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Riparian Review

With management, you can graze these special areas.

by ***Kindra Gordon***

Riparian areas, the highly productive and often lush green zones along creeks and streams, have been and continue to be a contentious issue among landowners, federal land permittees, land management agencies and the public.

As interest grows in multiple uses on public lands and more issues arise with threatened and endangered species, grazing livestock on riparian areas continues to draw debate, reports Sandra Wyman, a rangeland management specialist with the National Riparian Service Team (NRST). Based in Prineville, Ore., the group is comprised of Bureau of Land Management (BLM) and Forest Service (FS) specialists in partnership with the Natural Resources Conservation Service (NRCS). She adds, "There's often a perception that grazing livestock in riparian areas is bad, and no livestock in these areas is good."

But Wyman says that perception is far from accurate. "In many situations, removing livestock from riparian areas is not necessary," she says, and instead she suggests the implementation of proper management strategies to develop a balance between utilizing the forage in these zones, while also allowing time for riparian areas to rest and recover.

What works?

So what works and what doesn't when grazing these delicate areas? Active participation by a land manager is foremost. "You can't just turn your cattle out in the spring and round them up in the fall," Wyman says. "You need to monitor animal performance, the forage resource and the physical condition of the riparian area, and be prepared to adjust grazing use."

During the 1990s, Bob Ehrhart, currently a natural resources program leader with Oregon State University (OSU), studied healthy riparian zones on 34 ranches in Montana to determine what had been done to get, or keep, these areas in healthy condition. He found seasons of use and lengths of grazing periods varied greatly, but the commonality was that all producers were actively involved in the management of their properties and were concerned about the land. Bottom line: "Management, not a particular grazing system, is the key to keeping riparian areas healthy," Ehrhart concludes.

Wyman adds that management can also offer economic benefits to the producer. Cattle staying on riparian areas grazed down to nothing and waiting for plants to regrow aren't going to be gaining and performing. Management can help livestock more efficiently use forages in the pasture.

So, when it comes to season of use and length of time to graze riparian areas, Wyman and Ehrhart say it must be tailored to each situation.

"You can't cookie-cut this. It depends on the soils, hydrology of the area, and the goals of the ranch operation and public land if applicable," Wyman says. For instance, the dormant season, or winter, is when plants are generally least vulnerable, but if that doesn't fit the operation's grazing needs because of too much snow, it's not the right solution.

"Any season can work, and any season cannot work," she says, depending on resource conditions and how the resource is managed. "That is why we recommend monitoring and having producers set goals for triggers, such as stubble height, on key forage species." Based on that information, land managers need to evaluate forage use and riparian area condition and, if necessary, make adjustments.

For example, if livestock graze a riparian area in the hot season, Wyman says it is time to move the animals to a new location if plants have been grazed to the stubble height you've set as a limit or if acceptable streambank alteration levels are met. That way, the plants have time to rebound. "The key is you want to graze a plant once and then allow about 20 to 30 days rest. Without rest, a plant can't photosynthesize and maintain root vigor," she explains.

More options

In addition to monitoring timing of grazing on riparian areas, practices to attract livestock to upland areas of the pasture can also work. Wyman notes that research on low-stress livestock handling, where animals are slowly herded to upland areas and kept mothered up, has shown good results. Using low-moisture supplements to attract animals to different areas of the pasture is also showing promise.

Developing alternative water sources is a bit more of an investment, but it can be highly effective. "We've seen many producers use portable solar panels to pump water out of a lake, pond or stream and into a tank. Generally, livestock like to water out of a tank versus a stream," Wyman says. She

reports that research has shown livestock will spend as much as 90% less time on riparian areas if they have an alternative water source from which to drink.

Fencing out riparian areas can work, but Wyman says it's usually unnecessary. "Fencing off all riparian areas is very expensive, topographically not feasible and creates wildlife concerns because it can affect migration patterns," she says. "We may recommend exclusion fences if it is a real degraded area that needs a jump start."

Common mistakes

With those strategies in mind, there are still some common mistakes in managing riparian areas. Wyman says a frequent mistake she sees is moving the herd to a new pasture, but leaving a few animals behind. "When riparian areas aren't completely rested, even as few as 6 to 10 head can keep the area in poor condition if they are left there [all] season-long to graze," she says.

Another mistake is failing to monitor the environment. Monitoring within season is important — especially to evaluate if the plant resources are going in the direction you seek long-term. She suggests setting reasonable goals and tracking things like species, climate and precipitation. In addition, she recommends long-term trend monitoring of riparian herbaceous plants and woody species regeneration along the water, as well as key areas in the uplands. A healthy riparian area with a diverse mix of wetland plants will be able to better hold water in the soil vs. letting it all run into the stream.

Lastly, she suggests incorporating riparian area use into total ranch management plans, so the areas can be specifically managed, while still being a valuable and healthy grazing resource. She also says to be adaptable. "If you try a technique that doesn't work, evaluate why change did not happen. Perhaps it was due to a flood event or drought. So try something else and don't give up."

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Solving riparian issues

The National Riparian Service Team (NRST) is devoted to assisting both public and private groups in developing a collaborative approach to riparian management.

The team's strategy involves bringing all interested parties in a community (landowners, permittees, agencies and the public) together to encourage communication, build trust and create a common vision for the resource, according to Sandra Wyman, a rangeland management specialist with NRST.

The team has primarily provided assistance in the West when conflicts have arisen involving private and public lands. It has provided training and built collaboration. The team has also worked with private landowners and groups with watershed issues across North America.

Wyman reports that communication is often the key to developing relationships among groups who initially seem to have differing viewpoints. "When you get all interested parties together on the land, look at how the riparian area is supposed to function first and then share what each group's concerns are in a respectful manner. Through this process, people do become more informed and are often able to come up with a shared vision and work together to develop potential solutions," she says.

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