

Commissioner

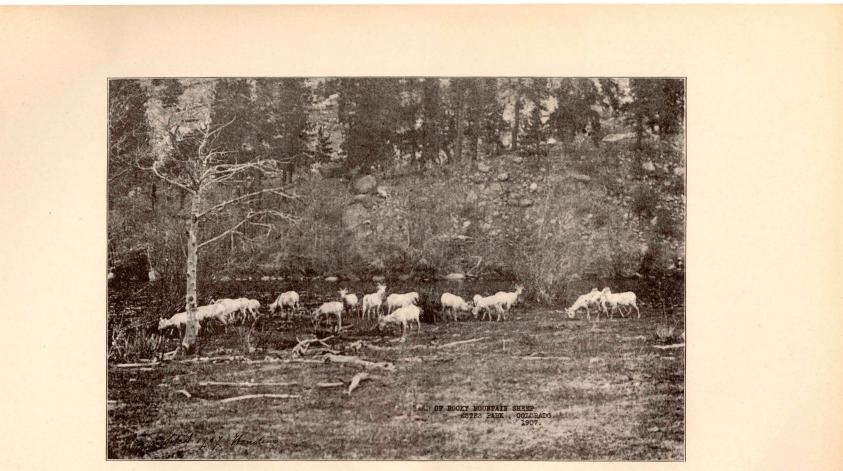
OF THE

State of Colorado For the Years 1907 and 1908

DAVID E. FARR, Commissioner CARLOS W. LAKE, Deputy Commissioner



DENVER, COLOEADO THE SMITH-BROOKS PEINTING CO., STATE PRINTERS 1998



Copyright 1907, by P. Hondius. ROCKY MOUNTAIN SHEEP IN ESTES PARK.

Biennial Report

OF THE

State Game and Fish Commissioner

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DAVID E. FARR, Commissioner CARLOS W. LAKE, Deputy Commissioner



DENVER, COLORADO THE SMITH-BROOKS FRINTING CO., STATE PRINTERS 1908

STATE OF COLORADO.

DEPARTMENT OF GAME AND FISH.

David E. Farr, Walsenburg, Huerfano County, Commissioner

Carlos W. Lake, Golden, Jefferson County, Deputy Commissioner

> R. L. Spargur, Denver, Chief Clerk

J. F. Engel, Denver, Special Chief Game Warden

W. D. Wilson, Creede, Chief Game Warden, First District

F. P. Addleman, Hotchkiss, Chief Game Warden, Second District

Fred A. Gordon, Glenwood Springs, Chief Game Warden, Third District

Chas. A. Purinton, Yampa, Chief Game Warden, Fourth District

W. V. Roberts, Fort Collins, Chief Game Warden, Fifth District

W. S. Kincaid, Denyer, General Superintendent State Fish Hatcheries

> S. E. Land, Denver, Superintendent Denver Hatchery

W. H. Corum, Gunnison, Superintendent Gunnison Hatchery

L. S. Barnes, Durango, Superintendent Durango Hatchery

Loren Bassett, Del Norte, Superintendent Del Norte Hatchery

H. T. Dawson, Glenwood Springs, Superintendent Glenwood Hatchery

Chas. Dowdell, Sulphur Springs, Superintendent Grand County Hatchery

W. J. Breckel, Steamboat Springs, Superintendent Routt County Hatchery

John F. Gamsby, Durango, Superintendent Emerald Lakes Hatchery

LETTER OF TRANSMITTAL.

Department of Game and Fish.

Denver, Colorado, December 1, 1908.

To His Excellency,

HENRY A. BUCHTEL,

Governor of the State of Colorado.

Dear Sir—Herewith I submit biennial report for the years 1907 and 1908, of the transactions of the Game and Fish Department; and I sincerely hope that same will meet with your approval.

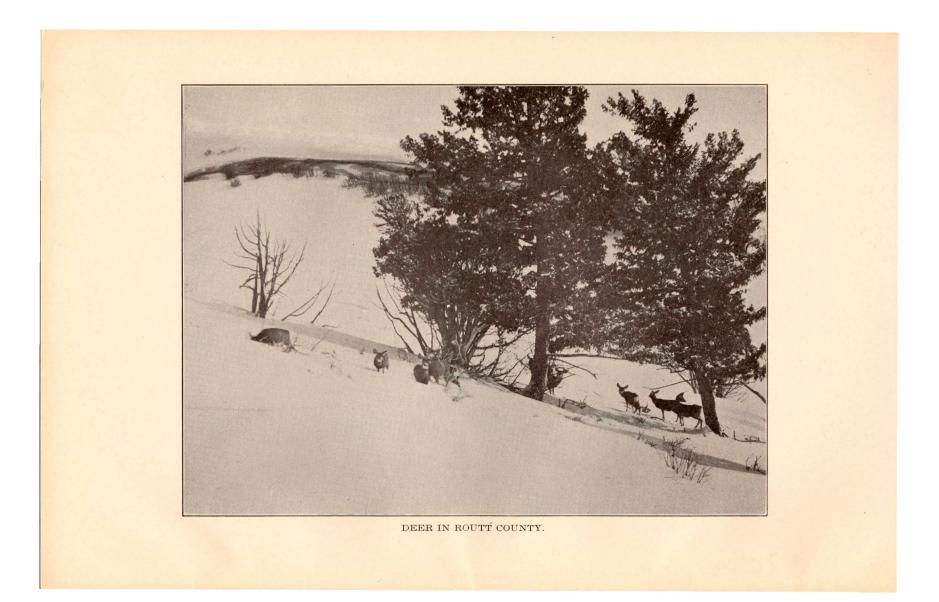
In carrying on the work of this Department it has been my aim at all times to so conduct the affairs of the office as not to reflect in any way upon your administration, and I hope that purpose has been accomplished.

I desire to take advantage of this opportunity to express my sincere thanks for the kind consideration, encouragement and assistance that you have rendered the Department in every way.

Yours very truly,

DAVID E. FARR,

Commissioner.



Biennial Report

OF THE

State Game and Fish Commissioner

The Game and Fish Department has been making rapid progress since the close of the last Democratic administration and is soon to become practically upon a self-supporting basis. During the last few years more convictions have been secured for violations of the game law and more fines have been paid than ever before in the history of the State. Game conditions generally have improved, with some exceptions, while respect for the game laws, and public sentiment regarding them, have improved to a still greater extent.

It has been my aim to organize a force of good, conscientious men who had no favorites to play and who were not afraid to perform their duties as they found them. In selecting men to fill the positions of game warden, great care has been exercised to select the best men for the place at all times. Owing to the sentiment of a large number of people with respect to the game laws, it has been a little difficult to always find the man who would best perform the duties of game warden. In different parts of the State there live a great many people who never have and who do not take the game law quite as seriously as they should, and consequently no one who could be found could enforce the game law to the liking of this class of people.

The work of a game warden is by no means easy. He has his simple duty to perform, and beyond that he must perform it in a way that satisfies the people of the community in which he works, or else he is the subject of undue criticism and consequently ill feeling is sometimes aroused. It is true that a man employed to fill the position of game warden may be qualified to attend strictly to the duties pertaining to that office, but he is not always qualified to do it in such a way as to meet the approval of the people generally. I have always made an effort throughout my administration of the affairs of this Department to select such men as would at all times render courteous treatment to the people with whom they came in contact.

It has always seemed to me that merely because a warden found it necessary to make an arrest, it is no reason why he should make a life-long enemy out of the person he has arrested. No one blames an officer for performing a sworn duty, and even though it becomes necessary to take violators into custody and have them tried in our courts, if proper treatment is rendered these persons and they are given a square deal, no occasion is

found for criticism, and as a rule no criticism is offered; but there are people who seem to think that a game warden trying to enforce the law is in the worst business on earth and that he necessarily must be one of the worst men on earth. It goes without saying that this class of people are not fair-minded, and that they would criticise, no matter whether they were right or wrong, or whether the treatment they received was good or bad.

