# MAINE STATE LEGISLATURE

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## Public Documents of Maine:

BEING THE

# ANNUAL REPORTS

OF THE VARIOUS

# Departments Plans Institutions

FOR THE YEAR

1899.

VOLUME II.

AUGUSTA KENNEBEC JOURNAL PRINT 1900

## REPORT

OF THE

## COMMISSIONERS OF

# INLAND FISHERIES AND GAME

FOR THE

## STATE OF MAINE

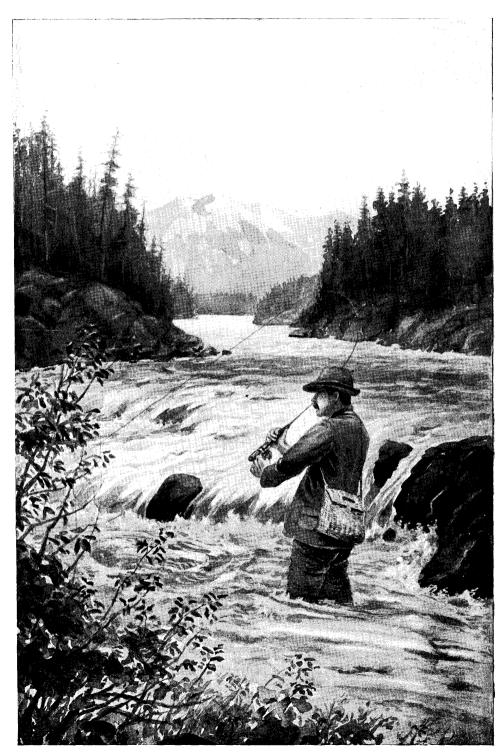
FOR THE YEAR

1898.

AUGUSTA KENNEBEC JOURNAL PRINT 1899.



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"I care not, I, to fish in seas,
Fresh rivers best my mind doth please."

—Isaak Walton.

#### STATE OF MAINE.

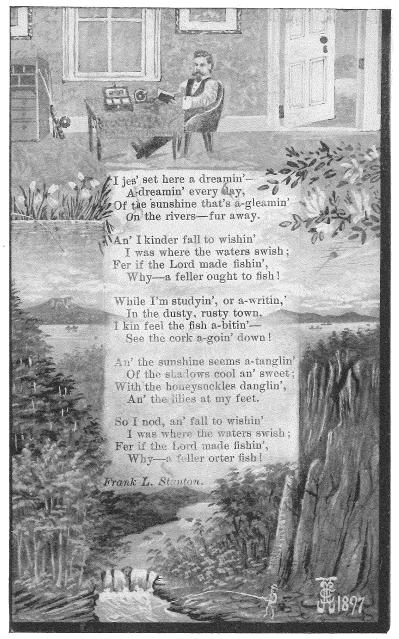
To His Excellency, Llewellyn Powers, Governor of Maine:

The Commissioners of Inland Fisheries and Game have the honor to present to your Excellency their report for the year ending December 31, A. D. 1898, as required by section 2, of chapter 104, of the laws of 1895.

LEROY T. CARLETON, HENRY O. STANLEY, CHAS. E. OAK,

Commissioners of Inland Fisheries and Game.





"FER IF THE LORD MADE FISHIN'."

### STATE OF MAINE.

To His Excellency, the Governor, and the Honorable Council:

The Commissioners of Inland Fisheries and Game beg leave to submit their annual report for the year 1898.

Through the kindly courtesy of Col. E. C. Stevens, Superintendent of Public Buildings, and the committee on the same of the honorable council, we have been provided with a very pleasant office, nicely and conveniently furnished, in the basement of the State House. The office work of the department has increased to such an extent that this became very necessary.

We have commenced to make a collection of all the birds, animals and inland fish native to Maine, for a State museum. This will require additional room which can readily and economically be obtained adjoining our present quarters.

We have held thirty hearings upon the petitions of citizens of the State to order fishways in dams and to regulate the times in which and the circumstances under which inland fish may be taken, in certain streams, ponds and lakes.

We have operated to their full capacity the four fish hatcheries and feeding stations in the State, as follows:

At Edes Falls, Cumberland county; at Monmouth, Kennebec county; at Caribou, Aroostook county; at East Auburn, Androscoggin county, besides operating to a considerable extent the one at Cold Stream, at Enfield, Penobscot county, and we have supplied fish eggs to several private hatcheries in the State to a considerable extent.

There was taken of land-locked salmon eggs about 700,000 at the weir at Edes Falls Hatchery, in the fall of 1897; the loss experienced up to February, 1898, from unfertilized eggs was 127,000, 275,000 were shipped to other hatcheries in the State,

leaving 282,000 at the date of shipment, February, 1898, and the total loss on these to time of planting in the fall was 21,000 so that 261,000 fed fish, or fingerlings, land-locked salmon, have been planted in the tributaries of Sebago lake as the product of the Edes Falls Hatchery the last year.

#### LAKE AUBURN HATCHERY-EAST AUBURN.

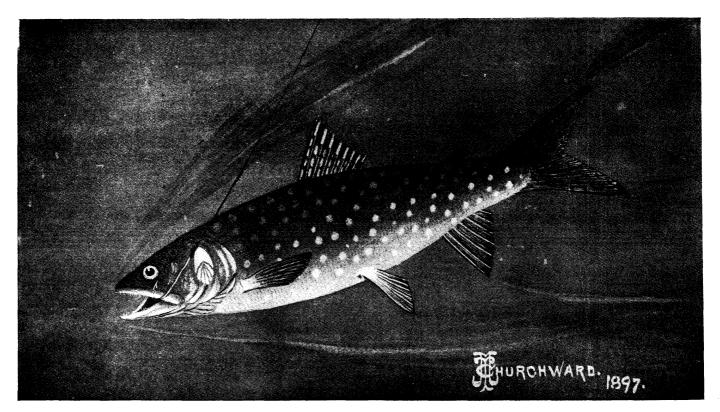
Number of salmon eggs taken in the fall of 1897 was 400,000. The loss from unfertilized eggs, up to February 1, 1898, 39,000.

There were shipped during February to the private hatchery at Parmachenee 30,000; to Robt. Phillips, Superintendent of Megantic Club Hatchery, 35,000; to the Fish and Game Association, at Rangeley, 35,000; Samuel Furbush, Hartland, 35,000.

These eggs were hatched at these hatcheries and planted in the waters of the State in the localities where these hatcheries operated by private enterprise are located.

There was also shipped to Cobbosseecontee Hatchery 25,000 leaving a balance on hand, February 1st, of 201,000 eggs, and the total loss from all causes from February 1st to the time of planting them in the fall was about 76,000, so that we raised 125,000 land-locked salmon at this hatchery, which were all planted in the public waters of the State.

There was also taken at this hatchery in the fall of 1897, 1,000,000 speckled trout eggs and placed in the hatching troughs. The loss on these up to February 1st, from unfertilized eggs was 200,000. Fifty thousand were sent to the Megantic Preserve Hatchery, and 100,000 to the Sebago Lake Hatchery, and 100,000 to S. L. Clark at the Monson Private Hatchery, 200,000 to the Caribou Hatchery, 50,000 to the Parmachenee Private Hatchery, 50,000 to the Rangeley Private Hatchery, and 30,000 to Sam'l Furbush at the private hatchery, at Hartland, leaving a balance of trout eggs on hand February 1st, 219,000. These were raised with a recorded loss of 30,000, and were planted in the public waters of the State. We also raised here 20,000 brown trout, 2,500 golden trout, and 1,000 rainbow trout. We also have in the ponds connected with this hatchery 500 of one and two-year-old trout.



NAMACUSH, OR TOGUE. "Thirty pounds if an ounce!"



#### COLD STREAM HATCHERY—ENFIELD.

We shipped from this hatchery and planted in Lake Pennesseewassee in Norway, in June, 30,000 togue fry, also 6,000 land-locked salmon, in lakes in township 32, Hancock county, and 6,000 in First, Second and Third ponds, in Bluehill; 6,000 in Springfield and Pistol lakes, Penobscot county; 6,000 in Lake Nicatous, and 2,000 in Birch Stream pond, Penobscot county, during the month of July. The spawn from which these fish were hatched were taken at Cold Stream by the U. S. Fish Commission, and very generously given to the State.

#### MONMOUTH HATCHERY.

Number of salmon eggs received from Edes Falls and Auburn Hatcheries, 200,000.

Of this number 132,333 hatched and there was a loss up to June 1st of 43,833, and from June 1st to date of planting 11,995.

Quinnat Salmon: Number of eggs received from United States, 35,000. Number hatched and planted, 30,000.

Brook Trout: Number of eggs taken, 370,000; number that hatched, 150,000; number planted, 100,000.

Most of the loss at this hatchery resulted, we are convinced, from an insufficient quantity of water being used by the super-intendent, as it nearly all occurred previous to the termination of his superintendency in May.

Since Mr. Wallace E. Berry has had charge the loss has been comparatively light.

#### CARIBOU HATCHERY.

Number of land-locked salmon eggs received from Sebago Lake Hatchery was 144,000. Loss to date of planting, of spawn and fish, 13,000.

#### TROUT.

Number of trout eggs received from Lake Auburn Hatchery was 200,000. A total loss of spawn and fry to date of planting was 80,000. There was planted in the spring 68,000 fry and the balance in the fall.

