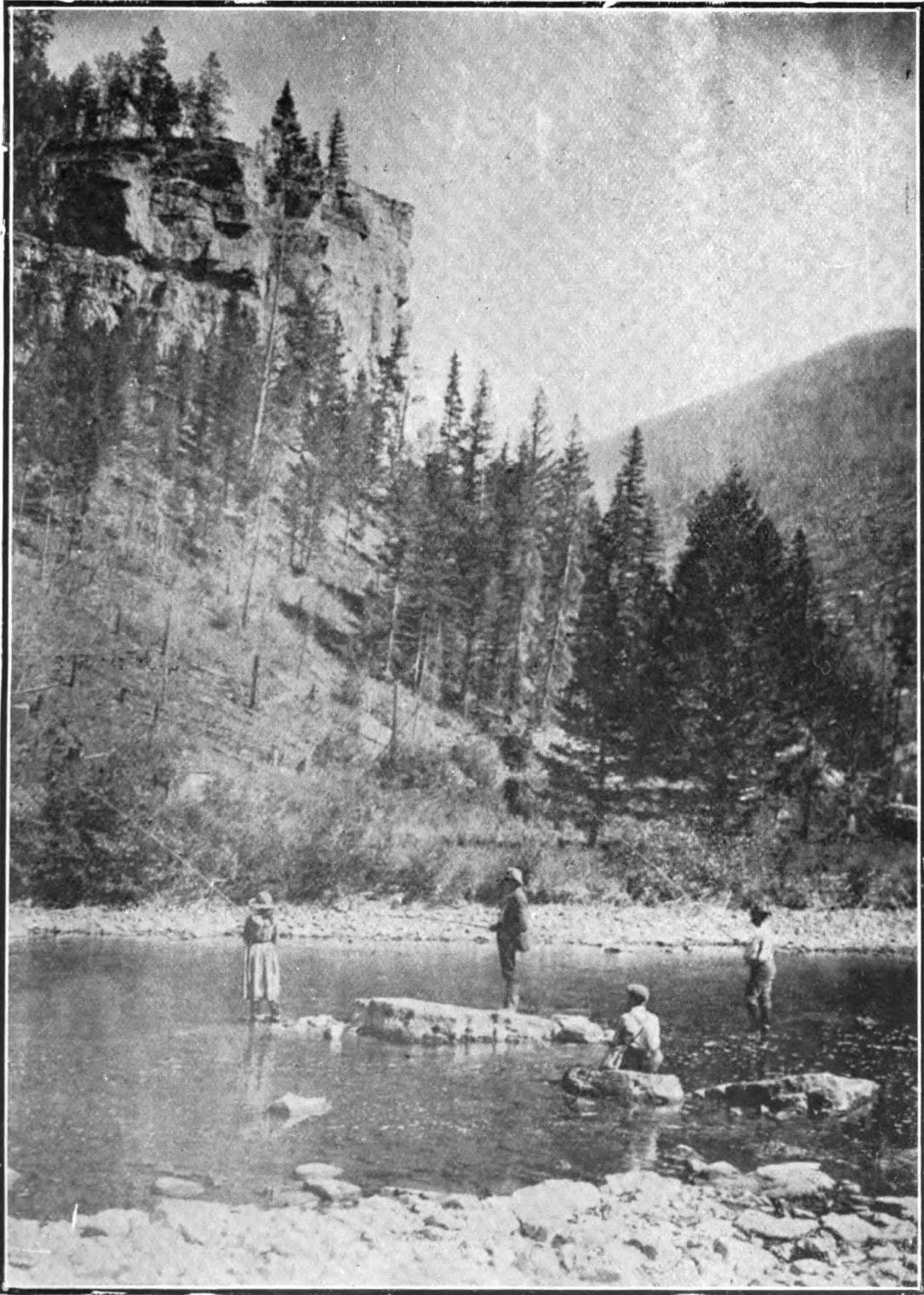
#### GAME SHOULD NOT BE EXHIBITED IN SHOPS.

It is the custom of many city hunters to bring in their large game whole and send elk and deer to the butcher shops to be skinned and cut up. Of course this is a right which all hunters have, if they do not know how to skin and divide the game they kill, but the action is often seized on by the meat dealers as an excuse for exhibiting whole game animals in front of their places of business—thus conveying to the passer-by and strangers the idea that game meat is for sale, resulting in many baseless reports to this department of violations of the law. I would recommend the passage of an act forbidding the display of game animals on the open market.

#### RECOMMENDATIONS FOR AMENDMENTS OF FISHING LAWS.

There is a provision concerning fishing which is the law in many states and which I believe to be a wise provisions—one which should be enacted as a part of our statutes. Just prior to the spawning season, all our game fish work up stream and thousands, aye in some instances millions, of fish congregate at the foot of dams. Where, as in Montana, fishing is permitted close to dams the hungry trout, grayling or whitefish fall easy prey to the angler. In Oregon, for instance, no fishing is permitted within three hundred feet below a dam. I believe this provision should be enacted as a part of our fishing laws. I also believe that the custom of fishing in the winter through ice should be prohibited as by this practice our largest trout are destroyed without affording the pleasure that by right belongs to the sportsman who lands one of these splendid specimen after a hard fight in open water. On account of the needless waste of our game fish by some campers, I would recommend a limit of twenty-five pounds of trout per day to the fisherman, with a total of fifty pounds to be the limit in possession of a fisherman at any one time and all trout caught under six inches to be returned to the water.

Then there are two other evils which destroy more fish yearly than all the fishermen in the state. I refer to cyanide of potassium and open irrigating ditches. Of course the

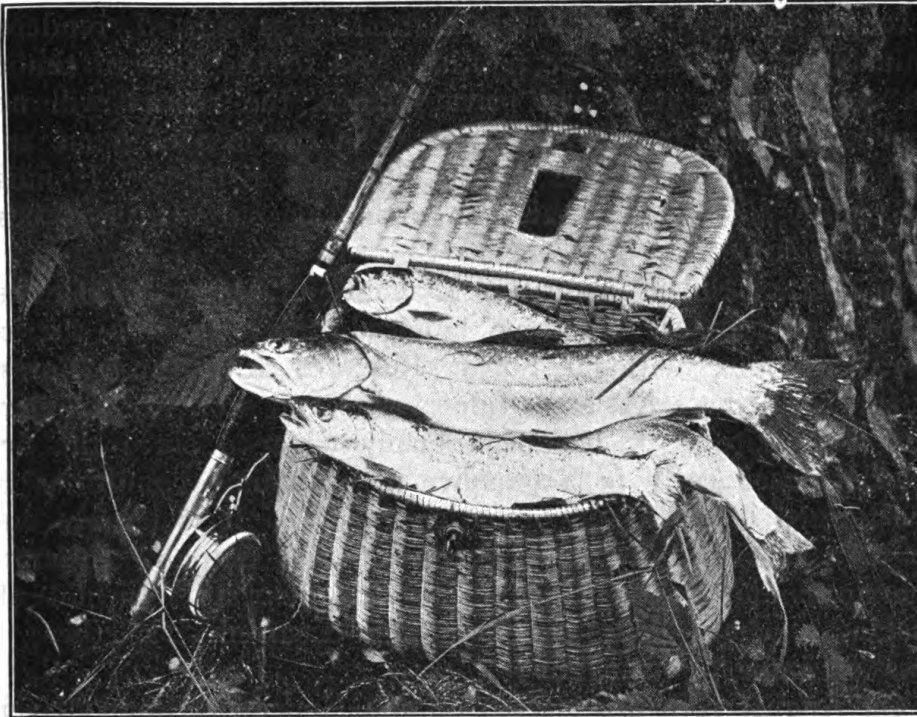


A DAY IN JUNE.

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TO THE  
UNIVERSITY OF CALIFORNIA



A Well Filled Creel.

mining interests require the use of cyanide, but this interest would not be jeopardized to compel all who use this deadly poison to prevent the washings from the tanks being carried into streams.

Although hundreds of protests are received annually by this department against the needless loss of fish through irrigating ditches, yet as the laws now stand, there is no remedy for this slaughter. The only redress possible is to refuse to stock streams which are tapped by irrigating ditches. Many ranchmen are now favorably disposed to the use of paddle wheels or screens for the headgates of ditches and I would suggest the consideration of this remedy by the Twelfth Assembly.

#### EFFECT OF FOREST FIRES ON GAME AND FISH.

During the past summer and fall, Montana was subjected to a series of destructive forest fires, the most serious of these being in the western part of the state, extending from the Canadian border to the Idaho line. Under the present law all deputy game and fish wardens are ex-officio fire wardens. From commendatory reports received from officers of the forestry department I am lead<sup>d</sup> to believe that this department,

through the deputies in whose districts fires existed, rendered valuable assistance in fire fighting. As to the loss of timber on government, state and private lands, the report will not touch, and only in a general way upon the loss of game and fish entailed by the fires in the different districts. It must be readily understood that data upon this subject is at best but approximate.

In District No. 1, comprising Lincoln and Flathead Counties, there were no less than one hundred fires. In this district there are four National Forest Reserves with three Forest Supervisors, three Assistant Supervisors and scores of Rangers and the entire force has been busily engaged since the fire season closed early in September in examining conditions in the burned districts and preparing reports. It is largely due to data furnished by these officers that I am able to state the approximate loss of game in this districts. In not all instances where these conflagrations occurred, was there a loss of game.

On August 10th fire started on the Upper Stillwater River. On the 19th, 20th and 21st it was fanned by a high wind and was carried with such speed that it destroyed the camp of the fire fighters who lost their provisions, bedding and clothing. This fire burned over about one township and was one of the most destructive in the district to the game. As near as can be estimated, thirty deer were burned there.

The next fire in point of loss of game in Flathead County was a fire on the North Fork of Flathead River in the Glacier National Park, where the loss of deer is estimated at twenty-five. The area burned over would probably cover two townships.

In Flathead County, the estimated loss of deer is placed at seventy, and there is known to have been four bears burned. There was considerable loss in game birds which is impossible to estimate.

In District No. 2, embracing a small portion of Missoula and the northern part of Powell Counties, the loss of game and fish by fire was inconsiderable. It is supposed that a few deer and elk perished in the flames on the upper South Fork of the Flathead River.

In District No. 3, comprised of the western portion of Missoula County and all of Sanders County, there were many fires. Commencing at the western line of the state, four miles

west of Heron, there was one conflagration that burned over eighty thousand acres of timber. This region abounds in deer. On Bull River fifty blacktail deer were found dead in one bunch. On Trout and Beaver Creeks, a few burned carcasses of deer were found and on Martin Creek two elk are known to have perished. The streams of Trout Creek, Bull River and Beaver Creek ran hot during the fire, thus killing all the fish of these streams. The loss of grouse, fool hens and pheasants in this district was great. Their burned bodies were seen in rows along the path of the fire.

On White Pine Creek and Thompson River the fire was fierce and destructive, but not as severe as on Bull River, Trout and Beaver Creeks. Here the loss of human lives was four.

From Taft, east on the Coeur d'Alene Branch of the Northern Pacific Railway and main branch of the Milwaukee Railway, there was great destruction of deer, also grouse, fool hens and pheasants. The area of this fire was about four hundred and fifty thousand acres. The St. Regis River and Fish Creek, the two largest streams in this section, also ran hot, destroying all fish. The loss of human life is known to have been seventy-two persons in this section.

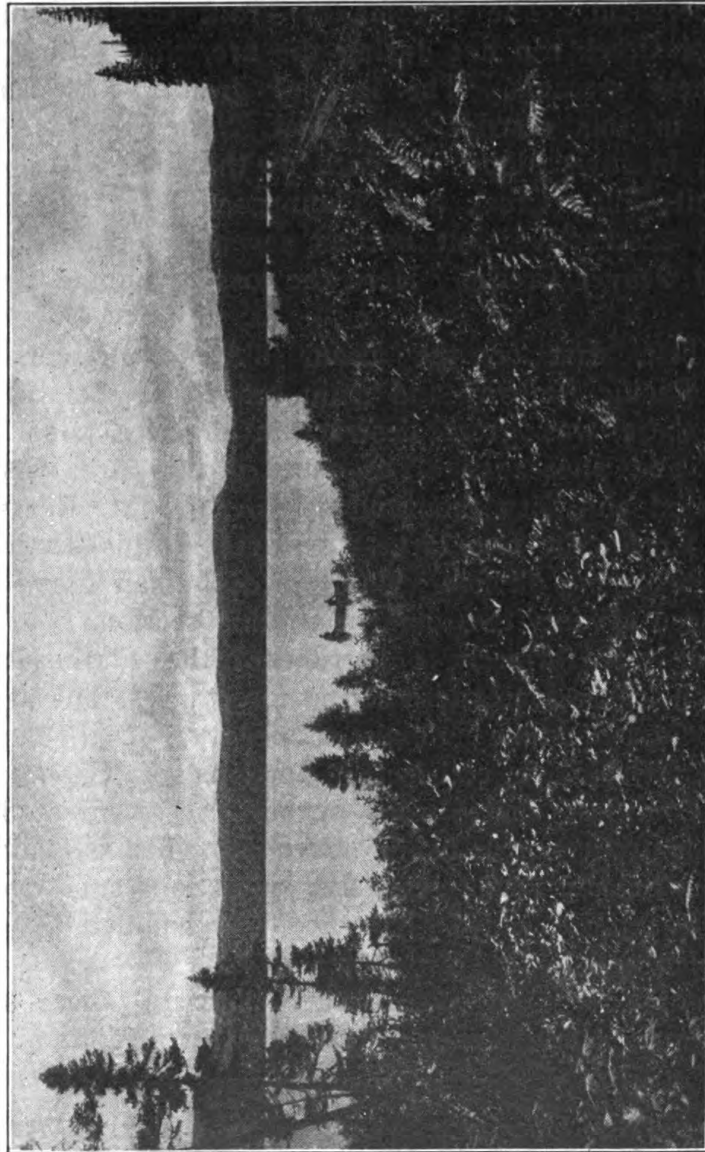
On what was formerly a portion of the Flathead Indian Reservation, there were destructive forest fires, but as far as known no loss of game animals or birds.

In District No. 5, embracing portions of Chouteau and Cascade Counties, there were several fierce fires, but no damage done to game or fishing streams, which is remarkable, as the area burned was twenty-five miles long and from fifty yards to five miles wide. This fire was handled by a large force of men and burned for eleven days.

While some fires raged in other districts, there was no loss of game or fish, further than above stated.

#### FISH HATCHERIES.

The State Fish Hatchery, which is established at Anaconda, has been in operation three seasons, under the supervision of Mr. C. F. Healea. The output from this hatchery is making a noticeable increase of the amount of fish in Montana streams. The United States Hatchery at Bozeman, which has been in operation several years, first came to the aid of the fishermen in Montana by supplying fry for the depleted



One of the Lakes Where Fry Have Been Planted.

streams. From the benefits thus received, an impetus was given to the establishment of the State Hatchery.

Many hatcheries, maintained by private citizens or clubs, have also aided in restocking our streams, most prominent among these being the one at Columbia Gardens, Butte, maintained and operated by the Butte Anglers' Club.

Particular attention is directed to report received from Mr. Healea, on transplanting grayling from the eastern slope of the Rocky Mountains to the western slope. This is the first experiment along these lines so far as information has come to this department.

In a recent report dated November 19th, Superintendent Healea says:

"The spawning, hatching and planting of fish by the State Hatchery for the year 1910 has been most successful. The plant exceeds in numbers that of any former year. We are also beginning to note results of the plantings of former years.

"**The Eastern Brook Trout**, the eggs of which were shipped from Rhode Island, are making an exceptional showing. Those in ponds at the Hatchery are now spawning and they will not be two years old until next February. We expect to get about one million eggs from them this year and many more next year. Those planted at our spawn collecting station at Georgetown Lake are coming to the spawning beds in large numbers, and reports from other localities stocked show similar results. These fish measure from six to twelve inches in length and are proving to be one of the very best fish to plant in our streams.

