

NINTH BIENNIAL REPORT
OF THE
FISH COMMISSION
OF THE
STATE OF IOWA,
1891.

R. K. SOPER, Commissioner.

DES MOINES:
G. H. RAGSDALE, STATE PRINTER.
1891.

REPORT OF STATE FISH COMMISSION.

HON. HORACE BOIES, *Governor of Iowa*:

Pursuant to law, I herewith submit my ninth biennial report for the years 1890 and 1891.

Upon taking charge of the commission I found the plant to comprise the following:

(a) Four acres of land on the shores of lakes Spirit and Okoboji, well fenced and with a row of fine growing trees surrounding the entire tract;

(b) Hatchery, twenty by forty feet, twelve foot posts; the basement of this building consists of a reservoir of same dimensions as building and five feet deep, which was originally constructed for and used as a winter hatchery, but which, owing to reasons hereinafter explained, is now in disuse. The first floor is occupied as an office and supply depot;

(c) Five fish ponds of dimension ten by forty feet, seven feet in depth, same being walled up with good substantial eighteen inch walls;

(d) One pond, thirty by four hundred feet, used for propagating bass;

(e) One pond, twenty by one hundred feet, used as a summer pond for the propagation of gold fish;

(f) One pond, twenty by two hundred feet, for pike breeding;

(g) A good barn, fourteen by twenty feet; stone foundation, painted and in good repair;

(h) Horse, wagon and harness.

IMPROVEMENTS.

When I assumed control of the Commission, May 17, 1890, the ponds used for winter breeding contained but seventeen inches of water. The summer ponds were entirely dry. During the month of August, 1890, I employed a civil engineer to take level surveys

for the purpose of ascertaining the practicability of securing an additional supply of water for these ponds. The engineer reported favorably on the project and I submitted some to the executive council for their consideration and action, with my estimate of the probable cost of the undertaking, estimating it at about three hundred dollars. After due consideration, the council authorized me to proceed with the work, provided the same did not cost to exceed three hundred dollars. Some idea of the magnitude of the enterprise can be formed when it is stated that the old conduit pipe, extending from the shore of Spirit Lake to the ponds, a distance of six hundred and forty-six feet, had to be taken up and relaid at a much greater depth, to wit, six to eight and one-half feet; we were also obliged to tunnel under the embankment of the Burlington, Cedar Rapids & Northern Railway for the distance of about eighty feet. The appropriation being quite small in comparison with the task to be accomplished, I naturally experienced much difficulty in procuring parties to bid for the work, but was finally successful in letting the contract for the amount limited. Immediately after placing the contract preparations were made for carrying out the work and it was soon under way, being completed early the following spring.

The result is very gratifying and clearly demonstrates the wisdom of judicious expenditure in the betterment of the interests of the Commission. The summer ponds, formerly dry as the parchement upon which this is written, are now covered with thirty inches of water with its myriads of inhabitants, while the volume of water in the winter ponds has been increased from seventeen inches to forty inches, and we are now able to properly winter our young fish and to continue breeding the seasons through. In addition to taking up and relaying this conduit pipe, I consider it advisable and for the best interests of the hatchery to extend the plank box-tubing some distance further under the waters of Spirit Lake, so as to secure a supply of colder water than we then had; so, at the time of relaying this conduit pipe, this tubing was extended thirty-two feet, making the total length of same in the neighborhood of two hundred and thirty-two feet. We now have an inexhaustible supply of pure, cold water for all our ponds, and are better able to conduct the propagation and care of our fish than ever before in the history of the Commission.

DISPOSITION OF PROPERTY.

Believing it to be in the interest of economy to dispose of the horse, wagon and harness heretofore mentioned, I submitted the

matter to the Executive Council and obtained their consent to so doing. The same was disposed of at a public auction, duly advertised in the Spirit Lake *Beacon*, and were sold to the highest bidder for the following prices:

Horse	\$142.75
Wagon	14.80
Harness	6.25
Total.....	\$163.80

This amount was covered into the State Treasury, and hereto I append copy of Treasurer's receipt:

TREASURER OF STATE,
DES MOINES, October 9, 1890.

