

# Winter Work at State Hatchery Means Summer Sport for Anglers



COLLECTING THE SPAWN.

ALTHOUGH fishing is entirely a summer sport in this state, a visit to the hatcheries in winter will furnish the sportsman a slight whiff of the once a delight and instructive game fish are there hatched by the millions, some artificially and some in their natural state, and that in the dead of winter. The hatcheries are situated in Sarpy county, just across the Platte river from South Bend and nine miles south of Omaha. As the season rolls around these are gradually taking on a finished appearance until at present the fishery grounds are as pretty a sport in summer time as any park in the state of Nebraska. Situated on the south slope of a high bank along the edge of the shallow Platte the site was selected years ago because of the magnificent springs which bubble out of the rock and sand in one of the draws back from the river. A spring house has been built over the largest spring, which pours out a three-inch stream the year around. This water, supplemented by twenty other springs, furnishes the water for the ponds and hatchery houses. About ten of the twenty-nine ponds which go to make up the fisheries are in the vale, succeeding each other toward the river, and the water flows from one to the other. A wind mill, with a twelve-inch pump to pump water from the river, is used in the summer when the river is low and drains out some of the water from the ponds.

### Winter Time for Spawning.

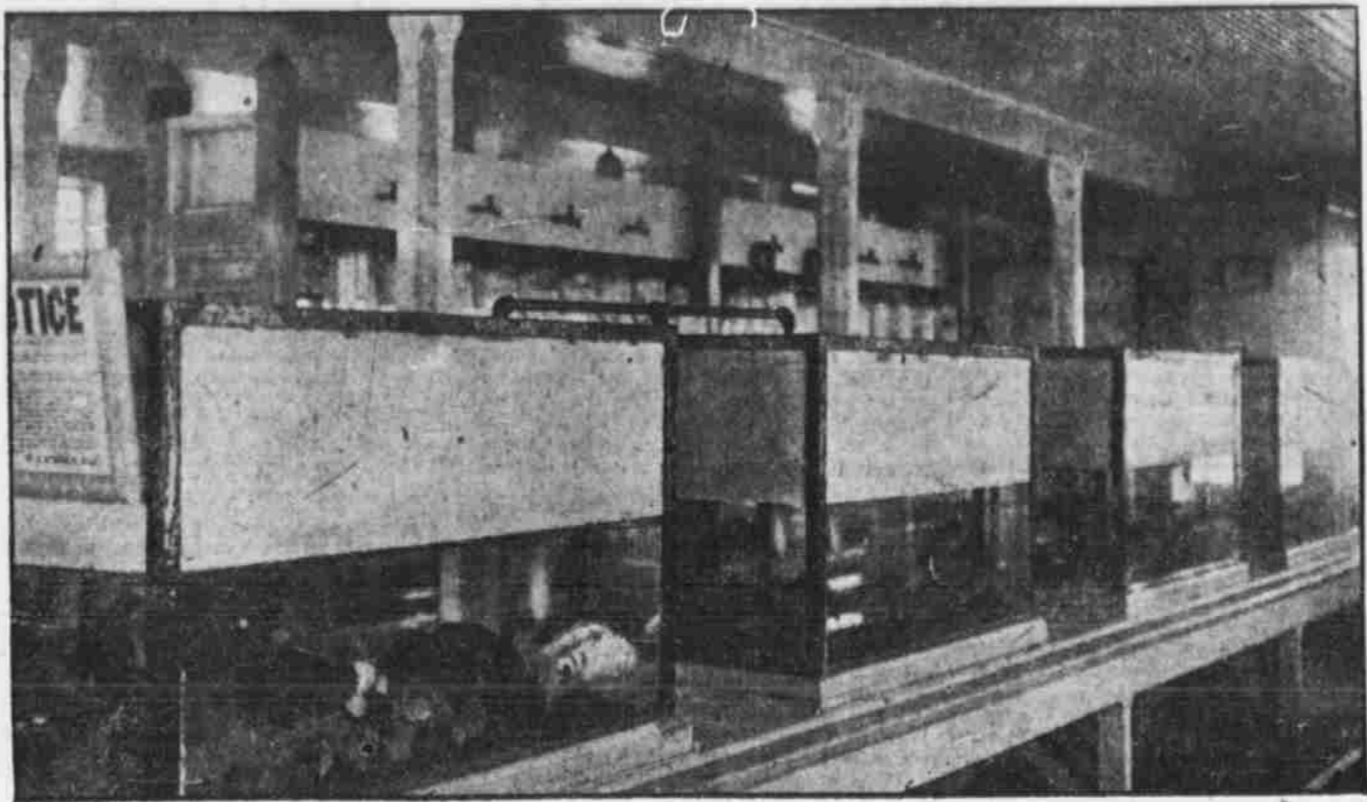
Game fish spawn and hatch during the winter months, and to see the stripping of the trout a visit was made to the fisheries on the first of February. The ponds looked truly desolate, being completely frozen over and covered with snow, except for square holes in the corners, which had been sawed out to give the fish air. The first four ponds into which the waters from the springs flow do not freeze, as the spring water is sufficiently warm to keep them from freezing over. In the first of these are kept the gold fish, and then come the trout. As the stripping process was the principal object of interest at this season of the year, W. J. O'Brien, the fish commissioner, went through all the processes in catching his visitors. With the thermometer flitting with zero, Mr. O'Brien went into the pond with a seine and made a splendid haul of rainbow trout. The brook trout had previously been stripped and were in the hatcheries. In milder weather the stripping is done at the bank of the ponds, but the extreme cold made this out of the question, so an equal number of male and female fish were caught with the seine and taken to the hatcheries in a tub, when the rest of the interesting proceeding was witnessed.

