

Befriending Birds



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Why should landowners care about integrating wildlife conservation with livestock production? The reasons are plenty.

by *Kindra Gordon*

If someone asked how many cattle you have on your ranch, surely you'd know a number. But if you were asked how many species of birds and wildlife could be found on your land, would you know? Would it be important to know?

Tammy VerCauteren with the Rocky Mountain Bird Observatory (RMBO) in Fort Collins, Colo., wants to get landowners thinking about those questions and to help them realize the important role birds and other wildlife play in rangeland settings.

VerCauteren, who works as an outreach director informing land managers about integrating bird conservation with rangeland management, says birds are ecologically and economically important to the environment.

Why birds are important

Economically, birds can mean big business. With nature-based tourism now the fastest-growing segment of the tourism industry in the United States, VerCauteren says many landowners are finding that offering wildlife or birding activities on their land can offer value-added opportunities. She reports that one in three of all Americans consider themselves bird-watchers. A 2001 survey found that more than 80 million Americans participated in some form of recreational activity related to fish and wildlife.

But even if nature tourism isn't one of your ranch's future goals, wildlife — particularly birds — play critical ecological roles by helping keep rodents and insects at manageable levels.

"Birds eat insects and rodents. They spread seeds and serve as prey for a diversity of other wildlife species," VerCauteren says. For example, she says a Baird's Sparrow will collect an estimated 135 insects — mostly grasshoppers — daily to feed its young, and

a pair of Ferruginous Hawks will kill roughly 500 ground squirrels, prairie dogs and rabbits in a single breeding season. These activities help suppress insect and rodent populations, often keeping them below outbreak levels, VerCauteren points out.

Additionally, VerCauteren says, "Birds let us know when there are environmental concerns." For instance, thin eggshells among birds of prey, including Bald Eagles and Peregrine Falcons, were an

initial indicator that there was DDT in the environment.

She adds that since birds are closely tied to the available habitat structure (height and density of vegetation), they can serve as indicators of habitat change, which in turn can reflect changes in land management strategies and range health.

"A healthy bird community should be a healthy grassland for livestock as well," she says. So, if something starts to decrease the

Rocky Mountain Bird Observatory offers assistance

Founded in 1988, the Rocky Mountain Bird Observatory (RMBO) is a nonprofit organization dedicated to the conservation of birds and their habitats throughout the Rocky Mountains and Great Plains. Working with private, state and federal agencies as well as landowners, RMBO strives to increase the understanding of birds and their habitats through research, monitoring, education and outreach efforts. RMBO has three offices in Colorado and one in Alliance, Neb., and they have worked with landowners from Mexico to Canada.

Presently, RMBO's Prairie Partners program is working to build a coalition of landowners and land managers actively involved in the conservation of lands important to prairie birds. Through the program, numerous train-the-trainer workshops are providing technical assistance and education to interested land managers. The program includes a handbook about integrating bird conservation with rangeland management, a pocket guide for identifying prairie birds and an interactive bird reference CD.



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Additionally, RMBO conducts workshops for the urban public to create awareness of the important role farmers and ranchers have in the conservation efforts of birds and wildlife. "They are the stewards of the land, and we want the public to understand the role of landowners in providing habitat," says RMBO's Tammy VerCauteren. To learn more about the Rocky Mountain Bird Observatory and the programs it offers, contact VerCauteren at (970) 482-1707 or tammy.vercauterer@rmbo.org.

diversity of bird species or populations, it may indicate a decline in range health that needs to be addressed.

Finally, and perhaps the most important factor in conserving grassland birds, are the implications preservation has for the future. Through conservation, future generations can enjoy a diversity of species. Implementing beneficial conservation efforts for birds and wildlife may also help keep management strategies in the hands of landowners and operators, rather than being dictated by regulatory action. This is becoming even more critical as contentious issues continue to arise with sensitive, threatened and endangered species.

How to manage for birds

Given all those reasons for the importance of birds and other wildlife, what can you do to attract more of them to your land?