Outside of merely performing their duties, the wardens throughout the State have, for the most part, been men who take an interest in all things that tend toward game protection. Their efforts, generally speaking, official and otherwise, have met with success. Not only have most all kinds of game existing within the boundaries of the State increased, but the protection which has been afforded, together with the interest which our people generally are taking, have done much toward allaying the fears of many persons that game is now all but extinct. In some localities in the State, which are very sparsely populated and off from the public highways, it has been found very difficult to afford competent protection for the game, as the only way that could be accomplished would be to have a trusty warden watch every individual who was inclined to hunt out of season; but outside of these few places the sportsmen and people generally are now respecting the law and living up to it, I might say to the letter. Practically all market hunting and game slaughter have been wiped out, and all that remains now is to see that the game is not too rapidly killed off by the passage of laws allowing the hunting season to remain open too long. There is great danger of this, and in my opinion our last Legislature made a lamentable mistake in extending the season on deer and in allowing the killing of does and fawns; however, I shall make recommendations in regard to these matters later on. Although this action was a mistake, I believe that our next Legislature can correct the error and thus prevent any further harm being done. Outside of that I know of no cases where our game has suffered to any great extent, although considerable effort has been necessary in some instances to make the people understand that our game laws must be respected. The members of the Game and Fish Department throughout the present administration have acted harmoniously, and altogether the standard of the Department has been raised.

During the present biennial period to date there have been 174 persons arrested and convicted for violating the game and fish laws, and these persons have paid into the courts as fines and costs \$8,651.66, which is an increase over last biennial period of \$3,576.13. During the year 1907 there were 29,377 resident hunting licenses issued; 70 non-resident general hunting licenses and 6 non-resident bird hunting licenses, and during the year 1908, up to November 30th, there have been issued 37,853 resident hunting licenses; 27 non-resident general hunting licenses and 12 non-resident bird hunting licenses. The records of this Department show that during the year 1903, the first year that

the law requiring hunting licenses took effect, there were issued 15,184 resident hunting licenses, so that, during the six years that the law has been in force, the number taken out at the present time considerably more than doubles the number taken out the first year, which shows that the people generally are becoming more and more observant of our game laws.

PHEASANTS.

Probably greater advancement has been made in the propagation and distribution during the past two years of pheasants than of any other game. It is obvious that the larger species of game animals can hardly be propagated by artificial means and that, for the most part, they must necessarily be left to their natural increase, but in the case of pheasants, however, the State, as well as private individuals, has done so much toward bringing a large number of pheasants to the State that there probably exists three or four times as many wild pheasants to-day within our boundaries as there did two years ago. Different persons, and particularly Mr. W. F. Kendrick, of Denver, have taken such an interest in assisting with the raising and distribution of pheasants that these birds may now be said to be plentiful in some parts of the State. We are greatly indebted to Mr. Kendrick for a donation of one hundred of these birds to the State last spring, and he has taken up the raising of pheasants on a very large scale, and in addition has raised and liberated an almost innumerable number of these birds. For the most part, the Chinese Ring Neck variety has been given particular attention, though several other varieties of the same bird have been brought into the State, and as a rule great assistance has been rendered the Department by ranchers and other individuals in caring for and assisting in the protection of these birds, though in some cases thoughtless violators have destroyed them. As yet these birds are hardly plentiful enough to warrant an open season being made upon them, but if the same increase in number is made in the future as has been in the past two years, it will not take many years until there will be enough pheasants to afford hunting for everybody. Because of particular attention paid to this class of game I do not deem it out of place to give more than passing notice to it in this report, and so include some general observations relative to pheasants and pheasant raising which may be of some interest.

So far as the State is concerned, its propagation of pheasants has been more or less of an experiment, though this has been conducted on a comparatively small scale, still I think this has enabled me to make some suggestions which might be valuable in the future. In order to properly care for pheasants donated to the State by Mr. Kendrick, I deemed it necessary to construct pheasant pens at the Denver Fish Hatchery especially for these birds, and have left the matter of raising them largely to my superintendent of that hatchery. Pheasant multiply with great rapidity, the Asiatic variety, which kind were donated to the State, laying enormously in captivity; the eggs are hatched under common domestic hens. In the wild state, pheasants produce from twelve to fifteen eggs at each setting, although as many as seventeen chicks have been taken from one hatching, the period of incubation being about twenty-four days. They commence to lay sometimes in March, but usually in April and May, and often lay only every other day.

The pheasant is truly a game bird in every sense of the word, being rapid in flight, hardy, cunning in covert, and toothsome; it can not be tamed, as it has not the instinct of domestication. The pheasant is decidedly insectivorous; the value of this bird to the agriculturist is not yet appreciated, but the pheasant is one of the best friends that the farmer or rancher has. It is estimated that hundreds of dollars' worth of products will be saved to the farmers and fruit growers of this State, taken as a whole, through the introduction of this bird. A recent estimate by the president of the National Association of Audubon Societies is that agricultural crops to the enormous value of \$800,000,000 are annually destroyed by insects, "entirely due to the rapid decrease of insect-destroying birds."

The pheasant is a terrestrial bird, seeking its food, making its nest and rearing its young on the surface of the ground; because of the fact that it is a bird of considerable size and is very rapid in flight, it is one of our very best game birds, and is much sought after by the hunters. The introduction of pheasants into this State should be encouraged by all who take any interest in game matters. The Mongolian-Asiatic pheasant, or the common ring-neck, the kind introduced, is perhaps the hardiest of any of the pheasants and more prolific for breeding in the open, and are birds that will remain within the boundaries of our State the year round. It can easily stand the heat of the summer and the cold of the winter, and is apparently unaffected by the sudden changes in climate.

I would suggest, however, that if the State is to continue in the propagation of pheasants, that an appropriation of two or three thousand dollars be made for the purpose of employing a caretaker for these birds and for purchasing eggs and breeding them, and for the incidental expenses of raising and distributing them. Facilities at the Denver hatchery could be very easily provided for, and as many pheasants as the State would care to handle, for the present at least, and as this is a central point for the railroads, distribution from here to any part of the State could be very easily made. In my opinion it would be far better to hatch these birds at the hatchery under an experienced man and ship live birds, rather than to ship the eggs, as has been done under the present administration, because of the lack of funds and facilities for employing any other method. A great many of the eggs are damaged in shipment, and comparatively small per cent. of the birds hatch from them after they have undergone the jar incident to the shipment, and I am inclined to believe that by far greater per cent. of birds could be raised

by shipping them alive than by shipping the eggs and then attempting to hatch the eggs with inexperienced people after shipment is made. About one thousand pheasant eggs were distributed over different parts of the State during the past summer from the Denver hatchery, and I must say that reports received from parties to whom these were shipped, as to what success they had, were not very encouraging. We also distributed fifty-six live birds in different parts of the State, generally sending them out in from one to six pairs in a place.

CAPERCAILZIE.

Our last Legislature made an appropriation of two thousand dollars for importing and bringing into this State capercailzie, or black game birds. These birds do not exist in America except where they have been brought in, and consequently it is necessary to bring them from European countries, principally Norway and Sweden. They are among the finest game birds in existence, and Colorado could not do better in affording sport for its hunters than to thoroughly stock the State with these birds. Owing, however, to the fact that they must be brought from such distance, the expense necessarily connected with the procuring of these birds is so great that the two thousand dollars appropriated by the Legislature would hardly serve for more than an experiment. However, immediately after the passage of the bill I began making preparations to carry out the intent of the act, but at that time was advised by the State Auditor that the money appropriated was not available, consequently no arrangements could be completed until such time as the money could be obtained. In the late spring of the year 1908 I was advised by the State Auditor that this appropriation had become available, and I opened up correspondence with many dealers of game, both American and foreign, and from reports received I found that it would be practically impossible to make an importation of the birds needed before December or January of the coming winter, and as the money appropriated for this purpose would not be available after November 30th, the close of the biennial period for which it was appropriated, I could see no way to perfect arrangements for the importation of these birds; therefore the intent of the Legislature in passing this act could not be carried out, because the money appropriated was not available at a time when it could be used. If the matter of stocking our State with the birds mentioned is again before the Legislature, I would recommend that a larger appropriation be made, and that the money be available at once in order that it may be used to advantage.

QUAIL.

