

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied
(searchable text may contain some errors and/or omissions)

Public Documents of Maine:

BEING THE

ANNUAL REPORTS

OF THE VARIOUS

Public Officers *and* Institutions

FOR THE YEAR

❧ 1889 ❧

VOLUME I.

AUGUSTA:

BURLEIGH & FLYNT, PRINTERS TO THE STATE.

1890.

REPORT

OF THE

Commissioners of Fisheries and Game

OF THE

STATE OF MAINE

FOR THE YEAR

1888.

AUGUSTA:

BURLEIGH & FLYNT, PRINTERS TO THE STATE.

1888.

REPORT.

To His Excellency Governor Marble:

The Commissioners of Fisheries and Game have the honor to present the report of their department for the biennial term of 1887 and 1888.

Notwithstanding the ill-judged changes made in our laws at the last session of our legislature, our success has been greater than we had any right to expect. Our game has exhibited an almost phenomenal increase, while our fish planting and protection has resulted in a more than bountiful return to our crippled resources for law enforcement. How such success could have been achieved under the mistaken changes of our laws by the late legislative amendments, is only to be accounted for by the moral support we have met with from the press of the State and the country, and the aid and sympathy of the reputable class of our population, from the artisan and farmer to the professional man. Great slaughter of our game will undoubtedly be perpetrated from this period until such time as the legislature will remedy their error which we hope may be at the opening of the session in January, 1889. We refer to a moiety of the penalty being taken from the wardens and the whole given to the county, leaving no incentive, except the bare pittance of one dollar and fifty cents per day, which they would get whether they caught the offender or not. We most feared the wholesale slaughter of our game as an immediate result of the emasculation of our laws by our legislature, but whether it was too severe a tax upon poachers' credulity that such a mis-

take could be committed, or else the knowledge of the bribe to unlimited licence was slow in meeting their comprehension, the full effects of the error were not experienced until the present open time.

We regret to record that some of the worst poaching crimes, and most cowardly, have been perpetrated by a class of visitors from whom we had a right to expect something better, but evidently they came of a race that had bred back to some ancestral Newgate stock.

A case has just been reported to us, as occurring last June, of more than usual cruelty. A nursing-cow moose was killed in the region above Mooshead, by a person who took but a small portion of the meat, leaving the rest to rot. The deed was incited by what the perpetrator would dignify as the sportsmanlike mania to kill. Two calves, we were told, were left to starve to death. It was related that the poor little brutes were heard calling for their slaughtered dam some hours after. The brave nimrod who committed this act, was caught some days since by one of our wardens and compelled to pay his penalty of \$100. We may add, that he was on his way home with another moose, which as it had been legally killed within the open time since October first, he was allowed to carry away with him. Should not this law be so amended that in a case of this kind the perpetrator should be mulcted, in an increased fine for both? Two fatal cases have been related to us of poachers killing brother poachers in mistake for venison, reported in both cases as accidental.

In all such cases the parties should be indicted and tried for manslaughter, and such fine be imposed by the magistrate as the development of the case warrants. It is too convenient a method for those gentry to remove a rival poacher or a troublesome warden, to be left unguarded. Another case has just been reported to us of a person at Prospect being shot by a hunter in mistake for a deer. All such cases, as also every citizen or child or grown person pointing a gun or pistol at any person and causing a wound or death, and plead-

ing that they "did not know it was loaded," should be punished by both fine and imprisonment. If innocence be the plea, the public should be protected against fools!

A case reported to us as occurring at Seven Ponds involved two boats loaded with Massachusetts poachers and Maine guides, shining deer in early summer when mostly nursing does are killed. One of the boats mistaking the other for game, delivered their fire. The passengers and guides were not so well peppered as we could have wished. It is of comparatively recent date as to years, since a party of ministers of the gospel were hunting our moose in midsummer, when one, the youngest and probably the one misled, accidentally shot himself.

Great as has been the pecuniary returns to our commonwealth from the excessive influx of travel, it is capable of an almost unlimited increase by proper provision by our legislature for the rigid enforcement of our laws. A deer killed at the proper season at any of our sporting centers, is worth at least one hundred dollars to the State, while if destroyed and sold by the poacher, its net return is almost valueless. The freight on the carcass of a deer pays only about one dollar to the railroad, while the freight or passage of a passenger to kill that deer, will pay to the railroad from \$8 to \$10 to which is to be added the expenditures for board and luxuries, while in transitu.

Our summer visitors are all consumers, affording the best of markets on our own soil to the farmer, for every product of his field, dairy and poultry-house. Every village lake or pond if stocked and protected, may be made a source of steady income to the town, in attracting summer residents. All the great investments of the last few years in our wealth of water power, or rural or scenic beauty for summer homes, has been made through the attention attracted to it by the skilled judgment of our visitors, who in seeking health, and rest and recreation, have taught us the value of our own unappreciated homes. Will not our representatives at Augusta

give heed to this? Our inland fishery laws require amendment. All the trout and salmon are bred in the tributary streams to our lakes and ponds. Driving dams are put up at will by the lumberman. These are left in a state after the season of their use is past, that renders them impassable to the spawning fish. The present law allows us only to order fishways upon such streams as are *naturally* frequented by salmon, shad, alewives and *landlocked salmon*. This shuts us out from Moosehead, Rangeley and other important waters. All fishing in the tributaries at Rangeley, Moosehead, &c. &c. &c., should cease from the last day of August and reliable wardens put in charge, to patrol wood, stream and lake, until the first day of May, or in fact such should be their duty for the whole twelve months. Fishing in the lakes may be allowed until the first of October in trout waters. The black bass, deemed and we think justly, one of the gamest of fishes, abounding in many lakes that have been stocked by the commissioners, afford unexampled sport far into October. The raising the water in the Rangeley lakes has opened new feeding grounds to the fish, attracting them from their former and well known haunts, and thus disappointing many of the old frequenters of their accustomed sport, until the new pools were discovered. The cry went forth of diminution of fish production. The commissioners from careful observation, are satisfied that never in the history of the lakes, was the breeding of the fish in a more satisfactory state than at present. But here as at Moosehead, and at other angling centers, new, increasing and destructive elements are at work, which must be promptly met, for the State cannot permit any danger to threaten the most productive interest she possesses. The use of dynamite for the taking of fish, should be made a capital offence, punishable by imprisonment as well as fine. Spearing, netting and jigging, should also be severely punished, as offenses equally destructive to the fish as dynamite. The famous land-locked salmon of Sebago lake have been almost exterminated by the persistent practice of these cow-

ardly methods for years past. To patrol the banks of Crooked river with a sufficient number of wardens to check the destruction of the spawning fish, was found impracticable. Our only resource was to construct a weir across the river at the nearest feasible point to the lake, and secure if possible every ascending fish and thus protect them from the net, the spear, the rifle, the dynamite cartridge, and the gaff of the poacher, for all these methods, were and are practiced. We not only thus secured all the ascending fish, but the first year we took 700,000 eggs which we hatched, and turned the product of young fish, into the waters of the lake and its tributaries. The success of this first experiment has been made apparent this present year to all observant visiting sportsmen, by the capture of many young salmon, varying in weight from one to three pounds. Our attempt in 1887 to repeat the same experiment, was partially frustrated by a raid upon our works of a party of disguised roughs, who demoralized our guard of one *man* and his *boy*. The weir was cut through, the tanks broken open, and such fish as they could not carry away with them turned loose. We repaired the damage, and were enabled at the end of the season to secure about 200,000 eggs, which we hatched and turned into Sebago waters. We make no comments here. None are needed. We were peacefully engaged in protecting the spawning fish from being destroyed in violation of the law in close time, taking and hatching their eggs, and restocking the very waters that the perpetrators of the crime had laid waste. We shall continue to set our weir every year, and employ sufficient force to protect the property of the State.

Many land-locked salmon and other fishes are being destroyed by railroad men, and their employees on the tributaries of Ship pond, and at other places, by the use of dynamite. The law should make the contractor or the company responsible for the act of their employees, as the dynamite could not be obtained without their complicity. Dynamite was likewise

used for the destruction of salmon by men employed on the dam at the outlet of Chesuncook lake. We think a law imposing a heavy penalty as well as imprisonment, and making the employers responsible would abate the evil.

