



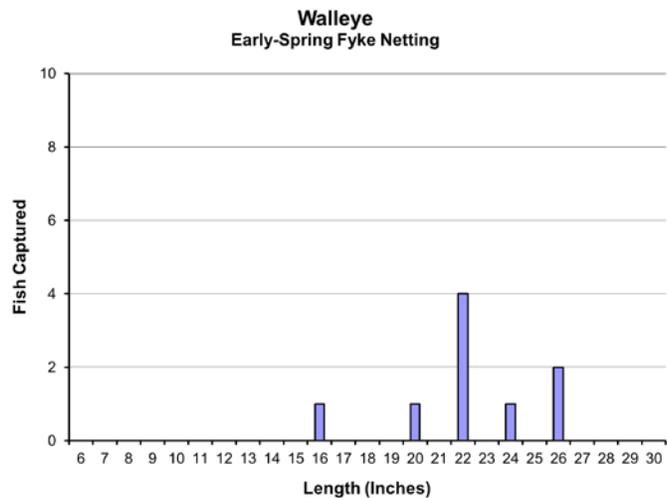
## Early-Spring Fyke Netting Survey Summary Island Lake, Sawyer County, 2012

The Hayward DNR Fisheries Management Team conducted a fyke netting survey on Island Lake during March 29-30 as part of our baseline monitoring program. Five nets were set overnight for two nights, resulting in 10 net-nights of effort. Primary target species were walleye, muskellunge, northern pike, and black crappie. An electrofishing survey conducted by our team in late May documented the status of largemouth bass and bluegill. Those results are summarized in a separate survey report. 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



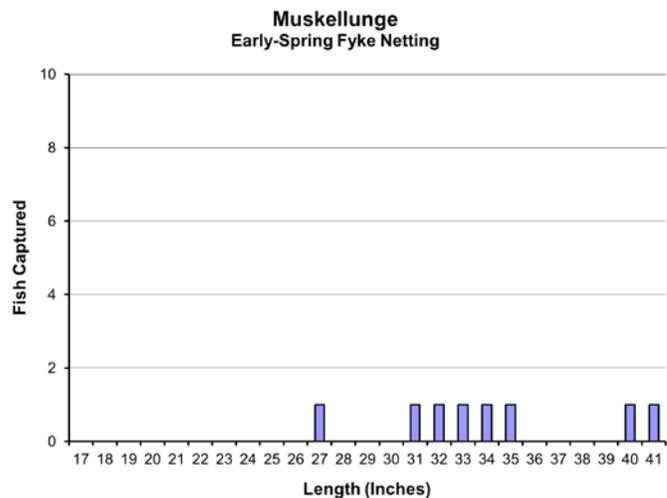
Captured 1 per net-night $\geq 10''$	
Quality Size $\geq 15''$	100%
Preferred Size $\geq 20''$	89%



### Muskellunge



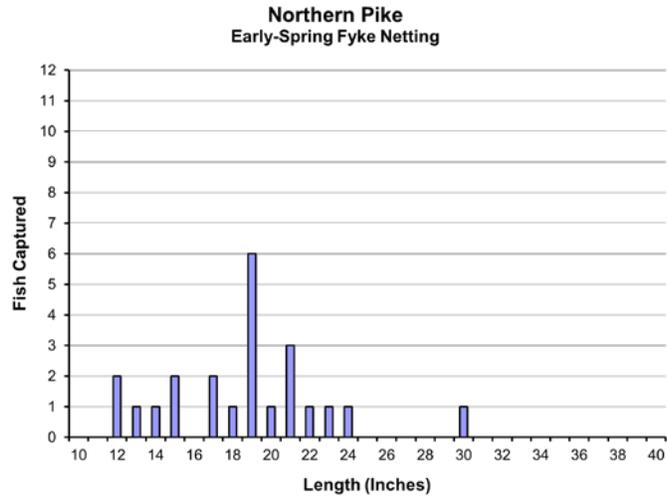
Captured 1 per net-night $\geq 20''$	
Quality Size $\geq 30''$	89%
Memorable Size $\geq 42''$	11%



## Northern Pike



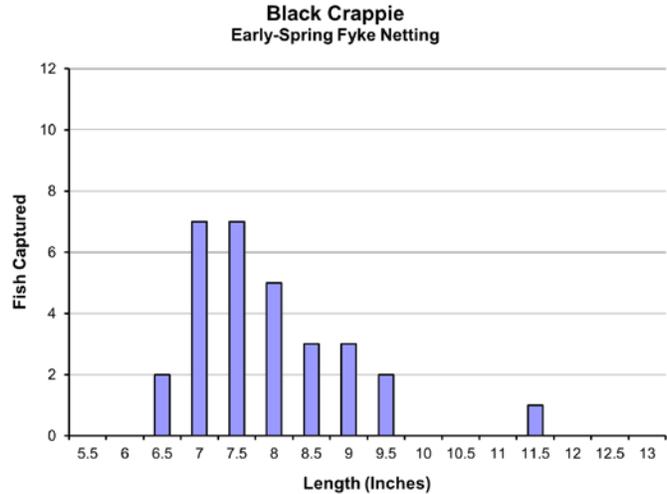
Captured 2 per net-night $\geq 14$ ''	
Quality Size $\geq 21$ ''	35%
Preferred Size $\geq 28$ ''	5%



## Black Crappie



Captured 3 per net-night $\geq 5$ ''	
Quality Size $\geq 8$ ''	47%
Preferred Size $\geq 10$ ''	3%



## Summary of Results

Water temperature at the time of this survey was between 45 and 46°F, appropriate for sampling walleye and northern pike populations during their spawning seasons. Muskellunge and black crappie were also captured in sufficient numbers to describe their populations.

The low-density walleye population in Island Lake was dominated by old fish, indicating relatively low survival of most stocked year classes. Natural reproduction is unlikely in Island Lake due to a lack of suitable spawning habitat and a relatively high abundance of other predators. DNR is no longer stocking small walleye fingerlings here, but the Winter Lakes Alliance has been permitted to stock a moderate number of “extended-growth” fingerlings (6- to 8-inch fish in the fall) which are more likely to survive and provide a bonus fishery. There is evidence that the 2011 stocked year class is surviving well (see 2012 electrofishing report).

For a small lake (67 acres), Island Lake has a good muskellunge population. We captured fish up to 42 inches long at a rate similar to much larger, classic Wisconsin muskie waters. There are occasionally reports of trophy-size fish being caught in this very small muskellunge lake.

Most muskellunge present in the system are believed to be stocked, but natural reproduction may also occur on a limited basis. Despite the small size of Island Lake, a forage base comprised of suckers, shiners, small northern pike, and panfish species appears to be sufficient to support satisfactory growth rate of muskellunge.

Northern pike were captured in moderate numbers, but size structure was poor; most fish were less than 21 inches long. Appropriately sized forage (perch, small minnows) may be limited for pike. Small bluegills are not a preferred food for pike. It is also possible that competition with, or predation by muskies may be limiting northern pike in Island Lake and preventing them from being a dominant species. Most anglers consider a muskellunge dominated fishery to be preferable to one with more pike.

Black crappies were captured in low numbers, although this survey occurred well before the peak in spawning activity for this species. Size structure was poor, with few fish over 10 inches.

Report By: Max Wolter – Fisheries Biologist, Sawyer County

Edited By: Dave Neuswanger – Fisheries Supervisor, Hayward Field Unit, 5-3-13

Approved for Posting By: Steve Avelallemant – Fisheries Supervisor, Northern District,  
12/23/13