Fall 2014 **THINK GREEN!** Newsletter

Ontario Forage Council

A Message from the President Fred Brown

As I sit down to write this report I find myself at a loss for words. As I look back at the spring; remembering the winter that we have just come though, we looked to spring and summer with optimism, only to have to work with excess rain fall and lower than normal temperatures. As you look around the country side there seems to be a larger than anticipated hay crop with good quality. As far as hay prices for this year go, we will just have to wait and see. I encourage anyone who feels they have quality forage products to take a serious look at the Milk Maker Forage Competition, a feature of the Canadian Dairy XPO in Strafford February 4-5, 2015. This competition has classes for every forage producer, including classes for dairy and grass hay, haylage, baleage, corn silage and BMR corn silage. This is an excellent opportunity to compare your forage samples to samples from across Canada and potentially win a $500 first place prize!

Once again, thank you to the sponsors, exhibitors and everyone who attend the Forage Expo in Simcoe County, it was a great success! A Big thank you goes out to the Robert and Roberta Wright and family for hosting this successful event. Their accommodating hospitality certainly added to the atmosphere of the day!

OFC is presently finishing plans for our annual Forage Focus Conference and Trade Show, which will take place in St-Albert on November 25th and in Shakespeare on November 26th. We are privileged to welcome back Ev Thomas-Vice President, Agricultural Programs, Miner Institute Research Education, as our keynote speaker. Forage Focus has always proven to be very informative, addressing the current information and trends in the forage industry. I hope to see you there.

As 2014 is coming to an end I would like to take this time to thank everyone who has been involved in the Forage Council. A big thank you goes out Ray Robertson and Patricia Ellingwood from Grey County Ag Services, along with everyone who sits on the OFC Board of Directors, representing the many industry related agri-businesses and organizations who are members. I strongly encourage any individual with an interest in forage to contact OFC for information on how you can join our organization and provide valuable producer input at board meetings. We at the council warmly welcome and value your input as assisting producers to build a strong, economically viable and environmentally sustainable forage industry in Ontario is our main focus.

At this time, I would like to thank everyone for the time you spend promoting high quality forage, and to the members of the council, it has been a privilege and honor to work with each and every one of you. Thanks again, I am looking forward to a great 2015!!

Fred Brown, President-Ontario Forage Council

Register Now!!

Join us for FORAGE FOCUS 2014!!

"Using Forages to Increase Profitability"

Tuesday, November 25th in St-Albert
Wednesday, November 26th in Shakespeare

Keynote: Ev Thomas-Vice President, Agricultural Programs, Miner Institute Research Education

Topics will include:

- "Harvest Management of Forage Crops and Corn Silage"
- "Making Quality Hay for Domestic and Export Markets"

$40 includes conference proceedings and hot roast beef lunch.

To register: 1-877-892-8663 or 519-986-1484
Visa and Mastercard accepted by phone

Presentations are CEU accredited.

Registration Deadline: November 20th, 2014
Registrations will be accepted at the door, but may not include lunch

Canada Post Agreement# 40949041

Manager's Report

By Ray Robertson-Manager, Ontario Forage Council

During the past couple of years, we hear comments about the increased profile of the forage industry. That is certainly not by accident, as forages do make up a huge part of the agricultural landscape. Admittedly, forages lack the direct financial support that most other crops attract because of the direct financial check-off. We must admit that money is not everything, but as in life, it sure helps.

In recent years, Ontario Forage Council (OFC) has played a key role in helping support and develop the Canadian Forage and Grassland Association (CFGA) and promote forages in a much more active way. In addition to the normal activities of maintaining an active office, website, forage information source with high level conferences and activities, OFC has also developed the Ontario Hay Listings Service for selling or buying hay and straw, and the Ontario Hay Marketing Forum. The Ontario Hay Marketing Forum is a very reputable group of hay marketing producers and brokers that focus on marketing hay on both the domestic and export markets. These activities all attract a huge clientele from across the province and beyond. This can be easily understood when we recognize the size of the forage industry. When we consider the fact that approximately 80% of Canada's beef production depends on forages as the main feed source and whereas forages represent 60% of a dairy cow diet, the size of the forage industry becomes much more evident. A CFGA study in 2012 determined the total value of the forage industry at $5 billion, when the on-farm feed value for beef, dairy, sheep and equine is included.