"**Black Spotted Trout**. Our plant of black spotted trout fry this year exceeds that of former years by about one million. It is more difficult to note results of plants of this species as they are found naturally in most of the streams of the state.

"**Lake Superior Whitefish**. This fish is being planted in the larger lakes of the state, mostly in Flathead Lake. It is yet too early to judge the results, but there seems to be no reason why this lake alone in a few more years should not supply the entire state with food fish.

"**Rainbow and Steelhead Trout**. These fish are being planted in isolated reservoirs only.

"The Montana Grayling were transplanted to Georgetown Lake in April, 1909, and are being taken on a fly as much as eleven inches long. In the season just past we have distributed this fish as far west as the Bitter Root River, north to the Flathead River, and east to the Yellowstone River. From reports, these plants have proven successful and we expect to continue the distribution to all parts of the state."

\*

## WORK OF THE DEPARTMENT.

1909-1910.

The records of this office show that 35 arrests have been made between December 1, 1908 and May 31, 1909, on complaints as follows:

Killing grouse out of season .....	3
Hunting without license .....	6
Dumping sawdust in stream .....	1
Loaning license .....	3
Seining fish .....	7
Killing deer out of season .....	5
Killing elk out of season .....	4
Killing antelope out of season .....	1
Killing goats out of season .....	2
Dynamiting fish .....	1
Fishing without license .....	2
	—
	35

The above complaints were instituted in the following named counties:

Fergus .....	3
Flathead .....	6
Park .....	4
Lewis and Clark .....	2
Silver Bow .....	1
Sanders .....	1
Yellowstone .....	2
Jefferson .....	2
Gallatin .....	2
Missoula .....	5
Powell .....	1
Granite .....	2
Valley .....	2
Meagher .....	2
	—
	35

These cases were disposed of as follows:

Convictions .....	25
Bound over .....	3
Bound over and pending .....	1
Acquittals .....	4
Dismissals .....	2
	—
	35

Fines imposed in above cases, \$1,060.00.



The records of this office show that 58 arrests have been made between June 1, 1909 and November 30, 1909, on complaints as follows:

Hunting without license .....	9
Killing deer out of season .....	4
Killing moose .....	4
Killing more than one goat .....	1
Killing antelope .....	2
Killing grouse out of season .....	5
Killing sage hens out of season .....	1
Killing song birds .....	1
Fishing on license of another .....	1
Fishing without license .....	21
Selling trout .....	3
Spearing fish .....	1
Seining fish .....	2
Trapping fish .....	3
	58

The above complaints were instituted in the following named counties:

Park .....	1
Fergus .....	9
Missoula .....	5
Lewis and Clark .....	8
Flathead .....	7
Beaverhead .....	3
Chouteau .....	5
Custer .....	1
Deer Lodge .....	4
Ravalli .....	1
Carbon .....	4
Valley .....	1
Gallatin .....	2
Silver Bow .....	2
Sweet Grass .....	4
Meagher .....	1
	58

These cases were disposed of as follows:

Convictions .....	49
Dismissals .....	4
Bound over .....	5
	58

Fines imposed in above cases, \$2,137.50.

The records of this office show that 72 arrests have been made between December 1, 1909 and May 31, 1910, on complaints as follows:

Hunting without license .....	18
Killing elk out of season .....	1
Killing deer out of season .....	5
Killing ducks out of season .....	2
Killing prairie chickens out of season ....	1
Killing sage hens out of season .....	1
Killing beaver .....	3
Killing song birds .....	1
Fishing without residence license .....	5
Fishing without alien license .....	12
Seining fish .....	1
Trapping fish .....	1
Dumping saw-dust in streams .....	1
Practicing taxidermy without license .....	1
Selling elk heads .....	19
—	
	72

The above complaints were instituted in the following named counties:

Park .....	21
Lincoln .....	4
Deer Lodge .....	1
Fergus .....	2
Cascade .....	1
Gallatin .....	10
Ravalli .....	8
Powell .....	4
Carbon .....	2
Flathead .....	1
Rosebud .....	7
Custer .....	2
Lewis and Clark .....	3
Silver Bow .....	1
Beaverhead .....	1
Yellowstone .....	1
Teton .....	1
Meagher .....	2
—	
	72

These cases were disposed of as follows:

Convictions .....	62
Dismissals and acquittals .....	9
Bound over and pending .....	1
—	
	72

Fines imposed in above cases, \$2,380.00.

The records of this office show that 62 arrests have been made between June 1, 1910 and November 30, 1910, on complaints as follows:

Hunting without license .....	12
Killing deer out of season .....	2
Killing elk out of season .....	1
Killing grouse out of season .....	7
Killing prairie chickens out of season .....	5
Killing sage hens out of season .....	1
Killing ducks out of season .....	3
Killing moose .....	2
Killing antelope .....	2
Serving antelope .....	1
Fishing without license .....	22
Fishing with grab-hooks .....	1
Trapping fish .....	2
Dumping saw-dust in stream .....	1
	<hr/>
	62

The above complaints were instituted in the following named counties:

Cascade .....	5
Meagher .....	1
Missoula .....	4
Jefferson .....	5
Flathead .....	7
Beaverhead .....	3
Lincoln .....	3
Sanders .....	3
Park .....	2
Broadwater .....	1
Fergus .....	7
Rosebud .....	3
Gallatin .....	6
Carbon .....	2
Yellowstone .....	3
Teton .....	1
Silver Bow .....	1
Lewis and Clark .....	2
Powell .....	2
Deer Lodge .....	1
	<hr/>
	62

These cases were disposed of as follows:

Convictions .....	53
Dismissals .....	5
Bound over to District Court .....	4
	62

Fines imposed in above cases, \$2,190.00.

**Licenses and Permits Issued During 1909.**

Resident Citizen Hunting and Fishing Licenses .....	44,815
General Non-resident Citizen Hunting and Fishing Licenses .....	89
Limited Non-resident Citizen Hunting and Fishing Licenses .....	23
Non-resident Citizen Fishing Licenses .....	1,202
General Alien Hunting Licenses .....	3
Limited Alien Hunting Licenses .....	24
Alien Fishing Licenses .....	126
Guides' Licenses .....	40
Taxidermists' Licenses .....	22
Shipping permits .....	445

**Licenses and Permits Issued During 1910.**

(Records November 30th).

Resident Citizen Hunting and Fishing Licenses .....	48,565
General Non-resident Citizen Hunting and Fishing Licenses .....	85
Limited Non-resident Citizen Hunting and Fishing Licenses .....	10
Non-resident Citizen Fishing Licences .....	1,782
General Alien Hunting Licenses .....	2
Limited Alien Hunting Licenses .....	9
Alien Fishing Licenses .....	146
Guides' Licenses .....	38
Taxidermists' Licenses .....	24
Shipping Permits .....	436

## RECEIPTS.

1909.

Justices of the Peace for licenses issued .....	\$18,444.80
Game Warden and deputies for licenses issued .....	*26,844.58
Shipping permits .....	227.50
Guides' Licenses .....	400.00
Fines paid in .....	2,188.55

## RECEIPTS.

1910.

(Records of November 30th).

Justices of the Peace for licenses issued .....	\$17,029.67
Game Warden and deputies for licenses issued .....	*31,496.55
Shipping Permits .....	218.00
Guide Licenses .....	380.00
Confiscations .....	\$ 175.35
Fines paid in .....	3,976.95
	} 4,152.30

\*Salaried deputies receive no commission on licenses issued by them.

**Licenses.**

Resident Citizen Hunting and Fishing License .....	\$ 1.00
General Non-resident Citizen Hunting and Fishing License .....	25.00
General Non-resident Citizen Hunting and Fishing License .....	10.00
Non-resident Citizen Fishing License .....	1.00
General Alien Hunting License .....	25.00
Limited Alien Hunting License .....	10.00
Alien Fishing License .....	5.00
Guide License .....	10.00
Taxidermist License .....	No charge
Shipping Permit .....	.50

**STATE OFFICIALS.**

(For information respecting the game laws in States and Territories which have no State wardens address as follows: Alaska—Secretary of Agriculture, Washington, D. C.; Arkansas—Secretary of State, Little Rock; Florida—Chas G. Megargee, Umatilla, Lake County; Georgia—C. L. Davis, Warm Springs; Hawaii—Wm. Alanson Bryan, Bishop Museum, Honolulu; Kentucky—E. H. Nobbe, 506 20th street, Louisville; Mississippi—Miles Carroll, Yazo City; Nevada—Secretary of State, Carson City; Virginia—L. T. Christian, 1012, East Broad street, Richmond.

The game laws are published in pamphlet form in all States except Georgia and Hawaii.)

**Alabama.**

State Game and Fish Commissioner. Office established February 19, 1907; term four years.

John H. Wallace, Jr., Montgomery (term expires January, 1913.)

Publications: Game Laws; Biennial Reports—last report 1908.

**Alaska.**

Game Warden. Office established May 11, 1908; appropriate first available July 1, 1909; term, pleasure of governor.

P. F. Vian, Kenai; John J. King, Dutton; Christopher C. Shea, Seward; A. R. Garner, Circle City.

**Arizona.**

Fish and Game Commissioners. Commission established 1887; term, two years.

Theo. T. Swift, Saqord.

Secretary, W. L. Pinney, Phoenix.

John G. Verkamp, Flagstaff. All terms expire April 1, 1911.

Publications: Game Laws.

**California.**

Board of Fish and Game Commissioners. Board of Fish Commissioners established April 2, 1870; jurisdiction extended to game 1878; title changed 1909; term, pleasure of governor.

President, George Stone, 200 Cherry street, San Francisco.

W. F. Van Sicklen, 1531 Central avenue, Alameda.

M. J. Connell, 405 South Hill street, Los Angeles.

Chief Deputy, Charles A. Vogelsang, Merchants' Exchange Building, San Francisco.

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### Colorado.

State Game and Fish Commissioner. Office of State Fish Commissioner established March 10, 1877; jurisdiction extended to game, 1891. Present office established April 27, 1899; term, two years.

Thomas J. Holland, Room 4, Capitol Building, Denver (term expires April 1, 1911).

Deputy State Game and Fish Commissioner, James A. Shinn, Denver (term expires April 1, 1911).

Publications: Game and Fish Laws; Biennial Report—last report, 1908.

#### Connecticut.

Commission of Fisheries and Game. Appointment of Commissioners on Fisheries first authorized in 1867. Jurisdiction extended to game, with establishment of present Commission, April 30, 1895; term, two years.

President, George T. Mathewson, Thompsonville.  
Secretary, E. Hart Geer, Hadlyme.

E. Hart Fenn, Wethersfield. All terms expire July 1, 1911.

Office of the Commission, Room 66, State Capitol, Hartford.

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### Delaware.

Delaware Game Protective Association. Incorporated March 28, 1879.

President, A. D. Poole, corner Seventh and West streets, Wilmington.

Publications: Game Laws.

#### District of Columbia.

Metropolitan Police.

Superintendent, Major Richard Sylvester, Washington.

Harbor Master, Lieut. J. R. Sutton, Washington.

#### Idaho.

Fish and Game Warden. Office established March 13, 1899; term, two years.

Wm. N. Stephens, Boise (term expires March, 1911).

Chief Deputy, B. T. Livingston, Boise (until successor si appointed).

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### Illinois.

State Game Commissioner. Office established April 24, 1899; term, that of Governor, four years.

Dr. John A. Wheeler, Springfield (term expires January, 1913).

Publications: Game Laws.

#### Indiana.

Commissioner of Fisheries and Game. Office of Commissioner of Fisheries established in 1881; jurisdiction extended to game and birds, and present office established February 13, 1899; term, four years.

Z. T. Sweeney, Columbus (term expires May 3, 1911).

Chief Deputy, E. E. Earle, Room 119, State House, Indianapolis.

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### Iowa.

State Fish and Game Warden. Office established October 1, 1897; term, three years.

G. A. Lincoln, 234 Granby Block, Cedar Rapids (term expires March 31, 1910).

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### Kansas.

State Fish and Game Warden. Office of Commissioner of Fisheries established 1877. Present office established July 1, 1905; term, four years.

Col. T. B. Murtlock, Eldorado (term expires June 30, 1913).

Publications: Fish and Game Laws.

#### Louisiana.

Board of Commissioners for the Protection of Birds, Game, and Fish. Established July 9, 1908; term, four years.

President, Frank M. Miller, 605 Maison Blanche Building, New Orleans.

Dr. Oscar Dowling, Shreveport.

James B. Tucker, Natchitoches. All terms expire 1912.



Office of the Board, 605 Maison Blanche Building, New Orleans.

Publications: Fish and Game Laws.

#### **Maine.**

Commissioners of Inland Fisheries and Game. Appointment of Commissioners of Fisheries authorized February 21, 1878; jurisdiction extended to game 1880. Present Commission established March 8, 1899; term, three years.

Chairman, L. T. Carleton, Augusta (term expires July 1, 1910).

J. W. Brackett, Phillips (term expires January 25, 1911).

Edgar E. Ring, Orono (term expires July 25, 1909).

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### **Maryland.**

Game Warden. Office established April 4, 1896; reorganized April 10, 1904; term, two years.

Horace F. Harmonson, Atlantic Hotel, Berlin (term expires April, 1910).

Publications: Game and Fish Laws; Bulletins; Reports.

Board of Special (Ducking) Police. Established 1872; reorganized 1880; term, two years.

Frederick C. Lawder, Havre de Grace, Harford County.

George J. Schirling, Perryman, Harford County.

William Heverin, Charlestown, Cecil County.

Richard Rickard, North East, Cecil County. All terms expire May, 1910.

Special Policeman (for protection of wild fowl on Elk and Bohemia rivers).

Office established 1884; term, two years.

John Clay, Elkton, Cecil County (term expires May, 1910).

#### **Massachusetts.**

Commissioners of Fisheries and Game. Organized 1865; jurisdiction extended to game 1886; term, five years.

Chairman, Dr. George W. Field, State House, Boston (term expires December 28, 1909).

Superintendent of Hatcheries, John W. Delano, Marion (term expires December, 1910).

George H. Garfield, Brockton (term expires 1913).

Office of the Commission, Room 138, State House, Boston.

Publications: Fish and Game Laws; Annual Reports—last report, 1908.

#### Michigan.

Game, Fish and Forestry Department. Established as a Game and Fish Warden Department, March 15, 1887; reorganized, 1907; term, four years.

Warden, Charles S. Pierce, Lansing (term expires 1911).

Chief Deputy, Charles N. Smith, Petoskey (term expires 1911).

Publications: Biennial Reports—last report, 1908.

#### Minnesota.

Board of Game and Fish Commissioners. Appointment of Commissioners of Fisheries originally authorized March 5, 1874. Office of [State] Game Warden created March 8, 1887; term, four years. Present Board established April 20, 1891; term, six years; reorganized 1901; term now, four years.

President, O. J. Johnson, Glenwood (term expires 1913).

First Vice President, John H. Grill, Sherburn (term expires 1910).

Second Vice President, J. A. Wessel, Crookston (term expires 1912).

Secretary, Robert Hannah, Fergus Falls (term expires 1911).

Executive Agent, Carlos Avery, St. Paul (term expires 1910).

Superintendent of Fisheries, S. F. Fullerton, St. Paul.

Office of the Board, State Capitol, St. Paul.

Publications: Game and Fish Laws; Biennial Reports—last report, 1908.

#### Missouri.

Game and Fish Commissioner. Office of Game and Fish Warden established April 8, 1895; reorganized June 17, 1905; term, two years. Present office established August 16, 1909; term, four years.

Jesse A. Tolerton, Branson (term expires August 16, 1913).

Publications: Game and Fish Laws; Annual Reports—last report, 1907.

