

REPORT  
OF THE  
COMMISSIONER  
OF  
FISHERIES AND GAME,  
OF THE  
STATE OF MAINE,  
FOR THE YEAR  
1881.



AUGUSTA :  
SPRAGUE & SON, PRINTERS TO THE STATE.  
1882.





# REPORT.

---

*His Excellency* HARRIS M. PLAISTED,  
*Governor of the State of Maine:*

In accordance with the provisions of the statute, I have the honor to present my report of the Department of Fisheries and Game for the current year.

At a period when an increased amount of work in both branches of our service required an increased executive force to perform its duties, the expiration by limitation of the term of service of my colleague in the Commission, left all its onerous duties to be performed by one alone. Fortunately my esteemed comrade, on the failure of his renomination, volunteered his aid, and the result has been most satisfactory in saving the State from much damage to its interests in the threatened confusion and derangement consequent upon the sudden and unanticipated reduction of its working force.

The stringent fishery and game laws enacted in the Dominion of Canada, requiring permits for angling in most sections, while licenses for hunting, trapping and shooting in several of the Provinces are required to be purchased at prices varying from thirty to twenty-five dollars, has precipitated upon the forests and streams of Maine, an army of visitors.

While we fully appreciate the importance of this interest to the State, its very great money value, as certified to by our railroad and bank officials, should dictate to our Legislature the imperative duty of affording to the Commissioners more effective laws and adequate compensation both to them and their wardens, for their enforcement. At present, our duties

require the whole of our time, while the pay of a Commissioner when there are two, which the work of the department always requires, is not equal to that of a police officer, or the wages of a good mechanic. The correspondence alone is very extensive, embracing not only our own State, but every State in the Union, and much from abroad.

The position of our State in fish culture, in which so widespread an interest is now indulged as a new and important source of food production, is a severe tax upon our time, in responding to the numerous applications for reports, information and counsel in all matters pertaining to fish and game. It has ceased to be a matter of question or experiment any longer, that a stock of both fish and game can be kept up to the full extent of the feeding power of the waters and forests of a given territory, by a stringent enforcement of laws of protection, during their respective breeding and recuperating seasons. We can quadruple our stock of fishes and game, we can quadruple the present large travel to our State to share our field sports, but we must have better laws and the means to offer adequate pay as inducements to qualified and efficient men as officers.

When the power of the Commissioners of Fisheries was extended to include game, no increased salary was provided for doubling the amount of work and duty already sufficiently onerous; when the power of fish wardens was extended to game, no increased provision was made for their pay. The law dictates that the pay of fish wardens shall be fixed by the Governor and Council, provided that the sum paid all the wardens shall not exceed fifteen hundred dollars. The wardens are appointed by the Governor and Council. Not even a reference of their qualifications to the Commissioners who are to use them to enforce the laws of the department is required.

There are now over sixty wardens on our list, and this provision of fifteen hundred dollars if equally divided among them would afford a salary of twenty-five dollars apiece. Game wardens have no salary provided for them at all; they



are expected to be sustained by enthusiasm alone in game protection, to abandon home and the occupations that give bread to their families, and go forth to the forest for the reward of one half the penalties they may obtain from captured and convicted law breakers, and the soul stirring privilege of shooting at sight, any dog they may discover chasing deer.

It is a disgrace to our State. We would suggest that a congress of sportsmen be called from all parts of the State, and that they should organize, and, after a thorough discussion of the whole subject, choose a committee to draft a code of fish and game laws to be submitted to the next Legislature for enactment. The Commissioners should be left entirely unembarrassed in the matter. It is their duty to enforce such laws as the people, through their Legislature, give them, without being liable to the charge of having favored this or that enactment.

It has been the experience of the Commissioners that whenever called upon before a committee of the Legislature to favor or oppose the passage of any particular law, the defeated party has always opposed the appropriation for the Commission, and made it a matter of personal animosity against the objects of the department.

We are always ready to give counsel and make general suggestions, but the people should give active personal protection to the fish and game of their locality, and go into the Legislature and insist upon proper protective laws where forest and stream are being impoverished by abuse.

We cannot too forcibly impress upon our brother sportsmen the necessity of taking this matter in hand at once. Let the whole subject be discussed exhaustively. As the law now stands on our statutes, it is almost impossible to make out a case of hunting deer with dogs; there seems an inherent absurdity in laws which permit weapons for the destruction of game to be taken into our forests by parties at a season when it is unlawful to kill the game, and then expect wardens to follow up each party to discover infractions of the law.

There are no beasts of prey in our forests that a pistol would not be an ample defence from, if ever required to be.

used at all. Again, why should hounds be allowed to be taken into our forests when their use is forbidden by law?

The great money value of the fish and game to our State should make it a subject of fostering care and protective legislation. We append an item taken from a Portland paper :

WHAT THE SUMMER TRAVEL DOES FOR MAINE. The *Press* says: In conversation with one of the officers of one of our banks, Friday, the statement was made that few people have any idea of the amount of money left in Maine by summer visitors who visit our watering places and country resorts. He said that up to six weeks ago it was difficult for a bank in Portland to get many large bills, and the pay rolls of various companies required an active "shinning round" to secure the necessary amounts in fives and tens to meet them, in addition to those of their regular customers. Since that time, however, bills have been a glut in the bank and the deposits have included many large sized bills. This great increase is due to the summer visitors to Maine. Their money focuses in the Portland banks, and this officer's bank four weeks ago forwarded \$60,000 in bills to New York, two weeks later, \$30,000, and Friday, \$50,000 more, or \$140,000 in six weeks, and this bank is but one of six in Portland.

It is a legitimate subject to be discussed by our Legislature, as to how this important crop or product of our forests and streams can be most profitably managed for the State's interests. So soon as our trout fishery opens in the spring, all our best localities are infested by men fishing for market. We do not know what their net return may be from Boston, but there is one fact staring us in the face, that these men bring nothing into the State of value, and that every pound of trout is five dollars taken from the State. We do not believe that there is a pound of trout taken at Moosehead or Rangely by visiting sportsmen at a less cost than five dollars per pound. With our forests and fields it is the same with the products of game. Remember, we speak of our own sportsmen as well as our summer visitors from abroad. Maine furnishes a large number and they spend their money freely on our field sports.

If the products of our forests and our inland waters can be made to yield more than one hundred fold when consumed on our own soil, than when mercilessly slaughtered under



our present system, should not our Legislature protect our own State's interests, by forbidding the exportation of both our game fishes and game?

