Riparian
FACTSHEET

BRITISH COLUMBIA
Ministry of Agriculture, Food and Fisheries

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Factsheet 3 of 7 in the Range Riparian Factsheet Series

Livestock Distribution in Riparian Areas

This Factsheet answers the questions "How to I distribute livestock in riparian areas?

Distribution

Water availability combined with other factors including shelter and forage will naturally attract and concentrate livestock to your riparian area. In order to avoid damage in riparian areas, livestock managers have the following distribution tools at their disposal.

Supplements:
Both salt and mineral supplements such as low moisture blocks are useful tools that can aid in distributing livestock away from riparian areas. It is important however to supplement as far as possible from any water source. A good rule of thumb is to if possible maintain a distance of approximately1.6 kilometers (one mile) between attractants. Other possible supplements that can aid distribution include hay, grain, molasses etc.

Alternative or Improved Forage:
Another useful distribution technique is the development of alternative or improved forage away from your riparian area. This can be achieved in a variety of ways including fertilization, seeding, prescribed burning and tree thinning.

Stock Water Development:
Developing water away from riparian areas has been shown to significantly reduce livestock foraging and loitering in riparian areas. Numerous techniques can be used to develop an alternative water source including installing ram, solar or conventional pumps; developing springs, seeps or wells; and piping water to several troughs once collected. For additional information on stock water development, please refer to the **BC Livestock Watering Handbook**.

Direct Water Access
While watering livestock directly from a steam may constitute a pollution risk, well developed and managed access sites will greatly reduce any environmental impact. Well managed access sites restrict access to a small area and may include hardened crossings and water access points consisting of gravel. This provides sure footing and a gentle grade that allows livestock to comfortably drink or cross a stream. Other way to ensure sure footing and prevent bank damage is to locate your direct water access site in a naturally rocky area. For more information on this subject, please see the **BC Livestock Watering Handbook**.

Fencing:
Besides stock water development, fencing is probably the next most effective method of managing livestock distribution on your range or pasture. In order to maximize the benefits that fencing can obtain however, you must ensure that it is properly located, well-construction and maintained. A fence that doesn't meet the aforementioned criteria can result in more negatives than positives! Ideally, fences should be used to separate different forage types. For example, a tame pasture should be fenced separately from a forest, a forest from native grassland, native grassland from a riparian area etc.

In most cases, exclusion fencing should be considered only when all other avenues have been exhausted. It is expensive, requires more fencing and involves a great deal of maintenance. It may also be a band aid solution that fails to deal with the grazing management problems that may be occurring on all aspects of the ranch.

In some cases however, it may be a viable option if for example stream banks are extremely fragile or severely degraded, topography and vegetation patterns are complex, or in situations where intensive management (e.g., calving, winter feeding etc.) occurs adjacent to a creek. When constructing corridor fencing please consider the following: Is the exclusion area going to be grazed in the future? If it is, it should be wide enough to allow effective grazing to take place. For more information on constructing a riparian pasture, please refer to the **Riparian Pasture factsheet**. If you don't plan on grazing it in the future, the fence should be located out of the active floodplain and far enough from the stream banks to permit the natural movement of the stream.

Barriers:
Various types of barriers may also be used to control livestock distribution. For example, fallen trees and large boulders can be used to block off water access points and trails thus discouraging use in those areas. Plants that form a physical barrier due to thorns or dense growth (e.g. hawthorn, rose), or have low palatability can also deter livestock from using an area. Natural barriers combined with fencing can also achieve the above results by regulating trailing and loitering in some areas.

Herd Management and Animal Husbandry

Various herd management and animal husbandry techniques can also be employed to improve distribution and either improve or reduce the impact that livestock has on the riparian area.

Herding:
Herding is another method that can be used to deter excessive livestock use in riparian areas. The only downfall of this tool is that it is labour intensive and requires in most cases daily riding and herding.

Livestock Turnout:
In large paddocks with adequate stock water you may be able to control livestock use in your riparian area by turning your livestock out well away from the riparian areas.

Culling:
Livestock foraging habitats have been shown to vary with breeds and herds. Some individuals often spend more time in riparian areas while others tend to forage widely. Animals that favour riparian areas may pass this trait down to their offspring. If this is happening in your herd, culling may be a tool you want to consider.

Livestock Class:
In general, unrestricted use by cow-calf pairs typically impact riparian areas more than any other livestock class as they tend to concentrate, forage and overall spend a large portion of their time near riparian areas. Yearlings however, generally tend to distribute themselves more widely throughout a pasture.

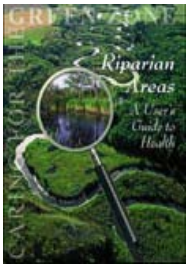
Livestock Type:
Different livestock types forage in different ways. For example, herded sheep may offer different options when riparian grazing since the herder is able to control location, timing, utilization, duration and frequency of use. In

addition, sheep grazing may reduce physical plant damage due to their nibbling characteristics and when properly managed typically cause less trampling damage than cattle.

Livestock Handling Facilities:
If possible, all livestock handling facilities including corrals and bed grounds should be located as far as possible from riparian areas.

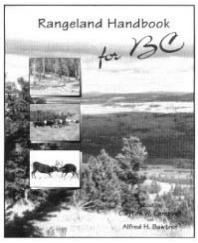
Further Information

To learn more about this topic please refer to the following documents:



1. Caring for the Greenzone. Available online: http://www.cowsandfish.org/greenzone.html
2. Riparian Areas: A User's Guide to Health. Available online: http://www.cowsandfish.org/usersguide.html.

3. Management Techniques in Riparian Areas. Available online: http://www-a.blm.gov/riparian/tech.htm
4. Grazing Management for Riparian-Wetland: Available online: http://www-a.blm.gov/riparian/tech.htm.



5. Rangeland Handbook for BC. Available online: http://www.cattlemen.bc.ca/handbook.htm

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