Snake Survey Summary 2011

Snake surveys are completed for the whole-park ecological inventories through an established citizen science program. This program began in 2004. Wood Hollow, Maple Grove and Springfield Bog were surveyed in 2011.

Liberty Park is 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 2011.

Liberty Park and Liberty Park South have been surveyed since 2004. They continue to produce several species of snakes including brown, garter, water, red-bellied and ribbon snakes. The species diversity is high in these areas and the number of individuals is also robust.

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 2012, new properties will be surveyed and survey locations are to be determined.

Table 1. Snakes Documented in 2011 during the Citizen Science Survey.

	Liberty Park	Maple Grove	Springfield Bog	Wood Hollow
Eastern Garter Snake	Х	Х	Х	Х
Eastern Milk Snake	Х			Х
Northern Brown Snake	Х	Х		Х

		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 Speed	Description					
Wind Scale	(mph)						
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)					

Board #	Species	General Health	Comments/Photograph Info