The admission of pulp mills upon our streams, more especially upon the Penobscot river the only salmon river (with the exception of the St. Croix, which Maine shares with New Brunswick) on the Atlantic coast of the United States, was and is a most fatal error. Our rivers should all be carefully cultivated to fish, and can be made to constitute an important feature of our food product. No manufacture of any kind whatever should be allowed to throw its waste into a river any more than into our highways. No argument or demonstration is necessary here. Take the line of current from any pulp mill and the dead perch, chub and other fishes will tell the whole story. Look at the rocks washed by the current direct from the mill, they are as white as if specially colored with lime. The salmon in ascending the river, carefully avoid the side on which is the deadly flow; to yearling fish or to newly bred fish it is fatal. In all our future planting of fish in the Penobscot, points must be selected above the pulp mills. Salmon have been accustomed to breed in the rapid water all the way from Veazie to far up to the fastnesses above Grand Falls, Sebais, &c. &c. The health, the comfort, the lives of those who dwell below the mills and are dependent upon the Penobscot waters for their household use, their drink. Are they not worthy of protection?

It is but right and proper that in every change proposed in the game laws the interest of the owners of the forest lands of Maine should be consulted. The wild game is the property of the State, while its pursuit which more or less endangers the property of the proprietors is controlled entirely by statute laws. We have often thought that the immense value of these timber lands rendered them as worthy of a carefully constituted fire department to be paid and controlled by the State, as the property of our municipalities. The present evil of a large and worthless class of semi-outlaws who live

entirely in the woods mainly by poaching, occasionally acting as guides, stealing hoop poles or juniper knees or anything that will sell, should be suppressed at once. With them and by them is the great danger of fire. Sometimes the fires are set intentionally to favor the blueberry crop or afford favorite browsing of young shoots for the deer; at others revenge; at others from the drunken saturnalia of irresponsible parties, they go with as guides during the close time for game. If the law should be so changed as to meet our proposal to the last legislature, viz: adding September to the open time, it would lesson, instead of increasing the danger from fire, as the better class of sportsmen who are now kept out of the forest from a sense of honor would then by their presence operate as a check upon them. Give us a sufficient appropriation to perform those duties our oaths and the statutes require of us, and our wardens would prove the best police against forest fires that can be devised, and one we think the owners of the timber lands would be grateful for and appreciate. Within the last biennial term, we have been applied to for wardens to afford protection to lumbermen operating in Washington county whose camps had been threatened with fire, and their horses and oxen with destruction by some poachers at Nicatous lake, if any more of their dogs were missing, thus falsely charging them with killing their dogs. These were also the men who sympathized with the murderers of Hill and Niles, and posted notices threatening the lives of wardens. (It is but a year since the lumber camp with much valuable property belonging to Mr. Page, was burned on the shores of Nicatous lake.) It is time our forests and summer resorts were weeded out from this class of outlaws, and a better and more reputable class substituted.

No more appropriate sentiments can be here expressed than the following extract we have cut from the columns of *Forest and Stream*, called forth from the occurrence of similar outrages in the west.

“It has come to pass nowadays that to chronicle all events connected with shooting and fishing means to devote space to reports

which properly belongs in the criminal news of the daily press. It was only the other day that we recorded the murder on the Tobique, and the gross miscarriage of justice by which the miscreants escaped righteous punishment. But if murderers of women go unhung in New Brunswick, they see to it that the hemp has its own out in Wyoming. That territory has a law forbidding the killing of game for market. In spite of this skin hunters and meat hunters have in years past invaded the territory and plied their trade. This can be done no longer with impunity. Public feeling is on the side of the law. News has just come of the fate that overtook two hunters in the Snake river country who sought to combine skin hunting and house burning. The combination would not work and the consequences were exceedingly disastrous. The hunters were T. W. Adams and one Dutchy; they were engaged in a wholesale slaughter of elk and antelope, saving only the skin and horns, when an ex-ranchman, Tom Johnson, remonstrated with them on the ground that they were violating the law and threatened to have them arrested. The rest is quickly told. The hunters fired Johnson's house at night, Johnson, his wife and child in arms, escaped from the flames and from the hunters' revolvers. The father made his way to the settlement and gave the alarm. Forty men turned out at daylight, captured the hunters, carried them into the settlement and jailed them in an adobe hut. In the night a hundred men hustled them out and the morning sun revealed two human forms dangling from the limb of a tree."

In these repeated cases where interference with game law breakers has resulted in personal violence and crime, the fact has stood clearly revealed that the offenders against the game laws are desperate characters and when these offenses are regarded with leniency, the tone of the community is abased. It was so with the Maine shacker incendiaries, the doggers who killed the Maine wardens, the New Brunswick salmon spearkers and the Wyoming skin hunters. Lawlessness, with respect to one class of statutes here means rebellion against good order and the bonds of society. Desperate miscreants who break the game laws show themselves ready to stand at nothing, not even murder. Sympathy for them as poor creatures who must live and who have a God-given right to

support themselves by taking from nature her fish and her game is sympathy thrown away. "All these skin hunters, pot hunters, poachers, east or west, Adams and Dutchy, McFarland and Graves, Snake river or Niatous lake, Wyoming or Maine are peculiarly sensitive as to the constitutionality of laws not one letter of which have they ever obeyed, and whose right to life or to live if it is to be earned by doing one's share of work, or earning his share of bread, or performing one single moral duty, is no stronger or more legitimate than that of a house rat. We know of no single instance where complaints have been made to us to send wardens to stop the netting and spearing and dynamiting of fish, or the dogging of deer or the snaring of grouse and we have referred the applicants to the local warden, or to his own manhood, when the reply has not been, 'we dare not, for our house or barns or camps would be burned, our stock poisoned or our lives endangered.'" Such are the deer doggers. What we require is the means to select and pay a dozen good and efficient men whom we can send to any and all parts of the State who shall be ever present and on duty and not only protect our fish and game from slaughter, but our forests from fire. Local wardens are of no account as we have shown. They can always be watched when they dare perform their duty, but are never reliable from neighborly dislike to make a quarrel or fear of loss of life or property. Give us a good square non-exportation law for our game and fish, for such has got to be the speculative mania of the day, such the enterprise and the wealth of the combined game dealers of Massachussetts and New York, that force enough can be put into our forests under our game laws, to sweep off every head of game in one season, if exportation is ever legalized. The capital invested in the refrigerator enterprise, could take but as a small item, all the game in our forests. Where are the countless herds of buffalo that but yesterday blackened our western plains? Where the countless droves of elk, deer and antelope? We have seen a train of cars standing at the Shaw's

tannery at Vanceboro, loaded with buffalo hides from the western plains, and we have now to feed those wild tribes of Indians with our beef cattle, where they formerly fed themselves from the buffalo. Our very western and southern men now come to Maine from their game desolated states to share our protected fish and game, increasing, even, under our very limited means of protection.

Your commissioners have 35,000 square miles of territory to not only protect, but to stock and cultivate from the generous appropriation of eighteen and one-half cents per square mile, \$6500, in all. From this sum \$2000 has to be annually paid to the Associated States Salmon Works for the purchase of our sea and land-locked salmon eggs, all expenses of hatching and distributing the young fish, all expenses of lawsuits, counsel, wardens, travelling expenses and engineer for fishways, etc. When the duties of the commissioners were confined to the inland fisheries alone, and those duties requiring but a portion of their time and attention, their salary was fixed at \$500 per annum. Not only has a large amount of territory been added to the fisheries department by our legislature, but the care and protection of the game of the whole State has been placed under our charge. Formerly the care of the inland fisheries gave us some rest during a portion of the year, but now that the care of the game has been added, the whole of the commissioners time is demanded. If but the salary and the same appropriation required for the fisheries alone, is to be continued to us, we have to request in the name of common sense and justice, that we be relieved of the care of the game.

SEA SALMON.

The run of salmon in the Penobscot river has been large in both years, but in 1888 far exceeding 1887 both in size and numbers. The capture in the weirs in tide waters was of corresponding numbers, the present year exceeding in quantity the record of many years past. The angling at the pools below the water works dam has been excellent; many fish

captured by the experts, and many more hooked and lost by tyros. The early part of the season great numbers of fish passed up the river making their way in the high water over the obstructions caused by the new dam at West Great Works. This dam would not have proved an obstruction to the fish, if notice had been given to the commissioners before its inception, that they might have sent an engineer to lay out a fishway to be built contemporary and part of the dam itself. The construction of the new dam destroyed entirely the State fishway built at the old dam below, while the accumulated water flowing over the new dam prevented a plan of a fishway being rendered by the engineer to enable the fish to pass over at all stages of the water. The fishway was promised completion when a plan had been provided by the commissioners, at various early dates, but for reasons as various, was never completed. A date for its final and positive completion was settled as to occur by October tenth of the present year. The fishway is not yet done. Very many of the large salmon, heavy with spawn, too heavy to ascend over any but the most ordinary obstruction were imprisoned in the water below the mills. Wild by their governing instinct to ascend to the wonted spawning beds, breathing the poisoned waters from the pulp mill, trying to penetrate the current of running water flowing beneath the mills, looking in vain for some means to ascend to the waters above the dam. These fish, decimated by the lime and soda poisoned water, by the spear, gaff and net of the local inhabitants, latterly found their way up the Otter river to avoid the tainted water and are there still imprisoned with no means of access to their old spawning ground. Although the waters of the east and west branches of the Penobscot have shown the presence of large numbers of breeding fish which much lessen the State's loss, yet the untoward act of the company in destroying the State fishway without proper notice and authority, and summarily constructing an impassable fence to the fish, however blameless the animus may have been, has subjected the State to great loss.