#### Montana.

State Game and Fish Warden. Board of Game and Fish Commissioners established March 14, 1895; term, three years. Replaced by present office March 18, 1901; term, four years.

Henry Avare, Helena (term expires March, 1913).

E. P. Mathewson, Anaconda, Chairman.

George E. Doll, Pleasant Valley, Secretary.

Henry Avare, State Game Warden, Helena, Member *ex-officio*.

C. F. Healea, Superintendent State Fish Hatchery, Anaconda.  
Publications: Game and Fish Laws; Biennial Reports—last report, 1906.

#### Nebraska.

Game and Fish Commission. Established July 1, 1901; term, two years.

Commissioner, Gov. Ashton C. Shallenberger, Lincoln (term expires January 1, 1911).

Chief Deputy, Dan Gellus, Lincoln (term expires July 1, 1911).

Publications: Game and Fish Laws; Biennial Reports—last report, 1908.

#### New Hampshire.

Board of Fish and Game Commissioners. Originally established as a Fish Commission June 30, 1865. Present Board established 1878; term, five years.

Chairman, Nathaniel Wentworth, Hudson (term expires 1912).

Financial Agent and Secretary, Charles B. Clarke, Concord (term expires February 11, 1911).

Frank P. Brown, Whitefield (term expires June 14, 1913).

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### New Jersey.

Board of Fish and Game Commissioners. Appointment of Commissioners of Fisheries first authorized March 17, 1870; jurisdiction extended to game, 1894. Board of Fish and Game Commissioners established March 22, 1895; term, now four years.

President, B. C. Kuser, Trenton (term expires 1911).

Treasurer, Wm. A. Logue, Bridgeton (term expires 1912).

Percival Chrystie, High Bridge (term expires 1910).

Ernest Napier, East Orange (term expires 1913).

Secretary, Walter H. Fell, Trenton.

Fish and Game Protector, James M. Stratton, North Long Branch.

Publications: Fish and Game Laws; Annual Reports—last report, 1908.

**New Mexico.**

Game and Fish Warden. Office established March 12, 1903; term, two years.

Thomas P. Gable, Santa Fe (term expires April 1, 1911).

Publications: Fish and Game Laws, in English and Spanish.

**New York.**

Forest, Fish and Game Commission. Originally established as a Commission of Fisheries in 1868. Office of Chief Game and Fish Protector created in 1888. Present commission established in 1895 and reorganized March 12, 1901; term, four years.

Commissioner, James S. Whipple, Albany (term expires April 15, 1912).

Deputy Commissioner, J. Duncan Lawrence, Bloomville (to serve with commissioner).

Secretary, John D. Whish, Albany (until successor is appointed).

Chief Game Protector, John B. Burnham, Essex (until successor is appointed).

Office of the Commission, The Capitol, Albany.

Publications: Forest, Fish, and Game Laws; maps; Annual Reports—last report, 1908.

**North Carolina.**

Audubon Society of North Carolina. Organized March 11, 1902; incorporated March 6, 1903.

President, Dr. R. H. Lewis, Raleigh.

Secretary, T. Gilbert Pearson, Greensboro.

Publications: State Game Law; circulars; Annual Reports—last report, 1908.

**North Dakota.**

Game and Fish Board of Control. Established April 1, 1909; terms, two and four years.

President, Herman Winterer, Valley City (term expires April 1, 1913).

Vice President, J. L. Killion, Towner (term expires April 1, 1911).

Secretary, D. I. Armstrong, Willow City (term expires April 1, 1911).

J. B. Eaton, Fargo (term expires April 1, 1913).

Thomas Griffiths, Grand Forks (term expires April 1, 1911).

District Game Warden. Office originally established as State

Game Warden in 1895; changed to District Game Warden in 1903; term, two years.

District No. 1 (northern). W. N. Smith, Grafton (term expires April 1, 1911).

District No. 2 (southern). Olaf BJORKE, Abercrombie (term expires April 1, 1911).

Publications: Game and Fish Laws; Biennial Reports—last report, 1908.

#### Ohio.

Commissioners of Game and Fish. Appointment of Commissioners of Fisheries first authorized May 3, 1873; jurisdiction extended to game with establishment of present Commission of five members May 17, 1886; term, five years.

President, Paul North, Cleveland (term expires May 17, 1913).

Dr. D. W. Greene, Dayton (term expires May 17, 1912).

Thomas B. Paxton, Cincinnati (term expires May 17, 1910).

Geo. W. McCook, Steubenville (term expires May 17, 1914).

J. F. Rankin, South Charleston (term expires May 17, 1911).

Secretary, George C. Blankner, Columbus (term expires at pleasure of Commission).

Chief Warden, Gen. John C. Speaks, Columbus (term expires May 1, 1911).

Office of the Commission, Columbus.

Publications: Fish and Game Laws; Annual Reports—last report, 1908.

#### Oklahoma.

State Game and Fish Warden. Office established March 10, 1899; term, four years.

Jude Askew, Chickasha (term expires January 1, 1911).

Publications: Reports—last report, 1908.

#### Oregon.

Game and Forestry Warden. Office of Game and Fish Protector established in 1893; term, two years. Present office established February 18, 1899; term, four years.

R. O. Stevenson, Forest Grove (term expires \$1909).

Publications: Game Laws; Biennial Reports—last report, 1908.

#### Pennsylvania.

Board of Game Commissioners. Board established 1895; term, three years.

President, James H. Worden, Harrisburg (term expires 1912).

C. K. Sober, Lewisburg (term expires November 17, 1911).

Wm. Heyward Myers, Williamsport (term expires 1912).

Dr. Charles B. Penrose, 1720 Spruce stree, Philadelphia (term expires 1911).

John M. Phillips, 2227 Jane street, Pittsburg (term expires November 17, 1911).

Arthur Chapman, Doylestown (term expires 1911).

Secretary, Dr. Joseph Kalbfus, Harrisburg.

Office of the Board, The Capitol, Harrisburg.

Publications: Digest of Game and Fish Laws; Annual Reports—last report, 1908.

#### **Rhode Island.**

Commissioners of Birds. Commission established June, 1899; term, three years.

Chairman, Charles H. Remington, 216 Waterman avenue, East Providence.

W. Gordon Reed, 2d, Coweset.

Dr. E. R. Lewis, Westerly.

William H. Thayer, Bristol.

A. O'D. Taylor, 11 Francis street, Newoort.

All terms expire January 1, 1911.

Publications: Abstract of Game Laws; Annual Reports—last report, 1908.

#### **South Carolina.**

Audubon Society of South Carolina. Incorporated February 19, 1907.

President, B. F. Taylor, Columbia.

Secretary, James Henry Rice, Jr., 336 Pine street, Spartanburg.

Publications: State Game Laws; Annual Reports—last report, 1908.

#### **South Dakota.**

State Game Warden. Office established July 1, 1909; term, two years.

W. F. Bancroft, Watertown (term expires July 1, 1911).

#### **Tennessee.**

State Warden of Game, Fish, and Forestry. Office of State Warden established April 11, 1903; Department of Game, Fish, and Forestry established April 15, 1905; term, eight years.

Joseph H. Acklin, Nashville (term expires April 17, 1913).

Publications: Game, Fish and Forestry Laws, and Reports—last report, 1908.

#### **Texas.**

Game, Fish, and Oyster Commissioner. Office of Fish and Oyster Commissioner established 1895; jurisdiction extended to game 1907.

R. H. Wood, Rockport.

Chief Deputy, R. W. Lorance, Austin.

Office of the Game Commissioner, Austin.

#### **Utah.**

State Fish and Game Commissioner. Office of State Fish and Game Warden established 1897; term, two years. Present office established March 9, 1899; term, two years.

Fred W. Chambers, Salt Lake City (term expires April 5, 1911).

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### **Vermont.**

Fish and Game Commissioner. Fish Commission established 1867; reorganized as a Fish and Game Commission November 22, 1892. Present office established December 7, 1904; term, two years.

Henry G. Thomas, Stowe (term expires November 30, 1910).

Publications: Fish and Game Laws; Biennial Reports—last report, 1908.

#### **Washington.**

State Fish Commissioner and Game Warden. Office of Game Warden established February 6, 1890; term, four years. Present office established March 13, 1899; term, four years.

John L. Riseland, Bellingham (term expires April 1, 1911).

Chief Deputy State Game Warden, R. C. Beebe, Bellingham.

Publications: Fish, Oyster, and Game Laws; Annual Reports—last report, 1908.

#### **West Virginia.**

Forest, Game and Fish Warden. Office of Game and Fish Warden established May 18, 1897; reorganized, 1909; term, four years.

J. A. Viquesney, Belington (term expires April, 1913.)

Publications: Game and Fish Laws; Annual Reports—last report, 1908.

**Wisconsin.**

State Warden. Office established May 5, 1891; term, two years.

Captain George W. Rickeman, Madison (term expires June, 1911).

Publications: Fish and Game Laws.

**Wyoming.**

State Game Warden. Office of Fish Commissioner established 1879; jurisdiction extended to game, 1895. Present office established February 15, 1899; term, four years.

D. C. Nowlin, Lander (term expires February 20, 1911).

Publications: Game and Fish Laws; Annual Reports—last report, 1908.

**CANADA.****Alberta.**

Department of Agriculture. Office of Chief Game Guardian established 1905.

Minister, W. T. Finlay, Edmonton.

Chief Game Guardian, Benjamin Lawton, Edmonton.

Publications: Game Laws; Annual Reports—last report, 1908.

**British Columbia.**

Provincial Game and Forest Warden. Office established 1905.

A. Bryan Williams, Fairfield Building, Vancouver.

Publications: Game Laws; Annual Reports—last report, 1908.

**Manitoba.**

Department of Agriculture and Immigration. Office of Chief Game Guardian established August, 1898.

Minister, R. P. Roblin, Winnipeg.

Chief Game Guardian, Charles Barber, Winnipeg.

Publications: Game Protection Act; Annual Reports—last report, 1908.

**New Brunswick.**

Crown Land Department. Office of Chief Game Commissioner established 1878; title changed to Chief Wardens, 1909.

Surveyor General and Chief Ranger, W. C. H. Grimmer, St. Stephen.

Deputy Surveyor General, T. G. Loggie, Fredericton.

Chief Fishery, Game, and Fire Wardens:

District No. 1, Dennis Doyle, Newcastle.



District No. 2, A. E. O'Leary, Richibucto.

District No. 3, W. J. Dean, Musquash.

District No. 4, John McGibbon, St. Stephen.

Overseer of Fisheries, C. U. McCulley, Chatham.

Publications: Game Laws; Annual Reports—last report, 1908.

#### **Newfoundland.**

Department of Marine and Fisheries. Established March 10, 1898.

Game Preservation and Inland Fisheries Board (15 members) authorized May 10, 1906; organized 1909.

Minister, A. W. Piccott, St. Johns.

Deputy Minister, A. C. Goodridge, St. Johns.

Secretary of Fisheries Board, Judge D. W. Prowse, Box 1187, St. Johns.

President of Game Preservation Board, Minister of Marine and Fisheries.

Publications: Annual Reports—last report, 1908.

#### **Nova Scotia.**

Board of Game Commissioners. Established April 16, 1908. (Duties formerly exercised by Nova Scotia Game and Inland Fishery Protection Society.)

Chief Game Commissioner, J. A. Knight, St. Paul Building, Halifax.

Associate Commissioners, A. O. Pritchard, New Glasgow; C. R. Kelly, Yarmouth.

#### **Ontario.**

Department of Public Works—Game and Fisheries Branch. Office of Chief Game Warden established 1892; office of Superintendent of Game and Fisheries established 1907.

Minister, J. O. Reaume, Parliament Buildings, Toronto.

Superintendent of Game and Fisheries, E. Tinsley, Parliament Buildings, Toronto.

Publications: Game Laws; Annual Reports—last report, 1908.

#### **Prince Edward Island.**

Game Inspector. Office established April 21, 1906; term, pleasure of Lieutenant Governor in Council.

E. T. Carbonell, Box 85, Charlottetown.

Publications: Annual Reports—last report, 1908.

**Quebec.**

Department of Colonization, Mines and Fisheries—Fisheries and Game Branch. Office of Game Superintendent established June 10, 1884; reorganized in 1897 and 1906.

Minister, Charles Devlin, Quebec.

Deputy Minister, J. Dufault, Quebec.

General Superintendent of Fisheries and Game, Hector Caron, Quebec.

Assistant Superintendent of Fisheries and Game, Eug. Hamel, Québec.

General Inspector of Fisheries and Game, J. A. Belisle, Quebec.

Publications: Fish and Game Laws, in French and English; Annual Reports—last report, 1908.

**Saskatchewan.**

Department of Agriculture. Office of Chief Game Guardian established 1905; term, pleasure of Commissioner of Agriculture.

Commissioner of Agriculture, W. R. Motherwell, Regina.

Deputy Commissioner, W. J. Rutherford, Regina.

Chief Game Guardian, T. N. Willing, Regina.

Publications: Annual Reports—last report, 1908.



# OR GAME

## ANADA 1910

31	Yukon	Sept. 1-Mar. 1.	District Columbia	Sept. 1-Nov. 1.
32	Saskatchewan	Dec. 1-Dec. 15.	West Virginia	Sept. 1-Feb. 1.
	Unorganized Ter.	Dec. 1-Apr. 1.		July 15-Dec. 20.
33	Manitoba	Dec. 1-Dec. 15.		
34			<b>Crane.</b>	
35				
36	<b>Goat.</b>			
37			Nebraska	Sept. 15-Apr. 6.
38	Montana	Oct. 1-Dec. 1.	North Dakota	Sept. 7-Dec. 16.
39	Idaho	Sept. 1-Dec. 1.	Colorado	Sept. 10-Apr. 16.
40	Washington	Oct. 1-Dec. 1.	Oklahoma	Aug. 15-May 1.
41	Alaska	Apr. 1-Feb. 2.	Nevada	Sept. 15-Mar. 15.
42	British Columbia	Sept. 1-Dec. 16.	Alberta	Sept. 1-Jan. 1.
43	Yukon	Sept. 1-Mar. 1.	Saskatchewan	Aug. 1-Jan. 1.
44	Alberta	Sept. 1-Oct. 15.	Yukon	Aug. 10-June 1.
45	Unorganized Ter.	Dec. 1-Apr. 1.		
			<b>DAYS EXCEPTED.</b>	
46			All hunting prohibited on:	
47	South Dakota	Nov. 1-Dec. 1.	<b>SUNDAYS.</b> —In all States and Provinces east of the 105th meridian, except Illinois, Louisiana, Michigan, South Dakota, Texas, Wisconsin and Quebec.	
48	Montana	Oct. 1-Dec. 1.	<b>MONDAYS.</b> —For waterfowl in Ohio, and locally in Maryland and North Carolina.	
49	Wyoming	Sept. 25-Dec. 1.	<b>TUESDAYS.</b> —For waterfowl on the Susquehanna Flats and certain rivers in Maryland.	
50	Idaho	Sept. 1-Dec. 1.	<b>OTHER DAYS.</b> —For waterfowl locally in Delaware, Maryland, Virginia and North Carolina.	
51	Washington	Oct. 1-Dec. 1.	<b>ELECTION DAY.</b> —In Allegany, Baltimore, Cecil, Frederick and Harford counties, Maryland.	
52	Alaska	Aug. 20-Jan. 1.	<b>DAYS WHEN SNOW IS ON THE GROUND.</b> —In New Jersey, Delaware, Virginia and Maryland.	
	British Columbia	Sept. 1-Nov. 15.		
	Yukon	Sept. 1-Mar. 1.		
	Alberta	Sept. 1-Oct. 15.		
53	Unorganized Ter.	Dec. 1-Apr. 1.		
54				
55				
56				
57				
58				
59	<b>Bear.</b>			
60	Louisiana	Nov. 1-Feb. 1.		
61	Pennsylvania	Oct. 1-Jan. 1.		
62	Michigan	Nov. 1-Apr. 1.		
63	Mississippi	Nov. 15-Mar. 1.		
64	Alaska	Oct. 1-July 2.		
	British Columbia	Sept. 1-July 15.		
	Quebec	Aug. 20-July 1.		







