Your Pond Update

Eugene C. Braig IV, Program Director Aquatic Ecosystem Extension

Winter 2015

...But I didn't think Ohio had any real lakes! ...At least outside Lake Erie.

This myth seems to surface way more frequently than it should, so frequently that it may be worthy of demythologizing.

In my statewide appointment with Extension, I do a great deal of pro bono consulting and site visits of ponds and lakes around Ohio. Perhaps most of my clientele are individual private homeowners, but I also consult with several homeowners associations, local governments or locally based agency offices, and a few pond-owning businesses. I also frequently present on various pond/lake management issues at extension or industry conferences and pond clinics organized by or collaboratively among counties.

This past summer, Stark County Extension collaborated with the Stark Soil and Water Conservation District to offer a pond clinic hosted for the general public of Stark County by the homeowners association that is charged with managing Nobles Pond. The pond itself (in spite of its name, let's call it a lake given the definitions I will present later) is a beautiful 13-acre glacial kettle surrounded by a 5-acre strip of parkland. Archeological digs have shown the site to be important to native Ohioans (long before there was such a geographic entity) for more than 10 millennia. The current homeowners association does their very best to lovingly maintain the lake in a state of youthful mesotrophy: no easy task given that its upstream watershed drains approximately 1,600 acres of developed, mostly suburban, landscape.

The formal-presentation portion of the evening was preceded by an informal question–answer session while walking around Nobles Pond. During the walk, I got the question (from one of the visitors, not a resident, of course): "I've heard that Ohio doesn't have any natural lakes. Is that true?" No, it actually is not.

The Ohio Environmental Protection Agency's (EPA) Inland Lake Program has developed a working definition of "lake" as "a standing body of open water that is present year round, occurs in a natural depression or is created by artificially blocking or restricting the flow of a stream or by diking or excavating dry land..." Perhaps self-evident but the EPA felt obliged to include the word "natural" in their definition because Ohio does indeed have natural inland lakes.

I'm going to reference a couple relevant documents generated by the Ohio Department of Natural Resources: Bowell's (1980) Inventory of Ohio Lakes¹ and Black's (1991) little catalog of Ohio's natural lakes. I will mostly dwell on Leonard "Len" Black's report because its focus is exclusively on natural lakes. "Natural lake' may seem clear enough," Len wrote, "however, determining what is and is not a 'lake' and whether it is or is not 'natural' can be rather difficult. For purposes of [his] report, a lake is a body of water deep enough to stratify thermally and with adequate fetch (distance across) to create wave action." Of course, "adequate fetch" will vary with basin shape, orientation in relation to prevailing winds, etc. Len compromised by assuming 5 acres would be sufficient.

Omitting historic sites that had since been completely drained or inundated by reservoir construction, Len cataloged 110 natural inland lakes covering a total surface area of 4,658 acres and occurring in 21 Ohio counties. Almost all are glacial in origin, but five are post-glacial oxbow lakes. "Summit County has the most lakes with 34, followed by Portage County with

16, and Geauga County with nine. Portage County has the largest area covered by natural lakes with 1,493 acres, followed by Summit County with 1,216 acres, and Stark County with 452 acres" (Black 1991). The largest is Portage County's Aurora Pond (345 acres), and 13 of Ohio's natural lakes are 100 acres or greater in size.

So maybe we ain't no Minnesota, the "land of 10,000 lakes" (that actually has around 12,000); we aren't even Michigan, the "Great Lakes state" (bordering four of the five Laurentian Great Lakes and sporting more than 11,000 inland lakes)—but at least we aren't Arizona (with two to four natural lakes depending on who's doing the counting and at what time of year). Perhaps you'll now look out over Ohio's landscape, what it offers of glacier-made geologic splendor, and feel just a hint of limnologically inspired bliss for occupying such a place.

Until next time...

Eugene

References

Black, L. P. 1991. Natural lakes in Ohio (larger than five acres): Open file report no. 5. Ohio Department of Natural Resources, Division of Water, Columbus, OH.

Bowell, D. F. 1980. Inventory of Ohio Lakes: Ohio water inventory report no. 26. Ohio Department of Natural Resources, Division of Water, Columbus, OH.

Contact:

Eugene C. Braig IV, Program Director, Aquatic Ecosystems Extension

The Ohio State University School of Environment and Natural Resource 379A Kottman Hall, 2021 Coffey Rd. Columbus, OH 43210

614-292-3823

braig.1@osu.edu