Every new dam across the Penobscot river necessarily subjects the State to increased expense in protecting the fish, for it is their wont to lay a few days below every new obstruction, at first perhaps to study the new obstacle placed in their path, afterwards, that the change of currents has afforded favorable resting ground. The projected new and immense pulp mill now under construction on the Penobscot river at Enfield, and which involves a huge dam to be built entirely across the river at Piscataquis Falls, and for which the commissioners have rendered plans for a fishway to be completed by the first of April, 1889, will afford a new resting ground for the salmon, which will require that all that section of the river be patrolled by wardens for their protection from the spear and net. In fact all the Penobscot river now requires protection from the Water Works dam to the mouth of the Wissattiquoik on the east branch and the Twin dam on the west branch. If the salmon fishery of the Penobscot river of the Atlantic coast of the United States is to be preserved, there must be no fishing above tide water but with hook and line. This is open to all without favor. No salmon ascend above the Water Works dam but to breed. Every fish killed above that point is just so much deducted from the State's fish production. For to grant a right for two days per week netting above tide water as application has been made for, is virtually to open the door to unlicensed destruction to every fish. We have the fullest confidence in the honor and sincerity of the applicants, but there are men who will kill the last salmon or the last deer, rather than do one honest day's work.

Complaints have been made and much remark current about the disregard of the tide water fishermen to the close time for salmon. In many cases they are guilty. We sent two wardens down the river to judge personally as to whether the weirs were stripped in obedience to the law. They found many of the weirs that it was impossible to decide upon, excepting at low tide. For instance, the opening does not

extend down to the bottom of the pound. Thus, if a weir was visited at high tide, it would show as if the marling was taken off and the weir incapacitated from taking fish; but when visited at low tide, the pound, boarded some distance from the bottom would contain a salmon. If the wardens were present the salmon would be set free; if not, presumably the salmon would be killed. If the warden should take out the salmon he would be charged with taking salmon in close time, the owner of the weir declaring that he himself visited it to save the life of the fish, or that the fish would have escaped at high water. The law should define the opening to be down to the very bottom of the pound or weir. We have been consulted by both parties up river and the tide water fishermen, as to the shortening the open time for salmon. All have proposed a fractional date of the month. We would suggest that the close time for weir and net fishing be July first.

Our success in salmon planting in the Penobscot river has been of the most gratifying character amply repaying the outlay in the purchase, hatching and care of the salmon eggs.

The St. Croix river of which we are joint owners with the Dominion of Canada, has exhibited decided improvement, for much of which we are indebted to the energy and enterprise of Mr. Frank Todd of the Dominion Fisheries Department, who has inspired all with new interest in the cause. Dominion contributions of young fry to the river have been larger than Maine's but we have done our best. We think the St. Croix destined to become an important river for salmon fishing, and will add much to the prosperity of the local inhabitants as well as the adjoining States.

We have made several plantings of salmon for the Kennebec river in the tributaries of the Sandy river. Young salmon of one or two pounds weight have been taken this last summer at Farmington Falls. The first salmon that passed through the fishway at Augusta when it was opened was killed with an extemporized gaff by a Frenchman at Water-

ville. It would require a very remarkable eel, sucker, chub, frog, fish or reptile, under any circumstances eatable, to escape the vigilance of a Canadian French village.

The Penobscot salmon works at Orland, owned by several associated States and the United States and controlled and managed by the United States Fish Commission has entered upon a series of experiments in retaining our young salmon fry in a preserve for at least one year, when they are supposed to be able to more effectually take care of themselves and more largely escape destruction from being devoured by other fishes when turned into their new homes. The initial of this experiment was by the late lamented Prof. Baird always ably sustained by Mr. Atkins. Col. McDonald the new incumbent of the office of United States Commissioner of Fish and Fisheries, enters upon his duties as a worthy and competent successor to his distinguished predecessor. Maine will receive in her rivers the results of these experiments, which want of means would have always denied to Maine. The United States Commission will probably apply to our State legislature for a lease of Craig's pond in Orland, to be used as a preserve of young salmon, from which to draft colonies of yearling fish for distribution. As the care, culture and stocking of that beautiful sheet of water will be of wonderful advantage in disseminating a knowledge of fish culture among the people, as well as a direct benefit to the State, we are led to hope that the applicants will receive prompt and cordial assent from the legislature.

Sea samon eggs distributed 1887, 104,000 sent to Grand lake and put in St. Croix waters.

25,000 hatched at Orland by C. G. Atkins, and put in Craig's brook. These eggs were presented to Maine by the United States Fish Commission, 1888.

| | |
|---|---------|
| Purchased by Maine..... | 232,000 |
| Presented by United States Commission.. | 148,000 |

380,000

60,000 put in St. Croix at Vanceboro.

320,000 Penobscot and Madawamkeag rivers.

LAND-LOCKED SALMON.

We have before in our reports remarked, that we have two varieties of these interesting fish so far as size is concerned, viz: those of Sebec lake and those of Grand lakes, being similar in size, making but a small average of some two and one-half pounds, while those of Sebago lake and those of Reed's pond, are very much larger, attaining the size of over twenty-seven pounds. These cases do not hold good of these fish, when the progeny of their eggs are planted in other waters. It has been asserted by many that the size of the waters has the effect of governing the size of the fish. Grand lake or those waters as to size, are surely equal to Sebago. Sebec is larger than Reed's pond. Webb's pond in the town of Weld, is a small sheet of water, and yet it has shown a spent fish of eleven and three-fourth pounds from a stock of Grand lake fish. Wilton pond has shown a seven pound fish of four years growth from Grand lake parentage. We have never found the land-locked salmon indigenous to any waters in Maine where the smelt was not also a native. In all cases of our own planting in new waters where the smelt did not exist, all have failed thus far excepting in the case of Rangeley, and there is to be found some small spring spawning fishes, whose spawning and period of hatching corresponds with that of the smelt, and probably fills its place in supplying food to the young of the salmon. The smaller variety of salmon of Sebec and Grand lake take the fly readily and afford fine sport. While the larger fish of Sebago and Reed's pond are seldom or rarely taken except by trolling with a minnow, or a smelt. How far this will govern, we as yet, have no case to decide upon from Sebago planting.

The wide popularity of this fish, its splendid game qualities, its rare excellence as a table fish, have all led to a wide popularity almost amounting to enthusiasm. The result has been applications from all sources for young fry to stock ponds. People do not seem to be aware that fishes are as peculiar as to the conditions of water as are fruits and flowers

as to qualities of soil. There is hardly one case out of ten when application for land-locked salmon fry to stock waters, if granted, without investigation by the commissioners, but would have resulted in failure and disappointment. One sure and positive test is the presence of smelts, for this always involves the existence of some pebbly, sandy-bottomed brook where the smelt spawn, and which is absolutely essential for the breeding of the young salmon, as well as the health of the grown fish. Four or five years since some cans of fry were sent to Niatous lake. They were transported with great care and fidelity by the respective parties in charge. While standing upon the platform in Bangor this last spring our attention was called to some fine land-locked salmon taken at Niatous lake by a party of fishermen. One of the fish weighed four pounds. If the tributary brooks of these waters can be kept clear of the dynamite cartridge and the spear and the net, these beautiful fish may be bred there to an almost unlimited extent.

DISTRIBUTION OF LAND-LOCKED SALMON, 1887.

Eggs taken at Sebago lake, 700,000. Planted as follows, viz: 5000 in Thompson's pond, Oxford. The balance put into tributaries of Sebago lake, viz: Burgess brook, Pleasant pond, Crooked river, Smith brook, Painter's pond, Raymond, Brandy pond, Jones brook and about 100,000 in streams near Bridgton, leading into Highland and Long lakes.

