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Biennial Report
OF THE
State Game and Fish
Commissioner

OF THE
State of Colorado
For the Years 1909 and 1910

THOMAS J. HOLLAND, Commissioner
JAMES A. SHINN, Deputy Commissioner



DENVER, COLORADO
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS
1910



STATE CAPITOL BUILDING, DENVER.

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STATE OF COLORADO.
DEPARTMENT OF GAME AND FISH.

Thomas J. Holland, Denver,
Commissioner

James A. Shinn, Denver,
Deputy Commissioner

R. L. Spargur, Denver,
Chief Clerk

Wm. P. Hummel, Denver,
Special Chief Game Warden

Joseph H. Whiteley, Creede,
Chief Game Warden, First District

Frank W. Childs, Cedaredge,
Chief Game Warden, Second District

Chas. L. Gilmer, Glenwood Springs,
Chief Game Warden, Third District

James M. Campbell, Steamboat Springs,
Chief Game Warden, Fourth District

Joseph L. Gray, Fort Collins,
Chief Game Warden, Fifth District

W. E. Patrick, Durango,
General Superintendent State Fish Hatcheries

Chas. A. Ribbing, Denver,
Superintendent Denver Hatchery

T. J. Thompson, Gunnison,
Superintendent Gunnison Hatchery

Thomas L. Hamer, Durango,
Superintendent La Plata Hatchery

John P. Bengard, Del Norte,
Superintendent Del Norte Hatchery

Samuel E. Thompson, Glenwood Springs
Superintendent Glenwood Hatchery

Logan B. Crawford, Steamboat Springs
Superintendent Routt County Hatchery

Chas. Dowdell, Sulphur Springs,
Superintendent Grand County Hatchery

John F. Gamsby, Durango,
Superintendent Emerald Lakes Hatchery

LETTER OF TRANSMITTAL.

Department of Game and Fish.

Denver, Colorado, December 1, 1910.

To His Excellency,

JOHN F. SHAFROTH,

Governor of the State of Colorado.

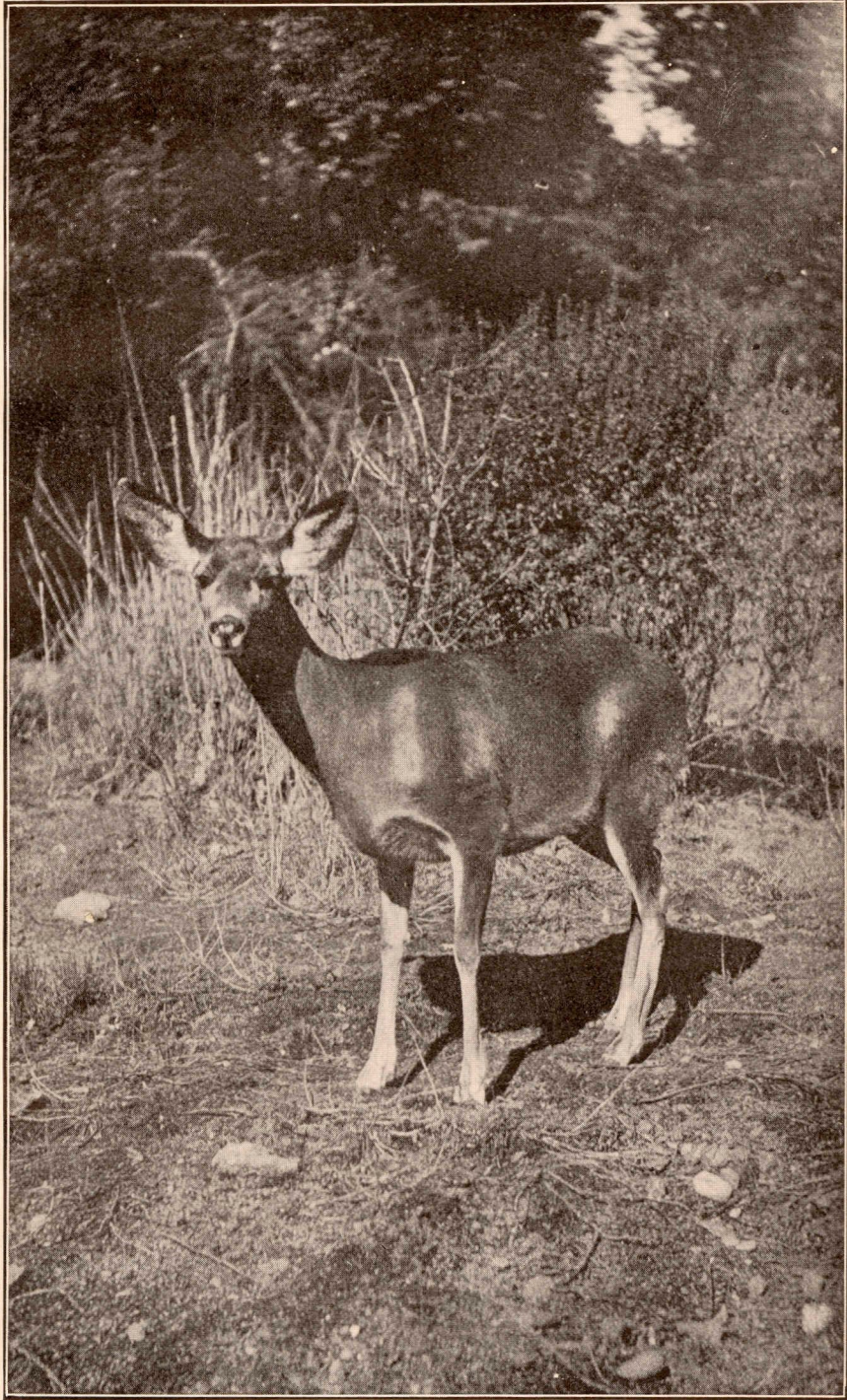
Dear Sir—I hand you herewith my biennial report as State Game and Fish Commissioner for the years 1909 and 1910.

You are aware that during the first four months of this period the department was conducted by my immediate predecessor, Mr. David E. Farr, as I did not take charge of the department until April 7, 1909.

Since assuming the duties of this office I have endeavored to give a business-like administration, and hope that my efforts have met with your approval.

Very truly yours,

THOMAS J. HOLLAND,
Commissioner.



A FEMALE DEER

BIENNIAL REPORT
OF THE
State Game and Fish Commissioner

When I was appointed State Game and Fish Commissioner of the great State of Colorado I realized that I was assuming no small task in conducting the affairs of this department and performing the various duties imposed by law in such a manner as would do justice to myself and produce the greatest benefit to the State at large. The work was not entirely new to me, particularly so far as the propagation of fish is concerned, as I had already, before entering upon the duties of my present office, had four years' experience as general superintendent of State fish hatcheries. With this advantage, I feel that I was qualified to enter upon the work, particularly that part of the work as pertains to fish matters.

I have tried, however, during my tenure of office to neglect none of the details incident thereto, and have given my undivided attention at all times to all matters relating to game and fish propagation and protection. The department having assumed the proportions that it has, the duties devolving upon this office have become as varied as they are in perhaps any other department of State. It has been no easy task to always do the right thing, but I trust that my record will speak for itself, and that, if mistakes have been made, it will be understood they were not made through any lack of attention or desire to do right on my part, but rather through my inability to give personal attention to details on account of the great number thereof, and the consequent necessity of trusting others to do a part of the work.

It seems to me that people generally underestimate the importance of the Game and Fish Department of the State and the value of our game and fish as a resource. In a large number of the older States, where game and fish laws have been in force for a great many years, the possession of game and fish, through their protection in years gone by, has been a source of revenue to practically every class of citizens in those States. Those who do not believe in protection through sentiment certainly must appreciate the value thereof from a financial viewpoint, when they stop to think of what it means in dollars and cents. I am one that be-

lieves that a man can be reached through his pocketbook when he can not be reached in any other way; and when our people are made to see that, if our game is protected and our streams are well stocked with fish, tourists and sportsmen in large numbers will be attracted to our State thereby, and everyone with whom they come in contact will be benefitted to some extent, at least in a financial way. To show to what extent this particular kind of resource has developed in the Eastern States the game commissioner of the State of Maine has made the astounding statement that at the present time over 350,000 persons annually visit the Maine woods and lakes, spending between \$18,000,000 and \$20,000,000; that the licensed guides of that State earned during last year the princely sum of \$567,000 in wages; that no industry in the State equaled her game and fish, it outranking in importance the products of her cotton, woolen and pulp mills. Thus it can be seen that it is a business proposition to effectively protect our game and fish, in order that wanton destruction thereof may be prohibited and a substantial increase gained thereby. Not only do persons who are attracted to our State by this means spend their money during their respective trips, but many of them become investors and permanent citizens.

