

Salamander Survey Summary 2010

Fully terrestrial (woodland) salamanders live their entire lives in the moist soil of the forest floor. These salamanders spend much of their time underground in burrows or channeled soil. They also can be found hiding under rocks, logs, leaf litter, and artificial structures that provide a cool and moist environment. They only come to the surface to feed or reproduce, which must coincide with cool, wet, and calm weather conditions.

Woodland salamanders in Ohio include the red-backed salamander and the slimy salamander. Semi-terrestrial salamanders include the dusky salamander, mountain dusky salamander, and the eastern newt. All of these species are known to occur consistently under artificial cover boards and were the target species for our survey.

Liberty Park, rich in salamander diversity, is the target for our long-term monitoring project. We set up transects at the north and south ledges and monitored them in the spring and fall this year. Transects consisted of approximately twenty 12" x 12" plywood cover boards. Cover boards were checked weekly in April and May and also in October.

Table I illustrates the species found in each transect in Liberty Park. Red backed and long tailed salamanders were recorded at the south ledges during the survey period. Red salamanders were noted at the south ledges in previous years. While they aren't a fully or semi-terrestrial species, they breed in spring fed streams near the transects and adults are found under the cover boards at times. None were recorded for 2010.

Two-lined, long-tail and red back salamanders were noted at the north ledges this year. As it has been shown each year of the survey, species diversity is higher at the north ledges, but greater numbers of individuals are observed using the cover boards at the south ledges.

Table I. Species Recorded for North and South Ledges Transects, 2010

Salamander Species	North Ledges	South Ledges
Two-line	X	
Long tail	X	X
Red Back (color phase not specified)		X
Red Phase		X
Lead Phase	X	X
Total Animals	19	57

A new trail was constructed at the north ledges in the summer of 2009. It is not officially open to the public, as there is currently no parking lot to access the trail directly, although local Twinsburg residents are using the trail. Parts of this new trail run right next to the existing salamander transect. The transects were placed in Liberty Park

specifically to monitor the impacts of development in the park. Over time, these impacts may be demonstrated through this program.

Conclusions

This long-term monitoring project was put into place to measure impacts of foot traffic at the ledges in Liberty Park. The last three years (2007-2009) of data serve as a baseline for the monitoring effort. While the trail now exists at the north ledges, it isn't receiving a large amount of foot traffic yet because there is no parking area associated with the trail yet. Effects of trail use may be seen in the future. The salamander transects will continue to be monitored in 2011.

Representative Photos



Red backed salamander with eggs



Long-tailed salamanders.