|  | Name | Original Address | Present Address |
| :---: | :---: | :---: | :---: |
| 8717 | Wilson, Geo. F | Des Moines. |  |
| 8751 | Webber, H. W- | Clarinda. |  |
| 8756 | Wahl, Leon E_-......- | Gowrie. |  |
| 8759 | Wagner, John G.-...--- | Des Moines | Minot, N. D |
| 8760 | Whitaker, W, P-...-- Weld, H. Erland | Oskaloosa. Towa City. |  |
| 8809 | Weld, H. Erland | Iowa City. <br> Churdan. |  |
| 8830 | West, Geo. R Young. B. F--.....-- | Churdan. Manson. |  |
| 8855 | Young. B. C. C------------ | Danbury | Correctionville. |
| 2962 | Yocum, A. L-........- | Newburn | , |
| 4002 | Yates, E. T'_.......... | Audubon | Omaha, Neb. |
| 4036 | Young, E. M | Beaman | Cross, Wis. |
| 4182 | Young, Charles O------ | Maquoketa. <br> Sioux City |  |
| 4767 | Young, John <br> Yager, Charles W | Sioux City <br> Calmar | Powell, Wyo. <br> Rockford. |
| 6091 | Yoeman, J. Victor--.- | Des Moines | Swink, Colo. |
| 6234 | Young, C. W | Manson | Isabel. S. D |
| 6265 | Young, C. B | Oelwein | Des Moines. |
| 6353 | York, T. E. | Bloomfield | Creston. |
| 6793 | Young, Charles | Des Moines | Toledo. Neb. |
| 7026 | Yeoman, I. F | Des Moines | Edward, Neb. Davenport. |
| 7185 | Yocum, W. W-.....----- Young, J. B | Springville Knoxville |  |
| 7319 | Young, J. B-_-.....-- | Knoxville - <br> Des Moines | Jesup. |
| 7739 4425 | Yoinger, R. L. | Eagle Grove | Peoria, 111. |
| 5464 | Zinger, E. W | Sioux Rapids. |  |
| 5718 | Zillig, J. A., Jr | Dubuque. |  |
| 6130 | Zimmerman, Chas. F.- | Gowrie | Ackley. |
| 6355 | Zeiger, Frank W.-.--- | Buffalo Center | Garner. |
| 6447 | Zimmerman, J. J | Chapin. |  |
| 6640 | Zimmerman, W. J--. | Gowrie | Des Moines. |
| 7067 | Zimmerman, C. J | Van Horne | Waterloo. |
| 7139 | Zieprecht, Carl W | Dubuque. |  |
| 7186 | Zender, M. J- | Earling. |  |
| 7263 | Zwanziger, J. W | Frederika. |  |
| 7364 | Zastera, Frank .......- | Cedar Rapids. |  |
| 7450 | Zimmerman, Julius -- | Hampton | Kelley. |
| 7541 | Zergen, G. F | Cedar Rapids | Holyrood, Kans. |
| 7672 | Zimmerman, Floyd V - | Waterloo | Brazil. Ind. |
| 7976 | Zimmerman, W. D---- | Red Oak | Lexington, Neb. |
| 8189 | Zinn, Edgar | Klemme | Thompson. |
| 8218 | Zimmerman, Wm...-- | Marengo | Cedar Rapids. |
| 8489 | Zoph, Peter Jr- | Marengo | Waterloo. |
| 8781 | Zastera, Jos. V........ | Cedar Rapids. |  |

## STATE FISH AND GAME WARDEN

TO THE<br>GOVERNOR OF THE STATE OF IOWA

1911-1912
GEORGE A. LINCOLN, WARDEN

Printed By Authority of the General Assembly

## LETTER OF TRANSMITTAL.

To His Excellency, B. F. Carroll, Governor of the State of Iowa:
Dear Sir-Pursuant to the provisions of Section 2539. Code of Iowa, creating the office of Fish and Game warden, I submit herewith for your consideration the twentieth biennial report of the State Fish Commissioner, and eighth biennial report of the State Game Warden.

George A. Lincoln,
State Fish and Game Warden.


## RLPORT

In making this. the twentieth biennial report of the Department of Fish and Game from June 30, 1910, to June 30, 1912, I find that new problems have arisen in reference to the protection of fish and game and propagation of the same. Our native game and song birds are fast disappearing, not only because of the relentless war made on them by the class of people known as sooners, but also by the foreign element imported into this country as laborers on our public improvements. Their instincts, brought from the foreign countries, are to kill everything in sight that is eatable and everything that runs or flies is eatable to them, They know no law and the large number of them distributed throughout our state at many different points makes it impossible to prevent many of their acts, and their resemblance to one another and their unpronouncable names prevents the making of warrants against them and their arrest. This is the greatest problem with which the wardens have to contend in the protection of birds. I will later take up the value of these insectivorous birds to the farmers and others as well as the pleasure to all of us of having them in the fields and forests and around our farms and homes.

We find that the constant breaking up of our native prairies for the purpose of agriculture is going on rapidly leaving but few resorts for the native game birds. Little by little their haunts are being devastated and they emigrate further west, and in a few years there will be no place for them to nest. This is more true now of the prairie chicken and grouse than of other game birds. While at this time the prairie chickens are numerous, for a few years they have been almost extinct. The reason they are with us, in my opinion, is that the surrounding states were short of feed and they emigrated to where the corn was left standing in the fields, but the majority of them have gone back to their western feeding grounds and unbroken prairie. We cannot expect them to stay as there is no place for them. This problem we have endeavored to overcome by the introduction of imported game tirds to take the place of those that have left and which are new to the surroundings in which they are placed. They appear to be
contented and at home for the present. We hope these new birds will be a success-will thrive and multiply and again restock our fields and forests with wild game. But under the circumstances this state can never expect to be a great game bird state and all that can be done is to keep everlastingly after it in protecting what are left and place new stock into the best breeding places in the hope of bettering conditions.

Hunting for the past two years has not been conducted as in former years. Hunters would then go into the fields with dogs and guns and tramp all day looking for the game bird. It was sport with them and that was what the majority of them went for. While a few now follow the old way the large majority of hunters, either alone or with friends, turn the gasoline into the auto and rush to where the birds are located, kill their limit and sometimes more and are back to their desks and labor in a short time. It is not the sport of hunting but the birds they want and they get them. Hunters with an outo will get more birds within a few hours than the sportsman will get in several days. With the large number of autos in the state, owned by almost every class of people, one can readily imagine the number of birds that are killed in a short time. A sportsman will pick a few out of each covey leaving the balance to multiply. Those after birds only will take every one in sight regardless of consequences to the next breeding season and the result is eventually the loss of all game birds.

## GAME BIRDS.

(Economic value of game birds).
The general conditions of the game in this state are most satisfactory, showing a marked increase in many quarters of prairie chickens and quail over the last biennial period. The opinion of many is that a law should be enacted prohibiting the killing of quail for a term of years, but it has been demonstrated that nature will perform her functions, and for reasons that periodically we have severe winters during which many birds which might have been used for food are wasted, it would seem best that the short open season continue. Every precaution has been taken to preserve the quail during cold weather and deep snows, feed and grain have been purchased for them.

The Inungarian Partridge has been introduced and liberated in this state, and we believe it will become abundant. They are one of the gamest of birds. can stand the extreme cold weather far better than the quail, and when covered by snow drifts they are able to d :g their way out. We have positive proof of this being done. They, like the quail, gather at night in compact bunches with its individuals facing the circumference and are ready to fly like a bursting bomb. We are confident that the Hungarian Partridge is a valuable game bird for this state and believe that the sportsmen will be satisfied with the introduction of this species. One of the conditions of success must be a closed season for a term of years.

The raising of game birds in captivity has not yet been reduced to a practical basis except, perhaps, in the case of the Ring-neck Pheasant. But such may be the result if experiments being made can find some method to make the young birds live after they are successfully hatched. In a few cases quail have been propagated in limited numbers, and instances are of record where ruffed grouse have been raised in captivity.. The Massachusetts Commission has experimented for a number of years in rearing game birds. Success has at times attended their efforts and resulted in raising and liberating several hundred quail in one season. The quail has long been popular as an article of diet but it has taken science a long time to find out its greatest value.
After a winter in which a vegetarian diet has largely predominated Bob White has no desire for the sprouting grain but in the early spring he is out on the war path hunting for animal food, and during the spring, summer and autumn his services in this direction are invaluable. The chinch bug leads the list of expensive insects with a tribute levied upon the American farmer which is estimated at $\$ 100,000000$ per year. This destructive little pest invades the wheat fields in armies, but Bob White leads his covey to the fray, and if there were a covey large enough he could eradicate the foe. In a letter to the Department of Agriculture Mr. M. A. Page, of Garnett, Kansas, says of the quail: "On opening the crop we found about two tablespoonfuls of chinch bugs." The grasshopper stands next in the amount of damage done $\$ 90,000,000$ per year being a conservative estimate of his tax upon this country but here too the quail is on duty with his flock. The potato bug is another pest. The quail will, when they are available make them a constant article of diet. They also seek and eat the
striped cucumber beetle which makes such havoe with cucumbers, squashes, etc. In fact Bob White has to his credit a list of 57 different beetles, 27 varieties of bugs, 9 species of grasshoppers, locusts and their kindred, and 13 sorts of caterpillars besides ants, flies, wasps, spiders, etc. These birds are especially valuable during the nesting season as the young feed almost entirely upon insects.

Man is Bob White's worst enemy, but by short open seasons with rigid enforcement of the game law, it may be possible to enable this valuable bird and faithful ally of the farmer to increase.

Dr. Judd, of the Bureau of Biological Survey, gives some interesting records obtained by a study of its food. The contents of the stomachs of 801 Bob Whites were examined by the experts of the survey. Over fifty percent of the food consisted of seeds, the bulk of this being weed seeds. One bird had in its stomach 1000 seeds of rag weed. Another had eaten no less than 5,000 seeds of the troublesome pigeon grass. As each bird eats two or more meals a day of this character during the season when weed seeds may be found, a few flocks of such birds might do much to limit the production of weeds on any farm. Dr. Judd estimates that the Bob Whites of Virginia consume 573 tons of weed seeds between September 1 and April 30. Examining the insect food of this bird he found that many of the most important insect pests of the United States are eaten in quantities. Cucumber beetles, bean leaf beetles, May beetles, click beetles and their progeny the wireworms; weevils, among them the notorious Mexican cotton boll weevil, potato beetles, spinach flea beetles, grape vine beetles, corn bill bugs, chinch bugs, eut worms cotton worms bool worms, southern tohacco worms, army worms. garden caterpillars, grasshoppers, locusts and ants are found in its bill of fare. It is one of the few birds that are very destructive to the Colorado potato beetle and the chinch bugs, cut worms, cotton worms, bool worms, southern tobacthe birds that the farmer should strive to protect. The ruffed grouse, the heath hen, the wild turkey, the introduced pheasants, the woodcock and the snipe all have a greater or less value as insect destroyers and most of these birds feed upon the seed of weeds.


## IMPORTEN BIRDS AND EGGS.

(Purchased and distributed in the different counties).
During the time covered by this report there has been purchased and d stributed to the different counties of the State 8,332 Hungarian Partridges. These birds were bought from two different parties: Yardley, Pennsylvania, and Oak Park, Illinois. They are all imported from foreign lands and are only brought to this country during the winter months as it is impossible to transport them during the hot weather.

Ring-neck Pheasants, numbering 4,738, were also purchased and distributed. These were bought from eighteen different breeders, many of them residents of our own state who are endeavoring, in a small way, to raise and propagate this variety of game bird, and some of them have been successful. I am of the opinion that in a few years, the home breeders gaining experience every year, that birds will be propagated in this state in sufficient numbers to supply the demands and as every breeder allows many birds to escape to the wilds the state will soon become stocked with this game bird.