The point to be considered is how to make the most of this great State's interest. We hope the citizens of Maine will carefully consider this question. The present killing of game for exportation is mostly in the hands of poachers, and a comparatively small and inconsiderable class at that. As at present carried on, it is of not the slightest benefit to the State. It has inevitably led to the utter destruction of the fish and game in every State where it has been permitted. The experience of other States has been that it has always bred up a class of citizens that have cost the State more for the punishment of vice and crime than they have earned towards their own support.

It is manifest injustice to the people at large of the State, that property that belongs equally to all, and to be enjoyed by all as a healthful diversion, should be monopolized by a small and undeserving class to the great pecuniary loss of the State at large.

Systematic depredations have been for several years carried on upon our moose, during the deep snow and crust of the early spring months, by the combined operations of Maine poachers with St. Francis and other Indians from the Provinces. At a period when moose and other skins cannot be safely brought to our markets, they are exchanged for furs saleable here, while the moose, deer and caribou hides are carried into New Brunswick, and from there find their way into the hands of dealers here. This was extensively carried on at the time it was unlawful to kill a moose in the State of Maine under a fine of one hundred dollars.

Now that the protection of our game has been placed in the charge of the Fish Commissioners, we earnestly beg that means, and the laws to enable us to use them, may be given us by the Legislature to summarily break up this nefarious traffic, and destroy the present school for fraud and rascality

which the present wretched system of leaving our fish and game at the mercy of of a small class of poachers, fosters.

We would suggest that a law be passed placing a bounty of twenty-five cents per head upon the destruction of hawks and owls. The money value of the poultry killed by these birds will far exceed that of all the sheep killed by bears and dogs, to say nothing of the havoc made upon wild ducks, partridges and insectivorous birds. We think that imprisonment should be added to the penalty for netting wild ducks and for netting our fresh water fishes.

We call special attention to a report of the case of the *People vs. Magner*, which we publish in our Appendix. It will repay careful attention and study, as it will govern the decision of our courts.

#### SALMON.

The run of salmon commenced unusually early this year, and was remarkable for the large size of the fish. As to numbers, it was the smallest run for the three last years, but the largest for the previous ten or twelve years. The fish seem to have made their way directly far up the river to their fastnesses, and consequently were not taken at the usual fishing places, owing to the very high stage of water and the very early movement of the fish. We think we may look for a very large run of smolts for this and the following year, as the result of their undisturbed spawning. Our share of salmon ova added to contributions from Prof. Baird enabled us to distribute over half a million of young fry into the rivers of Maine. The Penobscot, the Kennebec, the Androscoggin, the Presumpscot, the Saco and the Machias were each in turn visited, and received their quota of our stock. Our contribution to the Bucksport and Orland Salmon Works this year was two thousand dollars. Our dividend of salmon eggs is one million and eighty thousand (1,080,000). These are all to be hatched and distributed in the same rivers as quoted above.



For the benefit of such of our citizens as take an interest in pisciculture, we will give a short account of the method of taking our salmon eggs. The Salmon Works are owned by the United States and such individual States as contributed to their construction and arrangement. The whole is under the control of Mr. Charles G. Atkins, Assistant U. S. Commissioner of Fisheries. Each subscriber, whether Prof. Baird for the U. S. Commission, or such of the other States as see fit to contribute, receives a dividend of eggs according to the amount of his subscription. The fish are purchased alive of the weir fishermen at the market rate per lb., at the time when it is lawful to take salmon, and all that Mr. Atkins purchases are just so many fish saved to the State, less the number that may die from bruises received in taking them from the weirs. The fish are very violent when first taken from the weirs, being fresh run from the sea, and have to be transported in boats carefully prepared to protect the fish from injuring themselves, as also to furnish them with continued change of aerated water. The fish are transported several miles up a tributary of the Penobscot river into a stream of water known as Dead Brook. About ninety rods of the stream is here divided off by a secure and high fence made of slats, allowing free circulation of the stream; here the fish are confined all through the summer and autumn up to the time of spawning. The water varies in depth from two to fifteen feet. An abundant growth of water plants and overhanging bushes affords shelter to the fish from the direct rays of the sun, in deep pools where the surface water will sometimes indicate in the hottest days seventy-five or even eighty degrees of heat. The bottom of the area of water where the fish are confined, has a deep deposit of mud, which is absolutely essential, as otherwise the fish would cast their spawn wherever they could get access to the gravel, and the objects of the arrangements for their voluntary capture be defeated. The upper fence is across a breadth of some twelve feet of shallow water. Here is a small building furnished



with all the appliances for receiving the spawn, pans, pails, wire trays and frames for transporting the eggs to the hatchery some four miles distant, scales for weighing and measuring the fish and eggs, books to receive record of each fish, &c., &c.

As the cold weather of October approaches, the instinct develops of seeking a place to deposit their eggs, and the fish leave the deep water where they have rested all summer, and move up against the current, until stopped by the fence opposite the house. Some twenty feet below the fence, a net is stretched across the stream, with an opening midway, arranged something like the entrance to a mouse-trap, through this the fish all enter and are prisoners. These are dipped out in nets, the sexes divided off, and placed in floating tanks anchored to the shore, ready for use from day to day as they are required. A good deal of skill acquired by practice combined with natural aptitude, is required to handle, hold and spawn the fish. The eggs are received in a pan like an ordinary milk pan; then a male fish is taken from the tank, and by much the same process as in handling the female fish, a small quantity of milt is ejected into the pan which is turned and kept in motion until every egg is seen to be touched by the milky fluid. The eggs which at first were adhesive, clung to the pan, and to each other, now change color, become separate and individual bodies like buck shot. They are now washed in several waters, and then spread upon the trays ready for transportation to the developing house. They are there placed under running water which flows over and under them day and night until the eyes of the incipient fish can be seen without the help of a lens, like two little black dots small as the point of a needle. This period arrives in about sixty days. The eggs are then ready to be sent to the different subscribers. They are carefully packed in layers of gauze netting, resting on soft beds of damp moss, and can then be sent all over the United States, and even to remote parts of the world like Australia. Penobscot salmon



are now swimming in Australian rivers, where no salmon was planted at the creation; where no salmon was ever known until the eggs of the Penobscot salmon were sent out and hatched in those waters, and the little fish there carrying out the instincts of its own machinery and wants, went down into the ocean, and thence back to the place that first saw its birth, and thus was established a colony of Maine salmon in Australian waters.

In this connection, we cannot do better than republish an article taken from Dr. W. H. Ransom, that was inserted in the report of this department for 1880 :

#### THE EGG OF THE SALMON.

"The fecundation of the egg is a wonderful phenomenon. The egg in relation to the milt presents one of the most astonishing spectacles, if rightly viewed, which microscopist and 'philosopher' can witness. To those of your readers who have not given any attention to this subject, it may be thus briefly described.