When all of these things are taken into consideration it seems to me that no one should complain because they are restricted in hunting and fishing, and that our Legislatures should be very liberal in making the necessary appropriations to carry on the work of the department in the proper manner. It has been well said that it is folly to have a game and fish department and enact laws for their protection, and not appropriate sufficient money with which to properly carry on the work.

While we have fairly good game and fish laws in this State, there is still room for much improvement. Legislators in every State have spent much time in trying to create a game and fish law which would please everyone. In our own State the game and fish legislation has been an important subject of discussion, occupying a large amount of valuable time at each legislative session. Laws have been biennially enacted, and just as regularly repealed at the following session. The numerous game and fish bills introduced from time to time have been almost without end, and what was done at one time very often proved unsatisfactory at a later period.

The subject seemed so complex, and the conditions to be considered were of such extreme variation, that laws agreeable to one locality were highly objectionable in another district, and it often looks as though the people in no two parts of the State could be satisfied with any general provision in the game and fish laws. My recommendations in regard to our game and fish laws will be found from time to time throughout this report.

Since the enactment of the law, in 1903, requiring a person to have a license in order to hunt in this State, considerable revenue has been derived from this source, and former administra-

tions have turned the unused portion of this revenue back into the general fund of the state at the close of each biennial period. As a business proposition, if the State expects to continue receiving this revenue from hunters, we must do something to stock our lakes and streams with fish and protect our game. I am of the opinion that it was the intention of this law when it was enacted that every dollar of this money could and should be used for this purpose.

It seems to have been the tendency heretofore to divert part of this money received from licenses for other purposes than that contemplated by the framers of the game laws and the sportsmen of the State who pay the license. It has been unjustly advocated by some persons that only a small portion of the money be used for game protection, and that the remainder be turned into the general fund for other purposes. If the proceeds of this tax are used for other purposes than game and fish protection and for the propagation of same, people will hesitate to take out a license; on account of there being no fish in our streams and no game to hunt, and the funds will not be forthcoming to either protect game or stock our streams with fish. The movement will then defeat the very object for which the game and fish laws was intended.

One of the difficulties encountered in game protection is the matter of selecting wardens. The work of a game warden is by no means an easy task, and it is not everyone that is fitted for a game warden. He has his work to perform, and he must perform it in a way that satisfies the people of the community in which he works, and he is often subject to undue criticism, and consequently ill feeling is sometimes aroused. In selecting game wardens the Commissioner should be free to select the best men for the place at all times. In the selection of deputies I have tried to secure the services of persons who were thoroughly competent, and known for their previous concern in the protection of game and fish and for their good judgment and discretion in performing their duties imposed by law.

DEER AND OTHER GAME.

Probably the best sport afforded the hunters of our State is on trips made in search of deer, it being the only large edible game animal which can now be hunted in Colorado. I think the deer are increasing, even though there were more deer killed in the State during the year 1910 than 1909. The principal reason for this was that during the open season of 1910—from October 1st to October 10th—the weather was very fine, being dry and warm for the most part. Numerous attempts have been made to estimate the number of deer in the State, but I can see no way in which a person could make an estimate that would even approximate the correct number. I should say, however, basing my judgment on close observation and careful estimate, that during the year 1909 about five hundred deer were killed in the State, and during the year 1910 in the neighborhood

of seven hundred. Conditions in this regard have been very much improved, however, since the last session of the Legislature restricting the killing of deer to bucks with horns. It was estimated that twenty-five hundred deer were killed during the open season of 1908, when people were allowed to kill does and fawns.

I believe that the open season on deer should remain as it is, and that the provision in the law restricting the killing to bucks with horns is a very wise one. I know there is a great deal of opposition to the law as it stands, and it has frequently been argued that the loss of life incident to hunting would be greatly reduced if a person were allowed to kill either a buck or a doe, because the hunter would then get his game sooner, and consequently would get out of the woods that much quicker. I fail to see the force of this argument. As long as we have hunting accidents with guns will happen, and there will be more or less loss of life. I believe, however, that this is due for the most part to indiscriminate shooting. There is too great a tendency on the part of the ordinary hunter to shoot at the first thing he sees in the way of game. Very frequently he mistakes another hunter for game, because he has not taken care to clearly distinguish the object at which he shoots before shooting. In his excitement, when he is looking for a deer, he hears a noise, sees some sort of an object, takes it for granted that it is a deer and shoots away. It is a well known fact that many hunters have been killed in this manner. If the law, on the contrary, compels the hunter to discriminate between a buck and a doe, he will then be very sure of what he is shooting at before he begins shooting. In this way the danger to other hunters is greatly lessened, because the person shooting knows that he must find out that not only the object he is shooting at is a deer, but that it is a deer of the male sex.

It has been said that a hunter will shoot at the first deer he comes to, and find out the sex afterwards; and when he finds he has made a mistake he will either take chances on taking the deer in violation of law or leave it to be destroyed. Once before, for a period of about four years, the law was as it stands to-day, and from my observation during those years and from what I have learned since I feel safe in saying that in but very few cases did a hunter shoot until he was sure of the sex. I am satisfied that this provision of the law works out very satisfactorily, and there is no question but what it does more to give our deer a chance to increase naturally than any other provision contained in our game law.

In regard to other game quadrupeds there has been no open season on them during my administration, and they have been left free to propagate naturally, and every possible protection has been thrown around them. I feel that this has been productive of a great deal of good, as there are evidences on all sides of a substantial increase in some of the larger game animals. I am firmly convinced that the elk in our State are increasing, though



COW ELK.

to what extent it is very difficult to determine. I have made every effort to protect these animals, and feel that they should be given all the protection that can be given them. If allowed to go unmolested elk will naturally increase, and it has been my constant aim to give them every opportunity to propagate and increase as rapidly as possible. In some communities where they are found I am well satisfied that the rancher is killing an elk now and then, and perhaps the hunter is doing likewise; but every case that has been brought to my knowledge has been thoroughly sifted down, and where we could secure sufficient evidence parties were prosecuted, as I have been particularly anxious to see just as great an increase in these animals as possible. Although a great many persons have requested that an open season be made on the elk, I feel that conditions are not ripe for taking such action. With a few years longer of careful protection and care it is possible that we will have the elk on such a basis that a very short season could be opened up on bulls. For the present, however, I would strongly recommend that the season remain closed, and the law stand as it is with respect to these animals.

The same condition is true largely as to mountain sheep. These animals have appeared in places within the last few years where they had not been seen nor found for a great many years prior thereto. In a number of places throughout the State mountain sheep are a very common sight, and are even seen from our railroads, and settlers in various parts of the state report seeing fair-sized bands of them very often.

There seems to be no question but what the antelope have been increasing, though, of course, to what extent it is impossible to say. They are seen repeatedly from the railroads running out of Denver, and very often come up to from within ten to twenty miles of the city of Denver. Large numbers of these animals have been seen in the eastern counties of the State, and in some cases have been somewhat destructive to crops and other property. However, I feel that this has not been to such an extent as to cause serious alarm. Being naturally very wild and timid animals, it is easy enough for the ranchers to frighten them away from their ranches where they are committing depredations, and this can be done without killing them. It has always been the history of this department that too many people are always ready to file complaints about antelope, deer, beaver and other game animals destroying their property, in the hope that the Commissioner will grant them the privilege to get out and take these animals for their own benefit. When closely questioned, in nine cases out of ten the people who are making the greatest clamor have admitted that they would rather have the animals on their property than to have them driven out of the country or exterminated entirely. To the average man there is a great deal of satisfaction and a very strong sentiment connected in being in close touch with any of the game animals which I have mentioned. To him it is a real pleasure to see in its wild state any game animal,

and this is particularly true when near his own home. I favor the continued closed season on elk, antelope and mountain sheep.