There was also purchased 6,000 Ring-neck Pheasant eggs which were distributed to many applicants. The reports from those raising them are of the best, many birds having been raised and likerated. The demand for these birds and their eggs have been enormous, many more than we could furnish, but we have endeavored to so distribute them that every portion of the state has received an equal share.
feeding and care of the game birds.
The two severe winters covered by this report necessitated a large amount of work to prevent the loss of our native and imported game birds. The heavy snows and severe cold weather for weeks at a time prevented them from finding shelter and food. The deputies were instructed to see that they were taken care of and many of the bird lovers among the farmers, without pay for time or feed took care of them. Many were paid for their time and food, taken to the birds. Deputies purchased straw for shelter and food and distributed it where the birds were found suffering. This action saved many of the birds and from all reports received the losses were very small. Such a winter as 1911 or 1912 does more to exterminate the game bird, if not fed and cared for, than all the hunters in our state.

## FISHING.

During the year 1911 the waters in all our rivers. lakes and ponds, including the Mississippi and Missouri rivers, were very low. There were no rains of any consequence during this period. Many of the lakes and rivers were practically dry and the small bayous and ponds that contained thousands of young fish dried up and many fish perished. This department used every endeavor to save as many as possible but the low water in the rivers made a poor refuge for those rescued. The stage of water in the Mississippi river was so low that the ponds contiguous thereto from which the fish are gathered for distribution were grown up with grass and weeds and no fish could be gathered, hence the fish car was not in service during that year. In some cases, such as Medium Lake in Palo Alto county, one of our great fishing lakes, the water became so low that during the winter of 1911 it froze to the ground and practically destroyed all the fish in the lake. We endeavored to keep this lake open for air and deputies were constantly at work but all our eftorts tailed and ice froze to the bottom. Uther lakes were in the same condition but the depth of water was such that by strenuous efforts air was given the fish and but few of them perished.
While the dry season of 1911 had a tendency to destroy many fish this season proved that the loss was not as great as was feared as there has never been better fishing than this year. The Great Lakes are full of fish, our rivers and streams are well stocked, and from all reports the river fishing has been the best for many seasons, and the lakes have been patronized by more people during the season of 1912 than ever before. These lakes should be maintained. no matter what the cost. They are a breathing place and recreation grounds for our peopln who desire tu fish and enjoy their waters. We have at this time too few lakes of this kind in our state.
The cleaning of the lakes of coarse and obnoxious fish which has been done during the past two years under permit is in my opinion one of the factors toward a better game fish supply and this work will be continued until the objectionable fish are exterminated, or as nearly so as possible.

The state fish car "Hawkeye" will make its usual trins this fall as the ponds and bayous along the Mississippi river will supply the fish, and such localities as lost their fish by freezing and otherwise will be restocked. During this biennial period we have seined out from bayous and ponds and placed in live waters 723,700 fish.


The United States has assisted this department in many ways, supplying fish from the hatchery at Manchester, Iowa, and other places where they were gathered, thus helping to restock the waters of the state. A statement of these fish supplied is contained in this report.
In connection with this subject I will say that it is not altogether the seasons, wet or dry, that depletes the fish supply in our streams. Many are taken by the constant use of seines in the hands of parties contiguous to the rivers in isolated places where it is impossible for this department to know of the act. Seines, traps and other devices are used in the darkness of the night. Large numbers of fish are taken and the small fry destroyed. We are ignorant of this work and only by chance does one of our men find it out. So long as the law remains as it is, not permitting us to seize a seine or prosecute a man for having it in his possession except when in actual use or is found within ten rods of the public waters, it will be impossible to stop this work. If it was unlawful to possess a fish seine the work would be light and unlawful fishing of this kind could te prevented. I can see no reason for the possession of a seine only for the purpose of unlawfully taking fish.

SEINING LAKES UNDER PERMIT.
(To reduce the number of carp and buffalo).
During the year 1911 permits were issued under Section 2546, Chapter 15 of the Code of Iowa, to take from certain lakes the coarse fish named therein, the same to be done without expense to the state. The results of this work has been very beneficial to the game fish in these lakes as this spring there was a larger number of small game fish than ever before. The taking of the coarse fish leaves more food for the better kinds and prevents in a measure the destroying of the spawn. The work was done under the direction and supervision of a deputy whose time and expense was paid by the permit holder.
The results of this work was a revelation to the department as to the number of coarse fish contained in these lakes. A rule has been adopted and contracts made with the permit holders for the ensuing year that provides, in addition to the deputies pay and expenses, they shall pay to the state the sum of one-quarter of a cent a pound for all fish taken. If the results of this catch are as good in following years there will be a large sum paid into the
fish and game protection fund for the purpose of restocking and protection of the public waters. The following table shows the number of carp and buffalo taken from the various waters of the state:
gross pounds taken in 1911.


At all these lakes the gar fish were taken in large quantities and destroyed. No account of the numbers was kept by the deputies in charge. The season for this kind of fishing opens on June 15 and closes on December 1st, but in my opinion, if the season was extended to cover the winter months as is done in Minnesota, many more could be taken through the ice. These fish are not very valuable as the highest price paid for them at the lakes last season was two and one-half cents a pound, and many were sold at two sents. The labor and use of large seines are expensive. Even at this price there are many requests for permits but this department has made a ruling that only residents of the counties in which the lakes are situated can receive permits and the benefits derived from them. This protects our own residents from the invasion of foreign fishermen.

## IMPROVEMENTS AND WORK.

In 1910 the fish car "Hawkeye" was practically rebuilt by the C. M. \& St. P. Ry, at the Dubuque shops. The car has been run in the service of the department for about fifteen years. It had become unsafe and in such condition some of the railroads refused to haul it on their passenger trains. With these improvements and others made in the spring of 1912 we feel that the car is as safe as an old car can be made. If the work of distrituting fish from the Mississippi river is to be continued, which in my

sabula pond at sabula
opinion is best in the interest of restocking the waters of the state with game fish, a new car will need to be built and the old one disposed of to the best advantage.

The state launch used on the Mississippi river for many years in gathering fish, was rebuilt and equipped with new engines. It was shipped to lake Okoboji where it is now in service and is doing good work in the protection of fish and game. A new launch was purchased at Burlington, and one was also purchased at Dubuque, which are used in the enforcement of the boundary water license law. Both are in service at all times in this work. Several new boats have been purchased for the different rivers. Boat owners would not rent boats to be used by wardens for arresting unlawful fishermen fearing that damage would be done their boats or other property for allowing them to be thus used, and the state was obliged to purchase and use its own boats.

At Lake Okoboji and the numerous lakes connected with it there has been new iron screens placed in all the runs where fish could escape to the sloughs. The screen at Spring Run has been riprapped with stene to prevent washouts during the spring rains. At Spirit Lake a new dam was built to prevent fish from going into Minnesota. At breeding time for years the fish have gone up the inlet connecting Spirit Lake in Iowa and Loon Lake in Minnesota, only a short distance between them, and they failed to come back. We found this dam to be necessary to save our fish. All inlets into Spirit Lake have been open so that fish can have free run into the breeding grounds and back into the lake.

The state hatchery has been repaired, new roof put on, painted and otherwise placed in good condition, and if at any time the state should deem it advisable to use it for hatching fish it will be available. New cement breeding ponds have been built and the grounds placed in first class condition.

At Eagle Lake, Hancock county, a new dam has been built to hold the water in said lake.
At Clear Lake weed saws have been used to clear the lake from some of the obnoxious weeds. The water has not been high in this lake but the dam is entirely sufficient.
At Wall Lake the inlet has been sereened and careful watch has been maintained over the run of fish in the spring.
At Glenwood Lake the water became very low and stagnant and contained many fish. A stationary engine was placed at the creek and enough water was pumped into the lake to save the fish.

At Medium Lake the water, last fall, was so low that the hard winter killed most of the fish although every effort was made to save them. The lake is now being dredged by the city of Emmetsburg for the purpose of getting deep water.

At Lost Island Lake screens were placed to prevent the loss of fish.

At Monona Lake wild rice was sown to determine if it would be a success.

## MISSISSIPPI RIVER FISHING.

The late decision of the supreme court giving this state jurisdiction over the waters of the Mississippi river, not only to the center of the channel but also giving us concurrent jurisdiction to the shores of adjoining states, has simplified the question of licenses on the river. Fishermen who were fighting the law claiming it to be unconstitutional and refused to take out the legal license, are now applying for them and are banding together for the protection of fish in these boundary waters. With such organization and the strict enforcement of the law the fish in this great source of supply will increase instead of decrease as has been the case during the last few years.

At the request of this department the attorney general's office took charge of the case of the state of Iowa vs. Moyers, in Des Moines county, taking the case from the district court, and on June 25, 1912 handed down the following decision:
"The eoncurrent jurisdiction on the Mississippi river, so far as said river shall form a common boundary to Iowa and any other state. given Iowa by act of March 3, 1845, e. 48,5 stat. 742 , means that all the jurisdiction which might otherwise have been exercised by it with reference to transactions on the part of the river within its boundary shall be possessed and exercised by it with reference to like transactions on any part of the river between it and another state without regard to boundary; so that, as by Act of the 33rd General Assembly, c. 155, as amended by Act of the 34th General Assembly, c. 117, it has done, it may prohibit thereon fishing with nets, without a license from Iowa, and in case of violation thereof, although on the Illinois side of the river, punish the same even though the offender have a license from Illinois."

HUNTER'S LICENSE LAW.
The hunter's license law has proved the wisdom of the legislature in enacting it in many ways and the amount raised has
placed this department where it can carry out the work of propagation of both fish and game, restock our streams and lakes, and do such work in our rivers and lakes as may be necessary for the protection and preservation of fish and game. Only in such work has the fund been expended. This Department has used it for saving and protecting our native birds, restocking with imported birds. furnishing game bird eggs for propagation, repairing dams and building new ones to prevent the escape of fish, deepening the channels and breeding grounds, distributing and saving fish, and giving protection to both fish and game in every portion of the State.
Since its enactment this law has, by results obtained. been justified many times over. Some of the objects sought by the enactment were to place the Warden service on a footing whereby a better control of fish and game protection could be secured. It has tended to eliminate that class of hunters who hunt at all times any and every kind of bird, making all who receive benefit from protection contribute each a small sum to be used for the protection, preservation and propagation of fish and birds, game and non-game. This law has yielded revenue, without being a burden to those who use a gun. which has provided means for increasing the depleted supply of fish in our public waters and restocking the State with game, and in a great measure has provided protection for fish and game. Undouttedly it has done more to save the song and insectiverous birds, vital factors in the preservation of plant life, than any other combination of things has been able to accomplish. This law has come to stay and has resulted in great benefit to all the people of the State. No one would think of trying to get along without it. Such is the history of the hunter's license law which is now in force in nearly every state.
In addition to the protection afforded the fish and game of the State the propagation and preservation is each year receiving more intelligent attention. There can be no question but that the work of increasing the game supply and caring for it during unfavorable seasons is of the utmost importance. I think that there should te some provision that would make void the license of a person convicted of the violation of the game law, and that another license could not be issued to him for a period of one year from the date of conviction. Such license should be surrendered and sent to the State fish and game Warden.

Another subject that confronts us is the question of the alien.

These people shoot all kinds of birds and animals for food and should not be allowed to carry a gun unless provided with a nonresident license. This would tend to decrease this class of hunters.
While the amounts paid in for the years ending June 30, 1911 and 1912, are not so large as for the year ending June 30, 1910, the decrease was natural as many took out licenses the first year of its existence as a law just for the purpose of saying that he had one. Many of them never went hunting nor ever owned a gun. As shown in the building in which this department is located there were six licenses issued to parties who never in their lives hunted. The year 1911 showed a loss from the previous year, but the year ending June 30, 1912, is practically the same amount as for 1910 as shown in the table of licenses issued by counties.
While there is a balance remaining in the fund, in my opinion there should always be one and not a deficit. Circumstances may arise that funds may te needed at any time and should be available without notice as the Department is and has been experimenting on the raising of game birds in our state. in a small way and on small reservations. While at this time we are not fully satisfied that a State game farm would be successful, such a decision may be made and then the funds will be needed. Under no circumstances should this fund be diverted for any other purpose than what it is paid in for as those who have freely paid have done so under the law that explicitly states what it shall be used for and it would be a breach of faith to use it for any other purpose.

