

# Harvesting Annual Crops for Greenfeed or Silage



Annual forage crops being grown for greenfeed or silage are usually close to the optimal stage of maturity for harvest in July. Grain producers who have grain crops damaged by hot, dry conditions should consider letting them be harvested as a forage crop. Dry conditions lead to below average hay yields, browning of pastures, and increased grasshopper pressure. Annual crops harvested on a timely basis make excellent quality feed and can be harvested as a greenfeed, chopped silage or a baled silage. Advantages of harvesting feed as silage is ensiling will lower nitrate levels if they are present and silage harvest is less weather dependent.

Timing of cutting greenfeed or silage is a factor in feed quality and yield. The optimal time of harvesting most cereals for greenfeed or silage is in the soft dough stage. At this stage quality and yield is maximized. Even crops that are severely moisture stressed so that there is little grain fill in the heads will have a reasonable feed value when cut on the green side. Cutting and harvesting small grains prior to excessive leaf loss will improve forage yield and quality.

**Table 1: Harvest Stage of Annual Crops for Greenfeed or Silage**

Crop	Proper harvest stage
Oats	Late milk
Barley	Soft dough
Spring or Fall Rye	Early dough
Triticale	Soft dough
Spring or Winter Wheat	Early dough
Foxtail Millet	Early heading
Peas	First pods wrinkle

## Beware of Nitrates in Greenfeed or Silage

Annual forages including oats, barley, wheat, millet, sorghum and others are susceptible to high nitrates if stressed prior to harvest. This stress can be from a variety of factors such as drought, frost or hail related and depends on the severity. High soil nitrate levels can result in higher nitrate accumulation in the plant. A light frost that doesn't kill the plant shouldn't increase nitrate levels if plants resume growth in a day or two. As long as plant leaves can continue to photosynthesize, the nitrates will be used up by the plant. A killing frost or severe drought will cause nitrates to build up and requires immediate cutting of the plant to prevent nitrate accumulation.

Most feed that contains nitrates can still be fed to livestock by diluting and managing the amounts fed. Grazing high nitrate forage is more challenging and must be done very carefully. If nitrate levels are too high grazing may not be an option. Perennial forages such as alfalfa are at a very low risk of high nitrates building up.

Symptoms of nitrate poisoning in livestock can appear suddenly and include a rapid and weak heart beat, low body temperature and muscle weakness. Death can occur in 3-4 hours. Pregnant females showing signs frequently abort following recovery from nitrate poisoning.

## Hay and Feed Listing

To assist producers, Manitoba Agriculture has a forage listing on their website. Producers can list the hay, straw, green feed, silage or any other alternative feed they have for sale on the [MB Hay Listing Service](#), or hay and straw wanted can be listed.

If you would like to have your hay listed on the website, call your local [AGR/MASC Service Centre](#) with the details including contact information, type, bale size and weight, quality, price, transportation, etc. This is a free service and the list can be accessed on the website at [Province of Manitoba | agriculture - Online Resources \(gov.mb.ca\)](#).

## Utilizing a Crop for Alternative Use : Call Before You Cut !

It is important to be aware of some details regarding AgriInsurance coverage when you are considering putting a cereal crop to alternate use and utilizing it as a forage crop. Within MASC, "alternate use" means the insured crop has been put to another use or pastured, and not harvested in the generally accepted agronomic manner for that insured crop. Insured's should contact their [AGR/MASC Service Centre](#) and register a claim so the applicable acres to be put to alternate use can be appraised for crop potential. MASC will send an adjustor to verify the acres, inspect and appraise the crop for yield. This is done at no cost to the insured and for the purpose of determining a yield from the originally intended insured crop.

## Contact Us

This factsheet was developed by a Manitoba Agriculture Livestock Specialist.

For more information, contact the department:

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