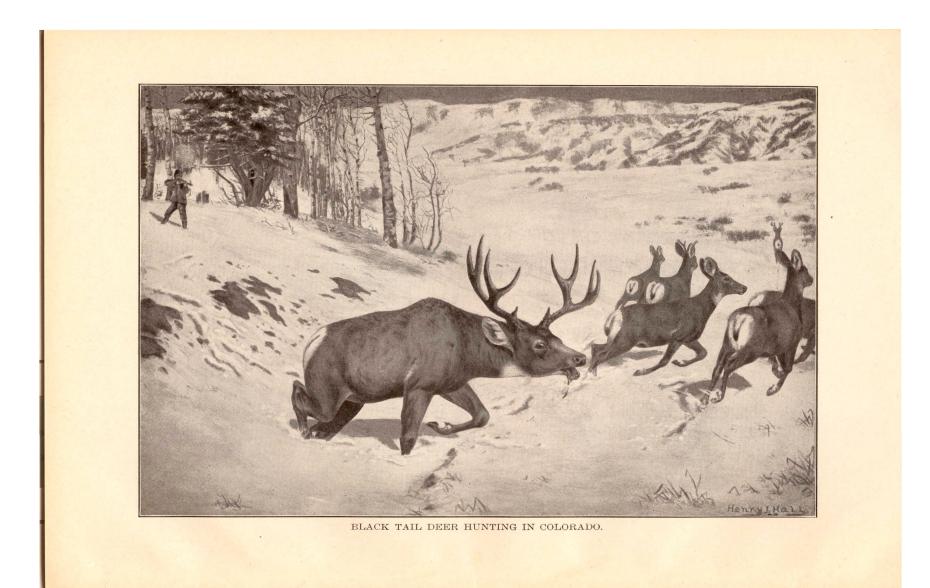
Colorado has two varieties of quail, besides the ptarmigan, that are worth mentioning, but these are perhaps the very finest kind; I refer to the bob white quail and what is ordinarily called the crested quail. Our Legislature in the past very wisely closed

the season on these birds, and we are just now beginning to realize the benefits of this action. Throughout all the agricultural districts of the State the bob white quail is increasing. It is true that this bird does not exist in such numbers any place in the State as to warrant the opening of the season on it, but by the continuance of wise laws and effective protection the time will come when the sportsmen can be given a chance to hunt bob white quail, as well as other game. This bird is perhaps one of the very best of all game birds, and the very strictest protection on it at all times should be encouraged.

Crested quail have likewise become more plentiful under some years of closed season until they have become very plentiful in some parts of the State. Perhaps the crested quail is found in greater quantities in the valleys of the western slope, where they are reported in some cases to have become a little troublesome to the ranchers and fruit growers. Complaints have been filed with this office as to the damage done by these birds; and while, for the most part, I think most of these complaints are made by persons who want only an excuse to kill the birds, still there are perhaps some cases where protection to the ranchers may be needed. It might be well for the Legislature to consider the opening of the season on crested quail in some localities, provided the season be a short one and the number of birds to be taken be very limited. These birds should not be slaughtered, nor should their increase be discouraged, except as a matter of protection to persons who have been troubled by them. There are other varieties of quail, principally among which are the California quail. These do not exist to any great extent, and consequently their protection, as well as the protection on ptarmigan, should be encouraged.

DEER.

Perhaps the best sport afforded to the hunters of our State is on trips made in search of deer. Deer are the only large edible game animals which can now be hunted in Colorado, and for this reason, among others, more people go hunting for deer than any other kind of game, outside of duck shooting. Time was in Colorado when deer were so plentiful that it seemed almost as though they never would be killed off, but with the increase in population and the more general settling up of the State the deer have been killed until now they must be carefully protected or future generations will not have an opportunity to hunt them, even as much as we are hunting them to-day. Had it not been for laws protecting the deer and the strictest enforcement of these laws Colorado would be to-day without any large edible game that would be available for the person who desired to hunt. Deer are probably now our most valuable asset in the game line, and for that reason we can not be too careful in regulating the killing of them. As it is deer have increased in the last five or six years until perhaps since the law passed by our last Legislature went into effect. The operation of this law has done a great deal toward exterminating



the deer and if allowed to continue it will not be many years until the deer will be very scarce indeed. During my administration I have given particular attention to the hunting of deer and spent both of the game seasons out in the field in the deer country. The manner in which the deer were slaughtered during the last season has convinced me that legislation is needed on this subject and that it should not be delayed. After the people generally learned what the effect of our new law was there began a wholesale killing of the deer. This can not be allowed in the future, as it has been in the past, especially if it means the large increase in the number of deer killed. During the season just closed more deer of both sexes and all ages were killed than probably have been killed in any one year within the last eight or ten, and I should say fifty per cent. more deer were killed the past year than were the year previous under the same law; consequently it is imperative that our Legislature do something to check the killing of deer in vast numbers. There are several ways in which this check might be made, but the most important of all is a change in the open season and in the limit upon the deer. The law existing immediately prior to the passage of our present law forbade the killing of any deer, except that each person could kill one deer with horns. That excluded the killing of fawns of either sex and the killing of does. This afforded the deer an opportunity to increase in their natural way, and during the years that law was in existence a marked increase was noted, practically all over the State where deer are found; but under our present law, taking into consideration the loss of fawns, because of the killing and crippling of the mother, and the separating of the fawns from the does, leaving the former in the deep snows of the mountains and the consequent exposure to all the natural enemies of its kind, I believe I am safe in saying that by far a larger per cent. of the does and fawns were lost to the State than of bucks. This tends more than anything else to the extermination of the deer. In order to increase the deer the does must be protected first in order that they may bear increase and the increase must likewise be protected until it can be given a chance to mature and produce more of its kind.

Some idea of the increase in the number of deer killed during the last season over that of five years ago is given from the following comparisons, which are taken from the records of the different railroads:

	1903	1908
Deer shipped from Rifle	37	520
Deer shipped from New Castle		160
Deer shipped from Glenwood		7
Totals	79	687

From close observation and careful estimate and reports sent me I am of the opinion that during the last open season on deer probably 2,500 were killed within the State. This is probably due largely to the fact that under our present license system

a man can, and probably does, take out a license for each member of the family, and then kills a deer on all of the licenses himself; whereas, the law provides that only one deer can be killed on one license. On my last trip to the deer country I met one party where a license had been issued to a six year old boy, the coupon from the license was detached and placed on a carcass of a deer, and the members of the party actually told me that the deer was killed by the boy. Other incidents of this kind occurred, all of which goes to show that some change is needed. The law as it existed two years ago was suitable to the true hunter and to the individual who desired a deer to hang in his smokehouse for future use, but the wanton slaughter of does and fawns under our present law will in a few years almost complete the extermination of the deer in this State.

The open season should be at a time when the deer are in their summer haunts, and this would consequently compel the hunter to seek for game in such places, instead of laying along a trail over which the deer run, where they have been driven out of the mountains by the deep snow and are seeking lower altitude. and thereby carrying on a ruthless slaughter, as is the case under the present law. In this connection I desire to say further that the opinion seems to be generally concurred in, that under our law as it stood two years ago too many bucks were being killed off and thus preventing an increase of deer. I am firmly convinced that this opinion is erroneous. It is true that under the operation of the old law more does were probably seen by the hunters in the field than bucks, and because the does were not accompanied by fawns the hunter came to the conclusion that the does were barren. In a great many of these cases the does were probably out feeding, not a great distance away from their young, and as is natural would return in a short time. In other cases the young may have been killed off by other wild animals which are their natural enemy, and in still other cases the young may have been killed by persons who had no more manhood than to kill any kind of a deer they might come to. In my opinion it would be practically impossible for a condition of affairs to come about where there would be too many does for the number of bucks. For the purpose of breeding only one buck is needed for as many does as he could find and could find him, as everyone familiar with these animals well knows, the doe, during the running season, looks just as hard for the buck as the buck does for the doe; consequently there is no occasion to feel that there are not enough bucks for the number of does.

When the change was made in our law it threw open the season on all kinds of deer, whether small or large, whether they were young or full grown. No true sportsman deigns to kill a doe or a defenseless fawn while on his hunting trip, but there were plenty of persons who were only too glad to shoot down anything they could find, consequently a larger number of does and fawns were killed and crippled in my opinion than bucks. In a great many instances, where the does were killed, there were probably

fawns that died, either naturally or were killed for the want of protection by the mother deer. In this way more damage has been done toward the extermination of the deer in the last two years than was probably done during all the years that the old law remained in effect. I can not be too emphatic in my recommendation that the law be changed back to where it was two years ago.

ELK.

