

Fish Habitat Factsheet #4

Locating Musky Habitat on Your Property

Landowners can play a vital role in the better management of fisheries by helping to locate and identify fish habitat on their properties. A basic understanding of the habitat needs of a particular species and where and when to look for the fish is all you need. A notebook, thermometer, hip boots and small boat are helpful.



Typical submerged vegetation preferred by musky. Photo: John Farrell

The Most Preferred Spawning Habitat of Musky

- Spawning often occurs a few weeks after Northern Pike spawning; in the St. Lawrence River, peak spawning occurs early May (50-55°F) to mid-June (44-63°F), sometimes late May-late June (55-65°F), generally two weeks later than Northern pike
- Open and backwaters of coastal bays and wetlands
- Variable bottom cover, including weed beds with new growth of aquatic vegetation
- Habitats can overlap that of Northern pike. Musky prefer shorter-stemmed plant species
- Submerged woody debris and dead vegetation covering mucky, sandy and silt-covered bottom areas

Musky Nursery Habitat

- Shallow (less than 3.5 ft deep) weedy areas of bays, rocky points, and sand bars in or near spawning habitats
- Mixed emergent, floating and submerged aquatic plants
- Some overlap with Northern pike nursery; musky are found closer to surface

Above: Young musky in preferred aquatic vegetation; right: Sand bar in a bay with good potential for musky spawning habitat improvement. Photos: John Farrell



Risks to Musky Habitat

- Deforestation, outdated farming practices, stream bank erosion that increases nutrient flows and reduces suitable aquatic vegetation that is replaced with poorer quality vegetation
- Water level regulation that lowers volume/duration of nearshore spring flooding
- Unplanned shoreline development that destroys nursery habitat
- Poorly designed culverts that reduce access between open waters and backwater spawning areas
- Careless use of herbicides and weed harvesting that destroys aquatic vegetation in spawning areas

Tips for Improving Musky Habitats

In tributaries and streams: reduce sedimentation

- Prevent erosion along stream banks: plant vegetation along banks
- Discourage agricultural stream crossings
- Place silt screens along banks in agricultural areas
- Reduce or eliminate development of stream banks

Along shorelines of open waters and main river channels to improve egg hatching/young fish survival:

- Establish seasonal refuge areas to restrict human access to musky spawning and nursery areas
- Restore natural water level fluctuations in spawning areas by intentional water drawdown and spring flooding by water control devices
- Reduce/limit development in nearshore areas
- Encourage safe use of herbicides
- Restrict dredging and weed harvesting operations during critical times of year important for musky spawning: early May (50-55°F) to late June (55-65°F)

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