Received of R. K. Soper, Fish Commissioner, one hundred sixty-three and 80-100 dollars, sale of horse, wagon and harness. On account of State revenue.

(Signed)

V. P. TWOMBLY, *Treasurer.*

FISH CULTURE.

Much has been written and said upon this subject by all manner of men, from the astute and learned philosopher down the ranks to the more expressive plebeian. From this multitude of thinkers there comes the almost unanimous admonition, that as eternal vigilance is the price of liberty, so constant and never flagging watchfulness, experiment and zeal, are the price of our finny tribes *in futuro*.

There is scarcely a dissenting voice to the prophesy, that without constant effort made, both in the propagation and distribution of fish, the waters of our inland streams and lakes will be completely depopulated ere the dawn of another decade. And this is not at all surprising, when we take into consideration the various causes which lead to the extermination of our fish. Among them may be mentioned the continual changes which are being wrought by Dame Nature herself; the brooks of to-day become the ponds of to-morrow; the ponds and lakes reduced in dignity to sloughs and swamps, and thus the never ending changes of Time are rung. It is to meet these exigencies that the services of this Commission are required if we would preserve for the benefit of our people a small token of that heritage which Nature has so lavishly bestowed upon us. These disappearing bodies of water should be visited and their perishing inhabitants transferred to more suitable homes; this policy has been in vogue for many years throughout the differ-

ent States of the Union; it has been practiced in Iowa in years gone by, and has been invariably fraught with good results, but of late it has from necessity fallen into disuse by reason of the lack of appropriations. I think I do not over estimate when I attribute to these causes the principal source of alarm for the future of our fish interests. And I am likewise of the opinion that I am not over sanguine in believing that much of these dire consequences can be averted upon proper effort being put forth.

Another cause of depopulation is the great number of fish taken for consumption; the number is almost incredulously large, reaching many millions annually. This is right and proper, and affords no just ground for complaint, provided the privilege be not abused. There certainly can be no objection to any legitimate manner of taking fish for consumption, but as practiced in some localities, the taking of fish is a most atrocious and wanton violation of the rights of others. I here refer to the taking of fish by means of seines, nets, traps and other unlawful instruments, and this is done in most instances for the commodity value of the fish thus unlawfully captured.

To counteract the disastrous influences which these causes have had in lessening the stock of game fish in the various waters of Iowa has ever been the objective point at which my efforts have been directed, and I am pleased to report that in so far as the means at my command permitted, my efforts have been quite successful.

Upon the completion of the work hereinbefore mentioned I seined from Lake Okoboji large quantities of wall-eyed pike, black and silver bass, croppies and perch, for the purpose or propagation, depositing same in the breeding ponds. The result has been very flattering, even during the brief period which has since elapsed. The fish have multiplied and thrived as well as might be hoped for, and we have already distributed a respectable number of their progeny in various sections of the State. These varieties being natives to our waters will uniformly prosper and multiply rapidly. The demand is constantly on the increase, the supply practically inexhaustible, so that if the lakes, rivers and creeks of Iowa are not kept well stocked with these several species of fish it will simply be because of a lack of local interest in the matter.

My predecessors have so frequently and thoroughly exhausted the *modus operandi* of fish propagation, bestowed upon each luckless son of the finny tribe, his own proper name under many and

diverse *aliases*, treated of their peculiarities, habits, faults and virtues, at so great length and with such regularity, that I deem it entirely unnecessary for me to go over the same ground at the present time, and for that reason I shall dismiss the subject without further comment.

EXPERIMENTS.

Practically no experiments have been made by the commission during my incumbency. Proffers are continually being received from like commissions in our sister States looking to the mutual exchange of species respectively native to each State, but in each instance we have been compelled to decline these proffers, there being no available funds on hand for carrying on these reciprocal exchanges. The amount needed is small and I believe our legislature would do well to investigate the matter at its coming session, with the view of making an appropriation for this purpose, should it be deemed advisable by them.

Although I am partial to our own native fish in many ways, I am still of the opinion that we should leave no means untried which may bring to us a greater variety of game fish. There are numerous species found in the waters of other States not found here, which I firmly believe can be successfully acclimated and accustomed to our rivers and lakes. I sincerely hope this matter will be taken up and favorably acted upon by the next general assembly.