#### QUINNAT SALMON.

We received from the United States Fish Commission for this hatchery 15,000 eggs. These were hatched and distributed, in the spring 11,240, and the balance in the fall.

#### PENOBSCOT SALMON.

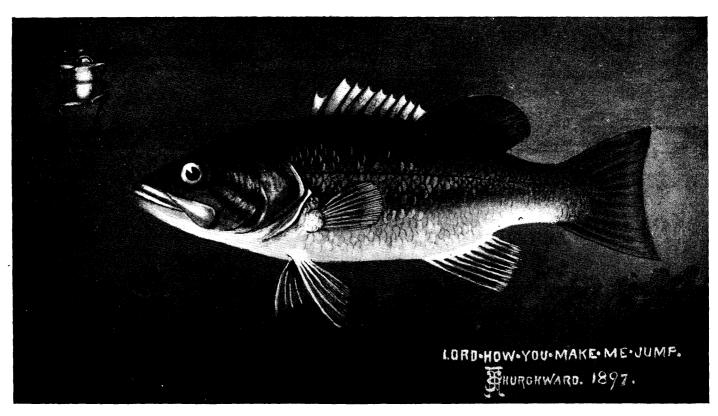
We also received from the United States Fish Commission at East Orland 20,000 Penobscot river salmon eggs. These were hatched with a loss of 511, and 19,489 were distributed as fry in the spring.

The various kinds of fish raised at these hatcheries were all planted in the public waters of the State. (See appendix.)

The call for trout and land-locked salmon to plant in the lakes and ponds continues to be largely in excess of the numbers that we have been able to supply, and we have been obliged in consequence to spread the planting over too large a territory to secure immediate results of a satisfactory nature, but in no pond or lake has land-locked salmon failed to appear in more or less numbers where the fed fish have been planted.

There is a constantly increasing number of our own people who avail themselves of the opportunities offered to take these fish for food purposes. Maine is fast becoming so attractive in this respect that less and less of our own people are going away to other states to spend their vacations, but are building cottages of their own on the shores of our lakes and passing their vacation in our midst, thereby adding to the taxable property of the State, and distributing a large amount of money at home; not only is this true of our own citizens, but there is a constantly increasing number of citizens of other states coming to Maine annually to spend their vacations at our inland fishing resorts, attracted primarily by the facilities for securing good fishing privileges, supplemented by our delightful climate in spring, summer and autumn, and our unequalled scenery.

The demand is therefore constant and pressing, not only to plant trout and salmon in lakes and ponds that have not yet been stocked, but to plant them where they already are, in order to keep up the supply for this ever increasing demand.



BLACK BASS. Micropterus Salmoides.



Maine should have the facilities by the erection of new hatcheries for raising at least one millon trout and land-locked salmon yearly for distribution in our waters.

This outlay would return dividends to our people of more than an hundred fold; to secure this one new hatchery would be required at an expense of \$4,000 and an increased outlay of \$3,000 annually to operate it.

The competition to secure the output of our hatcheries is exceedingly keen, and great pressure is brought to bear in one way and another from the various localities to secure a liberal supply, and we are always very reluctant to be compelled to deny any application, but are obliged to do so in many instances.

It should be borne in mind that raising fish artificially has long since passed the experimental stage in Maine. No crop is more certain, given the means and proper care.

The history of the development and growth of fish culture is extremely interesting and instructive. It is by no means a modern invention,—it is more than 4,000 years old. It has, in a primitive form, been in practice among the Chinese since the earliest ages of history, and is mentioned in their writings 2,100 years before the Christian era. It was known to the ancient Egyptians and well known to the Romans, and since their day has been practiced in nearly every country in Europe up to the present time.

It has crossed the seas and flourishes in our own land even better than it does in Europe. Undeveloped for many centuries beyond the mere collecting of natural spawn, or the preserving of fish in natural or artificial ponds, this art never reached any important or scientific advancement until Jacobi's discovery of artificial propagation in the year 1741.

From that time the art has steadily increased, until, by the perfections of our own age, it has assumed the proportions of a science. One of such importance to man that great governments do not disdain to take part in it for the public good, to make laws for its protection, to enlist the aid of scientists in its behalf, and to devote large sums of money to its maintenance and encouragement, as they do for agriculture.

The French, with great propriety, call this science aqua-culture. Thus at once comparing agriculture, in which the aqua, or water, is cultivated in place of the ager, or field.

Jacobi's first experiments were tried upon trout, probably the brown trout, which is the common trout of Europe.

He had first observed these upon their spawning beds in the German streams, and found that from the last of November to the first of February they would frequent shallow places, and dig furrows in the gravelly bed, and there deposit their eggs.

He thereupon caught spawning trout of both sexes, extracted the eggs of the female and the milt of the male, mixing them together in vessels half filled with water. The eggs thus fertilized were placed in wooden boxes pierced with holes covered with fine gauze and having a layer of sand at the bottom, and anchored these boxes in gently running water. These eggs hatched and were examined from time to time. He saw the eyes of the young fish appear at the end of three weeks, the body in a week more, and five weeks later the young fish were hatched out.

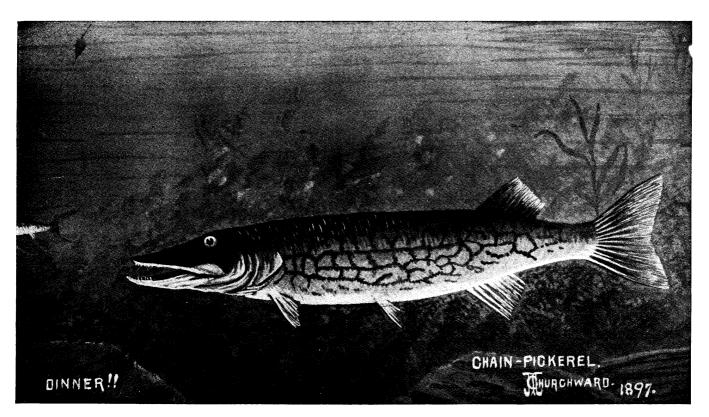
His experiments were successful upon the whole and in 1771 he was awarded a life pension by King George III. A large fish farm was built near Hanover under government auspices, and here Jacobi, and his sons after him, practiced their art until 1825.

The importance of the discovery was thoroughly appreciated at the time, and his experiments were much discussed.

The first government to take the matter up was that of Norway in 1850. It reached Finland in 1852, Belgium, Holland, and Russia in 1854, Canada in 1863, Japan in 1877.

In England and Scotland the method was tried upon a large and practical scale. In the provinces fish culture is well appreciated; Canada possesses twelve principal stations, all owned by the government and a Ministry of Marine and Fisheries, the only one in the world. Far from being behind any country in the world, America now stands in the front rank of fish culture, and in no country do the people evince a greater degree of interest in the subject. This art seems to have first attracted public attention in the United States about forty-five years ago. It was time that it should do so. Our sea fisheries once so famous and so prosperous had begun to fail seriously. Millions of shad and salmon which once filled the Penobscot, Kennebec, Androscoggin, Merrimac, Connecticut, Hudson, Delaware, Susquehanna, the Potomac and other of our rivers, had almost





POND PICKEREL Lucius Reticulates.

entirely disappeared,—great lakes denuded of their white fish,—ponds and streams deserted of speckled trout,—factories had polluted waters with sawdust, tan waste, gas tar, soap, chemicals and other abominations.

The exertions and good work of the United States Fish Commission, and those of our various states, and the general interest shown by our people in all that pertains to this subject, drew from Prof. Huxley, in 1883, the remark that he "did not think that any nation at the present time had comprehended the question of dealing with fish in so thorough, excellent and scientific a spirit as that of the United States."

It should be borne in mind that the fish in fresh water lakes and rivers may easily be practically exterminated unless the waters are kept pure, the spawn and young fry left undisturbed, and wholesale capture be forbidden.

Progress in fish culture was delayed by the Civil War, but upon the return of peace the matter received an impetus, largely through Mr. Greene's exertions and private hatcheries and fish preserves multiplied in all the states, and are still increasing in number. Soon the state governments took it up and State Fish Commissions were formed for the encouragement of this industry and the protection of the fisheries, both inland and upon the coast.

New Hampshire has the honor of having taken the lead, founding her fish commission in 1864, during the latter part of the war.

This commission made the first attempt, in 1866, of breeding salmon in the country for re-stocking the rivers, and also made the first public appropriation toward that end.

Massachusetts and Vermont were the first states to follow the example, and created fish commissions in 1865.

Connecticut and Pennsylvania came next in 1866, and our own State, Maine, in 1867. Rhode Island and New York in 1868, New Jersey and California in 1870, and Alabama in 1871.

The movement extended through the South and West until now thirty-five states have their fish commissions and state hatcheries, making free annual distribution of ova, fry, fed fish within their boundaries. Every state has its own code of fish and game laws for the protection of its coasts, lakes, streams and forests.

At length our National Government, itself, became interested, and February 9, 1871, the United States Fish Commission was instituted by act of Congress, the first commissioner being the late Prof. Spencer F. Baird, of the Smithsonian Institution, whom the Germans designated as "the first fish culturist in the world."

