



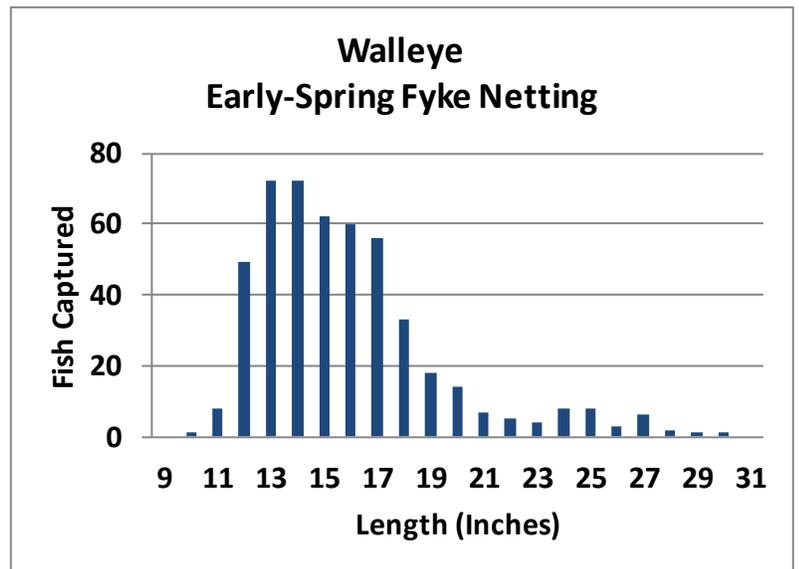
Early-Spring Fyke Netting Survey Summary Gile Flowage, Iron County, 2012

The Mercer DNR Fisheries Management Team conducted a fyke netting survey on the Gile Flowage during March 21-24 and April 2-3, 2012 as part of our baseline monitoring program. Primary target species were walleye and northern pike. A total of 20 net-nights of effort were expended (one net set overnight equates to one net-night of effort). Walleye were targeted specifically with 13 net-nights of effort, while the other 7 net-nights of effort targeted northern pike. 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.

Walleye



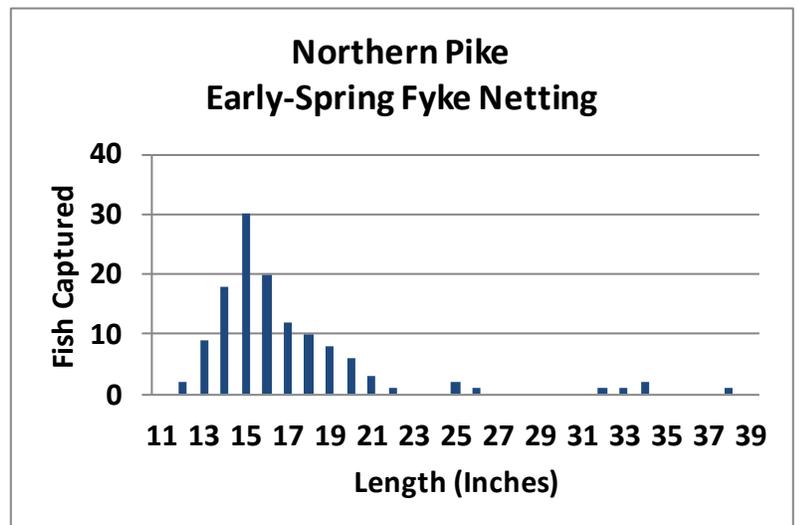
Captured 37.7 per net-night $\geq 10''$	
Quality Size $\geq 15''$	59%
Preferred Size $\geq 20''$	12%
Memorable Size $\geq 25''$	4%