It has become necessary upon different occasions since my coming into this office to rigorously prosecute persons guilty of killing elk; notwithstanding that a check had been made upon persons who had for years continued to slaughter the elk. In consequence of this check it begins to look as though we might save the elk we have with a fair chance of increase. In some parts of the State complaints were made against persons who from their actions seemed willing to kill what few remaining elk there were, if it lay within their power to do so. Upon information received at this office as to the killing of elk I set about to gather evidence and after some weeks of difficult research on the part of some of my wardens and the officers of Grand County, we at last got sufficient evidence together to begin prosecutions of these cases; trials were conducted for some considerable time and at great expense, both to Grand County and to the State, but we succeeded in convicting three persons who were implicated in the killing of three different elk, all of one sawmill camp. This, though expensive, has had the desired effect in that part of the State and I do not believe the elk will suffer much at the hands of violators for a few years at least.

Perhaps there are more elk in Routt County than in any other part of the State, and here there are several herds of 150 to 200 elk in each herd. The number of young elk seen by different ones encourages me in the belief that if these animals are allowed to go unmolested for a few years longer a marked increase in their number will be noticeable. Smaller bands of elk have been observed from time to time in other localities of the State, and altogether there are a great many of these animals still roaming our mountains and valleys.

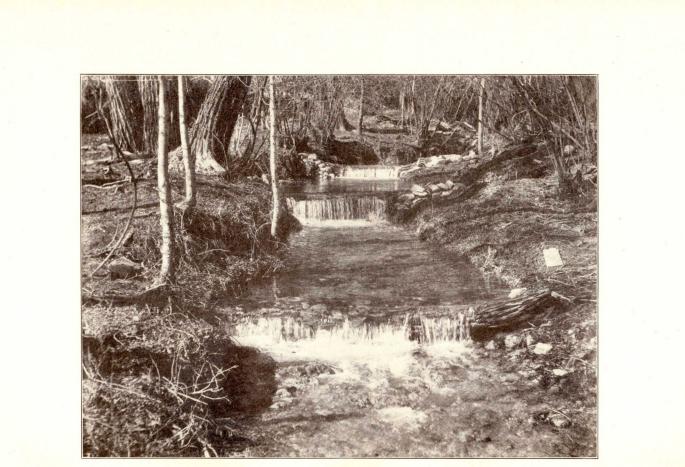
MOUNTAIN SHEEP AND ANTELOPE.

Special effort has been made to protect these animals during the last two years and I am led to believe with considerable success. Several successful prosecutions of sheep killers were had and in each case penalties of sufficient magnitude imposed to set a good example to others who might be inclined to offend the law in this particular. There are large bands of mountain sheep in different parts of the State, notably: in Chaffee, Teller, Clear Creek, Gunnison, Pitkin, Garfield and Routt Counties. Very few violations with respect to antelope have been reported or discovered by the department, and in each of these cases sufficient evidence was found to bring about the conviction of parties guilty of killing them. The antelope exist for the most part in the eastern part of the State, from north to the southern boundaries, and are frequently seen in quite large numbers. From recent investigations made and by actual count I believe there are in the neighborhood of from five to six thousand antelope in the State, and of these there are about four hundred that have been seen recently and counted in the neighborhood of Fort Morgan. Reports have been made from time to time that non-residents were coming across the Kansas line and killing antelope, but I am led to believe that these reports, for the most part, are not well founded, and I think these animals are well on the way to a noticeable increase and I strongly recommend a continued closed season on same.

There are of course many other species of game animals and also game birds in Colorado, some of which the law permits the killing of, but they do not exist in any great numbers, except ducks and geese, comparatively speaking, and consequently I do not deem it advisable to make more than passing notice of them. Probably more persons go duck hunting in Colorado in the course of a year than hunt for any other kind of game, and as these are migratory birds and are found only during certain times of the year, except perhaps in some of the higher altitudes, it seems to me the citizens of Colorado should have the same right to hunt them as the citizens of our neighboring States, consequently I see no reason why any change should be made in our liberal open season on these birds.

INDIANS.

During former administrations, and in fact ever since the earliest times of the State, our game has suffered a great deal at the hands of the Indians. In times gone by the matter has been taken up through the United States authorities in Washington and attempts made to control the Indians through their various agencies. As this is a roundabout way of getting at the situation, and as it is not possible to get prompt action which is required, I have thought it best to try and handle the situation entirely from this office. Whatever rights the Indians may have to take our game, I have deemed it my duty to enforce the law in regard to them, just the same as with all other persons. In order to prevent their slaughter of deer and other game and carrying it out of the State in large numbers it has been necessary during the fall of each year of this administration to place additional men in the countries where these Indians are in the habit of making their raids in order to afford proper protection, and as a rule it has been a comparatively easy matter to handle the Indian situation, as they have never at any time during my administration offered any violence, or refused to comply with my requests to desist from hunting contrary to law. However, it has been necessary to spend a part of the game fund in employing men to give this matter their



MITCHELL CREEK. An Ideal Mountain Stream, Where the Glenwood State Fish Hatchery is Located.

attention. During the falls of 1907 and 1908 it became necessary to put in the White River Country from six to eight extra Deputy Game Wardens for the sole purpose of guarding against Indian intrusions. During the winter of 1907 and 1908 I found it necessary to put several men in the field to remain permanently in order to watch these Indians. Out of the large amount used for Deputy Game Wardens between five and six thousand dollars have been spent in guarding against and protecting game from the Indians. This of course includes the amount spent in guarding against Indians in several different parts of the State where they have been in the habit of hunting. Besides the White River country mentioned, the Indians have caused some trouble throughout the Southwest part of the State, generally speaking and practically in and around La Plata County. When taking into consideration the real protection afforded the game by repelling and guarding against these Indian invasions I believe that the money paid out in this direction has been well spent.

FINANCIAL CONDITION OF THE DEPARTMENT.

The financial condition of the department is very gratifying indeed, especially the receipts, as they were nearly double the receipts for the biennial period for 1903 and 1904, the receipts for that period being \$25,489.23. The receipts for the biennial period of 1905 and 1906 were \$35,115.67 and for the present biennial period \$49,112.36, showing an increase over the last biennial period of \$13,996.69. This is accounted for principally by the fact that by keeping more men in the field and by the people generally obtaining a better understanding of the game laws, more revenue has been produced by additional licenses, certificates, permits and invoices of all kinds being issued.

Though this report shows that considerable more money has been spent during the present administration for game wardens, in excess of the five Chief Game Wardens provided for by the statutes, and also for fish eggs than heretofore, I believe that the benefits derived will greatly exceed the cost: That is to say, the receipts of the office have been correspondingly higher than the amount expended in an attempt to enforce the law.

The total amount appropriated and available for the various branches of the work for the years 1907 and 1908, including the bills providing for a Deputy Commissioner, building of Del Norte hatchery and Superintendent's residence at that point, the building of a Superintendent's residence at Glenwood hatchery, and improvements to be made at Durango, Routt County and Grand County hatcheries, and the building of fish ponds and stocking the State with capercailzie was \$64,-100.00. Of this amount we have used \$60,029.15, leaving a balance of the appropriations not used of \$4,070.85.

Detailed report of financial condition given below:

RECEIPTS

FROM DECEMBER 1, 1906, TO NOVEMBER 30, 1908.

Received from county clerks for resident hunting licenses\$	26,948.50	
Resident hunting licenses issued by commissioner's office	8,878.00	
Non-resident general hunting licenses	2,375.50	
Non-resident bird hunting licenses (18)	117.50	
Lakes, parks and renewals of same	1,282.00	
Preserves and renewals of same	373.00	
Importers' licenses	2,866.55	
Guide licenses	300.00	
Permits to seine for suckers, carp and squawfish	81.00	
'Taxidermists' licenses	747.90	
Transportation permits	708.00	
Specimen certificate tags	105.00	
Importation certificates	104.00	
Seizures and sale of game and fish	490.60	
Received for fines imposed on violators	2,006.23	
Received from insurance company-Del Norte Hatchery	1,500.00	
Miscellaneous, fish tags, storage permits, etc	288.58	

Total receipts

\$49,112.36

DISBURSEMENTS. Paid deputy game wardens.....\$28,636.97 Paid for legal services-Special attorneys and expenses...... 1,440.05 For extra clerical services..... 899.99 Paid for team hire account of Indians..... 13.30 Refund for permits taken up and cancelled 26.12 Paid for fish eggs 2,567.63 Court costs and witness fees-Bush case..... 55,65 441.25 Paid for seizures of game and taxidermy work..... Office expense, express charges, telegrams and telephones..... 693.66 Paid for postage 200.00 Del Norte Fish Hatchery 2,076.22 Paid for printing 1,364.36 Grand County elk case 198.65 582.00 Paid for insurance on state buildings..... Paid for maintenance of hatcheries...... 2,030.83 Expense of commissioner attending Game and Fish Wardens' National Convention, Yellowstone Park 238.60 Expenses of delegates attending International Congress of Fisheries, Washington, D. C..... 405 15 F. A. Sanders, special accountant, checking office 100.00 Total disbursements \$41,971.43 Amount on hand December 1, 1906.....\$ 2,981.66 Total receipts for biennial period 49,112.36

