

Muskellunge (*Esox masquinongy*)



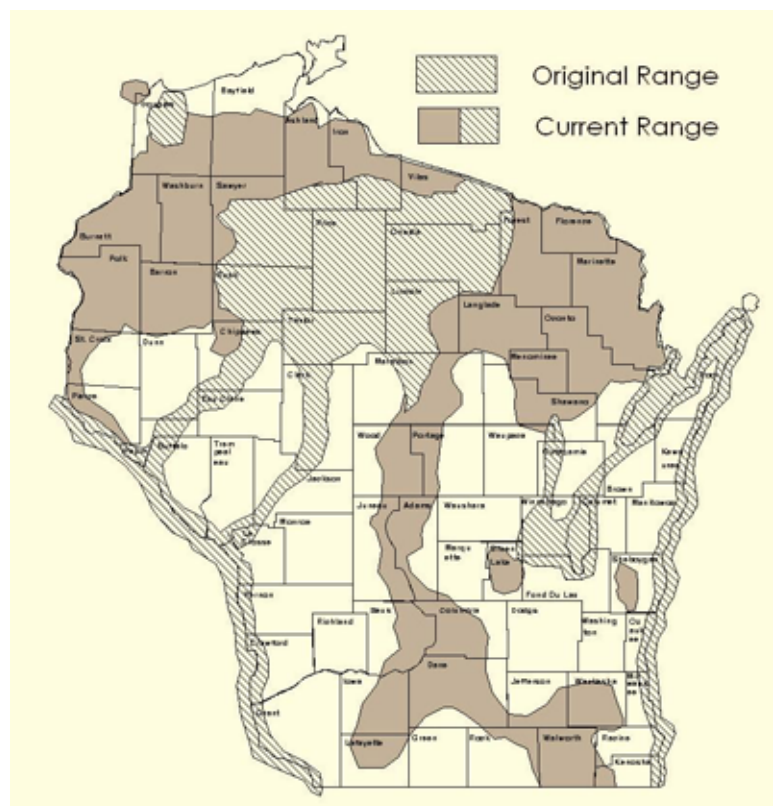
Illustration by Virgil Beck

Common Names: Muskellunge, musky, muskie, 'lunge, northern muskellunge, maskinonge, tiger muskellunge (used for the muskellunge/northern pike hybrid).

Meet the muskellunge -- a lean, mean fightin' machine that is arguably the most sought-after trophy in Wisconsin. Named the official state fish in 1955, this ferocious member of the pike family is often implicated in fish stories as "the one that got away." The muskellunge plays a starring role in Wisconsin's tourism industry. Wisconsin offers some of the best muskellunge fishing on the planet; yet it can still take the average angler more than 50 hours to catch a legal fish. Millions of dollars are spent at lodges, resorts, restaurants, service stations and sporting goods stores around the state every year by those in pursuit of this elusive fish.