This commission has an annual appropriation of about \$300,000.

It does not make laws to regulate fisheries, nor does it even recommend legislation, considering that each state has control over its own waters. It only investigates, reports and advises.

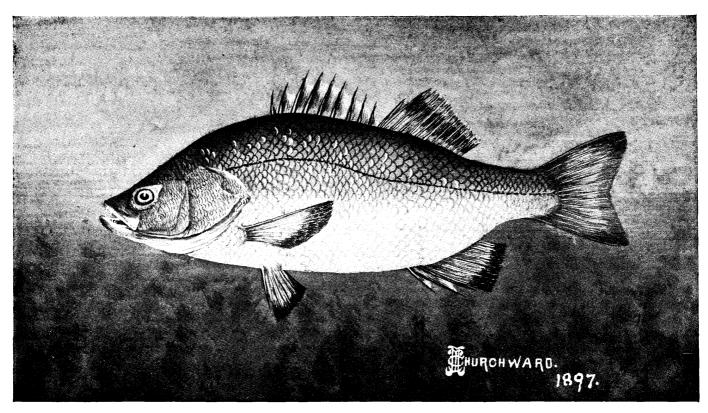
This commission possesses many hatcheries scattered all over the country where they will be most effective. Some of the more noteworthy among them are at Green Lake and East Orland, Maine.

This commission lends its aid and encouragement to individual efforts in all matters of fish culture; it co-operates with the state hatcheries and annually distributes millions of eggs and fry of the various fresh and salt water fish.

Dr. Goode, a celebrated authority has declared that the limitations of fish culture are precisely those of agriculture and the raising of animals, and he gives a clear definition of fish culture in a few words when he states the purpose of it to be to counteract by reparative and preventive measures the destructive effects of fishing.

An extended definition might be made as follows: Fish culture is the art of restoring to its former plentiful condition the natural supply of food fish, upon which the human race greatly depends, when that supply has become wasted by destructive means; of increasing the number of fish by improving the conditions under which they are hatched, so that the immense loss which naturally occurs at such times may be counteracted, of protecting the fish and their spawn from all harmful influences from their natural enemies, and particularly from capture at improper seasons or by immodest methods.

It cannot be doubted but that the State of Maine will continue by liberal appropriation to carry on this great work so beneficial to all her people.



THE WHITE PERCH. Morone Americana.



#### WHITE PERCH.

We are unable to state in how many of the lakes and ponds of Maine this very valuable food fish is found; but wherever it is, it is regarded with great favor, attaining a growth in some localities of over three pounds. The season for taking them is properly from about the first of July to January, affording ample opportunities for sportsmen and for good wholesome food at a time when the salmon and trout are more difficult to capture.

This fish has never been bred artificially in this State. Their spawning season is in the spring of the year, in the inlets of the lakes and ponds. We have successfully transplanted them in several instances, the method adopted being to take them with nets and transfer them to other lakes. We would strongly advise a more extensive stocking of the various inland ponds and lakes with this fish, confident that it would prove of great value in every locality where it is done. We have hesitated to do this, except in such instances where the community has requested it, from the fact that people generally are exceedingly jealous of their fishing privileges, and great complaint has been made from time to time with the stocking of some of the waters of the State with black bass years ago.

#### BLACK BASS.

There are various opinions held by the citizens of this State relative to this fish. In some localities they are held in great favor, while in others no condemnation is too severe to be hurled at them. They are very destructive to the pickerel and usually succeed in practically exterminating them in waters where they have been placed, and the pickerel being an inveterate enemy to the trout and land-locked salmon, the black bass have in this respect been of great practical benefit, and besides they are a very gamy fish to catch, and at certain seasons of the year are as good a pan fish as there is. We have not for many years, however, stocked any of the waters of Maine with black bass, and the laws for their protection have all long since been repealed, with one exception.

There is still a law forbidding the taking of them from their spawning beds.

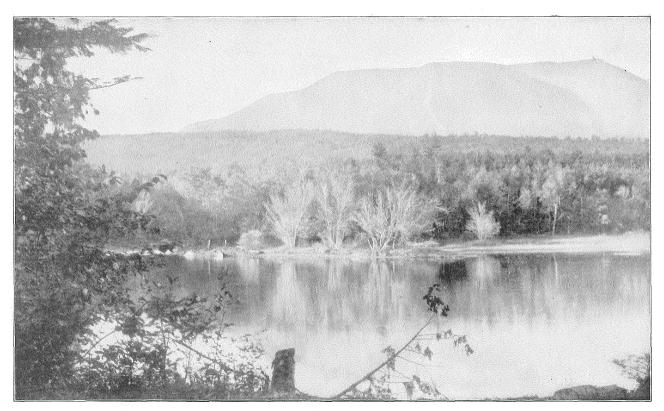
We speak entirely "within bounds" when we say that the fishing season of 1898 was a remarkably good one. The early and late fishing was the best of many years. The records show that more fish have been landed in the entire Rangeley region and in the Moosehead lake region, in Cobbosseecontee lake region and the Belgrade waters, at Grand lake, in Washington county, and Square, and other lakes in Aroostook county, Lake Webb, in Weld, and in fact generally over the State, than ever before since Maine became prominent for her sporting resorts, and more people came to Maine to fish than ever before in a single year in our history.

The re-stocking of our lakes and ponds with land-locked salmon and trout from the State hatcheries has so increased the supply that men and women in ever increasing numbers are coming to Maine to pass their vacations, and pass the time in fishing to a large extent.

A leading newspaper of the State said editorially not long since, "That it is surprising to travel over Maine and see how many farmers are keeping summer boarders." These "summer boarders" gather where the fishing facilities are good, and so the farmers are greatly benefitted and interested in this great fish industry.

The days of the inland town off the line of the railroad and electric road, and without large water power awaiting development, has passed. The little saw, grist, carding, fulling and other mills of our fathers which made the life of our earlier New England towns are fast disappearing. In fact, they have mostly, already disappeared. In place of the intelligent shoemaker on his village bench, who made every part of the boot or shoe, we now have hundreds of men and women under one roof in large towns, each of whom does but a single thing, such as the cutting of the upper or the driving of nails.

The same thing is true of all else. We have reached the age of machinery and of human machinery, for each man and woman of to-day is but a part in a vast mechanism, doing like the wheel or lever in the machine they operate but a single thing. The independent, complete, all around workman of a few decades back finds himself without an occupation, unless he accepts some *crank* or pulley position in a large establishment.



FOOT OF KATAHDIN TRAIL ON THE WEST BRANCH.



This revolution in industry is responsible for the changed conditions in many a rural town to-day. Instead of a population of units we are becoming a population of fractions of a larger whole whose movements we cannot control, but whose dictation we must obey.

In or near most of these towns situated as above described are beautiful lakes and ponds, ideal places for the summer tourist, that are, or can be by stocking, excellent fishing grounds. Such places men and women seeking for rest and recreation want to go to, and by a little effort will go to.

Take Belgrade Mills, for instance, in Kennebec county, and this is but one place among thousands like it in Maine equally attractive, ten miles from a railroad. We quote from an article in a daily paper of August 20, 1898:

"The fact is, the people of the State little appreciate the fame that those wonderful expanses of limpid water, Great pond and Long pond, enjoy among the people of distant cities. Some years ago the only fishermen who visited the lakes of Belgrade were some of the strolling anglers from the Kennebec cities. Now it is only rarely that Maine people try the fishing. Their places have been taken by enthusiasts from New York, Philadelphia, Boston and many other cities. It has come about that the lakes have become famous abroad. Some of the most noted fly fishermen in the country visit the section during the season. The place is fast becoming the fad, and the sport at Belgrade is a fertile topic in the city clubs during the long winter months.

"I have seen within a few weeks men arrive at Belgrade Mills with fishing kits worth \$500. I have seen one man unpack fifty rods and arrange them around his room at the hotel. There are names on the registers that the owners have made famous in the realms of sport. It is getting so that the records in bass fishing at Belgrade are becoming the standards in that sort of sport.

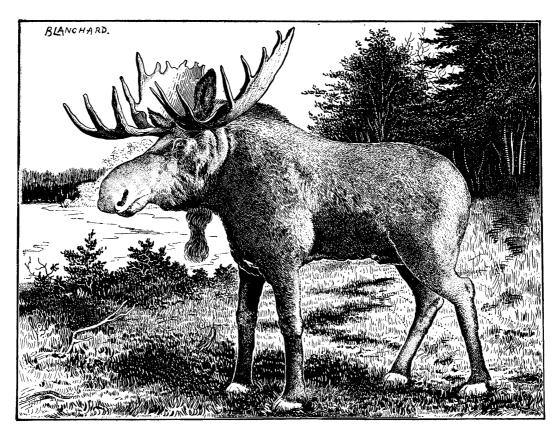
"Here and there about the shores of the beautiful lake are pretentious cottages. Some are set in the centre of what might almost be called estates. These are being added to each year and there is certain prospect that at Long and Great ponds will be developed one of the most famed resorts for sportsmen in the State of Maine." A leading newspaper of the State said editorially not long since, "that it is astonishing to anyone to visit Cobbosseecontee lake, in Kennebec county, and see the large numbers of cottages erected there by citizens of the State for private use," and what is true of this lake is equally true of hundreds of others in the State, and every year many additional cottages are erected on the shores of these lakes and ponds, and every year there comes to these inland towns in the vicinity of these lakes increased numbers of summer visitors to board at the hotels or among the farmers. No class of people are more directly interested in the development of our fishing facilities than the farmers, and it should be a cardinal principle among them to encourage in all possible ways the protection of fish and game, and the re-stocking of our lakes with trout and land-locked salmon.

