

Seasonal Considerations for Grazing Management

Determining Season of Use

When developing a grazing management plan, determining what season you should graze your riparian areas is typically the first question that must be answered. Before making this determination numerous factors must be considered. This factsheet will attempt to answer some questions that you may have as well as guide you through the process of making these decisions.

Generally, there are no easy solutions as grazing in every season tends to produce both positive and negative consequences. The remainder of this factsheet will try to explain the advantages and disadvantages that **may** result from grazing in certain seasons.

Spring



Spring grazing of riparian areas is often beneficial for a number of reasons.

- Availability of actively growing, succulent upland plants. During the spring the uplands of a majority of BC's southern interior grasslands produce an abundant amount of succulent plants that often does not exist in the summer, fall and winter months. This is beneficial in that it reduces both livestock foraging in riparian areas and browsing of riparian shrub species.
- Availability of additional water sources. In the spring, many ranges often have additional watering sites available that away from the main riparian area. The availability of this water is typically limited to the spring often drying up in the summer and fall or not developing due to drought conditions.
- Cool spring temperatures also often discourage livestock from loitering in riparian areas.
- Wet soils may, if given other alternatives, also discourage livestock from entering a riparian area.

Whether its wet soils, cool temperatures, additional forage, water or both, distribution of your livestock will be enhanced if the proper conditions exist. Regardless, a few words of caution must be given before considering spring grazing. In order for spring grazing to be successful, it is extremely important to remove livestock in the spring or early summer. This will allow for plant regrowth and prevent repeated grazing of desirable plants. In addition, due to high soil moisture levels which could lead to soil compaction, bank trampling and subsequent erosion, it is also essential not to graze **riparian pastures** at this time. Finally in order to maximize livestock production, animals should not be turned out onto pastures with insufficient forage unless supplemental feeding occurs. If supplemental feeding is not occurring, a good rule of thumb is to ensure that at least 10 to 15 cm (4 to 6 inches) of plant material is present before turnout.

Summer

There are numerous factors to consider before summer grazing since repeated or extended grazing during this period has the potential to be the most detrimental to riparian health.



You can successfully summer graze however, if you pay close attention to both the duration and frequency of grazing in these areas. There are various tools available that can assist in accomplishing this objective. For more information on the tools that can be used regardless of season please refer to the following factsheets in the Range Riparian Factsheet Series:

- **Livestock Distribution in Riparian Areas** (Factsheet 3). During the summer grazing season, it is extremely important to use various distribution tools such as supplementation, water developments, herding etc. to avoid livestock congregating in riparian areas.

Grazing Frequency and Utilization (Factsheet 4). Regardless of size, a pasture should not be subjected to grazing throughout the growing season. If possible, a pasture should be grazed only once per year and ideally at different times throughout the year. This is extremely important, especially if you plan on grazing during a plant's critical period of growth (late spring-early summer). Grazing during a plant's critical period of growth should be restricted to once every three or four years. If you plan to graze a pasture more than once per growing season, it is extremely important to ensure that adequate rest is built into your rotation. In general, depending on site condition and the types of plants you are dealing with, rest periods of at least 30 to 60 days will be needed in order to prevent riparian degradation.



- **Pasture Design** (Factsheet 6). This factsheet provides some suggestions as to how you can design your pastures in order to minimize riparian over-utilization, riparian loafing and the under-utilization of uplands.
- **Monitoring** (Factsheet 7). Monitoring is integral to any grazing management or range use plan as it provides you with a tool to ensure that you are meeting your objectives.

If these tools are not employed, the following disadvantages may result:

- Livestock may congregate in these areas and negatively impact water quality and riparian health.
- Plant production may decrease and a permanent shift to less productive plant communities may result.
- Woody plants may be either reduced or permanently removed from the riparian plant community thus impacting riparian integrity which may result in a loss of land and plant production and a corresponding reduction in riparian health.

Overall, it is extremely important not to graze your riparian area throughout the growing season and if possible to avoid grazing your riparian area at the same stage of plant growth year after year.





Fall

In some cases annual fall grazing of riparian areas can be detrimental to riparian health. Numerous disadvantages are commonly associated with fall grazing including:

- Lack of plant regrowth- it is extremely important that a portion of plant material remains in order for a riparian plant community to sustain and capture spring runoff lead to a properly functioning riparian area.
- Lack of succulent plants- following seed set and life cycle completion, most forbs and grasses become less attractive causing livestock to increase their preference for woody plants which often are more nutritious during this time. This switch in preference can limit livestock production and negatively influence riparian health. This is only an issue in riparian areas that either have or have the potential for woody plants to be present.
- Foul weather or lack of nutritious upland plants often congregates cattle in riparian areas resulting in over-utilization of riparian plants and poor herd performance.

Under the following conditions however, fall grazing may actually be beneficial to riparian health:

- Your riparian area is dominated by grasses, sedges and rushes such as in our Cariboo-Chilcotin regions.
- Fall precipitation has facilitated new upland grass growth and thus provides an attractant to persuade livestock from venturing outside of your riparian area.
- Enough off-stream water is available to attract livestock away from your riparian area.

Winter



In direct contrast to summer grazing, winter grazing of riparian areas may be the least detrimental to riparian health. This is especially true in situations where both soil compaction and stream trampling are significant concerns and your pasture is large enough to supplemental feed away from the riparian area. In addition of feed, the availability of accessible water either in the form of snow or other open watering facilities will also effectively limit livestock congregation in riparian areas. These factors combined with the cold-air drainage phenomenon which forces cattle to warmer surrounding uplands and south slopes and dormant plants all assist in protecting the integrity of your riparian area.

As with fall-grazing however, you must ensure that sufficient plant material remains so that the riparian banks are protected and sediment is captured during spring runoff. In addition, in order to protect the health of your woody plants you also must ensure that use of woody plants is kept to a minimum.

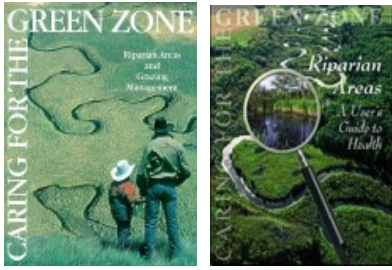
Season-long Grazing

From both a livestock and plant production point of view, season-long grazing in all pastures is considered to be the most detrimental range practice for both riparian and upland areas. As a result, it should be avoided or phased out of your range management scheme and/or plan.



Further Information

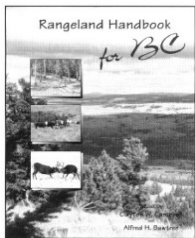
To learn more about this topic please refer to the following documents:



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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