From an internal perspective, the OFC is just completing a strategic planning study for the council. A consultant worked with the council and a questionnaire was widely circulated to a broad range of forage connections. The results of that review were extremely positive, and indicated a few suggestions as to possibilities for becoming even more effective. This process will be finalized in the next few weeks.

Companies with a keen interest in the forage industry are encouraged to join the Ontario Forage Council. Please feel free to contact us if you would like a membership application form or have further questions.

Best Regards,

Ray Robertson, P.Ag.

Manager, Ontario Forage Council

Hay Marketing Forum Update

By Ray Robertson-Manager, Ontario Forage Council

Ontario Hay Marketing Forum

The working group of the Ontario Hay Marketing Forum has been successful in getting financial assistance through Growing Forward 2 to complete a feasibility study on the availability and economic viability of accessing containers for overseas hay export shipments. That study is progressing well and hopefully it will produce positive information. If the results are positive, it is one more opportunity to help raise the profile of the forage industry. There is a constant and growing demand for Canadian hay and as most people recognize, Canada has an excellent reputation on the world market. It certainly bodes well for overseas exports if Canada's shipping companies can be competitive.

The Ontario Hay Marketing Forum has often been referred to as the "All Star Team" of the Forage Industry. If you are in the hay marketing business, you are invited to contact our office.

This is an exciting time for the forage industry, and producers are invited to join the Ontario Hay Marketing Forum and be a part of this entrepreneurial endeavour.

For further information, please feel free to contact:

Ray Robertson, P.Ag.
Manager, Ontario Forage Council
Email: ray@ontarioforagecouncil.com

Looking for Quality Hay Products? Be sure to check with the reputable members of the **Ontario Hay Marketing Forum www.ontarioforagecouncil.com**

Ontario Cover Crop Selection Tool

Anne Verhallen, with help from a team of Ontario specialists and researchers, worked with the developer of the Midwest Cover Crop Council's (MCCC) cover crops selector tool to create an Ontario version. The tool allows you to select your area, put in harvest date of the crop, field drainage information and the attributes you want in the cover crop (IE nitrogen source or scavenger, erosion control, forage value, interseeding, etc.). The tool will then provide a list of suitable species, timing for seeding, information related to the attributes and more. The MCCC website is www.mccc.msu.edu once there choose the cover crops selector from the menu on the left. Ontario

Ontario Forage Council Hosts Ontario Hay Listings

www.ontariohaylistings.ca

A Free Service for People Looking to Buy and Sell Hay and Straw

For more information, comments or questions, call 1-877-892-8663 or email info@ontariohaylistings.ca

Check out our new websites! www.ontarioforagecouncil.com and www.ontariohaylistings.ca have a brand new look and new easy to use features!! Enjoy!!

Fall Cutting Alfalfa

By Joel Bagg, OMAFRA Forage Specialist, Lindsay Joel.bagg@ontario.ca

While cutting alfalfa in the fall is often practiced in Ontario, it does create some risk to stand health, depending on the location, stand age, harvest frequency and other factors. The decision whether to cut alfalfa should weigh these factors and the immediate need for forage against the increased risk of winterkill and reduced yields the following year. Everyone's situation and comfort with risk is different. When faced with forage inventory shortfalls and low agronomic risk, taking a fall cutting is understandable. In situations where forage inventories are more than adequate, increasing the risk of winterkill by fall cutting may be far less acceptable. Decide what is an acceptable risk for your situation. Of course, if the field is to be rotated the following spring, take the final cut anytime.