VIOLATION OF FISH LAWS.

From the institution of this office the respective commissioners have found much cause for complaint against the wholesale destruction and extermination of fish by means of nets, seines and various other devices for the capturing of fish in large numbers. True, we have a law for the protection of our fish, but the means of enforcing it are very inefficient. The Commissioner is presumed to exercise supervisory powers in respect to the proper enforcement of this statute, that is to say, he is possessed of the power to institute and direct prosecutions, yet in truth he is powerless to act, having no funds at his command to set the machinery of law to working. I am often and repeatedly solicited to visit different places for the purpose of investigating alleged infractions of the law, but in all instances am unable to act further than to request my correspondents to give the matter their personal attention. This they almost invariably are disinclined to do, for reasons which are very appar-

ent. A sufficient appropriation should be set aside for the special purpose of enforcing our laws for the preservation of fish.

Further, on this subject, I would recommend the repeal of that part of section 2, chapter 34, laws of twenty-third general assembly, which reads as follows: "Also that it shall be lawful to take buffalo and suckers by spearing between the first day of November and the first day of March following," for the reason that the same is repeatedly taken advantage of and frequently serves as a shield for the protection of these wholesale fishermen, who, not content with what the law allows them, make a practice of taking fish indiscriminately during this privileged period. Certainly no great wrong will be inflicted upon anyone by repealing or annulling the clause in question, while on the other hand it will lessen the difficulty of detecting other infringements of the general fish laws.

I scarcely need add that it is inconsistent policy for our State to attempt the upbuilding of an interest of this nature without making full and adequate provisions for the enforcement of our protective laws. We can re-stock our streams over and over again, but so long as the law is not enforced they will be as many times depleted of all semblance of game fish by these wholesale fishermen of drag-net tendency.

As instances of the numerous complaints made to this office, I append hereto copies of some of the letters received by me.

CITIZENS STATE BANK, }
COUNCIL BLUFFS, April 20, 1891. }

Hon. Fish Commissioner, of the State of Iowa:

MY DEAR SIR:—I wish to call your attention to the fact that the State law is being constantly violated at Lake Manawa, at the edge of this city, and everybody seems to be afraid to take it up and prosecute the matter. There are people living around the lake, and in its neighborhood, who are constantly using nets and seines, and are taking out all the game fish of that lake. Cannot you send a deputy, or do something to uphold the law of the State in that location? We have made an effort in this city, but we are unable to get anyone to take hold of the matter and push it. What can you do for us in this matter?

Yours truly,

CHAS. R. HANNAN, *Cashier.*

Office of H. H. HOLMAN, *County Attorney,* }
INDEPENDENCE, IOWA, May 19, 1891. }

R. K. SOPER, *Spirit Lake, Iowa:*

MY DEAR SIR:—The people along the Wapsie river, both north and south of this place, have been destroying fish, both with dynamite and spear, during the spring. Report says there are wagon loads of dead fish at Quasqueton dam, caused by dynamite in the river between here and there.

Quite a number are spearing here and north of here. I think if the matter was investigated there would be no difficulty in bringing several of the guilty parties to justice.

Very truly,

H. H. HOLMAN.

THE LAKE VIEW FISH AND PROTECTION ASSOCIATION, }
LAKE VIEW, March 31, 1891. }

STATE FISH COMMISSIONER, *Spirit Lake, Iowa:*

DEAR SIR:—We are having some trouble with parties taking fish. Is there any way of getting help through you so that convictions can be had and fish protected? The boys are taking turns at watching nights, but want help if it can be had. Please let us know if there is any chance for State aid.

Yours truly,

C. G. PECK, *Secretary.*

Under this title I wish to call attention to the statute relating to fish ways.

Chapter 188, laws of seventeenth general assembly, reads as follows:

SECTION 1. The owner or owners of any dam or obstruction across any river or stream, creek, pond, lake, or water-course, in this State, shall, within a reasonable time, erect, construct and maintain, over or across said dam or obstruction, a suitable fish way of suitable capacity and facility to afford a free passage for fish up and down through such water-course when the water of said stream is running over the said dam.

