



Muskellunge Population Assessment

Cooperative Fisheries Research on Lake Vermilion

DNR is conducting a muskie population assessment on Lake Vermilion that seeks volunteer angler participation with sample collections. The assessment will provide critical information for muskie management in Lake Vermilion. Thank you for participating!

Project Objective

1. Estimate the number of adult muskies in Lake Vermilion.
2. Greater understanding of muskie movement and behavior.

Scale Collection Instructions:

1. Prior to landing a muskie, have a small knife and the collection envelope readily available.
2. If a fishing partner is available, have them assist by holding the muskie securely in the landing net or on a measuring board while you collect scales. If fishing alone, place the fish on a measuring board for collection. Minimize air exposure and handling time whenever possible.
3. With the tip of a sharp knife, scrape anywhere along the side or back of the fish, moving from head to tail, collecting approx 4 to 6 scales. DO NOT scrape against the "grain". You will need to apply firm pressure.
4. With scales on the knife blade, place the tip of your knife into the open scale envelope, and wipe off the blade against the inside of the envelope. The scales should stick to the envelope. There should be some "dirty" tissue at the base of each scale. This is the critical tissue that carries the DNA. DO NOT clean the excess slime, water, etc. from the scales.
5. Close the envelope and enter all the required information requested in pencil. Also, write your name, phone number, and email on the back of the envelope.
6. Clean knife prior to collecting scales from a different fish and only place scales from one fish per envelope.
7. At the end of the day or within 1 week, return envelopes to designated locations. Let the scales air dry, inside the envelope, before long-term storage (>1 week). DO NOT store in sealed containers or plastic bags unless they are thoroughly dried. NEVER remove the scales from the envelopes. DO NOT leave samples in direct sunlight.

Return Collection Envelopes to:

Minnesota Department of Natural Resources
Tower Area Fisheries Office
650 Highway 169
Tower, MN 55790



You can also pick up/drop off individual collection envelopes at Everett Bay Lodge, Glenwood Lodge, Muskego Point Resort, Retreat Lodge, Spring Bay Resort, and Vermilion Dam Lodge, all located on Lake Vermilion.

For further information contact:
218-300-7802 | Tower.Fisheries@state.mn.us

Scale Collection Tips:

- With the fish still in the landing net or on a measuring board, collect 4-6 scales using a pocket knife from anywhere along the side or back of the fish. Scrape firmly in a head-to-tail direction to "pull" scales out with the knife tip.
- DO NOT clean the scales. The "dirty" material is the genetic tissue needed to collect DNA.
- Place scales into collection envelope. In pencil, fill out the **Locality (bay fish was caught in), Date, Length, and Collector (your name)** on each collection envelope. One fish per envelope.*
- Leave scales in envelope and let them air dry completely before storage. DO NOT store in a plastic bag.
- Out fishing? You can pick up and drop off your collection envelopes at Everett Bay Lodge, Glenwood Lodge, Muskego Point Resort, Retreat Lodge, Spring Bay Resort, Vermilion Dam Lodge, or the DNR Tower Area office.

Thank you for participating!



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Collect 4 - 6 Scales



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SAMPLE CARD

Minnesota Department of Natural Resources
Section of Fisheries NA-01471-01 (097)
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Species Musky Ser No. _____
Locality Pike Bay Date 7-4-19
Length 50.25" Weight _____
Sex _____ State of Origin _____
Gear _____ Collector John Doe
Annual _____ Cond _____

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