MFGA Green Gold Report – June 1, 2020 – EASTERN

2020 Reports for Optimum Alfalfa Harvest Date cover Eastern, Central and Western Manitoba.

SITE	RFV NIR	RFV PEAQ	Height	CP
St.Pierre E	236	252	14	24
Beausjour		244	15	
Ste.Anne	217	252	14	29
New Bothwell	216	252	14	28
Stony Mountain	232	224	18	31
EASTERN AVERAGE	**225**	**245**	**15**	**28**

Frost damage: With temperatures dropping into the -3 C area in some areas and staying below 0 for up to 5 hours I have seen some major damage to a few fields and light to non in others. Producers are likely going to see some major leaf loss in the hardest hit fields and as of Monday AM it was hard to tell if the damage was hard enough that the alfalfa would have to start growing from the crown or if the buds were protected at the top of the plant.

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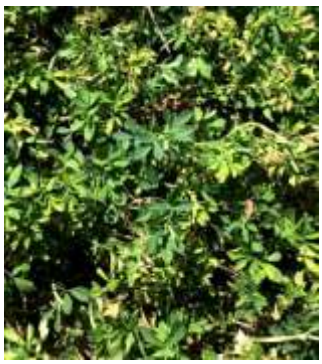
What I am seeing

Monday AM saw the GG fields showing varying levels of frost damage. There was a wide range of degrees of frost and the duration that it lasted. The first picture shows a field where the temperatures dropped to -2.7 C and the frost (below 0) lasted 5 hrs. The second picture shows a field where the frost must have been for a shorter period of time or wasn't as low.



The final picture is from the Beausejour area and it looks to be just top leaf damage. Beausejour temperatures were reported at -3.5 and below 0 for 5 hours. Damage from frost depends on a number of factors including temperature and duration of the frost. Some areas may have been low enough to cause damage but if the duration was short at the critical temperature, between -2 and -4 damage may be minimal (top of the plant). On the other hand if it was minus 2 for a couple of hours that damage could be greater.

Hay Quality

High quality hay is highly digestible, palatable dry forage with sufficient nutrients to meet the nutritional demands of the livestock being fed. Hay harvested at the proper stage of plant growth and undamaged by weather provides nutrients at a relatively minimal cost compared to many other supplemental feeds. Hay quality is determined by a combination of both physical factors and nutritional status.

Stage of plant maturity at cutting is the most important factor influencing hay quality. Young, vegetative forage is higher in protein and energy than older, flowering material. As forages mature, stem is increased in the total forage mass and the leaf-to-stem ratio is reduced. As a result, fibre increases while protein and digestibility decreases. **Delaying hay harvest tends to maximize forage yield but results in considerably lower forage quality.** Timing of cutting decisions must balance these variables – a compromise between quality and yield.

An important variable to consider when determining the best stage to cut hay is the nutritional needs of the animals to be fed. Age, physiological status and production targets determine nutritional requirements and feed quality must meet those needs.

Forage sampling and feed testing are essential tools for producers to evaluate quality parameters. While visual appraisal (i.e., forage colour, plant species, leaf/stem content) and knowledge of stage of maturity at cutting time are indicators of hay quality, they do not substitute for a feed test. It is important to not rely on averages and to test all feed sources annually.

Legumes are normally higher in quality than grasses but within each there can be a wide range in quality. Mixtures of grasses and legumes, when managed properly provide for high quality hay production. Grasses can improve the drying rate of mixed stands compared to pure legume stands.