SEC. 2. Any dam or obstruction mentioned in section one of this act not provided with such fish way within a reasonable time after the taking effect of this act, is hereby declared a nuisance, and may be abated accordingly.

I would recommend that the above be amended by giving to the Commissioner supervisory control over the matter of fish ways, making it compulsory upon the part of the owners of dams to submit plans of all proposed dams and ways to the Commissioner, for his approval; also, giving to the Commissioner authority to investigate into the adequacy of existing dams and ways. The law, as it now stands, does not define what shall be considered a suitable way, and, indeed, it would be difficult, if not impossible, to specify generally just what will constitute a proper fish way in each particular instance. The matter properly comes within the sphere of the Commissioner's duties, and if left with him I believe much better results would be attained than can be hoped for under existing conditions.

As illustrating the necessity of some such action, I quote the following from a letter recently received from a prominent gentleman in Iowa City: "I have been requested by a number of citi-

zens of this county, as well as by two or three members of the Board of Supervisors, to write you concerning the fact that there is a dam being constructed over the Iowa river, above Iowa City, at a little place called Coralville. I have been informed that no provision is made for a fish way over said dam."

Had I been possessed of discretionary powers in the matter, as well as an appropriation to cover such emergencies, I should immediately have visited Coralville, and feel quite confident that the owners of this dam would gladly have complied with the requirements of law when such requirements were made certain and plain, which cannot now be said concerning them.

APPROPRIATIONS.

For the next biennial period I would respectfully recommend that the following appropriations be made by the general assembly:

For the purpose of securing exchanges of game fish with Commissions of other States.....	\$ 300.00
For the enforcement of our fish laws	1,500.00
For assistant to Commissioner.....	800.00
For shipping pails.....	100.00
For cleaning and repairing fish ponds.....	100.00
Incidentals.....	1,000.00
For well and windmill to pump water for winter hatching..	200.00

DISTRIBUTION OF FISH.

The following is a list of our fish distribution. In this connection I wish again to recur to the fact that inasmuch as our ponds were not in a proper condition for hatching until the spring of 1891, it was impossible for us to supply any of these fish, with the exception of the gold fish, until late in the season, and for that reason the list is much smaller than it otherwise would have been.

CROPPIE DISTRIBUTION.

John A. Nash	Audubon.	S. S. Arnold.....	Chariton.
E. L. Parmenter.....	Gilman.	R. J. McDonald.....	Kinross.
Besides which a large number were put in the lakes here.			

BLACK BASS DISTRIBUTION.

John A. Nash	Audubon.	R. J. McDonald.....	Kinross.
E. L. Parmenter.....	Gilman.	Chas. Bennett.....	Lake Park.
S. S. Arnold.....	Chariton.		
And a large number put into the lakes.			

SILVER BASS DISTRIBUTION.

John A. Nash	Audubon.	R. J. McDonald.....	Kinross.
E. L. Parmenter.....	Gilman.	Chas. Mattson.....	Lake Park.
S. S. Arnold.....	Chariton.		
And a large number put into the lakes.			

GOLD FISH DISTRIBUTION.