Amount used during biennial period...... 41,971.43

Amount deposited with State Treasurer......\$52,094.02

20	BIENNIAL REPORT
	STATE GAME AND FISH COMMISSIONER-SALARY FUND.
By	appropriation for the fiscal years 1907 and 1908\$ 3,600.00
	J. M. Woodard\$ 300.00
	D. E. Farr
	3,600.00
	STATE GAME AND FISH COMMISSIONER-TRAVELING EXPENSE.
Bv	appropriation for the fiscal years 1907 and 1908\$ 1,200.00
	D. E. Farr
	Balance
	DEPUTY STATE GAME AND FISH COMMISSIONER-SALARY FUND.
By	appropriation for fiscal years 1907 and 1908\$ 3,000.00
То	C. W. Lake 2,458.33
	이는 것 같은 것 같은 것을 것을 것 같은 것이다. 그 것을 없는 것
	Balance\$ 541.67
	DEPUTY STATE GAME AND FISH COMMISSIONER-TRAVELING
	EXPENSE.
By	appropriation for the fiscal years 1907 and 1908\$ 800.00
то	C. W. Lake 582.30
	Balance \$ 217.70
	CLERK AND STENOGRAPHER-SALARY FUND.
	7 appropriation for fiscal years 1907 and 1908\$ 2,000.00
То	P. R. L. Spargur 2,000.00
	GENERAL SUPERINTENDENT STATE FISH HATCHERIES-
	SALARY FUND.
By	y appropriation for fiscal years 1907 and 1908\$ 2,400.00
То	W: S. Kincaid\$ 2,400.00
	GENERAL SUPERINTENDENT STATE FISH HATCHERIES-
	TRAVELING EXPENSE.
By	appropriation for fiscal years 1907 and 1908\$ 800.00
то	W. S. Kincaid
	방방법 2011년 11년 11일 - 11
	Balance \$ 7.84
	SUPERINTENDENT DENVER HATCHERY-SALARY FUND.
By	7 appropriation for fiscal years 1907 and 1908\$ 2,400.00
	G. H. Thomson
, То	S. E. Land 1,638.70
	· · · · · · · · · · · · · · · · · · ·
	Total\$ 2,400.00

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GAME AND FISH COL	MMISSIONER OF	F COLORADO.
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	MAINTENANCE DENVER HATCHERY.	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	To maintenance 1,797.77	
	Balance	\$ 2.23
	SUPERINTENDENT GUNNISON HATCHERY-SALARY FUNI	D.
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	To S. E. Land\$ 327.50	
	To W. H. Corum 1,472.50	
	Total \$ 1,800.00	
	MAINTENANCE GUNNISON HATCHERY.	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	To maintenance	
	Overdrawn	\$ 4.98
	SUPERINTENDENT DURANGO HATCHERY-SALARY FUNI).
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	To L. S. Barnes 1,800.00	
	MAINTENANCE DURANGO HATCHERY.	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	To maintenance 1,785.73	
	Balance	14.27
	SUPERINTENDENT EMERALD LAKES-SALARY FUND.	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	To John F. Gamsby 1,800.00	
	MAINTENANCE EMERALD LAKES.	
	MAINTENANCE EMERALD LAKES. By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00	1.56
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	
1	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	JND.
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	JND.
	By appropriation for fiscal years 1907 and 1908\$ 1,800.00 To maintenance	JND.

22 BIENNIAL REPORT	
SUPERINTENDENT GLENWOOD HATCHERY-SALARY	FUND.
By appropriation for fiscal years 1907 and 1908	800.00
To H. T. Dawson 1,	800.00
MAINTENANCE GLENWOOD HATCHERY.	
By appropriation for fiscal years 1907 and 1908\$ 1,	800.00
To maintenance 1,	799.56
Balance	\$.44
SUPERINTENDENT GRAND COUNTY HATCHERY-SALA	RY FUND.
By appropriation for fiscal years 1907 and 1908\$ 1,	800.00
To R. L. Huntsman\$ 50.00	
To R. M. Light 75.00	
To Chas. Dowdell 1,462.50	
	587.50
Balance	\$ 212.50
MAINTENANCE GRAND COUNTY HATCHERY.	
By appropriation for fiscal years 1907 and 1908	800.00
To maintenance	
Balance	\$ 119.80
SUPERINTENDENT DEL NORTE HATCHERY-SALARY	FUND.
By appropriation for fiscal years 1907 and 1908	
To Loren Bassett	
Balance	\$ 787.50
MAINTENANCE DEL NORTE HATCHERY.	
By appropriation for fiscal years 1907 and 1908\$ 1,	800.00
	760.59
Balance	\$ 39.41
FOR PURCHASING A SITE, ERECTING AND STOCKING HAT	CHERY AND
BUILDING OF SUPERINTENDENT'S RESIDENCE AT DE	L NORTE.
By appropriation for fiscal years 1907 and 1908\$ 5,	000.00
Used for this purpose 5,	000.00

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GAME	AND	FISH	COMMISSIONER	OF	COLORADO.	
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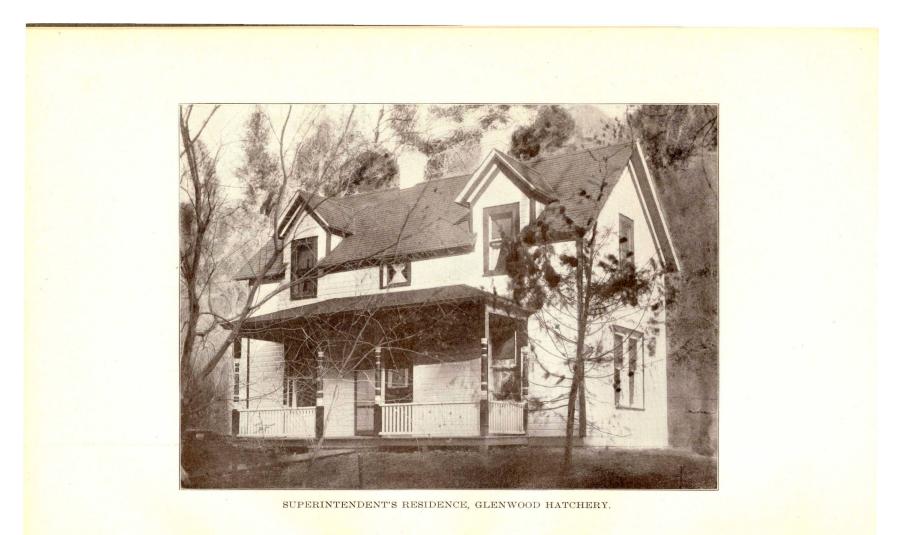
23

By appropriation for fiscal years 1907 and 1908\$	500.00
Used for this purpose	499.00
Balance	1.00

BUILDING FISH PONDS.

By appropriation for fiscal years 1907 and 1908\$	600.00		
Used for this purpose	599.25		
Balance		\$.75
FOR ADDITIONAL IMPROVEMENTS GRAND COUNTY E	IATCH	ER	Y.
By appropriation for fiscal years 1907 and 1908\$	1,000.00		
Used for this purpose	995.89		
Balance		\$	4.11
FOR ERECTING SUPERINTENDENT'S RESIDENCE-GI	LENWO	OD	
HATCHERY.			
By appropriation for fiscal years 1907 and 1908\$	1,000.00		
Used for this purpose	994.65		
Balance		\$	5.35
FOR CONSTRUCTION OF PIPE LINE AND IMPROVE	MENT	s—	
ROUTT COUNTY HATCHERY.			
ROUTT COUNTY HATCHERY. By appropriation for fiscal years 1907 and 1908\$	1,000.00		
By appropriation for fiscal years 1907 and 1908\$		\$	27.86
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose	972.14	\$	27.86
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose Balance	972.14	\$	27.86
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose Balance GATHERING SPAWN FOR ALL HATCHERIES	972.14 972.04 972.14	\$	27.86
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose Balance GATHERING SPAWN FOR ALL HATCHERIES By appropriation for fiscal years 1907 and 1908\$	972.14 972.04 972.14	\$	27.86
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose Balance GATHERING SPAWN FOR ALL HATCHERIES By appropriation for fiscal years 1907 and 1908\$ To expense collecting and gathering spawn	972.14 5. 2,000.00 1,990.92		
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose Balance GATHERING SPAWN FOR ALL HATCHERIES By appropriation for fiscal years 1907 and 1908\$ To expense collecting and gathering spawn Balance	972.14 3. 2,000.00 1,990.92 ID.		
By appropriation for fiscal years 1907 and 1908\$ Used for this purpose Balance GATHERING SPAWN FOR ALL HATCHERIES By appropriation for fiscal years 1907 and 1908 To expense collecting and gathering spawn Balance DISTRIBUTION OF OVA AND YOUNG FRY FUN	972.14 3. 2,000.00 1,990.92 ID.		