INDIANS.

In years gone by this department has had more or less trouble because of the Indians in the western part of the State making annual raids on the deer. At times this has assumed serious proportions, and trouble with the Red Men seemed imminent. I am pleased to report that during the past two years practically no difficulty has been encountered in this direction. This is due, perhaps, more than for any other reason, to the fact that I have taken hold of the situation early each year, and have succeeded in holding back the Indians until the snow falls were so heavy that they could not get into the deer country, even though they desired. I believe that if this policy is pursued, and the matter is taken in hand early enough, that less and less trouble will be encountered from the Indians in the years to come.

GAME BIRDS.

The conditions with respect to game birds have not changed much during the last two years. On some, such as the various varieties of quail, pheasants and partridges, there have been closed seasons, and I believe that these seasons ought to be kept closed. Game propagation on a large scale is a problem very difficult of solution. Attempts have been made in some of the older Eastern States to stock with different varieties of game birds after the natural supply had been practically wiped out. For instance: During the year 1903 the State of New Jersey ordered 1,500 dozen quail from the Indian Territory, and liberated all of those secured within the confines of that State. They proved to be a successful experiment, as the birds thrived and seemed to increase in numbers. It is becoming more difficult, however, to stock with birds on a large scale, on account of the laws of those States where the birds are found in large numbers now prohibiting the shipping of them out of the State. I believe that ample protection will secure better results for the future than an attempt to import different varieties of game birds that have become very scarce and liberating them in the State.

On rather a limited scale I have conducted an experiment of this kind with reference to partridges. On March 8, 1910, I purchased from Wenz & Mackensen, of Yardley, Pa., twenty-five pairs of Hungarian partridges, at a cost of \$247.40, including express, and distributed them in different parts of the State, as follows:

Two pairs were turned out below the Denver Hatchery, in Adams county; four pairs near Fort Collins, in Larimer county; two pairs near Littleton, Arapahoe county; three pairs near Golden, Jefferson county; three pairs near Boone, Pueblo county; two pairs near Hayden, Routt county; two pairs near Wootton,

Las Animas county; three pairs near Durango, La Plata county, and three pairs near Fort Morgan, Morgan county. From all reports these birds are doing well, and I regret that more can not be brought into the State.

During the year 1909 our success in propagating pheasants at the Denver Hatchery was rather limited, but in the spring of 1910 I purchased three dozen pheasant hens from Oregon for the purpose of introducing new blood into our State, and we succeeded in raising about two hundred young birds, and have distributed about seventy-five of them in different parts of the State, having the balance on hand, which will be sent out in the early spring. A great deal has been done in the interest of pheasants, both by this department and by private interests throughout the State. It is a matter of common occurrence that persons coming into the office report having seen pheasants in various numbers in all directions out of Denver. In fact, it is safe to say that thousands of these birds are at large over the State, and in some places they are much more plentiful than others. For a number of years now the department has been liberating pheasants, and as they are a very hardy bird and adapted to our climate and thrive on the food to be found here, they have done exceedingly well. I hope some day to see pheasants in the State in sufficiently large quantities that the season may be opened up on them and they may be hunted, the same as any other game birds. I hardly feel justified in recommending an open season at the present time. Although these birds have become plentiful, an open season right at this time would undoubtedly retard their progress; and as they have never been hunted in the State they have become very tame, and if the season was opened up on them they could be so easily killed and they would be so much sought after that it is quite likely the great majority of them would be killed off in the first few days of an open season. If we continue with the progress we have made with these birds, within the next few years I believe an open season for a limited time can be safely recommended.

In connection with the taking and killing of birds there are some places in the game laws that may be materially strengthened. This is true of the provision providing for the number of birds that may be in possession at any one time. The law is not clear as it stands as to whether the number fixed shall apply to all birds in the aggregate or to all birds of any particular kind. This has caused no end of trouble to this department, and I think that the law, by all means, should be made so clear that there can be no possible misunderstanding in regard thereto.

Then, in regard to open seasons, I would advocate that the season for plover, curlew, snipe and other wading, marsh and shore birds be made the same as that for ducks and geese. A great many persons have been found hunting ducks out of season, and when apprehended they would contend that they were hunting the other birds mentioned if it fell within the season when these

birds could be hunted. I believe that by making the open seasons the same for all of these a more effectual protection to each of the different birds mentioned could be had.

I would recommend that the season on ducks, geese and all other wading, marsh and shore birds, close on March 31st instead of April 15th, as the law now stands, thereby giving these birds a better chance to propagate in the spring.

NON-GAME BIRDS.

Colorado has an endless variety of birds which may all be put in one classification, and that is "non-game." This includes all the varieties of songsters, insectivorous birds and others not protected by the game laws. We have a law that applies to just this class of birds, and I believe that it should be rigidly enforced. The Game and Fish Commissioner is given the power to issue permits to any person over eighteen years of age recommended by an incorporated society of natural history to take non-game birds. The result is that applications by all kinds of people, having different objects in view, are made for such permits. I do not believe in the indiscriminate issuing of these permits. It seems to me that the granting of permits, as contemplated in the law, should be done away with, and that the privilege of taking this kind of birds for scientific or other purposes should be limited to the State Agricultural College and other State institutions.

The value of these birds is greatly underestimated. Many of them are valuable for their plumage; but I do not believe in taking them, and thus decreasing their kind, for the purpose of ornamenting women's hats and the like. The main value, however, of the birds lies in the protection they are to crops, trees, etc., in destroying insects found in them. From reports made by the Department of Agriculture of the United States I find that very careful estimate shows that these birds are worth millions of dollars every year to the farmers of the United States in destroying insects which infest the various kinds of crops, trees, garden truck, and all vegetation.

FINES AND CONVICTIONS.

During the past two years a great many arrests have been made for violations of the game and fish laws. These have been followed up in every instance, and in most cases convictions have been secured. It has not always been an easy matter to follow up the information secured at the office, make arrests and have the cases tried, as violations of the game law occur very frequently in the most remote corners of the State and under conditions which make it very hard to prosecute. Very often local sentiment is opposed to any action on the part of the department, and occasionally some difficulty is encountered with the local prosecuting officer, who seems to feel that his private wishes in the matter

are to be considered, rather than that it is his duty to strictly enforce the law. In some cases it has seemed best not to follow up the prosecutions, and particularly is this true in regard to very young boys. In several instances I have suspended prosecution of these boys, and put them on their good behavior as the best means of carrying out the law; but I do not believe that this can be generally done, because if the boys get the idea that they are not going to be prosecuted they will become the worst violators we have. Wherever the plan does not work out well, however, it is my intention to take them into court and have them dealt with just as severely as any other violators. In numerous other cases convictions could not be secured because of the fact that those who complained were unwilling to come into court and testify, because they did not care to get mixed up in the matter. Of course it is useless to take a violator into court when you know in your own mind that you have not sufficient evidence to convict. However, in spite of all of these difficulties, there were ninety-seven arrests and convictions made during the biennial period, as follows:

| | |
|--|----|
| Hunting without a license | 24 |
| Selling fish and importing same without a license..... | 5 |
| Killing, or having deer meat in possession out of season..... | 22 |
| Killing antelope | 1 |
| Killing beaver or having hides in possession without a permit..... | 11 |
| Killing prairie chickens out of season..... | 1 |
| Killing quail | 5 |
| Fishing out of season..... | 5 |
| Dynamiting fish | 1 |
| Killing pheasants | 3 |
| Killing ducks, doves and other game birds out of season..... | 7 |
| Killing song birds | 2 |
| Shooting from public highway | 3 |
| Fishing with net | 1 |
| Catching fish under size | 2 |
| Fishing without a non-resident license..... | 1 |
| Refusing to show officer license when requested..... | 1 |
| Acting as guide without a license..... | 1 |
| Polluting the stream and killing fish with creosote..... | 1 |

NUMBER OF HUNTING AND FISHING LICENSES ISSUED.