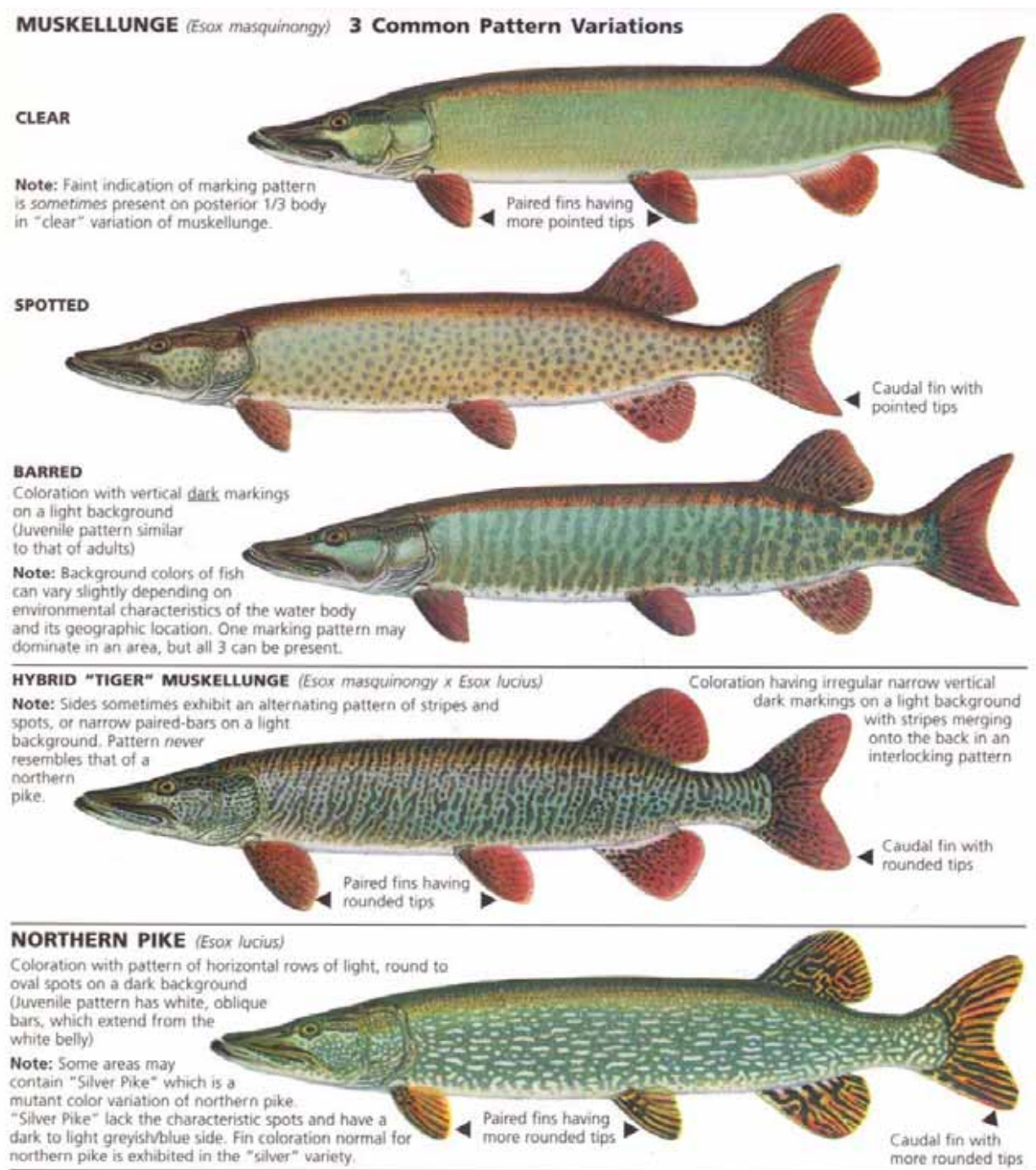
Why do some anglers forsake all other fish for a rendezvous with the musky? Because having a one on the end of the line is the aquatic equivalent of having a tiger by the tail. The muskellunge will confound the angler with its aerial acrobatics, one moment leaping completely out of the water, trying to shake the hook, the next lying on the bottom like an unyielding snag. These famous fighters will drag the line underneath the boat or wrap it around the nearest submerged stump. They crack rods, strip reels, bend hooks, mutilate baits and do whatever else they can to escape. Hooking a muskellunge is a first class fresh-water thrill no angler will soon forget.

Distribution: The lakes and rivers of Wisconsin's north are the natural home for muskellunge, but stocking has expanded the muskellunge's original range into the southern part of the state. The heaviest concentration of muskellunge is found in the headwaters of the Chippewa, Flambeau and the Wisconsin River systems. More than 660 lakes and 48 streams in 53 counties have muskellunge populations abundant enough for fishing.



Musky populations usually consist of about one adult for every two or three acres; some natural lakes are also stocked to supplement populations and provide more consistent fishing.

