Lake Benefits

For wildlife, it provides habitat for indigenous and migratory species, including herons, egrets, ducks, turtles, beavers, and songbirds.

For employees, the lake's diverse fish species provide a fine freshwater sport fishing opportunity. This self-guided nature trail offers an educational opportunity for all and a walking/jogging path for many at both NIEHS and EPA.

The lake itself serves as a rainwater catchment basin, which decreases potential flooding and erosion problems along the flood plain of Burden Creek. Boulders extracted during NIEHS's construction have been placed on the lake's bottom and provide habitat and protection, called "structure", for hatched fish. Earth removed in shaping the lake's shore was used as fill and for ground's shaping during construction.

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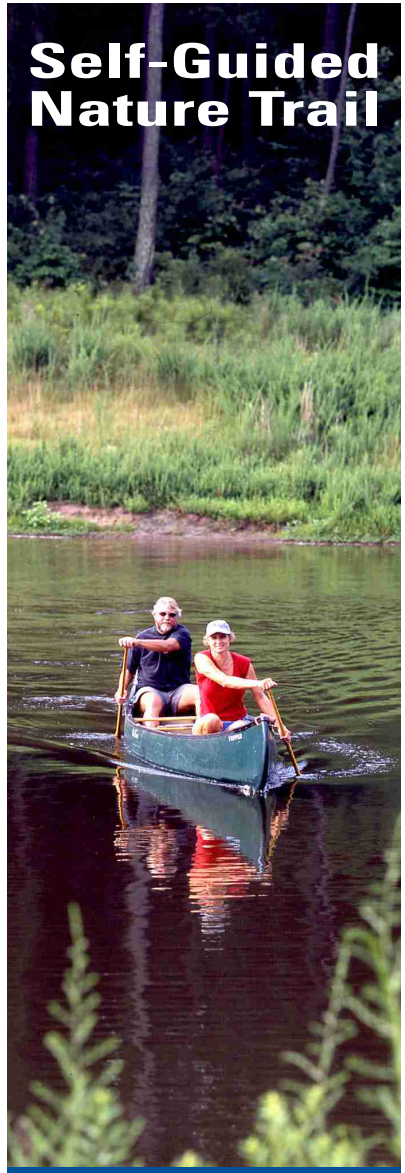
Self-Guided Nature Trail



Prepared by the
Environmental Awareness Advisory Committee

Trail Markers

#1 The lake was formed and filled circa 1976. Soil from the lake bed was used in construction of the NIEHS campus facility. After stabilization and construction completion, it was stocked with a broad range of fish including crappie, large-mouth bass, hybrid stripped bass, and catfish.

Edge shrubs and bushes discourage Canada geese from walking from the lake to the surrounding grounds. Dog fennel and wetland species can be found in this area.

#2 Plant succession is taking place here in the Bridge 1 area. Left alone, the Sweetgum and loblolly trees will be replaced with hardwoods.

#3 Memorial Garden area. This area is dedicated to deceased NIEHS employees, containing a mix of native and alien/domesticated plant species including sea oats.

#4 Plant succession is taking place with wild grasses, taking over a formerly mown area. Look for "Praying Mantis" egg cases on blades of tall grass and small branches in this grassy area. Look at the effects of wind on the direction of plant growth. If you see little white flowers on tall shrubs, you are looking at Asters. You may see some thistle, dog fennel, and golden rod in this area too depending on the season.

#5 Bridge 2. Notice the willow growing just south of the bridge. This is a moist area and willows thrive in this setting. In the Fall, the ash and hickory trees display brilliant yellow colors.

#6 This is a transitional area, going from a Riparian zone (i.e., next to a lake or stream) to a Woodland zone.

#7 Dogwoods are in this area and can be recognized from their coarser bark. They are a common "understory" species in NC, thriving in the shade of taller trees. Notice the ravine/washout area where runoff naturally drains.

#8 Here is a juvenile Southern Oak tree. Notice this tree is in near isolation with only a holly tree nearby. Notice the cedar trees providing a site for moss growth.

#9 Bridge 3. In this area you can see the natural processes of decay and renewal. Bacteria, fungi lichens, and mushrooms thrive here. Notice the elevated goose nesting box placed in the earliest days of the Insitute. Mr. Fred Talley, a now retired NIEHS'er was instrumental in having this structure built as he served on the Institute's old Lake Committee. This area provides great habitat for many birds and ducks and also is good for both crappie and bass fishing.

#10 This point is subject to erosion especially from northerly winds. Measures will be taken to control this problem using "riprap" and tall grasses. The Army Corps of Engineers is advising.

#11 Root effects are in evidence here and a potential erosion problem is being avoided through the natural growth of numerous lichens and mosses which stabilize the cooler shaded slope. These species do well in compacted, shaded, and acid soils.

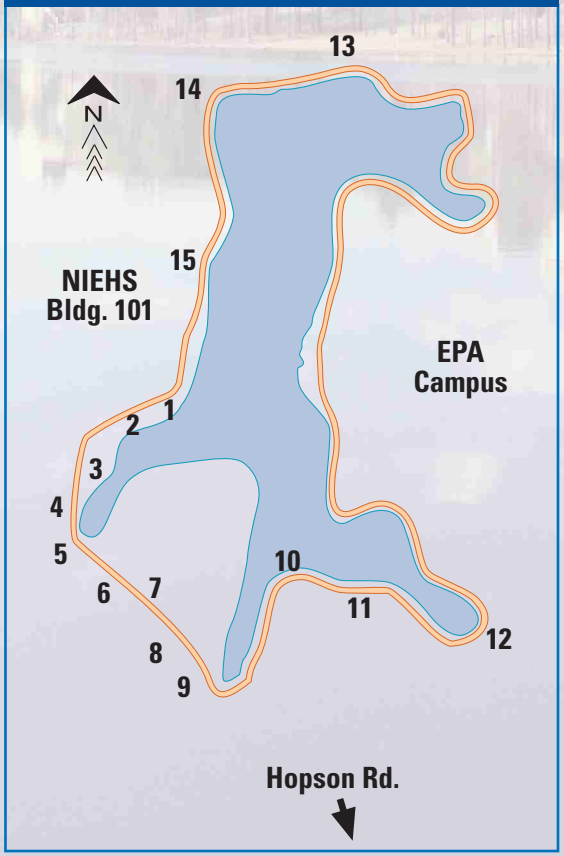
#12 Bridge 4 marks the transition point from NIEHS to EPA controlled lake shoreline. Native grasses line the bulk of the eastern lake shoreline. Keep an eye and ear open to the numerous shoreline wildlife. You may see and hear Canada Geese, Mallard Ducks, American Coots, turtles, Great Blue Heron, American Egret, Tricolor Heron, Little Green Heron, and King Fisher. In the winter, look for Ruddy Ducks and rare Black Ducks.

#13 This earthen dam has an outflow pipe which penetrates through the dam on its north side. If you walk to the dam's north edge, you will be able to hear and maybe see the outflow water. Flow is controlled by valves located in 2 concrete structures on top of the dam. Tree saplings are not allowed to grow on the dam since their roots will eventually undermine the dam, leading to its possible failure.

#14 This had been a significant erosion problem area after the F-module was built. But now with the thick growth of native grasses and plants, the area has stabilized through natural processes.

#15 Notice all of the barberry shrubs along the lake's edge. These have effectively inhibited Canada geese movements from the water to our mown areas.

Map of the NIEHS Lake and the Self-Guided Nature Trail



Total Lake Area = 27 acres
Fishing allowed after work and weekends
For more details, go to: **www.niehs.nih.gov/omfeb/fishing.htm**