The following table shows the number of resident hunting, non-resident hunting, non-resident combination hunting and fishing, non-resident bird hunting licenses and non-resident fishing licenses issued for the year 1909:

| Counties | Resident Hunting | Non- Resident Hunting | Combination Hunting and Fishing | Bird Hunting | Non- Resident Fishing |
|-----------------------------|---------------------|-----------------------------|--|-----------------|-----------------------------|
| Commissioner's Office | 3,279 | 31 | 3 | 5 | 85 |
| Adams | 269 | .. | .. | .. | .. |
| Arapahoe | 269 | .. | .. | .. | .. |
| Archuleta | 98 | .. | .. | .. | .. |
| Baca | 6 | .. | .. | .. | .. |
| Bent | 205 | .. | .. | .. | .. |
| Boulder | 896 | .. | .. | .. | 11 |
| Chaffee | 601 | .. | .. | .. | 19 |
| Cheyenne | 43 | .. | .. | .. | .. |
| Clear Creek | 209 | .. | .. | .. | .. |
| Conejos | 390 | .. | .. | .. | 10 |
| Costilla | 181 | .. | .. | .. | .. |
| Custer | 146 | .. | .. | .. | .. |
| Delta | 535 | .. | .. | .. | 3 |
| Denver | 3,638 | .. | .. | .. | 21 |
| Dolores | 69 | .. | .. | .. | .. |
| Douglas | 84 | .. | .. | .. | 2 |
| Eagle | 395 | 1 | .. | .. | .. |
| Elbert | 8 | .. | .. | .. | .. |
| El Paso | 866 | 7 | .. | .. | 28 |
| Fremont | 835 | .. | .. | .. | .. |
| Garfield | 853 | 13 | .. | .. | 12 |
| Gilpin | 135 | .. | .. | .. | .. |
| Grand | 252 | .. | .. | .. | 12 |
| Gunnison | 606 | 1 | .. | .. | 23 |
| Hinsdale | 35 | .. | .. | .. | .. |
| Huerfano | 934 | .. | .. | .. | 2 |
| Jefferson | 248 | .. | .. | .. | 1 |
| Jackson | 88 | .. | .. | .. | .. |
| Kiowa | 19 | .. | .. | .. | .. |
| Kit Carson | 21 | .. | .. | .. | .. |
| Lake | 504 | 2 | .. | .. | 2 |
| La Plata | 388 | .. | .. | .. | 3 |
| Larimer | 1,377 | 11 | .. | .. | 27 |

NUMBER OF HUNTING AND FISHING LICENSES
ISSUED—Concluded.

| Counties | Resident Hunting | Non- Resident Hunting | Combination Hunting and Fishing | Bird Hunting | Non- Resident Fishing |
|------------------|---------------------|-----------------------------|--|-----------------|-----------------------------|
| Las Animas | 1,132 | .. | .. | .. | .. |
| Lincoln | 40 | .. | .. | .. | .. |
| Logan | 348 | .. | .. | .. | .. |
| Mesa | 861 | 5 | .. | .. | 2 |
| Mineral | 140 | 1 | .. | .. | 47 |
| Montezuma | 152 | .. | .. | .. | .. |
| Montrose | 520 | .. | .. | .. | 5 |
| Morgan | 542 | .. | .. | .. | .. |
| Otero | 811 | .. | .. | .. | .. |
| Ouray | 274 | .. | .. | .. | .. |
| Park | 246 | .. | .. | .. | 1 |
| Phillips | 122 | .. | .. | .. | .. |
| Pitkin | 245 | 1 | .. | .. | 2 |
| Prowers | 398 | .. | .. | .. | .. |
| Pueblo | 1,680 | 3 | .. | .. | .. |
| Rio Blanco | 440 | 8 | .. | .. | 2 |
| Rio Grande | 412 | 3 | .. | .. | 6 |
| Routt | 320 | 3 | .. | .. | 8 |
| Saguache | 330 | .. | .. | .. | .. |
| San Juan | 149 | .. | .. | .. | .. |
| San Miguel | 192 | .. | .. | .. | .. |
| Sedgwick | 125 | .. | .. | .. | 5 |
| Summit | 195 | 2 | .. | .. | 1 |
| Teller | 405 | .. | .. | .. | 1 |
| Washington | 24 | .. | .. | .. | .. |
| Weld | 1,230 | .. | .. | .. | .. |
| Yuma | 64 | .. | .. | .. | .. |
| Totals..... | 29,879 | 92 | 3 | 5 | 341 |

NUMBER OF HUNTING AND FISHING LICENSES ISSUED.

The following table shows the number of resident hunting, non-resident hunting, non-resident combination hunting and fishing, non-resident bird hunting licenses and non-resident fishing licenses issued for the year 1910:

| Counties | Resident Hunting | Non- Resident Hunting | Combination Hunting and Fishing | Bird Hunting | Non- Resident Fishing |
|-----------------------------|---------------------|-----------------------------|--|-----------------|-----------------------------|
| Commissioner's office | 2,618 | 30 | 15 | 3 | 249 |
| Adams | 198 | .. | .. | .. | .. |
| Arapahoe | 232 | .. | .. | .. | 1 |
| Archuleta | 81 | .. | .. | .. | 4 |
| Boulder | 904 | .. | .. | .. | 4 |
| Baca | 14 | .. | .. | .. | .. |
| Bent | 212 | .. | .. | .. | .. |
| Clear Creek | 238 | .. | .. | .. | 2 |
| Costilla | 209 | .. | .. | .. | .. |
| Custer | 215 | .. | .. | .. | 1 |
| Cheyenne | 19 | .. | .. | .. | .. |
| Chaffee | 706 | .. | .. | .. | 6 |
| Conejos | 430 | .. | .. | .. | 20 |
| Dolores | 59 | .. | .. | .. | 1 |
| Douglas | 112 | .. | .. | .. | 1 |
| Delta | 844 | .. | .. | .. | 3 |
| Denver | 4,388 | .. | .. | .. | .. |
| Eagle | 456 | 1 | .. | .. | 8 |
| El Paso | 895 | 7 | .. | .. | 34 |
| Elbert | 15 | .. | .. | .. | .. |
| Fremont | 1,228 | 3 | .. | .. | 3 |
| Gilpin | 1,228 | .. | .. | .. | .. |
| Gunnison | 738 | 9 | .. | .. | 21 |
| Grand | 264 | .. | .. | .. | 11 |
| Garfield | 1,181 | 11 | .. | .. | 29 |
| Huerfano | 831 | 3 | .. | .. | 1 |
| Hinsdale | 48 | .. | .. | .. | 8 |
| Jackson | 102 | .. | .. | .. | .. |
| Jefferson | 261 | .. | .. | .. | .. |
| Kiowa | 31 | .. | .. | .. | .. |
| Kit Carson | 31 | .. | .. | .. | .. |
| Logan | 429 | .. | .. | .. | .. |
| La Plata | 568 | .. | .. | .. | 16 |
| Lincoln | 53 | .. | .. | .. | .. |

NUMBER OF HUNTING AND FISHING LICENSES
ISSUED—Concluded.

| Counties | Resident Hunting | Non- Resident Hunting | Combination Hunting and Fishing | Bird Hunting | Non- Resident Fishing |
|------------------|---------------------|-----------------------------|--|-----------------|-----------------------------|
| Larimer | 1,292 | 2 | .. | .. | 10 |
| Las Animas | 945 | 4 | .. | .. | 6 |
| Lake | 478 | 1 | .. | .. | 5 |
| Mesa | 992 | 1 | .. | .. | 8 |
| Morgan | 443 | .. | .. | .. | .. |
| Mineral | 313 | 5 | .. | .. | 10 |
| Montezuma | 189 | .. | .. | .. | 1 |
| Montrose | 773 | .. | .. | .. | 5 |
| Otero | 832 | .. | .. | .. | .. |
| Ouray | 287 | .. | .. | .. | .. |
| Pitkin | 378 | 2 | .. | .. | 4 |
| Prowers | 385 | .. | .. | .. | .. |
| Pueblo | 1,887 | 2 | .. | .. | 6 |
| Phillips | 115 | .. | .. | .. | .. |
| Park | 270 | .. | .. | .. | .. |
| Routt | 786 | 2 | .. | .. | 27 |
| Rio Blanco | 479 | 3 | .. | .. | 9 |
| Rio Grande | 473 | .. | .. | .. | 10 |
| Saguache | 387 | .. | .. | .. | 1 |
| San Miguel | 219 | .. | .. | .. | .. |
| Sedgwick | 139 | .. | .. | .. | .. |
| Summit | 176 | .. | .. | .. | .. |
| San Juan | 149 | .. | .. | .. | 1 |
| Teller | 469 | .. | .. | .. | 2 |
| Washington | 26 | .. | .. | .. | .. |
| Weld | 1,074 | .. | .. | .. | .. |
| Yuma | 70 | .. | .. | .. | .. |
| Totals..... | 33,864 | 86 | 15 | 3 | 528 |

DETAILED REPORT OF RECEIPTS.

