

Increased demand for locally produced, grass-fed beef is one reason conservation grazing has gained attention in Midwest states. The partnership between land managers and graziers meets the needs of both the wildlife and agricultural communities.



Greener pastures

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CONSERVATION GRAZING ON PUBLIC LAND IS A WIN-WIN FOR BOTH RANCHERS AND WILDLIFE MANAGERS.

Kris Johansen

Day breaks at the Buena Vista Wildlife Area on a cool August morning, and as darkness and a ghostly fog recede, life bursts forth from this expansive grassland. The emerging sights and sounds, for this visitor, are unforgettable.

Sandhill cranes announce themselves with their rolling, trumpeting call as they fly out for their morning meal. Greater prairie chickens flush with grace from their grassland roosts. Canada geese lift through the last traces of fog, piercing the morning silence with raucous calls. White-tailed deer, seeking quiet refuge, bed down for the day in a sea of grass.

Then, amidst the wild noises, comes the unmistakable call of a red Angus cow as mother bellows for her calf. While common on private lands, this bovine pair and the herd to which they belong

seem a bit out of place on the state-managed Buena Vista Wildlife Area, within a 320-acre fenced area devoted to conservation grazing.

A new tool for managers

Wildlife managers with the Department of Natural Resources have a suite of tools to improve habitat on state wildlife areas and other DNR properties. In grasslands like these, prescribed fire, mowing and herbicide application have traditionally been the most effective. Ideas and techniques evolve with time, however, and

during the past five years, conservation grazing has gained great attention here and in other Midwest states, in part because of increased demand for locally produced, grass-fed beef raised on sustainable grasslands.

Conservation grazing employs a staple of Wisconsin agriculture — cattle — to help manage wildlife habitat and to expand partnerships both with the agricultural community and with local, sustainable food movements.

On state wildlife areas where grazing occurs, lands are closely monitored and assessed by DNR staff and by cattle producers to avoid the negative environmental effects seen in poorly managed systems, such as over-grazing and erosion. The goal is always to minimize negative impacts on recreational users and maximize positive effects on vegetation, soils and wildlife. Grazing cattle, for instance, can help spread wildflower seeds and stimulate their growth while providing plant residue for nesting birds.

Scientists have found many ben-

efits from well-managed, conservation grazing including:

- Improved habitat for grassland-dependent wildlife species
- Increased diversity of wildflowers and other plants
- Suppression of invasive species
- Improved soil health and water quality
- Decreased use of herbicides and mowing
- Support of local farming communities

The power of partnerships

For DNR, partnerships are critical to success. In 2015 and 2016 conservation grazing was initiated on four DNR state wildlife areas in Portage, St. Croix, Crawford and Dane counties through a recently developed partnership between University of Wisconsin-Madison's Agroecology Program, the Wallace Center Pasture Project and local graziers.

The Wallace Center Pasture Project works to increase the number of sustainably managed farmland acres in the Upper Mississippi watershed, benefiting wildlife, farmers, water quality and soil health. The Pasture Project works with farmers, landowners, land trusts and government agencies to implement sustainable agricultural practices such as grass-based livestock production, cover cropping and integration of livestock grazing into row-crop farming. All these practices can add up to a win-win by increasing farmers' profits while conserving natural resources. The Pasture Project provided financial and technical support to DNR land managers with site-specific, certified management plans, assistance with infrastructure, workshops for DNR staff and educational signs for each conservation grazing property.

Rod Ofte is a consultant for the Pasture Project and lives in southwest Wisconsin where he uses rotational grazing on his own ranch. He said the partnership between DNR and local graziers is a huge win for all involved.

"Using cattle as a land-management tool on public lands allows ranchers access to productive forage sources and it reduces the need for mowing and pesticide spraying," Ofte said. "Well-planned grazing improves wildlife habitat while having minimal impact on the patrons who use the land. Better management lowers costs and makes for healthier soil and water quality, which everyone likes."

For their part, the UW Agroecology



Program is studying potential opportunities, benefits and impediments for grazing livestock on public lands, assessing environmental, economic and social outcomes of public-private conservation grazing partnerships during a four-year period. One of the principal investigators is Mark Renz, Associate Professor of Agronomy at UW-Madison who specializes in weed management.

"This effort demonstrates how institutions can work together to improve Wisconsin's landscape management so that everybody benefits," Renz said. "It's still ongoing, but we hope the results of these studies will be used to adapt DNR's approach to grazing and grazing partnerships to maximize wildlife benefits and strengthen relationships with the agricultural and conservation communities."