## THE ENFORCEMENT OF LAW.

Generally during the formative period of fish and game protective legislation laws the enforcement was entrusted to deputy sheriffs and constables of the counties. These officers did not meet the demands of the law and the warden system was finally adopted. This system in its various forms has by experience been proven to be the only effective method of enforcing the fish and game laws. The reason is not difficult to understand.

Elective officers will not enforce this class of laws. They may to a limited extent arrest and prosecute persons not residents of their county, but with an eye to re-election home folks, when voters, are permitted to break the law and are not prosecuted. A warden, however, who has no political ambition and whose activity is stimulated by the knowledge that his record of work will
insure him a continuance in his position, will hold in cheek many a would be violator and bring about a respect for the law which cannot be ottained under the old system.
It is said by some that the warden, under the present system, is judged by his record of cases. and the claim is made that better results would be obtained if fewer arrests were made, that violator, be warned and the evidence in hand against him be held as a means to make him a respector of the law. This is humanitarian in theory but as a method it fails to bring respect for law and does not produce the results sought. The fish and game warden would be glad to find a way to be relieved of the duty of prosecuting the violator as it often includes friends and acquaintances. To warn them would fail as a corrective agency in almost every case and would result in increased violations. There is but one attitude on this question and that is that the law must be enforced. Where there is a violation there must be a penalty.

When a violation is of such a character that an opinion is necessary let the court decide this fact. But when the plain provisions of the law have been violated the warden has but one course open to him and that is to prosecute at once and try to secure conviction for such open and notorious violation.

In many respects the laws seem arbitrary and severe but they are in force and only secure a fair measure of protection. The best law is the law that works the greatest good with the least injustice. There seems to be no lack of violations but the violators do not work in the open any more and it is more difficult to apprehend them. The same trouble exists in the matter of securing evidence. Sportsmen do not like to act as informers and the farmer will not give evidence against his neighbor, so the warden must depend largely upon his ability to catch them in the act or with the goods on them.

In almost every instance those who have violated the fish and game laws have done so with a knowledge of the penalty. Illegal fishing and hunting have been the two most common violations of law, but there has been violations of almost every section of the statutes relating to this department.

The selling of game birds is prohibited in this state by law, yet there has been two convictions during this year. The detection of offenders of this class is difficult for in most every case they are skilled in the various tricks resorted to in the shipments of game for sale. There will probably always be infractions of these laws and the wardens will not cease in their efforts to compel respect for them.

The warden force has been active as the results accomplished show, but with the many convictions it is very dis ouraging to the warden to be obliged to put in days and nights to catch an old violators and then have the court impose a fine of $\$ 1.00$ and costs, or as is often the case, suspend the fine upon payment of the costs.
The fine, as laid down by the statute of Iowa, should be assessed by the court and go to the fund provided by law, and if any remitting or suspending is necessary it might be in the matter of the costs as the court and officers could show their sympathy fully by this method of procedure. All too often offenders against the fish and game laws are able to use certain influence by which they suceed in escaping the legal penalties. If the general public took greater interest in the whole question such juggling of justice would not be tolerated. It is not allowed, much less practiced, in other departments of this state. Why, therefore, should it be permitted in the fish and game Department.
People who are ready to censure the Department for continued violations in some sections should realize that in many instances the information comes to the warden second hand. or with the provision attached that they will give the evidence if their names are not made public. They are afraid of damage to themselves or to their property at the hands of the lawless. This makes it impossitle for the wardens to prosecute the violators of that section unless caught in the act, or with the goods on them.

The wardens have a large territory to cover and it is impossible for them to continuously patrol all streams, or parts of streams, and if they were assisted by those who know, they surely could stop the unlawful work complained of in many instances.

The resolutions adopted by the special committee of the National Game and Fish Commissioners, held at Denver August 31, 1912, state that only through the Game Warden System can satisfactory enforcement be secured. Merit and efficiency only should be considereded in the appointment of wardens, or their retention in the service. That the wardens service should be divorced as far as possible from politics. In making this recommendation the committee invites attention to the merit system as now applied to the appointment and promotion of regular salaried wardens in the states of Massachusetts, New York, New Jersey and Wisconsin.

We find that many county auditors do not follow the law and remit to the state treasurer on the first of each month the proceeds of the sales of hunters licenses for the preceding month. In some cases remittances have only been sent for the year at the time statements have been sent from this office for settlement of the fiscal year. The state auditor's books will show these facts. Under these circumstances it is impossible for this Department to have any knowledge of the number sold in each county until the final settlement. If we knew the amount sold monthly we could make comparison with previous years and decide whether all hunters were obeying the law. I do not desire to place any extra burden upon the auditors but some method should be adopted that will result in monthly remittances to the state treasurer as provided by law.

## Carp, value of.

Only a few years ago there was a demand for young carp and they were supplied by hundreds of thousands by the United States Government, and also by many state commissions. Pond culture was soon abandoned and they were allowed to escape into the open public waters. These fish did not meet the expectations and were not approved as a table fish, and the cuiture of them ceased. With our added foreign population the problem of supplying these multitudes with cheap, yet wholesome food, becomes very great and anything which helps to meet this demand is of great value to the country. From this point of view there is no doubt but the carp is of value and that there is benetit to be derived from it. Pond culture ceased because of the abundance of carp in the rivers and open waters where they could be obtained with less trouble than they could be raised. The carp has adapted itself to the conditions found in this country and has steadily multiplied in our waters, and it finds a ready sale in our large cities to the poorer classes of people.

While there are those who maintain that the carp is entirely supplanting the fish which were there before. and that one fish is of more value than two which have taken its place, and that the carp does more than enough damage to offset its value, in most cases the damage has been greatly mistated or is entirely unfounded. It has been found that the carp have little or no share
in the decrease of the native fishes and it has been satisfactorily proven that black bass have increased in numbers by having the young carp to feed upon, and that it does not feed upon the spawn of other fish. It is not a question of what to do with them to rid our waters of them for they are here and here to stay.
The only question to consider is how we can make the most of its good qualities and lessen the damage done. The carp needs no protection and the best bounty is an increased market, a growing demand that will make fishing for carp a profitable business. I am of the opinion that an increasing demand will reduce its number.
water pollution.
The streams are looked upon by the owners of industrial establishments, by municipal corporations and even by many citizens as the natural sewers for all kinds of filth. Under the present laws this Department is powerless to stop this pollution. To empty into a stream anything injurious to human health is unlawful, and to empty into a stream anything injurious to fish or fish food should be made unlawful, and it should only be necessary to prove that the waste or substance is injurious to the fish or fish food to call for its abolition.
Fishermen on the Des Moines and other river of our state ask where the fish have gone. Game fish demand pure water and they are not found anywhere else. Why are the salmon streams of England and its provinces yielding to the sportsmen the same toll as in former years? The answer is that the waters are not allowed to be polluted. In England it is incumbent upon every city, village and hamlet to see to it that their rivers are just as pure below their sites as above.

In many states the practice of using the streams as sewers and receptacles of filth has been stopped by the Department of Health and the former depleted streams are now filled with an abundant supply of fish. In Pennsylvania where this work has been taken up by the combined efforts of the Board of Health and the Department of Fisheries, the result has been nearly forty suits at law and is gratifying from the fact that the commonwealth won in every suit in the lower courts; and the one, under a previous law which was decided against the state, was taken up on an appeal to the Superior Court. It was then taken to the Supreme Court which sustained the Superior Court, making the pollution

law absolutely effective. There should be a law which prohibits the introduction of any substance which will in any way directly or indirectly effect the food of the fish or effect the fish themselves, with a penalty attached for violation of the same. This would settle in a great measure the questions asked regarding the searcity of fish, and is also necessary as a health measure.

## PROTECTION OF USEFUL BIRDS.

(The Meadow Lark)
Weeds and injurious insects cost the farmers of the United States millions of dollars annually in direct losses and in the expenditures for labor and materials necessary to protect their crops. Anything which tends to reduce the number of weeds or to check the ravages of injurious insects is therefore a direct benefit.

The common Meadow Lark is perhaps one of the most valuable of all birds, for more than one-half of its food consists of harmful insects, and the vegetable portion of its fare is made up of seeds of injurious weeds. The people whose homes are among the green fields need no one to tell them of the aesthetic value of the meadow lark. It is claimed that the song of this Iowa prairie bird far exceeds in volume and sweetness that of its eastern brother of the meadows, but the wild sweet song of either leaves an impress upon the mind of the hearer that can never be effaced. The beauty of the meadow lark's plumage and the sweetness of its song, however, are far less important to the human race than its value as an insect destroyer. An analysis of the food of the meadow lark leads one to wonder how a farmer can act so much against his own interests as to allow one of them to be shot on premises which he controls.

USEFUL NON-GAME BIRDS.

## (The Flicker)

We have several kinds of woodpeckers in this state, one of which comes in early spring. It takes nearly all of its food from the ground, fully one-half being ants and their larvae taken from the ground or dead trees. Those who from a scientific standpoint know say that as many as three thousand little red ants have been found in the stomach of a Flicker. We are told by those who have made a study of insects that what is known as the plant louse, because of excessive numbers, is the most destructive of all small insects, sucking the vitality from the plant upon
which they may be found. The ant seems to be the especial protector of the plant lice, carrying the eggs of the louse below the frost line in the fall and bringing the newly hatched louse to the surface in the spring and placing it upon the desired plant, even moving it from point to point on the plant for the louse is almost incapable of locomotion. In return for services rendered the ant gets from the louse what is known as honey-dew, an excretion of the louse just as the farmer keeps a herd of cows for the milk they give, so the ant keeps his herd of plant life for profit. With the coming of the flicker the ant disappears. The protector of the louse has been removed and the louse either dies of starvation or is destroyed by some of its many natural enemies.

The flicker is an enemy and destroyer of the codling moth larvae. The red shafted flicker is given great credit by Mr. A. P. Martin, of Petaluma, Cal., who states that in looking over his orchard and examining all crevices and bark of the trees for the codling moth larvae he failed to find any where there were thousands last fall. He found plenty of cocoons but in every case the former occupant was absent. It was too early for transformation to have taken place and he found small holes in the bark scales which had been made by some bird. His belief is that the good work was done by a bird whose scientific name he does not know but which is variously called the "yellow hammer', 'flicker', or "high hole", and which Dr. Merriam informs us is, in California, (Colaptes Eafer). During the early spring months Mr. Martin states that they were to be seen by hundreds in his orchard industriously examining the trunks and large limbs of the fruit trees, and he also found great numbers of them around sheds where he stored his winter apples and pears. As the result of several hours' search Mr. Martin found only one worm and this one escaped only by an accident for several had been within a quarter of an inch of it.

No farmer can afford to permit the killing of a single flicker upon the property he controls, or any other member of this order of birds, for just as the flicker is working for him so the others are doing, each one in its especial place and peculiar way. The red headed woodpecker delights to feed upon large beetles and their larvae, while the hairy and downy woodpeckers feed upon smaller insects collected from the same tree trunks over which the redhead hunted. The nuthatch and the chickadee, closely allied to the order of woodpeckers, glean still smaller game from the same field.

## The Robin Redbreast)

The robin is found in all portions of North America, east of the Rocky Mountains, from the Gulf of Mexico to Alaska, and breeds in all of this great region that lies north of a line running through Kansas and Virginia, excepting the extreme northeastern Artic regions.