Fall Cutting Consequences

It can be very tempting to cut some alfalfa for haylage or baleage in the fall, particularly when supplies are tight or there is a lot of growth. If you do decide to cut, consider leaving some check strips that you can use for comparison next year. There are essentially 3 things that can and do happen as a result of taking a fall harvest of alfalfa:

1. Nothing …. all is good.

This is most likely to occur where management is good and plant stresses are minimal – with good soil drainage, fertility and pH; a young, vigorous (1-3 year old) stand with minimal disease and insect pressure. Some luck with adequate snow cover and no ice sheeting will help.

2. Winterkill and/or visible winter injury.

If diagnosed early in the spring, the crop rotation can be modified with a new alfalfa seeding being made, but there is an "establishment year yield loss" associated with that. Even where winterkill does not occur, stressed, weakened stands are at a greater risk of continued decline and poor yield.

3. No apparent injury, but with a reduced 1st-cut yield the following spring.

Fall harvests are usually not very high yielding. Even when winterkill does not occur, research shows the extra yield harvested during the critical harvest period is often offset by reduced vigour and lower1st-cut yield the following spring. It can sometimes be difficult to observe, but still be significant.

Critical Fall Harvest Period

The Critical Fall Harvest Period for alfalfa is the 6-week period (450 Growing Degree Days) preceding the average date of killing frost. Not cutting during this period allows alfalfa plants to re-grow and build up sufficient root reserves to survive the winter and grow more aggressively in the spring. When cut, early in the period, the alfalfa will use the existing root reserves for regrowth, "emptying the tank". Later in the period, the alfalfa uses photosynthesis to produce carbohydrates and stores them as root reserves, "refilling the tank". Cutting in the middle of the Critical Period (3rd or 4th week is higher risk than cutting at the beginning or end of the period.

The Critical Fall Harvest Period begins as early as August 10th in northern Ontario, August 25 – 30th for eastern and central Ontario, and September 4th in the southwest. However, it is difficult to predict when that killing frost will actually occur. The actual date seldom occurs on the average date, so the beginning of the Critical Fall Harvest Period is a guideline only.

Risk Factors

Some areas of the province, such as the Ottawa Valley, have a higher historical risk of winterkill. Flat, heavier soils that "pond" in the winter when tiles are frozen are at greater risk of winterkill. From time to time, fall cutting has contributed to alfalfa winterkill and injury in areas that are typically considered low risk, including western Ontario. We can never accurately predict what the weather will bring, but wet saturated soils in the fall reduce winter hardening and contribute to winterkill.

Aggressive cutting schedules with cutting intervals of less than 30 days between cuts increases the risk of winterkill, while intervals over 40 days (allowing flowering), reduces the risk. When harvest schedules are delayed by a late start or difficult weather, harvesting the normal number of cuts without cutting in the fall is not possible. Disappointing 1st-cut yields where 4th cut was taken the preceeding fall are sometimes observed.

In addition, fields with:

- older stands (3 years or greater),
- low potassium soil tests (< 100 ppm),
- low pH (< 6.5),
- poor soil drainage,
- poor varieties, or
- insect pressure (potato leafhopper), and
- disease (root and crown rots)

are also at increased risk of winterkill and are poor candidates for fall harvesting, unless you are planning to rotate.

Late Fall Cuttings At The End Of The Critical Fall Harvest Period

If fall harvesting, the risk of winterkill can be reduced (but not eliminated) by cutting towards the end of alfalfa growth, close to a killing frost. Little root reserves will be depleted by regrowth, but lack of stubble to hold snow to insulate the alfalfa crowns against cold weather damage and heaving may be a problem. Leaving at least 6 inches of stubble will help. Stubble will also protrude through winter ice sheeting, should that occur.

Try to limit late cuttings to fields that are otherwise lower risk – well drained, good fertility, healthy crowns and roots, etc. A killing frost occurs when temperatures reach -4°C for several hours. After a killing frost, alfalfa feed value will quickly decline, as leaf loss occurs and rain leaches nutrients quickly.

Smothering?

There is always the question of smothering in heavy forage stands that are left unharvested. Heavy stands of grasses or red clover can sometimes smother over the winter because the top growth forms a dense mat. In contrast, alfalfa loses most of its leaves as soon as there is a hard frost, and the remaining stems remain upright and seldom pose any risk of smothering.

www.Fieldcropnews.ca
An excellent resource of current forage and crop information!

