

Riparian Areas:

Ribbons of Green on the Landscape that Tie Us All Together.

The Alberta Riparian Habitat Management Society, also known as **Cows and Fish**, works with landowners and communities to improve their understanding of riparian areas and how changes in management can improve the health and productivity of these areas for ranchers, farmers and others who use and value riparian areas. Riparian areas are the lands adjacent to streams, river, lakes and wetlands, where the vegetation and soils are strongly influenced by the presence of water. A riparian area can be recognized by having wet soils, water loving vegetation like sedges, cattails, willows and aspen, and of course, the presence of water, either surface water or groundwater. In Alberta 2 to 5% of the entire land base is riparian, however these areas are among the most productive and valuable of all landscape types. The key to maintaining healthy riparian areas is in understanding how they work. Once you understand how they work, you can manage riparian areas to restore or maintain those functions.

“Riparian areas are the ribbons of green vegetation next to rivers, creeks, lakes, and wetlands.”

Some of the critical functions riparian areas perform include:

- trapping sediment from runoff or overland flow;
- preventing erosion of streambanks and shorelines;
- reducing flood damage;
- acting like a sponge to hold and store water helping to maintain water levels;
- providing abundant forage and shelter for livestock and wildlife;
- improving water quality through the filtration and uptake of nutrients; and
- maintaining biodiversity

Consider that most cities and towns are built next to a river or lake (and therefore the riparian area), and that each and every one of us rely on these areas for our own water supply. Our livestock also depend on riparian areas for forage, shelter and water. In Alberta, 80% of our wildlife relies in whole or in part on riparian areas to survive. Thus, it is critical that we manage riparian areas in a sustainable manner for the benefit of all users. The health and functioning of riparian areas can be influenced by activities as diverse as road construction, resource extraction, agriculture, urban or rural development, and recreation. Often we do not understand or fully appreciate the functions and roles riparian areas provide to landscapes and societies and as a result changes in the landscape within riparian areas go unnoticed.

What can you do?

1. Promote healthy vegetation
 - Diverse herbaceous and woody plants create the structure needed to trap sediment and contaminants as well as uptake some nutrients.
2. Encourage the principles of range management

- Provide effective rest to pastures. Aim for evenly distributed livestock. Avoid grazing riparian areas during vulnerable periods, like early in the spring when soils are wet and woody species are more susceptible to damage from browse. Balance forage supply with livestock needs.
3. Increase the width of buffers
 - A buffer is a zone of healthy, diverse vegetation next to the riparian area. Buffers help to minimize the impacts from cultivated fields, wintering sites or other intensively used areas.
 4. Try a variety of management techniques
 - Consider alternate water sources for livestock. Place supplemental feed and mineral away from riparian areas, create fenced stream crossings, control timing of use, and reduce manure build up in riparian areas.
 5. Join or start a local watershed group in your community.
 - Watershed groups are a good way work together as a community to recognize riparian issues, identify management tools that work and benefit your operation, and to develop and implement non-legislative voluntary action plans to address the issues. Cows and Fish works with a number of watershed groups in Alberta helping people to understand riparian areas, collecting data on riparian health, and encouraging and facilitating community lead watershed activities.

Where can you find more information?

For more information on riparian area management contact Cows and Fish at riparian@cowsandfish.org or (403) 381-5538. Or visit: www.cowsandfish.org.