In most parts of the country the robin is too common a bird to need an introduction to any one except an urbanite. Even those who think they have nothing to learn about the robin, however, will be surprised at how much of interest and value can be gleaned by a systematic study of the life history of this species during an entire year. Our common robin comes with the black birds, among the first in the spring time, each one just as busy as he can be, rushing here and there, turning over leaves, listening and running in the quest for food. They follow the freshly turned furrows and gather daily vast numbers of beetles of which we have sixty or more kinds in this state. They also eat the larvae of these insects that when the warmer days come if not destroyed, would make profitable cultivation of the land upon which they are found impossible.
Investigation of the life work of robins, made by the Biological Survey at Washington, through a body of men trained in this work, demonstrated through the examination of almost four hundred stomachs of robins taken at different places and at different times, that fully 40 per cent of the food of these birds the year around was composed of insects, 43 per cent of wild fruit and seeds, 8 per cent of cultivated fruit, 5 per cent of miscellaneous vegetable matter, and 4 per cent unidentified, proving beyond question the economic value of the robin. Yet, in the face of all this evidence, we find many farmers ready and willing to kill this bird the moment he flies into their berry patch, cherry tree, or even into their fields. The majority of these men never examines a bird's stomach, yet they presume to know more about this matter than can be demonstrated by an army of scientific examiners.

The following birds are valuable as insect and seed destroyers and should be protected at all times especially by farmers and fruit raisers of our state:

The night hawk, which is almost exclusively insectiverous and which usually feeds upon insects which fly some distance above the ground, has been shown to also feed upon grasshoppers, as
many as sixty being found in a single stomach. The stomach of a yellow-billed cuckoo was found to contain 217 fall wewworms, and another 250 American tent caterpillars.

Dr. S. D. Judd has called attention to the quantities of insects captured by birds to feed their young. • In the case of the kingbird one-half the stomach contents of 14 nestlings consisted of crickets and grasshoppers. In feeding a brood of three young wrens about three-fourths grown the mother was observed to make 110 visits to the nestlings, carrying to them 178 insects and sp:ders, among them being 14 grasshoppers, 32 May flies, 54 caterpillars and 13 spiders.

In examining the stomachs of doves he found one containing 7,500 seeds of the yellow wood sorrel (oxalis stricta) and another 9,220 miseellaneous seeds, chiefly weeds. The total quantity of weed seeds destroyed by such birds as these in the course of a season is almost beyond computation. Under modern game laws complete protection throughout the year is extended to non-game birds. In the case of the dove, however, which is often considered a game bird, an open season for hunting is provided in a few states although the tendency is to remove it from the game bird list on account of its importance as a weed destroyer. Not only should they be protected and saved from destruction at the hands of man, but also from the vicious of their own kind, certain kinds of owls, hawks and the crow. While it is admitted that these three last named birds do some good in the way of destruction of rodents and insects, the evil they do more than outweighs the good and the weight of opinion tends to their destruction, particularly is this true of the crow. Enabled by the power of flight and a disposition to wander the crow covers vast stretches of territory in search of food and its work of evil far exceeds that of any other bird or four footed animal no matter how blood-thirsty it may be. A noted Ornithologist says on this subject: "No observing person will deny that the crow does serious damage to the eggs and young of wild birds."

The instances of depredation, which have come within the knowledge of most farmers and others living in the country, are far too numerous to leave a shadow of a doubt on this score in any unprejudiced mind. For every instance of such robbery witnessed by man thousands must take place without his knowledge.
Persecution by crows is doubtless a very large factor among the influences which cause so many birds to crowd around human

habitations during the nesting season. And yet the relentless crow follows them even to the eaves and window sills of our houses, taking their eggs and young despite every precaution, and the only wonder is that the wild birds, of many species, are able to raise their young at all. The sharp shinned hawk, Cooper's hawk, duck hawk and pigeon hawk, with the great horned owl and the barred owl, are great destroyers of birds and game and should be killed wherever found.

Another specialist writes: "For the past ten years, during the breeding season of the birds, from the last of May through June and July of each, I have watched the crows eat the eggs and little birds. I have watched them start at 4 o'clock in the morning, or a little later, and hunt over the shade trees that line the streets for the eggs and young birds, even going into the trees that stand close to the buildings where people would not think a crow would ever go. This is done, of course before people rise, and as soon as any one stirs out they will leave."
Another observer, Mr. Ingalls, says: "I have seen the nests of many birds of several species, from the ruffed grouse to the red-eye, and chippy, robbed before my own eyes, and have evidence of many more. Every season, late in May or early in June, the crows make a raid on the birds nesting in the shade trees along our village streets and in orchards and private grounds, systematically searching every tree, destroying nests and eating or carrying away the eggs and young." He rates the crow as the most destructive of all natural enemies of birds. It is true they are now seen in increasing numbers and some measure should be taken to lessen the number. A small bounty as an incentive would tend to accomplish this.
federal fisheries.
The Public, or Government Fish Culture, has in America attained tremendous proportions and exceeds in extent and importance that of all other countries combined. Fisherles work was conducted at thirty-five permanent stations and eighty-six field and collection stations located in thirty-two states.

The land owned and occupied by the United States Bureau of Fisheries at the fish-cultural and biological stations has an aggregate of over 12,000 acres with a value of $\$ 240.000 .00$. The improvements and equipment of these stations represent an investment of more than $\$ 1,000,000.00$. Other property of the bureau
includes four sea going steam and sail vessels. 20 steam launches and 150 small sail power and row boats which, with equipment, have a value of $\$ 300,000.00$. Its six fish transportation cars are valued at $\$ 45,000.00$. The aggregate investment of the Federal Government in property devoted to the fishery service is thus about $\$ 1,585,000.00$. The appropriations granted by Congress for the use of the bureau totals nearly $\$ 1,000000.00$ annually.

It has been urged that provision be made for the establishment of additional stations for the rescue of fishes from overflowed lands in the Mississippi valley. Millicns of fish now annually left by the receding waters to die of exposure can by this means be saved at a small expense.

## STATE FAIR EXHIBIT.

In 1910 this department made a very large and elaborate exhibit at the state fair of the game birds being introduced. This was considered by this Department as a necessity as at that time contract had been made for a large number of Ring-neck Pheasants and their eggs for propagation purposes had been distributed over the state. But very few of our people had ever seen these birds and the Department had adopted the policy of restocking with them. It was our desire to have the people obtain a full knowledge of them and their habits. Besides being instructive the exhibit proved very attractive as was shown by the large number of persons who visited it daily. At that time there were shown over two thousand Ring-neck Pheasants which at the close of the fair, were distributed to those who desired to have them for propagation and restocking and they went to every portion of the state. Besides the game birds owned by the state there was shown in our enclosure by private parties, a large variety of fancy birds and several large ponds exhibited our native fish.
At the State Fair in 1911 we decided to continue this exhibit believing it to be for the best interest of all that they should become acquainted with the birds that were being distributed, but on a smaller scale. While reduced in size, the exhibit was so arranged that it brought the people in close contact with the birds and fish shown so they could study them at their leisure. The birds shown at this fair were in the large majority those raised in the state during the year, and demonstrated that with proper care they can be raised in large numbers. As at the previous fair the birds were distributed among those desiring to raise them.


After visiting other State Fairs I am of the opinion that a suitable building should be erected on the State Fair Grounds with such conveniences as may be necessary for the yearly exhibit of all birds, game. and fish native to our State or that may be imported for restocking; and the distribution of such literature as will enlighten the people on the saving of all our wild and insectiverous birds showing the great value they are to the farmer and the horticulturist.

## RECOMMENDATIONS.

I would again recommend that the word "knowingly" be stricken from Section 2543 in reference to the sale of fish. This one word prevents many convictions of parties selling game fish and why it should remain in the fish law and be taken out of the game law is inconceivable to me.

I would recommend that game birds and animals raised in captivity in the State of Iowa be permitted to be sold and shipped under authority and with permit from the fish and game Warden for propagation purposes, as many private parties are now raising game birds for propagation and liberation and sell to others who desire to raise them.
I would recommend that hunting with ferrets be abolished.
I would recommend that the laws be so amended that it shall be unlawful to take in any manner from the public waters of the State, or sell or offer for sale, any of the following named fishes which are less than the length specified:


## ACKNOWLEDGEMENT.

I desire again to acknowledge my indebtedness to the press of the State, which has at all times assisted by publication and otherwise in bringing the laws before the people and urging in every manner their enforcement. This educational work has been of great assistance to the work of this Department.
To the Commissioners of the United States Fisheries who have at all times responded to all requests for fish and endeavored in every way to assist this Department in restocking the public waters,

To the railways which have made many concessions and have given good service in the movements of the fish car,

To the several Fish and Game Clubs that have rendered valuable assistance,

To your Excellency and members of the Executive Council for courtesies extended,

To you, one and all, I am indebted.
George A. Lincoln,
State Fish and Game Warden.


BULL HEAD

BOUNDARY WATER LICENSE FUND.
RECEIPTS.


BOUNDARY WATER LICENSE FUND Continued. RECEIPTS.


boundary water license fund Continued.
RECEIPTS.




RECEIPTS.





RECEIPTS


| n Wm. Pla |
| :---: |
| H. A. Schurtzma |
| 4. Henry Whipka |
| 4- Wm. Junker |
| 4-_ Zeb Hartman |
| 4.- Chas. Shain |
| 4.- Claid Dickey |
| 5.- C. F, Miller |
| 5.- J. H. Attall |
| 5.- W. A. MeGowan |
| 6.- Abert S. Miller |
| 6._ J. P. Busch |
| 6.- Wm. H. Lyons |
| 8.- Wash Davis |
| 8.- Geo. Oates |
| 8.- Wm. Radach |
| 8_- Wm. Wachend |
| 8.-. Louis elling |
| 8.- John Drollma: |
| 8.. Henry Saengling |
| 1.-. Frank Hillige |
| 21.. M. B. Westgate |
| 1.- C. E. Hugunies |
| 1.. L. W. Howard |
| W. J. Davis |
| 3... Geo. Johnson |
| 25.- August Rodenburg |
| 5.. Henry Harting |
| 25.- Albert Robinson |
| 25-- John Thiltgen |
| John Klein |
| J. C. Saylor |
| 25.. Carl Brock |
| 28.. Hans Stender |
| 1-. L. F. May |
| U. Gantenb |
| A. Gant |
| 3.- John Fads |
| 4.- Adie McPartlan |
| 4.- Geo. B. May |
| 4. Wm. Pust |
| 4.- Rert Menne |
| 4.- John Van Schaa |
| Not issued |
| 4.. E. Fhrhar |
| 5.- Martin Oats |
| 5.- L. L. Adams |
|  |



## BOUNDARY WATER LICENSE FUND-CONTINUED.




BOUNDARY WATER LICENSE FUND.
DISBURSEMENTS


BOUNDARY WATER LICENSE FUND-CONTINUED.
DISBURSEMENTS.