EXCHANGE  
APR 11 1913

1911-1912

BIENNIAL REPORT

OF THE

*Montana Fish & Game*  
STATE

Game and Fish Warden  
and Montana  
State Fish Commission

INDEPENDENT PUBLISHING COMPANY, HELENA, MONTANA.











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OF THE  
STATE OF MONTANA

1911-1912

HENRY AVARE, Warden.



"INDEPENDENT PUBLISHING COMPANY, HELENA, MONTANA"



**STATE OF MONTANA**  
**DEPARTMENT OF GAME AND FISH**

---

Henry Avare.....State Game and Fish Warden  
Helena

S. F. Ralston.....Deputy State Game and Fish Warden  
District No. 1, Kalispell

H. D. Vance.....Deputy State Game and Fish Warden  
District No. 2, Ovando

Jas. R. Froman.....Deputy State Game and Fish Warden  
District No. 3, Hamilton

J. E. Clifford.....Deputy State Game and Fish Warden  
District No. 4, Anaconda

Sherman Cushman.....Deputy State Game and Fish Warden  
District No. 5, Great Falls

Henry L. Sherlock.....Deputy State Game and Fish Warden  
District No. 6, Townsend

Henry Ferguson.....Deputy State Game and Fish Warden  
District No. 7, Bozeman

Thos. A. Berkin.....Deputy State Game and Fish Warden  
District No. 8, Lewistown

P. W. Nelson.....Deputy State Game and Fish Warden  
District No. 9, Livingston

T. J. Thompson.....Deputy State Game and Fish Warden  
District No. 10, Forsyth

Harry Cosner.....Deputy State Game and Fish Warden  
District No. 11, Malta

A. R. Boyer.....Deputy State Game and Fish Warden  
District No. 12, Billings

W. W. McCormick.....Deputy State Game and Fish Warden  
District No. 13, Missoula

D. H. Morgan.....Chief Deputy State Game and Fish Warden  
District No. 14, Helena

Wm. J. Dorrington.....Deputy State Game and Fish Warden  
District No. 15, Choteau

Henry Tiggerman.....Deputy State Game and Fish Warden  
Pryor Mountain Game Preserve,  
Warren

Charles Marrs.....Deputy State Game and Fish Warden  
Snow Creek Game Preserve,  
Jordan

**STATE FISH COMMISSION.**

E. P. Mathewson, Chairman.....Anaconda

Geo. E. Doll.....Kalispell

M. D. Baldwin.....Kalispell

W. M. Bickford.....Missoula

Henry Avare, State Game and Fish Warden, ex-officio member...Helena

H. D. Dean, Superintendent State Fish Hatcheries..Anaconda and Somers

DEPARTMENT OF GAME AND FISH.

Helena, Montana, December 1, 1912.

To His Excellency,  
Edwin L. Norris,  
Governor of the State of Montana,  
Helena.

Dear Sir—

I have the honor to submit herewith my biennial report for  
the years of 1911-1912.

Respectfully,

HENRY AVARE,  
State Game and Fish Warden.

## Biennial Report.

---

Since the last biennial report of this department, the game conditions of Montana have remained in a fairly satisfactory state, but the time has now arrived when it is necessary for a radical change in many of our laws, otherwise, there will be a notable decrease of our game animals from this time on.

This opinion is based upon close observation and reports of conditions from all sections of the state. The reasons for this belief, and the necessary proposed amendments, will be set forth in the following pages.

### **GAME KILLED DURING OPEN SEASON OF 1911 AND 1912.**

During the open season of 1911, an unusually heavy fall of snow, followed by extremely cold weather early in November, caused many game animals to seek the lower valleys. This condition resulted in more than double the normal amount of deer being killed by hunters during the latter weeks of November.

From reliable reports received by this department, there were approximately 15,000 deer killed in Montana during the season of 1911. The greatest numbers of elk killed during the same season were in the vicinity of Gardiner, near the Yellowstone Park line. At this point more than 500 of these animals fell under the hunters' bullets. In all other sections of the state the number killed aggregated about 1,100, making a total of 1,600 animals.

Of goats and sheep about the usual quota were killed—less than 125 of each.

During the hunting season of 1912, just closed, there are as yet no official figures upon which to base an estimate of the game killed, but it may be safely stated that there was not 25 per cent the number killed in 1911. This is due largely to the mild weather and lack of storms during the month of November.

### GAME PRESERVES.

The State Legislature of 1911 established three state game preserves: one in Dawson County known as the Snow Creek Game Preserve; one in Carbon County, the Pryor Mountain Game Preserve; and the third comprising parts of Park, Gallatin and Madison Counties, adjacent to the northern line of the Yellowstone National Park, called the Yellowstone or Gallatin Game Preserve.

These preserves have been of benefit to the game of the state, but the lines of the Snow Creek Preserve were defined before that section of the state had been surveyed and through an error only comprise about one half of the area intended by the original promoters of the plan. A bill to enlarge the boundaries of this preserve should meet favorable action in the coming Legislature.

Citizens in different sections of Montana have expressed their desire to have more of these game preserves established. I believe that the establishment of game preserves is feasible and beneficial only in those sections of the state where game abounds in considerable quantities, and where the establishment of such preserves is in accordance with the sentiments of the residents of the district proposed to be set apart as a preserve. In short, it is not best to establish a preserve where the predominant sentiment of the community is against game preserves. No benefit will result to the game interests by forcing such established game refuges.

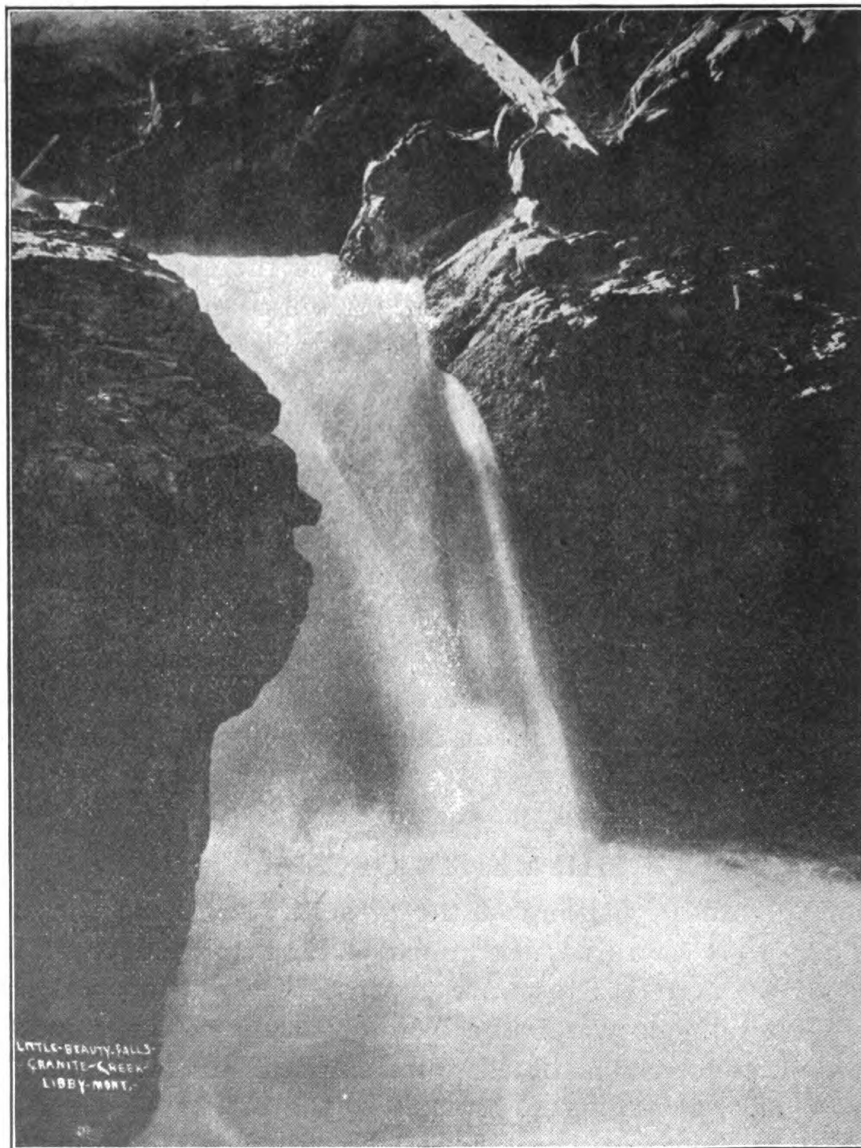
### SHIPMENTS OF ELK.

During the early spring of the present year, some two hundred elk were captured near Gardiner and shipped to various parts of the state. The entire expense of capturing and shipping these animals was borne by the citizens of the respective communities to which the elk were shipped. In all there were five carloads, averaging 40 animals to the car.

The first shipment was made to Hamilton. In this instance the elk were loaded in an ordinary stock car, without separating the animals of different sizes and ages into compartments. Upon arrival at Hamilton, it was deemed inadvisable to unload at the stock yards, on account of the distance of the stock yards from the lane leading to the park where the animals were to be fed until liberated on the range. Several loads of



straw were piled on the ground alongside the car door at the head of the lane leading to the park. Several animals were injured in unloading and some of the weaker ones were trampled and killed in the car. After this disastrous experience the cars



Beauty Falls, Lincoln County.

were divided into compartments and the larger, stronger animals loaded separately from the yearling calves. Under this plan the loss in shipment and unloading was much reduced, and shipments thereafter were successful.

Two cars were unloaded at Hamilton, one at Stevensville, one at Deer Lodge and one at Woodline, Sanders County, near Thompson River.

A portion of the report received from Mr. P. W. Nelson, deputy in charge of the district from which these animals were shipped, follows:

"The first car load of live elk ever shipped by rail in the history of the world, was made on the 8th day of March, 1912, by this department. The number shipped at that time was 42 head, consigned to Hamilton, in the Bitter Root Valley, this state. Said car reached its destination after being on the road twenty-three hours. Out of the number shipped the loss was six head of calves. From experience gained by this shipment, I learned that it was not advisable to make a mixed shipment of cows and calves in the same car, without separating them.

"In my next shipment I divided the car into three parts, putting twelve cows and bulls in each end of the car, and sixteen yearlings in the center of the car, making forty head loaded in this shipment, which said second shipment was made on the 15th day of March, 1912, consigned to Stevensville, this state, of which the loss was four head, after being on the road twenty-four hours.

"The third shipment of forty head, which was consigned to Woodline, a station on the Northern Pacific Railway in the extreme western part of the state, this shipment being on the road thirty hours, and the loss was four head, which died in transit. This shipment was made on the 20th day of March, 1912.

"The fourth shipment, of one car of elk, was made on the 22nd day of March, 1912, and was consigned to Deer Lodge, and contained twenty-four head of cows and bulls and sixteen yearlings, which shipment was on the road eighteen hours, and reached its destination with a loss of only one. I now came to the conclusion that I had the matter of shipping live elk thoroughly in hand.

"The fifth shipment, on March 25th, 1912, contained twenty-four head of cows and bulls and sixteen yearlings. This car was consigned to Hamilton, being on the road twenty-four hours. The car was divided as heretofore stated in three parts. This shipment reached its destination without any loss whatso-

ever, but I learned since the shipment was made that out of this car load one elk died the next day, the cause of death being too much water.

"The cost of the several shipments was borne by the Rod and Gun clubs of the various places receiving the shipments. The cost of shipment per head was \$5.00. The Rod and Gun Clubs have taken it upon themselves to look after the welfare for a few days—possibly a month—at their own expense, before turning the elk out upon the range selected for them.

"The total shipment was five cars, of two hundred elk, out of which the loss was eight per cent, which I think is very small indeed, when the question of the shipment of wild elk is taken into consideration, the animal being so timorous in its nature and the shipments being the first ever attempted.

"The State Game and Fish Department have received numerous applications for other shipments of live elk, but the department, owing to the lateness of the season and taking into consideration the condition of the female elk at this season of the year, did not deem it advisable to make further shipments."

There are only two portions of the state at present which contain considerable numbers of elk. These are the sections adjacent to the National Park borders and an area around the upper Sun River and South Fork of the Flathead River.

Now that the shipment of these splendid game animals has been found to be feasible, I am in favor of having a closed season for five years in all parts of the state, except those indicated, and during that time have quantities of elk shipped from near the Park line and unloaded on suitable ranges. This will tend to restock the entire state and at the end of the closed season there will be quantities of elk in all parts of Montana which are adapted to elk grazing and propagation.

Would also recommend that limited quantities of these animals be sold by the State of Montana to game departments of other states at a nominal price, thus tending to relieve the congested condition of the elk in the vicinity of the Park and enable other states which possess suitable ranges to obtain their quota of these much prized game animals.

#### **COURT COSTS IN VIOLATIONS OF GAME LAWS.**

Some antagonism to this department is entertained by County Attorneys of the several counties and the reason for this feel-

ing is partially justified on account of the present law governing costs in prosecutions of game law violations.

As the statutes now exist, if a defendant is found guilty of a violation of a game law and pays a fine the fish and game fund derives the benefit, as the amount is paid to the State Treasurer for the credit of this fund. If defendant is found guilty and serves a jail sentence, under the present law, the cost of his confinement must be paid by the county in which the crime is committed. If defendant is discharged after trial, the costs again fall on the county.

The State Fish and Game Department is in the position of having everything to gain by prosecuting defendants and stands to lose nothing, while the respective counties can derive no direct benefit and may lose a large sum in costs or payment of board for prisoners. Now to remedy this glaring inconsistency of our statute, I would recommend the passage of a law providing that payment of costs for board of prisoners found guilty of violations of game laws be paid out of the fish and game fund, and that the same course be pursued in payment of costs of trials of defendants who have been discharged or found not guilty of such violations as charged.

#### **RECOMMENDATIONS AS TO AMENDMENTS OF PRESENT GAME LAWS.**

I will again respectfully recommend an amendment to our state game law permitting boys under fourteen years to fish without license and also to hunt, when accompanied by parent or guardian. Women should not be required to procure a license to fish or hunt in season; but all male hunters, irrespective of whether hunting for rabbits or other game, should be held rigidly to the required possession of a license. This will do away with the trumped up excuse of the alien laborers, that they are only hunting rabbits, when accosted by a game warden and license demanded.

I believe an alien gun license law, similar to the one introduced by Nelson Story, Jr., in the last legislative session, will be of benefit to the state, not only along the lines of protecting game from illegal killing, but also as a peace measure.

I would also recommend that the present limit of three deer per season be reduced to two, and that these two be of the horned variety. There is a diversity of opinion among the sportsmen of Montana as to the season for hunting large game.

Some claim that the present sixty days open season is proper and others that the season should be from September 15th to November 15th. Both contentions possess merit—the earlier season favors the non-resident hunter and the licensed guides of the state, while the present season gives an opportunity



A Fair Hunter "Expectation."

to the resident hunter to hunt after the usual snow fall, the latter part of November.

On account of the heavy penalty for violations of the laws concerning feathered game the trial of these cases may now only be held in District Courts. Would recommend that the penalty be reduced to permit these trials in Justices Courts; that is, make violation of these laws a misdemeanor instead of an indictable misdemeanor as at present.

The object of the law of four years ago, covering the open season on game birds, has been fulfilled by protecting grouse during the month of September, and on account of the universal clamor of sportsmen I believe that there should now be an open season on grouse, prairie chicken, pheasants, fool hens and sage hens during the month of September, instead of October.