Pasture Opportunities

By Jack Kyle, OMAFRA Grazier Specialist, Lindsay Jack.kyle@ontario.ca

Beef cow inventories in Ontario, Canada and the world are currently down significantly, and there is no sign of a rebuild in numbers starting yet. This has resulted in the value of beef calves and stockers being at an all-time high. Calves selling at $3.00/lb represent $1,200 - $1,500 gross return on a cow. This is twice the average from the last few years.

Grazing is about growing grass. The more grass forage that is produced on a parcel of land, the more cattle that can be supported on that acreage. Managing a pasture is about rest and recovery of the grass. If livestock have access to all the pasture area, they pick the tasty plants and leave the less palatable and more mature plants. The most palatable plants get over-grazed and the less palatable get under-grazed. Palatability is affected by maturity as much as species.

Subdividing Pastures & Rotational Grazing

Rotational grazing is the key to getting even pasture consumption across the pasture. Animals should be in a pasture / paddock for no more than 5 days. For optimum production a paddock should be grazed 1 - 2 days, followed by 25 - 45 days or more for recovery and re-growth.

In my years as provincial grazing specialist, I have seen significant improvements in pasture productivity simply by sub-dividing a pasture. In most cases, an increase of 25 - 35% in productivity is readily achieved. In very dramatic cases, a 500% increase has been seen.

Since your pastures already have a perimeter fence, sub-dividing to increase productivity is very simple. An internal sub-division fence can consist of one electric wire (2 at the most) with step in posts. Animals quickly learn that the fresh grass available when they are moved is far more palatable than the grass that has been trampled and fouled by manure and urine. See video Rotational Grazing In Ontario at: http://www.youtube.com/watch?v=lvE3syIXd0E

Each paddock must have easy access to water, but since several paddocks can access the same water point, this does not need to be a daunting task. One fairly easy way of getting water where it is needed is by pumping it through plastic pipe lying on the ground.

Grazing Cover Crops

There is another opportunity for pasture in cover crops. Cover crops grown for soil protection can double as livestock pastures. The livestock will benefit from the cover crop forage, and also convert the nutrients in the cover crop into a more readily available form for the succeeding annual crop. This additional feed will give your permanent pastures an opportunity to rest and recover and will result in strong plants for next year's grazing season.

Look around your farm and your community and see if there are crop acres that are better suited to perennial forage, or are already producing perennial forage but could be more productive. I think you will be able to find some opportunities to increase your livestock productivity and the productivity of the available pasture lands. Rotational Grazing In Extensive Pastures available at http://bit.ly/M7M1kE provides a number of options.

There are many opportunities to increase the productivity of existing pasture land and also grazing of other crops. This will provide low cost feed for livestock and allow the producer to realize increased profitability in their farm enterprise.

Canadian Forage and Grassland Association's 2014 Conference and Annual Meeting will be held November 17,18 & 19 in Bromont, Quebec. Visit the CFGA web site to register: www.canadianfga.ca

The Ontario Forage Council would like to thank the **Beef Farmers of Ontario** for generously hosting the OFC Director's meetings. Your friendly, approachable staff add to the welcoming experience! Thank you!

Beef Farmers of Ontario

Forage Variety Testing

David Morris and Jim Johnston OFCC

It is in the interest of Ontario agriculture that farmers are provided with sufficient, accurate, and independent performance information about the forage varieties grown in Ontario. Farmers not only want top yielding forage varieties, but also want assurance that perennial forage varieties have adequate persistence in the province.

Historically, before a forage variety could be registered in Canada it had to receive the support of a provincial or regional registration recommending committee. The Ontario Forage Crops Committee (OFCC) was recognized as a registration recommending committee by the Variety Registration Office (VRO) of the Canadian Food Inspection Agency under the authority of the Seeds Act. The OFCC membership includes producers, seed trade representatives, OMAF specialists and forage researchers. The OFCC coordinated testing of new forage varieties at several locations across Ontario and after reviewing results of such testing, made recommendations to the VRO as to which varieties were considered worthy of registration for use in Ontario. The OFCC also published a list of recommended forage varieties which has been widely distributed through trade publications and on-line.

