

Muskies being stripped — first eggs taken in Iowa

muskies in iowa?

Wally Jorgensen
Hatchery Manager

Terry Jennings
Hatchery Biologist

In the past, to catch the elusive muskellunge Iowa anglers had to spend hours fishing one of the isolated lakes of northern Minnesota or northern Wisconsin. To many Iowa fishermen the dream of hooking one of these vicious fighting trophies could never become a reality because of personal travel time or monetary restrictions. But due to a limited stocking program in Iowa, trophy sized muskies are now present in Clear Lake and West Okoboji. For some, the once impossible dream of hooking a muskie is now possible.

During the late 1950's, in response to numerous angler inquiries, the Fisheries Section of the Iowa Conservation Commission investigated the possibility of introducing muskies into Iowa waters. Resulting from these investigations, in 1960 a muskellunge stocking program was initiated. Until 1970, when Rathbun Reservoir was stocked, the muskie program was restricted to Clear Lake and West Okoboji.

Muskies will not be commonly caught by Iowa anglers, but they will be highly prized whether caught incidental to other fishing or while angling specifically for them.

Muskellunge reproduction begins when the water temperature reaches 54°F, usually late April in northern Iowa. They prefer to spawn in shallow marshy areas connected to larger lakes where the adhesive eggs are scattered over submergent vegetation.

During the six to ten days required for yolk sac absorption, the fry are inactive and remain attached to submergent vegetation. After the yolk sac has disappeared, the fry become active and begin searching for zooplankton. A critical period in the life of all muskies occurs during the initial feeding period. If zooplankton of an edible size is not abundant, the fry will starve to death. Zooplankton is a primary source of food until the fish attains two inches total length, normally 15 to 20 days. During this stage, muskies are vulnerable to predation by other fish — particularly fingerling northern pike. Muskies longer than two inches are primarily carnivorous, feeding on minnow fry or any other live organism available. The transition period between plankton and predacious feeding is another critical period in the life of a muskie. If ample quantities of a suitable forage are not available

cannibalism and starvation are common.

Muskellunge is the fastest growing member of the pike family. In a favorable environment this species will attain a length of 12 inches at age one and 20 inches at age two. Growth of male and female is similar until sexual maturity is attained then females grow faster. Males reach sexual maturity at age four and about 30 inches, whereas females reach sexual maturity at age five and approximately 34 inches.

The life span (10-15 years) and the rapid growth rate for this species are indicative that fish larger than the present state record of 23 pounds and two ounces are present.

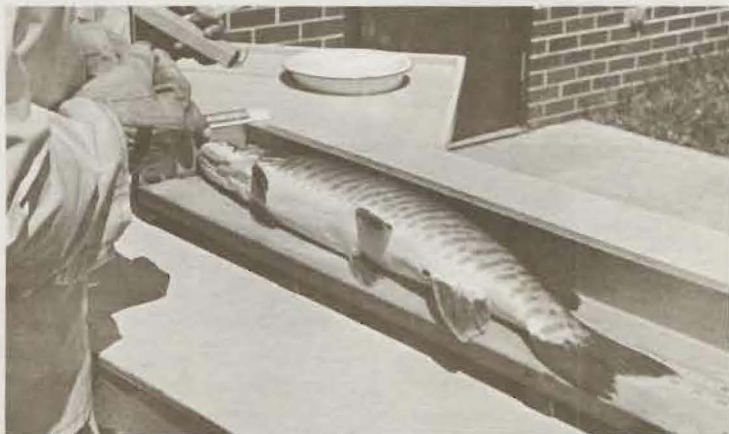
Sources of Fish for Iowa's Muskie Program

Since Iowa's muskie program began it has been dependent on other states for a supply of eggs. This has been a major factor controlling the number of fish stocked (Table 1).

Eggs are not readily available from states artificially propagating this species because muskies are valuable to their own state.



A mature muskie taken from Clear Lake for stripping



After stripping, fish are measured and tagged, then released.

Year	Clear Lake	West Okoboji	Rathbun Reservoir
1960	40	40	
1962	41	41	
1965	200	200	
1967	133	134	
1968	376	401	
1969	75	77	
1970	129	231	35,000
1971	326	553	1,010

Eggs, normally obtained from Wisconsin, New York, or Pennsylvania, are shipped to the Lansing, Iowa fish hatchery and hatched at this station. From Lansing they are distributed in oxygenated plastic bags either to Rathbun Reservoir or to rearing facilities at Decorah, Clear Lake, and Spirit Lake. At the rearing stations muskies are grown to fingerling size before being planted into the lakes.