### Dates for the Different Species.

Taking a female ready to spawn firmly in his hands the thumb is pressed down the belly of the fish several times until all the eggs are pressed out and placed in a jar. A male fish is taken and the same process is gone through to fertilize the eggs, which are left to stand for half an hour, when they are washed in fresh water and placed in the hatcheries trough on trays. A 3-year-old rainbow will lay 1,000 eggs. Fresh water running over these continuously for eight weeks will hatch about 20 per cent, whereas hardly 10 per cent will hatch if the fish are left to spawn naturally in the ponds. Brook trout spawn from November 10 to the middle of December; rainbow trout from January 20 to March 1; bass from May 15 to June 10 and crappies about the same; pike and perch from April 1 to 10; bullheads and catfish from 15 to 20; and goldfish April 15 to 20. Rainbow trout hatch in about eight weeks and brook trout in ten weeks, while bass take from five to seven days. The only fish hatched in the hatcheries are pike and trout and the rest are hatched under the ponds in practically natural conditions. The eggs are hatched on wire trays 14x18 inches in size placed in running water. The trays are placed one on top of the other, about five deep, the upper trays having the larger mesh, and as the fish hatch they drop to the lower tray which is closely enough woven to keep them from falling through. The males fight fiercely for the privilege of swimming around with some nicely marked female and when they are mated the male with his fins and tail helps prepare a smooth place in the bottom of the stream for the female to deposit her eggs. Large males were seen out of the pond which had worn most of their fins away by beating the leaves and rocks to make a smooth place for Mrs. Fish.

### Capacity of the Hatchery.

Although the hatcheries have a capacity for hatching about 20,000,000 eggs each year, they are worked to about half their capacity. The state owns fifty-three acres at the hatcheries and the twenty-nine ponds



TANKS FOR THE FISH INDOORS.

tions of the state. Other states are more fortunate than Nebraska in that they convert the money received from these allowances into the fish and game fund and this gives a large revenue.

### Nebraska Streams Well Stocked.

The state fisheries have been of immense value to Nebraska, although in this state, where the fish are not netted, it is harder to show just what increase in fish has been brought about because of the hatcheries and the distribution of fish by the commissioner. Streams in central, eastern and southern Nebraska are thoroughly stocked with carp and catfish. Brook and rainbow trout are taken from practically all the streams in Antelope, Knox, Boyd, Holt, Rock, Koyah, Cherry, Sheridan, Dawes and Sioux counties, and are also found in a few streams in Custer and Deuel counties. Bass and crappie fishing at Cut Off lake has been better than ever during the past year, due largely to the work of the state fisheries. Splendid catches of bass have been made at Crystal Lake, Dakota county, during the last summer, while on the Elkhorn in Cuming, Madison, Antelope and Holt counties, bass fishing is reported as good and the same favorable reports come from Cedar river at Spaulding and Erbeon. Many Omaha anglers secured the limit allowed by law on bass from lakes in Cherry and Brown counties. When the state hatcheries were first established private lakes and ponds were stocked without cost all over the state, but in 1903 a charge was imposed for this service and since that time the fish sales have decreased. Nearly all the state hatcheries have discontinued the practice of stocking private waters and have turned this work over to privately owned hatch-

