

Protecting Established Henslow's Sparrow Breeding Colonies Through Selective Haying

Last June, Katey Buster, a member of the Central Kentucky Audubon Society (CKAS), noticed a breeding colony of at least eight Henslow's Sparrows in a hayfield about to be mowed at Talon Winery and Vineyards in Fayette County. Henslow's Sparrows are a high priority for grassland bird conservation, listed as both a "Species of Greatest Conservation Need" by the Kentucky Department of Fish and Wildlife and a Conservation Concern Score of 14 on the North American Bird Conservation Initiative's *State of the Birds* report. Talon Winery and Vineyards covers a total of 295 acres including the vineyards, three small ponds, an ephemeral creek, and a few barns, silos, and commercial facilities, but consists primarily of large rolling managed hayfields. In an effort to protect the birds, CKAS asked Talon to stake off roughly five acres of field habitat and reserve it from mowing until the end of July. Although this acreage is much less than researchers recommend for Henslow's Sparrow conservation efforts, several pairs successfully fledged young.

Much has been written regarding the habitat selection and space requirements of Henslow's Sparrows and other grassland bird species. As grassland habitat becomes more and more fragmented and/or lost to development and row-cropping, understanding specific species' minimum requirements for breeding success can help focus conservation efforts. Previous Henslow's Sparrows studies found that the birds prefer areas characterized by herbaceous cover like grasses or sedges with ample uncompressed plant litter, nearby sources of moisture, and the presence of singing perches in the spring (Robins 1971)—habitat akin to that the birds had adopted at Talon. Reports of minimum acreage needed for breeding success vary: Herkert (1994) found no Henslow's Sparrows breeding pairs adopted fragmented habitat patches of less than 100 hectares, Hanson (1994) noted pairs adopting patches of only 23.1 ha, and Samson (1980) indicated that the species would adopt patches of 9 ha and larger. Further, research on delaying mowing indicated that Henslow's Sparrows need at least seventy-five contiguous acres to successfully raise broods (Mazur 1996) - significantly more than the approximately two hectares reserved at Talon.

In Herkert's exhaustive summary of Henslow's Sparrow research (1998), there are no examples of the species successfully raising broods in less than eight hectares, casting doubt that protecting such a small acreage would be enough for the birds to successfully rear offspring. In order to give the birds at Talon the best chance of success, CKAS members walked the fields and staked off boundaries at least fifty yards from any perched singing sparrow to create a small protective buffer for the birds. The marked area comprised roughly five acres of grassed hillside moderately sloping down to the edge of an ephemeral mucky puddled low spot; this damp area was not included in the final reserved boundary. All neighboring areas, including the neighboring moisture patch, were subsequently hayed.

CKAS members and other birders monitored the fields for the next several weeks, sometimes watching from the edges and sometimes watching from blinds. Haying up to the edge of the marked tract did not have a discernible effect on the total numbers nor the breeding behaviors of the Henslow's Sparrows present; Henslow's continued to perch and sing in the unmowed area. By July, several eBird counts indicated that the birds successfully produced offspring despite the small amount of non-mowed acreage allotted to them: birders observed and photographed adults carrying fecal sacs and adults feeding fledged juveniles. After the fields and previously reserved habitat were hayed in early August, the birds dispersed.

These results are notable because they indicate that efforts to preserve even small tracts of managed hayfield habitat, through delayed mowing of carefully selected areas, can help to sustain the population of Henslow's Sparrows and may provide a potential avenue for conservation efforts of near-threatened species.

Submitted by Tony Brusate, President of Central Kentucky Audubon Society.

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