24 BIENNIAL REPORT			
FOREST AND GAME WARDENS-SALARY FUN	D.		
By appropriation for fiscal years 1907 and 1908\$	9,000.00		
To Salaries-Five chief game wardens	8,987.00		
1987년 1987년 1987년 1987년 1987년 1988년 198 1987년 1987년 1988년 1988			
Balance		\$	13.00
TRAVELING EXPENSES-GAME WARDENS.			
By appropriation for fiscal years 1907 and 1908\$	3,000.00		
To traveling expense, five chief game wardens	2,958.20		
Balance		\$	41.80
SPECIAL GAME WARDEN-SALARY FUND.			
By appropriation for fiscal years 1907 and 1908\$	2,400,00		
To U. G. Purinton\$ 450.00	_, 100.00		
To J. F. Engel			
10 5. F. Enger			
\$	2,400.00		
SPECIAL GAME WARDEN-TRAVELING EXPENSE	FUND		
By appropriation for fiscal years 1907 and 1908\$			
To U. G. Purinton\$ 85.95			
To J. F. Engel			
10 J. F. Engel 409.10			
	E01 70		
\$	581.70		
	581.70	æ	10.00
\$ Balance	581.70	\$	18.30
	581.70	\$	18.30
	581.70	\$	18.30
	581.70	\$	18.30
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	581.70	54	18.30
	581.70	\$	18.30
	581.70	\$	18.30
	581.70	\$	18.30
	581.70	\$	18.30
	581.70	\$	18.30
	581.70	\$	18.30



Fishing is a sport which is being followed more and more as the years go by until at the present time vast numbers of fish are caught out of our streams and lakes during the course of the open season. Unlike game, fish that have been taken can be replaced and our streams replenished to a certain extent through artificial propagation. It has been my intention always to put back into the streams more fish than have been taken out in order that the streams may become better stocked; consequently the matter of operating the fish hatcheries and distributing the fish has become a very important branch of the Game and Fish Department. The State has altogether seven well equipped fish hatcheries, located at different points from which are hatched and distributed three varieties of trout, namely: Eastern Brook, Rainbow and Natives. These, with a few lake trout, are the only varieties handled by the State and are practically the only fish found within our streams, except a variety commonly called suckers. There are, however, within the State numerous private lakes which have been licensed and into which the proprietors have placed other varieties of fish than trout and which afford good sport for those who care for that kind of fishing. These fish are owned and controlled by the persons holding the licenses, and consequently the public is not permitted to fish in these lakes except by consent of the owner. As the streams of our State are so well adapted to trout and as fly fishing is generally considered the best sport of all the various kinds of fishing it seems to me that the State will do well to give special attention in the future, as it has in the past, to the raising and stocking of the streams with trout. Colorado has become more famous as a trout fishing State than anything else in the way of sport.

This department is now conducting a systematic manner of replenishing the streams with young trout through the various hatcheries, which it now maintains and operates; however, I hardly think any more hatcheries would be beneficial, but believe with larger hatcheries and better facilities more could be accomplished along this line. One great difficulty in obtaining best results at our fish hatcheries is in getting experienced fish men to handle the hatcheries and being able to fill them with eggs. If the hatcheries were fewer in number and experienced and competent men kept in charge of same they could handle a greater number of eggs and would be able to distribute more fish at less expense than by having more hatcheries, as we are compelled to have helpers at most all the hatcheries the year around, and the Superintendent and helper can handle two million eggs in one hatchery cheaper than could if they were placed in two hatcheries. The most serious difficulty in establishing a hatchery is to find a site where

proper water supply can be had. Such a water supply does not now exist at all of our hatcheries controlled by the State and consequently there are seasons of the year when these hatcheries cannot be used to advantage. Rather than recommend that there be more fish hatcheries established in the future I would recommend a larger appropriation for maintaining those we already have, and believe that the amount appropriated for maintaining and operating the fish hatcheries should be in one lump sum and the Commissioner be allowed to draw on this amount for use of each hatchery as he might see fit, as I believe that system would produce better results in stocking the streams.

The work of stocking the streams has become very well systematized under the supervision of a General Superintendent and all the means of carrying on the work are facilitated so that no useless work is done, or unnecessary expense incurred. In addition to the field stations already established at Emerald Lakes, Marvine and Trapper's Lake, I have endeavored to establish field stations for the purpose of taking spawn in other parts of the State so as to enable the State to supply our hatcheries with spawn and do away with the expense of purchasing eggs from the east. Consequently I have established a station at Russell's Lake, near Trinidad, and one at Mancos, in the southwest part of the State, and one near Colorado Springs; thereby getting eggs from our own waters, as I believe the fish hatched from our own native fish are better adapted to the waters of Colorado than those purchased from the east, and this will save considerable trouble and expense and consequent loss in long transportation of the eggs. We have stocked these field stations with fish and within a year or two more expect to be able to take spawn from such places.

When the spawn is placed in the hatcheries it receives the closest attention during the period of time that it takes to hatch, which depends upon the temperature of the water and location of the hatchery; when the spawn so hatched produces fry it must be given constant attention until such time as they are ready for shipment and placing in the streams, consequently fish raising has become quite an extensive business, and each succeeding year a larger number of fish is placed within our streams than the last preceding year. During the year 1908 there were planted by the State in the streams of Colorado a total of almost ten million trout fry, which is almost double the number planted in the streams during the year 1907. This is accounted for principally by being able to get more eggs to fill our hatcheries, and having purchased about three million brook trout eggs from the east during the winter of 1907 and 1908. I have also contracted for two million eggs from the east this year, which will be delivered the early part of the coming year. With this marked increase in the number of fry used for stocking the streams it is evident that if the work can be

kept up to the standard, which it has now attained, a few years will find our fishing grounds abounding in enough trout for every one who cares to go after them.

In this connection I might also mention the fact that I think some legislation is needed in regard to the matter of allowing our fish to go out into irrigating ditches of the State and die. This is one of the great drawbacks in being able to keep our streams stocked with fish; thousands upon thousands of the fish go out into the irrigating ditches and finally land upon the fields and are lost. Some action should be taken by our Legislature to prevent this, and I believe that a law compelling the owners of irrigating ditches taken out from streams containing trout to screen their head gates or put in paddle wheels would have a good, wholesome effect toward keeping our streams stocked with fish.

We receive a great many complaints from people in regard to this matter, asking the department to take action to prevent the owners from allowing the fish to go out into the irrigating ditches and die, but as our law now stands the department is powerless to act in the matter, and we simply have to answer these people making complaints that we have no authority to interfere with any man's water right. I have, however, refused to plant fish in streams where the people would not take proper care of them, and where we have known that they would be allowed to go out into the ditches and die, but this matter is hard to regulate in this manner, and these people complain of not getting their proper quota of fish from the State hatcheries.