eries. Of the \$60 which the hatcheries have secured from the sale of fish during the last two years most has come from the sale of ornamental fish. No more interesting exhibit is seen at the Nebraska State fair than that of the state fisheries. It seems as though more people are interested in this exhibit than in any other one thing.

### Crappie the Most Prolific.

For the lakes and streams which go to make up the waterways of Nebraska no fish has shown more gratifying results than the crappie. Its propagation has been most successful. Wherever plants of this fish have been made the results have been most encouraging and they seem to be especially successful in the waters of the Elkhorn river and the lakes and sloughs along its borders. Crappie spawn largely on the clustering fibrous roots of the bull-rushes and willows and for this reason their eggs do not fall an easy prey to the carp and other spawn-eating fishes. They seem to thrive equally as well in muddy or in clear water, and every effort should be made to increase the production of this fish. Because of its nature it is the most suitable in many ways for Nebraska. It is a fish easily caught by the fisherman and no fish surpasses it very much as a table fish. The crappie is caught in large numbers at Cutoff lake and the number fishing for this variety is increasing every year. Crappies were only introduced into Nebraska twelve years ago and are widely distributed over the entire state, and are the most numerous game fish to be found along the sloughs of the Elkhorn. Crappies planted in the private lake of the Metzger farm near Cedar Creek had in-

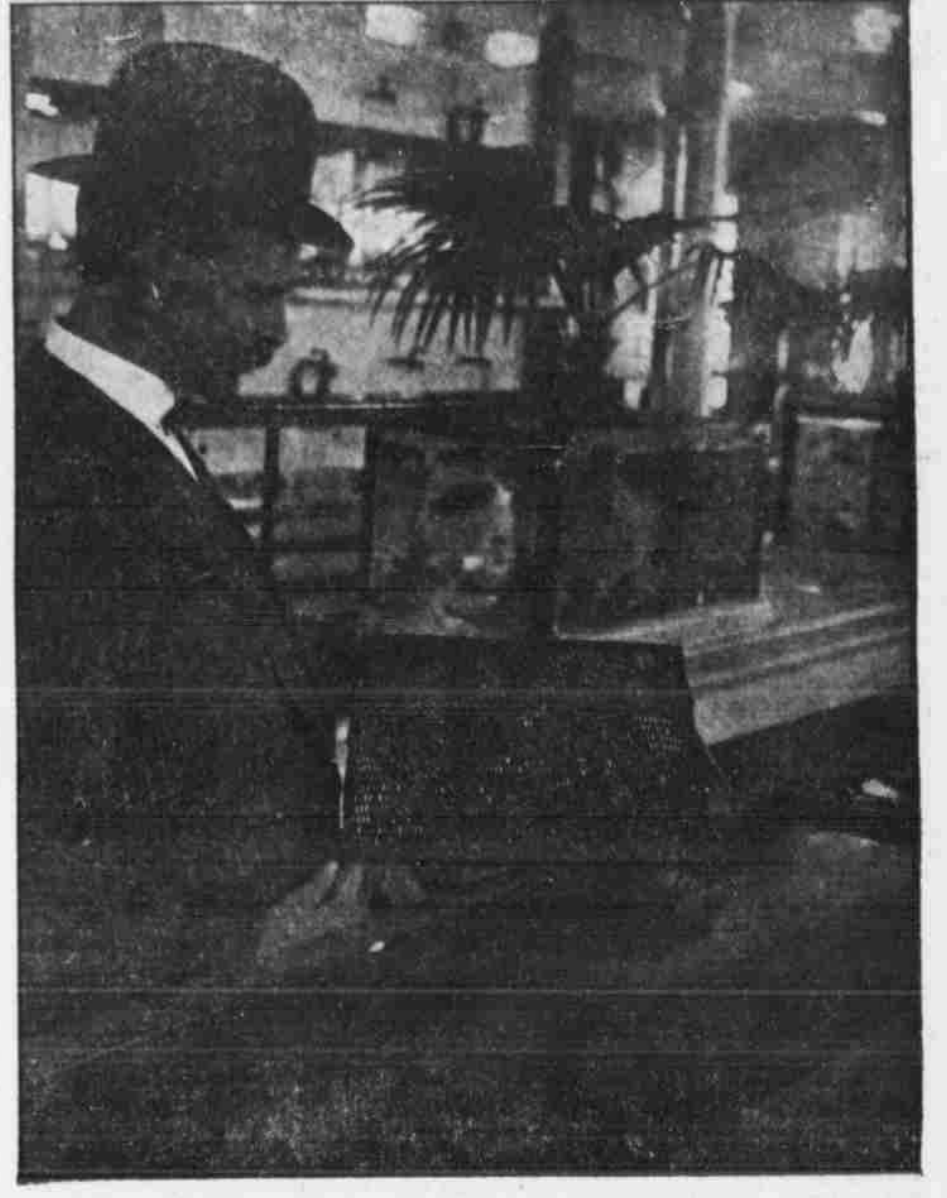
creased to such an extent that more than 1,700 adult fish were taken at a single haul of the net last July and numerous other instances of the same kind have been witnessed of the rapid increase of this fish.