First Eggs Taken in Iowa

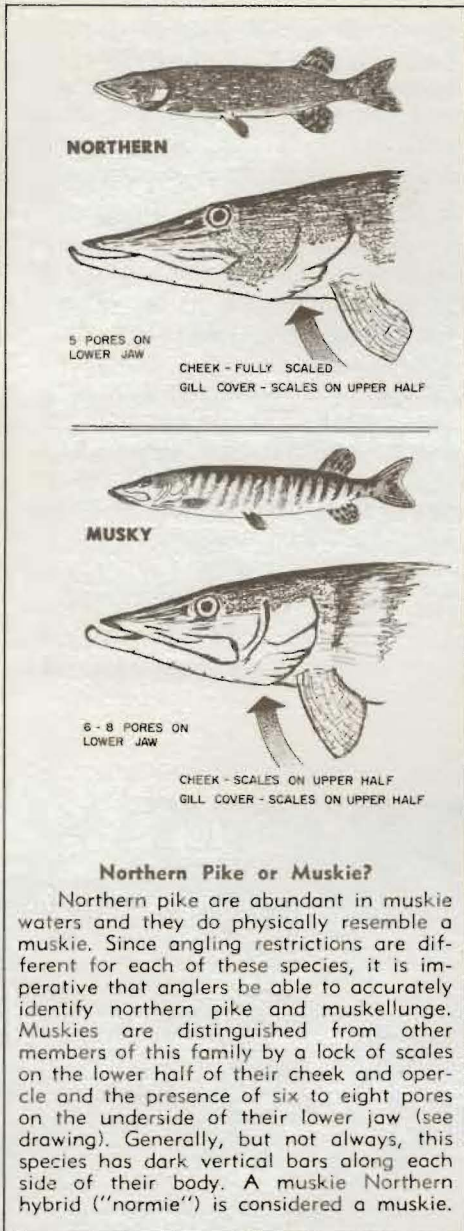
This year a limited quantity of eggs were collected from adult muskies at both Clear Lake and West Okoboji. Although the number of fry obtained was not suf-

ficient to maintain a desirable stocking program, it is significant that this was the first year Iowa has produced its own fry. Annually the number of sexually mature muskies in Clear Lake and West Okoboji is expected to increase. Thus these lakes should supply a major portion of the fish needed to maintain the present program. Rathbun Reservoir is also expected to be a major source by 1975. If this expectation becomes a reality and if Clear Lake and West Okoboji muskie populations increase as expected, the muskie program could be expanded to include other suitable lakes.

Another source of muskies for West Okoboji has been from a private sportsman's club. Musky Inc., a group of sportsmen formed this club with the intent of stocking as many fingerling muskie as their funds will allow. All muskies stocked by the club have been fin-clipped to distinguish them from state planted fish and to evaluate the club's effort.

Management

Techniques for managing muskies vary depending on the type of water. At Clear Lake and West Okoboji muskie populations have been established in spite of dense populations of other species. These populations were estab-



Clear Lake hatchery — where first muskie eggs were taken in Iowa.

lished by stocking large fingerlings. Muskie populations in each lake have matured so that natural reproduction can now be expected. However, the competing northern pike in each lake will probably suppress natural muskie reproduction. So, the continuation or expansion of this program depends on the success of rearing sufficient numbers of fish to more than offset annual mortality.

Muskie management at Rathbun has been somewhat different because this was a newly impounded reservoir and the species of fish could be controlled. In 1970, with the expectation of es-

tablishing a reproducing muskie population, a large number of muskie fry were planted. The competitive northern pike has not been stocked into the reservoir.

Since muskellunge are trophy fish and never become as densely populated as northern pike or walleye, restrictive harvest regulations are a beneficial management tool. Statewide regulations for the 1972-73 fishing season permits a daily catch and a possession limit of one provided the fish is at least 30 inches long. The season is open from April 29 through February 15. In order to protect small muskellunge and to elimin-

ate the need to accurately identify "normies" (muskie-northern pike hybrids) from muskies, angling regulations consider hybrids to be muskies. These restrictive regulations are necessary to provide a trophy fish, maintain a harvestable population, and to distribute the take to a maximum number of anglers.

Because of the low density of legal-sized fish, few anglers have specifically sought this species. But with recent increases in stocking rates, the chances of a dedicated Iowa muskie fisherman fulfilling his dream in his home state are rapidly increasing. ☆

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