Riparian Pasture Program

South Dakota Wildlife Division
Department of Game, Fish and Parks

Private Lands Habitat Program

A riparian area is the transitional zone adjacent to streams and rivers where vegetation is strongly influenced by the presence of water. Riparian areas are often the most productive pieces of land on a ranch, providing an important source of water and shelter for livestock and wildlife. These areas also respond relatively quickly to management changes. It has been recognized that many of South Dakota's riparian areas are some of the best in the nation, while some others are in need of help. Those in need of help have limited woody vegetation regeneration (cottonwood, ash, box elder, wild plum, willow, choke cherry, etc.) and eroded banks with deeply incised channels along seasonal and permanent streams.

When managed properly, these riparian areas provide important habitat for wildlife and can increase forage production for livestock. Healthy, well vegetated riparian areas also serve as important buffers that can reduce water pollution by slowing runoff and trapping sediment.

Result of many years of continuous summer grazing.

The South Dakota Department of Game, Fish, and Parks (SD GF&P) will cost share up to 75% of the costs incurred (fencing materials & labor) to create a riparian pasture or exclosure. Priority will be given to those projects that also include a wetland creation or restoration project or managed grazing system. SD GF&P will also cost share 50% for water development (pipe & tank, shallow wells, etc.) up $5,000 if the riparian area was the main source of water prior to creating the riparian pasture.

Result after six years of only early spring grazing with no reduction in AUMs from the previous photo.

Why create a riparian pasture?

Economics

A survey of 346 producers who had changed to controlling riparian area grazing and rotational grazing practices found that 80% reported higher weight gains, 91% reported higher forage production, 88% reported higher forage quality and 52% reported lower over-wintering costs.
(Saskatchewan Watershed Authority)

"Riparian management can also be economically justified by maintaining the quality of water supplies. Riparian management usually involves remote watering or protecting water quality by maintaining riparian health. Recent research has shown that improved water quality can improve feed intake, feed efficiency and weight gains."
(Saskatchewan Watershed Authority)

Water Quality

Healthy riparian areas can maintain or even improve water quality by reducing runoff, erosion, sedimentation and non-point source nutrient loading in streams and rivers. The quality of water in our lakes, reservoirs and aquifers can also be maintained and improved. Cleaner water provides for a healthier fish and wildlife resource, not only on-site but further down stream. Runoff from range land eventually finds its way into one of South Dakota's many rivers, which eventually flows into the Missouri River reservoirs and under ground aquifers. Water from these two sources is used for drinking water in many rural communities and homes. If the water is cleaner from the start coming off of range land, large amounts of money can be saved at water treatment plants.

Results of nine years of grazing restricted to November through February.

Wildlife Habitat

Riparian pasture management can also improve habitat for wildlife. Healthy riparian areas provide habitat for deer, pheasants, turkeys, grouse, many migratory birds, and fish. The naturally regenerated woody cover and taller grasses and forbs provide protective cover from predators and from harsh weather conditions. Riparian pastures also provide an excellent food source from the mast produced by trees and shrubs for wildlife. In streams that support fish, the shade provided by trees and tall grasses on the banks keeps water temperatures cooler. Cooler water holds more oxygen and thus a greater diversity of aquatic life. This vegetation also stabilizes the stream banks, reduces sedimentation, and provides a source of organic matter all of which improves habitat for fish and other aquatic species.

Result of season-long grazing on a Colorado pasture.

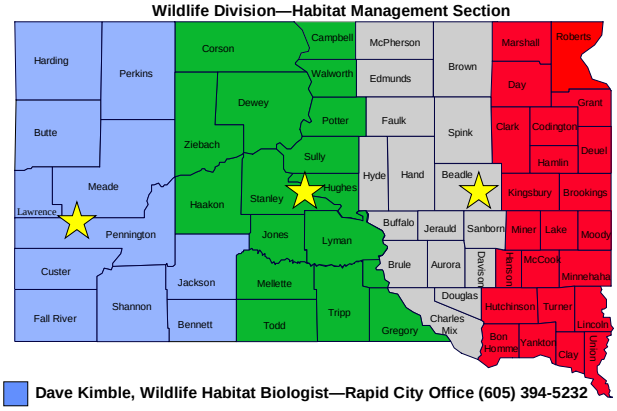
Aesthetics

Riparian pastures are also pleasing to the human eye. We feel good about seeing new trees and shrubs and vegetative ground cover in riparian areas instead of trees grazed as high as the livestock can reach and/or down to the ground. It is appealing to see grass covered banks instead of eroded banks. Healthy riparian areas also increase the value of the land. If one ever wanted to sell their land, prospective buyers would be willing to pay more for an area that had healthy vibrant riparian areas.

A properly managed riparian pasture can improve livestock weight gain, increase forage production, and reduce costs, all while instilling a sense of good land stewardship knowing that your land is improving South Dakota's water quality and providing quality habitat for wildlife.

SOUTH DAKOTA DEPARTMENT OF GAME, FISH & PARKS

Wildlife Division—Habitat Management Section



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Pictures found in the U.S. Environmental Protection Agency's 1993 report: "Managing Change, Livestock Grazing on Western Riparian Areas"

www.sdgfp.info/Wildlife/privatelands/Index.htm