Description: Muskellunge, the largest member of the Pike Family, are long, torpedo-shaped fish with dorsal and anal fins set close to the tail (caudal fin). The enormous mouth is filled with long, pointed teeth. Markings and coloration vary from lake to lake, and fish-to-fish, but the species is usually recognized by vertical bars or spots on a lighter colored background (versus northern pike, which have light spots on a dark background). The back, head and upper sides are iridescent green-gold to light brown with cream-colored or pearly-white bellies. The fins are pointed and usually rust colored (northern pike and hybrids have rounded fins). The lower gill cover and cheek of muskellunge lack scales (northern pike cheeks are fully scaled; hybrid cheeks are fully or 2/3 scaled).



Habits and Habitat: The muskellunge is usually a solitary fish with a relatively small home range, but they are known to roam more during spawning and when food is in short supply. They prosper in lakes with a wide range of depths and large beds of aquatic plants, such as pond weeds (“cabbage”), bulrushes, arrowleaf, pickerel weed, and water lilies, and medium to large rivers with deep pools and areas of slow-moving water. Muskies are also found in clear, deep lakes with few weeds; larger lakes tend to produce larger muskellunge. Most comfortable in cool water temperatures (33 to 78 degrees Fahrenheit), the muskellunge can briefly withstand temperatures up to 90 degrees Fahrenheit.

Lurking around rock bars, stumps, or rocky ledges, or hiding amongst the broad-leaved pond weeds or other vegetation, the sedentary muskellunge waits patiently for the attack. When a fish swims by, the muskellunge strikes swiftly, impaling its prey on large canines and then swallowing it head first. Any species will do, from minnow to gamefish to other muskellunge, with suckers, perch or cisco being particular favorites. Muskrats, ducks, mice and frogs also appear from time-to-time in the stomachs of muskellunge. There is a direct relationship between the size of the muskellunge and the size of their food. Because their stomachs are so large, muskellunge can consume prey up to 2/3 their own body length (e.g., a 50” musky could handle a 33” meal!!). This superlative predator relies heavily on sight to capture prey. Muskellunge may have more difficulty feeding at night or in waters with higher turbidity (murkiness caused by solids suspended in the water).



Life Cycle: Muskellunge spawn from mid-April to late May, when the water temperature rises from 50 to 60 F. The males and females seek out warm, shallow areas, swimming side-by-side over several hundred yards of shoreline, depositing eggs and milt simultaneously at irregular intervals over the bottom. Females can lay between 20,000 and 200,000 eggs a year, with larger females producing greater numbers of larger eggs. Spawning seldom lasts more than a week. When it’s over, the adults leave the spawning grounds, providing no parental care to the eggs or young. Muskellunge return to the same area each year to spawn.

The translucent, amber-colored eggs hatch within about two weeks, and the newly hatched “fry” begin feeding on zooplankton (microscopic aquatic animals) the day after they hatch; after a few more days, they switch to eating live fish. Young muskellunge are eaten by northern pike, bass, yellow perch, sunfish, certain aquatic insects and occasionally, other muskellunge. The “fingerlings” will reach from 7 to 13 inches by summer’s end. They continue to grow rapidly during the first five years of life; males mature in four to five years, at 28 to 31 inches and females mature in five to seven years, at 30 to 36 inches. Adult muskies have no aquatic predators, but may fall victim to disease, large birds of prey, or people. Muskellunge can live to about 18 years old, but fish up to 30 years of age have been documented.

Fishing for Muskellunge: Patience is probably the most important item in a musky angler’s tackle box. Other elements of traditional musky fishing gear include a medium-heavy action 7’ or longer casting rod; substantial level-wind bait casting reel; heavy (50 to 80#) braided spectra fishing line; and a variety of large lures, such as buck-tails, spinner-baits, jerk-baits, diving crank-baits, and large spoons. During the fall, some anglers also cast or drift with live bait – usually a white sucker 10–14 inches long.



Muskies lurk near drop-offs, rock or sand bars, weed edges, in weed-covered bays, or in shady areas along shore. Casting around these areas will eventually reward the persistent angler. Muskies will often “show themselves” by following a lure back to the boat, without striking. Experienced anglers employ a figure-8 maneuver with the lure at boat-side in an attempt to provoke a strike. Muskellunge generally hit baits that have considerable “action”, so keep the lure moving and don’t let it rest. When a muskellunge does attack, set the hook immediately and firmly, keeping the line tight.