Auditor of State.....	Des Moines.	B. Coffin.....	Spencer.
Treasurer of State.....	Des Moines.	Edward Beebe.....	Spencer.
John Shaffer.....	Des Moines.	G. N. Williams.....	Rock Falls.
C. S. Byrkit.....	Des Moines.	J. H. Harrison.....	Davenport.
Verge Bannove.....	Primghar.	Mrs. C. Arb.....	Davenport.
W. H. Noyes.....	Primghar.	E. M. Bennett.....	Mason City.
Mrs. F. M. McCormack.....	Primghar.	Jacob Vroom.....	Mason City.
C. Achorn.....	Sutherland.	Winfield Grob.....	Iowa Falls.
L. E. Alexander.....	Sutherland.	Robert Right.....	Iowa Falls.
L. C. Wright.....	Boonville.	William A. Hearn.....	Iowa Falls.
J. Burns.....	Cedar Rapids.	Miss Della Brand.....	Iowa Falls.
O. D. Ladd.....	Cedar Rapids.	J. C. Bergen.....	Livermore.
Mrs. Berge.....	Cedar Rapids.	Mrs. Anna Holliday.....	Rock Rapids.
Mrs. Barker.....	Cedar Rapids.	Mrs. A. B. Hallday.....	Rock Rapids.
E. W. Bushnell.....	Cedar Rapids.	Mrs. G. M. Hallday.....	Rock Rapids.
Mrs. A. Hanson.....	Cedar Rapids.	W. J. Phillips.....	Ottumwa.
D. M. Gunn.....	Oskaloosa.	Dr. Rosa Upton.....	Marshalltown.
Frank Ellsworth.....	Humboldt.	Harry McCullough.....	Emmetsburg.
Mrs. Cora Rhodes.....	West Bend.	J. J. Robins.....	Emmetsburg.
Mrs. Hoskins.....	West Bend.	H. Hoagland.....	Emmetsburg.
C. A. Moody.....	West Bend.	C. C. Haugen.....	Fort Dodge.
J. W. Killip.....	Milford.	Rev. W. E. Dunlap.....	Boyaen.
C. E. Blockert.....	Milford.	Rev. C. L. McCracken.....	Rock Valley.
Mrs. H. H. Smith.....	Milford.	Mrs. J. S. Nye.....	Ackley.
Emma Parrish.....	Milford.	Mrs. C. L. Hatch.....	Ackley.
Zetta Doolittle.....	Milford.	Mrs. L. Reed.....	Ackley.
Persis Schuneman.....	Lime Tower.	C. Burns.....	Winneshiek.
Mrs. Sherburne.....	Spirit Lake.	J. H. Mitchell.....	Bloomfield.
D. Van Buren.....	Spirit Lake.	J. L. Stewart.....	Council Bluffs.
Mrs. H. Carr.....	Spirit Lake.	B. R. Olds.....	Aurelia.
Mrs. G. Kellogg.....	Spirit Lake.	L. A. Olds.....	Charles City.
Mrs. T. Dane.....	Spirit Lake.	Carrie Reason.....	Mitchellville.
Mrs. McCrane.....	Spirit Lake.	Bessie Francis.....	Mitchellville.
G. Tveleger.....	Spirit Lake.	Helen Sherburne.....	Mitchellville.
P. Weeks.....	Spirit Lake.	W. G. Phippin.....	Mitchellville.
E. D. Carlton.....	Spirit Lake.	Zella Tennant.....	Mitchellville.
A. A. Mosher.....	Spirit Lake.	W. E. Simmons.....	Mitchellville.
Mrs. C. E. Blackert.....	Spirit Lake.	F. C. Tyler.....	Mitchellville.
Mrs. S. L. Pillsbury.....	Spirit Lake.	C. W. Reed.....	Woodbine.
Mrs. L. S. Vanners.....	Spirit Lake.	L. C. Mudge.....	Burlington.
Mrs. C. McMan.....	Spirit Lake.	L. D. Smith.....	Burlington.
H. Thompson.....	Spirit Lake.	E. H. Bacon.....	Burlington.
F. L. Dollif.....	Spirit Lake.	Myrtle F. Bacon.....	State Center.
Miss Vina Wall.....	Spirit Lake.	F. W. Ruets.....	Dubuque.
Miss Minnie Oliver.....	Spirit Lake.	R. T. Jackson.....	Dubuque.
Mrs. D. S. Blakey.....	Spirit Lake.	Frank B. Jackson.....	Dubuque.
Mrs. D. Blusher.....	Osage.	George B. Parker.....	Dubuque.
John Rhimer.....	Hardy.	E. L. Jenkins.....	Dubuque.
Charles Woodruff.....	Sheldon.	O. C. Hill.....	Algona.
John O. Donnell.....	Sheldon.	Mrs. Boyer.....	Algona.
F. Woods.....	Sheldon.	W. H. Carpenter.....	Algona.
T. Spence.....	Sheldon.	Mrs. Joseph Thompson.....	Algona.
Mrs. F. Howard.....	Sheldon.	G. A. Briggs.....	Lake Park.