Opposition to the expenditure of money by the State for this purpose has not entirely ceased, but it has died out to a very considerable extent, and it is hoped will soon cease altogether.

#### THE BIG GAME.

#### CARIBOU.

There are but few caribou in Maine compared with a few years ago. It is not long since they were more plentiful than deer, but they have apparently steadily decreased. Various reasons and suggestions are given to account for it, such as the decrease of their natural food, the moss, the depleting of the forests by the extensive lumbering operations, their alleged tendency to migrate, and kindred ideas. There are considerable numbers of caribou yet remaining in some sections of Aroostook county, and possibly in one or two other counties. The probability of the early extinction of the caribou should occasion great There seems to be no reasonable doubt that their concern. numbers could not stand the constant drain from year to year occasioned by the persistency with which they were hunted in open season, and the nefarious operations of the common poacher, pot-hunter, hide and market hunter. This is the cause There is abundance of their natural of their disappearance. food, the forests and barrens, their natural home, are almost unlimited, they have not migrated except before the muzzle of a



THE MOOSE.



Winchester rifle. If asked for a remedy, the obvious reply is If caribou could be let alone for a term of years doubtless their numbers would rapidly increase. The law can do something, its enforcement much more, but game laws cannot be enforced without the means to employ a suitable number The greatest depredations are of suitable men to enforce it. along the Canadian border. The outlaw seeks an abode on the Canadian side of the divisional line, and has every opportunity to slay and kill without anyone to "molest or make him afraid." Safe in his Canadian retreat he goes forth in summer and in the deep snows in winter and butchers the caribou to his heart's content on the American side, and is back again with his bundle of hides before any of the authorities know anything about it. An English gentleman of candor and intelligence informed us that caribou and moose meat was openly and publicly peddled on the streets of a Canadian town adjoining Maine during the entire summer of 1898, and at one time in the winter of 1897-98 fifty caribou were hanging up in the woods, killed in the deep snows on the American side. Such has been the fate of the caribou, and will be the fate of the moose unless some means can be speedily devised whereby this state of affairs can be remedied. The territory to be guarded is so vast, so extensive, that the warden system with present or anticipated means to carry it on will never accomplish it. What, then, is the remedy, or is there one. We leave that to the wisdom of the legislature to determine, with such suggestions as will be embodied in a bill that will be laid before it, at its coming session.

#### MOOSE.

There is no game animal so persistently sought after or hunted, or regarded as so grand a trophy when captured in the chase, as the Maine moose. No labor or expense is considered too great for their capture; large sums of money are expended in efforts to penetrate to the remote regions, and there is hardly a township in the State, no matter how difficult or how expensive to reach, but what is visited by one or more sportsmen during each hunting season. In consequence of this, it is not surprising that those interested in the preservation of this species of gameare concerned

lest they become extinct. It is no child's play, however, to secure a moose during the present open season. Many try; few comparatively succeed. On the other hand it is but little better than child's play to secure them during July, August and September, for they are then constantly about the shores of lakes and streams, and there is no difficulty in paddling a canoe very near to them; so that a person who can merely point a gun and fire it, can easily secure a moose if accompanied by a competent canoeman. During the first fifteen days of October, while this is more difficult, many are found near the water or can easily be "called" there by experienced "moose callers."

The question most discussed, most frequently asked, is this, are the moose increasing or are they decreasing in Maine?

There are various opinions about it. It is not uncommon to hear heated arguments about it by guides, hunters and others, each side apparently being able to bring forward satisfactory proofs to maintain their side of the controversy.

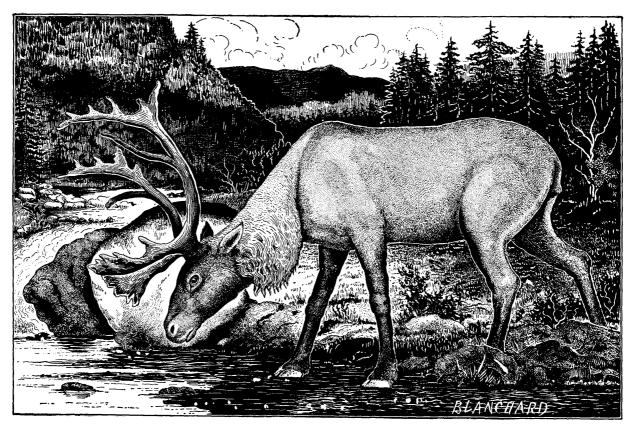
That moose are more scattered, that is, found over a larger area of the State than in recent years, seems to be an established fact.

On account of the many differences of opinion it becomes necessary to discuss the moose question somewhat carefully.

All familiar with the proceedings of the legislature of 1897 will remember that at that time there was a strong feeling that we should have an absolute close time for five years on moose, or else there was great danger of having this, almost the last of the larger game animals of the United States, becoming extinct.

Those in favor of such restriction argued that "the buffalos once so numerous on the Western plains, appearing in such vast numbers that it seemed impossible to exterminate them, have virtually disappeared, owing entirely to ignorant, wanton destruction, and that the same thing could very easily happen with reference to the moose in all North America, if too lax methods of hunting or destruction were allowed to go on, as they had during past years, for their numbers were becoming less and less each year."

The legislature did not see fit to make an absolute close time for five years, but restricted the hunting season to six weeks, instead of three months as before, and also made the penalty for violation of the law very severe. We are inclined to think the



CARIBOU.



danger point is passed in consequence of this change, provided, always, that the destruction can be confined to legal hunting during the open season, from October 15th to December 1st.

The number of moose in the United States is not large, for the region they inhabit is comparatively very small, yet they were once numerous over a territory more than twenty times larger than where found to-day.

Within the borders of our own State probably stand more moose than can be found in all North America, outside of Maine, in regions accessible to sportsmen and hunters, and it largely rests with this and the coming sessions of the Maine legislature to say whether or not this "monarch of the forest" of our generation shall become extinct.

While sentiment may figure somewhat in influencing the minds of some people in considering this subject, still if sentiment is disregarded entirely, and only the actual commercial value of the animal is taken into consideration, even then it seems to us a wise policy for our State to carefully guard and protect them against either extermination or decrease in numbers.

It is estimated by conservative judges interested in the preservation of our game interests, that the average worth of each male moose that inhabits our forests is at least \$500. We fully agree with them that this estimate is not too large, because we know from actual inquiry and observation that it costs more than that sum, on an average, for the sportsman from abroad to secure his moose trophy.

As there were killed in this State in 1897, 250 of which we have record, it will be seen that the money left in consequence, if our calculations are correct, was \$125,000.

These seem like large figures, we are aware, but realizing that the *possible* chance of getting a moose induces many other sportsmen to come and hunt deer, we feel sure that could exact figures be obtained they would be larger rather than smaller than those given.

The number killed this season promises to be approximately as large or perhaps even larger than in 1897, (see appendix,) which naturally raises the question in the minds of those interested whether the supply will stand this constant drain, for the number who hunt them will never be less, so long as they exist in any considerable numbers.

In order to answer intelligently we must learn what has occurred during past years. We are informed upon what seems reliable authority, that moose at times have apparently increased, while at other periods they have appeared to be very scarce, and learn, if possible, the reason for these different conditions.

All testimony points to a single conclusion, viz., that the periods when moose were scarce were immediately preceded by extensive hide hunting, or slaughtering for consumption in the woods camps. Canada furnished a ready market for the hides while the woods camps often provided no fresh meats for their men, other than wild game killed almost entirely during close season.

We are also informed that it was customary for many of our own citizens residing in the vicinity of the large forest region, as well as many from across the border, in New Brunswick and Canada, to kill and salt for future use, large quantities of moose meat, when these animals were plenty. When these practices made them scarce they would be left comparatively undisturbed for a few years and their numbers would increase.

The means at the command of the commissioners were insufficient to protect them during those years to any appreciable degree, there being only a seeming protection along the southern and eastern boundaries, while the northern and western boundaries adjoining Canada were never even visited by either wardens or commissioners.

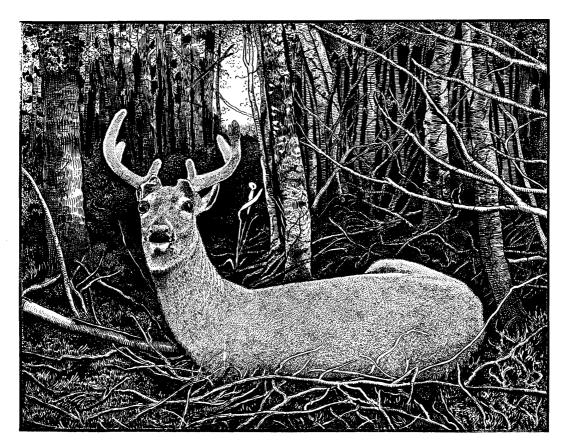
It was not until four years ago that means were provided that made it possible to employ wardens for this purpose. We have no hesitation in saying that their work, together with the change ir sentiment regarding moose protection, has accomplished very much, and venture to assert that not one moose is killed illegally now, where ten were killed six or eight years ago.