1888—Fifty thousand hatched at Orland from eggs taken at Grand lake and presented to Maine by the United States Fish Commission and distributed as follows, viz:

- 13,000, Patten's pond, Surrey.
 - 7,000, Chain ponds, Franklin county.
 - 3,000, to J. S. Blank pond, in Mount Vernon.
 - 13,000, Orford's pond, Rockland.
 - 1,000, Fits pond, Eddington.
 - 13,000, Alligator lake.
-
- 50,000

Two hundred and seventy-five thousand taken at Sebago, hatched at Edes Falls and put in Sebago waters.

BLACK BASS AND WHITE PERCH.

We still continue to receive applications for black bass to stock ponds. There are now so many ponds in various parts of the State that have been stocked by the commissioners, that our response is always that the people must learn a little more self dependence and wait upon themselves. While the black bass is highly esteemed by anglers for its game qualities, and brings many sportsmen to our State solely to enjoy the pleasure of taking it, it seems not to have earned with the people at large, the reputation of being so good a fish as the white perch. Every fish, as with almost every article of food, has its own special mode of treatment to make it more or less palatable. What would be correct treatment for a trout, would not bring out the fine flavor of a bass. Our method with the black bass is to skin it, then split it open on the back and remove the back bone, spread it open and salt it slightly, place it in the cellar on ice, if in hot weather, and broil it for breakfast the next morning. Try it. There is no better fish thus treated and you will call for more.

The white perch is a favorite with everybody. It abounds in many of our ponds, and were it not for the ever present pest of the poaching netter, might be more plenty and the means of bringing more summer residents to our country towns. Many complaints are made to us, but if the inhabitants of our villages have not the manhood to protect the greatest attraction and source of profit to the country towns from the poacher, surely the State cannot be expected to incur the expense of guardianship to every village lake.

MOOSE, DEER AND CARIBOU.

We have remarked upon the wonderful increase of our venison game animals. The moose have been more numerous than we can account for unless by immigration from the Prov-

inces. Some cause has undoubtedly affected this movement, and whether it be wolves, dogs, continued pursuit, or whatever be the cause such is the fact. More have been seen in parts of our State where scarce a deer has strayed for years. This has likewise been the case with deer. Wherever the law against dogs has been enforced, both deer, moose and caribou have made their appearance. The last winter very earnest applications were made to us to send wardens to the border counties of the State to protect them from the Indians from the Provinces who were over in March skin hunting moose in the deep snow and crust of spring. After consultation with the Governor and Council we sent relief, but the aggressors had gone. This evil will be increased this and coming years from the fact that a law has been enacted in New Brunswick, forbidding all killing of moose and deer for several years. One of our wardens last winter seized a whole car load of Caribou meat on its way to Boston market. We should be able to station two or three good wardens in our border counties to arrest all persons guilty of infractions of our game laws. Our fish and game brings so much revenue into our State in the form of money expended for our products of food as well as service and labor, that the State can well afford generously to aid in enforcing our game laws. Surely it is not too much to ask for a few thousands to be expended in producing millions.

Such is the fact, millions are the product of our summer travel all originating in the pursuit of our fish and game. The wives, sisters and daughters now come with the husband, fathers and brothers. We would suggest that the law taking a part of the penalty from the warden which was changed at the last session of the legislature, be restored at the earliest possible date of the session, that we may be able to meet all the skin hunters who will begin their cruel, dirty work after the first deep snows of January. If the law against hounding our venison animals could be enforced, scarce any care or protection would be required before the deep snows visited us.

In making a tour of observation among our sportsmen, it was almost universally requested that we would repeat our request to the legislature for the addition of September to the open time for deer, as also the law to make it penal to kill a cow or yearling moose at any time. We accede to this request, and most earnestly make the appeal for the latter law. Our reasons for the addition of September to the open months we have already given. We are earnest in belief of the reasons we have assigned. No better guard can the timber lands of Maine possess than the presence of good wardens, patrolling the forests on the trail of all hunters.

Give us a good square non-exportation law for venison. Give us the means of rigidly enforcing the hounding law, both for the sake of the game as well as our *farmers' sheep*. Let the close time to nets and weirs in tide water for salmon commence the first minute of July. Cause the opening of the weirs to be made to the bottom. There is some confusion in the minds of our trial justices as to the penalty for using nets above tide water in ponds and streams, as in Sections 51 and 52, Chapter 40, R. S. Let the law be so amended as to impose a fine of \$25 for setting or using a net in ponds or streams above tide water; be \$25 whether any fish are caught or not; and a further fine of \$10 for each salmon or land-locked salmon so caught; and \$1 for every other fish of any kind whatever so caught. The object is to protect the people at large from the netting poacher, who destroys the sport of every honest angler when he takes his holiday.

Money penalties in all cases do not operate equally as a punishment. Some of our most aggravating cases are by persons with whom the fine is hardly regarded as an obstacle in their path of waste and cruelty. There was a case occurring this last summer and in our close time for game, of a person from New York we were told, going through our forests on our water courses with canoes, boatmen, cook and guides with all the vulgar display of unaccustomed means, shooting at and wounding or killing everything that presented

regardless of all those laws of courtesy due to the laws of a State where he paid no tax and was but a visitor. Money penalty would be no punishment to one whose pleasures are cruelty. Could not our laws embrace discretionary power with the magistrate to sentence to imprisonment in such cases?

Respectfully submitted,

E. M. STILWELL,

HENRY O. STANLEY.

REPORT

OF THE

Commissioner of Sea and Shore Fisheries

OF THE

STATE OF MAINE.

1888.

REPORT.

His Excellency S. S. Marble, Governor of Maine:

The commissioner of sea and shore fisheries has the honor to present his second report for the years 1887 and 1888. This has been an unusual busy year in this department.

The fish and game laws passed the last session of the legislature have proved good laws for the protection of fish and game, but some amendments should be made to properly carry them out and I must renew my statement made in my last report that it has been no small task to look after this branch of the fisheries stretched along the coast some 5,000 miles from Kittery to Eastport and amongst the islands.

With the small appropriation at our command we have not done all that might have been done if we had had more means to carry out our plans. We have endeavored to observe economy in all we have done and have at all times remembered that the resources were limited. We have found it difficult to get good wardens to serve for the pay since all the fines go to the county and I would therefore recommend that this part of the old law be restored, so that part of the fines go to the State and part to the warden.

LOBSTERS.

It is very noticeable that the last law of protection has had much to do with the increase of lobsters the past season for we have reports from all parts of the State that they have not been so plenty, cheap and large for ten years. We have abundant proof of this fact. One of the principle fish

dealers in Lewiston made this remark this summer, "The law can do a good deal in this way. I have seen no such lobsters for several years as these. They are beauties and I lay it all to the effect of the lobster law that just now is beginning to be apparent in its effects. In five years more the lobster will be as plentiful as ever and every one a champion."

Johnson & Young one of the largest and oldest wholesale dealers in lobsters of Boston writes one of the members of the last committee on fisheries as follows :

"We congratulate you on the success you have had in making a good lobster bill. According to our judgment it is the most perfect that has yet been drawn; the measurement is definite and all its provisions clear. The difficulty heretofore has been the ambiguous language allowing loopholes for those so disposed to crawl out of, but this bill seems definite and easily understood. It shows the result of knowledge of the subject, and to our mind is the first real success that has attended the effort for a bill that would protect the lobster interest of your State. The bill in our opinion is *all right* and if properly enforced will benefit everyone engaged in the business in anyway, overcoming the opposition of one of the most powerful monopolies in your State."

It is stated by one of the largest dealers in lobsters in this State that "the average catch of lobsters on the Maine coast has been fifteen millions yearly for thirty years," and that we can use this amount yearly without any detriment to the increase of the lobsters.

I have requested the wardens to give me the number of lobsters caught this season and the number of men employed in the business but up to this time have only received partial returns, and will here give some of their statements for 1888 which will give some idea of the business.

Thirty men in Bremen caught 100,200 lobsters in 1555 traps.

Twenty-three men in Muscongus caught 34,400 lobsters in 1267 traps.

Eighty men in York, Kittery and Eliot fished about 1600 traps and 300 nets.

One hundred twenty-five men from Cumberland county line to York, caught about 350,000 in 6500 traps.

Thirty-two men in North Haven with 1900 traps caught about \$125 worth to each man.

Seventy-five men in Vinalhaven with 4000 traps caught about \$200 worth to each man.

The cost of each trap is about \$1.00; the cost of car is about \$25.00; the cost of each boat from \$125 to \$300.