The egg of the salmon of the size of a pea consists of a semi-transparent spherical mass, whose tough, external covering is penetrated by a very minute funnel-shaped opening, termed the micropyle. The milt of the male contains a vast assemblage of exceedingly minute organisms, styled spermatozooids. Perhaps a hundred thousand of these spermatozooids may be equal in bulk to one egg. Taking a minute quantity of milt on the point of a fine needle, and putting it into a drop of water in contact with an egg, the careful observer may witness the following consequences with a good microscope: The number of spermatozooids wandering vigorously round the passive egg, travelling over its surface with considerable activity. Suddenly one reaches the minute funnel-shaped micropyle; it enters, and the mouth of the micropyle contracts. Suddenly, pulsation begins in the egg, a new life has dawned and the micropyle suddenly closes. Other spermatozooids continue wandering over its surface, but in fifteen or twenty minutes grow weary, languish, drop off and die. But vivid pulsations continue in the egg, and the new creature is forming. Let us carry the thoughts which may crowd upon us to a further issue. We have had under view two imperfect lives, that of the active spermatozoid and that of the passive egg. But the moment the spermatozoid enters the micropyle a new and a perfect physical life begins, which, as we shall presently see, already possesses absolute knowledge of a special kind, requiring only a short time for its manifestation.

Two of these eggs thus 'fertilized' are conveyed far away, say to Australia, and these placed in a river in which salmon had never been.

The eggs are hatched, the young fish in due time migrate to a sea of which their ancestors had no experience, and return to a river of which they knew nothing, and where there are no teachings to be gained from the experience of others of their kind. How did they obtain this absolute knowledge of an unknown sea, and whence did they gather the instinct that it was essential they should return to the river in which they were born, at stated periods? Ages of experience in others of their kind were not there to aid them, and migration is said to be the result of experience. It is clear that out of two imperfect lives a new life possessing absolute knowledge—knowledge not gained by experience or teaching—has been produced. Is this to be explained by the formula of words, that the instinct which impels the resulting creature to migrate to a sea and return to a river of which its ancestors knew nothing is 'an inherited habit?' Or is not the gulf between the imperfect lives of the egg and the spermatozoid on the one hand, and the resulting perfect life of the impregnated egg on the other, with its absolute knowledge, infinite to us, passing the power of language to describe, and, failing which, we apply to it a formula of words?

It seems to me that the conception which is so often designated as an 'inherited habit,' is a manifestation of design infinite in its variety, endless in its future attainments, and crudely spoken of in the too often misleading language of philosophy by the barren term 'evolution,' which properly used and interpreted, indicates only a part of design. The possession of absolute knowledge by the embryonic salmon, and all similar cases, is fatal to the materialistic view of evolution. How the results of experience can be conveyed from the parent to the spermatozoid or to the egg—for habit is derived from the female as well as from the male—we may never fully understand, but that it is an effort infinitely beyond the mere 'potency of matter' we may adoringly believe."

After the eggs are all taken from the fish, their numbers ascertained, which is readily done, as each tray holds in a single layer covering its entire wire surface, a certain number, say two thousand each; counting the trays in use gives an accurate count of the eggs; the books are made up, the expense per thousand calculated and the number of eggs each subscriber is entitled to is the number of times that the cost per thousand will go into the sum of money each subscriber contributed.

The number of salmon bought this year was five hundred and thirteen. One hundred and forty-six of these died from injuries supposed to have been caused by the rude dip net used by the fishermen transferring the fish from the pound of



the weir to the boats in which they are delivered at the works. Four were never accounted for, possibly killed by otter or mink. In the fall, one hundred and thirty-one males and two hundred and thirty-two females were captured and placed in the tanks.

The Penobscot river being the only river on the Atlantic coast of the United States where salmon are left in sufficient numbers to afford a supply of salmon ova to the country, it is deserving of all the protection and care that the State and the city of Bangor can afford it.

We give below the contributions to the Penobscot salmon breeding establishment controlled by State and National Government, at Bucksport and Orland for the year 1881 :

Maine,	\$2,000.00	Share of eggs, 1,080,000
Massachusetts,	500.00	" " 270,000
Connecticut,	300.00	" " 162,000
United States,	1,757.34	" " 950,000
		<hr/> 2,462,000

#### LANDLOCKED SALMON.

We received from the Grand Lake Stream Landlocked Salmon Breeding Works one hundred and fifty-eight thousand eggs, for fifty thousand of which we are indebted to Prof. Baird. These eggs were hatched and distributed in Cold Stream pond at Enfield, Maranocook at Readfield, Wilson's pond in Auburn, and Rangely lakes. The landlocked salmon planted in previous years have proved a success, and have been taken at Cold Stream pond in Enfield, Wilson's pond in Auburn, Webb's pond in Weld. Also several have been taken in the Androscoggin river, at the mouth of Webb's river at Dixfield. Every year they are now taken quite frequently in Rangely waters. This fish is a very valuable acquisition to all waters where there are large running streams affording them facilities for breeding, and which seem as necessary to their perfect developement as to the sea salmon. As a pond fish, without these accessories, it will

prove a failure. Maine is the only State that possesses a sufficient stock of this rare fish, to afford its ova to be taken for distribution to other States. An establishment in its conduct and arrangement similar to the salmon works at Orland and under the same superintendent, is successfully carried on at Grand Lake stream in our State. As this is strictly an inland fish, which does not migrate to the sea, and cannot be taken in sufficient numbers for breeding purposes, excepting during the breeding season, a special permit is granted to the superintendent to take the fish during the close time, upon the condition, that the parent fish shall be put back uninjured into the waters whence taken, and that twenty-five per cent. of all the ova taken shall be hatched and distributed in the same waters.

As a matter of interest to the reader, we give below a list of the contributors for 1881, with the dividend of eggs to each subscriber :

Maine,	\$300.00	60,000
New Hampshire,	250.00	50,000
Massachusetts,	500.00	100,000
Connecticut,	500.00	100,000
United States,	1,450.00	290,000
		<hr/>
		600,000

In conclusion, we would suggest to any anglers taking a landlocked salmon in waters stocked by the Commissioners of Fisheries, that they carefully return them back. In this way, we may expect in a few years to see good salmon fishing in our inland waters ; and while we are on this subject, allow us to ask the aid of all our citizens in preventing the destruction of the young sea salmon by boys. We do not wish to be understood that they are wantonly destroyed, but from actual ignorance that they are young salmon. Indeed, they are sometimes sold as trout. They may readily be distinguished as having minute and bright red spots, dark cross bars, and are often mistaken for trout.