So large is the territory to patrol, however, it is impossible, with the means at our command, to police the region at all adequately, yet could it be done, we are satisfied beyond a doubt, that there would be no danger of exterminating the moose by legitimate hunting during the present open season.

We even hope it may be accomplished by continuing the present outlay, but whether our hopes will be realized cannot be fully determined until after a few more years.

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DEER WITH HORNS IN VELVET.

A great deal of the best breeding and feeding grounds are along the Canadian border, hundreds of miles in extent, and candor compels us to say that the evidence seems to show conclusively that poachers from the Canadian side make it a business to kill moose on the American side and openly peddle the meat in the Canadian markets.

To remedy this state of affairs would require the services of four additional trained wardens, at least, to patrol this section constantly.

It is not our purpose in this report to recommend legislation, but to state the facts as nearly as we are able, to the end that the law making power may be able to act intelligently in the enactment of such laws as the exigencies of the case seem to call for.

It is farthest from our purpose to complain of the meagreness or the inadequacy of the appropriation to carry on the work of the department, as efficiently as is desirable.

Taxes are burdensome. Many do not comprehend the vast importance to the State of our fish and game, and vote for an appropriation grudgingly, or not at all, but we sincerely hope that no backward steps will be taken.

It would be a misfortune well nigh a public calamity.

One of the veteran hunters from another state, and one who is known to every frequenter of the Maine woods, and an ardent friend of our game laws, says, "It is my opinion, one gained by close observation and an intimate knowledge of the facts, that moose and caribou are being rapidly exterminated." He says, "that the great hue and cry about the increasing number that is slaughtered annually is more likely to be due to the greatly increased number of sportsmen who visit the hunting regions, led thither by the flaming advertisements of railroads, hotels and campowners than to any increased number of game." "Certain it is," says this authority, "that with each succeeding year increased numbers of sportsmen invade the State, while it is likely that the average number of big game killed by each hunter is smaller than formerly, although the aggregate number killed each year is greater. On the train by which I returned to Boston, there were probably sportsmen enough to recruit two military companies This veteran hunter further says, "that the forest with rifles." areas of the State have been sadly diminished in the last twentyfive years," and "that it is well within the memory of the present generation when a trip to Rangeley region involved a fifty mile carriage drive. Now parlor cars of two roads land the tourist upon the shores of the lakes. It is but a very few years ago since another very extensive line of railroad was projected from Brownville to Caribou and Ashland. A hundred miles or more of that road was built through a dense forest, the natural breeding grounds of big game."

With the diminished forest and breeding areas and the increasing number killed each year, this man evidently does not take the optimistic view of increasing game, which is maintained by many.

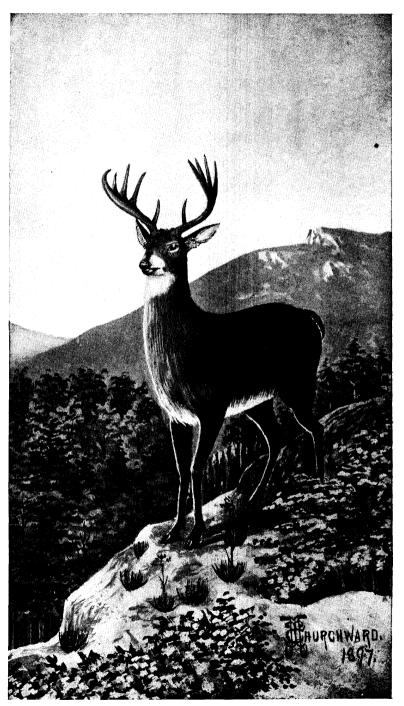
From the most reliable information we have gathered from all sources,—registered guides, wardens, hunters, and others who have exceptional facilities for forming the best judgment upon this question, as well as somewhat extensive personal observation—we are of the opinion that the future supply will not warrant any additional open time on moose, or greater facilities for their capture.

#### DEER.

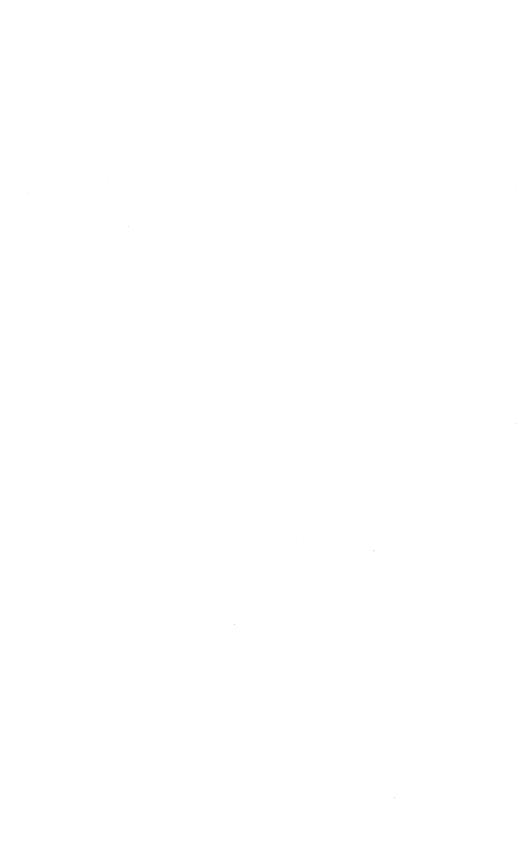
If we give due credence to all reports received from every quarter, registered guides, sportsmen, newspaper correspondents, farmers, transportation companies, wardens, and others, deer have been increasingly abundant during the year. The exceptionally deep snows of last winter caused some anxiety, but we were unable to learn that deer suffered thereby.

The opportunities and temptation to kill deer illegally have greatly increased in the last few years. They are now found in every county and nearly every town in the State. There were at least ten thousand killed in 1897 legally, and the number legally killed this year cannot be less than eleven thousand. The number illegally killed is largely a matter of speculation or guess work.

At first glance it would seem that it would be impossible to supply the demand from the natural increase, if they are to be yearly taken in such large numbers. We are, however, convinced that there will be plenty of deer for an indefinite period, provided the present close time is maintained and legal killing only is indulged in.



THE VIRGINIA DEER.



## DAMAGE TO FARMERS' CROPS BY DEER.

We have received a number of complaints from farmers in various parts of the State that deer were destroying, or had destroyed, their growing crops, in some instances accompanied by a bill of the amount of damage claimed, and also a demand more or less emphatic, that "the Commissioners take care of the State's cattle and prevent them from destroying their growing crops."

We have endeavored to carefully investigate every such complaint, and are convinced that the damage done to growing crops by deer is greatly overestimated, and is largely imaginary.

Still there are a few well authenticated cases where substantial damage has been done, and we think in all such cases, means should be provided whereby full compensation may be received by the injured party.

## WAYS AND MEANS.

The feeling seems to be increasing that the State, aside from individuals, should derive substantial revenue from its fish and game, in order to relieve in a measure our citizens of a portion of the burdens of taxation now required for the propagation of fish and the protection of game; whether the revenue derived from the license fees of guides, taxidermists and others, fines collected and other sources of revenue, shall all be expended each year for this purpose, in addition to the regular appropriation, or form the nucleus of a permanent fund, only the interest of which shall be expended, is a matter that the legislature must determine. There is not much doubt, however, that if during August and September deer are allowed to be taken for food purposes only, by the person taking them in certain portions of the State, on payment of a fee of six dollars for non-residents and four dollars for residents, under such rules and regulations as the Commissioners may establish from time to time, and allowing shipment of fish and game, under such rules and regulations, when not accompanying it, on payment of a suitable fee, that a large permanent fund would accumulate in a few years, the interest alone of which would yield a substantial revenue.

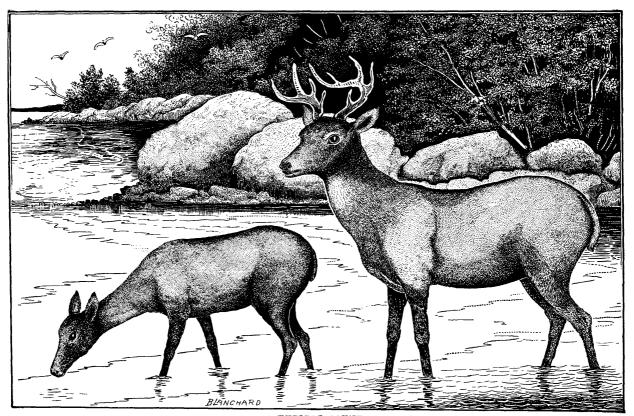
We give below an extract from a letter from a very prominent gentleman in Massachusetts, bearing upon the question of the

deer supply, and their protection. He says: "Deer shooting in that part of the country, they (the natives) don't make any account of any part of the year, but then I don't know as I should bother myself about that, for there are deer enough about the Maine woods, if you can keep the lumbermen and pot hunters from killing them in the winter. I have been a constant visitor in the Maine woods for twenty-five years: my observation is that with the present game laws well enforced, the State of Maine would produce ample game for legitimate hunting for an indefinite period; and with the mint of money that flows into your State annually from the sportsmen, your legislature ought not to stint you to a small allowance which handicaps your being able to have the game laws well enforced at all seasons of the year. On the whole I think your game laws are well enough as they are, especially on moose and caribou, and \$100,000 is little enough for your State to appropriate annually to enforce these laws that you have.

