

Sexing and Staging Lake Sturgeon Winter Spear Harvest – Winnebago System

Fisheries staff of the Wisconsin Department of Natural Resources have been determining the sex and maturity stage of lake sturgeon harvested during the annual February spearing season on Lake Winnebago and the Upriver Lakes since 1991. The sex and maturity data are critical to effective management of the harvest and the fishery. This condensed 2 page sturgeon “gonad-guide” gives Winnebago sturgeon spearers a quick reference showing the appearance of the various stages of maturity of gonads of lake sturgeon seen in the winter. Not all stages are present in the winter. A complete field guide of stages of lake sturgeon maturity can be purchased from Sturgeon for Tomorrow for \$20 by contacting Dick Braasch, SFT West Central Chapter, Oshkosh, at 920-231-4708.

Male lake sturgeon winter stages of gonadal development

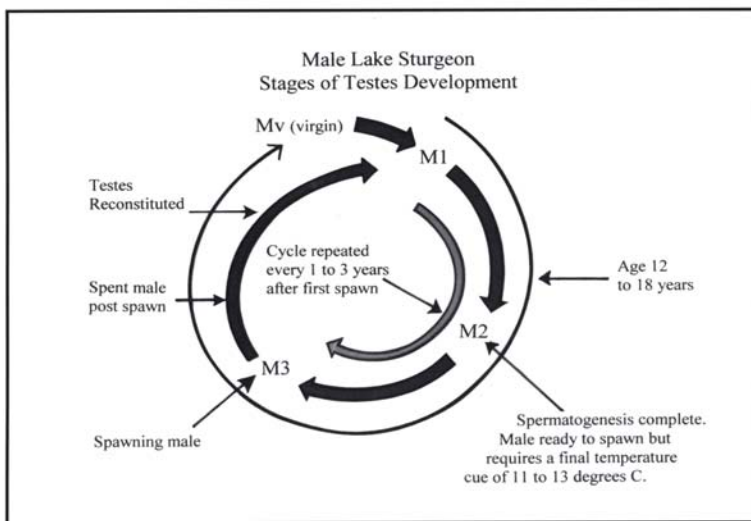



Fig. 43. Male lake sturgeon stages of testes development. Males first mature and spawn at age 12-18. After their first spawn, males will subsequently have a testicular cycle of approximately 1 to 3 years. Following spawning and reconstitution of the testes, males start at an M1 stage to begin their next reproductive cycle.



**Mv
Virgin Male**

A male that has not started sexual development yet



M1 Developing Male

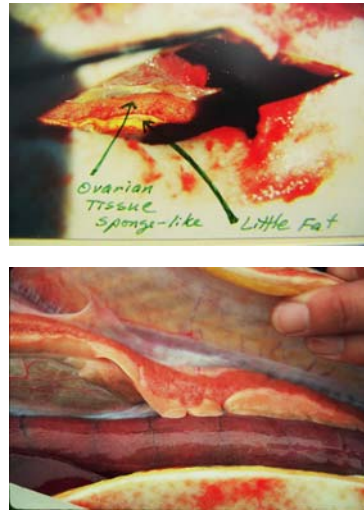
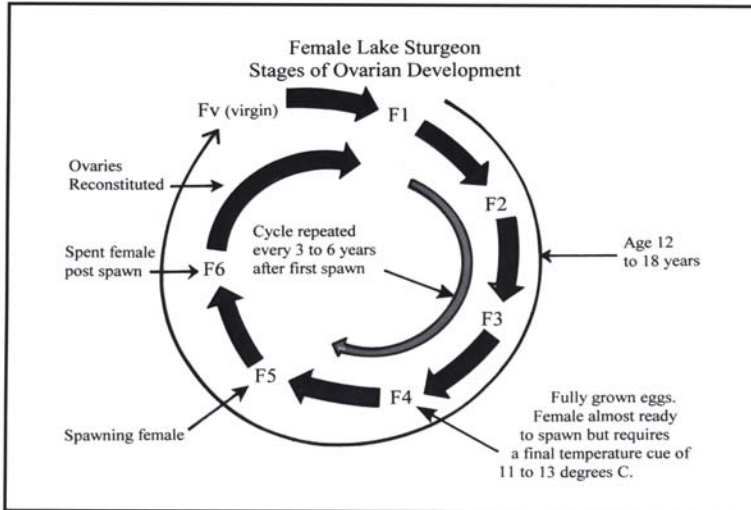
A male that has just started sexual development and males that are in between spawning cycles



M2 Fully Developed Male

A male that has fully developed testes and in his spawning year

Female lake sturgeon winter stages of gonadal development



Fv Virgin Female

A female that has not started sexual development yet

Fig. 8. Female lake sturgeon – stages of ovarian development. Typically females first mature and spawn at age 20-24. After their first spawn, females will have an ovarian cycle of approximately 3 to 6 years. Following spawning and reconstitution of the ovaries, females start again in an F1 stage to begin their next reproductive cycle.

<p><i>Ovarian Tissue - Brain-like</i></p>		<p>F1 Developing Female (“white egg” fish)</p> <p><i>A female that has just started sexual development and females that are in between spawning cycles</i></p>
		<p>F2 Developing Female (“yellow egg” fish)</p> <p><i>A female that has just started egg yolk development and (from February) is 14 months from spawning</i></p>
		<p>F4 Fully Developed Female (“black egg” fish)</p> <p><i>A female that has full egg development and (from February) is 2 months from spawning</i></p>
		<p>F6 Spent Female (“pepper egg” fish)</p> <p><i>A female that spawned last year and has some residual eggs being resorbed (“pepper” spots) in flaccid ovarian tissue</i></p>