Major changes to the federal system of forage variety registration were completed in June of 2014. Forage varieties must still be registered by CFIA but the requirement for testing and merit assessment prior to registration of new forage varieties has been eliminated. Thus, this change also eliminated the role the OFCC previously played in assessing the yield and persistence of new forage varieties being considered for use in Ontario. The upside of the change is that new genetic material can get into farmers hands faster. The potential downside is that new varieties without adequate persistence and yield potential might be introduced into the market. The changes could also mean that the OFCC Forage Variety Performance Brochure would not be available to farmers unless the OFCC is able to implement a sustainable new performance testing program to collect the desired information.

The OFCC has attempted to continue performance testing of alfalfa on a voluntary, fee for service, basis. In 2013, a new voluntary performance testing system to compare alfalfa varieties being sold in Ontario was introduced but uptake was very poor. In fact, no registered varieties were entered and the test was cancelled. Another attempt to initiate voluntary performance testing of alfalfa in the spring of 2014 similarly did not result in enough interest to seed a performance test. (A few experimental lines were tested in each year because the requirement for merit testing was still in effect at the time of planting.) There could be a number of reasons why a voluntary performance testing system has not moved forward, but cost is likely the major factor. Testing fees paid by the seed companies have been the OFCC's only source of funding and there is a significant gap between what research sites need to charge for cost recovery and what seed companies are willing to pay for performance testing on a voluntary basis.

At this time, it is uncertain whether the OFCC will be able to afford to continue independent testing of forage varieties in Ontario in the future. In effect, the future of forage testing here is in your hands. Seed companies respond to the needs of their customers. Are they hearing anything about the need for an independent forage variety testing system? Producers generally support the idea of independent forage variety testing, but financial support for such a system will be needed to see it continue. This is also a discussion that needs to happen within the commodity organizations that represent the major users of forages (ie: dairy, beef, sheep, goat and equine). Is independent forage variety testing valuable enough to their membership for them to use commodity organization dollars to support it on an on-going basis? The answer to the two questions above will determine if independent forage variety testing continues in Ontario.

Pricing Corn Silage

By Joel Bagg, OMAFRA Forage Specialist, Lindsay Joel.bagg@ontario.ca

"What's corn silage going to be worth this year?" Corn development is delayed for a significant portion of the crop and could be at risk of frost. Farmers may be looking at salvaging frost damaged corn that hasn't matured adequately for optimum yield, moisture or quality by harvesting or selling some of those fields for silage. Silage piles and silage bags can provide flexible storage options. Local supply and demand and negotiation between buyer and seller ultimately determines the price. It is important that you make your own assumptions for your situation and calculate your own costs, in order to determine what you feel is an acceptable price. Then negotiate the best you can.

Forage Quality Of Frost-Damaged Immature Corn Silage

Buyers need to consider the nutrient quality of frost-damaged corn silage. Frost damaged corn silage will have a lower grain-to-stover ratio. Use wet chemistry laboratory analysis, and newer measures (including crude protein, NDF, fibre digestibility, starch, ash and fat) to more accurately estimate corn silage digestible energy.

Slightly immature, frost damaged corn that has dented can make good silage. In general, this will have slightly higher fibre and crude protein and slightly lower energy levels than normal corn silage. Quality may not be optimum for high producing dairy cows, and it is sometimes a good idea to consider harvesting the better corn fields for silage. Very immature corn silage at the milk or early dough stages will have lower starch and higher fibre levels. This can be fed to animals with low to moderate energy requirements, such as beef cows and stockers. Additional grain can be more easily included in feedlot rations to increase the energy content.

