

Managing Forages During Dry Conditions

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Dry conditions in April and May will impact growth of cool-season grasses while dry conditions from mid-May to mid-July will have a more pronounced effect on warm-season grasses. Snow and rain may help to alleviate some concerns; however continued careful management of grazing rotations may be necessary to ensure sufficient pasture supplies through the remainder of the growing season.

Typically at the end of April into early May we go into the spring "flush" of growth. For pasture and hay fields that are primarily grass based, 70 per cent of the growth happens in the month or so after the spring flush. The reason for this much growth is that growing conditions are ideal and forages are in the reproductive growth stage, with the priority for perennial grasses and legumes being to produce seed heads. Many species will head out, even if growth is short. For most grasses, this period will likely be the only time seed heads are made.

As a forage manager, there are three tasks that will improve grazing during this time of the year.

First, if you remove the seed heads, forages will move from the reproductive stage into the vegetative stage. This will restart new leaf growth and encourage the plants to start storing energy in the roots to help them through the summer stress and into winter. A mature plant with a seed head on it will stop growing and as it matures feed quality in the stems will trend lower.

There are two options for removing the seed heads:

- Have the animals remove them or cut them. Unfortunately, many grasses set seed all at the same time and the challenge becomes getting the livestock to graze off the heads quickly enough. When plants start to develop the stem that has the seed head in it, livestock may graze the tender seed head within the young stem but cattle may not graze the stems and seed heads in favor of the leaves at the base of the plant. If pastures get too mature, a good alternative is to simply clip them after seed heads have emerged.
- Another option if forages are growing too fast may be to not graze the field now and remove the crop for hay.

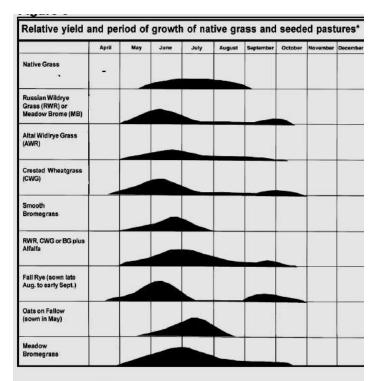
The second way to improve grazing is to stretch out this flush of growth. If your pastures are healthy enough after last year's dry conditions and growing well, you can do a rapid grazing through the paddocks to slow down the rapid growth slightly. Then as the rapid

growth slows, initiate a rotation, possibly leaving some paddocks specific for hay removal if you anticipate excess pasture but need hay.

A third option which is more long term is to use different species in different paddocks as you reseed fields. As you can see in the chart, different species can have different growth periods which can stretch out the flush of new growth and allow different maturing dates.

These three options work under normal and/or dry conditions with the major difference being that growth slows under dry conditions and plants tend to mature quicker.

Under dry conditions the biggest challenge is to keep cool season grasses in a vegetative state before the third week of June (summer). When stressed, many species head out early even though they aren't very tall. The reason for this is that cool season grasses are productive under cooler temperatures, shorter photoperiods and higher soil moisture. Changes to any or all of these factors hasten maturity (seed set).



These curves are averages for Saskatchewan. Growth patterns may differ, according to weather and soil zones.

First grazing passes should be made quickly over the paddocks to clip the grass and keep it in the vegetative state. Timely removal of seed heads, at the late-jointing to early boot stages, triggers growth of the second cycle of tillers before the onset of hot, dry weather making it possible to increase summer productivity in this manner. This will leave plenty of leaf material behind to fuel the growth for subsequent grazing passes. Once the days get shorter and hotter (July and August), cool season grass growth slows. Through this time period, grazing passes should be slowed down as cool season grass growth slows, allowing stock more time to graze the forage mass that has built up during the earlier period of more rapid growth in June.

When it comes to managing grasses, understanding how grasses grow can go a long way under normal or dry conditions will help to keep them productive. For more on this topic, go to <u>Managing Grasses</u>.

Each farm situation will be different. Some producers may be very short on hay ground and have plenty of pasture; some may be just the opposite. One of the most important aspects of Managed Intensive Grazing is to be flexible and try to anticipate what your forage needs and availability will be over the course of the season. Hopefully a few of these options will allow you to have a more successful grazing season.