### Great Demand for Black Bass.

As is the case in all states, the demand for black bass for stocking purposes far exceeds the supply. Bass are rapidly increasing in the sand hill lakes, especially in Brown and Cherry counties, but except in Cut Off lake and Crystal Lake in Dakota county, there is a marked decrease in eastern Nebraska, and they are liable to become extinct, according to Commissioner O'Brien. This is accounted for by the excess wash from the tilled lands and because of the sewage and refuse which is dumped into the streams, so the bass will not remain. The water in these smaller lakes is soiled to such an extent the eggs are buried by settling sediment, and this, coupled with the capacity of the spawning-catchers, is rapidly destroying the bass. These conditions do not exist in the western part of the state.

### Rainbow and Brook Trout.

Rainbow trout seem to be producing better results than any trout ever introduced into the waters of Nebraska. They have thrived in many spring streams where it seemed impossible for the brook trout to gain a foothold. The fisheries now have on hand the best supply of rainbow trout ever collected in this section of country, and with the eggs now collected and those which are yet to be stripped from the fish should have 400,000 eggs during February and March, or enough to supply all the demands from all sections of the state for



TRAY OF TROUT EGGS.

this fish, which in point of color and game-ness is the superior of all.

The fish commissioner is much encouraged from the good reports which continue to come in as to the success of the plants of brook trout which have been made in the tributaries of the Niobrara river and other spring streams in the northwestern part of the state. The stock of brook trout in the hatchery ponds has never recovered from depletion by disease, which began among them in 1894, and it has been found necessary to purchase 100,000 eyed eggs yearly and 150,000 have been bought for this year and are now hatching at the hatchery. This has been found necessary to properly keep up the supply.

In 1905 the hatcheries of Nebraska were allotted 150,000 green eggs of wall-eyed pike, collected at the spawning grounds on Saginaw bay, Michigan. The collecting crew seemed to have more interest in getting a large number of eggs than in getting quality, and as a result the percentage of impregnated or fertile eggs was very

low, cutting down the number planted that year in comparison with former years.

### Striped Perch and Rock Bass.

Little has been done with the striped perch for the last two years and the number planted has been disappointing to those who delight in that class of fish. An effort will be made to get in a new supply of adult perch at the hatcheries this spring. The perch is decreasing rapidly in the waters of Nebraska, which are infested with carp. They spawn their eggs in a ribbon-shaped gelatinous mass which the carp easily discover and greedily devour.

The commissioner has deemed it advisable to stop the propagation of rock bass. The table of distribution shows none of these little fish have been sent out for the last two years, and none have been planted at all. This decision was reached because of the slow growth of this fish and the lack of results from plants made in former years.