The final critical component involves the partnerships being developed with agricultural producers. Everyone is learning from each other and gaining a better appreciation of what each has to offer. Each producer entered into a five-year farming agreement with the DNR to ensure the project is beneficial to both parties. Agreements cover details such as the number of cattle that can be grazed, seasonal schedules, fencing, water specifications and liability.

The Buena Vista experience

This spring, DNR Wildlife Technician Erin Grossman and William Kolodziej, a rancher and grazing specialist, will begin

year three of a five-year project using rotational grazing to improve wildlife habitat at Buena Vista. The project area consists of 320 acres within the Central Sands region of Wisconsin.

"Rotational grazing allows for varying rates of grazing pressure to achieve our desired outcome," Grossman said. "I'm excited for the potential this project has on Buena Vista and other wildlife areas. We've seen positive results so far,





William Kolodziej grazes his cattle on the Buena Vista Wildlife Area. Pastures are divided into paddocks with temporary fencing and regularly rotated. This continual movement of cattle provides them with quality forage while at the same time improving grassland habitat for wildlife.

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and I've gained a greater appreciation and understanding of what is important to ranchers. We've developed some great partnerships."

Grossman and Kolodziej are working to improve wildlife habitat with cow-calf pairs at varying grazing intensities. They plan to bolster plant species diversity and increase variation in vegetation heights and densities while reducing woody and invasive plant species, and



Different types of cattle provide different management services. This Scottish Highlander removes exotic invasives, such as buckthorn and wild parsnip.

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the need for herbicide use and mechanical management methods. Additionally, they hope to foster partnerships with neighbors and the agricultural community.

When first approached, Kolodziej saw opportunities, but also had many concerns.

"Will DNR understand my goals and needs as a producer?" he wondered. "Will my cattle have enough to eat and adequate water to be healthy and stay inside the fence?"

After year two Kolodziej had this to say: "DNR staff have been easy to work with and showed concern for my livestock operation. We rely on each other's knowledge and skills from wildlife needs to livestock needs. We're a team working together to reach both wildlife habitat and livestock production goals. It's rewarding to be part of a successful project where commercial agriculture works with the DNR to improve water quality, soil health and wildlife habitat."

In 2016, stocking doubled to 60 beef cow-calf pairs. Kolodziej says cattle performance has been great, with 100 percent breeding success last season. Forage yields were roughly six times higher after one year of rotational grazing and great weather. In addition, the cows have been trained to eat woody and invasive plant species, including spirea, willow, aspen, musk thistle and goldenrod, which allowed a diverse set of native plants and wildflowers to reappear.

How does conservation grazing impact hunters and other property users?

As with all land-management techniques, public property users may notice some changes on properties with conservation grazing. The practice requires fences to keep the cattle inside areas where grazing has been prescribed. Depending on the location of the project, these fences may have multiple strands with barbed or electric wire.

DNR property managers carefully consider how conservation grazing may affect other users. Steps taken include: providing numerous access points to enter fenced areas; posting properties with educational information; restricting timing of grazing operations to spring, summer and early fall; and providing property manager phone numbers so users can seek out additional information.

The goal for all these managed areas is to improve habitat, including for game birds. While ungrazed areas provide



A host of grassland and wetland birds benefit from conservation grazing, including sandhill cranes, pheasants, wild turkeys, greater prairie chickens, upland sandpipers and meadowlarks.

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undisturbed nesting habitat, managed grazing areas provide excellent brood-rearing cover and abundant sources of invertebrates that growing chicks need. Together, this creates important habitat throughout the developmental phases of game birds.

Planning for the future

Though conservation grazing holds great promise, it is not suitable for every place or time. DNR staff plans to identify areas in the state best suited for conservation grazing, provide support for DNR land managers and identify possible funding sources for infrastructure.

Most importantly, DNR staff will work closely with conservation partners and the agricultural community, continually searching for solutions that benefit wildlife, farmers and the citizens of Wisconsin who enjoy and appreciate public lands.

Kris Johansen is DNR's regional wildlife manager stationed in Eau Claire.



PUBLIC LAND OPPORTUNITIES

DNR's wildlife management program manages over 500,000 acres across more than 200 state wildlife areas for the benefit of both wildlife and wildlife-based recreation. DNR-managed public lands provide many opportunities for individuals and families to hunt, fish, trap, hike, canoe or watch and photograph wildlife. To find a property near you, visit dnr.wi.gov and search "wildlife areas."