



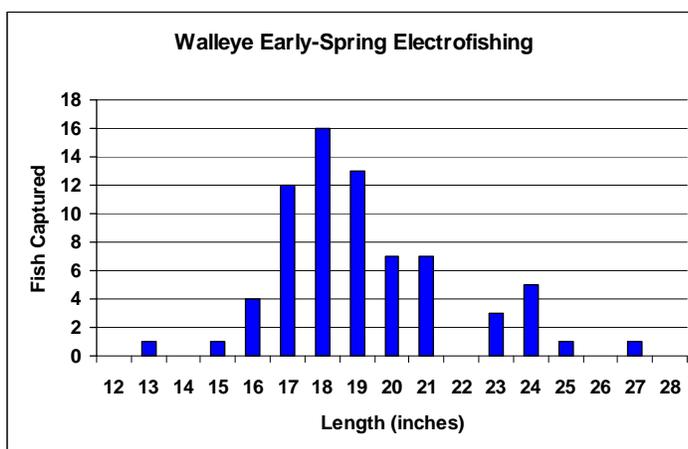
Summary of Fishery Surveys Sandy Beach Lake, Iron County, 2011

The Mercer DNR Fisheries Management Team conducted the following fishery surveys on Sandy Beach Lake in 2011: two early-spring electrofishing surveys (April 21 and 25) to assess the walleye population, a late-spring electrofishing survey (June 7) to assess the largemouth bass population, and a summer fyke netting survey (June 27-28) to assess the panfish community. 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 20 per mile $\geq 10''$	
Quality Size $\geq 15''$	99%
Preferred Size $\geq 20''$	34%
Memorable Size $\geq 25''$	3%

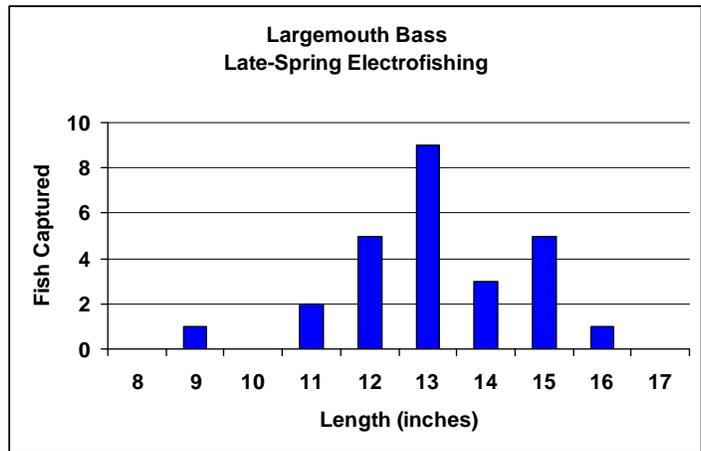


We captured 83 walleyes during the two early-spring electrofishing surveys. Using mark-recapture techniques, the population estimate for adult walleye in 111-acre Sandy Beach Lake was estimated to be 168 fish, or 1.5 fish per surface acre of water. This density (1.5 fish per acre) is below average (~ 2 fish per acre) for stocked walleye populations in northern Wisconsin, but still offers what is considered to be a fishable population. As is typical of low-recruiting, low-density populations, the size distribution of walleye in Sandy Beach Lake is skewed toward larger fish. Sandy Beach walleye are currently managed under no minimum length limit, but anglers may harvest only 1 walleye daily over 14 inches long. In July of 2011 we submitted a proposal to revert the Sandy Beach walleye length regulation back to the statewide minimum size limit of 15 inches. The proposed regulation would protect small, immature walleye from harvest, while offering anglers more of a harvest opportunity of the larger-sized fish which currently make up the vast majority of the population. Anglers will have an opportunity to express their opinion on this proposal when it likely appears on the Spring Hearing Questionnaire of the WDNR and Wisconsin Conservation Congress in spring of 2013.

Largemouth Bass



Captured 12 per mile $\geq 8''$	
Quality Size $\geq 12''$	88%
Preferred Size $\geq 15''$	23%

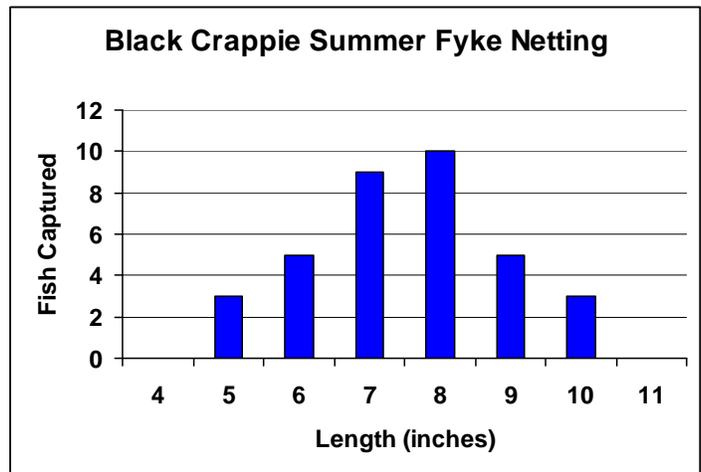


Largemouth bass ≥ 8 inches were captured at a moderate rate of 12 per mile during the late-spring electrofishing survey. Size structure of the population is considered good, with numbers of fish near, and exceeding, legal size (14 inches and longer). No smallmouth bass were captured or seen during this or any other survey.