HUNTERS' LICENSES ISSUED BY COUNTIES FROM JULY 1, 1910, TO JUNE 80, 1912.

| County | Non- Resident 1911 | Resident 1911 | $\begin{gathered} \text { Non- } \\ \text { Resident } \\ 1912 \\ \hline \end{gathered}$ | $\begin{gathered} \text { Resident } \\ 1912 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Adair |  | 432.00 |  | 439.00 |
| Adams |  | 458.00 |  | 516.00 |
| Allamakee | 40.00 | 723.00 | 50.00 | 538.00 |
| Appanoose |  | 1,407.00 | 10.00 | 1,489.00 |
| Audubon |  | 405.00 |  | 1 424.00 |
| Benton |  | 791.00 |  | 86900 |
| Blackhawk |  | 2,088,00 |  | 2,196.00 |
| Boone | 10.00 | 1,158.00 |  | 1,28500 |
| Buchanan |  | 1.071 .00 |  | 956.00 |
| Bremer |  | 1,100.00 |  | 97500 |
| Buena Vista |  | 595.00 |  | 639.00 |
| Butler |  | 686.00 |  | 64500 |
| Calhom |  | 544.00 |  | 534.00 |
| Cartoll |  | 862.00 |  | 86600 |
| Cass |  | 713.00 |  | 702.00 |
| Cedar |  | 74500 |  | 676.00 |
| Cerro Gordo |  | 1,329 00 |  | 1,417.00 |
| Cherokee |  | 454.00 |  | 582.00 |
| Chickasaw |  | 1,16200 |  | 1,078.00 |
| $\mathrm{ClO}^{-1} \mathrm{C}$ |  | 396.00 |  | 353.00 |
| Clay | 10.00 | 597.00 | 20.00 | 60300 |
| Eliyton |  | 1.69400 |  | 1,564.00 |
| Clinton | 20.00 | 1,53500 | 10.00 | 1,259.00 |
| Crowford |  | 657.00 |  | 1,02300 |
| mollos |  | 1,07200 |  | 1.21509 |
| Davis |  | 670.00 36100 |  | 597.03 |
| Decatur Delaware | 1000 | 361.00 1.02200 |  | 32800 932.00 |
| Des Moines | 60.05 | 1,471 0 r | 30 r | 1,34200 |
| Dickinson |  | $766{ }^{\circ}$ | 30 | 747.00 |
| Dubuque | 200 | 2.142 f | 301 | 1.89700 |
| Fmmet |  | 539.0 |  | 47400 |
| Fayette |  | 1,092 0 |  | 98000 |
| Floyd |  | 909.0 | 100 | 84500 |
| Franklin |  | 68900 |  | 62500 |
| Fremont | 20.00 | 59300 | 30.0 | 49100 |
| Greene |  | 81000 |  | 72300 |
| Simindy |  | 43800 |  | 47400 |
| Guthrie |  | 87000 | 100 | 88100 |
| Hamilton |  | 895.00 | 10.00 | 94000 |
| Hancock |  | 49400 | 20.00 | 46200 |
| Hardin | 10.00 | 96500 |  | 1.20200 |
| Harrison |  | 1.09600 | 10.00 | 1,063 00 |
| Henry |  | 57400 |  | 40500 |
| Howard | 20.00 | 747.00 | 2000 | 67100 |
| Humboldt |  | 439.00 | 10.00 | 433.00 |
|  |  | 30600 |  | 32800 |
| Iowa | 10.00 | 947.00 |  | 80400 |
| Jackson |  | 1,06100 |  | 938.00 |
| Jasper |  | 1,480 00 |  | 1,51400 |
| Jefferson |  | 468.00 |  | 419.00 |
| Johnson |  | 1,129.00 |  | 999.00 834.00 |
| Jones ${ }_{\text {Kıoknk }}$ |  | 971.00 100500 | 1000 | 834.00 92600 |

HUNTERS' LICENSES ISSUED BY COUNTIES FROM JULY 1, 1910, TO JUNE 30, 1912-CONTINUED.

| County | Non- Resident 1911 | $\begin{gathered} \text { Resident } \\ 1911 \end{gathered}$ | Non- Resident 1912 | $\begin{gathered} \text { Resident } \\ 1912 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Kossuth |  | 704.00 |  | 664.00 |
| Lee |  | 1,383.00 |  | 1,289.00 |
| Linn | 20.00 | 2,302.00 | 20.00 | 2,416.00 |
| Louisa |  | 683.00 | 20.00 | 673.00 |
| Lucas |  | 443.00 |  | 393.00 |
| Lyon |  | 301.00 |  | 504.00 |
| Madison |  | 575.00 |  | 465.00 |
| Mahaska |  | 1,777.00 |  | 1,835.00 |
| Marion |  | 1,161.00 |  | 943.00 |
| Marshall |  | 1,178.00 |  | 1,519.00 |
| Mills |  | 656.00 | 20.00 | 581.00 |
| Mitchell |  | 502.00 |  | 562.00 |
| Monona |  | 614.00 |  | 637.00 |
| Monroe |  | 1,261.00 |  | 1,384.00 |
| Montgomery |  | 638.00 |  | 618.00 |
| Muscatine - |  | 1,534.00 |  | 1,640.00 |
| O'Brien |  | 546.00 |  | 710.00 |
| Osceola |  | 306.00 |  | 443.00 |
| Page |  | 863.00 |  | 799.00 |
| Palo Alto | 10.00 | 756.00 |  | 667.00 |
| Plymouth |  | 691.00 |  | 762.00 |
| Pocahontas |  | 402.00 |  | 426.00 |
| Polk |  | 3,939.00 | 10.00 | 4,142.00 |
| Pottawattamie | 60.00 | 2,004.00 | 50.00 | 1,868.00 |
| Poweshiek |  | 679.00 |  | 627.00 |
| Racgingold |  | $\begin{aligned} & 308.00 \\ & 650.00 \end{aligned}$ |  | 273.00 703.00 |
| Scott | 10.00 | 1,948.00 | 20.00 | 1,902.00 |
| Shelby | 20.00 | 622.00 |  | 650.00 |
| Sioux |  | 493.00 |  | 810.00 |
| Story |  | 930.00 |  | 1,076.00 |
| Tama |  | 1,03800 |  | 981.00 |
| Taylor | 2000 | 510.00 |  | 430.00 |
| Union | 10.00 | 734.00 |  | 795.00 |
| Van Buren |  | 689.00 |  | 570.00 |
| Wapello | 10.00 | 1,64500 | 10.00 | 1,870.00 |
| Warren |  | 556.00 | 20.00 | 542.00 |
| Washington |  | 936.00 |  | 899.00 |
| Wayne |  | 56500 |  | 473.00 |
| Webster |  | 1,145.00 |  | 1,286.00 |
| Winnebago | 1000 | 433.00 | 10.00 | 346.00 |
| Winneshiek |  | 864.00 |  | 826.00 |
| Woodbury | 20.00 | 1,83500 |  | 1,746.00 |
| Worth |  | 360.00 |  | 367.00 |
| Wright -------19-12 |  | 1,109.00 |  | 989.00 |
| Total Resident 1912 Total Non-Resd. 1912 |  |  | 90. | 90,218.00 |
|  |  |  |  |  |
| Total 1912 _-...- |  |  |  | 90,708.00 |
| Total Resident 1911 - |  | 90,891.00 |  |  |
| Total Non-Resd. 1911. | 430.00 | 430.00 |  |  |
| Total 1911 |  | 91,321.0f |  | 91,321.00 |
| Grand total |  |  |  | 182,029.00 |



## DISBURSEMENTS.

| June 30, 1910, to June 30, 1912-Fish and game Protection Acts Thirty-third G. A. |  |
| :---: | :---: |
| Geo. A. Lincoln, Fish and Game Warden, Salary: |  |
| April 20 to June 30, 1911 | 311.11 |
| June 30, 1911, to June 30, 1912 | 1,600.00 |
| Office Expenses: |  |
| Rent, light, clerk hire, express, postage, traveling expenses and sundries | 5,424.60 |
| Deputies salary and ex | 76,909.05 |
| Printing | 4,513.09 |
| Distribution of fish | 2,287.76 |
| Okoboji Expense: |  |
| Dam, screens and riprapping | 570.57 |
| Feeding and care of game birds | 1,999.94 |
| Refund county auditors overpaid hunter licenses | 108.00 |
| Property Bought: |  |
| Weed saws, 5 seines, 2 boats, office furniture, pump, tent, lawn mower, 1 launch at Burlington, and 1 launch for Dubuque |  |
| Spirit Lake Hatchery and Dams: |  |
| Repairing hatchery, concrete ponds, dams, ete | 1,576.10 |
| Ring-neck pheasants purch | 14,587.76 |
| Hungarian partridges purchased | 22,968.46 |
| Pheasant eggs purchased | 1,561.01 |
| Miscellaneous: |  |
| State Fair exhibit including purchase of permanent tanks, wire cages, lumber and plumbing for 1910 and 1911 $\qquad$ ......... . . . . . . . . . . . . . . . . . . . . . . . $\$ 2,318.63$ |  |
| Work at Clear Lake. . . . . . . . . . . . . . . . . . . . . . . . . . . . 101.50 |  |
| Dam at Eagle Lake................................. . 250.00 |  |
| Work at Wall Lake. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 186.40 |  |
| Work at Glenwood Lake. . . . . . . . . . . . . . . . . . . . . . . . 128.01 |  |
| Wild rice, Lake Manawa. . . . . . . . . . . . . . . . . . . . . . . . . 10.00 |  |
| Deputy badges . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 16.00 | 3,010.5 |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8137.912 .87 |  |
| RECEIPTS. |  |
| From hunters' licenses July 1, 1910 to June 30, 1911......... \$ $91,321.00$ <br> From hunters' licenses July 1, 1911, to June 30, 1912.......... 90,708.00 |  |
|  |  |
| Total . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 182,029.00$ |  |
| From fish seized and sold. | 50.0 |
| From sale of guns and seines | 3. |
| From G. N. Vermillion, deputy auditor Lee county, refund on hunters' licenses not accounted for to county auditor........ . | 13.0 |

PROSECUTIONS.
Month of July, 1910.

## Unlawful Fishing:

24 convictions; fine and costs.
1 jail sentence.
1 case not guilty.
Seized and Destroyed:
62 fish traps; 22 hoop nets; 15 unlawful minno.v seines; 58 trot lines; 50 throw lines; 4 trammel nets; 5 seines; 2 spears and 5 boats.

## Month of August, 1910.

Unlawful Fishing:
9 convictions; fine and costs. $\$ 72.10$
1 jail sentence.
2 cases not guilty.
Hunting Without License:
6 convictions; fine and costs.
2 cases not guilty.
Killing Song Birds:
1 conviction; fine and costs. ................................................. 16.15
Killing Game Birds Out of Season:
2 convictions; fine and costs........................................... 21.85
Seized and Destroyed:
56 hoop nets; 3 seines; 1 spear; 100 trot lines and 13 fish traps.
Month of September, 1910.
Unlawful Fishing:
18 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 282.34$
1 case jail sentence 7 days.
Hunting Without License:
6 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 151.55$
Killing Ducks from Launch:
1 conviction; fine and costs. ....................................... $\$ 13.85$
Killing Muskrats Out of Season:
1 conviction; fine and costs.
Killing Song Birds:

1. conviction: fine and costs..................................... 5.

Buying Fish Unlawfully Taken:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 95.00$
Seized and Destroyed:
8 nets; 13 fish traps; 6 trot lines; 1 hoop net; 4 seines, and 19 rat skins.

Month of October, 1910.
Unlawful Fishing:
10 convictions; fine and costs.

2 cases jail sentence.
2 cases not guilty.
Hunting Without License:
15 convictions; fine and costs......................................... $\$ 430.85$
1 case not guilty.
Unlawful Trapping:
24 convictions; fine and costs......................................... $\$ 613.80$
3 cases jail sentences.
Shooting From Boat After Sunset:
3 convictions; fine and costs..................................... $\$ 43.45$
Killing Song Birds:
2 convictions; fine and costs...................................... $\$ 49.70$
Seized and Destroyed:
192 traps; 2 tents; 2 boats; 1 trot line; 1 seine; 1 trammel net and 5 hoop nets.

Unlawful Fishing:
Month of November, 1910.
10 convictions; fine and costs. ........... . . . . . . . . . . . . . . . . . $\$ 259.55$
Hunting Without License:
2 convictions; fine and costs........................................ 86.30
3 cases jail sentence 15 days each.
Unlawful Trapping:

1 case not guilty.
1 case jail sentence 30 days.
Dynamiting:
1 conviction; fine and costs. ......................................... 53.85
Killing Deer:
1 conviction; fine and costs......................................... 27.70
Interfering With Deputy:
1 conviction: fine and costs
Seized and Destroyed:
14 spears; 1 gill net; 21 traps; 8 trot lines and 2 hoop nets.

Unlawful Fishing:
Month of December, 1910.
28 convictions; fine and costs
1 case jail sentence 15 days.
Hunting Without License:
2 convictions; fine and costs
Selling Squirrel: 2 convictions; fine and costs
Seized and Destroyed:
11 spears; 10 fish traps; 1 seine and 7 trot lines.
Month of January, 1911.
Unlawful Fishing:
25 convictions, fine and costs
$\$ 286.40$
3 cases not guilty.