From the best information that we can obtain we are actually using more than 25,000,000 annually. Now if this is correct it will be seen that we are annually using 10,000,000 more than the increase and if continued at this rate it will not take but a short time to make them extinct. Such being the fact we surely need to protect them.

No lobster increases in size except when they shed their shell. A lobster that is 9 inches long before shedding becomes 10½ inches long after shedding and the shell becomes hard. It is known to increase in 24 hours from 9 inches by shedding to 10½ inches. If the small 9 inch lobster is caught in the spring and sold for one cent each, were cast back into the sea and allowed to shed they will reach 10½ inches in a few months, and are worth almost any time 4 or 5 cents, and such lobsters were sold last winter from 12 to 15 cents each. Some such lobsters were sold last winter in Boston for 20 cents. The fishermen of Monhegan understand this and catch lobsters in the spring, fall and winter and let the young 9 inch lobster remain in the water and shed its shell and become hard in the fall. It then becomes what is called a smack lobster 10½ inches long or more and was sold last winter at wholesale for 12 cents. The Monhegan lobsters are amongst the best caught on the coast of Maine, and I know of no more prosperous community in this State than the fishermen of that island. Is there a farmer in this State that can raise any stock that will give him any such profit as this and that to without any expense of feeding? It seems a little strange that the fishermen cannot see it in this light, and let

the lobster remain until it sheds and become 10½ inches and is worth something.

Another reason why the young 9 inch lobster should not be used, but should be protected is this, we never find any eggs attached to a healthy 9 inch lobster, while the 10½ inch lobster has from 15,000 to 25,000 eggs attached. It will be seen by this, if this little lobster is destroyed before it comes to maturity how is the lobster going to be propagated on our coast? It would be just as good policy for the farmer to destroy his chickens before they are hens as the fishermen to destroy the 9 inch lobster. Some of the fishermen when they find little lobsters in their traps kill them and cast them back into the sea. Now it would be just as good policy for the farmer to kill his chickens because they annoy him when he feeds his hens, as it is for the fishermen to kill the little lobsters because they get into his trap and eat his bait.

One great difficulty we have to contend with is the New York market where there is no law in regard to the length of the lobsters. Short lobsters have been secretly shipped to New York in quite large numbers and in very bad condition before leaving this State. Some of them shipped in barrels were *actually offensive and not fit to eat*. Such lobsters are used at saloons and lunch rooms for free lunches.

I am of the opinion that the canners do not care to do much canning of lobsters in this State, if they did they could have canned 9 inch lobsters under the law up to July 1st. 1887, and this is as late in the season as they usually care to can. Out of some forty lobster and sardine factories in this State only fourteen or fifteen operated in 1887. This season not more than five or six factories canned any lobsters. Canning of lobsters in the Provinces can be carried on at much less expense than in this State and at much better profit. In the canning season lobsters can be bought for 70 to 75 cents per hundred pounds in the Provinces, and this is not more than 7 or 7½ mills each. Men's wages are \$1.00 per day and women and boys about 50 cents and there is no duty on the

tin that the cans are made from. While in this State the usual price for a 9 inch lobster is about \$1.25 per hundred pounds or about 1 cent each, men's wages from \$1.50 to \$2.00 per day, women and boys from 75 cents to \$1.00 per day. It will readily be seen by this that it is for the interest of the canners to operate in the Provinces than in this State.

Capt. Riley Davis of Cushing, a man that takes a lively interest in the lobsters, writes as follows :

CUSHING, January 13th, 1887.

"I have carefully summed up the catch of lobsters for 1886, and find the best estimate I can get is over 23,000,000 for the past year. Now all candid men engaged in the business will be obliged to admit there has been a smaller catch the past year than for twenty years, from the fact that not more than one-half has been canned the past year as heretofore, and our market to some extent stocked with lobsters from the Provinces. At the present time it takes about twice the number of traps to catch the same amount of lobsters that it did ten years ago.

The fact is our lobsters have diminished in size as well as in numbers. Smacks that used to carry 1500 to 2500 now carry from 4000 to 7000. There are about sixteen lobster factories on the coast of Maine. Twenty-seven smacks, from sixteen to sixty tons, and a large number of men engaged in shipping in barrels. Several large New York smacks come each spring, and with the exception of a few that run to Nova Scotia, the whole drain comes on the coast of Maine. That some wise law, rigidly enforced, should be passed by the present legislature, will only prevent the lobsters from being exterminated or rendered unprofitable in a very short time.

I have followed the lobster business for over twenty years, and for one am interested."

It will be seen by the following extract taken from the Annual Report of the Department of Fisheries, Dominion of Canada, 1887, that the lobster is likely to be destroyed if fishing for them is continued as it has been, and they now see the need of protecting them, and have passed a law that makes a close time of six months :

"Owing to the heavy inroads made upon the lobster and the ultimate danger of complete extinction by over-fishing, it was found

necessary to curtail this fishing so as to give lobsters some chance of breeding and keeping up the species. With this end in view a regulation was adopted fixing the close time on that part of the coast of the Atlantic extending from Cape Canso westward and following the coast line of the Bay of Fundy to the United States boundary line, between 1st July and 1st December. In the remaining waters of the Provinces of Nova Scotia and New Brunswick, and in the waters of Prince Edward Island and Quebec (including Magdalen Islands and Anticosti), the close season is fixed between the 15th July and 31st December. It is earnestly hoped that these stringent measures will have the effect of preserving a valuable industry and preventing the depletion which is now being experienced on the coasts of Maine and Massachusetts.

In order to put some check on the growing traffic of illegally caught fish over the Intercolonial Railway, an Order in Council was adopted enjoining upon every officer, agent or employe of Government railways to refuse for transport any fish, unless the shipper or his agent produced a certificate from a fishery officer showing that such fish were caught in a legal manner. This order is believed to have had a most beneficial effect."

Mr. W. H. Venning, Inspector of Fisheries, St. John, New Brunswick, says :

"The returns show a most alarming decrease. In fresh fish the falling off has been 1252 tons. In canned fish, 2,031,253 pounds, nearly half the catch of last year. This decrease is caused entirely by scarcity of fish caused by over-fishing in the past. Many factories closed before the season was over, because they could not get fish enough to keep them running. I have so often foretold this result that I can now only express my regret that the end of this great industry has come so much sooner than even I expected."

J. Hunter Duvars, Inspector of Fisheries, Prince Edward Island, says :

"Keeping to the fishing features of my own Province only, I would say that, setting apart all local side issues, lobster canning along the whole 400 miles of island coast is completely exhausted. About this there can be no cavil. It is an uncontrovertible and patent fact. Many of the factories had to shut down in July for lack of fish, and not a few of the cannery have drifted into bank-

ruptcy. The size of the lobsters has become deplorably small, it taking $7\frac{1}{2}$, 8, and, in one former good location, 9 to fill a one-pound can. I am credibly informed that, owing to the poor quality of the goods, most of the London, Great Britain, greengrocers have agreed among themselves not to deal in Prince Edward Island canned lobsters.

| | |
|-------------------------------------|-----------------|
| In 1885 there were canned | 4,389,189 cans. |
| 1886 " " | 3,616,780 " |
| 1887 " " | 2,009,107 " |

thus rapidly sinking from the mere absence of fish. According to all indications the lobsters now taken are the young or fry, not old enough to continue their species.

Having had the honor to be a member of the Government Commission to enquire into and report upon the shell fisheries of the Atlantic Maritime Provinces of the Dominion, I am precluded from surmising what course it may be deemed proper to pursue in regard to the future of these fisheries, and it is unnecessary here to define the importance of that commission, tending, as it may be, towards a cessation of lobster fishing for a sufficient length of time to bring back the supply of fish to its former abundance. The places of meeting of the commission in Prince Edward Island were advertised in public prints, the sittings were open to all, and anyone interested in the matter was invited to communicate freely with the commissioners. Of the considerable number of representative men who tendered evidence it is noticeable that a large majority confessed they could see no other way to preserve the fishery from total extinction than by definitely closing down all lobster factories for such a term of years as would enable the fish to recuperate in size and numbers.

The public mind, as expressed in conversation and through the press, seemed generally to favor a total temporary closure. At the same time it was urged that to close down suddenly for a term of years, without giving at least one year's notice, would be productive of much injury, both to the fishermen who depended on a continuance of their monthly wages and to the packers who had capital invested in the industry. It was therefore felt that it would be but an act of justice to grant one more year's fishing to work off stock before the introduction of more stringent measures, should such be deemed necessary.