## SHAD.

Two millions of young shad in charge of Prof. Ellis were received the 16th of June, from Havre de Grace by the kindness of Prof. Baird, the U. S. Commissioner. These fish were divided between the Penobscot and the Kennebec rivers; one million being distributed in the Sebasticook at Waterville, and one million into the Mattawamkeag river near its junction with the Penobscot. The U. S. rail car, carefully constructed for the use of the U. S. Commission, with every appliance of refrigeration, steam engine for air pump to aerate the water, cooking stove, sleeping bunks, sitting room, &c., for the board and comfort of the Prof. and assistants, was transported free of cost over the Eastern Railroad from Boston, over the Maine Central from Portland, and the European and North American Railroad from Bangor to the respective points of destination of the fish. Our enlightened railroad men fully appreciate the benefit of fish and game protection to the net returns of their road. All hail to E. B. Phillips, Payson Tucker, F. W. Cram, L. L. Lincoln and Gov. Israel Washburn, Jr.

## BLACK BASS.

The black bass, owing to its very game qualities, continues to be a favorite fish with anglers, and applicants for its introduction are received beyond the power of the Commissioners to gratify. It should never be introduced into any waters where there are trout, or from whence it can gain access to trout streams. For ponds whose stock of trout has been exhausted by poachers who murder the fish on their spawning beds, and where no fish but yellow perch, bream and pickerel are left, it is invaluable. Trip pond in Minot, Gardiner's pond in Wiscasset, Gun Point Ice Co. pond in Harpswell, Hosmer pond in Rockport, Keazer's, Heald, and Cushman ponds in Lovell, and Little Pushaw in Corinth have all been stocked with bass this past year.

## ALEWIVES.

The alewife fisheries have this year proved very remunerative and successful, the run of this fish being unusually large. Mr. Caleb Gilman of Meddybemps reports the run of alewives in Dennys river the largest for forty years.

On the 26th of May, we transported eighty alewives successfully from Bucksport to Merrill's Mills on the Kenduskeag, and turned them into the mill pond. The young of these fish will undoubtedly find their way down stream, over the intervening dams, to the ocean; but on their return, which the fishermen estimate at three years, they of course can get no farther up the Kenduskeag than Morse's Mill. The object of the experiment is to judge how far a yearly planting of alewives will prove remunerative in establishing fisheries at the mouth of inaccessible streams.

## WHITE FISH.

We were presented by Prof. Baird, from the establishment of Frank N. Clark, Northville, Michigan, one million white fish eggs. Owing to the extreme cold weather, long distance of transportation and tenderness of the eggs, the percentage of loss was large,—should judge about twenty-five per cent. of the eggs hatched. They were received in February; were hatched and turned loose March 20th. About fifteen thousand of these were put in Rangely, the balance were turned loose in Mooselucmeguntic lake.

We think the white fish would be a valuable addition to our large fresh water lakes and ponds, both as food for the game fishes and also for the table, being of excellent flavor and very productive.

It is not generally supposed that they can be taken with hook and line, yet the white fish in Maine waters (which are plenty in Moosehead, Grand lake, and are common in the eastern part of the State,) will bite readily, and a large number are taken in that way in Moosehead, both in winter and summer, by fishing in deep water near the bottom,



having baited the ground the day before with a cusk or other fish roasted and crumbled fine. Indeed, they are often taken with the fly,—I have often taken them in that manner at Moosehead. The white fish of Moosehead are quite gamy and afford excellent sport.

#### FISHWAYS.

Owing to the large amount of other work which could not be put off, and having no colleague to assist (as heretofore), I have not been able to attend to some places where fishways have been asked for. Those which have not been visited will be attended to as early in the spring as practicable.

Sheepscot river was visited and several dams examined. Plan was furnished for lower dam known as Head of Tide in Alna. Owing to want of time and lateness of season, plans were not furnished for dams above.

Lower dam on Dyer's river, occupied by Erskine & Baker, was also visited. The fishway required there being very simple, Mr. Erskine promised to put it in without plans or process.

Next visited Little river (Perry) and Cathance river in Dennysville. Plan was furnished for lower dam at Perry and fishway ordered. Those at Dennysville did not think it advisable to order fishways, owing to the number of dams, large expense and limited extent of breeding ground; also could not learn that alewives ever frequented the river to any extent.

The new dam now building across the St. Croix river at Calais has been attended to, and model for fishway furnished. It will be finished with the dam.

Frankfort stream in Winterport has been examined. On this stream are ten or twelve dams. It is a very shallow stream, subject to high freshets. Taking into consideration the large number of obstructions, for the amount of spawning territory for alewives, did not think it advisable to order fishways at present.



## FISH AND GAME WARDENS.

There are now in the State over sixty wardens. Below are the names of those whose commissions are dated since May 1st, 1879. The term of office of the others will expire previous to 1882.

There was no appropriation made at the last Legislature to pay them, as has been done heretofore, and what they have received has been drawn from the appropriation for fish and game. The larger number of them get no pay and cannot be expected to do the amount of service of a paid servant. A better system would be one which would allow the Commissioner of Fisheries to pay them according to their effectiveness and service rendered, as an unreliable man would be content to receive his salary without earning it. In some localities, at the season when the migratory fishes are running up our rivers, and also during the spawning of those in our inland waters, it would require nearly the whole time of the wardens to protect them, and they should be paid accordingly. A dozen wardens well paid and in the right localities, no doubt, would do more effective service than a large number paid a small and insufficient sum each. A great and crying evil is the want of means for the Commissioners to employ some reliable men who could be used as detectives where the Commissioners may deem requisite. In many places, where there is but little to do, there are usually enough interested who will serve without pay, except what they may be entitled to from penalties, and for the interest they take in the cause. The Commissioners should know the men and select them, as they are to do the work of their department. By statute, they have no voice in the matter. Governor Plaisted has my sincere thanks for granting my requests in this matter the past year and his assurance for the future.

Respectfully submitted.

HENRY O. STANLEY,

*Commissioner of Fish and Game.*

Dixfield, Dec. 31st, 1881.