Hunting Without License:
12 convictions; fine and costs........................................ $\$ 327.50$
Killing Game Birds:
2 convictions; fine and costs....................................... 18.00
Shipping Squirrels:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 15.50$
Dynamiting:
2 convictions; fine and costs each $\$ 54.75 \ldots \ldots . . . . . . . .$.
Jail sentence 15 days each.
Having Pheasants in Possession:
1 conviction; fine and costs. .
Month of February, 1911.
Unlawful Fishing:
14 convictions; fine and costs
1 case not guilty.
Hunting Without License:
2 convictions; fine and costs
1 case not guilty.
Serzed and Destroyed:
6 trot lines; 1 dip net and 2 seines.
Month of March, 1911.
Unlawful Fishing:
6 convictions; fine and costs
Hunting Without License:
13 convictions; fine and costs
1 case not guilty.
2 cases dismissed; boys.

## Month of April, 1911.

Unlawful Fishing:
2 convictions; fine and costs
1 case jail sentence.
5 cases dismissed.
Hunting Without License:
2 convictions; fine and costs..................................... 17.70
Killing Game Out of Season:
6 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 90.40$
Selling Game Birds:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 20.95$
Seized and Destroyed:
5 hoop nets; 74 trot lines; 3 Eeines; 6 hoop nets and 2 air guns; 1 trap.
Month of May, 1911.
Unlawful Fishing:
35 convictions; fine and costs.
.$\$ 390.95$

## 5 cases jail sentence. <br> 2 cases not guilty.

Hunting Without License:
5 convictions; fine and costs.
Killing Prairie Chickens:
2 convictions; fine and costs.................................... 31.70
Seized and Destroyed:
10 hoop nets; 52 fish traps; 127 trot lines; 14 seines and 2 spears.

Unlawful Fishing:
Month of June, 1911.
9 convictions; fine and costs. $\qquad$
3 cases jail sentence.
2 cases not guilty.
Hunting Without License:
2 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 60.00$ Shooting Song Birds:

3 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 29.60
Seized and Destroyed:
74 fish traps: 62 trot lines; 22 dip nets; 2 hooks; 18 zeines and 1 trammel net.

Unlawful Fishing:
21 convictions; fine and costs
2 cases not guilty.
2 cases defendants left state.
Hunting Without License:
10 convictions; fine and costs.. ....................................... $\$ 299.85$
2 cases jail sentence.
Unlawful Shipping of Fish:
1 conviction; fine and costs........................................... $\$ 10.90$ Dynamiting:
2 cases not guilty.
1 conviction; jail sentence; fine and costs......................... \$ 54.50
Seized and Destroyed:
102 traps; 71 nets; 8 seines; 34 trot lines and 1 spear.
Month of August, 1911
Unlawful Fishing:
17 convictions; fine and costs. $\qquad$ 1 case not guilty.
Hunting Without License:
9 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 269.00$
1 case not guilty.
Killing Game Birds Out of Season.
7 convictions; fine and costs.
Seized and Destroyed:
21 fish traps, 13 trot lines and 5 seines.

Month of September, 1911.
Unlawful FishIng:
3 convictions; fine and costs
2 cases jail sentence.
Hunting Without License:
9 convictions: fine and costs
1 case not guilty.
1 case jail sentence.
Killing Birds Out of Season:
9 convictions; fine and costs........................................ . . . $\$ 160.40$ Dynamiting:
2 convictions; fine and costs......................................... $\$ 10880$
Jail sentence 15 days each.
Seized and Destroyed:
9 trot lines; 4 nets; 1 spear and one seine.
Month of October, 1911.
Unlawful Fishing:
$\qquad$ Hunting Without License:

19 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 519.60$
1 case not guilty.
2 cases dismissed.
Killing Birds and Animals:
1 conviction; fine and costs.
1 case not guilty.
Unlawful Trapping:
7 convictions; fine and costs . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$82.05
Seized and Destroyed:
100 traps, 1 seine and 3 nets,
Killing Protected Birds:
1 conviction; fine and costs

## PROSECUTIONS.

Month of November, 1911

## Unlawful Fishing:

5 convictions; fine and costs......................................... $\$ 58.10$
Hunting Without License:
13 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 329.15$
Killing Squirrels out of Season:
1 conviction; fine and costs............................................. $\$ 14.30$
Seized and Destroyed:
5 spears and 5 traps.

Month of December, 1911.
Unlawful Fishing:

5 convictions; fine and costs $\qquad$
2 cases jail sentence 30 days each.
Hunting Without License:
17 convictions; fine and costs.
3 cases dismiszed.
Killing Game Birds:
1 conviction; fine and costs.
Killing Protected Birds:
2 convictions; fine and costs. 1 case not guilty.

## Selling Game Birds:

1 conviction; fine and costs .

## Month of January, 1912.

## Unlawful Fishing:

3 convictions; fine and costs.
Hunting Without License:
11 convictions; fine and costs.
4 minors to Probation Court
Snaring Prairie Chickens:
1 conviction; fine and costs.
Killing Deer:
3 convictions; jail sentence.
1 conviction; fine and costs
Killing Game Unlawfully:
1 conviction; fine and costs
Serving Game at Hotel:
1 conviction; fine and costs.
nd Destroyed
30 quail traps, 8 spears and 4 nets.

## Month of February, 1912.

## Unlawful Fishing:

14 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 146.20$
Hunting Without License:
5 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 171.30$
2 cases not guilty.
Selling Game Birds:
2 convictions; fine and costs.
2 cases dismissed.
Minor Shooting Birds:
1 conviction; paid costs.
Shooting Song Birds:
1 conviction; fine and costs.
Seized and Destroyed:
1 trammel net, 1 boat and 60 chicken traps.

Month of March, 1912.
Unlawful Fishing:
8 convictions; fine and costs.
Hunting Without License:
2 convictions; fine and costs.
2 cases; jail sentence 30 days.
Killing Game Birds:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ 24.15
Killing Protected Birds:
1 conviction; fine and costs. $\$ 14.15$
Shipping Game Birds:
1 conviction; fine and costs.
Selling Game Birds:
2 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 28.00$ Seized and Destroyed:

1 seine and 1 boat.

## Month of April 1912.

Unlawful Fishing:
11 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 169.25$
Hunting Without License:
2 convictions; fine and costs.
1 case not guilty.
Shooting After Sunset:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ 14.35
Selling Game Birds:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 12.00
Killing Protected Birds:
2 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 34.70$
Shipping Game Birds:
1 conviction; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 165.00$
Killing Game Birds:
3 convictions; fine and costs....................................... $\$ 23.90$
1 case; jail sentence.
Game Fish in Possession Unlawfully:
1 conviction; fine and costs.

## Seized and Destroyed:

4 traps, 61 trot lines, 14 hoop nets, 3 seines

Month of May, 1912

## Unlawful Fishing:

41 convictions; fine and costs . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 320.45$ 1 case not guilty.
Hunting Without License:
3 convictions; fine and costs. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ 57.50 Selling Fish Unlawfully:
1 conviction; fine and costs.$\$ 13.85$Seized and Destroyed:9 trammel nets, 13 seines, 16 hoop nets and 72 trot lines.Unlawful Fishing:27 convictions; fine and costs
3 cases; jail sentence
Hunting Without License:
4 convictions; costs.
Dynaimting:1 conviction; fine and costs.$\$ 102.20$
Killing Doves:
1 conviction; fine and costs.$\$ 77.65$
Seized and Destroyed
5 seines, 30 traps, 42 trot lines and 7 hoop nets.
RECAPITULATION OF PROSECUTIONS
Total number of cases
743
743
Total fine and costs. ..... $\$ 11,892.56$
Of the above prosecutions there were-
Jail sentences ..... 37
Verdicts of not guilty ..... 37
Unlawful devices destroyed-
Traps
790
790
Hoop nets ..... 257
Seines ..... 104
Trot and throw lines. ..... 730
Trammel nets ..... 16
Spears ..... 45
Boats
9
Tents ..... 2
Value of property destroyed-
Estimated at ..... $7,500.00$

DISTRIBUTION OF FISH BY FISH CAR "HAWKEYE." 1910.

|  |  |  |
| :---: | :---: | :---: |
| Monticello | Maquoketa river | 7,500 |
| Anamosa | Wapsie river | 7,500 |
| Hazelton | Creek and Pond | 7,500 |
| Independence | Wapsie river | 7,500 |
| Webster City | Des Moines river | 15,000 |
| Green | Shell Rock river | 7,500 |
| Shell Rock | Shell Rock river | 7,500 |
| Wall Lake | Wall Lake | 15,000 |
| Decorah | Upper Iowa river | 15.000 |
| Clear Lake | Clear Lake .. | 15,000 |
| Cedar Rapids . | Cedar river | 15,000 |
| - . | Total Game Fish . . . . . . . . . | 120,000 |

Car mileage, 2,512 miles.
The care could not run after November 7th, as the water got so low could not get fish.

$$
1911 .
$$

Car did not run on account of low water in Mississippi river.

FISH SEINED FROM DEAD WATERS AND PLACED IN LIVING WATERS.

| 1910- | Number. |
| :---: | :---: |
| July | . 30,000 |
| August | . 50,000 |
| September | . 45,000 |
| November | . .100,000 |
| $\begin{gathered} \text { December } \\ 1911- \end{gathered}$ | . 400,000 |
| January | 3,000 |
| April | . 2,500 |
| May | . 1,200 |
| June | . 22,500 |
| July | . 4,000 |
| August | .. 42,500 |
| September | .. 1,000 |
| October | - 2,000 |
| 1912- |  |
| April | . 10,000 |
| May | . 10,000 |
| Total | . .723,700 |

These fish were seined from ponds and bayous along the rivers and lakes that would go dry in the summer and freeze in the winter, and placed in good water.

About 500,000 was seined from the overflows of the Mississippi river and the balance from the inland waters.


FISH PLANTED IN IOWA WATERS BY THE BUREAU OF FISH ERIES DURING THE FISCAL YEAR 1911.

| Point of Deposit | Waters Stocked | Number |
| :---: | :---: | :---: |
| Catfish- |  |  |
| Belfast | Brodsky Pond No. 1 | 50 |
| Chester | Tpper Iowa River | 300 |
| Keota | McDonald Pond | 100 |
| Buffalo Fish- |  |  |
| North McGregor | Mississippi River | 600,000 |
| Rainbow Trout- |  |  |
| Bryant | Wiese's Pond | 250 |
| Cedar Rapids | Pond | 1.060 |
| Chester | Beaver Creek | 750 |
| Chester | Beaver Creek, south fork | 500 |
| Decorah | Trout Run | 500 |
| Greeley | Prairic Pond | 250 |
| Lansing | Pond | 20,000 |
| North McGregor | Bickel Creek | 500 |
| St. Olaf --.-- | Klinkenberg's Pond | 250 |
| Wankon | Patterson Creek | 750 |
| Wankon | Village Creek | 750 |
| Wankon | Williams Creek | 250 |
| Brook Tront- |  |  |
| Decorah | Big Canoe Creek | 8,000 |
| Lansing | Village Creck | 1.200 |
| Lansing | Clear Creek | 900 |
| Manchester | Spring Branch | 5.300 |
| North MeGregor | Bloody Run | 5.500 |
| Waterville .-... | Paint Creek | 5,000 |
| Waukon | Beard Creek | 1,500 |
| Winneshiek County | Old Water Creek | 300 |
| Winneshiek County | Pine Creek | 600 |
| Crappie and Strawb Bass- |  |  |
| Ayrshire | Silver Lake | 45 |
| Belfast | Brodsky Pond No. | 50 |
| Boone | Des Moines River | 90 |
| Cedar | Moore's Pond | 100 |
| Clear Lak | Clear Lake | 345 |
| Fairfield | Fryman's Pond | 15 |
| Marengo - | Summer Center Lake | 100 |
| St. Ansgar | Cedar River | 200 |
| Rock Bass |  |  |
| Ottumwa | Seven Acres Pond | 150 |
| Small-mouth Black |  |  |
| Chester | Upper Iowa River | 1,350 |
| Mason City | Clear Lake | 300 |
| New London | Sunapee Lake | 800 |
| Riceville | Spring Pond | 400 |
| Washington | Highland Park Lake - | 75 |
| Large-mouth Black Bass- |  |  |
| Ayrshire | Silver Lake | 36 |
| Bernard | Deer Pond -- | 40 |
| Boone | Des Moines River | 72 |
| Calmar | Big Turkey River | 36 |
| Charles City | Cedar River | 36 |