FROM DECEMBER 1, 1908, TO NOVEMBER 30, 1910.

| | |
|---|-----------------|
| Received from county clerks for resident hunting licenses..... | \$37,318.70 |
| Resident hunting licenses issued by Commissioner's office.... | 5,852.00 |
| Non-resident general hunting licenses..... | 1,899.25 |
| Non-resident fishing licenses | 1,566.00 |
| Lakes, parks and renewals of same..... | 997.00 |
| Preserves and renewals of same..... | 268.00 |
| Importers' licenses | 2,000.00 |
| Guide licenses | 190.00 |
| Permits to seine for suckers, carp and squawfish..... | 45.00 |
| Taxidermists' licenses | 370.00 |
| Transportation permits | 328.00 |
| Specimen tags | 85.00 |
| Importation certificates | 125.00 |
| Seizures and sale of game and fish..... | 263.30 |
| Sale of buffalo hides sold at Leadville..... | 391.30 |
| Received from fines imposed on violators..... | 887.75 |
| Received from sale of hay purchased for feeding antelopes and not used | 40.00 |
| Received from sale of horses—Denver hatchery..... | 50.00 |
| Received from sale of horse—Del Norte hatchery..... | 50.00 |
| Received from sale of old harness..... | 10.00 |
| Miscellaneous, fish tags, storage permits, etc..... | 438.30 |
| Total receipts | \$53,174.60 |

DISBURSEMENTS FROM GAME CASH FUND.

| | | |
|--|-------------|-------------|
| Amount on hand in State Treasury, December 1, 1908, to credit of Game Cash Fund..... | \$ 4,664.06 | |
| Amount deposited with State Treasurer during biennial period | 53,174.60 | |
| | | \$57,838.66 |
| Paid Deputy Game Wardens | \$27,538.64 | |
| Paid for legal services..... | 165.00 | |
| For clerical services | 1,076.02 | |
| Office expenses | 1,039.01 | |
| Fish* | 3,380.00 | |
| Fish eggs | 9,390.37 | |
| Printing and stationery | 929.81 | |
| Maintenance of hatcheries | 5,350.58 | |
| Expenses collecting spawn | 1,344.70 | |
| Feed for wild game, deer and antelope..... | 154.10 | |
| Horses Denver Hatchery | 360.00 | |
| Horses for Trappers Lake country..... | 275.00 | |
| Court costs, Gold Link Mining & Milling Co..... | 51.22 | |
| Wagon and harness for hatcheries..... | 93.60 | |
| Game birds, pheasants and Hungarian partridges..... | 517.25 | |
| Insurance on hatcheries | 390.00 | |
| Miscellaneous, freight, express and telephone..... | 413.50 | |
| | | 52,468.80 |
| Total disbursements for biennial period..... | | |
| Balance | | \$ 5,369.86 |

APPROPRIATIONS.

Total amount appropriated by the last Legislature and available for the various branches of the work—salaries, maintenance, etc.—for the years 1909 and 1910 was \$61,700.00. Of this amount I have used \$59,820.01, leaving a balance of \$1,879.99.

There was also appropriated ten thousand dollars for the purpose of purchasing additional land and water, and for enlarging and improving the State Fish Hatchery near Denver; two thousand dollars for the completion of Superintendent's residence and make repairs to fish hatchery at Glenwood Springs, and fifteen hundred dollars for the purchase of right of way for a road to the fish hatchery and for the construction of an additional fish pond at the La Plata Hatchery, making a total of \$13,500.00. Of this amount only \$120.21 has been used, leaving a balance of \$13,379.79. The reason these improvements have not been made was on account of the money not being available until the latter part of the year of 1910. When I was advised it was available I immediately began to make arrangements for securing the proper water right at the Denver Hatchery and contracted for this at a cost of twelve hundred dollars; but voucher for same was not allowed by the State Auditor, thereby retarding the work. I also contracted for the purchase of a small strip of land adjoining the fish hatchery site of the La Plata Hatchery at a cost of five hundred dollars, a portion of which was to be used for a road way to said hatchery, and this voucher was not allowed. Consequently, nothing further has been done toward making these improvements, as I did not feel justified in going ahead and making additional facilities for hatching fish at the Denver Hatchery until we had secured the additional water supply necessary to operate the hatchery.

STATE GAME AND FISH COMMISSIONER—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 3,600.00 |
| To D. E. Farr..... | \$ 630.00 |
| To T. J. Holland | 2,970.00 |
| | \$ 3,600.00 |

STATE GAME AND FISH COMMISSIONER—TRAVELING EXPENSE FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,200.00 |
| To D. E. Farr..... | \$ 210.00 |
| To T. J. Holland..... | 520.05 |
| | 730.05 |
| Balance | \$469.95 |

DEPUTY STATE GAME AND FISH COMMISSIONER—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 3,000.00 |
| To C. W. Lake..... | \$ 529.15 |
| To James A. Shinn..... | 2,470.85 |
| | 3,000.00 |

DEPUTY STATE GAME AND FISH COMMISSIONER—TRAVELING EXPENSE FUND.

| | |
|--|-----------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 800.00 |
| To C. W. Lake..... | \$ 94.25 |
| To James A. Shinn..... | 659.65 |
| | 754.90 |
| Balance | \$ 45.10 |

CLERK AND STENOGRAPHER—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 2,400.00 |
| To R. L. Spargur | 2,400.00 |

GENERAL SUPERINTENDENT STATE FISH HATCHERIES—
SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 2,400.00 |
| To W. S. Kincaid | \$ 433.33 |
| To W. E. Patrick | 1,930.00 |
| | <hr/> |
| | 2,363.33 |
| | <hr/> |
| Balance | \$ 36.67 |

GENERAL SUPERINTENDENT STATE FISH HATCHERIES—TRAVELING
EXPENSE FUND.

| | |
|--|-----------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 800.00 |
| To W. S. Kincaid..... | \$ 132.00 |
| To W. E. Patrick..... | 649.05 |
| | <hr/> |
| | 781.05 |
| | <hr/> |
| Balance | \$ 18.95 |

SUPERINTENDENT DENVER HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 2,400.00 |
| To S. E. Land | \$ 433.33 |
| To Jack Moran | 366.67 |
| To C. A. Ribbing | 1,600.00 |
| | <hr/> |
| | \$ 2,400.00 |

MAINTENANCE DENVER HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,800.00 |

SUPERINTENDENT EMERALD LAKES—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To John F. Gamsby..... | 1,800.00 |

MAINTENANCE EMERALD LAKES.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,770.33 |
| | <hr/> |
| Balance | \$ 29.67 |

SUPERINTENDENT GLENWOOD HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To H. T. Dawson..... | \$ 150.00 |
| To R. M. Light..... | 150.00 |
| To S. E. Thompson..... | 1,500.00 |
| | <hr/> |
| | 1,800.00 |

MAINTENANCE GLENWOOD HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,799.89 |
| | <hr/> |
| Balance | \$.11 |

SUPERINTENDENT GRAND COUNTY HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To Charles Dowdell | 1,800.00 |

MAINTENANCE GRAND COUNTY HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,743.75 |
| | <hr/> |
| Balance | \$ 56.25 |

SUPERINTENDENT GUNNISON HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To W. H. Corum | \$ 327.50 |
| To T. J. Thompson | 1,472.50 |
| | <hr/> |
| | 1,800.00 |

MAINTENANCE GUNNISON HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,740.61 |
| | <hr/> |
| Balance..... | \$ 59.29 |

SUPERINTENDENT LA PLATA HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To L. S. Barnes..... | \$ 423.40 |
| To T. L. Hamer..... | 1,376.60 |
| | <hr/> |
| | 1,800.00 |