A Fair Hunter "Realization"

The season on ducks and geese should remain as at present—from September 1st to January 1st—but on account of the fast diminishing numbers and in conformity with the opinions of the Wardens and Commissioners of other states I would recommend a perpetual closed season on swans.

Curlews and snipes are not protected under our laws, but

they are, strictly speaking, highly prized game birds and should be afforded the protection in Montana that is given them in most of the other states of the union.

In my biennial report of 1909-1910 I called attention to the practice of exhibiting the carcasses of protected game animals in meat shops and restaurants. This practice should be prohibited by law, as it gives the impression that the meat is on sale.

#### **SHIPMENTS OF GAME DURING CLOSED SEASON.**

I have found the agents of all common carriers within the state to be living up to a strict interpretation of the law concerning shipments of game, both within and to points outside of the state.

For the better protection of game out of season, I respectfully suggest that a law be enacted prohibiting the agents of all common carriers from receiving for shipment game more than five days after the close of the hunting season. This provision will work no hardship on the hunter who has killed his game within season and will prevent the unlawful killing of many game animals out of season.

#### **BETTER PROTECTION FOR ROCKY MOUNTAIN SHEEP.**

There are but comparatively few Rocky Mountain sheep in existence today, and Montana is among the last of the States having an open season on these magnificent specimens of game animals.

At present there is a sixty-day open season, permitting each hunter one sheep, without restrictions as to age or sex. I believe it imperative that a law be enacted prohibiting the killing of ewes and lambs—only permitting the killing of grown bucks, otherwise the race will become extinct in Montana.

#### **FEDERAL LAW, PROPOSED, TO GOVERN HUNTING OF MIGRATORY GAME BIRDS.**

The American Game Protective and Propagation Association, of which Mr. John B. Burnham is President, has been instrumental in having a measure presented to the National Congress providing for the establishment of uniform national game laws to govern the hunting of migratory game birds. This measure is now pending in the United States Senate, and has received

the approval of most of the State Game Wardens and Commissioners throughout the United States, but there is some opposition among the sportsmen of the country, alleged to be on account of the possible infringement of the sovereignty of the respective states.

At the sixth biennial convention of the National Association of Game and Fish Commissioners, held in Denver last August, a motion was carried to appoint a standing committee of five to promote greater uniformity of the game laws of the several states—J. H. Acklin, Commissioner of Tennessee; H. C. Davis, Commissioner of Delaware; John B. Burnham, President American Game and Protective Association; Jesse E. Mercer, Commissioner of Georgia, and James Henry Rice, Jr., Commissioner of South Dakota. This committee drafted a report that is worthy the earnest consideration of every sportsman in the United States and in part is as follows:

“The committee, after careful consideration of existing provisions in the several States, and after consultation with members of the National Association of Audubon Societies and the United States Biological Survey, concluded that it would be impractical, on account of constitutional limitations and diversity in the form of state laws to attempt to draw up a game law suitable for adoption in all of the forty-eight States. The committee does not feel that, with the limited time at its disposal for the preparation of a preliminary report, it can do more than make a few recommendations, regarding certain important principles, and must leave to the officers in each State the formulation of amendment covering such points as may meet with their approval in such manner as will best conform with the statutes of that State.

Commissioners are urged to consider these recommendations in connection with their annual reports, to suggest to the committee other subjects in which greater uniformity is most needed, and to send a copy of such suggestions to the U. S. Biological Survey.

#### Recommendations—General.

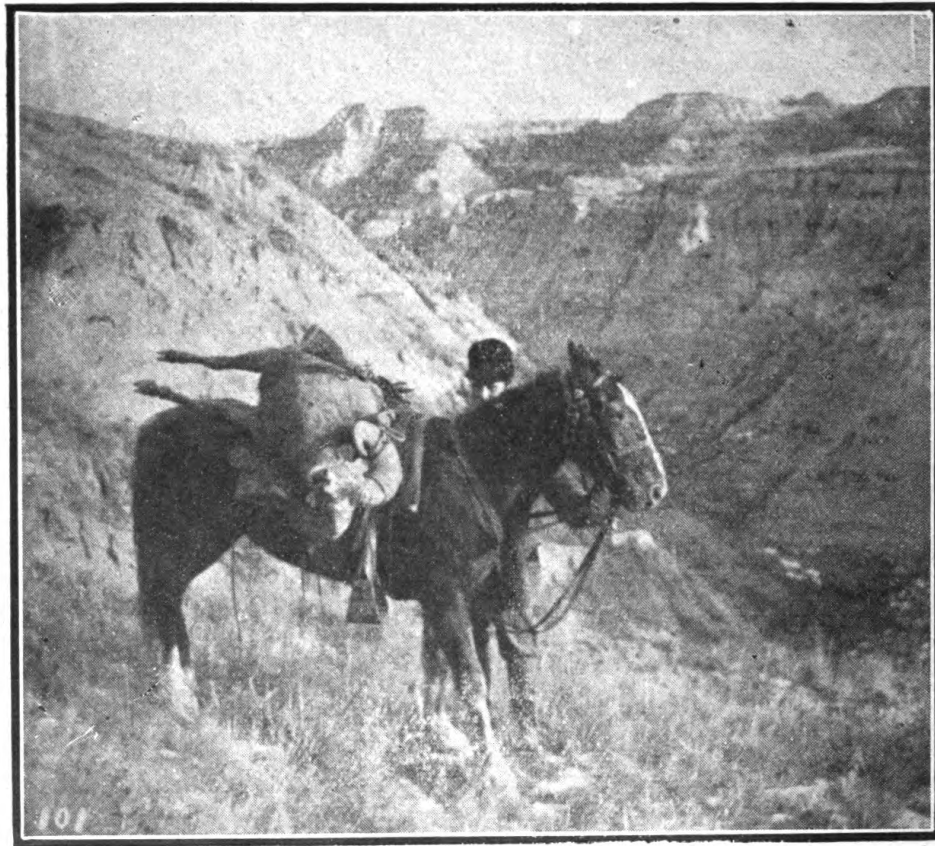
(a) That in drafting game laws, the plan of permissive law, as originated in Colorado and recently incorporated in the conservation law of New York and other States, be adopted so far as possible. This plan simplifies the law, directs attention to proposed amendments and avoids special legislation



to meet new methods of hunting, or changes in the condition of game.

(b) That local legislation be reduced to a minimum, and in order to meet the demand for such legislation broader powers be conferred upon State authorities to provide when necessary, after due notice and public hearing, special protection for certain kinds of game or for closing the seasons in certain sections of the State.

(c) That game laws be made as simple and as few in num-



Packing a Big Horn.

ber as possible; except in special cases single propositions should not be made the subject of separate bills, but bills for the protection of fish should ordinarily be kept separate from those providing protection for game.

(d) That modern, comprehensive, general laws are greatly needed in a few States, notably in Arkansas, Florida, Maryland, Mississippi, Nevada, North Carolina and Virginia.

**Administration.**

(a) That provision be made for the enforcement of the game laws by State officials or commissioners in Arkansas, Florida, Mississippi, Nevada and Virginia.

(b) That the term of office of commissioners should be not less than four years in the States of Arizona, Connecticut, Georgia, Idaho, Maine, Utah, New Mexico, Pennsylvania, Rhode Island, South Dakota, Vermont and Wisconsin. No man, however active, can accomplish effective work within two years, one of which is necessarily spent in becoming familiar with the duties of the office. Frequent changes in the head of the department are not conducive either to efficiency or economy of administration.

(c) That the only satisfactory enforcement of fish and game laws can be secured through the game warden system. Merit and efficiency only should be considered in the appointment of wardens or their retention in service.

(d) That the warden service should be divorced as far as possible from politics. In making this recommendation the committee invites attention to the merit system as now applied to the appointment and promotion of regular salaried wardens in the State of Massachusetts, New York, New Jersey and Wisconsin.

**Seasons.**

(a) That shooting in the breeding season in summer, or during spring migration, be universally prohibited, especially in the case of ducks, woodcock and other migratory birds.

(b) That so far as possible the opening dates of the hunting season in neighboring States be identical.

(c) That in order to secure uniformity in the legislation of the Northern States and to insure the permanent preservation of migratory birds on their former breeding grounds, spring shooting in the States north of latitude 37 degrees be absolutely prohibited, notably in the States of New Jersey, Delaware, Pennsylvania, Maryland, Virginia, West Virginia, Michigan, Ohio, Kentucky, Illinois, Indiana, South Dakota, Missouri, Nebraska, Iowa, Kansas, Colorado and Wyoming.

(d) Prairie Chickens—That the open season for hunting prairie chickens should not in any case exceed thirty days. These birds have now become so generally reduced in numbers and their range so restricted that hunting should be so limited

as to enable them to increase in the States where they still remain.

(e) Doves—That in the States which now provide no close season for doves—namely, Virginia, Florida, Kansas, Oklahoma and Nevada—adequate protection should be given these birds. That in the States north of latitude 38 degrees doves should be protected throughout the year—namely, in Pennsylvania, Ohio, Illinois, Missouri, Nebraska, Colorado and Oregon—in order that they may have the same protection which they enjoy in other States in this zone. That in the Southern States, where seasons are so varied in point of time, the open season should be restricted to three months or less, the dates to be determined by the respective States.

(f) Shore Birds—That the upland plover and the smaller shore birds, including the killdeer and other small plover and sandpipers, be removed from the game list and given protection at all seasons.

(g) Woodduck—That on account of the rapid decrease in numbers and danger of extermination in some States, the woodduck should be treated separately from other ducks and water fowl in the game law, and whenever possible should be protected throughout the year, particularly in the New England, Middle and Lake States. Summer shooting should be prohibited, and the bag limit should not exceed fifteen birds per day.

(h) Ducks and Geese—That reasonable seasons should be provided for ducks and other water fowl in the States of Arkansas and Texas, which hitherto have provided no close season for these birds.

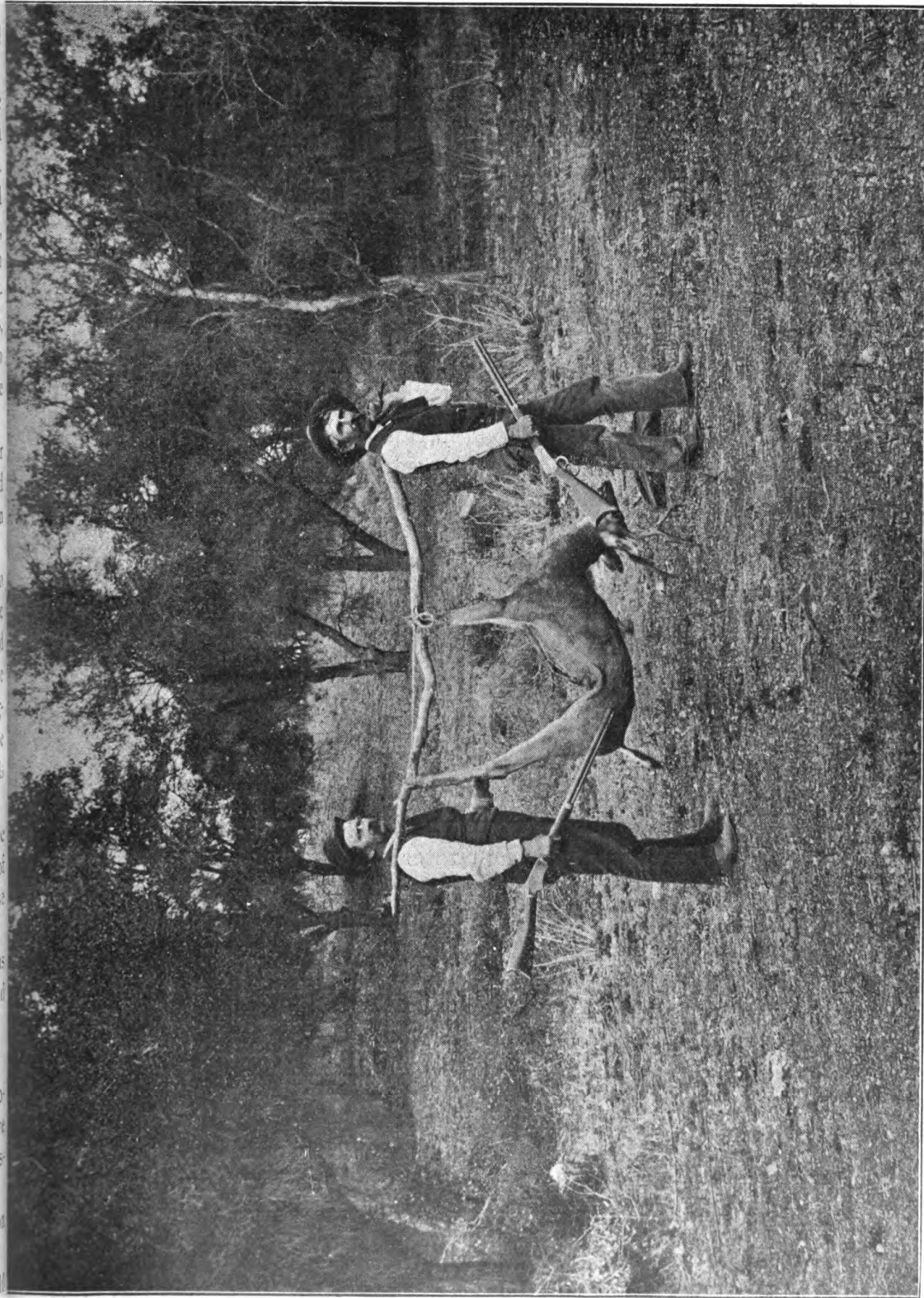
(i) Swans—That on account of their increasing rarity, swans and sandhill cranes should be removed from the game list and protected throughout the year.

#### **Big Game.**

(a) That female and young of all big game should be protected at all seasons in every State. Twenty States have already enacted the so-called doe law, with eminently satisfactory results.

(b) That due provision should be made for the propagation and transfer of big game in each State.

(c) Elk—That a definite and comprehensive policy should be adopted by the several States and the general government



Too Heavy For One

looking to the permanent preservation of elk now remaining in the Rocky Mountain and Pacific States; that due provision should be made for propagation and for adequate winter range, but in transferring animals from one State to another elk of one species should never be liberated in a region inhabited by a distinct species.

(d) That seasons for antelope should be kept closed for the present in all the States.

#### **Licenses.**

That a mandatory dollar resident hunting license be provided in the States of Maine, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Florida, Tennessee, Mississippi, Arkansas and Ohio, as the best and most satisfactory method of raising revenue for the protection of game, or establishing a salaried warden system and for properly regulating hunting.

(a) That a seasonal limit on deer be established in every State where deer hunting is permitted, and that this limit should not exceed two deer a season.

(b) That reasonable bag limits be provided for game birds in the States of Arkansas, Kentucky, Rhode Island and Virginia, which now have no restriction on the amount of game which may be killed or captured in a day or a season.

#### **Non-Game Birds.**

(a) That the model law recommended by the National Association of Audubon Societies for the protection of non-game birds be enacted in the States of Maryland, Kansas, Nebraska, Idaho, Montana, Utah, Nevada, Arizona and New Mexico, in order to make legislation uniform throughout the Union.

(b) That legislation regulating the traffic in aigrette or heron plumage be enacted in Pennsylvania, Maryland, Georgia, Illinois and such other States as have not yet extended proper protection to these birds, now nearly extinct.

#### **Propagation.**

It is recommended that encouragement be given for the propagation of fish and game animals and game birds in the various States under the provision of the State game authorities.

### Game Refuges.

Inasmuch as game refuges afford the most effective means of protecting the scattered remnants of our native game, it is strongly recommended that every State should have one or more State refuges. Commissioners and wardens should be given adequate authority to arrange for refuges on private or State lands, and to co-operate with the proper officers of the Federal Government in the establishment of such refuges on public lands not now utilized for other purposes.