## FISH PLANTED IN IOWA WATERS-CONTINUED.

| Point of Deposit | Waters Stocked | Number |
| :---: | :---: | :---: |
| Clear Lake | Clear Lake | 72 |
| Coggon | Buffalo Creek | 72 |
| Emmetsburg | Medium Lake | 36 |
| Fstherville | Des Moines River, west | 72 |
| Evans | Blair's Pond | 12 |
| Independence | Wapsipinicon River | 36 |
| Iowa Falls . | Towa River | 72 |
| Kensett - | Shell Rock River | 36 |
| IeMars | Smith's Pord | 12 |
| Manchester | Maynokete River | 36 |
| Minden | Dau's Pond | 24 |
| Ruthven | Lost Island Lake | 72 |
| St. Ansgar | Cedar River | 218 |
| Spirit Lake | East Okoboji River | 72 |
| Spirit Lake | Spirit Lake | 72 |
| Tama - | Iowa River | 36 |
| Waterloo | Cedar River | 36 |
| Wehster City | Boone River | 72 |
| West Liberty | Howes Lake | 12 |
| West Liberty Sunfish- | Pike Run | 12 |
| Boone -..... | Des Moines River | 1.000 |
| Fort Madison | Weibler Pond | 500 |
| Pike Perch - |  |  |
| Clear Lake .-. | Clear Lake | 800,000 |
| Dows | Wall Lake | 800,000 |
| Fidora | Towa River | 1,400,000 |
| Gruver | Swan Lake | 1,200,000 |
| Independence | Wapsipinicon River | 800.000 |
| Large-mouth Black Bass- |  |  |
| Boone | Des Moines River | 2.000 |
| Plerson | Davis Pond | 100 |
| Marshalltown | Iowa River | 425 |
| Stanton | Larson Pond | 125 |
| Onawa | Blue Lake | 400 |
| Pereival | Opossum Lake | 125 |
| Ida Grove | Todd's Pond | 100 |
| Harlan | White's Pond | 125 |
| Yellow Perch - |  |  |
| Shenandoah | Moody's Pond - | 100,000 |
| Glenwood | City Park Lake | 275 |
| Randall Pike Perch | Little Wall Lake | 400,000 |
| Chester | Upper Towa River | 400.000 |
| Staceyville | Little Cedar River | 400,000 |
| Lime Springs | Upper Towa River | 400,000 |
| Cresco | Iowa River | 3,200 |
| Rainbow Trout- |  |  |
| Amana | Price Creek | 1,000 |
| Fairbank | Elm Pond | 400 |
| Waukon | Yellow River | 2,000 |
| Logan | Woodland Pond | 400 |
| Waukon | Silver Creek | 1,000 |
| Waterville | Little Paint Creek | 400 |

FISH PLANTED IN IOWA WATERS-Continued.

| Point of Deposit | Waters Stocked | Number |
| :---: | :---: | :---: |
| Waukon | Bear Hollow Creek | 800 |
| Waukon | Patterson Creek | 1.000 |
| Lansing | Clear Creek | 400 |
| Arlington | Brush Creek | 800 |
| Bellevue | Pleasant Creek | 1.000 |
| Lansing | Cliff Spring Pond | 200 |
| Ft. Atkinson | Rogers Creek .... | 600 |
| Arlington | Spring Hollow Creek | 200 |
| North MeGregor | Crimmins Creek | 1.600 |
| Monteith | Moorhead's Pond | 500 |
| Waukon | Paint Creek | 2,000 |
| Luana | Military Road Pond | 200 |
| Waukon | Village Creek ....... | 1.200 |
| Waterville | Paint Creek | 2,000 |
| Postville | Stone House Branch | 200 |
| Postville | Yellow River | 800 |
| Des Moines | Lake George | 300 |
| Lansing | Horse Shoe Creek | 200 |
| Lansing | Riverside Trout Ponds | 400 |
| Lansing | Van Cooly Run | 200 |
| MeIntire | Spring Creek | 400 |
| Lansing | Cavers Spring Run | 200 |
| Guthrie Center | Woodland Lake .-. | 400 |
| North McGregor | Bloody Run | 1,200 |
| Calmar | Anter Creek | 1,200 |
| Lansing Brook Trout - | Thompson Run | 200 |
| Atlantic -....... | Bregning Soe Pond | 500 |
| Postville | Livingoods Branch | 3.000 |
| Osage | Spring Park Creek | 450 |

## NUMBER AND VARIETY OF FISH.

Deposited in the waters of the State in the year 1911 by the United States Fish Commission.

| Catish | 450 | Small-mouth Bass | 3,000 |
| :---: | :---: | :---: | :---: |
| Buffalo Fish | 600,000 | Large-mouth (black) Bass | 1,200 |
| Rainbow Trou | 25,800 | Bream (Sunfish) | 1,050 |
| Brook Trout | 28,300 | Pike Perch (Jack Salmon) | 5,000,000 |
| Rock Bass | 150 | Crappie | 1,000 |

Deposited in the waters of the State in the year 1912 by the United States Fish Commission.

Rainhow Trout Brook Trout
$\qquad$ 26,600 Large mouth (black) Bass Yellow Perch Pike Perch (Jack Salmon) $1,600,000$

## INVENTORY OF PROPERTY

## State Fish and Game Department.

State Grounds at Orleans:
5 acres land, including hatchery, building, ponds, ete. State Grounds at Outlet Okoboji Lakes:
1 acre land, including State dam and Custodians House.

## Okoboji:

1 launch.

## Dubuque:

1 launch.
Burlington:
1 launch.
1 fish car "Hawkeye," including all equipment.
8 row boats.
4 weed saws.
4 tents, including camp equipment.
State Fair Exhibit:

## 4 aquariums.

5 wire cages.

LIST OF DEPUTIES IN IOWA.

| NAME | Address |
| :---: | :---: |
| Aeker, Geo. | Council Bluffs. |
| Albert, W. E. | Lansing. |
| Allen, J. G. | Lenox. |
| Allen, J. E. | Arnolds Park. |
| Andrews, Geo. | Oskaloosa. |
| Austin, J. E. | Sac City. |
| Baber, Walter | Avon. |
| Bailey, C. O. | Washington. |
| Ballou, W. C | Independence. |
| Barnett. A. E | Alden. |
| Bauer, Theo. | Dubuque. |
| Berry, W. W | Grinnell. |
| Beymer, P. M. | Avoca. |
| Blackburn, W, | Jefferson. |
| Blair, Bert F. | Manilla. |
| Boller, Anton | Goodell. |
| Brawley, W. 1 | Ottumwa. |
| Brees, E. E. | Waterloo. |
| Bronn, Geo. | Fayette. |
| Bulicek, C. J. | Cedar Rapids. |
| Burton, C. C. | Webster City. |
| Clark, C. E. | Marshalltown. |
| Christian, Alec. | Randall. |
| Christensen, A. | Ruthven. |
| Condon, I. W. | Mineral Ridge. |
| Coon, Geo. B. | Albia. |
| Cooper, Geo. C. | Des Moines. |
| Cooper, C. B. | Washta. |

LIST OF DEPUTIES IN IOWA CONTINUED.

| NAME ${ }^{\text {a }}$ Address |  |
| :---: | :---: |
| Connor, F. H. |  |
| Cotter, J. S. | Tipton. |
| Davis, B. C. | Sabula. |
| Doty, E. R. | Ft. Madison. |
| Doran, O. I | - Oxford. |
| Doze, J. E. | - Atlantic. |
| Dunn, B. S. | - Humeston. |
| Ergers, Wm. | - Adel. |
| Emerson, Roy | - Arion. |
| Fisher, Bert | Creston. |
| Fisher, Claude H | Clarion. |
| Franks, E. H. | Fruitland. |
| Galland, Britton | - Cedar Rapids. |
| Gay, A. M. ..... | - Salix. |
| Green, Henry | Conesville. |
| Groneweg, W. | Spencer. |
| Habicht, F. W. | Council Bluffs. |
| Hall. J. C. | Avoca. |
| Hall, C. B. | - Cedar Rapids. |
| Hall, T. L. | Des Moines. |
| Hansen, Fred | Glenwood. |
| Hartsough, P | Exira. |
| Harvison, J. | Oelwein. |
| Height, A. A. | Clarinda. |
| Higgins, E. C. | Mason City. |
| Heffelfinger, Jack | Salem, Mo. |
| Hilliard, R. A. | Grundy Center. |
| Inman, Aaron | Corning. |
| Jeffers, D. D. | Seymour. |
| Johnson, Geo. | Red Oak. |
| Kellogg. H. F | Walker. |
| Kuhl, C, B. | Garner. |
| Kecney, W. R. | Sioux City. |
| Lake, C, G. | Kanawah. |
| Iamb, F. P | Chester. |
| I araway. W. | Cedar Rapids. |
| Iockie, J. W. | Hamburg. |
| Martin. H. E | Pomeroy. |
| M-..h. Wm. | Iowa Falls. |
| Miller, Henry | Ft. Dodge. |
| Mitchell, J. L. | Arnolds Park. |
| Mizener, Geo. | Leon. |
| Nal or. Ceo. I | Decorah. |
| Norton, Geo. R. | Brownville. |
| P-okeard \& M | Onawa. |
| rinve. $n \rightarrow$ | Packard. |
| Pierce, R. M. | Fairiteld. |
| Peterson, I. | Maquoketa. |
| Peterson, Ole | Spirit Lake. |
| Perry, H. E. | Britt. |
| Prenssner, L. C. | Madrid. |
| Pratt. H. H. | Manchester. |
| Reddin, Thos. | Sascade. |
| Feeve, H. R. | Cascade. Geneva. |

LIST OF DEPUTIES IN IOWA-CONTINUED.

| Name | Address |
| :---: | :---: |
| Rogers, Roy | Rock Rapids. |
| Prffeorn, C E. | Mandamin. |
| Rowlett, G. F'. | Reinbeck. |
| Schreiber, J. R. F. | Bayard. |
| Schroeder, J. C. - | Emmetsburg. |
| Frott, L. A. | Zearing. |
| Sharp, Chas. | What Cheer. |
| Spencer, C. W. | Lake View. |
| Swarnweber, I | Carroll. |
| cwoiles. Tohn | Spirit Lake. |
| Swift, Chas. H. | Sabula. |
| Swinford, J. W. | Mystic. |
| Tubbs, D. I. | Burlington. |
| Wubls H . S. | Manchester. |
| Ward, W. E. | Algona. |
| Waterbury, O. P. | Nora Springs. |
| Weirather, A. | Keokuk. |
| Weiting. J. G. | Toledo. |
| White, L. E. | Estherville. |
| Wiley, R. J. | West Liberty. |
| Wilson, H. C. | Ie Mars. |
| Willson. M. M. | Des Moines. |
| Yordy, H. H. | Waterloo. |
| Venor.S.S. | Perry. |

## FEDERAL OFFICIALS

United States Department of Agriculture.
(Jurisdiction extended to game protection by act of May 25, 1900.) Secretary of Agriculture, James Wilson, Washington, D. C. Chief of Biological Survey, H. W. Henshaw, Washington, D. C. Assistant Chief, Biological Survey, T. S. Palmer, Washington, D. C. Commission $\overline{\mathrm{o}} \mathrm{f}$ Fish and Fisheries, Washington, D. C.
Commissioner, George M. Bowers, Washington, D. C.

