

# Assessing the Role of Conspecific Attraction in Habitat Restoration for Henslows Sparrows in Iowa

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**Collaborators:** n/a  
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**Goals and Objectives:**

- Examine the response of Henslow's sparrows to conspecific call playbacks in previously unoccupied restored habitat in the Spring Run Complex
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## Progress:

For territorial songbirds, the presence of conspecific individuals may provide important cues for species about habitat suitability. The practice of restoring or reconstructing habitat is dependent on the assumption that individuals will recolonize areas once they are available. The addition of social cues to suitably restored grassland habitats may aid in the recovery of populations of Henslow's sparrows as well as other avian species of conservation concern.

Within the Spring Run Complex, two study plots were located within each of seven fields (monotypic smooth brome and a five-grass mix of native tall-grass species, planted before 2004). Each plot within a field was about one-half of the overall size of the field or approximately 4 ha. One plot on each field was randomly assigned to the treatment and the other was assigned as a control plot.

In mid-May 2008, playback stations were constructed and erected on seven sites. Each station consisted of a portable compact disc player connected to a programmable timer. The timers were connected to rechargeable 12 volt batteries and solar panels. Playback stations were programmed to broadcast songs starting one hour before sunrise and ending at 9:30 am CST, and again in the evening just before sunset. Broadcasts were played for one hour at a time, with 30 minute intervals in between for a total of four hours in the morning and two hours in the evening.

Each call playback station was housed in an aluminum box for protection from the elements. The aluminum boxes were drilled out in front of the CD player speakers to allow for sound transmission. Boxes were mounted to 4x4 posts at approximate perching heights in each field. Line transect surveys were conducted weekly in each field from June 2 to July 18, 2008. Henslow's Sparrows were not detected on any surveys. Call playback stations were monitored regularly and parts were replaced as necessary for continuous operation throughout the study period. The playback stations were removed at the end of the season (early August 2008).

For the 2009 season, call playback stations were installed earlier in the season (mid-April). Call playback stations were installed on the same seven fields in 2009 as in 2008. The design of the call stations was modified slightly for the 2009 field season to increase the call volume by digitally amplifying them with computer software. In addition, larger openings were created in the aluminum boxes to allow for greater sound transmission.

Monitoring of the study fields using the line transect method was continued during 2009. Weekly surveys were conducted from June 1 – July 10, 2009. Henslow's Sparrows have been detected in 2009 line transect surveys. Exact locations (UTM coordinates) of each individual detected were recorded. The playback stations were removed at the end of the season (early August 2009).

## Future Plans:

Data collected during the 2009 field season will be examined to determine the effectiveness of the approach in attracting Henslow's Sparrows to reconstructed grasslands.