Northern Pike



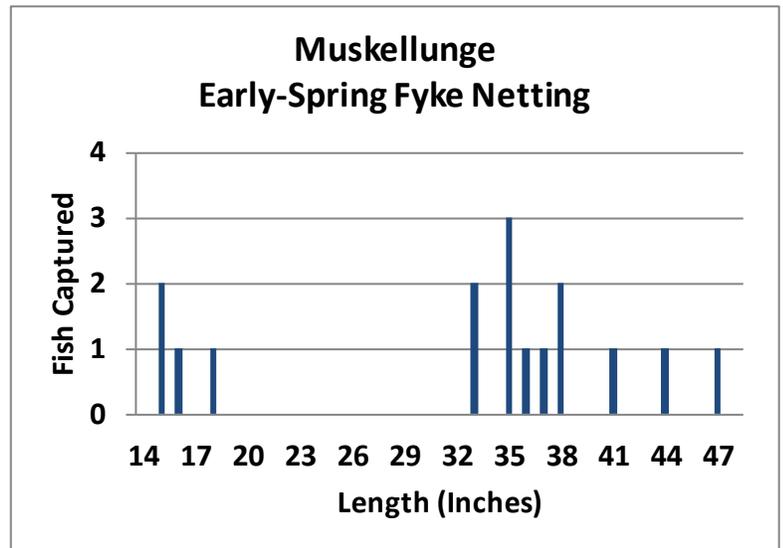
Captured 16.6 per net-night $\geq 14''$	
Quality Size $\geq 21''$	10%
Preferred Size $\geq 28''$	4%
Memorable Size $\geq 34''$	3%



Muskellunge



Captured 0.6 per net-night $\geq 20''$	
Quality Size $\geq 30''$	100%
Preferred Size $\geq 38''$	42%
Memorable Size $\geq 42''$	17%



Survey Conditions & Description

In early spring of 2012 the Gile Flowage was below full pool after the overwinter drawdown, but most of the high-quality spawning habitat for targeted species was underwater. Fyke nets were set right after ice-out, fished for three nights, and then re-set (over a week later) for one night in order to evaluate our walleye catch between the two dates. Our reasoning for doing this was to gain insight into walleye spawning behavior during an unprecedented early ice-out with water temperatures immediately at, and above, preferred walleye spawning temperatures (as a result of an unseasonably warm weather pattern). During our first netting efforts, water temperatures recorded at the road dykes on the east side of the Flowage were in the 50s while main-lake temperatures were in the mid-upper 40s. More seasonable weather conditions resulted in cooler water temperatures (mid 40s at the Hwy C dyke) when we returned in early April.

Summary of Results

Walleye

Although water temperatures were at, and above, optimal walleye spawning temperatures right after ice-out, peak walleye spawning activity did not occur until a couple weeks after ice-out. Managers have observed this phenomenon in past years with extremely early ice-out due to the important roles of maturation time and photoperiod in determining when walleyes spawn. However, it should be noted that we captured the majority of our largest female walleyes during the first netting effort (right after ice-out), with the smaller, younger females showing up during the second netting effort. Nets set at the Hwy C dyke captured walleyes at rates of 57/net-night during the early netting period and 125/net-night during the late period.

We captured relatively high numbers and a wide size range of walleyes ≥ 10 inches in walleye-targeted net sets, indicating a healthy, naturally reproducing population. The proportion of quality-size fish ≥ 15 inches (PSD) in targeted sets was 59%, which is within the objective range of 40-60% as identified in the 2005 Fishery Management Plan. PSD has ranged recently between 43% in 2008 and 65% in 2010, which is likely a reflection of very strong year-classes being present in the adult population.

Northern Pike

Northern pike capture rate (≥ 14 inches) in targeted net sets was high for northern Wisconsin at 16.6 per net-night. Pike on the Flowage continue to exhibit a poor size structure; only 10% were of quality size (≥ 21 inches), although a few individuals are able to attain memorable size (≥ 34 inches). Although age analyses need to be performed in order to validate the following assumption, poor pike size structure in the Flowage is likely a result of slow growth rate and high natural mortality. Pike are a coolwater species with physiological requirements that dictate their need for coolwater habitats throughout the year. In dark-stained flowages like the Gile, pike likely have to spend a significant amount of time in warm water temperatures (e.g. foraging in relatively shallow waters) that subject them to increased physiological stress. This can shut down the growth process and may even lead to high natural mortality rates. This may explain why large, old pike are uncommon in relatively warm, shallow, dark-stained water bodies like the Gile Flowage.

Muskellunge

Muskellunge were not specifically targeted during this survey; therefore, catch statistics should not be compared with other waters or used to evaluate the status of management objectives. Nonetheless, our sample revealed the presence of some large muskellunge in the Flowage, and there were some young fish entering the fishable population as well. We hope to do a more targeted evaluation of the Gile Flowage muskellunge population during the spring of 2014.

Other Species

Black crappie, bluegill, pumpkinseed, yellow perch, rock bass, black bullhead, and white sucker were also captured, however, data for these species are not reported here due to low abundance and/or sampling bias.

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