Harvesting Frost-Damaged Corn Silage

Harvesting at the proper whole-plant moisture is critical for producing quality corn silage. Harvesting frost damaged corn silage too wet is the most serious problem. At moisture greater than 70%, clostridial fermentations produce butyric acid, resulting in high fermentation losses, lower intakes, ketosis and poor cow performance. Refer to:

- "*Frost Damaged Corn Silage*" http://fieldcropnews.com/?p=8004, and
- "*Harvesting Corn Silage At the Right Moisture*" (OMAFRA Factsheet 13-051)http://www.omafra.gov.on.ca/english/crops/facts/13-051.htm.

Example Calculations

One method to determine the price of corn silage is to compare it to the value of grain corn to determine a **minimum price**. As a seller, you would not want to sell it as corn silage for less than you could net selling it as grain. Buyers feeding corn silage to livestock might be prepared to pay more, depending on what alternate feedstuffs are available. From a livestock nutrient point of view, corn silage may be worth more in the ration than is reflected in the market.

These calculated corn silage values are not necessarily the cost of production, or the feed nutrient values, but reflect the market value of the alternate harvesting options (ie. harvesting as grain corn).

Tremendous variation in yield and quality

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Continued from page 5

can occur between fields. Higher yield reduces harvesting costs per tonne. Higher yielding corn fields also contain a higher proportion of grain relative to stover, usually making them greater in digestible energy. A "thumb rule" is 7.7 bushels grain per tonne (7.0 bu/ton) of silage at 65% moisture for a good crop. As an example, refer to Table 1, Pricing Corn Silage Example Calculations. Example #1 has good yield, while the frost-damaged corn in Example #2 yields about three-quarters of that.

The expected grain value should be adjusted for custom combining, drying, and trucking charges to give a value of the crop in the field. The additional soil nutrient value (P and K) removed in the non-grain portion of the silage (stover) is significant, at about $3.50 per tonne of corn silage harvested (@ 65% moisture). Calculating the cost per lb or tonne of dry matter can help put corn silage in perspective relative to what the market is willing to pay for standing hay. If the seller is going to fill the silo for the buyer, custom silo filling charges should also be added. Storage costs, fermentation shrink and spoilage losses are not included. Refer to:

Guide to Custom Farmwork and Short-Term Equipment Rental http://www.omafra.gov.on.ca/english/busdev/facts/10-049.htm

2014 Field Crop Budgets http://www.omafra.gov.on.ca/english/busdev/facts/pub60.htm.

Percent moisture will have a significant impact on price, so it is important to sample and get reliable moisture numbers. Nobody wants to pay for water when they think they are buying feed. An error of only 5% moisture (ie. estimating 65% when it is actually 70%) is equivalent to almost $4 per tonne.

Other Considerations

The local supply and demand of corn silage and alternate forages will influence the price. The availability of silage storage and the economics of feeding are considerations. Sellers with a potential Crop Insurance claim should contact Agricorp (1-888-247-4999) before harvest to determine how selling corn as silage will impact the claim. Good yield and quality estimates are important and should take into consideration actual weights and percent moisture. The removal of the stover organic matter could be considered as well.

	Example #1 "normal"	Example #2 "frost damaged"
Assumptions		
estimated grain yield tonnes / ac bushels / ac	**4.190** **165**	**3.175** **125**
bushels grain (15.5% moisture) per tonne silage (65% moisture)	7.7	6.4
corn silage yield (65% moisture) tonne / acre	**21.43**	**19.53**
grain price (fall delivery, local) #2 grade #5 grade	**$155.50/T ($3.95/bu)**	**$143.00 ($3.63/bu)**
Calculations		
gross grain value / acre (grain yield X price)	**651.54**	**454.03**
- drying 27% moisture @ $25.60/T 30% moisture @ $31.20/T	**-100.64**	 **-97.50**
- combining	**-40.00**	**-40.00**
- trucking (@ $9.00 / tonne)	**-37.71**	**-28.58**
= gross value / acre before grain harvesting costs	**473.19**	**287.95**
+ extra P & K removed in stover (~$3.50/ tonne of corn silage @ 65% moisture)	**+75.01**	**+68.36**
Value Standing		
per acre	**548.20**	**356.31**
per tonne silage (65% moisture)	**25.58**	**18.24**
$ / tonne dry matter	**73.09**	**52.13**
¢ / lb dry matter	**3.3**	**2.4**
+ silo filling **$240/hour, 2.5 acres/hour** **$240/hour, 3.0 acres/hour**	**+96.00**	 **+80.00**
Value Harvested		
per acre	**644.20**	**436.31**
per tonne silage (65% moisture) **(before fermentation shrink, spoilage & storage costs)**	**30.06**	**22.34**

Table 1 – Pricing Corn Silage Example Calculations

Nominations are being accepted for the Mapleseed Beef Pasture Award!