Bull Elk of the West Gallatin Basin

### STATE FISH HATCHERIES.

Montana now has two modern, well-equipped State hatcheries, which, in conjunction with the Government hatchery at Bozeman, will furnish all streams and lakes in the State with a large supply of young fish annually.

The hatchery at Somers, Flathead County, has just been completed and will be in operation in 1913.

Members of the State Fish Commission have drafted a proposed law governing fishing in this State, so that subject will not be referred to in this report.

During the past year considerable work has been done in improving the plant at Anaconda. The residence has been entirely remodeled, making it much more convenient and comfortable. The hatchery building was made fifteen feet longer, making room for an office and small shop. Also small room was added for use as liver room, in preparing fish food.

A cement wall was constructed across the large pond, so that fish could be divided when necessary. The old cement pond was also divided by cement walls, making ten small nursery ponds. A shed was built on rear of ice house for storage purposes and a small building constructed, 22x24, to be used for garage or stable.

#### DISTRIBUTION OF FISH.

The output of fish for the year was very gratifying, the number of cans of trout distributed being in advance of the previous years. An effort was made to send out the fish by as near actual count as possible, the number being arrived at by the displacement method, which is approximately correct.

The fish were distributed as follows:

Grayling .....	600,000
Rainbow trout .....	16,350
Brook trout .....	1,299,200
Black-spotted trout (natives) .....	2,424,500

Of the black-spotted trout, 185,000 remain on hand at this writing, in addition to the number above.

#### FLATHEAD HATCHERY.

The site first chosen for this hatchery was found impracticable by reason of the danger of overflow, so it was abandoned and a new site selected on the shore of Flathead Lake about two miles from Somers by road. The hatchery building is placed just above high water mark. It is of frame, 38x84, and will be equipped with forty cement hatching troughs with a capacity for hatching at least three million trout. There will also be a whitefish battery with a hatching capacity of eight or ten millions.

The water supply is piped down through about 3,000 feet of wood pipe, six inch for nearly all the distance, and comes into the hatchery under 228' head, giving power for cutting fish food, electric lighting plant, etc.

The residence is 32x42, bungalow style, and is very complete

and adapted to the purpose. There is also an ice house, 20x24. and a garage, 22x24.

**WORK OF THE DEPARTMENT.  
1911-1912.**

The records of this office show that 64 arrests have been made between December 1, 1910, and May 31, 1911, on complaints as follows:

Hunting without license .....	3
Killing deer out of season .....	12
Killing elk out of season .....	4
Killing sage hens out of season .....	1
Killing song birds .....	1
Killing beaver .....	2
Killing antelope .....	1
Killing buffalo .....	3
Fishing without license .....	20
Fishing with grab-hooks .....	1
Dynamiting fish .....	5
Seining fish .....	3
Killing more than limit of deer .....	1
Selling beaver skins .....	2
Selling elk head .....	1
Selling moose scalps .....	1
Dumping sawdust in stream and lake .....	3
<u>64</u>	

The above complaints were instituted in the following named counties:

Teton .....	1
Valley .....	4
Yellowstone .....	2
Beaverhead .....	3
Cascade .....	1
Chouteau .....	3
Custer .....	1
Fergus .....	1
Flathead .....	10
Gallatin .....	3
Granite .....	1
Lincoln .....	5
Madison .....	2
Meagher .....	6
Missoula .....	1
Park .....	4
Powell .....	1
Ravalli .....	3
Rosebud .....	1
Sanders .....	3
Silver Bow .....	3
Sweet Grass .....	4
<u>64</u>	

These cases were disposed of as follows:

Convictions .....	45
Dismissals .....	16
Acquittals .....	1
Pending .....	2
<u>64</u>	

Fines imposed in above cases, \$2,680.00



The records of this office show that 78 arrests have been made between June 1, 1911, and November 29, 1911, on complaints as follows:

Hunting without license .....	15
Hunting on citizen's license (alien) .....	3
Killing deer out of season .....	6
Killing elk out of season .....	2
Killing sage hen out of season .....	1
Killing pheasant out of season .....	1
Killing grouse out of season .....	5
Killing prairie chicken out of season .....	3
Killing ducks out of season .....	1
Killing song birds .....	3
Killing beavers unlawfully .....	2
Killing antelope .....	2
Killing moose .....	2
Fishing without license .....	11
Fishing on citizen's license (alien) .....	2
Fishing with net .....	2
Fishing unlawfully .....	3
Spearing fish .....	3
Seining fish .....	3
Dynamiting fish .....	5
Selling trout .....	1
Guiding without license .....	2
	<hr/>
	78

The above complaints were instituted in the following counties:

Beaverhead .....	8
Broadwater .....	2
Carbon .....	11
Cascade .....	5
Deer Lodge .....	3
Fergus .....	3
Flathead .....	16
Gallatin .....	2
Lewis and Clark .....	3
Lincoln .....	1
Madison .....	1
Meagher .....	3
Missoula .....	6
Park .....	3
Rosebud .....	2
Sanders .....	1
Silver Bow .....	1
Sweet Grass .....	4
Teton .....	1
Yellowstone .....	2
	<hr/>
	78

These cases were disposed of as follows:

Convictions .....	62
Dismissals .....	10
Acquittals .....	4
Pending .....	2
	<hr/>
	78

Fines imposed in above cases, \$2,511.20.

The records of this office show that 79 arrests have been made between December 1, 1911, and May 31, 1912, on complaints as follows:

Killing game without license .....	2
Killing deer out of season .....	24
Killing pheasants out of season .....	2
Killing prairie chickens out of season .....	2

Killing prairie chickens out of season .....	1
Killing more than three deer .....	4
Killing elk out of season .....	4
Killing two elk in one season .....	1
Killing an antelope .....	1
Killing grouse out of season .....	1
Hunting without license .....	16
Hunting and fishing without license .....	1
Hunting and trapping on the Gallatin Preserve .....	1
Hunting deer with dog .....	1
Fishing without license .....	10
Dynamiting fish .....	1
Spearing fish .....	1
Dumping sawdust into stream .....	2
Selling beaver hides .....	2
Trapping beaver .....	1
Catching fish by means of dam .....	2
	<hr/>
	79

The above complaints were instituted in the following named counties:

Beaverhead .....	6
Deer Lodge .....	7
Fergus .....	1
Gallatin .....	3
Flathead .....	27
Lewis and Clark .....	5
Lincoln .....	5
Musselshell .....	6
Park .....	3
Rosebud .....	3
Sanders .....	2
Silver Bow .....	3
Sweet Grass .....	1
Teton .....	1
Yellowstone .....	1
Valley .....	4
Powell .....	1
	<hr/>
	79

These cases were disposed of as follows:

Convictions .....	46
Dismissals .....	13
Pending .....	18
Convicted of another charge while out on bail .....	2
	<hr/>
	79

Fines imposed in above cases, \$2,306.10.

The records of this office show that 48 arrests have been made between June 1, 1912, and November 30, 1912, on complaints as follows:

Hunting without license .....	9
Fishing without license .....	12
Fishing with citizen's license (alien) .....	2
Catching fish unlawfully .....	2
Killing grouse out of season .....	3
Killing prairie chickens out of season .....	2
Killing deer out of season .....	2
Killing sage hens out of season .....	3
Killing ducks out of season .....	2
Killing antelope .....	1
Killing beaver .....	2
Selling trout .....	1
Selling part of game animal .....	2
Selling grouse .....	1

Selling elk head .....	1
Hunting game on game preserve .....	1
Conducting taxidermist shop without license .....	1
Allowing sawdust to drain into stream .....	1
	<u>4</u>

The above complaints were instituted in the following named counties:

Beaverhead .....	5
Blaine .....	6
Carbon .....	1
Chouteau .....	2
Custer .....	1
Dawson .....	3
Deer Lodge .....	3
Fergus .....	5
Flathead .....	4
Gallatin .....	3
Granite .....	1
Missoula .....	2
Musselshell .....	3
Park .....	1
Powell .....	1
Ravalli .....	1
Silver Bow .....	2
Sweet Grass .....	2
Teton .....	1
Yellowstone .....	1
	<u>48</u>

These cases were disposed of as follows:

Convictions .....	42
Dismissals .....	1
Pending .....	4
Acquittals .....	1
	<u>48</u>

Fines imposed in above cases, \$1,734.50.

#### LICENSES AND PERMITS ISSUED DURING 1911.

Resident Citizen Hunting and Fishing Licenses .....	57,302
General Non-resident Citizen Hunting and Fishing Licenses .....	137
Limited Non-resident Citizen Hunting and Fishing Licenses .....	25
Non-resident Citizen Fishing Licenses .....	1,357
General Alien Hunting Licenses .....	4
Limited Alien Hunting Licenses .....	9
Alien Fishing Licenses .....	102
Guides' Licenses .....	50
Taxidermists' Licenses .....	55
Trappers' Permits .....	4
Shipping Permits .....	33

## LICENSES AND PERMITS ISSUED DURING 1912.

(Records November 30th).

Resident Citizen Hunting and Fishing Licenses .....	45,322
General Non-resident Citizen Hunting and Fishing Licenses .....	117
Limited Non-resident Citizen Hunting and Fishing Licenses ....	19
Non-resident Citizen Fishing Licenses .....	934
General Alien Hunting Licenses .....	2
Limited Alien Hunting Licenses .....	7
Alien Fishing Licenses .....	83
Guides' Licenses .....	41
Taxidermists' Licenses .....	39
Trappers' Permits .....	2
Shipping Permits .....	544

The records for 1912 are incomplete as many license supplies have not been accounted for by deputies and Justices of the Peace, at this date.

## RECEIPTS—1911.

Justice of the Peace for licenses issued .....	\$17,236.30
Game Warden and Deputies for licenses issued .....	*39,495.30
Shipping Permits .....	416.50
Guides' Licenses .....	500.00
Trappers' Permits .....	20.00
Fines paid in .....	3,118.50
Confiscations .....	240.75—
	3,359.25

## RECEIPTS—1912.

(Records November 30th.)

Justices of the Peace for licenses issued .....	\$11,300.40
Game Warden and Deputies for licenses issued .....	*33,966.60
Shipping Permits .....	272.00
Guides' Licenses .....	410.00
Trappers' Permits .....	10.00
Fines Paid in .....	2,753.60

\*Salaried deputies receive no commission on licenses issued by them.

## PRICES OF LICENSES AND PERMITS.

Resident Citizen Hunting and Fishing License .....	\$ 1.00
General Non-resident Citizen Hunting and Fishing License ....	25.00
General Non-resident Citizen and Fishing License .....	10.00
Non-resident Citizen Fishing License .....	1.00
General Alien Hunting License .....	25.00
Limited Alien Hunting License .....	10.00
Alien Fishing License .....	5.00
Taxidermist License .....	No charge
Shipping Permit .....	.50
Trapper Permit .....	5.00





BIENNIAL REPORT  
OF THE  
**Montana State Fish Commission**



**BIENNIAL REPORT OF THE**  
**Montana State Fish Commission,**  
**December, 1912.**

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TO HIS EXCELLENCY,  
Governor Edwin L. Norris,  
Helena, Montana.

Under the Act approved March 8th, 1907, creating the Montana State Fish Commission, it is required that a correct record of all business transacted should be kept by that Commission, and that a biennial report shall be made to the Governor and Legislative Assembly. In pursuance to the provisions of said Act, we would most respectfully submit this report, in conformity to said Act for the period ending November 30th, 1912.

By the terms of an Act approved February 11th, 1911, the membership of the Montana State Fish Commission was increased from three to five members, whereupon Major M. D. Baldwin, of Kalispell, and W. M. Bickford, of Missoula, were nominated and appointed by the Governor to complete the membership, so that at the present time the Commission is composed of the following members:

E. P. Mathewson, President, Anaconda, Montana.  
Henry Avare, Helena, Montana.  
Major G. E. Doll, Secretary, Helena, Montana.  
Major M. D. Baldwin, Kalispell, Montana.  
W. M. Bickford, Missoula, Montana.

In pursuance to call a quorum met in Kalispell, Montana, on the 24th day of April, 1911, and elected E. P. Mathewson President, and George E. Doll, Secretary.

The terms of the Act approved February 11th, 1911, required that the Commission should provide for the construction of a fish hatchery in Flathead County, upon a site to be selected by the Commission, the site and water therefor to be donated to the State free of charge by the people of Flathead County. In pursuance to the terms of the law, and in April, 1911, a

majority of the Commission went to Flathead County and selected what appeared to be the most desirable one of the many offered, leaving the task of acquiring title to the land and water right to the citizens of the County. Later the Commission was notified that a purchase of the selected site could not be made at any price within the means of the people; whereupon, and later in the same year, another site was selected about ten miles north of the city of Kalispell. This site seemed most favorably located and had an ample supply of water, but subsequent investigation disclosed that the land upon which the hatchery must be built to use the water with its natural flow, would be below high-water level during spring floods,—hence the site was abandoned. Later several sites along and near the shore of Flathead Lake were offered, and after an examination of them a choice was made of a tract of land on the Cramer farm, about one and a half miles south of the town of Somers, on the shore of Flathead Lake. The Commission believes this to be the best available point, because of its proximity to a railroad,—the abundance of water of even temperature from a natural spring, and ease of access both by rail and water.

Plans for the building were prepared for and accepted by the Commission, and after the proper advertising, bids for the construction of the hatchery were accepted and at the present time the building is nearly completed, and will soon be ready for use. It is hoped and expected that eggs will be hatched during the present winter.

Complaint having been made that the funds appropriated for the maintenance of the hatchery at Anaconda were not being properly used, a meeting of the Commission was called to meet at Anaconda for the purpose of investigating the matter. The State Examiner appeared by one of his deputies, and from statements made and accounts presented it appeared that money was being improperly paid to and used by the Superintendent of the hatchery at Anaconda, but after listening to the explanation made by the Superintendent, we were unable to determine whether the money had been misapplied through faulty accounting on the part of the Superintendent, or with dishonest motives. A report was made embodying the findings of the Commission and forwarded to the Attorney General; whereupon the Superintendent was relieved from duty.



and Mr. H. D. Dean, formerly with the United States Government hatchery, at Bozeman, employed. There were many applicants for the place, but none with the same knowledge of the details of the work to be done, nor having as much experience in the actual work of the hatchery. Mr. Dean has proved himself to be all that could be hoped for as an able superintendent. He has conducted the affairs of the hatchery carefully and conservatively, and has devoted all of his attention to the perfecting of plans for, and the completion of the hatchery in Flathead County, and cared for the work at Anaconda hatchery. His present compensation is eighteen hundred dollars a year. This should by all means be increased to twenty-five hundred dollars (\$2500.00) a year, not only because of additional work which will devolve upon him in the future because of the Flathead hatchery but also because of the careful and able manner in which the work is carried on under his supervision.

Many needed improvements have been made at the Anaconda hatchery, during the past two years, and now with a pond where Eastern brook trout are kept,—largely for spawning purposes,—the hatchery is in good working condition and producing fry at about the limit of its capacity. Subjoined hereto and made a part hereof will be found an itemized list furnished by Mr. Dean, showing the number of fry produced of the different varieties, the date when and the place to which sent, and the streams, or lakes, in which planted.

Only an approximation as to numbers can be attempted, but the calculation is made in the manner approved by the Department of Fisheries of the United States Government, and is as nearly correct as possible.