"I would not advocate taxing the sportsmen by compelling them to take out a license for hunting,—it is not American,—we are really taxed for it now, in one sense of the word, for I hired men to build my camps this year for \$1.50 per day, and they found themselves, which was good pay for them. Now then, after the first of September, I used the same men and found them for two months and paid them three dollars per day, so you will see that while we are not directly taxed we are indirectly."

In this connection it may not be amiss to call attention to what appears to be a feeling more or less strong among the tax payers of the State, that some system should be devised for the taxing of visiting sportsmen by requiring a license fee from them, and the system in vogue in some of the states, and New Brunswick and other countries or provinces, is the most frequently advocated for the purpose of raising such revenue.

With a perfected guide law,—with a law allowing the transportation of fish and game unaccompanied by the owner, under proper restrictions, on payment of a fee to the State, and allowing the taking of one deer for food purposes only, in certain portions of the State, during August and September, on payment of a fee for each deer so taken, with all proper restrictions so this privilege could not be abused, and possibly the compelling non-resi-



A TYPICAL SCENE.



dents to hire registered guides, we are convinced that no good reason would exist for taxing non-residents for the privilege of fishing or hunting within our borders.

### GUIDES.

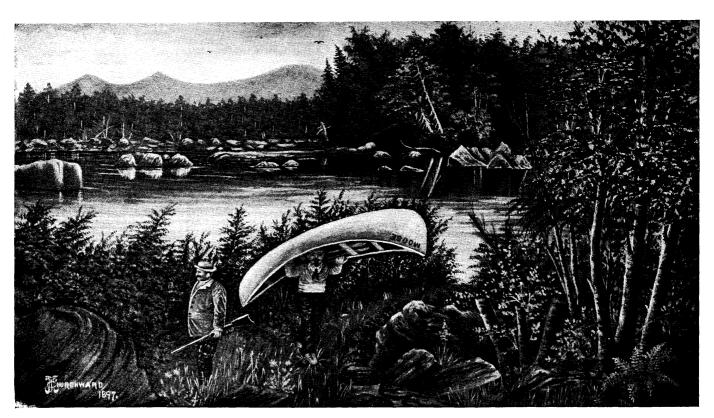
The law enacted by the legislature of 1897 requiring those "who engage in the business of guiding, either for forest hunting, or inland fishing, or both, to cause their name, age and residence to be recorded by the Commissioners, and procure a certificate, setting forth that he is deemed suitable to act as a guide," has been severely, and by many unjustly criticised. Before the law was given any chance to prove its usefulness or otherwise, it was assailed, and the supposed authors of it, with the greatest vehemence by those who for one reason or another were interested in keeping it off the statute book.

The Commissioners were of the opinion that this law would operate favorably for the better protection of fish and game, and from facts gleaned from the annual report of registered guides, which could be procured in no other way much valuable information could be placed before the people. We believe that this law has proved, and will continue to prove, of great benefit to the State. Since its enactment 1763 different men and three women have been granted certificates of registration, in accordance with its requirements, 1,443 in the year 1898 and 1,316 in the year 1897.

From the nature of their occupation during at least a portion of the year, it will be readily seen that they are all directly interested in fish and game protection, and so situated as to be able to help greatly the Commissioners in this important work, if so disposed, while if disposed otherwise they can do great mischief.

We think that every person authorized by the State to act as a guide for others, to take the State's property, its fish and game, —should be compelled to observe carefully all the laws, and render the Commissioners and wardens all the service in their power, by information or otherwise,—in fact, should be fish and game protectors, and no person should be permitted to be a guide who will not do this. It can readily be seen that with this large number of persons directly interested in aiding in the enforcement of the fish and game laws, a much better system of

wardenship would be carried on: in fact those who are most conversant with the question of game protection in Maine thoroughly believe that without a system of laws requiring the registration of guides, and prescribing certain duties for them to perform to the State, it will be practically impossible to do very much to protect game, more than the enactment of restrictive laws: it has been said on the part of timberland owners of the State, that all non-residents who come to Maine to hunt or camp in the forests should be compelled to hire registered guides to accompany them during their trips through the woods. guides, of course, as a rule, favor such a law. But a criticism of selfish interest might attach to this position on the part of the guides. In case of the timber land owner selfishness cannot be The lumbermen argue the importance of their interests and the necessity of protecting them. It has been shown beyond question that too often parties of outside sportsmen who visit Maine and go into the forests without guides, are either ignorant or careless regarding the laws regulating the setting of fires in the woods. The State can most effectively protect not only its game, but the forests of the State, through the "guide registration law." The guides understand, or can be made to understand, the proper places and ways of building camp fires, and can be made to realize the importance of having these fires extinguished before leaving the camping ground, and no other class of persons can, other than those directly interested. With experienced woodsmen for guides for all sporting parties, the wild land owners would feel that they had a reasonable guarantee of safety against forest fires. Much has been stated in the press in relation to carelessness with firearms and the consequent loss of human life. That such occurrences are possible in these days at first might seem almost incredible. But that they do happen ought to impress upon men who go hunting or shooting the fact that firearms are dangerous alike to those who carry them and to those within their range. Even sportsmen who are not accustomed to the use of firearms need not fear these accidents, if they employ skilled guides and follow their instructions concerning the carrying and use of their firearms. In connection with this subject it may be remarked that it has been seriously considered whether it be not better to restrict the use of powder used in hunting big game to black powder, forbidding



A CARRY ON THE WEST BRANCH.



the use of the smokeless variety, and in the more thickly settled countries, to allow in hunting large game only the use of shot-guns.

In summing up the benefits to be derived from the guide's registration law, which has now been so much discussed, that it is not only thoroughly understood by Maine people, but by those of other states who are interested in the preservation of the large game, it must not be forgotten that other states are beginning to see the wisdom of this law, and talk of adopting it, as in Colorado, where the commissioner has thoroughly investigated the Maine law, and gives it his emphatic approval.

The advantage to be received by timberland owners throughout the State, by the extra precautions which registered guides will take against fires, is the first great benefit to be derived from this law. And equal in importance is the comparative safety which a hunting party will derive from the small chances of accidents or of being lost in the wilderness.

Then comes the benefit to be derived by the State, in having these personally interested wardens to supplement the efforts made by the State to preserve and protect the game which annually brings so large an income into the State, besides furnishing employment to hundreds of men in a legitimate business of guiding sportsmen.

That this law is wise and just almost everyone at this time admits. That it is constitutional no one doubts at the present time, the highest court in the country, in an opinion written by Chief Justice Fuller of the United States Supreme Court, having decided that the game of a state is the property of that state, and any restrictions which the supreme authority may determine, may be placed upon the taking of it.

No man or party should be allowed to traverse or camp in the game preserves of the State with firearms in close time without a registered guide. The use of Winchester rifles for fish poles—rods—has become altogether too common. Hundreds of parties are found camping in the forests of Maine every year in July, August and September, and in nearly every instance have rifles and kill deer; nor is it possible to prevent it. No warden system we have ever had, or can hope to have under present conditions, can reach and prevent this state of affairs. The guides can stop it, and it is argued with great plausibility, that if it was lawful

to take deer during these months for food purposes only, under such rules and regulations as the Commissioners should from time to time establish, that the guides would be relieved of being parties accessory to the illegal killing, and would see to it that the law was obeyed, and that no more deer would be killed during these months than are now, and the State would derive many thousands of dollars income for deer thus taken.

We are pleased to report that so far as summer killing of moose is concerned, the guides are almost all of them against it, and are willing to join with us to prevent it as far as possible.

It is otherwise with the summer killing of deer for food purposes, and also of moose during the two weeks preceding open season; many guides seem willing to assist their employers in this illegal killing. This is a lamentable fact, causing us a great deal of trouble and expense.

It seems to us that the guide who does this, after the State has done and is doing so much to furnish him with employment, deserves the strongest condemnation, and should be made to suffer a severe penalty in consequence. We favor the granting all the open season for game that can be done with safety, but when open time is oncefixed, of compelling the guides to conform with the law strictly and absolutely, or quit the business. It is largely in their power to either improve or injure the hunting business, and assist very materially in causing a less demand on the State treasury in order to prevent poaching. In our opinion those who are willing to cheerfully assist on these lines should be allowed to continue the business, but those who are not should be barred from guiding.

By adopting this course, providing sufficient warden force to prevent hide hunting and slaughtering for woods camps, or in other words confining the hunting to the present open season, we are satisfied that the supply of large game will last for an indefinite time.

#### GAME BIRDS.

All reports received from wardens, guides and sportsmen emphasize the fact that there is a great scarcity of partridge in the State generally, although in some particular localities they have been reported as plenty. It would seem that the supply is growing steadily less. Interested persons pretty generally agree



ALLEGASH LAKE-COMING TO DRINK.



that market hunting is the real cause of it, although many other reasons are suggested, such as foxes, hawks and deep crusty snows in winter and cold, wet weather in spring time.