Since then, the Order in Council, of date 17th December instant, has granted that privilege.

An experimental short fishing season will go a certain distance towards solving the question whether the fishery can be recuperated without total closure. The objection of some of the smaller packers to any closure is that during the lapse of packing the factories, traps and boats would rot, and thereby "inherent and vested rights" would be infringed. I cannot recognize this. Nobody possesses an inherent right to wipe out a fishery from over-greed, and vested rights cannot exist except as rights officially recognized, and lobster fishing localities are not officially recognized as fisheries (*pecheries*). In like manner there can be no claim for "compensation." I am happy to say that not one packer put forth any claim before the commissioners, claiming compensation for having ruined the fishery by over-fishing. It is an impossibility to frame any general regulation that will press equally on all localities. I might incidentally mention that packers on the south side of this province claim that from the different dates at which lobsters strike the north and south shores of the island, they are at a disadvantage as compared with packers on the north. They will probably bring this matter to your notice. Until the main problem of the lobster fishery is experimentally worked out, the side issues of leasing of areas and other questions must necessarily be left in abeyance. Certain persons state that the closing of the lobster factories will infer a large deprivation of interests on shore. I think not. It is quite possible to over-estimate the injury that would be done on shore. The cutting and supply of fuel for lobster furnaces is no great affair. To keep a lobster factory running with fuel is not much more than would be required to supply a schoolhouse log fire. When a factory is once supplied the only shore work is to repair damaged traps or to replace the few that may be missing. Were deep-sea products to be largely increased, as they ought to be, truckmen, railway and sea freight would not suffer. Saw-mills might cut fewer shooks for packing cases, but coopers would make it up by the greater number of barrels. In fact there is no reason why the collateral branches of shore industry should suffer from lobster closing.

A short season in 1888 under the regulation of an Order in Council might give some indication whether a continuance of similar short fishing seasons would afford sufficient protection to the fishery. As, however, this is not likely to be the case, and as this report when

laid before Parliament will be read by island packers, I would venture to suggest that it might be wise to prepare for yet more restrictive measures."

A. C. Bertram, fish officer of Cape Briton Island, says :

"This branch of fishing shows a large increase over the catch of any previous year, but a depression in market value, equal to 20 per cent as compared with last year. There is a general impression that this fishery is being overdone to an extent that threatens its extinction at no distant date, and the depression in the present year's prices points in that direction. It may be said, however, that the greater quantity taken points to an opposite conclusion. But it should not be forgotten that lobster canning factories are multiplying year by year, as well as the number of boats and men engaged in the catching. It has now become almost general for the shore fishermen to abandon all other fisheries, though ultimately more profitable, for the lobster catch. Ultimately the standard fisheries of cod, herring, mackerel, &c., are more profitable and give employment to a much larger number of persons, but the temptation to forsake these for the factories consists in the fact that factories pay *cash* on delivery of lobsters as they are brought in, whereas in the case of other fisheries a longer time must be wasted in waiting for returns, and there is, moreover, the depressing practice of local purchasers of, and traders in, fish refusing payment except in goods.

That the waters in some sections of the Maritime Provinces are being depleted by excessive fishing is beyond doubt, and to guard against the extinction of this valuable crustacea it has been suggested that lobster fishing should be entirely prohibited for two or three years, in order to give them an opportunity to recuperate. While this plan would be effectual for the time and even absolutely necessary if no other restoratives could be found, it is attended with difficulties. 1st—It might be felt a hardship by such as have invested in the business by the erection of factories, &c., to find themselves suddenly shut down upon, and a portion of the fishermen, too, might be disposed to complain. 2d—When the time arrives for the removal of the restriction, the business of packing would be revived, with probably greater energy than ever before, and in a short time the entire shutting down process would have to be again resorted to. These alternate suspensions would impress a

character of uncertainty on the business in reference to the interests of both fishermen and packers. Whilst it is evident that some restriction of the business is necessary in the public interest, hardship to any class of persons would possibly be avoided by adopting the following:

1st—A standard regulation of minimum size, below which it would be unlawful to kill lobsters, say 11 inches, and a strict supervision over all boats arriving at the factories to see that this regulation is faithfully obeyed; no sale to take place until the lot has been inspected.

2nd—No factory to be permitted to go in operation except under a license from the Department, and no license to issue to factories situated within a given coast mileage from any other factory already licensed; preference to be governed by priority of application. Some such method of restriction would preserve the lobster fishery in perpetuity, and avoid giving coloring to complaints on the ground of personal interest to any parties. The shortening of the open season would enable the Department to fix upon such dates for opening and closing in each year as would be adapted to all localities, irrespective of differences in early or late spring seasons.”

Hon. George E. Foster, Minister of Marine and Fisheries, says:

“The catch of lobsters amounts to 857,098 lbs., as compared with the season of 1886, when the yield was 949,482 lbs., or a falling off this year of 92,384 lbs. The following tables show the annual catch since 1887 for the counties of Bonaventure and Gaspé with mainland and Magdalen Islands respectively.

COUNTY OF BONAVENTURE.

| | | | |
|-----------|-------------|-----------|-------------|
| 1877..... | 98,565 lbs. | 1883..... | 43,710 lbs. |
| 1878..... | 149,112 “ | 1884..... | 157,644 “ |
| 1879..... | 97,404 “ | 1885..... | 178,616 “ |
| 1880..... | 210,553 “ | 1886..... | 143,312 “ |
| 1881..... | 131,696 “ | 1887..... | 78,111 “ |
| 1882..... | 99,000 “ | | |

COUNTY OF GASPE (Mainland).

| | | | |
|-----------|-------------|-----------|-------------|
| 1877..... | 73,000 lbs. | 1883..... | 92,000 lbs. |
| 1878..... | 240,960 “ | 1884..... | 110,655 “ |
| 1879..... | 315,184 “ | 1885..... | 103,593 “ |
| 1880..... | 238,046 “ | 1886..... | 257,810 “ |
| 1881..... | 255,656 “ | 1887..... | 311,023 “ |
| 1882..... | 147,430 “ | | |

MAGDALEN ISLANDS.

| | | | |
|-----------|--------------|-----------|--------------|
| 1877..... | 277,104 lbs. | 1883..... | 470,444 lbs. |
| 1878..... | 390,048 " | 1884..... | 519,984 " |
| 1879..... | 376,641 " | 1885..... | 590,048 " |
| 1880..... | 227,952 " | 1886..... | 510,360 " |
| 1881..... | 473,564 " | 1887..... | 458,964 " |
| 1882..... | 476,528 " | | |

In 1877 there were four canneries in operation at the Magdalen Islands ; this season twenty-one. On the mainland of Gaspe there were in 1877 four canneries ; this season eighteen at work. In the county of Bonaventure three canneries did the work in 1877 ; this year we had six. These statements show that while in 1877, when the industry was yet in its infancy, 448,669 lbs., of lobsters were put up by eleven canners, forty-five canneries with a larger number of traps and better appliances only succeeded in 1887 in taking 857,098 lbs., and the article of poor quality, as owing to the small size of lobsters now generally taken, much of the meat obtained is inferior, being soft and watery. It is absolutely necessary that steps be taken to curtail this over-fishing and this can only be done either by closing down altogether for a term of years or by shortening the fishing season and increasing the gauge which should be no less than ten or ten and one-half inches. At Magadalen Islands and elsewhere, lagoon fishing should be prohibited, as there is no question that the shoal warm waters of these lagoons are the natural breeding ground of the lobster."

Johnson & Young of Boston, have carried on a very successful lobster business at Vinalhaven the past season, (1887). They have a large pound, so-called, which is a pond of water several acres in extent, connected with the sea, the outlet being closed to the passage of lobsters by a wire netting. Last fall they purchased 900,000 ten and one-half inch lobsters of the fishermen, at four cents each, and placed in the pound. They must have food, and to satisfy their hunger were fed on fish cleanings, consisting of heads, fins and inwards of codfish, hake, &c., which were purchased at \$1.00 per barrel. Seven or eight hundred barrels of this food was fed to them in all. After the winter had set in the lobsters were raked from the bottom of the pound as wanted, many being found buried in the mud at a depth of from two

to two and one-half feet, and shipped to Boston by rail from Rockland at the rate of from ten to twenty-five barrels per day. To reach the lobster it was necessary to cut through the ice some two feet thick or more. It was said that some of these lobsters were sold in Boston for twenty cents per pound, and some of them would weigh two or three pounds each. Lobsters so fed are said to be of very superior quality.

