

Snake Survey Summary 2006

The snake survey program was structured to compliment the park ecological inventories. Therefore, the parks scheduled for comprehensive inventories are surveyed for snakes through this citizen science program. Sand Run, Deep Lock Quarry and Gorge Metro Parks were surveyed in 2006.

Liberty Park is also surveyed as part of a long-term monitoring project. This park has the potential to harbor the eastern massasauga rattlesnake. Following the protocol set forth by the United States Fish and Wildlife Service, the rattlesnake is being surveyed for in Liberty Park and adjacent Pond Brook South (Johnson et al. 2000).

Cover boards made of tin (approximately 12 x 48 x 0.6 in.) were placed in wet meadows, fields in and near wetlands or near forest edges. These cover boards are put in place and remain there from May through September. Cover boards were checked once every two weeks. The surveys are completed when there is >50% cloud cover, less than 15 mph breeze, and temperatures between 50 and 80 degrees Fahrenheit. They are conducted during the morning or evening hours. The cover boards are lifted with a snake hook to provide safe distance between the surveyor and the animals.

All snake species found under the boards are documented. Other non-reptilian species are also recorded. Species, general body condition, and comments are recorded for each species (sample data sheet in Appendix A).

Results

Table 1. illustrates the species found in each park surveyed in 2006. Northern brown snakes were found in Deep Lock Quarry and Gorge Metro Parks. Eastern garter snakes were found in Sand Run, Deep Lock Quarry and the Gorge. One northern water snake was documented at Gorge Metro Park during the bio blitz.

Only a small numbers of each of species were documented in each park. This may be due to cover board number and location. It was very difficult to find locations to place cover boards. Habitat was available. However, many of the desirable locations were easily accessible to the public. Even with our best efforts to place cover boards, some were vandalized or removed from their original locations.

No new species were documented for Liberty Park or Pond Brook South. In fact, while several species were documented in previous years (i.e. eastern milk snake, ribbon snake and smooth green snake), only the eastern garter, northern brown and northern water snakes were found in 2006. Approximately the same amount of survey effort was completed in all years. The species not documented this year are likely less common species and therefore will not be found every

survey season. Additionally, species like the northern water snake and the smooth green snake are less likely to use the cover boards for shelter or thermoregulation. These species are typically found during visual searches of the area around the cover boards. Conversely, species such as the eastern garter snake and northern brown snake are found during every survey event.

Table 1. Snake Species found at the Survey Sites.

| Park | Snake Species | Northern Brown | Eastern Garter | Eastern Milk | Eastern Ribbon | Northern Water | Smooth Green |
|------------------|----------------------|----------------|----------------|--------------|----------------|----------------|--------------|
| Sand Run | | X | X | | | | |
| Deep Lock Quarry | | X | X | | | | |
| Gorge | | X | X | | | X | |
| Liberty | | X | X | X | X | X | |
| Pond Brook South | | X | X | | | X | X |

Conclusions

Snake surveys will continue to be performed in Liberty Park and Pond Brook South as part of a long-term monitoring effort for the eastern massasauga rattlesnake. This species has not been documented in these parks in recent history. In 2007, snake surveys will be carried out in Cascade Valley and Goodyear Heights Metro Parks as part of the comprehensive park inventories.

Date: _____ Start Time: _____ Start Temp _____ Start Rel. Humidity: _____ Start Wind(Beauford): _____ Start % Cloud Cover _____
 Surveyors Name: _____
 Survey # _____ Park/Conservation Area _____
 End Time: _____ End Temp: _____ End Rel. Humidity: _____ End Wind (Beauford): _____ End % Cloud Cover: _____

| Beaufort Wind Scale | Wind Speed (mph) | Description |
|---------------------|------------------|--|
| 0 | < 1 | CALM: smoke rises vertically |
| 1 | 1-3 | LIGHT AIR: rising smoke drifts; weathervane inactive |
| 2 | 4-7 | LIGHT BREEZE: leaves rustle; can feel wind on face |
| 3 | 8-12 | GENTLE BREEZE: leaves and twigs in constant motion; small flags extend |
| 4 | 13-18 | MODERATE BREEZE: moves small branches; raises dust and loose paper (too windy to monitor) |
| 5 | 19-24 | FRESH BREEZE: small trees begin to sway (way too windy to monitor) |

[illegible]