At the time when the Anaconda hatchery commenced the task of distributing fry, the Butte Anaconda & Pacific Railway Company, gave a car to the State for this purpose. This car has been in constant use and has answered the purpose very well, although lacking in conveniences and some essentials. When fry are taken from the hatchery for transportation, one or two men are kept constantly at work aerating the water in the cans which contain the fry, and when the distance to be traversed is long, and the time consumed more than one day, it is necessary that the men in charge should work in relays. For this reason the car should be fitted with

bunks, as well as with an air pump and cooking facilities. The car now in use has only a part of these conveniences and it is the belief of this Commission that a car should be purchased by the State, fitted so that all necessary conveniences may be at hand to ensure the safety of fry handled, as well as of the men in charge thereof. Nearly all the product of hatcheries is taken to points on the railroad and delivered to local anglers, for distribution in places selected by either individuals or fish clubs. The car should be large enough to carry at least one hundred and fifty cans. Such a car can be procured at a comparatively modest cost by the purchase of a second-hand Pullman and having same remodeled to suit the purpose. The original cost of the car should not exceed \$2,000.00, and the cost of remodeling would be not to exceed \$4,000.00. As the railroad companies are willing to haul the cars at no cost to the State, it would seem to be the part of wisdom to make the purchase.

Prior to 1911, no accurate records of the product of the hatchery were kept, but an effort has been made during the past four years to stock Flathead, Whitefish, and McDonald lakes, with the Lake Superior whitefish. Observation has not so far shown whether the experiment has been successful or not, but during the year 1913, by the use of nets, we hope to be able to ascertain beyond a doubt whether these fish have grown to maturity. All of the conditions of food and water are favorable, and there is no reason apparent why they should not thrive, and in time, supply the people of the State with a vast quantity of cheap food. The law should allow this species of fish,—as well as all varieties not classified as game fish,—to be taken in nets, and at any season of the year, for the reason that the Lake Superior white fish are not taken on a hook or with bait, and can only be taken in nets. If other varieties of fish could be taken in this way it allows the game fish to grow and to feed on the food which others consume. It is especially desirable that the Dolly Varden trout (called also "bull trout," "salmon trout" and "char"), should be taken at any time and by any means because it is a cannibal fish, eats any and all varieties of other fish, and is very destructive to fish life.

The department of fisheries of the Government estimates that the ten-pound Dolly Varden trout will, in a year, consume

three hundred pounds of other fish. The sucker and squaw fish eat the eggs of the trout, so that there should be no protection by law for any variety or species except those known as game fish; that is, the Mountain trout, Rainbow trout, Eastern brook trout, the Steelhead trout and the Grayling. Of the last named, the Mountain trout and the Grayling are indigenous to Montana, but the Grayling has never been found in the waters of the State which flow into the Pacific, but only in the headwaters of the Missouri river.

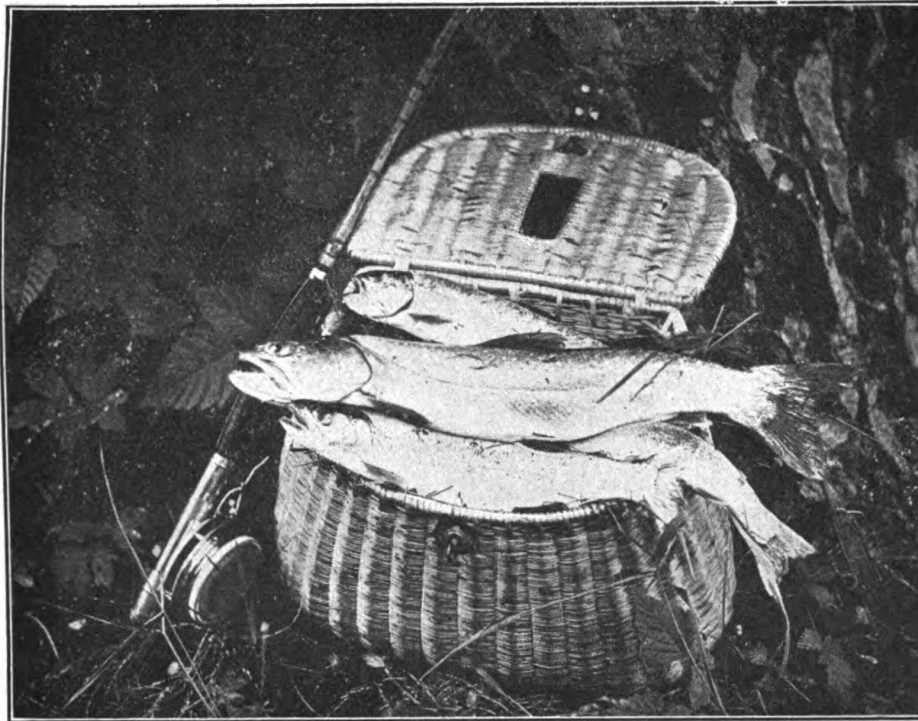
In the spring of 1909, the experiment of planting Grayling in Georgetown lake, the waters of which flow into the Pacific, was made with most surprising success. In the last mentioned year, a quantity of eggs were obtained and hatched, and a number, estimated at fifty thousand, planted in this lake. At the end of two years they had attained the remarkable weight of nearly two pounds and during the present year, they have been caught therein of an estimated weight of five pounds, which is much larger than they are ever found in their native waters. In the spring of 1911, and also the present year, large quantities of eggs have been taken from the fish first planted, and they are also multiplying rapidly in a natural way.

The measure of success which has been met with in planting fry in the public waters of the State must always remain a matter of conjecture where the waters are already fairly well supplied with native fish.

We have had most encouraging reports from streams in which fry have been planted, when the natural supply has been exhausted by fishing, and in those lakes and streams which contained no fish but had the natural food for them, the results have been most gratifying. There are a large number of lakes in Montana which, because of the waterfalls separating them from the lower reaches of streams or rivers having fish, have never become populated. In this direction, there is an almost boundless field for work for the hatcheries. The biological department of the State University has, under the direction of Dr. M. J. Elrod, done excellent work in exploring and reporting upon lakes of this description. One of such reports is subjoined hereto, and made a part hereof, and we ask that the same may be considered as showing the necessity for renewed and persistent activity upon the part of the State, in taking advantage of its vast natural advantages in this direc-

tion. It has been estimated by the careful observers connected with the United States Fishiers Department that an acre of water will produce as much life sustaining food if devoted to the raising of fish, as will an acre of land, so that the question is one of more than usual importance when considered in the light of a food supply, open and free to all.

The law should provide a closed season for game fish, as well as some means by which they may be prevented from



A Well Filled Creel.

entering irrigating ditches through which they are carried onto the cultivated land, and then die. If a screen or a Henshall wheel should be placed in the head of ditches, and this be a requirement of law, much of the damage now done would be avoided, and much now lost would be saved. The Henshall wheel is inexpensive, easily made and adjusted, and never causes an obstruction to the flow of water.

With the completion of a hatchery in Flathead County, the means of propagation of fish will be doubled, but even this will hardly supply the ever increasing demands which are made from all parts of the State for trout fry for planting in the many suitable lakes and streams. We believe that if the fund at the disposal of the State is ample for this purpose,

that additional hatching facilities should at once be provided and placed in operation, under such conditions as may seem best. When the extent of the State is considered, with the many clear lakes and streams therein, and the opportunities which are presented for attracting people to our ideal summer climate for an outing, and the revenue which would be derived from licenses, there is little question but that it would prove a good investment to now speed the work of restocking streams and lakes, by the provision of additional hatchery facilities.

All of which is most respectfully submitted.

E. P. MATHEWSON,  
Chairman.

Anaconda, Montana, December 28, 1912.

Dec. 6, 1912.

Montana State Fish Commission,  
Mr. E. P. Mathewson, Chairman,  
Anaconda, Montana.

Dear Sir:—

As Director of Hatcheries since March last, I hereby submit report of operations during that period of time.

At the time I took charge of the work, there were in the Anaconda Hatchery about 900,000 brook trout fry. These were too young for distribution, but by the middle of April they were old enough to send out and the distribution was made as fast as possible until all were distributed.

#### **Blackspotted Trout.**

The trap was placed in Stuart Mill Creek at Georgetown Lake about May 1st, but not many natives came up for spawning, only about 100,000 eggs were secured from Georgetown and Silver Lake together. A trap was also placed in upper Flint Creek, but owing to high water going over the trap, no fish were caught.

Largely through the efforts of Senator Myers, over 2,500,000 eggs were received from the U. S. Bureau of Fisheries, operating in Yellowstone Park. These filled the hatchery to overflowing and it was necessary to construct two new hatching throughs and two large tanks, in order to properly care for them. They were good eggs hatching out with but little loss, about 12 per cent for the eyed eggs, up to distribution. The fish have been all distributed except 2,600, which are retained in a nursery pond for experiment.

#### **Grayling.**

These fish commenced to run at Georgetown about June 1, but not in as large numbers as formerly. Only 265 fish were caught, but they were of good size and about one million eggs were taken. The male fish, as usual, were not very good producers of milt, but the eggs seemed as good as usual and 600,000 fry were distributed.

These fish must be present in Georgetown Lake in large numbers, as the fishing has been good all the season, many large fish being reported caught, some weighing as much as four or five pounds each.

There is no doubt but that the persistent fishing between

the trap and lake, is a large factor in preventing the fish from reaching the trap. This will be partly obviated another season by moving the trap down nearer deep water. The foundation for the trap in the new location, having been put in this fall.

A small building was constructed near the trap, for the comfort and convenience of the man on watch.

A trip was made to the Lima dam in Beaverhead County to see if the grayling congregated below the dam as in former years, but practically none were seen there this year.

About 140,000 fry were planted in Little Bitter Root Lake, west of Kalispell. It is believed that this lake is well adapted to the growth of the grayling and if so, it will prove a valuable spawning station in three years.

#### **Brook Trout.**

The stock fish began spawning much earlier than usual, the first eggs being taken October 19th. Over one million fine eggs were secured, the females averaging very nearly 1,000 eggs each. About thirty thousand eggs were taken at Lorenz' and 125,000 at Georgetown.

#### **Improvements.**

Quite a number of improvements were made at the Anaconda hatchery. The residence was thoroughly overhauled and remodeled and a hot water heating plant installed.

The hatchery building was enlarged by a fifteen foot addition, providing room for an office and small shop. The addition had a cement basement for coal storage and a future heating plant. A small room was also provided for the preparation of fish food, a 15" Pelton wheel and a No. 42 Enterprise chopper being installed to cut liver for the fish.

A neat building 22x24 was constructed to be used as a garage or stable. Also lean-to shed on rear of icehouse, for storage.

A cement division wall was put in across the stock pond for the better control and handling of the stock fish.

The old cement pond, 30x60, was divided into ten small nursery ponds by cement walls, but it will be necessary to change the water supply pipes before much use can be made of them. However, one pond will be used this winter as an experiment.

The buildings were all repainted, a few trees set out, lawns

graded and improved, so that a marked improvement was made in the appearance of the property.

A trip was made to Kalispell in April to prepare for the construction of the Flathead hatchery, but it was discovered that the site previously selected had at times been overflowed by backwater from the Stillwater river, so that site was abandoned and a new site finally selected on the west shore of Flathead Lake, about two miles by road from Somers. The buildings have been constructed under the supervision of the architect, J. B. Gibson of Kalispell.

The station is ready for work and it is probable that some eggs of the brook trout and whitefish will be hatched there this winter.

The hatchery building is 38x84 equipped with forty cement troughs with a capacity for hatching at least 3,000,000 trout eggs at one time. There is also a whitefish battery with a capacity for hatching eight or ten million eggs.

The water supply is brought down through about 3,000 feet of wood pipe, six inch, except 250 feet of twelve inch at the upper end. It gives us 228 feet head at hatchery and it is intended to use it for power for lighting and for cutting fish food. The residence is 32x42, bungalow style, is modern and well adapted to the purpose.

The buildings look very neat and when the grounds are laid out and graded, the station will present a very attractive appearance.

The output of fish for the year was very gratifying. Over eleven hundred cans of trout were sent out as compared with less than eight hundred and fifty last year. Owing, however, to the difference in method of counting, last year's distribution was apparently larger than this.

All of the trout sent out during my administration were measured by the displacement method, which is approximately correct.

The fish distributed during 1912 were as follows:

Grayling .....	600,000
Rainbow trout .....	16,350
Brook trout .....	1,299,200
Blackspotted trout .....	2,604,500
Total .....	4,510,050



In making the distribution of fish, the car traveled 8,048 miles, and the messenger trips, without car, made 2,500 miles more.

On official business, I have traveled since April 1st, 15,000 miles.

As no records were found at the hatchery, at the time that I took charge of the work, except a very incomplete record of distribution, I am unable to make any report for the year 1911.

The Anaconda Hatchery needs new hatching troughs, preferably of cement, also a good heating plant. The spring should be improved by laying about 600 feet of drain tile to bring the water down to a cement intake that should be constructed early in the spring. This would protect our water supply from pollution and also prevent the formation of the algae which has caused so much trouble in the past. It would also necessitate some changes in the piping at the hatchery, to supply troughs and nursery ponds.

It would be of great advantage to our work and would save considerable in expense of draying, if we could have a spur switch in front of our property, where our car could be kept and where we could have our water supply to use for cleaning and loading car.

About three hundred feet of the high board fence in front of our property, should be removed and replaced with a neat wire fence that would not obstruct the view. A large entrance gate should also be provided, so that we could drive through without having to go so far as the present Park gate. Often in winter the snow collects behind the high fence, making it difficult to get through when loading car, or hauling in supplies.

All of these improvements could probably be accomplished from our regular appropriation.

I have already recommended the securing of a better fish car and you have taken up the matter of better protective laws for the fish in this state, so it is not necessary for me to mention these matters in detail. I believe that with wise protective laws for our game fish we can keep Montana, in the future, as it undoubtedly is now, the best trout fishing state in the Union.

I wish to express my appreciation of the many courtesies

received from the railroads of the State. I have always found officials and employes alike, ready to do anything consistently possible for the State Fish Commission.

I wish also to express my appreciation of the friendly and helpful relations, between your Board and myself. It is a pleasure to work under a Board, the members of which are so thoroughly alive to the fishing interests of the State.

A detailed list of distribution for 1912, is appended.

Respectfully submitted,

H. D. DEAN,  
Director.

## DISTRIBUTION—1912.

State Fish Hatchery, Anaconda, Montana.

