

## Grass Management for the Birds

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Last month Jerry Cigelske and I compared the conservation benefits of CRP and management intensive grazing (MiG). MiG can provide many of the soil conservation benefits that CRP does and has the potential to provide high quality wildlife habitat as well. While soil conservation relates directly to our well being as farmers, the relationship of wildlife to our bottom line is considerably more tenuous. Why should we concern ourselves with these critters?

Grassland birds as a group are declining in population more rapidly than any other group of wildlife species in North America, some species at rates approaching 10% per year. There are many factors involved in their declines, including loss of both breeding habitat here in North America and wintering habitat in Central and South America. In the US, we've made efforts to set aside land in wildlife refuges and conservation programs like CRP. But if we can provide high quality habitat for these ground nesting birds in an economically sustainable agricultural system, everyone wins.

Unlike some other wildlife species that share our farms, grassland birds like meadowlarks and bobolinks cause no known damage or inconvenience. In fact, they perform the useful, though minor service of consuming weed seeds and insects. As Minnesota grazier Art Thicke has found, observing grassland bird activities throughout the seasons is an agreeable pastime that can become addictive!

Grassland birds can also be looked on as an indicator of how environmentally friendly our management systems are. If the system we use is capable of sustaining not only ourselves, our families, and our livestock, but can also provide a home for a complex community of plants and animals, we can know that it is a healthy, resilient, and fundamentally sustainable system. Art views the fact that meadowlarks choose to nest in our pastures as an indication that he is managing well!

One way that we can enhance pastures as habitat for grassland birds is to set aside rest paddocks or 'refuges' where these birds can nest undisturbed. Each species has its own nesting requirements, but in general grassland birds nest in May and June and require 4 to 6 weeks to build a nest and raise their young. Many species will re-nest, especially if their first nest has been disturbed or destroyed.

Wildlife ecologists Stan Temple at UW-Madison and Dave Sample with the DNR worked with Dan Undersander of the UW-Madison Agronomy Department and me on a study that resulted in the following guidelines for creating a 'nesting refuge'. Our guidelines include: 1) set aside groups of paddocks totaling 10 or more acres, up to 1/3 of the total acreage in a block of paddocks; 2) locate rest paddocks away from trees, buildings, and crop fields (alfalfa and CRP fields are ok); 3) graze rest paddocks lightly before May 15<sup>th</sup>; 4) defer grazing for at least 6 weeks between mid-May and early July; 5) graze or mow as desired after July 1<sup>st</sup> through the end of the season.

For our study, four graziers set aside refuge areas in their paddock systems. As I reported last time, these undisturbed paddocks attracted more birds and had higher nest survival than adjacent, normally grazed paddocks—not surprising.

But how did this work into the grazier's system? What are the agronomic implications of grass farming 'for the birds'? As expected, rest paddock forage was tall and rank after 6 weeks of growth and forage quality was lower than that of the rotationally grazed paddocks sampled at the same time. Forage quality was not as low as we expected, though, with crude protein averaging between 10 and 14% and relative feed values at 100 to 110. If cut for hay, it would be suitable for dry cows, but clearly not for lactating animals.

Following harvest of the rest paddocks, pasture regrowth was good and by the second cycle after the refuge period, forage quality was significantly higher than in surrounding normally rotated paddocks. So, the poor quality forage and inconvenience of managing the refuge early in the season was offset by the availability of high quality forage in August, a time when pasture quality tends to be low.

Although the research has ended, I've continued to think about this issue of resting paddocks and the broader implications for pasture health. How can we work these rest areas into a pasture management system in a way that makes sense to graziers? Are there other benefits to resting paddocks that we should consider?

Art Thicke, an experienced grazier who's become an avid birder as well, has incorporated the rest paddock idea into his pasture management system. Art grazes Airshires on 120 acres of pasture near La Crescent, Minnesota. He uses 75 acres on his home farm for his milking herd and another 45 acres on a second farm for his young stock and dry cows. His rest paddock system is set up on this second farm.

Art outwinters his cattle on a different 4 to 5 acre paddock each year. The hay bales are spaced throughout the field in fall and a portable wire is moved to limit access to a few bales at a time. In this way, Art spreads manure more evenly across the paddock. These paddocks get pretty beat up by the end of the winter and a lot of manure is deposited. In spring, the outwintered paddocks become Art's nesting refuge and they're rested till early August.

Art has observed increased grassland bird activity in these rest paddocks and feels that it enhances the habitat value of his farm. By August, all the birds are done nesting and the paddocks, allowed to recover with the help of winter-deposited manure, have come back vigorously. The rest paddocks are brought back into the rotation. Much of the vegetation is over mature and simply gets trampled as the cattle pick through it. Art views this 'wasted' forage as an investment in future soil health and fertility. He finds that the year after a paddock is rested in this way, it is significantly more productive than the other paddocks in his summer rotation. Art chooses a different paddock for the following outwintering site. He expects to return to each paddock every 6<sup>th</sup> year. Now in his 4<sup>th</sup> year of this rotation, he still observes greater plant vigor in the first paddock he outwintered on. Thus, Art has been able to blend pasture management and conservation objectives and provide multiple benefits for his pasture system with a single practice.

If you're interested in providing enhanced habitat for grassland birds, a good book to read is "Managing Habitat for Grassland Birds: A Guide for Wisconsin" by David Sample and Michael Mossman with the Department of Natural Resources. Your local DNR office should have copies available. I encourage you to learn about the birds and their needs and then work with your system to devise ways of providing undisturbed rest areas for them. Many graziers have come up with ideas: strips, corners of paddocks, etc. We don't know how these areas will work for birds. We know that large rectangular blocks probably provide the most benefit, but any undisturbed areas on your farm are of some value and like Art, you can work on including the needs of wildlife into your overall pasture management system in a way that makes sense to you.

Art receives multiple benefits from setting aside rest paddocks, including an important, but often neglected one: quality of life. Surveys show that the average livestock producer works more than 70 hours a week. The pleasure that Art gets from watching the birds on his farm is hard to measure, but can make a big difference in making those long hours a little more enjoyable.