It has been suggested by a considerable number of observant persons that a close time of two years be placed upon them to allow them to multiply, before they are entirely exterminated in this State. So far as we have been able to ascertain the minds of those interested, by extensive correspondence and thousands of circulars sent, it seems to be the prevailing opinion that the sale of partridges should be absolutely prevented, for at least a term of years, or if not entirely prohibited by law, their sale should be restricted and regulated in the same manner as the traffic in deer is at present restricted and regulated. suggest that the use of dogs in hunting these birds should be We have used our best endeavors to look carefully prohibited. into the matter as we deem it of great importance to the State, and trust that such action will be taken by the law making power, as will preserve this most valuable of all indigenous Maine game birds from extermination, or nearly so.

## WOODCOCK.

By Hon. P. O. Vickery.

Woodcock is termed, and really is, America's game bird, for there is no kind of shooting that is equal to it, in my opinion. Let a party of bird shooters go out hunting, and as soon as a woodcock is flushed, all thoughts of partridge, snipe, etc., vanish, until the much sought for woodcock is bagged. With a good pointer, or setter dog, well trained, I can get more real sport shooting woodcock over him than in any other sport in the world, and I think this is the opinion of most every sportsman who has tried it under favorable circumstances.

The woodcock is migratory, but is one of the earliest birds to come back in the spring. It is a common thing to see them long before the snow has all left the ground. They nest on high ground, but near some brook or bog, where they go to bore for their food. And this reminds me of the many articles I have read from the pens of scientific experts. I have seen it very solemnly stated that they do not bore for worms at all, but for a substance which they extract from the mud and earth; yet I have shot many with angle worms in their mouths. I have shot two with them in their bill this year. They hatch the young in May and are full grown by the fourth of July, and during July are better for food than they will be again until October 10th. Woodcock lose their flesh and fat very quickly, and put it on in a very short time.

As a rule they commence moulting from August 25 to September 5th, and are nothing more than scrags until September 20th to September 25th, when they commence taking on flesh and fat very fast, and by October 5th to 10th you have a bird fit for the gods to eat, and from that time until they take their flight, which averages about October 25th to November 1st. After that time, as a rule, you will find but a scattering bird here and there, and very scattering indeed.

There are many peculiarities about the woodcock. During the moulting season they disappear, and will not reappear until they have got their feathers pretty well grown. If you chance to find one during the moulting season ten chances to one your dog, however keen of scent, will walk over him without knowing it; for nature has given them the power to with-hold their scent during their moulting.

While gunning in the early part of July I have walked up quite a number, but the dog could do nothing with them. I had one fly but 30 or 40 yards and go into a bunch of hardhack bushes, not more than ten feet across it, but neither the dog or myself could dislodge him. Doubtless he crawled down under some roots or underbrush and had no fear of us.

Woodcock are growing less every year. The bird hunters when they find a good cover, gun it so close that within three or five years they become almost extinct. For instance, five years ago in one cover I and others shot over my dogs 48 woodcock. Four years ago we got 37; three years ago we got 23; two years ago but 7 and last year but 5. This year I visited it twice and got but three birds, and I think this is the experience of other sportsmen. This fact keeps us hunting for new covers, and we succeed in finding them. During the summer months they are found along the sides of brooks and around mud holes, but after they are done moulting you will almost always find them on high land, and especially in birch growth.

They migrate from Maine, as I said before, about October 25 to November 1st, and go south as cold weather drives them. They are found in Florida, and very many of them are shot in that state. Sometimes it is a wonder to me that so many return, for they get a good shaking up here before they leave, and have to run the gauntlet of sportsmen all the way south, and then again on their return trip.

How to best protect them is a question hard to solve; but let us hope that they will breed in this State for many years to come. One thing we should do at the coming session of the legislature, and that is to change the open time from September 1st to September 15, the same as the partridge.

## THE SONG BIRDS OF MAINE.

By O. W. Knight, M. S.

Of the 324 species and subspecies of birds known to occur in Maine, how many may be called song birds?

The songs of all birds are vocal expressions of their feelings of love or pleasure, and as every species has the power of thus expressing these emotions, why should not all be called song birds?

The gurgling croak of the grebe is as truly a song as is the pleasing melody of the brown thrasher, though one repels and the other attracts our ears. One is not a song bird and the other is.

As ordinarily understood, the term song birds applies to those species which utter a succession of musical sounds or notes in tones which are pleasing to our ears. The duration of the song may vary from a half dozen clear pitched, quickly uttered notes, taking up a few seconds of time, to a succession of trills and trebles continued for a half hour or longer.

Allowing for the difference of opinion as to what birds utter notes which may be called songs under this definition, there are between 40 and 75 species found in Maine which might be included in this class. These all belong to the order passeres or perching birds, suborder oscines or singing birds, but all of our species belonging to this suborder are not song birds if we accept the definition previously given.

That the bobolink is honestly entitled to a place in this class nearly everybody will admit. When not engaged in pouring forth a wild rollicking rhapsody of melody, "Robert of Lincoln" is busily engaged along with his sober garbed mate in devouring some of the vast host of insects which inhabit their favorite meadow. As a considerable portion of the insects thus devoured are species injurious to agriculture, we should forgive "Robert" and his wife for their depredations in the rice fields of the South, since in the North they fight our insect enemies, and he pleases our ears with his song.

For melody of a happy, joyous style, but not so rollicking as that of the bobolink, we have the songs of the brown thrasher, catbird, robin and rose-breasted grosbeak, each distinctive in character and equally pleasing to the ear. Though these birds sometimes steal a few cherries and other small fruits to pay for their songs, they also devour a large number of injurious insects and are entitled to protection by law.

The song of the American goldfinch or "wild canary" is only slightly different from and inferior to that of its domestic namesake. Although a seed eating bird, yet this species is of benefit to the agriculturist as its favorite food consists of the seeds of the Canada thistle, shepherd's purse and other noxious roadside weeds.

These are only a few of the more prominent songsters. The hermit thrush, winter wren, house wren, white-throated sparrow, meadow lark, Baltimore oriole, and many others, including a host of sparrows, warblers, finches and vireos, have equally pleasing songs of varying style and degrees of loudness, but owing to the limited space allowed this article they cannot be discussed as fully as is their due.

It should be deeply impressed upon the minds of the people of Maine that nearly if not quite all our song birds are beneficial to agriculture, for they all feed more or less extensively upon injurious insects or the seeds of injurious weeds.

Let the law abiding citizens of every community unite in protecting our feathered friends.

It is a matter for congratulation that the citizens of the State appear to be taking a deeper and more general and intelligent interest in bird protection than formerly. Various suggestions and recommendations to this end are made from time to time. One of the most important of these that has come to us is from a distinguished gentleman of our State, and seems to be entitled to weight. We give his interesting letter upon the subject in full:

"STATE OF MAINE, ADJUTANT GENERAL'S OFFICE, Augusta, December 16, 1898.

Hon. L. T. Carleton, Chairman, Fish and Game Commission, Augusta, Me.:

DEAR SIR:—I have the honor to suggest that a small portion of the funds at the disposal of the Commission be set apart the coming year for the planting of wild rice in the various lakes and ponds of the State, which are frequented, during the season, by wild ducks, and in which the feed for these birds is quite deficient.

I am sure that this action would prove most satisfactory to the many sportsmen who annually note the decrease in the flight of wild fowl and the increasing tendency they show to leave our waters without a prolonged stay. I am sure that if wild rice can be introduced it will prove such a source of attraction that the flight will be increased and that the birds will linger longer in their feeding grounds, and thus furnish an additional attraction to our visiting sportsmen.

Yours very respectfully,

John T. Richards, Adjutant General."

#### PROSECUTIONS.

There have been instituted one hundred and fifteen, (115), prosecutions for violations of the inland fish and game laws, or more than two a week for the entire year.

The aggregate of fines imposed amounts to	\$3,904 50
Of this amount was paid	2,684 50

The jail sentences imposed amounted to ten hundred and fifty days, (1,050).

The number of days actually served in jail under these sentences was four-hundred and twenty, (420).

The balance of the cases where jail sentences were imposed were either appealed and have not yet been disposed of, or the cases were continued for sentence during "good behavior."

The jail sentences were all for violations of the law relative to moose.

In addition to this we have caused thirty-one, (31), deer dogs to be killed, found chasing deer, or kept or used for that purpose.

# APPENDIX.

We have endeavored to get a report from the wardens of the location and cost of every camp and hotel that is run for the entertainment of fishermen or hunters, and also of the location and value of every private camp, cottage or lodge located on the shores of the inland lakes.

The record may not be entirely complete, but the wardens have reported 204 hotels or camps, run for the purpose of entertaining fishermen or hunters, and their cost as \$323,740.00.

There are 150 steamers on the inland waters of the State used wholly or partially for the conveyance of sportsmen. Five years ago there were but eighty-seven. Fifteen new ones have been put in during the year 1898. The fair cash value of these steamers would not be less than \$125,000.00. This does not include the value of the many row boats or canoes, which is many thousand dollars more.

There are reported 397 private cottages, camps or lodges, the cost of which, as near as can be estimated, amounts to \$524,855.

The guides report 140,516 pounds of trout, salmon and togue caught by parties whom they have guided,—more than seventy tons,—an increase of eighteen tons over last year. This represents a value of more than \$40,000.00. It should be borne in mind that this quantity represents only the amount of fish taken where registered guides were employed.

