
Delay hay cuttings to allow birds to successfully fledge young

Earlier and more frequent cuttings of hay in the Northeast can be devastating to grassland songbirds.

A University of Vermont study comparing nesting success of grassland birds for various management techniques on working haylands found that the majority of grassland habitat was cut during the breeding season, and this early cut haying caused almost all Savannah sparrow and bobolink nests to fail.

“But the birds re-nest, and we found late-hayed fields to be high-quality reserves for late-nesting birds like bobolinks that were displaced from fields that were cut earlier,” says researcher Noah Perlut.

Grassland bird populations in the Northeast have dropped dramatically—some species by as much as 80 percent—over the past 40 years. The loss of agricultural land and resulting smaller patches of farm fields surrounded by woodlands has led to habitat ill-suited to grassland birds.

The problems for grassland birds have been compounded as remaining grasslands have been cut early and often for hay production.

The Vermont research shows a strong correlation between the degree of management intensity and the birth and survival rates of two species of grassland birds, the Savannah sparrow and the bobolink. Fields cut early in the nesting season (prior to June 12) show low birth and survival rates, whereas fields cut after August 1 show much greater birth rates and survival rates.

Grazed fields and fields cut during the middle of the breeding season, mid-June to mid-July, show intermediate values. These data strongly suggest that for bobolinks and Savannah sparrows, early cut fields are unlikely

to support viable populations in the long term, but grazed fields and fields cut later in the nesting season might enable populations to sustain themselves over time.

Timing is everything

For Savannah sparrows, the earliest observed fledging date was June 5, and the latest was August 10 (although fledging can occur as late as August 23 in other management-type fields). For bobolinks, the earliest fledging date observed was June 11, and the latest was July 28.

Although the timing of cutting is critical to the nesting success of grassland birds, many farmers have limited flexibility in their ability to delay cutting because of reduced forage quality.

Delayed second cuts

There may be opportunities for farmers to cut hay early in the season (before May 31) and delay their second cut by 65 days. This allows 14 days for regrowth, 42 days for a nesting cycle, and 9 days for young to develop flight capabilities. This strategy may be used where farmers need some amount of high-quality forage, but are interested in higher production volume but lower quality late hay for dry cows or horses.

Influenced by this research, the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) in Vermont offers monetary incentives for delayed second cuttings through the Environmental Quality Incentives Program, according to Charlie Rewa, a biologist with the NRCS who facilitated the study for the NRCS.

Funding for the project was provided by the NRCS Agricultural Wildlife Conservation Center (AWCC). The AWCC, located in Madison, Mississippi, is a fish and wildlife technology development center.



Photos by Noah Perlut and Allan Strong, University of Vermont

Vermont dairyland landscape; (insets) (left) Savannah sparrow nest; (right) Savannah sparrow

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