## STATE OFFICIALS

For information repecting the game laws in States and Territories which have no State wardens address as follows: Alaska, Secretary of Agriculture, Washington, D. C; Arkansas, E. V. Visart, Little Rock: Florida, Chas. G. Megargee, Umatilla, Lake County; Hawaii, D. B. Kuhns, Honolulu; Mississippi, Miles Carroll, Yazoo City; Nevada. Secretary of State, Carson City; Virginia, L. T. Christian, 1012 East Broad Street, Richmond.

The game laws are published in pamphlet form in all the States.
Alabama-State Game and Fish Commissioner, John H. Wallace, Jr., Montgomery.

Alaska-Governor, Walter E Clark, Juneau. Game Wardens, Christian L. Larson, Chicken; F. C. Irons and William Lloyd, Fairbanks; Adam Schneider, Juneau; P. F. Vian, Kenai; J. C. Tolman, Kodiak; Christopher S. Shea, Seward

Arizona-Fish and Game Commissioners, A. W. Sydnor, Globe; Charles M. Bledsoe, Winslow; T. T. Cull, Yunsa.

California-Board of Fish and Game Commissioners. President, F. M. Newbert, Forum Bunlding, Sacramento; M. J. Connell, Consolidated Realty Building, 605 South Hill Street, Los Angeles; Carl Westerfeld, Mills Building, San Francisco; Secretary, Ernest Schaeffle, Mills Building, San Francisco.
Colorado-State Game and Fish Commissioner, James A. Shinn, Room 41, Capitol Building. Denver.
Connecticut-Commission of Fisheries and Game, President, Dr. Frank W. Hewes, Groton; Secretary, E. Hart Gear, Hadlyme; Frank O. Davis, Putnam.

Delaware-Board of Game and Fish Commissioners, President, Edward C. Bradford, Jr., Wilmington; Vice President, William H. Reed, Dover; Secretary and Treasurer, H. C. Davis, Laurel.

District of Columbia-Metropolitan Police. Superintendent, Maj. Richard Sylvester, Washington; Harbor Master, Lieut. Russell Dean, Washington.

Georgia-Department of Game and Fish, Commissioner, Jesse E. Mercer, Fitzgerald.
Idaho-Fish and Game Warden. Ben. R. Gray, Bolse; Chief Deputy, F. M. Kendall, Twin Falls.

Illinois-Fish Commission, President, R. R. Meents, Ashkum; Secretary, S. P. Bartlett, Quincy; State Game Commlssioner, Dr. John A. Wheeler, Springfield.
Indiana-Commissioner of Fisheries and Game, George W. Mlles, State House, Indianapolis.
Iowa-State Fish and Game Warden, Geo. A. Lincoin, 230-232 Granby Block, Cedar Rapids.

Kansas-State Fish and Game Warden. Prof. L. L. Dyche, Pratt.
Kentucky-Game and Fish Commission, Chairman, Joseph G. Sachs, Sachs' Law Building, Louisville; R. R. Burnham, Richmond; J. E. Crider, Jr., Fredonia; A. G. Patterson, Pineville; Executlve Agent, J. Quincy Ward, Frankfort.
Louisiana-Conservation Commission. Board of Commissioners for the protection of birds, game, and fish. Conservation Commission authorized by act approved in July, 1912. The appointments had not been made August 1, 1912. Office of the commission, New Orleans
Maine-Commissioners of Inland Fisheries and Game, Chairman, J. S. P. H. Wilson, Auburn; Frank E. Mace, Great Pond; Blafne S. Viles, Augusta.
Maryland-Game Warden, Franklin E. Cox, 506 Union Trust Bullding, Baltimore. Board of Special (Ducking) Police, Arthur L. Dippish, Havre de Grace, Harford County; Harry A. Gilbert, Aberdeen, Harford County; J. Howard Pyle, Chesapeake City; Cecil County; Andrew Reynolds, North East, Cecil County. Special Policeman (for protection of wlld fowl on Elk and Bohemia Rivers;, John Racine, Elkton, Cecll County.
Massachusetts-Commissioners of Fisheries and Game, Chairman, Dr. George W. Field, State House, Boston; George H. Garfleld, Brockton; George H. Graham, Springfield.

Michigan-Game, Fish and Forestry Department. Warden, William R. Oates, Lansing; Chief Deputy, David R. Jones. Petoskey.

Minnesota-Board of Game and Fish Commissioners, President, George J. Bradley, Norwood; Vice President, D. L. Durklin, Frazee; Second Vice President, E. L. Ogilvie, St. Paul; Secretary, O. J. Johnson, Glenwood; Executive Agent, H A. Rider, St. Paul.

Missouri-Game and Fish Commiszioner, Jesse A. Tolerton, Jefferson City; Chief Deputy, E. T. Grether, 902 Fullerton Building, St. Louis.

Montana-State Game and Fish Warden, Henry Avare, Helena.
Nebraska-Game and Fish Commission, Chief Deputy, Henry N. Miller, Lincoln.

New Hampshire-Board of Fish and Game Commi:sioners, Chairman, Nathaniel Wentworth, Hudson; Financial Agent and Secretary, Charles B. Clarke; Concord; Frank P. Brown, Whitefield.

New Jersey-Board of Fish and Game Commissioners. President, Ernest Napier, East Orange; Secretary, Walter H. Fell, Trenton; Fish and Game Protector, James M. Stratton, North Long Branch.

New Mexico-Game and Fish Warden, Trinidad C. de Baca, Santa Fe; Chief Deputy, P. E. Otero, Santa Fe.

New York-Department of Conservation. Commissioners: George E. Van Kennen, Ogdensburg; James W. Fleming, Troy; John D. Moore, New York; Deputy Commissioner of Fish and Game, Thomas H. Guy, Troy; Secretary. Aimert E. Hoyt, Albany; Chief Game Protector, Llewellyn Legge, Albany. Office of the Commission, 21-23 Washington Avenue, Albany.

North Carolina-Audubon Society of North Carolina, President, Dr. R. H. Lewis, Raleigh; Secretary, P. D. Gold, Jr., Raleigh.

North Dakota-Game and Fish Board of Control, President, W. E. Byerly, Velva; Vice President, J. P. Lamb, Michigan; Secretary. Tobias D. Casey, Dickinson. District Game Warden. Office originally established as State Game Warden in 1895; changed to District Game Warden in 1903; term, two years.

District No. 1 (northern) E. H. Stenvick, Minot.
District No. 2 (sulutieth) Frid MoLoan, Farga.
Ohio-Commissioners of Fish and Game, President, Paul North, Cleveland; Walter C. Staley, Dayton; Thomas B. Paxton, Cincinnati; Gill McCoo, Steubenville; J. F. Rankin, South Charleston; Chief Warden Gen. John C. Speaks, Columbus.

Oklahoma-State Game and Fish Warden, John B. Doolin, 308-311 Mercantile Building, Oklahoma City.

Oregon-State Board of Fish and Game Commissioners, President, C. K. Cranston, Pendleton; Secretary, J. F. Hughes, 385 State St., Salem; George H. Kelly, 70 Fourth Street, Portland; C. F. Stone, Klamath Falls; M. J. Kinney, 510 Corbett Building, Portland. State Game Warden, William L. Finley, 808 Yeon Building, Portland.

Pennsylvania-Commissioner of Fisheries, Nathan R. Buller, Office, Harrisburg; Board of Game Commissioners, President, Dr. Charles B. Penrose, 1720 Spruce Street, Philadelphia; C. K. Sober, Lewisburg;

Arthur Chapman, Doylestown; W. B. McCaleb, Harrisburg; Lanning Harven. Wilkes-Barre; Secretary, Dr. Joseph Kalbfus, Harrisburg. Office of the Board, Capitol Building, Harrisburg.
Rhode Island-Commissioners of Birds, Chairman, C. E. Peirce, Rumford; W. Gordon Reed, 2nd, 178 Dorrance Street. Providence; Dr. Edwin R. Lewis, Westerly; William H. Thayer. Bristol; C. M. Hughs, 7 Francis Street, Newport.
South Carolina-Chief Game Warden, James Henry Rice. Jr., Summer. ville.
South Dakota-State Game Warden, W. F. Bancroft, Watertown.
Tennessee-State Warden of Game. Fish and Forestry, Joseph H. Acklen, Nashville.
Texas-Game. Fish and Oyster Commissioner, W. G. Sterett, Austin; Chief Deputy, Jeff D. Cox, Austin.
Utah-State Fish and Game Commissioner, Fred W. Chambers, Salt Lake City.
Vermont-Fish and Game Commissioner, John W. Titcomb, Lyndonville.
Washington-State Fish Commissioner and Game Warden, John L. Riseland, Bellingham; Chief Deputy State Game Warden, Gus. Johnson, Bellingham.

West Virginia-Forest, Game and Fish Warden, J. A. Viquensney, Belington.

Wisconsin-State Fish and Game Warden, John A. Sholts, Madison: Chief Deputy, Fred Gerhardt, Milwankee

Wyoming-State Game Commission. Presitent, Gov. Joseph M. Carey, Cheyenne; Secretary of State, Frank L. Houx, Cheyenne; State Auditor, Robert B. Forsyth, Cheyenne; State Game Warden, D. F. Hudson, Lander.

## CANADA.

Alberta-Department of Agriculture, Minister, Duncan Marshall, Edmonton: Deputy Minister, George Harcourt, Edmonton; Chief Game Guardian, Benjamin Lawton, Edmonton.

British Columbia-Provincial Game Warden, A. Bryan Williams, Court House, Vancouver.

Manitoba-Department of Agriculture and Immigration, Minister, Geo Lawrence. Winnipeg; Chief Game Guardian, Charles Barber, Winnipeg.
New Brunswick-Crown Land Department. Surveyor General, James K. Flemming, Hartland: Deputy Surveyor General T. G. Loggie, Fredcricton: Chief Fishery, Game and Fire Wardens: District No. 1, Dennis Dcyle, Newcastle; District No. 2, A. E. O'Leary, Richibucto; District No. 3, W. J. Dean, Musquash; District No. 4, John McGibbon, St. Stephen. Overseer of Fisheries. S. U. McCully, Chatham.
Newfoundland-Department of Marine and Fisheries. President, Min ister of Marine and Fisheries, A. W. Piccott, St. Johns; Vice President, Thomas Winter, St. Johns; First Asst. Vice President, Dr. L. E. Keegan, St. Johns; Second Azst. Vice President, Alex McDougall, St. Johns; Secre tary, James W. Mercer, St. Johns.

Nova Scotia-Board of Game Commissioners, Chief Game Commissioner, J. A. Knight, K. D. St. Paul Building, Halifax; Associate Commissioners, A. O. Pritchard, New Glasgow; C. R. Kelley, Yarmouth.

Ontario-Department of Public yrks, Game and Fisheries Branch. Minister, J. O. Reaume, Parliamen Buildings, Toronto; Superintendent of Game and Fisheries, E. Tinsle. rliament Buildings, Toronto; Kelly Evans, Commissioner, 503 Empire Building, 64 Wellington Street west, Toronto.

Prince Edward Island-Game Inspector, E. T. Carbonell, Box 83, Charlottetown.

Quebec-Department of Colonization, Mines and Fisheries, Fisheries and Game Eranch. Minister, Charles Devlin, Quebec; Deputy Minister, J. Dufault, Quebec; Special (expert) Officer, E. T. D. Chambers, Quebec; General Superintendent of Fisheries and Game, Hector Caron, Quebec; Assistant Superintendent of Fisheries and Game, Eug. Hamel, Quebec; General Inspector of Fisheries and Game, J. A. Bellisle, Quebec.

Saṡkatchewan- Department of Agriculture. Minister of Agriculture, W M. Motherwell, Regina: Deputy Minister, A. F. Mantle, Regina; Acting Chief Game Guardian, Fred Bradshaw, Regina.

# U. S. DEPARTMENT OF AGRICULTURE WEATHER BUREAU 

# Iowa Weather and Crop Service 

## ANNUAL REPORT FOR 1912

GEO. M. CHAPPEL, Director

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