## FISH AND GAME WARDENS.

- 
- Joseph M. Johnson, Freeport, May, 1879.  
Samuel Brown, Weld, May, 1879.  
James S. Buck, Saco, May, 1879.  
William S. Watkins, Casco, July, 1879.  
Edwin L. Poor, Sebago, July, 1879.  
Columbus Gray, Wilton, July, 1879.  
Charles H. Reddington, Waterville, July, 1879.  
James Bailey, Bath, July, 1879.  
Joel D. Berry, Stockton, July, 1879.  
Barker A. Neal, Gardiner, August, 1879.  
John F. Pettingill, Auburn, December, 1879.  
A. K. P. Ward, Sebago, November, 1879.  
George Moses, Gorham, November, 1879.  
Noah Pillsbury, Scarborough, January, 1880.  
Leonard M. Walker, Bangor, February, 1880.  
George Davidson, Calais, March, 1880.  
Nahum H. Smith, Greenville, May, 1880.  
Robert French, Stockton, May, 1880.  
Alec. McLain, Mattawamkeag, May, 1880.  
William Cochrane, Calais, July, 1880.  
J. E. Green, Brewer, May, 1880.  
A. J. Darling, Enfield, June, 1880.  
John S. Keizer, Dedham, June, 1880.  
Benjamin Manchester, Gorham, July, 1880.  
H. Frank Farnham, Auburn, September, 1880.  
Edwin N. Osgood, Surrey, September, 1880.  
Shedrach Black, Brooksville, November, 1880..  
C. M. Wormell, Bethel, December, 1880.  
John D. Piper, Camden, March, 1880.  
Ellis M. Smith, Machias, June, 1880.  
Isaac L. Linscott, Brunswick, April, 1881.  
George D. Huntoon, Rangely, April, 1881.  
Isaac M. Jones, Patten, April, 1881.  
Ellis Hanscom, Machias, May, 1881.

John A. Burrill, Newport, June, 1881.  
 Charles E. Brackett, Naples, June, 1881.  
 Caleb Gilman, Meddybemps, June, 1881.  
 N. N. Child, Lincoln County, June, 1881.  
 Henry B. Penny, West Waterville, September, 1881.  
 Morrill Sprague, Dexter, September, 1881.  
 Charles Sanford, Fort Point, September, 1881.  
 Pelham B. Peterson, Washington County, October, 1881.  
 George A. Drew, Lewiston, October, 1881.  
 John Mead, North Bridgton, December, 1881.  
 W. S. Hammond, Howard, December, 1881.  
 Ebenezer G. Morse, Eddington, December, 1881.  
 Thomas F. Allen, Bangor, December, 1881.  
 Joseph F. Nichols, Phippsburg, December, 1881.  
 William A. Penny, No pay.  
 Charles Banks, Jr., "  
 Fred Parks, "



## APPENDIX.

### A TEST GAME LAW DECISION.

#### "THE PEOPLE VS. MAGNER."

Action was brought against one Magner, a Chicago game dealer, in January, 1880, for selling quail out of season, and judgment obtained in the Justice's Court and in the Criminal Court of Cook County. Upon appeal the case was taken to the Supreme Court of Illinois, last March, and the decision of that court has just been handed down sustaining the decisions of the lower courts.

The Magner case was an important one because it had purposely been made a test of the constitutionality of the Illinois game law. The published report of the case states that by an agreed statement of facts the following points were covered:

"In case No. 1, the defendant bought and sold quail, during the prohibited season, the entire transaction taking place within the State, and confined to citizens of Illinois. In case No. 2, the defendant bought one box of quail in the State of Kansas during the open season, had said case shipped to Chicago, and sold the same during the prohibited season to a citizen of Illinois. Case No 6, same as No. 2, except that defendant sold the package to a citizen of the State of New York. Case No. 10, defendant sold quail at Chicago during the prohibited season, to citizen of New York, said quail having been killed in Kansas, and shipped to defendant in Chicago. These three cases were so framed to test the authority of the State to pass the law. Cases No. 3, 4, 7 and 9 contained the same statement of facts, except that the game was purchased in Kansas during the close or prohibited season by the laws of that State, and raised the question of the right of a citizen to deal in goods, when the law of the place of contract has forbidden such dealings. Cases No. 5, 8 and 9 represented similar facts, except that goods were sold in smaller parcels than original shipment, thereby raising the question, that as the original packages had been broken, the quail had become 'merged in the mass of property of the State,' and the State could then regulate its sale, even if it could not regulate inter-State commerce.

"The argument upon the part of the State was briefed to evidence the following propositions, viz:

*First*, That game of all kinds is the property of the State, and that the State has full power to protect its property by statute, even to the affecting of commercial relations between the various States, and that such law will not be unconstitutional, unless the opposition between it and the constitution be clear and plain.



*Second.* Showing that the highest courts in the States of New York and Missouri have decided a similar law to be constitutional.

*Third.* That the power of Congress, under the Constitution, to regulate commerce among the several States, is not exclusive.

*Fourth.* That Congress having for over a century failed to pass a game law, it may reasonably be inferred that a 'national rule' is not required, and in such a case the State may act.

*Fifth.* That the States having always protected fish and game, the acquiescence of the Federal Government admits their rights so to do.

*Sixth.* That the States can better control this question than Congress.

*Seventh.* That Congress has no power over the subject.

*Eighth.* That this law can be upheld under the police power of the State.

*Ninth.* That goods contraband *lex loci contractu* cannot be the subject of a legal contract elsewhere.

*Tenth.* That the comity of States requires each to assist the other in preserving its game.

*Eleventh.* That game and fish are of great importance to the country.

*Twelfth.* That the quail were bought in Kansas when such purchase was then and there prohibited should not be received as a defense in the courts of this State.

*Thirteenth.* That the practice has become general by which courts of justice examine into and enforce contracts made in other States, and carry them into effect, according to the laws of the place where the transaction took its rise; subject only to the exception that such contract should not, either in itself, or in the means used to give it effect, work an injury to the inhabitants of the country where it is attempted to be enforced.

*Fourteenth.* That even if another State was bound to permit the sale of the subject of contract in the hands of the importer, it is not bound to furnish a market for it, nor abstain from the passage of any law which it may deem necessary to guard the health or property of its citizens, although the effects of such legislation might discourage importation."

The opinion rendered by the Supreme Court sustains these arguments. It is so comprehensive and so important that we publish it entire as printed in a Chicago paper:

STATE OF ILLINOIS, Supreme Court, Northern Grand Division.

At a Supreme Court, begun and holden at Ottawa, on Tuesday, the seventh day of September, in the year of our Lord one thousand eight hundred and eighty, within and for the Northern Grand Division of the State of Illinois.

Present: Hon. T. Lyle Dickey, chief justice; Pinkney H. Walker, justice; Benj. R. Sheldon, justice; Alfred M. Craig, justice; John Scholfield, justice; John M. Scott, justice; John H. Mulkey, justice; James K. Edsall, attorney general; Rufus C. Stevens, sheriff; Everell F. Dutton, clerk.

Be it remembered, that afterward, to wit: On the third day of February, A. D. 1881, the opinion of the Court was filed in the clerk's office of said court in words and figures following, to wit:

James Magner *vs.* the People of the State of Illinois. Appeal from Criminal Court of Cook County.

Opinion by SCHOLFIELD, J.:

The grounds upon which it is argued the judgment below should be reversed are:

1st. Because the statute does not condemn the possession or sale of quail taken and killed beyond the limits of the State, which is subsequently shipped into the State for sale.