VerCauteren suggests land managers start by recognizing the habitat requirements of grassland birds. This includes looking at bare ground, species composition of the vegetation and structure of the vegetation.

“Birds need habitat with diversity. If it all looks the same, you’re not going to have as many birds. So, we encourage landowners to try to keep a mosaic of conditions to meet the broader needs of birds,” she says. VerCauteren offers these guidelines for effective bird habitat:

Focus on habitat structure. VerCauteren says grassland bird communities are generally influenced more by habitat structure than the particular species of plants in the habitat. Structure consists of many factors, including height and density of vegetation, topographic features, ground cover and man-made structures, and is important in providing nesting substrates and opportunities for feeding, resting and perching.

The more structurally diverse a habitat is with grass, shrubs, forbs (flowering plants), etc., the more species-rich the bird community found there. For example, some species require taller, denser vegetation, while others require short vegetation for attracting mates, nesting and brood rearing. VerCauteren says grasslands with a patchy structure will provide opportunities for multiple species to coexist.

Pay attention to species. While structure can be the biggest factor affecting bird habitat, it doesn’t mean plant species composition isn’t important. For instance, in the case of the Sage Grouse, not just any shrub species will meet its habitat needs; these birds need sagebrush.

VerCauteren suggests that if you don’t have a large landmass that can offer diversity of habitat structure, perhaps you should focus on critical birds that are key to your area and the habitat you can provide.

Surveying for birds

If you’d like to get an idea of how many birds are on your land, you’ll first need a guidebook to identify different species. Then, establish several survey points at different locations on your ranch. This can be as simple as monitoring birds during a normal driving route for checking cattle. Simply stop for five minutes and record indicator birds for your pasture(s). Select an area that falls within a single pasture. Avoid stopping next to windmills (or fencelines), since some of the birds using stock tanks or perching areas may not actually be nesting in your nearby pasture.

The best time of year to survey breeding birds is from mid-May until the end of June. The best time of day to survey birds is from dawn until 10 a.m., because bird activity diminishes as the day progresses.

If possible, do a survey two or three times during the breeding season, using the same methodology, to get an average number of indicator birds on the land.

This protocol, though not a statistical sample, should provide an idea of bird trends within surveyed areas over time.



Consider management implications.

VerCauteren says management factors can greatly influence the available habitat structure for birds, including the use or nonuse of fire, haying, grazing, and methods of invasive species control.

As an example, heavy spring grazing year after year in the same pasture may reduce, or eventually eliminate, cool-season grasses in that pasture. This can be detrimental to early-season nesting birds that require cool-season grasses.

As a solution, land managers should be aware of the habitat needs of birds and

wildlife and try to integrate those needs with their rangeland management. Strategies might include:

- ▶ implementing a rotational grazing system that varies the grazing patterns and timing in pastures annually;
- ▶ using fire as a tool to create disturbance and alter habitat structure;
- ▶ waiting to hay areas until after July 15, when most birds are finished nesting;
- ▶ altering use in riparian areas to allow birds to utilize the area, or using escape ladders to protect water quality and minimize loss of birds and other wildlife in stock tanks;
- ▶ establishing native shrubs, legumes or forbs to add diversity to the habitat (Avoid establishing monoculture stands of forages.); and
- ▶ considering stocking rate, as overstocking will reduce habitat quality for most species of wildlife and birds.

Of these suggestions, VerCauteren emphasizes that there is a balance between livestock and wildlife. “Grazing is a critical tool, and birds need different levels of grazing to keep diversity in their habitat,” she says. “Grazing can also be an effective tool for invasive species management.”

For producers interested in enhancing bird and wildlife habitat on their lands, VerCauteren says there are many partnership opportunities available for funding through the U.S. Fish and Wildlife Service (FWS), Natural Resources Conservation Service (NRCS), state agencies, and several private and state incentive programs. Contact any of these organizations for more information.



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