Visit **www.ontarioforagecouncil.com** for information and applications!

The deadline to submit applications for the beef pasture award is **November 28th, 2014.**

Achieving Optimal Pasture Results

By Jack Kyle, OMAFRA Grazier Specialist, Lindsay Jack.kyle@ontario.ca

It is at the beginning of the pasture season that you can take the steps to optimize pasture performance on your farm. Pasture is the lowest cost feed source available, and the opportunity for improved production is significant on most farms. A well-managed pasture will be very competitive with any other crop use that you might consider for that land base if the forage and livestock are both well managed with a a good rotational system.

The key to maximize both forage and livestock production is to manage the forage for optimum forage growth and optimum bite size for the animals grazing.

To get optimum growth from the forage plants they need to be in a rapid growth state for as much of the growing season as possible. Maintaining a grazing forage height between 10 cm (4 inches) and 30 cm (12 inches) will allow the plants to maintain good growth and capture all the available sunlight to drive photosynthesis. This plant height will maintain a substantial root system that will be able to gather water and nutrients from the soil throughout the summer and minimize a summer dormancy period should hot dry weather occur. To maintain this level of forage growth the pasture manager needs to move livestock to fresh grass every couple of days. If too much pasture is offered at a time, then selective grazing will take place and the less desirable plants will not be grazed, become mature and over a number of years, dominate the pasture. After a plant is grazed it needs time to rest and re-grow, this is the key point of pasture management -- rest and recovery.

Maximizing bite size is the key to good animal productivity. Cattle bite at a rather constant rate and for about 8 hours each day. As the pasture manager you have control of the bite size. Providing pasture that is the optimum size for the animal to bite (10-30 cm) is the first big step to maximize intake. The second step is to have fresh forage on offer at all times. Livestock are not going to eat forage that has been laid on or fouled with manure or urine. The longer the animals are in a given paddock, the greater the percentage of forage in that paddock that is going to be unpalatable because of what has been done to it, thus the importance of frequent moves to fresh pasture.

Fencing is the tool that allows you to manage your livestock to provide re-growth time for the grass and manage the quality and quantity of forage available for your livestock. Perimeter fences need to be substantial enough to keep your animals where they belong and to give you piece of mind to sleep at night. Fences to sub-divide the pasture into paddocks do not need to be elaborate; single or double wire electric fence works very effectively. If there is need for a larger or smaller grazing area, these fences can be easily repositioned. Animals that have adequate quantities of quality forage available will not place nearly the challenge on fences that hungry animals will. Cattle are creatures of habit and if they know that you are going to provide fresh grass later today or tomorrow, they will patiently wait – the job of the pasture manager is to not challenge their patience!

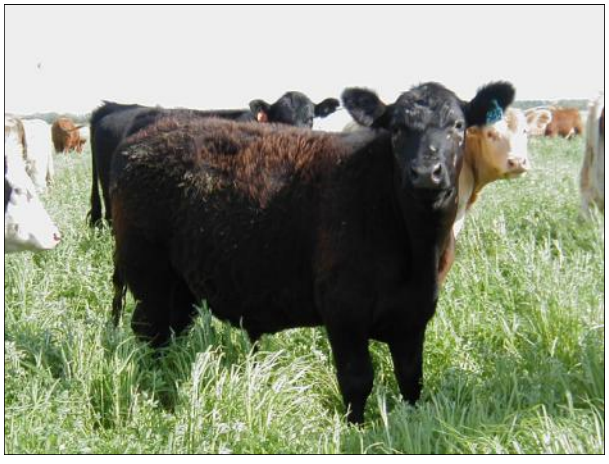
Moving livestock to fresh pasture every 1-2 days will optimize the quality and quantity of forage available for your livestock. This frequency of moves will minimize the animal's opportunity to take a second bite from the plants and will help to prevent over grazing which greatly diminishes plant growth. It is important to have enough paddocks that your livestock do not return to a paddock until the plants have fully recovered from the grazing. This depends on growing conditions but generally takes about 20 days in May and early June and about 30-45 + days in July and August.