2d. Because, if the statute shall be held to condemn such possession and sale, then in its enactment, so much of § 13, Art. 4, of the State Constitution as requires that the subject of every act shall be expressed in its title, was disregarded, and hence it is not law.

3d. Because, if the statute is free of all other objections, but shall be held to condemn the possession and sale of quail taken and killed beyond the limits of the State, it is void and not law, for the reason that it is in contravention of the 3d clause of § 8, of Art. I of the Constitution of the United States, which confers upon Congress power to regulate commerce with the foreign nations and among the several States.

They will be examined in the order stated.

1st. The first section of the statute under consideration makes it unlawful for any person to hunt, pursue kill or trap, net or ensnare, or otherwise destroy any quail or ruffed grouse between the 1st day of January and the 1st day of October of each and every year.

The second section makes it unlawful for any person to buy, sell, or have in his possession any of the wild fowls, birds, etc., mentioned in section one, at any time when the trapping, netting or ensnaring of such wild fowls, birds, etc., shall be unlawful, which shall have been entrapped, netted or ensnared contrary to the provisions of the Act. This is manifestly but equivalent to saying that it shall be unlawful to buy, sell or have in possession, between the 1st day of January and the 1st day of October, in each and every year, any of the wild fowls, birds, etc., specified in section one, which shall have been entrapped, netted or ensnared contrary to the provisions of that section. Very clearly this section has reference only to wild fowls, birds, etc., within this State.

But section six is more comprehensive in its language than either section one or section two. It is: "No person or persons shall sell or expose for sale, or have in his or their possession, for the purpose of selling or exposing for sale, any of the animals, wild fowls or birds mentioned in section one of this act, after the expiration of five days next succeeding the first day of the period in which it shall be unlawful to kill, trap or ensnare such animals, wild fowls or birds," etc. No exception whatever is made with reference to the time when or the place where such "animals, wild fowls or birds" shall have been killed, trapped or ensnared; but the language as plainly as language can, includes *all* animals, wild fowls and birds.

That this was intended, is further manifest from the language of the seventh section, which declares: "The provisions of this act shall not be construed as applicable to any express company, or common carrier, in whose possession any of the animals, wild fowls or birds herein mentioned shall come, in the regular course of their business, for transportation, while they are in transit through this State from any place without this State, where the killing of said animals, wild fowls or birds shall be lawful," thus, in effect, declaring that but for this qualification the provisions of the act would be applicable to express companies and common carriers.

But, it is argued, this cannot be the correct construction, because such a prohibition does not tend to protect the game of this State. To this, there seem to be two answers. *First*, the language is clear and free of ambiguity, and in such case there is no room for construction. The language must be held to mean just what it says. *Second*, it cannot be said to be within judicial cognizance that such a prohibition does not tend to protect the game of this State. It being conceded, as it tacitly is, by the argument, that preventing the entrapping, netting, ensnaring, etc., of wild fowls, birds, etc., during certain seasons of the year, tends to the protection of wild fowls, birds, etc., we think it obvious that the prohibition of *all* possession and sales of such wild fowls or birds, during the prohibited seasons, would tend to their protection in excluding the opportunity for the evasion of such law by clandestinely taking them beyond the State and afterward bringing them into the State for sale, or by other subterfuges and evasions.



It is quite true that the mere act of allowing a quail netted in Kansas to be sold here does not injure or in anywise affect the game here, but a law which renders all sales and all possession unlawful, will more certainly prevent any possession or any sale of the game within the State, than will a law allowing possession and sales here of the game taken in other States. This is but one of the many instances to be found in the law, where acts which in and of themselves alone are harmless enough are condemned because of the facility they otherwise offer for a cover or disguise for the doing of that which is harmful.

A similar objection to the construction of the Act, it seems, was raised in *Whitehead vs. Smithers* (2d C. P. D. 553), 21st Moak 458; but Lord Coleridge, C. J., said: "I am of the opinion that that argument is not well founded. It is said, it would be a wrong thing for the Legislature of the United Kingdom to interfere with the rights of foreigners to kill birds. But it may well be that the true and only mode of protecting British wild fowl from indiscriminate slaughter, as well as of protecting other British interests, is by interfering indirectly with the proceedings of foreign persons. The object is to prevent British wild fowl from being improperly killed and sold under pretence of their being imported from abroad." In that case, the wild fowl was shown to have been of a consignment of dead plovers, received by a poulterer from Holland, and it was held that its sale was prohibited by general language, like that of the section under consideration, prohibiting all sales of such fowl.

In *Phelps vs. Racey*, 60 N. Y. 10, the language of the statute was substantially the same as that of the 6th section. The defence there was that the bird—a quail—had been killed in the proper season, but had been kept, by a process for preserving game, until after the season expired, and then offered for sale. The Court said: "The penalty is denounced against the selling or possession after that time, irrespective of the time or place of killing. The additional fact alleged that the defendant had invented a process of keeping game from one lawful period to another, is not provided for in the Act, and is immaterial."

2d. The title of the act is "An Act to revise and consolidate the several acts relating to the protection of game, and for the protection of deer, wild fowls and birds." We think this fully expresses the subject of the Act. From the views expressed under the first point, it follows that we are of opinion that the prevention of the possession and sale of *all* game during the periods designed to protect the same in this State from being taken or killed, may reasonably be regarded as a means necessary to the effectual protection of the game of this State. It was unnecessary to state the mode by which the game was to be protected, or the reasons which influenced the Legislature in making the enactment.

*Fuller vs. The People*, 92 Ills. 182. *People ex. rel. vs. Lowenthal et al.*, 93d Id. 191. *Johnson vs. The People*, 83d Id. 431.

3d. No one has a property in the animals and fowls denominated "game" until they are reduced to possession. 2d Kent's Com's (8th Ed.) 416 *et seq.* Cooley on Torts, 425. While they are untamed and at large, the ownership is said to be in the Sovereign's authority—in Great Britain, the King. 2d Blackstone's Com's (Sharswood's Ed.) 409-10; but with us, in the people of the State. The policy of the common law was to regulate and control the hunting and killing of game, for its better preservation; and such regulation and control, according to Blackstone, belong to the police powers of the government. 4th Com's (Sharswood's Ed.) 174.

So far as we are aware, it has never been judicially denied that the government, under its police powers, may make regulations for the preservation of game and fish, restricting their taking and molestation to certain seasons of the year, although laws to this effect, it is believed, have been in force in many of the older States since the organization of the Federal Government. On the contrary, the constitutional right to enact such laws has been expressly affirmed in regard to fish by Massa-



chusetts, in *Burnham vs. Webster*, 5 Mass. 266, *Nickerson vs. Brackett*, 10 Id. 212, and by Indiana, in *Gentile vs. The State*, 29 Ind. 409; and in regard to game by New York, in *Phelps vs. Racey*, *supra*; and by Vermont, in *State vs. Norton*, 45 Vermont, 258; and upon principle the right is clear.