## BLACKSPOTTED TROUT.

Date.	Applicant.	Address.	Waters stocked.	No.
Feb. 18—	Missoula Club	Missoula	Streams near	100,000
Feb. 23—	Great Northern		Between Butte and Helena	50,000
Feb. 25—	Angler's Club	Townsend	Streams near	85,000
	Ben. R. Smith	Winston	Beaver Creek	20,000
	Roy H. Noble	Johnson	Confederate Creek	20,000
	John Furst	Anaconda	Willow Creek	5,000
Aug. 23—			Silver Lake	25,000
			Georgetown	35,000
			Stuart Mill Creek	40,000
Aug. 28—	Fred C. Morgan	Arlee	Jocko River	67,000
	R. J. Holland	Arlee	Finley and Jocko Rivers	33,000
	J. W. Gladden	Perma	Magpie Creek	33,000
	G. H. Avery	Plains	Curry Lake	33,000
	Anglers Club	Thompson Falls	Prospect Lake and Thompson River	300,000
Sept. 13—	Fred Allen	Heron	Elk Creek	34,000
	F. D. Sayers, et al.	Phillipsburg	Flint Creek	60,000
	Bonita Club	Rock Creek	Rock Creek	40,000
	Rod & Gun Club	Stevensville	Mill Creek Lakes	80,000
	Dr. F. E. Buchen	Hamilton	Streams near	120,000
	Mr. Dudley	Darby	Streams near	60,000
Sept. 17—	M. J. Sullivan	Alhambra	Prickly Pear	8,000
	H. F. Stapt	Clancy	Prickly Pear	12,000
	J. A. Botkin	Clancy	Big Buffalo	8,000
	J. H. Burke	Wolf Creek	Wolf Creek	20,000
	C. B. Power	Wolf Creek	Rock Creek	20,000
	Geo. F. Miller	Choteau	Willow Creek	40,000
	Rod & Gun Club	Choteau	Streams near	80,000
	H. C. Schick	Augusta	Beaver Creek	40,000
	E. E. McKean	Browning	Cut Bank River	20,000
	O. S. Phillips	Browning	Willow Creek	20,000
	J. R. Hart	Browning	Flat Iron Creek	20,000
Sept. 18—	Great Northern	Glacier Park	McDermot Lake, Etc.	50,000
	C. E. Proctor	Proctor	Dayton Creek	15,000
Sept. 28—	E. Guillot	Helena	Hauser Dam	8,000
	C. M. Larimore	Anaconda	Antelope Creek	8,000
Oct. 8—	C. A. Matthews	Whitefish	Upper Whitefish	42,000
	J. C. Dowdell	Stryker	Pond	6,000
	G. N. Agent	Stryker	Streams near	3,000
	R. L. Slee	Troy	Blue Lake	21,000
	H. B. Anderson	Troy	O'Brien Creek	21,000
	W. S. Dingee	Troy	Callahan Creek	21,000
	David Kelsey	Troy	Stanley Creek	21,000
	W. F. Doonan	Troy	Lake Creek	21,000
	Wm. Rightbower	Troy	O'Brien Creek	21,000
	W. F. Doonan	Troy	Iron Creek	3,000
Oct. 9—	C. N. Brilenberg	Deer Lodge	Dempsey Creek	4,000
Oct. 17—	H. Z. Brilenberg	Deer Lodge	Rock and Powell Creek	15,000
Oct. 18—	R. N. Jones	Harlowton	Musselshell River	21,000
	John McFarland	Harlowton	Lebo Creek	21,000
	J. V. Kelly	Harlowton	American Fork	6,000
	W. R. Woods	Lewistown	McDonald Creek	9,000
	W. J. Pitts	Lewistown	Big Casino Creek	9,000
	J. T. Fowley	Lewistown	McCartney Creek	81,000
	Commercial Club	Lewistown	Streams near	12,000
	J. A. Dougherty	Maiden	Warm Springs	1,500
Oct. 23—	W. H. Lockhart	Gregson	Pond	15,000
Oct. 28—	W. E. Crawley	Logan	Rea Creek	45,000
Oct. 29—	Henry Ferguson	Bozeman	West Gallatin	15,000
	C. S. Hefferlin	Livingston	Yellowstone River	15,000
	Eugene Confarr	Livingston	Spring Creek	45,000
	Sam Brady	Wilsall	Elk Creek	15,000
	Rob. Bennett	Wilsall	Flathead Creek	45,000
	Rod & Gun Club	Big Timber	Boulder Creek	25,000
Oct. 31—	Rod & Gun Club	Basin	Cataract Creek	12,500
	D. W. Middlemas	Boulder	Elkhorn Creek	12,500
	A. J. Stough	Stanford	Wolfe Creek	12,500
	A. B. Andrews	Judith Gap	Blake Creek	12,500
	D. D. Rice	Albright	Belt Creek	12,500
	Jack Stewart	Albright	Logging Creek	15,000
	W. M. Cockrill	Great Falls	Logging Creek	15,000
	G. B. Longeway	Great Falls	Pilgrim Creek	15,000

## BLACKSPOTTED TROUT—Continued.

Date.	Applicant.	Address.	Waters stocked.	No.
	H. S. Greene .....	Great Falls .....	Dry Fork Creek .....	12,500
	A. T. Luther .....	Monarch .....	Belt Creek .....	12,500
	E. A. Shaw .....	Nelhart .....	Belt Creek .....	12,500
	David Ledbitter .....	Nelhart .....	O'Brien Creek .....	12,500
	D. L. S. Barker .....	Nelhart .....	O'Brien Creek .....	12,500
Nov. 7—	Jno. Furst .....	Willow Creek .....	Willow Creek .....	2,500
	Anglers Club .....	Missoula .....	Streams near .....	57,500
Nov. 29—	B. F. Bembrick .....	Toston .....	Dry Creek .....	20,000
	Agent N. P. R. R. ....	Logan .....	Maillands .....	10,000
				2,454,500
To be distributed in December .....				150,000
				2,604,500

## BROOK TROUT.

Date.	Applicant.	Address.	Waters stocked.	No.
Feb. 25—	John Corrette .....	Woodville .....	Nez Perce .....	60,000
	Jas. Canty .....	Butte .....	Hail Columbia Gulch .....	6,000
	Planted in Alaska Basin by G. H. Shambow .....			322,000
Mar. 17—	Earl B. Rice .....	Forsyth .....	Pond .....	1,500
Apr. 11—	Gus Anderson .....	Anaconda .....	Springs .....	500
Apr. 13—	Eugene McCarthy .....	Anaconda .....	Springs .....	2,000
Apr. 20—	A. P. Schumaker .....	Kalispell .....	Patrick Creek .....	5,000
	Richard Greig .....	Kalispell .....	Pond .....	10,000
	O. P. Gregg .....	Kalispell .....	Spring Creek .....	5,000
	Jas. O'Boyle .....	Kalispell .....	Boyle Creek .....	5,000
	J. H. Montgomery .....	Kalispell .....	Pond .....	5,000
	E. Slemmer .....	Kalispell .....	Pond .....	4,000
	G. W. Bethel .....	Kalispell .....	LaSalle Springs .....	2,000
	A. W. Merrifield .....	Kalispell .....	Flathead Lake .....	62,000
	S. F. Ralston .....	Kalispell .....	Lake Ronan .....	22,000
May 2—	Commercial Club .....	Three Forks .....	Madison and Trib. .....	30,000
	I. W. Choate .....	Manhattan .....	Baker Creek .....	30,000
	J. E. Swindlehurst .....	Livingston .....	Pond .....	20,000
	C. S. Hefferlin .....	Livingston .....	Halliday Spgs and Corwin .....	20,000
	Rod & Gun Club .....	Big Timber .....	Boulder and Tributaries .....	20,000
May 14—	J. Lingenfelter .....	Gold Creek .....	Gold Creek .....	5
	F. D. Says, et al. ....	Phillipsburg .....	Flint Creek and others .....	30,000
	Anglers Club .....	Missoula .....	Blackfoot and Rattle .....	82,500
	Anglers Club .....	Hamilton .....	Trib. Bitter Root .....	25,000
	Anglers Club .....	Stevensville .....	Trib. Bitter Root .....	7,500
May 24—	C. M. Larrimore .....	Anaconda .....	Pond .....	5,000
June 2—	Leo Bens .....	Butte .....	Lone Tree Lakes .....	3,000
	Olson & Sargent .....	Melrose .....	Canyon Creek .....	25,000
	W. C. Templin .....	Armstead .....	Horse Prairie .....	10,000
	J. W. Scott, et al. ....	Armstead .....	Springs, Prairie, Etc. ....	140
June 7—	G. Z. Adams .....	Phillipsburg .....	Rock Creek .....	10,000
June 11—	G. N. Ry. .....	Elk Park .....	Elk Creek .....	5,250
	G. N. Ry. .....	Clancy .....	Basin Creek .....	1,750
	Chatfield & Peterson .....	Helena .....	Trout, Prickly Pear .....	17,500
	Chatfield & Peterson .....	Silver .....	Virginia .....	7,000
	Chatfield & Peterson .....	Silver .....	Canyon .....	3,500
	G. A. Slater .....	Silver .....		3,500
	Craig .....		Stickney and Wag. ....	3,500
	Tom Pruitt .....	Hardy .....	Hardy Creek .....	1,750
	Rod & Gun Club .....	Choteau .....	Streams near .....	43,750
	Henry Arnott .....	Dupuver .....	Streams near .....	17,500
June 12—	G. N. Ry. .....	Midvale .....	Upper Two Medicine .....	19,250
	G. N. Ry. .....	Rock Hill .....		7,000
	G. N. Ry. .....	Whitefish .....	Whitefish Lake .....	7,000
	H. H. Dingman .....	Kalispell .....		7,000
	H. S. Parker .....	Kalispell .....	Spring Pond .....	7,000
		Kalispell .....	Spring Creek .....	5,250
June 18—	Henry Ferguson .....	Bozeman .....	West Gallatin .....	20,000
June 20—	Station Agt, et al. ....	Harlowton .....	Lebo Creek .....	16,500

## BIENNIAL REPORT OF

**BROOK TROUT—Continued.**

Date.	Applicant.	Address.	Waters stocked.	No.
	Commercial Club....	Lewistown .....	Streams near .....	30,000
	S. L. Hodges .....	Martinsdale .....	Musselshell .....	12,000
	Chamber Commerce..	White Sulphur .....	Sheep Creek .....	12,000
	Chamber Commerce..	White Sulphur .....	Smith and Eight Mile.....	15,000
	Chamber Commerce..	White Sulphur .....	Birch Creek .....	7,500
	Chamber Commerce..	White Sulphur .....	Newlan Creek .....	6,000
	Chamber Commerce..	White Sulphur .....	Lake Creek .....	12,000
	Chamber Commerce..	White Sulphur .....	Four Mile .....	6,000
	Chamber Commerce..	White Sulphur .....	Smith .....	1,500
	Chamber Commerce..	White Sulphur .....	Wood Gulch .....	1,500
June 29—	F. G. Waggoner.....	Flint .....	Goat Mt. Lakes .....	3,500
June 30—	Dr. T. A. Grigg .....	Butte .....	German Gulch .....	1,500
July 8—	Harvey Flster .....	Helena .....	.....	1,500
	B. A. & P. Ry. ....	Rocker .....	Pond .....	1,500
July 11—	C. M. Larrimore.....	Anaconda .....	Antelope Creek .....	1,000
July 27—	Eugene Confarr .....	Livingston .....	.....	1,000
	C. W. Jackson .....	Bozeman .....	West Gallatin .....	3,000
Aug. 28—	W. R. Ginther .....	Trout Creek .....	Swamp Creek .....	5,000
Sept. 28—	E. Guillot .....	Helena .....	Hauser Dam .....	200
	Railroad Men .....	Clancy .....	Basin Creek .....	500
	.....	Anaconda .....	Warm Springs Creek .....	8,000
				1,299,200

**GRAYLING.**

Date.	Applicant.	Address.	Waters stocked.	No.
July 2—	.....	.....	Georgetown Lake .....	3,000
July 6—	Dr. J. M. Scanland....	Warm Springs .....	.....	15,000
July 8—	D. H. Morgan .....	Helena .....	Prickly Pear .....	50,000
July 11—	G. N. Ry. ....	Bernice .....	Little Boulder .....	60,000
	.....	Kalispell .....	Little Bitter Root .....	140,000
	Anglers Club .....	Missoula .....	Spring Slough .....	100,000
July 13—	C. W. Jackson .....	Bozeman .....	West Gallatin .....	100,000
	D. H. Morgan .....	Helena .....	Hauser Dam .....	40,000
	Anglers Club .....	Butte .....	Lake Avoca .....	50,000
July 15—	.....	.....	Georgetown Lake .....	42,000
				660,000

**RAINBOW TROUT.**

Date.	Applicant.	Address.	Waters stocked.	No.
July 21—	Chas. Laier .....	Anaconda .....	Barker Lake .....	1,000
Aug. 23—	.....	.....	Silver Lake .....	7,500
	.....	.....	Georgetown .....	850
Aug. 25—	.....	.....	Barker Lake .....	7,500
				16,850

# HUNTING GAME

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## TABLE, 1912

(AW.)

season and the first date of the close season are given, so that shooting is permitted, as Oct. 1, 1913, appears in the table.

17	Ontario .....	Oct. 16-Nov. 16.	California .....	Sept. 1-Dec. 1.
18	Quebec .....	Sept. 1-Feb. 1.	Nevada .....	July 15-Oct. 2.
19	New Brunswick..	Sept. 15-Dec. 1.	Idaho .....	July 15- Dec. 1.
20	Newfoundland ...	Oct. 21-Feb. 1.	Washington .....	Oct. 1-Jan. 1.
21			Oregon .....	Aug. 1-Nov. 1.
22	<b>Elk.</b>		<b>Reedbird.</b>	
23				
24				
25	Montana .....	Oct. 1-Dec. 1.	New Jersey .....	Sept. 1-Jan. 1.
26	Wyoming .....	Sept. 1-Dec. 1.	Pennsylvania .....	Sept. 1-Jan. 1.
27	Idaho .....	Sept. 1-Dec. 1.	Delaware .....	Sept. 1-Nov. 1.
28	Yukon .....	Sept. 1-Mar. 1.	Maryland .....	Sept. 1-Nov. 1.
29	Alberta .....	Nov. 1-Dec. 15.	Dist. of Columbia.	Sept. 1-Feb. 1.
30	Saskatchewan ..	Dec. 1-Dec. 15.	West Virginia ...	July 15-Dec. 20.
31	Unorganized Ter..	Dec. 1-Apr. 1.		
32	Manitoba .....	Dec. 1-Dec. 15.		
33	<b>Goat.</b>		<b>Crane.</b>	
34				
35	Montana .....	Oct. 1-Dec. 1.	Nebraska. ....	Sept. 1-Apr. 6.
36	Idaho .....	Sept. 1-Dec. 1.	North Dakota ....	Sept. 7-Dec. 16.
37	Washington .....	Sept. 1-Nov. 1.	Colorado .....	Oct. 1-Mar. 1.
38	Alaska .....	Apr. 1-Feb. 2.	Oklahoma .....	Aug. 15-May 1.
39	British Columbia.	Sept. 1-Dec. 16.	Nevada .....	Sept. 15-Mar. 16.
40	Yukon .....	Sept. 1-Mar. 1.	Alberta .....	Sept. 1-Jan. 1.
41	Alberta .....	Sept. 1-Oct. 15.	Saskatchewan ...	Aug. 1-Jan. 1.
42	Unorganized Ter..	Dec. 1-Apr. 1.	Yukon .....	Aug. 10-June 1.
43				
44	<b>Sheep.</b>		<b>DAYS EXCEPTED.</b>	
45			All hunting prohibited on:	
46	Montana .....	Oct. 1-Dec. 1.	<b>SUNDAYS.</b> —In all States and	
47	Wyoming .....	Sept. 1-Dec. 1.	Provinces east of the 105th meridian,	
48	Idaho .....	Sept. 1-Dec. 1.	except Illinois, Louisiana, Michigan,	
49	Washington .....	Sept. 1-Nov. 1.	Texas, Wisconsin, and Quebec.	
50	Alaska .....	Aug. 20-Jan. 1.	<b>MONDAYS.</b> —For waterfowl in	
51	British Columbia.	Sept. 1-Nov. 15.	Ohio, and locally in Maryland and	
	Yukon .....	Sept. 1-Mar. 1.	North Carolina.	
	Alberta .....	Sept. 1-Oct. 15.	<b>TUESDAYS.</b> —For waterfowl on	
	Unorganized Ter..	Dec. 1-Apr. 1.	the Susquehanna Flats and certain	
52			rivers in Maryland.	
53	<b>Black Bear.</b>		<b>OTHER DAYS.</b> —For waterfowl lo-	
54			cally in Delaware, Maryland, Vir-	
55			ginia, and North Carolina.	
56	Louisiana .....	Nov. 1-Feb. 1.	<b>ELECTION DAY.</b> —In Allegany,	
57	Pennsylvania .....	Oct. 1-Jan. 1.	Baltimore, Cecil, Frederick, and	
58	Michigan .....	Nov. 1-Apr. 1.	Harford counties, Md.	
59	Mississippi .....	Nov. 15-Mar. 1.	<b>DAYS WHEN SNOW IS ON THE</b>	
60	Alaska .....	Aug. 1-Apr. 1.	<b>GROUND.</b> —In New Jersey, Dela-	
61	British Columbia.	Sept. 1-July 15.	ware, Virginia, and Maryland.	
62	Quebec .....	Aug. 20-July 1.		
63				

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