

## Salamander Survey Summary 2007

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.

### Results

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. Both color phases of the red backed salamander were reported. However, red backed out-numbered the lead phased individuals by 90%. No red phased individuals were found our expected.

While fewer numbers of individuals were found at the north ledges, the species diversity was higher. Red backed, long tailed, two lined and northern dusky salamanders were observed. Both color phases of the red backed salamander were found at the north ledges. Again, red backed individuals were more prevalent.

Table I. Species Recorded for Each Salamander Cover Board Transect in Liberty Park.

<b>SPECIES</b>	<b>NORTH LEDGES</b>	<b>SOUTH LEDGES</b>
<b>Long tailed salamander</b>	X	X
<b>Red backed salamander</b>	X	X
<b>Two lined salamander</b>	X	
<b>Northern dusky salamander</b>	X	

Measurements including snout vent length (SVL) and total length were taken on a subset of salamanders. Averages are documented in Table 2 below. The measurements for the red backed salamander include data for both color phases.

Table 2. Average SVL and Total Length of Measured Salamanders during 2007.

<b>SPECIES</b>	<b>SVL</b>	<b>TOTAL LENGTH</b>
<b>Long tailed salamander</b>	26.3	67.6
<b>Red backed salamander</b>	28.4	62
<b>Two lined salamander</b>	38	84.8
<b>Northern dusky salamander</b>	n/a	n/a

## **Conclusions**

This long-term monitoring project was put into place to measure impacts of foot traffic at the ledges in Liberty Park. This year's survey will serve as baseline data as the ledges have not been officially opened up for public use. 2007 represents the first year of data collection and this survey will continue in 2008.