The ownership being in the people of the State—the repository of the sovereign authority—and no individual having the property rights to be affected, it necessarily results that the Legislature, as the representative of the people of the State, may withhold or grant to individuals the right to hunt or kill game, or qualify and restrict it, as in the opinion of its members will best subserve the public welfare. Stated in other language, to hunt and kill game is a boon or privilege granted, either expressly or impliedly by the sovereign authority—not a right inhering in each individual; and consequently nothing is taken away from the individual when he is denied the privilege, at stated seasons, of hunting and killing game. It is, perhaps, accurate to say that the ownership of the sovereign authority is in trust for all the people of the State, and hence, by implication, it is the duty of the Legislature to enact such laws as will best preserve the subject of the trust, and secure its beneficial use in the future to the people of the State. But in any view, the question of individual enjoyment is one of public policy and not of private right.

Our attention has been called to no law of Congress, and we are aware of none, in regard to the transportation of game; still, if this law may be regarded as a restriction upon inter-State commerce, that is of no importance, for it was held in *Welton vs. The State of Missouri*, 91 U. S. (1st Otto) 275, that the non-exercise by Congress of its power to regulate commerce among the several States is equivalent to a declaration by that body that such commerce shall be free from any restriction. The inquiry then arises, Is the prohibition of the possession and sale of game as enacted in this State a restriction of inter-State commerce?

In *Gibbons vs. Ogden*, 9 Wheaton, at page 203, Chief-Justice Marshall classifies as belonging to and forming a portion of that "immense mass of legislation, which embraces everything within the territory of a State, not surrendered to a general government, all which can be most advantageously exercised by the States themselves." "inspection laws, quarantine laws, health laws of every description, as well as laws for regulating the internal commerce of a State, and those which respect turnpike roads, ferries, etc." And he adds: "No direct general power over these objects is granted to Congress, and consequently they remain subject to State legislation." So in the *Daniel Ball*, 10 Wallace 564, the Court said: "There is undoubtedly an internal commerce which is subject to the control of the States. The power delegated to Congress is limited to commerce among the several States, with foreign nations, and with the Indian tribes. This limitation necessarily excludes from Federal control all commerce not thus designated, and of course that which is carried on entirely within the limits of a State, and does not extend to or affect other States." And upon this principle, in the *United States vs. Dewitt*, 9 Wallace 41, it was held that a statute of the United States, making it a penal offence to mix naphtha and illuminating oils, was beyond the legislative authority vested in Congress, and it was said: "But this express grant or power to regulate commerce among the States has always been understood as limited by its terms; and as a virtual denial of any power to interfere with the internal trade and business of the separate States."

In the celebrated license cases, 5 Howard 504, laws prohibiting sales of liquor except in large quantities and under stringent regulations, were sustained as within the police power, notwithstanding they interfered indirectly with inter-State commerce. Ch. J. Taney said: "These State laws act altogether upon the retail or domestic traffic within their respective borders. They act upon the article after it has passed the line of foreign commerce, and becomes a part of the general mass of property in the State. These laws may, indeed, discourage imports and diminish the price which ardent spirits would otherwise bring. But although a State



is bound to receive and permit the sale by the importers of any article of merchandise which Congress authorizes to be imported, it is not bound to furnish a market for it, nor abstain from the passage of any law which it may deem necessary or advisable to guard the health or morals of its citizens, although such a law may discourage importations or diminish the profits of the importers, or lessen the revenue of the General Government.

So, upon like principle, it has since been held that as a measure of police regulation looking to the preservation of public morals, a State law entirely prohibiting the manufacture and sale of intoxicating liquors is not repugnant to any clause of the Constitution of the United States. *Bootmeyer vs. Iowa*, 18 Wall. 129. *Beer Co. vs. Massachusetts* (97 U. S.) 7 Otto 25.

Very clearly this law relates only to the internal commerce of the State in the article of game. As in the license cases, it acts altogether upon the retail or domestic traffic within the State, and as there said so it may be said here: "The State is not bound to furnish a market" for game; and by parity of reasoning is not bound to furnish game for a market.

And it would seem to be a legal truism, if a State may constitutionally prohibit the killing and possession of game during certain seasons, the prohibition of the transportation of game killed and possessed in violation of such prohibition, cannot be unconstitutional. There cannot be a constitutional right to transport property which cannot legally be brought into existence.

The principle finds sanction in *Munn vs. Illinois*, 94 U. S. (4 Otto) 113. *Slaughter-house cases*, 16 Wallace 36. *Fertilizing Co. vs. Hyde Park*, 97 U. S. (7 Otto) 659.

The birds which are here admitted to have been brought from Kansas, as appears by the laws admitted in evidence by the agreement of the parties, were there killed and possessed in violation of a law of that State, and hence never legitimately became an article of commerce.

There is no question here of discrimination in favor of the game of this State as against that of another State, so as to apply the doctrine of *Welton vs. the State of Missouri*, *supra*, and kindred cases. Nor is there in *R. R. Co. vs. Husen*, 95 U. S. (5 Otto) 465, and other like cases, any question of the right to transport commerce from one State to another. For the 7th section of the statute expressly provides that: "The provisions of this act shall not be construed as applicable to any express company or common carrier into whose possession any of the animals, wild fowls or birds herein mentioned shall come, in the regular course of their business, for transportation, while they are in transit through this State from any place without this State, where the killing of said animals, wild fowls or birds shall be lawful."

And herein our statute is directly opposite of the 6th section of the Kansas act, which was held unconstitutional in the *State vs. Saunders*, 19 Kansas 127. There the prairie chickens were lawfully killed and lawfully became an article of commerce, and their transportation prohibited. Here the quail were unlawfully taken and killed, and their possession and sale in this State were unlawful. But had they been lawfully taken and killed, their transportation to a place where they might be lawfully sold could not be interfered with by the statute.

The questions we have been considering were all raised in *Phelps vs. Racey*, *supra*. The opinion in that case, by the late Chief Justice of the Court of Appeals, is well considered and reaches the same conclusion at which we have arrived.

The judgment is affirmed.



## COMMISSIONERS OF FISHERIES.

---

*The expirations of the terms of office are indicated by the dates. Where no date is given the term is indefinite.*

---

*Canada.*

W. F. Whitcher, Ottawa, Ontario.

*New Brunswick.*

W. H. Venning, Inspector of Fisheries, St. John.

*Nova Scotia.*

W. H. Rodgers, Inspector of Fisheries, Amherst.

*Prince Edward Island.*

J. H. Duvar, Inspector of Fisheries, Alberton.

*British Columbia.*

Alex. C. Anderson, Inspector of Fisheries, Victoria.

