

*Northern Cricket Frog (Acris c. crepitans)*  
*Call Surveys May 20 to June 11, 2015*

Primo Sports Site  
County Route 94/Tetz Road  
Town of Chester, New York

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## 1.0 INTRODUCTION

The State-endangered northern cricket frog (*Acris c. crepitans*) has been documented making use of Glenmere Lake and surrounding habitat located in the Village of Florida, Town of Warwick and Town of Chester, New York, more than a linear mile southwest of the Primo Sports Site. As part of the project's environmental review process for the proposed project known as Primo Sports, Ecological Solutions, LLC completed a Habitat Suitability Assessment (HSA) report in September 2014 and identified a man made pond approximately 0.25 acres in area and probably 4-5 feet deep located at the southwest corner of the site east of Glenmere Road and south of NYS Route 94. The HSA determined that use of the site by this species was unlikely because of habitat conditions on the site and surrounding area. In correspondence from the New York Department of Environmental Conservation (NYSDEC) dated April 29, 2015 the NYSDEC requested that a northern cricket frog call survey be conducted at the pond on the site. Northern cricket frogs breed in weedy lakes in June and July.

### 1.1 Background

The Northern cricket frog occupies a scattered distribution in southeastern New York including Orange, Ulster, and Dutchess Counties. In New York the species is primarily associated with circum-neutral lakes and ponds with a thick aquatic and emergent vegetation component. Breeding occurs in these weedy, shallow water bodies in June and July. Outside the breeding season northern cricket frogs have been documented in previous surveys by Ecological Solutions, LLC using various wetland (e.g., riparian, forested, emergent, vernal) and upland habitats (e.g., forests, wet fields, lawns).

Glenmere Lake contains habitat that supports probably the largest Northern cricket frog population in this area of Orange County and the Lake's northeastern boundary is located about 6,700 feet from the Primo Site Pond. Glenmere Lake was used by Ecological Solutions, LLC as a reference site to compare observations from both Glenmere Lake (known population) and the Primo Sports site.

### 1.2 Methods

A survey protocol entitled, "Northern Cricket (*Acris c. crepitans*) Frog Call Surveys, Primo Sports Site, Town of Chester, New York" dated May 19, 2015 was submitted to and approved by NYSDEC Region 3 biologist, Lisa Masi on Tuesday May 19, 2015. The study period encompassed four (4) days covering the period from May 20 to June 11, 2015 with two surveys occurring in May (May 20 and 27), and two surveys occurring in June (June 4 and 11). Additional opportunistic surveys occurred during this time period, i.e site walks around the pond occurred on May 28 and June 10 during the day.

The proposed protocol for the investigation followed the specifications in the document entitled, "Call Survey Protocol" last revised by G. Kenney on 9/29/2010:

- Each call survey will be separated by at least seven (7) days.

- At least 10 sampling points will be established around the Pond perimeter. Each sample point will be surveyed for a minimum of ten (10) minutes.
- Surveys will begin ½ half hour after sunset and will end by midnight.
- Surveys will only be conducted on still nights with winds no more than 12 mph and temperatures above 60 degrees F.
- All data as outlined in the Call Survey protocol document will be collected.

## **2.0 RESULTS**

The perimeter of the on site Pond was surveyed four times between May 20 and June 11, 2015 for a total of 6.5 man-hours. No northern cricket frog observations were made and no calls were heard at any of the observation locations around the Pond during any of the site visits.

Glenmere Lake was utilized as a reference site since it has a large population of northern cricket frogs. Northern cricket frogs were observed and heard at Glenmere Lake during June 3 and 11.

### **2.1 Call Surveys**

The call surveys occurred at ten (10) locations around the perimeter of the Pond and data from each point is shown (Tables). The locations were more or less equidistant from the starting point on the Pond bank adjacent to Glenmere Road.

The Pond is characterized by an open water column with a water elevation of 4-5 feet and lack of floating vegetation although algal blooms became persistent during the June visits. The Pond edge just beyond the bank contains broad leaved cattail (*Typha latifolia*) as the dominant species with spike rush (*Eleocharis* spp.) as a co-dominant at the water's edge.

**Table 2.1-1 Data<sup>1</sup>**

Primo Sports, Town of Chester, Orange County May 20, 2015										
Sample Point	1	2	3	4	5	6	7	8	9	10
Time	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00
Air Temp.	62F	62F	62F	62F	62F	62F	62F	62F	62F	65F
Water Temp.	58	58	58	58	58	57	58	57	57	57
Cloud Cover (%)	20	20	20	20	20	20	20	20	20	20
Wind Force	1	1	1	1	1	1	1	1	1	1
Noise Level	low	low	low	low	low	low	low	low	low	low
Precipitation	none	none	none	none	none	none	none	none	none	none

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<sup>1</sup> All times p.m.

[illegible]

### Table 2.1-3 Data

[illegible]



### Table 2.1-4 Data

[illegible]

### **3.0 DISCUSSION**

Sample points 1 through 10 were located at equal distances around the perimeter of the on site pond. The pond contains no floating aquatic vegetation except for algal blooms and what appeared to be Eurasian water milfoil toward the deeper areas of the pond. There were no frog species observed or heard around the pond during the May surveys. During the June surveys only bullfrogs were heard and observed around and in the pond.

During the survey days I also investigated Glenmere Lake which was used as a reference area to compare data between Glenmere Lake and the Primo Sports site pond. I walked previously evaluated areas associated with Glenmere Preserve where Northern cricket frogs were numerous during previous studies by Ecological Solutions, LLC from 2008-2010. Numerous Northern cricket frogs were heard and several frogs were observed during the June surveys at Glenmere Lake but none were found at the Primo Sports site.

The call surveys suggest that currently the Primo Site pond is not utilized by northern cricket frogs. The remaining area of the site is not considered habitat for this species since it is open dry field with no forest or wetland habitat.

## **4.0 CONCLUSION**

The methods employed in this study were meant to confirm the presence and/or absence of breeding northern cricket frogs at the Pond on the Primo Sports site. This investigation indicates that northern cricket frogs are not utilizing the pond for summer breeding habitat and currently the habitat within the pond is not suited for this species.

As with any wildlife study, behaviors and habitat uses can change in response to environmental variables. Nonetheless, for this point in time the data or lack of northern cricket frog observations should be able to help guide regulatory decisions.

## 5.0 REFERENCES

New York Natural Heritage Program. 2009. <http://www.acris.nynhp.org/guide.php?id=6706>

Northern Cricket Frog Fact Sheet. <http://www.dec.ny.gov/animals/7120.html>

## 6.0 PHOTOGRAPHS

Pond



Area around pond - dry grass field