The *Vinalhaven Echo* says :

“Johnson & Young, who have a large lobster pound, have closed buying lobsters this fall, (1888). Their agent, Elisha Oakes, has bought and put into the pound 150,000, and all accomplished in twenty-two days. They paid three and one-half cents for them.”

The lobster business at Cape Porpoise has grown up within thirty years from a small beginning. That year there were two fishermen, who had twenty pots between them, and fished a while in the summer. This winter, in addition to the boats, there are thirty-three men in the business, with 2160 traps, requiring fifty-four bushels of fish and clams to bait for each haul. The traps cost one dollar each when ready to set, showing a considerable investment of capital.

BIDDEFORD, March 14, 1888.

Cape Porpoise lobster catchers are reaping a harvest at present, as that crustacean is very scarce everywhere but at that place, and sells for \$25 per barrel in the New York market. One lobster catcher has averaged a barrel and a half at each haul, and made two hauls a week for the past month.

We often find barrels and boxes containing short lobsters without the shipper's name marked on them, but in looking on the under side of the card we find them marked x or with a sloop pictured out in pencil. The firm in New York having a key of these marks can tell who sent them as well as if they had the name of the shipper in full.

To prevent shipping short lobsters and game in this manner I would recommend that all barrels and packages

containing fish and game should require the shippers name marked on such packages in full. If the shipper is making an honest shipment he cannot object to this manner of marking his shipments. By doing this they would avoid their packages from being examined.

MACKEREL.

This fish has been very scarce on our coast this season, and therefore the law has not been violated as much as usual. The catch of mackerel all along the shore has been very limited, and the seiners have seemed determined to catch every mackerel as soon as it might be discovered to be in the sea.

The total catch up to as late date as I have is only 25,511 barrels for 1888, against 56,919 barrels in 1887, 58,557 in 1886, 258,900 barrels in 1885, and 319,698 barrels in 1884. It will be seen that this season's catch so far is not half as large as the two preceding years, and a mere trifle compared with catches of 1884 and 1885. In fact the present catch is the smallest known for fifty years, and many vessels will suffer great loss. What the cause of this falling off no one seems to know. To supply the demand many mackerel have been shipped to the States from England, a thing never known before.

SMELTS.

This little fish is caught in weirs and in large quantities in this State, and shipped to Boston, New York and Philadelphia, at a profit in the fall and winter.

“Section 5th, laws 1887, provides that no smelts caught in such weirs after the first day of April, shall be sold or offered for sale in this State, nor shall smelts caught in any manner between the first day of April and the first day of October following.”

It will be seen by the above that no smelts can be sold in this State after April 1st, caught in any manner except by hook and line.

Many complaints have been made to me by people that could not get smelts to eat unless they were made liable to a fine, as the ice seldom leaves our bays and brooks in season for smelts to come up before April 25th, and it would seem that the time should be extended for taking smelts in the spring by dip-net to May 1st. It was formerly May 20th, but was changed to suit the weir men, and certainly it would look hard that the spring fishermen should be entirely shut off that the fall fishermen should gain.

Large quantities of smelts were caught in dip-nets last spring and left to lay on the ground to rot, when they might have been sold for \$2.00 or more per bushel if allowed to be sold. Therefore I would recommend that dip-nets may be used up to May 1st, and that smelts caught in this State may be sold up to that time.

MENHADEN OR PORGY.

The migrations of ocean fish are among the mysteries against which scientists and practical men have beaten their heads in vain. The sudden disappearance of menhaden or porgy from northern New England coast ten years ago, and the gradual abandonment of these waters by the mackerel which is now in progress cannot be accounted for by any diminution in their numbers caused by the fishermen, by any known cause or by any supposed change in the temperature of the ocean and the re-appearance of the menhaden in our waters this summer is equally unaccountable. From Boothbay to Cape Cod the waters have been full of them, and Boothbay's once great porgy oil business has been revived and has done a good business this season.

I quote the following: "Linneken porgy factory, Boothbay, received 1500 barrels of porgies one day last week. They employ three steamers, and fish are reported plentiful. Last week they manufactured 600 barrels of oil."

After these fish have been away so long it seems hard that they must be destroyed again just as they make their appear-

ance in our waters. The small fishermen along the coast would like them for bait but the oil factories are using them in large numbers and it is feared that they will drive them away again. One or two oil factories have started up this season and it is understood that preparations are being made to go largely into the business next season. There has been quite a number of steamers and smacks that have violated the laws by seining in small bays and harbors within the three-mile limit and several cases of this kind are now pending in court.

It has been very difficult to catch these steamers as many of them are from other States, that steam into our rivers and small bays, cast their seines for a short time, then steam out and away before a warden can board them and learn their name or where they belong.

Unusual vigilance has been necessary on the part of the commissioners and the wardens to prevent their being scooped up as soon as they appeared.

Porgies are now canned as an article of food to a very great extent and in many instances are canned and labelled as sea trout or ocean mackerel.

This fish when fresh from the water is said to be delicious eating. This is especially true if they are served under the name of sea trout.

One captain writes that "no porgies have been caught on our coast for ten years and I am not sure but it is twelve, and if the seiners are allowed to fish within the three-mile limit it will be ten years more before they will come again."

Some minor changes are needed in the law for the protection of mackerel, herring, shad, and porgies, and other migratory fish, to make its provisions certain. Nearly every fisherman now has a construction of his own to put upon it, and that construction usually gives him a right to fish *when, where, and as he pleases*. The general provision may be well enough; but to be practicable in its operations, some uncertainties should be removed, and some of its provisions more definite.

ALEWIVES.

This fish is a very important one in this State as an article of food, and should be better protected.

Large numbers of this fish are caught in Damariscotta, Medomac, and George's rivers, and pays quite a portion of the town tax.

The catch in Waldoboro' in 1887, was from 75,000 to 80,000, and in 1888, 135,000.

In Warren in 1887, the catch was 217,460, and were sold for 26 cents per hundred, amounting to \$489.04

| | | |
|--|----------|-----------------|
| Eleven men employed and other expense, | | |
| amounting to - - - - - | | 244.50 |
| | Net, - - | <u>\$245.54</u> |

| | | |
|--|----------|-----------------|
| In 1888, there were caught 386,100, and sold at 20 | | |
| cents per hundred, - - - - - | | \$772.20 |
| Expense about - - - - - | | 250.00 |
| | Net, - - | <u>\$522.20</u> |

The largest catch in one day was 58,000.

| | |
|--|----------|
| In 1884 these fish were sold for - - - | \$906.08 |
| Expense, - - - - - | 226.45 |

| | |
|------------------------------|-----------------|
| | <u>\$679.63</u> |
| Materials on hand, - - - - - | 25.85 |
| | <u>\$705.48</u> |

It will be seen by this that the alewives are gradually falling off each year.

Number of weirs on the George's river is 15, besides nets.

In Newcastle and Damariscotta there were caught about 600,000 at the mills, and 240,000 in river; 840,000 in all for 1887, and this was considered a small catch.

There were twenty-four weirs on the river in 1887. In 1888 there were taken on the river in twelve weirs, and at the mills (Damariscotta), about 1,215,000, or about 2430 barrels, as it takes about 500 of alewives to fill a barrel.

It will be noticed by this that there has been a large increase at the stream, and large falling off in the river.

This in a measure, I think, was caused by the law being better enforced in 1888 than in 1887.

Something should be done to protect the wholesale destruction of the young alewives, as they return to the ocean past the mills, where they are caught in the water wheels and ground into pieces, and in this manner thousands are destroyed.

SEA SALMON.

During the season for salmon fishing in 1887 and 1888 quite a number have been caught in Bangor with hook and line and bait of flies.

This manner of fishing has become very popular and has brought many sportsmen from about all over the United States and they leave a large amount of money in Maine for this pleasure, much more than if caught in weirs or nets. I would therefore recommend that the salmon be better protected in future.

SARDINE FISHERY OF MAINE.

The herring-sardine business is an enterprise of considerable magnitude in Maine. There are forty factories in the State. Their product last year was 450,000 cases. This year it will reach 500,000 cases. Each case contains 100 boxes and each box ten or twelve little fishes.

There was money in the business for a time. But greed made the packers careless, and the fish were put on the market in bad condition. That hurt the trade and it began to decline. To-day there is little money in it on that account. But a wiser method is coming. One of the best of the Eastport packers has dropped all French labelling, brands his own fish in his own name as herring, and guarantees them to be of a specific quality, and each box to contain no less than ten nor more than twelve fish. These fish he is selling at better figures, and can dispose of all he can make. Honesty is the best policy, even in the herring business.