Al Hoag.....	Sheldon.	Mrs. M. J. Jones.....	Shelby.
George Campbell.....	Sheldon.	C. E. Francis.....	Rhodes.
H. B. Wyman.....	Sheldon.	Miss Kate Tibbets.....	Sumner.
H. M. Crocker.....	Sheldon.	Mrs. C. W. Adams.....	Calro.
Mrs. W. W. Reynolds.....	Sheldon.	W. J. Smith.....	Dakota City.
Mrs. James Espeset.....	Estherville.	Chas. Bennet.....	Lake Park.
Mrs. W. Barber.....	Estherville.	Mrs. John Dunn.....	Mason City.
Mrs. H. Petersen.....	Estherville.	Mrs. E. W. Foster.....	Mason City.
Mrs. M. I. Little.....	Estherville.	Mrs. Ella Weir.....	Mason City.
Mrs. E. Wells.....	Estherville.	Miss Sarah Keenan.....	Mason City.
Miss Etta Ridley.....	Estherville.	Miss Mollie Shields.....	Mason City.
Miss Kate Lyman.....	Estherville.	Mrs. Thomas Comfort.....	Mason City.
Jo Hardie.....	Estherville.	Mrs. John F. Hughes.....	Sanborn.
F. M. McCoy.....	Estherville.	Mrs. O. E. Woods.....	Mason City.
C. H. Wilson.....	Estherville.	I. H. Harrison.....	Davenport.
J. Boston.....	Estherville.	B. R. Henderson.....	Davenport.
Effie Halverson.....	Estherville.	F. J. Ashby.....	Iowa Falls.
Mary Howe.....	Estherville.	A. H. Keller.....	Emmetsburg.
George Fitzgerald.....	Estherville.	J. W. Bennett.....	Waverly.
Mrs. Anna Davenport.....	Estherville.	C. W. Reynolds.....	Sheldon.
A. N. Wetherell.....	Estherville.	Miss Bertha Mitchell.....	Pringhar.
W. A. Stone.....	Estherville.	H. H. Meiler.....	Milford.
F. L. Ronemas.....	Estherville.	Henry Goetsch.....	Whittemore.
H. H. Coats.....	Estherville.	Mrs. Patterson.....	Lake Park.
Miss Kate Lyman.....	Estherville.	Chris. Miller.....	Elgin.
Mrs. Flint.....	Spencer.	John L. Pitcher.....	Milford.
Mrs. C. M. Wollescrott.....	Spencer.	J. F. Thomas.....	Iowa Falls.

RECEIPTS AND DISBURSEMENTS.

1890.		Dr.	Cr.
May and June.	Ole Byorensen, two months' salary.....	\$	\$ 24.00
	P. Johnson, printing and stationery.....		14.50
	D. S. Blakey, oats for horse.....		4.00
	S. Gray, hay for horse.....		3.50
	Postage and stamps.....		1.50
	Received warrant.....	47.50	
July and Aug.	Ole Byorensen, labor.....		24.00
	D. S. Blakey, oats and hay.....		5.50
	R. B. Caldwell, surveying.....		5.00
	Postage stamps.....		1.00
	Received warrant.....	36.50	
Sept. and Oct.	S. B. Miller, auctioneering wagon and horse.....		5.00
	A. B. Funk, printing sale bills.....		1.00
	E. L. Brownell, glass.....		1.00
	Received warrant.....	7.00	
	A. O. Peterson, 120 foot seine.....		17.25
	Barron & Dodge, cart.....		6.00
	Stationery and stamps.....		6.50
	Ole Byorensen, labor.....		35.00
	Baron & Dodge, lumber.....		1.00
	Received warrant.....	64.75	
		\$ 155.75	\$ 155.75
August.	P. E. Nary, taking up and relaying supply pipe from Spirit take to State Fish Hatchery.....		300.00
	Received from Executive Council amount appropriated from the contingent fund.....	300.00	
		\$ 300.00	\$ 300.00

I, R. K. Soper, being duly sworn, depose and say that the foregoing accounts of the Fish Commission with the State of Iowa, are true, as I verily believe.

R. K. SOPER.

Sworn to before me by R. K. Soper, this 2d day of November, A. D. 1891.

A. J. PENN.