Black Crappie



Captured 9 per net-night $\geq 5''$	
Quality Size $\geq 8''$	51%
Preferred Size $\geq 10''$	9%

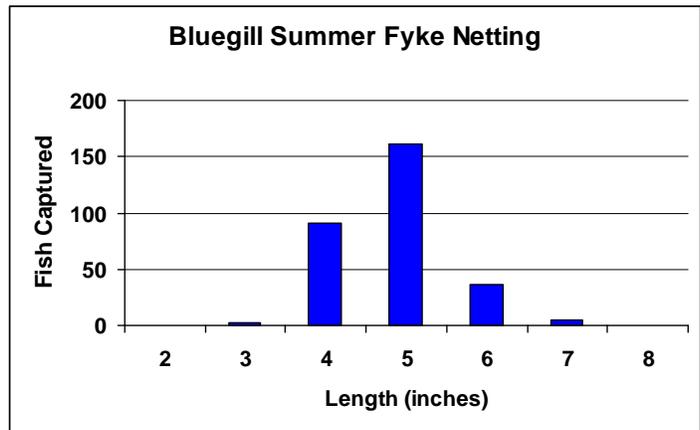


Black crappie ≥ 5 inches were captured at a relatively low rate of 9 per net-night during the summer fyke netting survey. The size structure of the population was fair, with a few fish being of preferred size to anglers.

Bluegill



Captured 179 per net-night $\geq 3''$	
Quality Size $\geq 6''$	14%
Preferred Size $\geq 8''$	0%

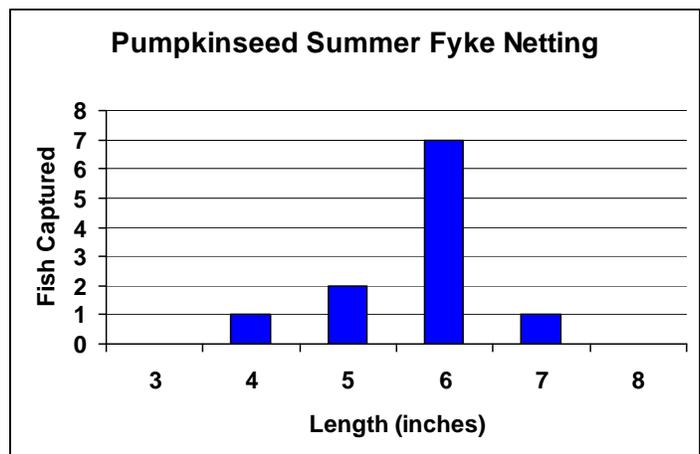


Bluegill ≥ 3 inches were captured at a very high rate of 179 per net-night during the summer fyke netting survey. The size structure of the population was very poor, with very few fish near an acceptable size to anglers. The capture rate and size structure of bluegill we observed in this survey is indicative of an overabundant population. As a result, growth and size of all panfish species are negatively affected due to high levels of competition for available resources.

Pumpkinseed



Captured 3 per net-night $\geq 3''$	
Quality Size $\geq 6''$	73%
Preferred Size $\geq 8''$	0%



Pumpkinseed sunfish ≥ 3 inches were captured at a very low rate of 3 per net-night during the summer fyke netting survey. The size structure of the population is considered fair, but numbers of pumpkinseed of an acceptable size to anglers are limited.

Conclusions

The Sandy Beach Lake fish community currently exhibits characteristics of a fishery in which apex predator populations (e.g., walleye and largemouth bass) are at insufficient levels to effectively prey on the overabundant prey populations (e.g., bluegill). As a result, bluegill (and other panfish species) growth and size are negatively affected as they compete with each other for limited space and food resources. We will attempt to rectify this problem by resuming a walleye stocking program on Sandy Beach Lake, in hopes of bolstering the number of effective

predators on young bluegills. In addition, we encourage anglers to harvest bluegills (especially the smaller ones), as another way to reduce their numbers. Other species captured at low abundance levels during these surveys included northern pike, yellow perch, brown bullhead, and a variety of minnow species. Sandy Beach Lake has a quiet, state-owned campground, with a beach and boat landing.

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