The sardines of Maine are sent chiefly to New York. When properly cured they are a very excellent substitute for the more expensive sardines. If the Canadian government chose to be severe, it could destroy the Maine sardine business. That knowingly it permits it to flourish in Eastport is evidence of a neighborly spirit for which we should not hesitate to give due credit.—*Board of Trade Journal.*

In conclusion, I would say that the expense of enforcing the law for the protection of fish is very considerable, in order to afford the protection that the law is designed to give. Nearly all violators of the law have thus far shown a determined spirit in resisting all legal proceedings, to enforce penalties, and much litigation may be necessary to establish the fact that the law must be respected by all alike. The appropriations so far have not been adequate for a successful enforcement of the law, and I would recommend that they be made more generous in the future.

Respectfully submitted.

B. W. COUNCE.

COMMISSIONERS OF FISHERIES.

The following list of the Commissioners of Fisheries of the United States, the several States and Territories, and of the Canadian provinces, has been compiled from information recently obtained by the secretary from first hands, and is believed to be full and accurate :

Dominion of Canada—John Tilton, deputy minister of fisheries, Ottawa, Ont.

Province of New Brunswick—W. H. Venning, inspector of fisheries, St. John.

Province of Nova Scotia—W. H. Rogers, inspector, Amherst ; A. C. Bertram, assistant inspector, Amherst.

Province of Prince Edward Island—J. H. Duvar, inspector, Alberton.

Province of Quebec—W. Wakeham, inspector, Lower St. Lawrence and Gulf division, Gaspé basin.

Province of British Columbia—Thomas Mowat, inspector, New Westminster.

Province of Manitoba and North-west Territories—Alex. McQueen, inspector, Winnipeg, Man.

The United States—Professor G. Brown Goode, Washington, D. C. ; assistant commissioner, J. H. Kidder. Assistants in charge : fishculture, Marshall McDonald ; scientific inquiry, Richard Rathbun ; statistical inquiry, R. Edward Earle.

Alabama—Col. D. R. Huntley, Madison ; Hon. Charles S. G. Doster, Prattville.

Arkansas—H. H. Rottaken, president ; J. W. Calloway and W. B. Worthen, all of Little Rock.

Arizona—J. J. Gosper, Prescott ; Richard Rule, Tombstone ; J. H. Taggart, business manager, Yuma.

California—T. J. Sherwood, Marysville ; Joseph D. Redding, San Francisco ; J. D. Harvey, Los Angeles.

Colorado—G. F. Whitehead, Denver; E. V. Bogart, superintendent.

Connecticut—Dr. William M. Hudson, Hartford; Robert G. Pike, Middletown; James A. Bill, Lyme.

Dakota—No commission.

Delaware—Elwood R. Norny, Odessa; Dr. E. G. Shortlidge, assistant and superintendent of hatcheries, Wilmington.

Florida—No commission.

Georgia—Hon. J. T. Henderson, commissioner of agriculture, Atlanta; Dr. H. H. Cary, superintendent of fisheries, LaGrange.

Illinois—N. K. Fairbank, president, Chicago; S. P. Bartlett, secretary, Quincy; Major George Brenning, Centralia.

Indiana—Enos B. Reed, Indianapolis.

Iowa—E. D. Carlton, Spirit Lake; Ole Bjorensen, superintendent of Hatchery, Spirit Lake.

Kansas—S. Fee, Wamego.

Kentucky—William Griffith, president, Louisville; P. H. Darby, Princeton; John B. Walker, Madisonville; Hon. J. C. Walton, Munfordville; Hon. John A. Steele, Versailles; W. C. Price, Dansville; Dr. W. Van Antwerp, Mt. Sterling; Hon. J. M. Chambers, Independence; A. H. Goble, Catlettsburg; J. H. Mallory, Bowling Green.

The commission has been without funds for about four years and consequently no work has been done.

Maine—E. M. Stilwell, Bangor; Henry O. Stanley, Dixfield, commissioners of fish and game. B. W. Counce, Thomaston, commissioner of sea and shore fisheries.

Maryland—G. W. Delawder, Oakland; Dr. E. W. Humphreys, Salisbury.

Massachusetts—Frederick W. Putnam, Cambridge; Edward A. Brackett, Winchester; Edward H. Lathrop, Springfield.

Michigan—John A. Bissell, Detroit, president; Dr. J. C. Parker, Grand Rapids, Herschel Whitaker, Detroit; W. D. Marks, superintendent, Paris; A. J. Kellogg, secretary, Detroit; William A. Butler, Jr., treasurer, Detroit.

Minnesota—Robert Ormsby Sweeny, St. Paul, president; Niles Carpenter, Rushford; William Bird, Fairmount; S. S. Watkins, superintendent.

Mississippi—No commission.

Missouri—H. M. Garlich, chairman, St. Joseph; J. L. Smith, Jefferson City; H. C. West, St. Louis; A. P. Campbell, secretary, St. Joseph; superintendents: Philip Kopplin, Jr., St. Louis; Elias Cottrill, St. Joseph.

Montana—No commission.

Nebraska—W. L. May, Fremont; R. R. Livingston, Plattsmouth; B. E. B. Kennedy, Omaha; M. E. O'Brien, South Bend, superintendent.

Nevada—W. M. Cary, Carson City.

New Mexico—Has no commission, but Governor Ross intends to have one established. Hon. E. S. Stover, Albuquerque, has given the subject much attention, and will impart information.

New Hampshire—George W. Riddle, Manchester, chairman; E. B. Hodge, Plymouth; John H. Kimball, Marlboro'; E. B. Hodge, superintendent.

New Jersey—Richard S. Jenkins, Camden; William Wright, Newark; F. M. Ward, Newton.

New York—Hon. R. B. Roosevelt, president, 120 Broadway, New York; General R. U. Sherman, New Hartford, Oneida county; E. G. Blackford, treasurer, Bedford bank, Brooklyn; William H. Bowman, Rochester, Monroe county; A. S. Joline, Tottenville, Richmond county; E. G. Blackford, shell-fish commissioner, Fulton market, New York; clerk of the board, Edward P. Doyle, Potter building, New York room 110; superintendents: Seth Green, Rochester; Fred Mather, Cold Spring Harbor; Monroe A. Green, Mumford; James A. Marks, Bloomingdale.

North Carolina—W. J. Griffin, Elizabeth City, chairman; R. B. Watson, Englehard; W. T. Caho, Bayborough.

Ohio—C. V. Osborn, Dayton, president; J. H. Laws, Cincinnati; John Hofer, Bellaire; A. C. Williams, Chagrin Falls, secretary; E. D. Poller, Toledo.

Oregon—F. C. Reed, Clackamas, president; R. C. Campbell, Ranier; E. P. Thompson, Astoria.

Pennsylvania—Henry C. Ford, president, 524 Walnut street, Philadelphia; James V. Long, 205 Ridge avenue, Allegheny City; H. C. Demuth, secretary, Lancaster; S. B. Stilwell, Scranton; A. S. Dickson, Meadville; W. L. Powell, Harrisburg.

Rhode Island—John H. Barden, president, Rockland; Henry T. Root, treasurer, Providence; Wm. P. Morton, secretary, Johnston—commissioners inland fisheries. James C. Collins, North Provi-

dence; N. P. S. Thomas, North Kingstown; James M. Wright, Foster—shell-fish commissioners.

South Carolina—Hon. A. P. Butler, Columbia, commissioner of agriculture, *ex-officio*, fish commissioner.

Tennessee—W. W. McDowell, Memphis; H. H. Sneed, Chattanooga; Edward D. Hicks, Nashville.

Texas—Commission abolished.

Utah—No commission. A. Milton Musser, acting fish commissioner, Salt Lake City.

Vermont—Frank Atherton, Waterbury; Herbert Brainerd, St. Albans.

Virginia—Col. Marshall McDonald, Washington, D. C.

West Virginia—C. S. White, president, Romney; F. J. Baxter, treasurer, Sutton; James H. Miller, secretary, Hinton.

Wisconsin—The Governor (*ex-officio*); Philo Dunning, president, Madison; C. L. Valentine, secretary and treasurer, Janesville; Mark Douglass, Melrose; A. V. H. Carpenter, Milwaukee; Calvert Spensley, Mineral Point; E. S. Miner, Sturgeon Bay; James Nevin, superintendent, Madison.

Wyoming Territory—Otto Gramm, Laramie. (Dr. W. N. Hunt, Cheyenne, is commissioner for Laramie county and B. F. Northington, Rawlins, is commissioner for Carbon county.)