Having enough paddocks is the key to a good grazing operation with 10 to 12 being the minimum required to have a good system. Ideally there will be about 30 paddocks for each group of livestock that you are managing. Experience has shown that those producers who have this number of paddocks are the most satisfied with their systems and consistently achieve excellent results.

With attention to detail, you will have animals consuming large quantities of high quality forage to attain optimum growth throughout the growing season. These steps will give you a very successful profitable grazing system.

Be sure to catch Jack Kyle`s presentation on the latest in grazing and pasture research on Ecological Day at Grey Bruce Farmers Week in January!

The Ontario Biomass Producers Co-op, united with Switch Energy Corp, OMAFRA, REAP-Canada, University of Guelph , OFC and OAFT to host a Biomass Field Day in Clinton on September 5th, 2014. This event outlined existing and emerging biomass markets and ongoing research efforts. The highlight of the event showcased the fusion of plastic and Switchgrass! Switch Energy Corp is currently producing a plastic product that contains approximately 20% Switchgrass and 80% recycled ag plastic. An exciting advancement for the biomass industry!



Highlights from the report :

"Canadian Forage and Grassland Association's Strategy for the Future"

- "Canada's forage resources….accounted for 33.8 million acres or 39% of the land in Canada devoted to crop production. …..In addition, over 36 million acres of land were devoted to native rangeland and unimproved pastures."
- "The livestock sector is the largest user of forages in Canada."
- "Approximately 80% of Canada's beef production depends on forages as the main feed source whereas forages represent 60% of a dairy cow diet."
- "Keeping all of Canada's beef cows and replacement heifers on pasture for one more day every fall would save the cow/calf sector an estimated $3.5 million annually in winter feeding costs as indicated by the Beef Cattle Research Council. Extending the grazing season is a major opportunity to reduce feeding costs winter feed and bedding is the largest cost for cow/calf operations".
- "Forages represent 50% of the feeding costs of dairy cows with large variations across farms."
- "Forage production and grazing is also the back bone of the Canadian horse, sheep, goat, bison and domestic deer industry."
- "Grazing and stored feed for ruminant livestock represents 0-85% of the total forage produced."
- "CFGA in 2012 determined the total value of the industry at $5 billion when the on farm feed value for beef, dairy, sheep and equine is included."
- "The objective of CFGA is to increase research program capacity across Canada in the areas of 1) the development of annual and perennial forage varieties with improved establishment, increased yield, improved adaptation to stressors such as drought, flooding and saline soils, improved ensilability and nutritional value, and 2) the improvement of grass/rangeland/hay and management and utilization to increase productivity, longevity and sustainability."
- "Stakeholders identified improvements in yields and nutritional quality through improved pasture, forage and grazing management and plant breeding as the highest priority research outcome, with the recognition that research capacity must be reinvigorated in order to deliver"

Canadian Forage and Grassland Association's 2014 Conference and Annual Meeting will be held November 17,18 & 19 in Bromont, Quebec. Visit the CFGA web site to register: www.canadianfga.ca

Canadian Forage and Grassland Association
Association Canadienne pour les Plantes Fourragères

Submit your entries to the Milk Maker Forage Competition for the chance to win a first place prize of $500! Classes for Dairy Hay, Grass Hay, Baleage, Haylage, Silage, and BMR Corn Silage! This competition is open to ALL forage grown for dairy production across Canada!
For more information visit www.ontarioforagecouncil.com

The Ontario Forage Council thanks the Ontario Ministry of Agriculture, Food and Rural Affairs for their continued support!

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