Most Wisconsin anglers indulge in muskellunge mania through a practice called “catch and release.” Simply put, you catch the fish and let it go to be caught another day by another fortunate angler. You’ll be able to enjoy

having hooking Wisconsin's most fearsome fish and your fishing companion can take a quick snapshot to document the best "believe it or not" fish story you'll ever tell.

To "catch and release", reel the fish up next to the boat and remove the hooks quickly with long-nosed pliers, or simply cut the hooks with a heavy wire cutter. If you prefer, scoop the fish into a large landing net and leave it in the water next to the boat. Remove the hooks, quickly snap a photo, and slip the fish back into the water.

While they are rarely targeted for human consumption, these long-lived, slow-growing, top-of-the-line predators can accumulate contaminants such as mercury or PCBs (polychlorinated biphenyls). So, WDNR recommends that women of childbearing age and children under 15 do not eat muskies. Men (and older women) should only eat 1 meal per month, (and no more than 6 meals per year from Green Bay).



Management Practices: There are three primary tools used to manage muskellunge in Wisconsin: Protection of habitat and water quality; stocking; and angling regulations (<http://dnr.wi.gov/fish/musky/>).

Maintaining good habitat and water quality is the first step in any fishery management program. Without good habitat, other management actions would be futile. Habitat protection for muskellunge is critical if we are to maintain natural reproduction, allow young muskellunge to survive their early life stages, and to support healthy aquatic communities that musky depend on throughout their lives. Habitat protection is an ongoing struggle in the face of increasing lakeshore development and wetland encroachment. Habitat protection measures include enforcement of shoreline, wetland, and water quality regulations; purchasing and preserving important shorelands and wetlands; and educating property owners about good shore-land management.

Much of the success of Wisconsin's muskellunge management program can be credited to an excellent propagation and stocking program. Stocking has been used to establish new fisheries, but most stocking is done to supplement fisheries where natural reproduction, for various reasons, may be inadequate or nonexistent. State hatcheries produce large muskellunge fingerlings from eggs which are collected each spring from wild fish. The cost to produce and stock large musky fingerlings is high compared to other species, and the relatively few fish

that survive to reach large size are worth considerably more. The cost, however, can be justified in terms of the total value of the recreation and benefits to the economy provided by the fishery. Most anglers who catch a musky know that the experience is not something that can be measured in dollars and cents! Look up stocked waters http://infotrek.er.usgs.gov/doc/wdnr_biology/Public_Stocking/StateMapHotspotsAllYears.htm .

Angling regulations, such as size limits, bag limits, and closed seasons are important, cost-effective management tools. Regulations are designed to allow sufficient numbers of muskellunge to reach a size that anglers want to catch. In addition, effective regulations can benefit natural reproduction by assuring that adequate numbers of muskellunge survive to maturity and preferably spawn more than once.

Although the muskellunge has long been considered a trophy fish, in more recent years, musky fishing has evolved into a sport with a much greater emphasis on quality-sized fish, rather than just quantity. Catch-and-release is now widely practiced among dedicated musky anglers, and regulations have become more restrictive in Wisconsin, as well as in neighboring states and Canada. In 2012, the muskellunge length limit was set at 40 inches for most Wisconsin waters, but several waters have more restrictive regulations, such as 45-inch, and even 50-inch minimum length limits, with one lake catch-and-release-only, all in an effort to meet the desires of trophy musky hunters.



In this era of widespread catch-and-release, some argue that stricter regulations are not needed because voluntary release is doing enough for the fishery. Catch-and-release has definitely had positive impacts; however, even a small amount of harvest can prevent many waters from reaching their potential. A combination of effective regulations and voluntary catch-and-release of large muskellunge is the best way to realize the full potential of our waters to produce trophy muskellunge.

For information on bag limits, legal size and seasons for muskellunge, you can download a copy of Wisconsin's fishing regulations (http://dnr.wi.gov/topic/fishing/regulations_index.html) or pick up a copy at the nearest DNR office.

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original by Terrance Dehring and Charles C. Krueger



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