For the purpose of increasing the revenue of this department and thus placing it more nearly upon a self-sustaining basis, it seems advisable to me that a license should be required to fish, as well as hunt. I am inclined to think that the public would not object to paying a nominal fee for the right to fish, when they realize that by so doing more revenue will be created, and consequently better protection afforded for the game and fish. I believe that a license should be required, which would include both hunting and fishing, to be issued to residents of Colorado, and that the fee therefor should be one dollar. Such license to remain practically the same, so far as the taking of game is concerned, as the hunting license now provided by law, and in addition that it permit the taking of fish at the time and in the manner and quantity as now provided by law. It is estimated that about three times as many persons go fishing as go hunting. If this is correct, this would afford an income to the department greatly in excess of the expenditures. The appropriation used by the department for the past biennial period is approximately \$60,000.00. During the year 1908 over 37,000 resident hunting licenses were issued, and if three times that number should be issued to the persons desiring to fish, an additional revenue amounting to about \$60,000.00 would be provided for carrying on the work of the department. This would make the appropriations by the

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Legislature entirely unnecessary, and with a change in the law so that the expenses of the department would be met out of the game cash fund the department could pay all of its expenses out of the receipts of the office.

It seems to me at this time it might be well to mention the matter of change in the open season on trout. Each year this office is bombarded with letters, telegrams, telephone calls and personal requests as to whether the public will be allowed to fish on Decoration Day, as this day falls two days before the regular fishing season opens. The month of May, as a rule, affords ideal weather, and as the people of all classes are anxious to get out into the woods and along the streams, after having been housed up through the winter months, it seems to me that the season for taking of trout might well be changed and open fifteen days earlier than it does at the present time, and close just that much earlier in the fall. I do not believe that much harm will be done to the fish by this change in the law, as the waters are generally high at this time of the year, and very few fish will be caught, but it will give the people a chance to get out in the spring, when the privilege is appreciated a great deal more than it is during the latter part of November, and this office will be relieved of this annoyance. This would give six months for fishing just the same as at the present time.

The following figures will show the distribution of trout for the period of two years last past:

DISTRIBUTION OF YOUNG TROUT DURING THE YEAR 1907.

From Denver Hatchery-

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Brook trout-fingerlings	512,000
Rainbow trout-fingerlings	279,000
Native trout-fry	323,500

From Durango Hatchery-	
Brook trout-fingerlings	928,000
Rainbow trout-fingerlings	35,000
Native trout-fry	392,500

1,355,500

1,114,500

F	com Glenwood Hatchery-	
	Brook trout-fingerlings	143,000
	Rainbow trout-fingerlings	160,000
	Native trout-fry	990,000

1,293,000

From Gunnison Hatchery-	
Brook trout-fingerlings	242,000
Rainbow trout-fingerlings	140,000
Native trout-fry	65,000

	447,000
From Routt County Hatchery-	
Native trout-fry	466,000
From Grand County Hatchery-	
Native trout-fry	317,000
From Emerald Lakes Hatchery-	
Native trout-fry	250,000
Total number of brook trout-fingerlings	1,825,000
Total number of rainbow trout-fingerlings	614,000
Total number of native trout-fry	2,804,000
Grand total	5,243,000

DISTRIBUTION OF YOUNG TROUT DURING THE YEAR 1908.

From Denver Hatchery-	
Brook trout-fingerlings	559,000
Rainbow trout—fingerlings	338,000
Lake trout-fingerlings	50,000
Native trout-fry	536,000

From Durango Hatchery-	
Brook trout-fingerlings1	,192,000
Rainbow trout-fingerlings	190,000
Native trout-fry	722,000

2,104,000

1,483,000

From Glenwood Hatchery-	
Brook trout-fingerlings	
Native trout-fry1,244,000	
	2,321,000

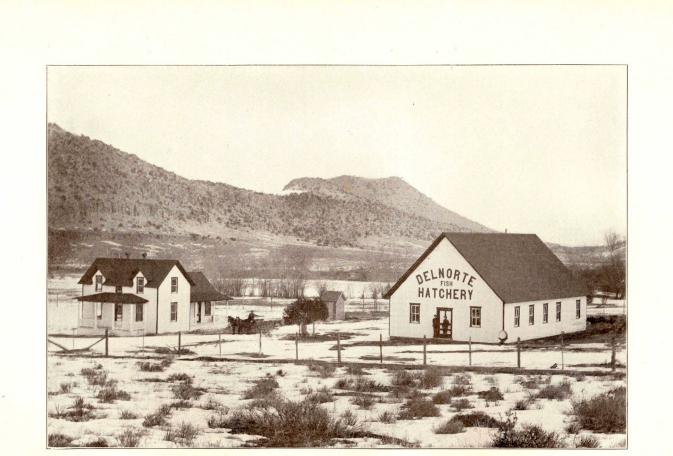
From Gunnison Hatchery-	
Brook trout-fingerlings	345,000
Rainbow trout-fingerlings	470,000
Native trout-fry	170,000

985,000

From Del Norte Hatchery-	
Brook trout-fingerlings	
Native trout-fry 200,000	
	381,000
From Grand County Hatchery-	
Rainbow trout-fingerlings 323,000	
Native trout—fry 244,000	
	567,000
From Emerald Lakes Hatchery-	
Native trout-fry	80,000
From Estes Park Hatchery-	
Brook trout-fingerlings 367,500	
Native trout—fry 80,000	
1	447,500
From Marvine Hatchery-	
Native trout-fry	428,000
From Routt County Hatchery-	
Native trout-fry	427,000
From Grand Mesa Lake and Power Company-	
Native trout-fry	300,000
Total number of brook trout—fingerlings	3,721,500
Total number of rainbow trout-fingerlings	1,311,000
Total number of native trout-fry	4,431,000
Total number of lake trout-fingerlings	50,000
Grand total for year 1908	9,513,500
Grand total for year 1907	5,243,000
Grand total for the biennial period	14,756,500

During the present administration a new hatchery and Superintendent's residence have been constructed at Del Norte and a Superintendent's residence has been constructed at the Glenwood hatchery and very material improvements have been made on the Superintendent's residence and grounds at Durango.

The last Legislature passed an act appropriating \$5,000.00 for purchasing site, erecting hatchery and Superintendent's residence at Del Norte. Immediately after I was advised by



DEL NORTE HATCHERY AND RESIDENCE.

the State Auditor that the money was available under this appropriation I began making arrangements for the work of constructing this hatchery and the building of the Superintendent's residence. On November 21st, 1907, when the hatchery was practically completed, through an accident caused by an explosion the hatchery took fire and was burned to the ground. The accident was caused by an explosion of black asphaltum paint that was being used in preparing it for painting fish trays to be used in the hatchery. Immediately after the explosion the building caught fire and spread the flames over the entire work room of the hatchery in an instant. The man in charge of the work was badly burned about the hands and face, but succeeded in escaping from the fire. The hatchery being situated about four miles from town, no water could be applied effectively and the building was destroyed. However, the building had been insured and though the insurance company made a thorough investigation into the cause of the fire, it finally decided that the claim for the insurance was a meritorious one and paid the amount of the insurance on the building, so that the State practically lost nothing by the destruction of the hatchery. In the meantime, however, and before the insurance was paid, I proceeded to reconstruct the hatchery building, and to do this it was necessary to draw on the Game Cash Fund to the extent of about \$2,000.00; subsequently when the insurance money was paid I reimbursed the game cash fund by the amount received from the insurance company, leaving \$576.22 of money taken from the Game Cash Fund for the reconstruction of the hatchery, which was not replaced. As the hatchery, however, was improved over the original plans I consider the additional money was well spent. Altogether the matter of purchasing a site, erecting the hatchery and the Superintendent's residence cost \$576.22 more than the appropriation. But out of this amount I purchased a good team of horses, harness and wagon and was enabled to make the improvements over the original plan spoken of and placed the hatchery in operation for the season of 1908.

In making the appropriation for building a hatchery at Glenwood Springs no provision was made by that Legislature for Superintendent's residence, consequently our last Legislature made an appropriation of \$1,000.00 for the building of a Superintendent's residence at this point, and immediately after this money was available I proceeded to the construction of same. For a little less than the amount appropriated I was able to construct a very neat and substantial residence and it has been occupied by the Superintendent for about one year.

The last Legislature also appropriated \$500.00 for improvements to be made at Durango hatchery. This amount was expended in building porches for the Superintendent's residence, beautifying the grounds and improving the roadway to the hatchery.

In addition to those mentioned, the Legislature also appropriated \$1,000.00 for raising the floor, constructing drains and pipe line at Grand County hatchery; \$1,000.00 for constructing pipe line at the Routt County hatchery, and \$600.00 for building fish ponds. When the money under these appropriations became available the work provided for by each was begun and completed as rapidly as possible. At the Grand County hatchery the floor was raised about 15 inches and about 1,400 feet of old pipe line connecting the water supply to the hatchery was removed and replaced with new pipe line and about 1,500 feet of new pipe line added.