The state fisheries have made a hit all over the state with the channel catfish which have been planted. During the two years just past 24,085 catfish were collected from the Platte river and distributed over the waters of the state. The catfish were in splendid condition and as they are highly esteemed and recognized as one of the best native fish, their distribution has met with favor everywhere. Good results have been produced by the distribution of this class of fish.

Gold fish are grown at the state fisheries, and during the last two years over 4,000 were disposed of and a large supply is still on hand. These fish are sold in lots of one to 100, all for ornamental purposes. About two-thirds of the moneys realized from fish sales comes from this class of fish. They more than pay for their cost of production. The sun fish which the table shows the fish commissioner planted were secured in the sloughs near Cut Off lake and the remainder from Gibson lake, near Nebraska City. This fish is also a dainty table morsel, equal, in the opinion of many, to the bass or crappie. They thrive in waters where the bass are decreasing.

### Bullheads and German Carp.

During the last two years more bullheads have been propagated and distributed than during the previous ten years of the existence of the hatchery. A demand for this fish is increasing in many sections of the state, and anglers are no longer adapted to the better class of game fish. They thrive under all conditions and, while some may take an axe to kill them, they are still a very good fish and many which are caught around Omaha are put to good use. Deputy Commissioner Pierson often catches a handful and distributes to the hospitals of Omaha. It is the opinion of many that their propagation could be profitably increased.

While the German carp was propagated and distributed during the first years of the existence of the hatcheries, it has been deemed advisable to discontinue the practice. Carp is disliked by the lovers of the game fish. The streams and lakes where carp were planted became so overstocked to such an extent that the culture of carp was discontinued in 1896. They are the worst fish in these waters for destroying the eggs of game fish, and many wish they had never been planted. The opinion seems to prevail that a law should be passed permitting the carp to be netted from the lakes and, at the present high price which is being paid for fish, considerable revenue could be derived from this source.

Summary of distribution, 1906-07:

Brook Trout (fy).....	45,000
Brook Trout (2-year-old).....	45,000
Rainbow Trout (fy).....	34,500
Rainbow Trout (1-year-old).....	4,500
Pike (fy).....	14,500
Black Bass (fy).....	12,500
Black Bass (6 months old).....	24,250
Perch (fy).....	35,000
Perch (6 months old).....	10,000
Crappie (6 months old).....	16,500
Channel Fish (1-year-old).....	24,000
Yellow Bullheads (1-year-old).....	21,000
Sunfish (1-year-old).....	9,500
German Carp (6 months old).....	4,825
Gold Fish (6 to 12 months old).....	8,800
Perch (1-year-old).....	200
Bullheads (1-year-old).....	200

Grand total.....15,320,753  
This shows that 15,320,753 were planted in the fry stage and 155,285 were distributed when from 6 to 12 months old.

Omaha fishermen are beginning to awaken to the advantages right at their door, namely, at Cutoff lake, and the organization of the Omaha Rod and Gun club has been a great stimulus to the sport, and also served to protect the lake from illegal fishermen. Since the new law went into effect in 1901 there have been planted in Cutoff lake by the fish commissioner:

May 2, 1901, 5,000,000 pike fry, estimated.  
November 14, 1901, 1,000 black bass, 1,000 rock bass, 1,000 crappie, 1,000 striped perch, 1,000 channel catfish, all about 6 months old.  
June 6, 1906, 50,000 bass fry, estimated; 200 bass 1 year old.  
January 6, 1906, 2,000 bass, 5,000 sunfish, 2,000 crappie, 200 perch, netted from overflow water and transferred to Cutoff lake, May 15, 1906, 50,000 pike fry, estimated.  
October 18, 1906, 2,000 bass, 3,000 crappie, 6 months old.  
November 21, 1906, 2,000 crappie, 2,000 sunfish, 200 bass, ranging from 2 months to 5 years old, netted from Gibson lake, near Nebraska City, and transferred to Cutoff.



MAIN BUILDING OF STATE FISH HATCHERY.



WHERE THE TROUT LIVE AND BREED.