MAINTENANCE LA PLATA HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,514.29 |
| | <hr/> |
| Balance..... | \$285.71 |

SUPERINTENDENT ROUTT COUNTY HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To W. J. Breckel | \$ 442.75 |
| To L. B. Crawford | 1,322.50 |
| | <hr/> |
| | \$ 1,765.25 |
| Balance | \$ 34.75 |

MAINTENANCE ROUTT COUNTY HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,689.60 |
| | <hr/> |
| Balance | \$ 110.40 |

SUPERINTENDENT DEL NORTE HATCHERY—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To L. Bassett | \$ 408.85 |
| To J. P. Bengard | 1,391.15 |
| | <hr/> |
| | 1,800.00 |

MAINTENANCE DEL NORTE HATCHERY.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 1,800.00 |
| To maintenance | 1,771.62 |
| | <hr/> |
| Balance | \$ 28.38 |

GATHERING SPAWN FOR ALL HATCHERIES.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 2,000.00 |
| To expense collecting and gathering spawn..... | 1,951.24 |
| | <hr/> |
| Balance | \$ 48.76 |

DISTRIBUTION OF OVA AND YOUNG FRY FUND.

| | |
|--|-----------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 600.00 |
| To expense distributing | 523.40 |
| | <hr/> |
| Balance | \$ 76.60 |

FOREST AND GAME WARDENS—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 9,000.00 |
| To salaries—Five chief game wardens..... | 9,000.00 |

TRAVELING EXPENSES—CHIEF GAME WARDENS.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 3,000.00 |
| To traveling expenses, five chief game wardens..... | 2,423.20 |
| | <hr/> |
| Balance | \$ 576.80 |

SPECIAL GAME WARDEN—SALARY FUND.

| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 2,400.00 |
| To J. F. Engel | \$ 463.30 |
| To W. P. Hummel | 1,936.70 |
| | <hr/> |
| | \$ 2,400.00 |

SPECIAL GAME WARDEN—TRAVELING EXPENSE FUND.

| | |
|--|-----------|
| By appropriation for fiscal years 1909 and 1910..... | \$ 600.00 |
| To J. F. Engel | \$ 115.75 |
| To W. P. Hummel | 481.65 |
| | <hr/> |
| | \$ 597.40 |
| | <hr/> |
| Balance | \$ 2.60 |

IMPROVEMENTS DENVER HATCHERY.

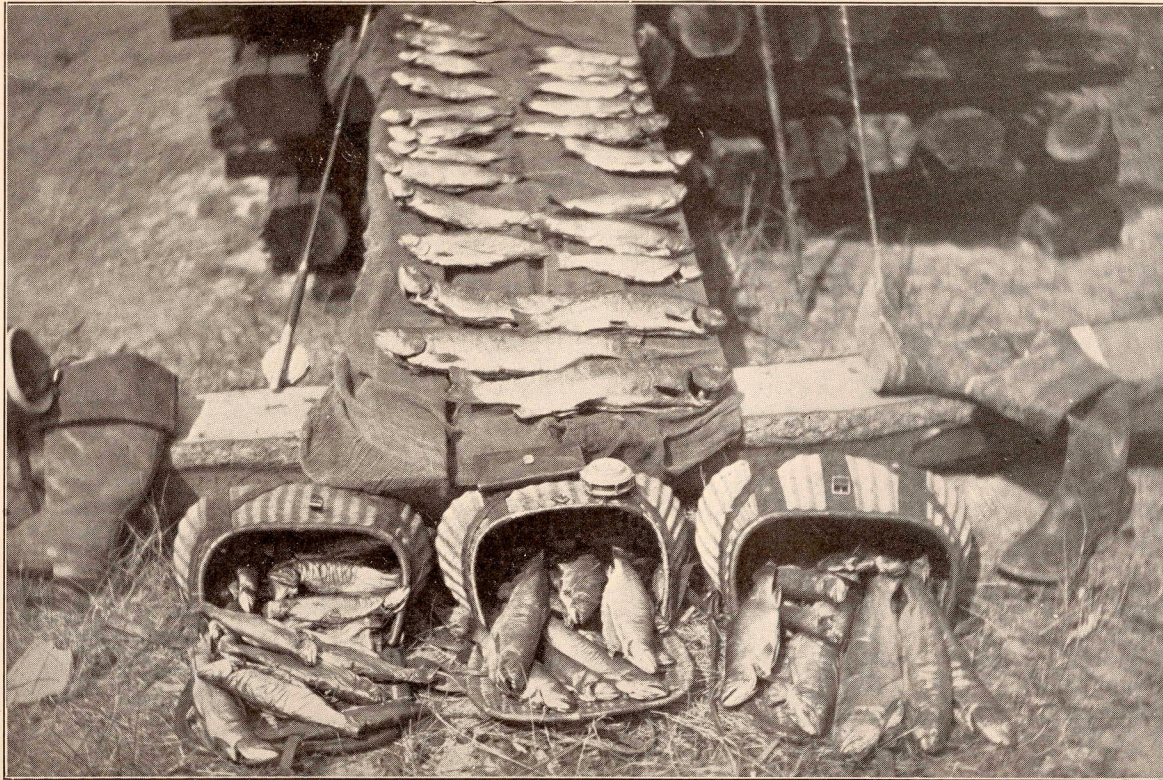
| | |
|--|-------------|
| By appropriation for fiscal years 1909 and 1910..... | \$10,000.00 |
| To vouchers drawn on same..... | 120.21 |
| | <hr/> |
| Balance | \$9,879.79 |

FISH.

The work of the Game and Fish Department, so far as it pertains to fish, has increased very materially since the creation of the department. The State is now engaged in propagating fish on a large scale through its system of hatcheries and spawning stations. There are now and have been throughout this administration seven State fish hatcheries in actual operation, and in addition a spawning station at Emerald lakes, in Hinsdale county, some forty or fifty miles from Durango. Through the kindness and generosity of Mr. W. T. Kirkpatrick of Durango the State has been aided very materially in its operation by the establishment of a field station at Emerald lakes. These lakes are now and have been for a good many years under the private ownership and control of Mr. Kirkpatrick. Some of the best varieties of trout are found in these lakes, and the conditions of the water, climate, etc., make this an ideal station for the taking of spawn and hatching of trout. Mr. Kirkpatrick has made no charge during this administration, and in fact never has made any charge for the use of these lakes and the surrounding land by the State for the purpose of fish culture and propagation. He permits the State to go in and take spawn in unlimited quantities, hatch and make use of the lakes as it sees fit, and to ship out as many to other hatcheries as it cares to. He has also assisted in every way in his power in the work and has maintained the lakes and the surrounding premises at his own expense. I feel deeply indebted to Mr. Kirkpatrick for all that he has done in this direction and desire to express to him the thanks of this department on behalf of the people of the State, and feel sure that my predecessors will take pleasure in joining with me in this action.

The system of fish hatcheries is undoubtedly the best that could be put into operation for the purpose of replenishing our streams with fish. Great care must at all times be exercised, however, in order that the expense in maintaining these hatcheries is not greater than is justified by the results accomplished. Danger of establishing too many hatcheries is likely to arise if the Legislature does not very carefully consider the matter of making appropriations for new hatcheries. It should at all times work toward the end that the greatest number of fish shall be turned out at the least possible expense.

In the early history of the department the only spawn that was secured for the purpose of hatching trout was that taken from the trout in ponds immediately connected with the hatcheries. During my former term of office as General Superintendent of State Fish Hatcheries I inaugurated the system of going directly to the lakes and streams for the purpose of gathering spawn. In carrying out this system, field stations for the purpose of gathering spawn are established during the spawning



A NICE CATCH OF TROUT NEAR GRANT, COLORADO.

seasons at a number of different places throughout the State. In this way spawn in large quantities can be gathered, and without any harmful results whatever. The fish in the streams are stripped of their spawn and are returned to the stream not any the worse for it.

To me it has always been a remarkable fact that nature did not provide a better means for fish to propagate naturally. Scientific investigation has shown that of all the spawn of trout deposited naturally in the streams and lakes, not over three per cent. at the very most are hatched and become adult fish. This is due in the first place to the ineffective manner of fertilizing the eggs. The eggs are deposited by the female and are later fertilized by the male. Before there has been an opportunity, however, to fertilize the eggs they are either covered with sand, destroyed, or become exposed so that fertilization becomes impossible.

