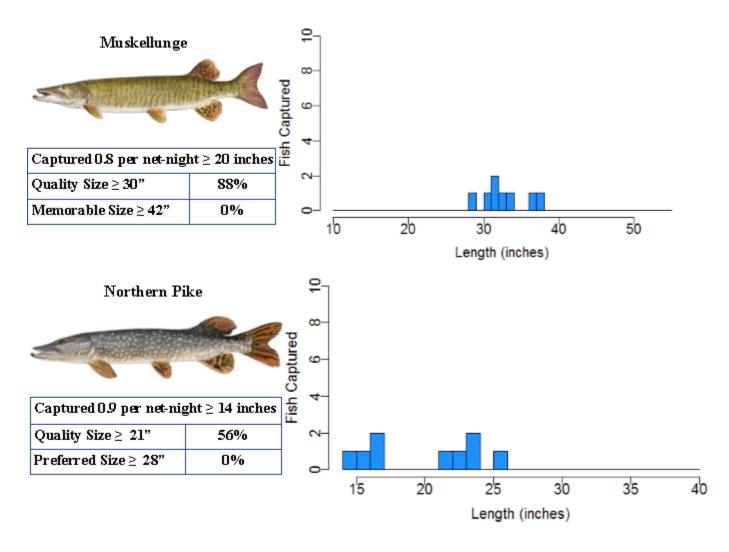
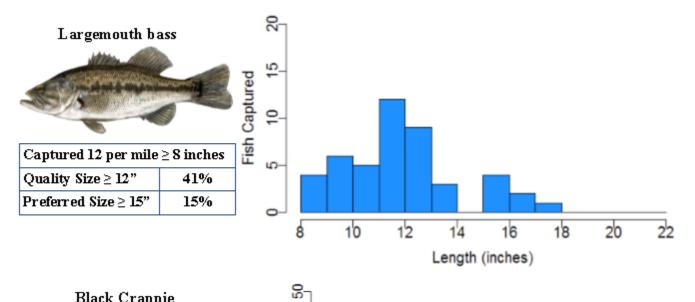


## Spring Fisheries Survey Summary Mud/Callahan Lake, Sawyer County, 2019

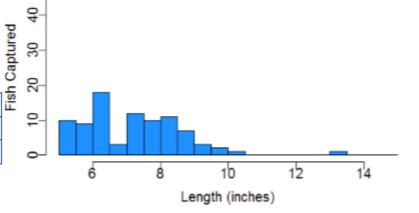
The Hayward DNR Fisheries Management Team conducted a fyke netting survey on Mud and Callahan lakes (known as Mud/Callahan) from May 2-3, 2019 to assess the muskellunge, northern pike, and black crappie populations in the lake. Five nets were set overnight for two nights which resulted in 10 total net-nights of effort. An electrofishing survey conducted on June 11, 2019 documented the status of bluegill, largemouth bass, and non-game. Four miles of shoreline were shocked. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society.





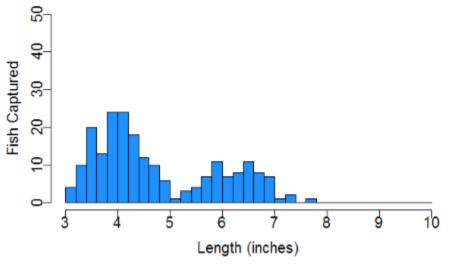


Captured 9 per net-night $\geq 5$ inches		
Quality Size≥8"	29%	
Proformed Size > 10"	2.0%	





Captured 212 per mile	ile≥3 inches	
Quality Size≥6"	21%	
Preferred Size ≥ 8"	0%	



## **Summary of Results**

Mud/Callahan Lake has unique habitat composition that includes very dark water, expansive bogs, limited aquatic plant rooting depth, abundant nearshore woody habitat, and an inlet and outlet over a dam that regulates water level of this impoundment. This habitat has historically supported a gamefish community that was primarily made up of muskellunge and largemouth bass. The 2019 DNR survey efforts of the lake found some changes to the fish community.

Muskellunge are still present in Mud/Callahan Lake and maintain a relative density that remains fairly high for the area. However, previous surveys have found considerably higher relative densities of muskellunge (2.5 per net night in 2014). The pattern of declining muskellunge catch in surveys has been mirrored in other lakes in the same drainage, including the Tiger Cat Chain and the Spider Chain. The commonality among these lakes is the relatively recent discovery of northern pike. Pike and muskellunge are thought to occupy a relatively similar habitat niche, and presence of pike in these native muskellunge lakes may be having negative impacts on muskellunge abundance. Muskellunge size in 2019 was largely similar to past surveys of Mud/Callahan Lake, with most "muskies" in the 30-40 inch range and fish larger than that being uncommon.

Northern pike are not exceptionally abundant in Mud/Callahan Lake, and may never be so given the dark water and limited aquatic plant growth. However, pike outnumbered muskellunge for the first time in our 2019 survey. Anglers are encouraged to harvest northern pike caught in Mud/Callahan,but should be aware that the statewide daily bag limit of five pike per angler still applies.

Largemouth bass were captured at a higher rate in 2019 (12 per mile of shocking) than in 2014 (8 per mile of shocking), but size was not exceptional. A majority of largemouth captured were less than 12 inches in length. Still, Mud/Callahan has been known to occasionally produce very large bass, and a few high-quality fish were observed in this survey.

Angling opportunities for panfish are limited in Mud/Callahan. Crappie were moderately abundant, but few were over 8 inches. Bluegill were abundant and small, which has been characteristic of that population over time. Interestingly, all lakes in the North Fork of the Chief River drainage (including Spider and Tiger Cat) have generally poor panfish size.



Northern pike are becoming an increasingly abundant component of the Mud/Callahan fishery. Photo by Max Wolter.

Report by Max Wolter – Fisheries Biologist, Sawyer County Survey conducted by Max Wolter, Scott Braden (Fisheries Technician), and Evan Sniadajewski (Fisheries Technician) Special thanks to volunteer Jake McCusker.

Reviewed and Approved by