---

*The United States.*

Prof. Spencer F. Baird, Washington, D. C.

*Alabama.*

C. S. G. Doster, Pratteville.

D. B. Huntly, Courtland.

*Arizona.*

John J. Gosper, Prescott, 1884.

Richard Rule, Tombstone, 1884.

Dr. J. H. Taggart, Yuma, 1884.

*Arkansas.*

N. B. Pearce, Osage Mills.

James Hornibrook, Little Rock.

John E. Reardon, Little Rock.

*California.*

S. R. Throckmorton, San Francisco, 1883.

B. B. Redding, San Francisco, 1883.

J. D. Farwell, Niles, Alameda County, 1883.

*Colorado.*

W. E. Sisty, Brookvale, 1883.

*Connecticut.*

Dr. W. M. Hudson, Hartford, 1882.

Robert G. Pike, Middletown, 1882.

C. N. Woodruff, Sherman, 1884.

*Georgia.*

J. T. Henderson (Commissioner of Agriculture and *ex-officio* Commissioner of Fisheries), Atlanta, 1882.

Dr. H. H. Cary, Superintendent of Fisheries, La Grange, 1882.

*Illinois.*

N. K. Fairbank, President, Chicago, 1882.

S. P. Bartlett, Quincy, 1884.

S. P. McDoel, Aurora, 1884.

*Indiana.*

Calvin Fletcher, Spencer, Owen County, Sept. 20, 1883.

*Iowa.*

B. F. Shaw, Anamosa, 1882.

A. A. Mosher (Ass't. for N. W. portion), Spirit Lake, 1881.

*Kansas.*

D. B. Long, Ellsworth, March, 1883.

*Kentucky.*

Wm. Griffith, President, Louisville.

Dr. S. W. Coombs, Secretary, Bowling Green.

P. H. Darby, Princeton.

John B. Walker, Madisonville.

Hon. C. J. Walton, Munfordville.

Hon. J. A. Steele, Versailles.

W. C. Price, Danville.

Dr. W. Van Antwerp, Mt. Sterling.

Hon. J. M. Chambers, Independence, Kenton County.

A. H. Goble, Catlettsburg.



*Maine.*

Henry O. Stanley, Dixfield, 1883.

*Maryland.*

T. B. Ferguson (of Baltimore), Massachusetts avenue, Washington, D. C., 1882.

Thomas Hughlett, Easton, April, 1882.

*Massachusetts.*

Theodore Lyman, Brookline, 1881.

E. A. Brackett, Winchester, 1884.

Asa French, South Braintree, 1881.

*Michigan.*

Eli R. Miller, Richland, 1883.

A. J. Kellogg, Detroit, 1885.

Dr. J. C. Parker, Grand Rapids, 1887.

*Minnesota.*

1st District—Daniel Cameron, La Crescent, 1883.

2d District—William W. Sweeney, M. D., Red Wing, 1883.

3d District—Rob't Ormsby Sweeney, President, St. Paul, 1883.

*Missouri.*

Hon. Silas Woodson, St. Joseph, 1882.

John Reid, Lexington, 1882.

J. G. W. Steedman, 2,803 Pine street, St. Louis, 1882.

*Nebraska.*

W. L. May, Freemont, June, 1883.

R. R. Livingston, Plattsmouth, June, 1884.

B. B. Kennedy, Omaha, June, 1885.

*Nevada.*

H. G. Parker, Carson City, 1882.

*New Hampshire.*

Albina H. Powers, Plymouth, 1886.

Luther Hayes, Milton, 1886.

Dr. Edward Spaulding, Nashua, 1886.

*New Jersey.*

Dr. B. P. Howell, Woodbury, Gloucester County, 1883.

Maj. E. J. Anderson, Trenton, 1883.

Theo. Morford, Newton, Sussex County, 1883.

*New York.*

Hon. R. Barnwell Roosevelt, 76 Chambers st., New York.

Edward M. Smith, Rochester.

Richard U. Sherman, New Hartford, Oneida County.

Eugene G. Blackford (Fulton Market, New York City), 809  
Bedford avenue, Brooklyn.

*North Carolina.*

S. G. Worth, Raleigh.

[Mr. Worth is acting as Commissioner and Superintendent, there being no special Fish Commissioner recognized in the State. The department is under the general supervision of the Commissioner of Agriculture, Hon. Montford McGehee, Raleigh.]

*Ohio.*

L. A. Harris, Cincinnati, 1884.

C. W. Bond, Toledo, 1884.

H. C. Post, Sandusky, 1884.

*Pennsylvania.*

Hon. H. J. Reeder, Easton, Northampton County, 1881.

Hon. Benj. L. Hewit, Hollidaysburg, Blair County, 1881.

James Duffy, Marietta, Lancaster County, 1881.

John Hummel, Selingrove, Snyder County, 1881.

Robert Dalzell, Pittsburgh, Alleghany County, 1881.

G. M. Miller, Wilkesbarre, Luzerne County, 1881.

*Rhode Island.*

Newton Dexter, Providence, 1883.

John H. Barden, Rockland, 1883.

Alfred A. Reed, Jr., Providence, 1883.

*South Carolina.*

A. P. Butler (Commissioner of Agriculture and *ex-officio* Commissioner of Fisheries), Columbia.

*Tennessee.*

W. W. McDowell, Memphis, 1883.

Geo. F. Akers, Nashville, 1883.

H. H. Sneed, Chattanooga, 1883.

*Texas.*

J. H. Dinkins, Austin (term unknown).



*Utah.*

Prof. J. L. Barfoot, Curator Deseret Museum, Salt Lake City.

*Vermont.*

Dr. M. Goldsmith, Rutland, 1881.

Charles Barrett, Grafton, 1882.

*Virginia.*

Col. M. McDonald, Berryville, 1882.

*West Virginia.*

H. B. Miller, Wheeling, 1885.

C. S. White, Romney, 1885.

N. M. Lowry, Hinton, 1885.

*Wisconsin.*

The Governor, *ex-officio*, Madison, 1882.

Philo Dunning, President, Madison, 1885.

C. L. Valentine, Secretary and Treasurer, Janesville, 1887.

J. V. Jones, Oshkosh, 1886.

John F. Antisdel, Milwaukee, 1885.

Mark Douglass, Melrose, 1887.

C. Hutchinson, Beetown, 1886.

*Wyoming Territory.*

Henry B. Rumsey, Red Buttes, Albany County (term unknown).

Deputies.—Dr. M. C. Barckwell, Cheyenne, (term unknown);  
Otto Gramm, Laramie (term unknown).

