

# Refinement of National Survey Protocols for Monitoring Secretive Marsh-birds

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**Collaborators:** Iowa Department of Natural Resources  
**Duration:** September 2008 to December 2010  
**Funding Source(s):** Iowa Department of Natural Resources  
**Goals and Objectives:**

- Compare responses of secretive marsh-birds to call-broadcasts for morning and evening survey periods in Iowa to determine which survey period produces the greatest response rate.
- Compare seasonal responses of secretive marsh-birds in Iowa by conducting a second round of call-broadcast surveys in June and July, after the standard monitoring period.

## Progress:

To meet these objectives, we conducted paired call-broadcast surveys at a random subset of wetlands during both early (15 May to 14 June) and late (15 June to 14 July) in the 2010 survey season. Surveys were conducted in accordance with the protocol mentioned above. A total of 56 wetlands were visited during consecutive survey periods (morning-evening or evening-morning) both early and late in the survey season. Two different observers conducted each paired survey, and the order and choice of the observers were selected at random.

This grant allowed us to hire a second field technician (Jonathan Lautenbach) from May to July 2010 to assist with paired surveys. Having a second field technician allowed us to conduct the paired surveys in conjunction with our regular surveys and ultimately allowed us to visit more wetlands during the 2010 survey season.

## Results:

The 2010 survey season went from 20 April – 10 July rather than 15 April – 31 May as suggested by the North American Marsh Bird Monitoring Protocol (Conway 2005). By extending the survey season we gained better insight into breeding phenology of these species in Iowa because nesting dates range from late April (American Bittern) to mid-July (Least Bittern) (Kent and Dinsmore 1996). We conducted paired surveys both early and late in the survey season to compare response rates to call-broadcast surveys between morning and evening survey periods and between early and late in the survey season. Doing this will allow us to establish the optimal time of day and time of season for conducting marsh-bird surveys in Iowa. We detected 379 birds early in the season (15 May-15 June) and 217 birds late in the season (15 June-15 July) (Table 1). Also, we detected 306 birds during morning survey periods and 290 birds during evening survey periods.

**Table 1:** Number of detections by species for morning/evening survey periods and early/late in the survey season 2010.

Species	Early/Morn	Early/Eve	Late/Morn	Late/Eve
LEBI	22	17	13	28
SORA	35	23	5	1
VIRA	54	55	40	36
KIRA	2	1	0	0
AMBI	2	1	0	0
COMO	4	1	6	1
AMCO	13	47	13	15
PBGR	48	54	49	10
<b>TOTAL</b>	<b>180</b>	<b>199</b>	<b>126</b>	<b>91</b>

## Conclusions and Recommendations:

The analyses for this portion of the study are still on-going, although preliminary results suggest there are no differences between morning/evening surveys and few seasonal differences for the target species. Our intent is to use these findings to 1) make recommendations for modifying the secretive marsh-bird survey period in Iowa, and to 2) suggest increased flexibility in conducting evening surveys in addition to more traditional morning surveys.