In taking spawn from the females and the fertilizing fluid from the males practically all of the eggs are fertilized, and in our hatcheries we are able to hatch ninety, and sometimes ninety-five, per cent. of all the eggs taken. This, of course, is done through the proper handling of the fish and can be done only by experienced men. I do not mean to say that as large a per cent. as herein mentioned will be placed in the streams in the shape of fry, as it is apparent that after the spawn has been hatched out a number of the fish are deformed, do not take their food properly, and die from other causes, and if they have to be held for any considerable length of time in the hatcheries, still more are lost. By far the largest part of the spawn taken, however, is returned to the streams in the way of fry which grow to be adult fish. If this artificial manner of propagating fish were not possible, we could not hope to secure enough fry for stocking our streams to any great extent whatsoever. As it is, we are enabled to place the young trout fry into our streams by the millions every year, as this report further on will show. With increased appropriations and better facilities still more could be accomplished than is being done at the present time.

Through irrigation a number of fish are lost every year, and I question whether it would not be wise for our Legislature to adopt some means that would tend in a measure at least to prevent this destruction of our fish. Our irrigating ditches all over the State are operated without any screens or other device for keeping the fish out of them, and consequently they enter the ditches in large numbers and follow them out into the fields, and when the water is shut off the fish are then on dry land and left to die. Numerous devices have been constructed which I believe will tend to do away with this great loss of fish. I have at the present time in my office a device which has been used very successfully in the state of Wyoming for the last two years. It is an automatic screen so constructed that it

allows the free passage of the water up to a time that the screen becomes loaded with debris, and at the moment any resistance is brought about by reason of sediment being collected on the screen, the flow of the water washes the screen down and carries the debris on over. The screen is then brought back into place by the use of a weight attached. The screen is fine enough to prevent the fish from passing through it, and the only possible way any fish could go beyond it would be when the sediment is being washed over. This is guarded against by the action of the weight, which scares back the fish so that none get out into the ditches at this particular time. This device can be installed at comparatively small expense, and the beauty of it is that it does not detract any from the flow of water in the ditch, nor does it require the attention of the owner of the ditch in order to operate.

SEINING.

Considerable difficulty has been encountered from time to time in the manner of seining our streams. Under the law as it stands permits may be granted by the Commissioner to such persons as apply therefor, and who seem to be trustworthy, to seine for carp, suckers, white salmon, squawfish and catfish. I believe that this is a good provision in the law and have encouraged the seining of these fish wherever it could consistently be done. I further believe that if all of these kinds of fish, with the exception of catfish, could be seined out of our streams, and the same streams stocked with other varieties of fish, such as bass, greyling and more catfish, greater good could be accomplished. The kinds of fish which can be seined now, with the exception of catfish, are absolutely worthless for any purpose whatever and tend only to stir up the waters and make them unfit for better kinds of fish. I realize that it would be impossible to rid our streams entirely of these fish, but it seems to me that, as far as possible, seining should be allowed to proceed. This, of course, must at all times be done under the careful supervision of the Commissioner, as there is undoubtedly a tendency on the part of those seining to retain all the fish that may come within their nets. As the law requires a permit before any seining can be done, the Commissioner has in his office a record and is given notice of each and every case. This permits proper inspection to be made, and, whenever there is any doubt as to whether the person seining is confining himself to the kinds of fish that may be taken, his operations are inspected.

The waters in the lower altitudes of the State, and, in fact, wherever they reach the higher temperatures, are well adapted to the kinds of fish I have recommended substituting instead of those that are seined. At the present time the State propagates only three varieties of trout, viz.: Rainbow, Native and Eastern Brook, and with few exceptions these are the only kinds of fish that are being placed in the public waters. 1

see no reason why the department cannot be enlarged so as to stock our streams on a larger scale with varieties other than trout. A great many fishermen prefer bass fishing to trout, and, in addition to the sport that would be afforded, these fish are among the best of the food varieties. If this plan was carried out and the State should attempt to stock its streams with food fish other than trout, our law would necessarily have to be changed so that these fish, as well as trout, would be protected.

With the limited funds at my command I have purchased as many black bass as was practicable and have placed them in our streams to the number of several thousand. These fish have done very well, and the fact that this variety of fish does well in Colorado is further demonstrated by the number thereof that are held by private ownership and propagated in private lakes and streams throughout the State. I believe that the lower waters of our State, which are not adapted to trout, should be stocked with bass and catfish. Some of these black bass were planted in the Bear river, in the vicinity of Craig, some were planted in the Grand river at the junction of the Gunnison and Grand rivers, and some were planted in the San Juan river in the vicinity of Pagosa Springs.

IMPORTATION OF FISH.

During my administration, and in fact during former administrations, no little difficulty has been encountered in regard to the matter of importing fish into this State. Fish importers are charged a license of fifty dollars per year for the privilege of importing, and as the law stands now it is very indefinite just what they may import for the license fee paid by them. I want to urge that the law in this regard be made more specific, so that the importers may know exactly where they stand on the question and can keep well within the meaning of the law. I do not advocate the passage of laws which have in view simply the protection of our own fish, and I appreciate the fact that, if Colorado desires the assistance of other states in preventing the exporting of her own game and fish, she must be willing to reciprocate to those states and assist them as far as she can in not permitting game and fish to be imported into states contrary to their laws; but, whatever our Legislature should decide on in this regard, the law should specify just what kinds of fish may be imported under a license. As the law for the most part has been construed to mean that Colorado, theoretically having all the fresh water varieties of fish, the importation of any fresh water variety could only be made under a license. Numerous objections to this construction of the law have been made by those in the importing business, and very often I have been compelled to admit the justice of their contention. I hope that

this matter may be cleared up, both for the satisfaction of our importers and for the benefit of the department in carrying out the law.

FISH DISTRIBUTION.

The matter of fish distribution is not always an easy problem. It goes without saying that the demand for trout fry greatly exceeds the supply, as the department furnishes these fish without any cost whatever to the applicants. I have tried to make an equitable distribution of trout and send them to all parts of the State without showing any partiality, and in numerous cases I have planted trout fry in places where I thought they were needed, even though no application was made therefor by any person in that immediate locality.



A CATCH OF TROUT IN SOUTH FORK OF SOUTH PLATTE RIVER.

DISTRIBUTION OF YOUNG TROUT DURING YEAR 1909.

| | | |
|-------------------------------|---------|-----------|
| From the Denver Hatchery— | | |
| Brook trout | 426,000 | |
| Rainbow trout | 241,000 | |
| Native trout | 517,000 | |
| | <hr/> | 1,184,000 |
| From Durango Hatchery— | | |
| Brook trout | 175,000 | |
| Rainbow trout | 272,000 | |
| Native trout | 445,000 | |
| | <hr/> | 892,000 |
| From Del Norte Fish Hatchery— | | |
| Brook trout | 225,000 | |
| Rainbow trout | 252,000 | |
| Native trout | 228,000 | |
| | <hr/> | 705,000 |
| From Glenwood Hatchery— | | |
| Brook trout | 762,500 | |
| Rainbow trout | 360,000 | |
| Native trout | 555,000 | |
| | <hr/> | 1,677,500 |
| From Gunnison Hatchery— | | |
| Brook trout | 156,000 | |
| Rainbow trout | 330,000 | |
| Native trout | 135,000 | |
| | <hr/> | 621,000 |
| From Grand County Hatchery— | | |
| Rainbow trout | 40,000 | |
| Native trout | 290,000 | |
| | <hr/> | 330,000 |

| | | |
|-------------------------|---------|-----------|
| Routt County Hatchery— | | |
| Brook trout | 140,000 | |
| Rainbow trout | 270,000 | |
| Native trout | 245,000 | |
| | <hr/> | 655,000 |
| Emerald Lakes Hatchery— | | |
| Native trout | 310,000 | |
| | <hr/> | 310,000 |
| Marvine Hatchery— | | |
| Native trout | 442,000 | |
| | <hr/> | 442,000 |
| | | <hr/> |
| Grand total | | 6,816,500 |