## Selections from the Story Teller's Collection

### Cranks at the White House.

THIS anecdote of Lincoln's administration was told several years ago by the late Secretary Hay at a dinner at the White House. As the private secretary of President Lincoln, it fell to Mr. Hay's lot to receive the cranks who daily called at the White House to see the President, and even at that time they were not few in number. One day a man who had been especially persistent in demanding to see the president was at last shown into the office of Mr. Lincoln's private secretary. Mr. Hay merely looked up from his desk and explained that the President was very much engaged and asked what the visitor's mission was.

### Geronimo as Soldier Saw Him.

Geronimo, the once bloodthirsty chief of the Apaches, now a wrinkled sage of 80, awaiting the end of his troublesome life in military custody at Fort Sill, Indian Territory, Mr. Hugh C. Weir, in Human Life for February, recalls General Miles' description of this famous old Indian as "one of the most remarkable men, white or red, I have ever met. His square chin I have only seen once duplicated, in the face of General Sherman." He always struck in the back and in the dark. Here is what the soldiers who followed his last war trail say of him: "If all of the redskins who have ever given the white man hell were bunched together, their combined devilry wouldn't equal the record of Geronimo. If ever Satan himself was in an Indian you would have found him in that man!"

### Cranks at the White House.

"How do you like the butter?" asked the host. "Excellent," was the reply. "I can fairly taste the rich, pure cream in it." "That's one on you," said his friend. "You have been eating oleo." Dr. Wiley smiled calmly as he replied: "Ah, that just goes to show that since the most expert of us can be so easily deceived there's all the more need of the strictest laws against impure foods."

### Clinging to Life.

Colonel Alexander K. McClure, the veteran editor, at a club dinner in Philadelphia a few days ago, delivered a short speech in which he urged his hearers not to fear the approach of old age. "Old age has nothing to fear," he said with a kindly smile. "When death calls me I shall not be afraid." Later in the evening Colonel McClure recalled an admission that Andrew Carnegie had made to him some time ago. He and the steel millionaire had been talking of life and death one evening after dinner. Mr. Carnegie said he would give \$500,000 to have a lease on life. "Two hundred million, either. I'd give it for ten years only." In telling the story Mr. McClure said: "Now, I don't think Carnegie is afraid to die. He simply clings to life. There's a difference in the two attitudes,

### Harriman's Good Side.

A friend of E. H. Harriman, pointing out some of the good qualities of the man who is made so conspicuous by the Interstate Commerce commission investigation, remarked: "He has given thousands of dollars for irrigation purposes, has voluntarily reduced passenger and freight rates in far western states, where the laws allow high charges. In the San Francisco disaster Harriman did probably more than any one person for the relief of the city. Besides throwing the road open and going to San Francisco personally, he gave \$200,000 in cash. This alone popularized him in California. He numbers among his friends now many of the most radical thinking men in public life in this country. He has expended money liberally to check the damage being caused by the Salton sea, and he has given the free use of his steamships to carry Red Cross food supplies to famine-stricken China."

### Lincoln's Honesty.

Lincoln was appointed to defend a man charged with murder, Monthly Justice Brewer in the Atlantic, recently, has written the case, and while the case was entirely circumstantial, the accused a stranger. Feeling was high against the friendless defendant. On the trial Lincoln drew from the witness full statements of what they saw and knew. There was no effort to confuse, no attempt to place before the jury the facts other than they were. In the argument, after calling attention to the fact that there was no direct testimony, Lincoln reviewed the circumstances, and after conceding that this and that seemed to point to defendant's guilt, closed by saying that he had reflected much on the case, and while he seemed probable that defendant was guilty, he was not sure, and, looking the jury straight in the face, said, "Are you?" The defendant was acquitted and afterward the real criminal was detected and punished. How different would have been the conduct of many lawyers! Some would have striven to lead the judge into technical errors, with a view to an appeal to a higher court. Others would have become hoarse in de-

### Crushes Fond Father's Hopes.

"Times are changed," said Mark Twain, speaking of Washington. "I doubt if nowadays a man of Washington's unswerving integrity would be able to get on." "A rich lawyer, after dinner the other night, went into his den for a smoke. He took down from his pipe rack a superb meerschaum, a Christmas present from his wife; but, alas, as he started to fill the pipe, it came apart in his hands. The bowl had been broken in two and then carelessly stuck together.

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