

Final Report for Grant Agreement #08-035W
Presence of the Bird-voiced Treefrog *Hyla avivoca* According to Call Surveys in
Southern Illinois

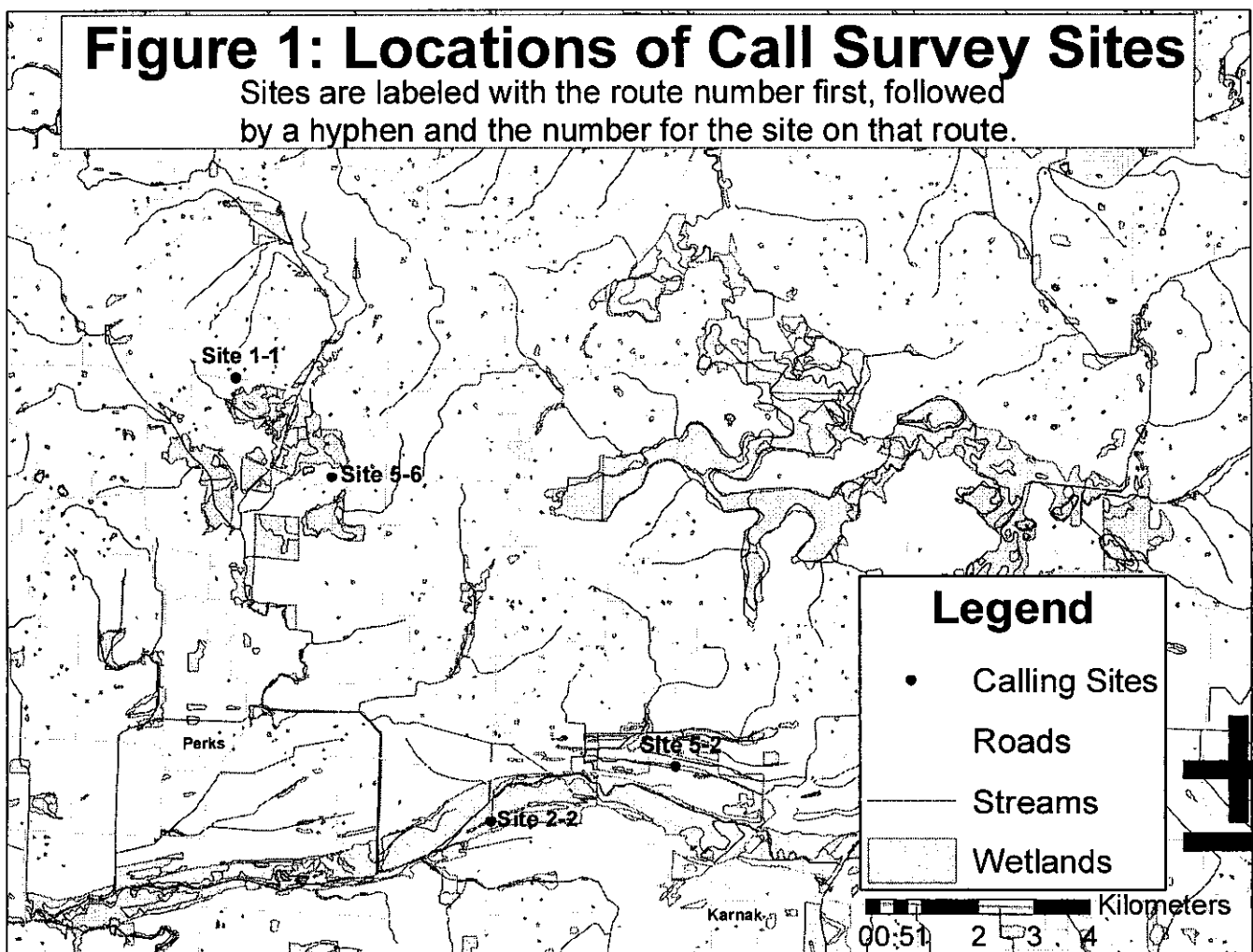
Abigail J. Maley
Rm 72 Natural Resources Building
Illinois Natural History Survey
Center for Biodiversity
1816 S. Oak Street
Champaign, IL 61820
Phone: (814)-233-9843

Time-frame of Report: Spring-Summer 2007 & 2008

Project objective: To evaluate previous auditory records of the bird-voiced treefrog, *Hyla avivoca*, in Southern Illinois, verify the presence/absence of this species at certain locations, and evaluate the fragmentation, quality, and impact of these sites in the conservation of this species.

Volunteer conducted call surveys have been conducted at a number of sites in the Cache River Basin since 1995, following the protocols of the North American Amphibian Monitoring Program or NAAMP. The state-threatened bird-voiced treefrog, *Hyla avivoca*, has been detected at four sites in these surveys. During the spring breeding seasons of *H. avivoca* in 2007 and 2008, the presence or absence of *H. avivoca* at the four sites was investigated.

The locations of these sites in the Cache River Basin and their proximities to one another are shown in Figure 1 below.



As shown in the map above, all four of these call survey locations are in close proximity to large wetland areas in the Cache River Basin. This suggests that these

areas may be of importance for future efforts in the conservation of *H. avivoca* since these appear to be large, relatively un-fragmented habitats for this species.

The results of both the previous volunteer surveys and the two seasons of surveys conducted for this study are compared side by side below in Table 1.

Table 1: Summary of *H. avivoca* Surveys
 The NAAMP defines calling indices as follows: 0 – no individuals heard; 1 – individuals can be counted but there is space between calls; 2 – individuals can still be distinguished but calls overlap; 3 – full chorus, calls are constant, continuous, and overlapping.

Route #	Site #	Maximum Calling Index		Number of Detections		Number of Surveys	
		This Study 2007-08	Volunteer Surveys 1995-2007	This Study 2007-08	Volunteer Surveys 1995-2007	This Study 2007-08	Volunteer Surveys 1995-2007
1	1	1	3	2	3	11	35
2	2	3	3	10	41	28	109
5	2	1	3	4	7	12	44
5	6	3	3	6	5	12	44

From this table, it can be seen that the presence of *H. avivoca* was verified at all the locations where it was previously detected by volunteers. The strength of the call surveys was confirmed for both Site 2 on Route 2 and Site 6 on Route 5. The strength of the calling indices at Site 1 on Route 1 and Site 2 on Route 5, were not confirmed in this study. This could be a result of different weather and other environmental conditions at the call survey sites during the various study seasons.