DISTRIBUTION OF YOUNG TROUT DURING YEAR 1910.

| | | |
|--------------------------|---------|-----------|
| From Denver Hatchery— | | |
| Brook trout | 881,000 | |
| Rainbow trout | 400,500 | |
| Native trout | 610,500 | |
| | <hr/> | 1,892,000 |
| From Durango Hatchery— | | |
| Brook trout | 386,000 | |
| Rainbow trout | 237,000 | |
| Native trout | 285,000 | |
| | <hr/> | 908,000 |
| From Del Norte Hatchery— | | |
| Brook trout | 170,000 | |
| Rainbow trout | 269,200 | |
| Native trout | 260,000 | |
| | <hr/> | 699,200 |
| From Glenwood Hatchery— | | |
| Brook trout | 481,000 | |
| Rainbow trout | 320,000 | |
| Native trout | 230,000 | |
| | <hr/> | 1,031,000 |

| | | |
|---|-----------|------------|
| From Gunnison Hatchery— | | |
| Brook trout | 257,000 | |
| Rainbow trout | 242,000 | |
| Native trout | 152,000 | |
| | <hr/> | 651,000 |
| From Grand County Hatchery— | | |
| Rainbow trout | 125,000 | |
| Native trout | 575,000 | |
| | <hr/> | 700,000 |
| From Routt County Hatchery— | | |
| Brook trout | 225,000 | |
| Native trout | 400,000 | |
| | <hr/> | 625,000 |
| From Emerald Lakes Hatchery— | | |
| Native trout | 300,000 | |
| | <hr/> | 300,000 |
| From Marvine Hatchery— | | |
| Native trout | 320,000 | |
| | <hr/> | 320,000 |
| From Collbran Hatchery— | | |
| Native trout | 190,000 | |
| | <hr/> | 190,000 |
| Grand total | | 7,316,200 |
| Total number brook trout distributed in 1909..... | 1,884,500 | |
| Total number rainbow trout distributed in 1909..... | 1,765,000 | |
| Total number native trout distributed in 1909..... | 3,167,000 | |
| | <hr/> | 6,816,500 |
| Total trout distributed during 1909..... | | 6,816,500 |
| Total number brook trout distributed in 1910..... | 2,490,000 | |
| Total number rainbow trout distributed in 1910..... | 1,593,700 | |
| Total number native trout distributed in 1910..... | 3,232,500 | |
| | <hr/> | 7,316,200 |
| Total trout distributed during 1910..... | | 7,316,200 |
| Grand total for biennial period..... | | 14,132,700 |

RECOMMENDATIONS.

Our Legislature two years ago very wisely amended our game and fish laws requiring persons not citizens of the United States, even though they live in this State, to take out a non-resident license in order to hunt in this State. While this has caused considerable decrease in the number of resident hunting licenses issued, I have no criticism to offer in regard to the law remaining as it is in this respect, as it is a well-known fact that foreigners are the greatest enemies to the game we have, especially to our song birds, and I find that this same law is in effect in many states throughout the country. I have endeavored to enforce this provision of our law and impress upon our wardens and the county clerks the necessity of carrying it out, and whenever we have found foreigners hunting without a license they have been prosecuted to the full extent of the law. I believe if this policy is carried out it will induce a great many foreigners to become citizens by taking out their naturalization papers, and will also afford better protection to our birds.

I desire particularly to call your attention to the fact that there was some opposition raised in the Legislature two years ago relative to issuing licenses to parties to hold game in private parks, and the Legislature endeavored to amend the law, cutting out that portion which gave the Commissioner authority to issue licenses for private parks; but, instead of doing this, it failed to amend Division "C" of the game law requiring us to issue a license and cut out the fee we were required to collect. As the law stood two years ago, it provided that we should collect a fee of forty dollars for issuing a license for two years on parks, and one hundred dollars for issuing a license on parks for ten years. As the law now stands we are compelled to issue a park license for one dollar, whether for two or ten years, and everyone that is taking out park license makes application for a license for ten years. This has caused considerable decrease in our revenue, and the law should be amended so that we can collect a reasonable fee for issuing a park license, or cut out the park license altogether.

Our law in regard to fishing licenses is not clear as to whether it applies to residents or non-residents. When the amended law took effect in 1909, being in doubt on this question, I asked the Attorney General for an opinion, and he gave me one which was to the effect that residents of the State were not required to have a license to fish. This has caused considerable confusion on account of the law not being clear on the matter, and should be straightened out. If the proper law could be drafted I think we should have a license for residents to fish, but let one license cover both fishing and hunting. This would give us considerable more revenue and enable us to better stock



FISHING FOR TROUT IN THE GUNNISON RIVER.

our streams with fish, and would make the people who fish pay for it.

I would further call your attention to the fact that the wardens and fish superintendents connected with this department are underpaid at the present time. It will be remembered that this department was created a good many years ago, and at the time of the passage of the body of our present law the whole thing was more or less an experiment. It has worked itself out, however, and now the department is a systematic business, conducted on a very large scale. New duties have been added to the officers connected with this department from time to time, and there has not been a corresponding taking away of other duties. Consequently, a great deal more work must be done by our wardens and superintendents than was contemplated upon the passage of our present law. In addition to this, it is well known to everyone that the cost of living has gone up to such an extent that what was a living salary at the time of the creation of this department is no longer a living salary. Men must be competent in order to fill these positions, and in the fish line, particularly, technical knowledge and training are indispensable qualifications in holding these offices. I feel that the State should pay for the services it receives what is reasonable and proper, and I hereby recommend what I consider to be the proper basis for compensating the members of this department.

All game wardens should receive a salary of \$100.00 per month and their necessary traveling expenses, not exceeding \$25.00 per month. The General Superintendent of State Fish Hatcheries should receive at least a salary of \$125.00 per month and his necessary traveling expense, not exceeding \$40.00 per month, as he necessarily has a great deal of traveling to do. The Superintendent of each fish hatchery in the State should receive \$100.00 per month, which amount the law has allowed the superintendent of the Denver hatchery for a number of years past.

In addition to this, the clerk in the department should receive a salary of \$125.00 per month, as it goes without saying that the clerk's duties are increased with every increase in every branch of the department. The department has been greatly enlarged, and each particular branch thereof is doing more than it has done at any time in the past and a competent man must be had in order to perform the duties of clerk. A large part of the responsibility of the department is thrown on him and the salary now allowed is inadequate, especially in view of the fact that ordinary clerks throughout the departments of state, with a much smaller amount of work to perform, are receiving the same salary that is allowed this clerk.

In conclusion, I desire simply to say that my very best efforts have at all times been exerted on behalf of the people of the State in carrying on the work of this department. Although

it has not always been an easy matter and the duties imposed cannot be easily carried out, still I have taken great pleasure in the work and hope that I have conducted myself in a way that will reflect nothing but credit on your administration. I take this means of thanking you for imposing the confidence that you did in appointing me to the position of State Game and Fish Commissioner, and hope that the trust imposed has not been betrayed in the slightest particular.

Amount of money necessary to appropriate to carry on the different branches of the Game and Fish Department for the biennial period, December 1, 1910, to November 30, 1912:

| | |
|--|-------------|
| Game and Fish Commissioner, salary..... | \$ 3,600.00 |
| 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 | 3,000.00 |
| Game and Fish Wardens, salaries (5)..... | 12,000.00 |
| Game and Fish Wardens, traveling expense (5)..... | 3,000.00 |
| Special Game Warden, salary (1)..... | 2,400.00 |
| Special Game Warden, traveling expense..... | 600.00 |
| Superintendent State Fish Hatcheries, salary..... | 3,000.00 |
| Superintendent State Fish Hatcheries, traveling expense..... | 960.00 |
| Eight Superintendents: Denver, Durango, Emerald Lakes, Glenwood, Gunnison, Del Norte, Sulphur Springs, Steamboat Springs..... | 19,200.00 |
| For Maintenance Eight Hatcheries..... | 14,400.00 |
| For Distributing Ova and Young Fry..... | 600.00 |
| Gathering Spawn for all Hatcheries..... | 2,000.00 |

Respectfully submitted,

THOMAS J. HOLLAND,
State Game and Fish Commissioner.