At Routt County hatchery new pipe line was constructed for the purpose of obtaining a better water supply for the hatchery. Nursery ponds at Denver and Glenwood hatcheries were constructed, and to improve the condition of the water at the Denver hatchery thirteen cement wells were built and new pipe put in to replace the old system of wooden troughs. To provide for the rearing of young trout to the age of four to six months before planting in the streams ten cement nursery ponds five feet by twenty feet have been built at the Denver hatchery, and I would recommend that a system of nursery ponds be built at each of the fish hatcheries, where the spring water is of suitable temperature, to care for the young trout.

This includes all of the special appropriations made for this department and it has been my aim to comply with the strict letter of the law in carrying out the provisions of the bills and the full intention of the legislature in making the appropriations.

A private hatchery has been built at Marvine Lodge, on Marvine Creek, in Rio Blanco County; also one at Estes Park, in Larimer County, for the purpose of stocking the streams in the immediate neighborhood of those places. These hatcheries have been furnished with spawn by the State and Government and the fish distributed from same have been planted in the public streams of the State in the neighborhood of those hatcheries.

RECOMMENDATIONS.

The changes which I am about to suggest will, in my opinion, lessen the complications of our game laws and close a number of loop holes through which violators are prone to crawl.

In order to have an abundance of game and fish within the boundaries of our State, it must be protected, and in order to thoroughly protect the same we must devise and enact into laws provisions which will procure a fund of sufficient amount to enable the department to place an adequate number of efficient and salaried officers in the field.

BEAVER.

In my opinion, the law relating to the killing of beaver should be amended. Beaver are the most valuable fur-bearing animals that we have in the State to-day, and are one of the finest specimens of game. In many places throughout the State beaver are often seen and they furnish one of the greatest attractions in the game line to tourists and persons who visit Colorado. If these animals are worth protecting at all, they are worth protecting in an effective manner in order that they may not be exterminated. There have been instances during the last year or two where beaver have been killed, but the law in regard to them is so loose that convictions for the killing were impossible. I have made a number of useless attempts to convict parties for violating the law in this regard, but the wording of the statutes is so loose and its meaning so obscure that it is hard to convince the courts of its true meaning, consequently I would recommend that section 1 division "B" of the game law be so amended that no beaver whatever should be killed or otherwise taken, except upon a permit granted by the Game and Fish Commissioner, when in his discretion he is of the opinion that a permit is necessary in order to protect the property of the applicant. Said permit being upon such conditions as the Game and Fish Commissioner may see fit to impose. Further, that no beaver be allowed to be killed or taken unless they are doing actual damage or injury to the persons who seek to have the permit issued.

DEER.

For reasons heretofore given, it seems to me that sub-division 1 of section 7 of division "B," relating to the open season on deer, should be so amended that one person could only take one deer with horns and that the open season for said killing should be from September 20 to September 30.

As our law now reads the season closes on grouse the same day it opens on deer. In order to save our deer and not tempt people to violate the law by killing grouse for camp meat when hunting for deer, parties should be allowed to kill grouse during the open season on deer. But there will be no need to change the open season on grouse if the season is changed on deer, as the open season on grouse is now from August 20 to October 1.

FISHING SEASON.

I am of the opinion, for reasons heretofore given, that subdivision 7 of section 7 of division "B" should be so amended that the open season on trout be from May 15 to November 15 of each year. This, I think, would meet the objections urged against the present open season.

HUNTING LICENSES.

I would recommend that section 1 of division "G" be so amended that any person who goes hunting should be compelled to take out a general hunting license. This could be done by simply striking out the words, "any game protected by law," and would consequently do away with the excuse so often presented by the hunter when found in the field without a license, that he was not hunting protected game. Instances are very numerous indeed where the hunter goes out to kill whatever he can find and take his chances on having to show his hunting license. If he is accosted by a game warden and has not yet killed any protected game he simply says that he was hunting for rabbits or other game which are not protected, when, as a matter of fact, he was hunting for one class of game as well as the other.

In this connection I desire to again call your attention to my former recommendations, that one license include both hunting and fishing, and that any person who desires to either hunt or fish should be required to take out a general hunting and fishing license at the same cost as now provided for a hunting license.

As the law now stands the fee charged for a non-resident hunting license is twenty-five dollars, and in addition the law provides than an export fee of five dollars shall be charged the non-resident hunter for shipping out of the State the deer that he may have killed within the State. It seems to me that it would be better to impose a fee of fifteen dollars for a non-resident general hunting license, and that the license itself protect the holder thereof in shipping out of the State any game he may have taken lawfully under the license without any additional charge therefor.

FINES.

Under section 5 of division "L" a person convicted for violating the game law and fined therefor is allowed five dollars per day for serving out his fine in jail, in case he does not see fit to pay the amount. This should be changed so that the law in this respect will conform to our general statutes, and the violator be allowed only two dollars per day for serving out a fine in jail. As it is, the ordinary violator can well afford to spend the time in jail rather than pay the amount of his fine imposed. Two dollars per day is a sufficient allowance for a violator's time, when he elects to go to jail rather than pay his fine.

BOUNTIES.

From observations made by myself on numerous trips throughout the State I am convinced that a large amount of



young game is killed every season by the natural enemies of the game animal. The mountain lion, wild cat, eagle, wolf, coyote and all of that class of animals are naturally inclined to prey upon the young of the more defenseless variety, such as elk, deer, mountain sheep and antelope. I have seen large numbers of does, which evidently had given birth to their young, but the fawns were nowhere in sight and evidently had been lost, and I am led to believe in the majority of these cases that while the mother deer had been away from the fawns for a short time, or had perhaps lost its fawns altogether, the latter had been destroyed by predatory animals spoken of. Not only do these animals destroy the young of game, but of domestic animals as well, as every stock and sheep man in the State can testify to. I therefore most heartily recommend that the Legislature make an appropriation sufficiently large to provide a reasonable bounty upon all such animals of destructive instinct. In this way great good can be accomplished, both to the state at large by saving its game and also to the individual stock raiser and rancher. I believe that a provision of the law providing for such bounty would meet with the general approval of a great majority of the people throughout the entire State.

Although this department has had a great many obstacles to overcome and a great deal to contend with in one way and another, it has been assisted in different ways, and for this assistance I desire at this time to express my hearty thanks. Probably the most material assistance came from the railroads, who have been ready at any and all times to do whatever they were called on to do. I have tried to work in harmony with all of the railroads of the State for our own mutual interest and my relations with them have been most pleasant indeed. They have furnished the department with transportation for its different members and for transportation of fish spawn and fish fry over the State. As the distribution of fish must necessarily go into the streams that are visited by the largest number of fishermen it follows that the distribution must be made along the various railroad lines in order to be reached by the people; consequently I have consulted the railroads in regard to shipments to be made along their respective lines and have tried to conform with their wishes wherever it could be consistently done, and this for no other reason than for the advancement of our mutual interests. I desire to make special mention of the Colorado & Southern, Denver & Rio Grande, Colorado Midland, Denver, Northwestern & Pacific and the Union Pacific, and would if space would permit mention every railroad in the State as having done what it could in assisting in carrying on the operations of our fish department.

Amount of money necessary to appropriate to carry or different branches of the Game and Fish Department for biennial period, December 1st, 1908, to November 30th, 197	r the
Game and Fish Commissioner, salary\$	
Game and Fish Commissioner, traveling expense	1,200.00
Deputy Game and Fish Commissioner, salary	3,000.00
Deputy Game and Fish Commissioner, traveling expense	800.00
Chief Clerk, salary	2,400.00
Game and Fish Wardens, salaries (5)	9,000.00
Game and Fish Wardens, traveling expenses (5)	3,000.00
Special Game Warden, salary (1)	2,400.00
Special Game Warden, traveling expense (1)	600.00
Superintendent State Fish Hatcheries, salary	2,400.00
Seven Superintendents, Durango, Emerald Lakes, Gunnison, Glenwood	
Springs, Del Norte, Sulphur Springs and Steamboat Springs 1	2,600.00
Superintendent Denver Hatchery	2,400.00
For Maintenance Eight Hatcheries 1	4,400.00
For Distributing Ova and Young Fry	800.00
Gathering Spawn for all Hatcheries	2,000.00

Respectfully submitted,

DAVID E. FARR, State Game and Fish Commissioner.