The total number of days guides have been employed in the business of guiding during the year is 63,501. This at \$3.00 per day and board fifty cents represents \$221,257 paid to the guides for guiding,—an increase of 11,583 days over last year.

Five thousand eight hundred and twenty residents of the State employed guides, an increase of 2,436 over last year,—and 7,366





TWO REGISTERED GUIDES.



non-residents employed guides,—an increase of 243 over last year, leaving not less than \$2,000,000.00 in the State.

As near as we can estimate about 260 moose have been killed, an increase of ten over last year; 160 caribou, a decrease of seventy-nine; and 9,000 deer, or fifty-three more than last year. Undoubtedly several thousand deer were killed of which we have no record. The conclusion forces itself from the facts that at least 11,000 deer have been killed in the State the past year.

Five guides have died during the year, as follows: D. W. Hopkins, Milo, typhoid fever; Frank W. Gerrish, Norcross, fever; John Smart, Kineo, shot by guide Paul Peters; Dell Durgin, The Forks, shot by a friend with whom he was hunting,—mistaken for a deer, and Jos. LaCrosse, Kineo, accidentally shot himself.

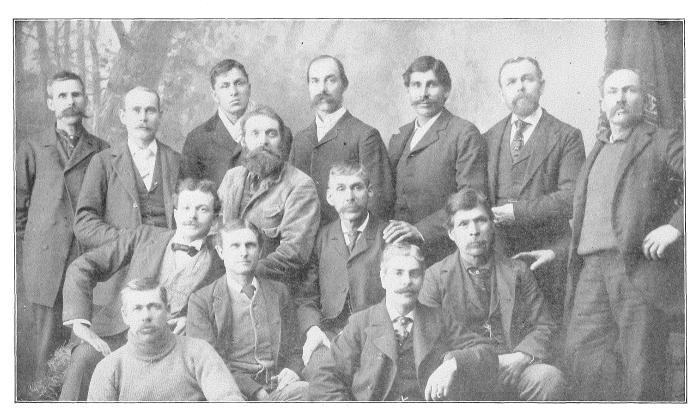
The greatest number of days any one guide was employed was 182. The number who guided 150 days or more was forty; the number who guided more than 100 days and less than 150 days was 175; the number who guided fifty days or more was 1,000.

Twenty-seven guides registered since the first part of this report went to print, making the total number of guides registered to date 1.464.

The guides report their occupations besides guiding as folllows: Farmers, 300; common laborers, 164; woodsman, 162; cooks, 66; camp proprietor, 57; carpenters, 57; blacksmiths, 18; steamboat proprietors, 16; spool manufacturers, 10; hunters and trappers, 32; taxidermists, 12; trappers, 45; merchants, 21; livery man, 2; gummers, 7; railroad brakeman, 2; newspaper correspondents, 3; pension agents, 2; deep sea fishermen, 8; surveyors, 5; thread manufacturers, 2; barrel and box manufacturers, 2; tin smith, 2; hotel proprietors, 8; painter, 4; scaler, I; engineer, 4; telephone operator, I; jeweler, I; miller, I; mechanic, I; fish culturists, 3; game keeper, I; axe handle manufacturer, I; scythe manfacturer, I; weaver, I; harness maker, I; paper hanger, I; land agent and scaler, I; plumber, I; barber, 2; poultry and bee keeper, 1; night watchman, 1; shoe manufacturer, 2; paper maker, 1; railroad postal clerks, 2; clerks, 5; snowshoe manufacturers, 4; stone masons, 5; manufacturer of agricultural tools, I; painter and paper hanger, 6; basket manufacturers, 1; railroad employee, 1; millman, 12; fish and game wardens, 4; gummers, 4; canoe builders, 8; hotel clerks, 2; printer, 1; no other occupations reported, 296.

## FINANCIAL STATEMENT.

Amount appropriated by the legislature	\$25,000 00
There has been received from guides' registration	1,464 00
fees	1,404 00
and game laws, and game seized and sold	2,504 95
Received from taxidermists' licenses	55 00
	\$29,023 95
We have expended this amount as follows: Fo	
the four fish hatcheries, including the distribution	of the fish,
repairs and improvements on hatcheries, and actua	al travelling
expenses of the Commissioners, as audited by and vo	ouchers filed
with the Governor and Council, \$15,235.84.	
Clerk hire	\$473 00
Publication of notices	114 25
Sheriff's fees for serving notices	8 <i>7</i> 0
Typewriter for office	90 00
Attorney's fees	526 64
United States revenue stamps	6 00
Express charges	2 56
For canoe	40 18
For a net	23 24
Benj. Atwood, Winterport, warden service	288 25
W. L. Blackington, Rockland, warden service	9 50
O. E. Bowers, Machias, warden service	575 90
A. P. Bassett, Norway, warden service	<i>77 7</i> 0
Frank Bagley, G. L. Stream, warden service	9 50
John Breen, Princeton, warden service	29 50
D. L. Cummings, Houlton, warden service	588 oo
Fred E. Davis, Blackwell, warden service	202 07
Robt. A. Davis, Steuben, warden service	20 00
Albert French, Calais, warden service	668 15
Thos. Gehigan, Bangor, warden service	19 25



A GROUP OF TYPICAL REGISTERED MAINE GUIDES,



A. W. Gowen, York Corner, warden service	\$88	80
M. S. Gordon, Vienna	24	
W. F. Gilman, South Mt. Vernon	35	
Geo. D. Huntoon, Rangeley	501	
Geo. H. Huston, Perham	1,169	
W. L. Hodgkins, Enfield	965	
Silas M. Hodgkins, Enfield, warden service	36	
Henry Hughey, Holeb, warden service	10	00
J. N. Herrick, East Eddington, warden service	112	25
A. M. Jones, Stratton, warden service	747	90
E. H. Kenniston, Amherst, warden service	162	
Abner H. McPeters Old Town, warden service	22	00
C. C. Nichols, Foxcroft, warden service	1,362	54
Walter I Neal, Pittsfield, warden service	1,276	
National Camp Supply Co., supply for wardens	15	88
L. R. Oliver, Songo Lock, warden service	204	00
Sam'l Orr, St. Croix, warden service	7	93
W. H. Osgood, Vanceboro, warden service, special		
service	<b>7</b> 9	10
F. M. Perkins, Bradley, warden service	339	60
W. T. Pollard, Foxcroft, warden service	1,012	59
S. J. Raymond, Edmundston, warden service	18	36
R. T. Rankin, Belfast, warden service	15	00
Dennis B. Swett, Weld, warden service	106	00
W. W. Small, Rumford Falls, warden service	18	oo
G. W. Towle, Belgrade Mills, warden service	13	-
Clarence Thompson, Calais, warden service	408	
J. C. Weston, Waldoboro, warden service	32	
Henry A. Wing, Lewiston, special service	14	00
Whiting & Cummings, Winthrop, team hire for	0	
Monmouth hatchery, and transporting fish eggs,	108	
Chas. H. Wieden, New Sweden, warden service	15	
John A. Wyman, Winthrop, warden service	50	
Ernest Walton, Cardville, warden service	20	
J. D. W. Quimby, Rangeley, building dam	13	
Felix Thibadeau, Eagle Lake, warden service	21	•
Frank Thibadeau, Eagle Lake, warden service	13	
W. H. Theirault, Caribou, team hire	14	
S. S. Tufts, Kingfield, warden service	9	00

Elton D. Bailey, Auburn, warden service	\$50	00
L. A. Bump, Wilton, warden service	14	00
A. L. Sukeforth, North Whitefield, warden service,	25	ОО
D. W. Berry, Carthage, warden service	74	35
F. C. McPheters, Costigan, warden service	20	ОО
F. O. Perkins, Phillips Lake, warden service	6	00
N. G. Dixon, Monmouth, warden service	IO	oo
J. C. Burns, Oxford, warden service	22	00
D. A. Maxwell, Monmouth, warden service	10	oo
M. Abbott Frazar, Greenville, Jabor	5	oo
B. & A. R. R., transportation	17	06
F. W. S. Blanchard, Bath, engravings for report	27	30
J. W. Harlow, Augusta, trucking	2	oo
S. S. Brooks & Co., Augusta, steel for screen	50	ОО
G. P. Blake, Oakland, expenses distributing fish	4	97
Clinton Wire Cloth Co., wire cloth for fish trays	29	32
J. W. Clark, Wilson's Mills, warden service	151	ОО
J. C. Mead, North Bridgton, warden service	35	00
E. Little, Monmouth, rent of land	10	oo
F. J. Clark, brackets for office	5	00
David Holden, Jackman, rent of hall for hearing	3	00
J. H. Merrill, Manchester, warden service	58	20
Felix Mauro, Aroostook county, board of wardens,	11	00
Gilbert Bennett Mfg. Co., wire cloth for hatcheries,	84	38
Cassius Tirrell, for deer seized	10	00
G. P. Stanley, Dixfield, warden supplies	20	00
Taxidermists for services	195	
J. W. Emery, Manchester, special service	10	00
C. A. Fletcher, Augusta, rubber stamp		35
G. A. Singer, Hallowell, pictures for office	1	25

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