

## Message From the President, John Adema

Thank you for the privilege of serving as President for this past year. While I have learned a little (mostly about what I do not know) the interconnections of the various agencies and organizations along with their respective financial arrangements are still beyond my grasp.

After our last OFC Annual meeting some discussion was held in regard to strategic planning, this remains a work in progress and in all likelihood will remain such as we respond to the current issues.

The Forage Focus conferences with Dr. Dan Undersander as the key speaker was in my estimation very well received. The upcoming Profitable Pasture Conferences with Don Campbell should be equally challenging for participants.

The current financial status of the beef industry may direct many to consider alternative management for directing their operations. These who were at the OCA Annual Meeting certainly got a glimpse of forage utilization in Brazil and New Zealand.

Today the OFC finds itself in a very challenging position. For years the primary focus of agriculture has been on feed for livestock and food for humans. Of late we have the added dimensions – fuel, ethanol and biodiesel.

The objective of alternative fuels may be laudable for stemming the desire of reducing our dependence on imported petroleum products but there is not a great deal of discussion concerning the food implications to our fellow citizens and neighbours in other parts of the world. Having said such, I do believe that as we go forward we should consider how the OFC can interact with the Corn Producers, Soybean and Wheat organizations. One idea that may warrant greater consideration relates to crop rotation being integrated with livestock and usage of legume forages. The utilization of manure

in conjunction with some of the new controlled release fertilizer products should be examined.

In the immediate future there will be an accelerated challenge for agricultural land, growing more on fewer acres, higher yields with fewer inputs and doing all within an environment that has its own threats and is in great need for stewardship.

We continue to recognize the lack of researchers working in the forage industry both within Ontario and across Canada. The benefits of the use of forages, livestock uses and new alternative uses of forages need to be researched and documented. Perennial crops may hold the key to some of the fuel and fibre requirements if research were conducted.

A new area which we may wish to consider, modeled on the “Project Soy”, would be to sponsor an annual student competition for using forages in alternative fashions currently not already being done. This would raise the profile of forages beyond animal feed, resulting in educational awards and could have significant health benefits. Discussion with Human Health and Nutritional Science may ignite some ideas.

I also attended a government symposium to entertain suggested changes to the Agricultural Policy Framework. The current programs expire at the end of March 2008. By mutual agreement between the federal and Provincial Governments, the programs will be extended with funding for one year to complete negotiations for the new “Growing Forward Program.

In conclusion, Joan McKinlay has managed to ensure that the THINK GREEN newsletter gets completed and distributed. Thank you to Ray and Mary who daily attend to the requirements of the Ontario Forage Council.

About the time we can make the ends meet,  
somebody moves the ends.

Herbert Hoover



## OFC Activity Report - 2007

- We did a Strategic Planning Session early in the year and considerable follow up discussion was done on it. This continues to be a work in progress.
- The research projects funded through (Canada Ontario Research and Development), CORD IV, have been completed and OFC has received reports. Some research projects are being funded by other partners in addition to the OFC phase but OFC will receive a final report at completion. Watch for these results as they are reported upon in the farm media.
- The second Ontario Forage Expo was held in Peterborough County in July 2007 in partnership with Peterborough County Soil & Crop.
- **OFC**, Mapleseed and OCA jointly present the Mapleseed Pasture Award at the OCA Annual Meeting in February. The recipient this year was Scott Honey from Northumberland County. The runner up was Ken Mitchell from Grey County.
- Forage Focus 2007 was held in early December in Shakespeare and Napanee and the evaluations was extremely positive. Dan Undersander was the key note speaker. He is considered to be one of the best forage resource people in North America.
- Profitable Pastures Seminars held March 26, 27 & 28 in Elmwood, Manvers Hall near Bethany and Almonte respectively featured Don Campbell from Meadow Lake, Saskatchewan. His holistic approach to grass management focuses on the health of the land, the grass, the cattle but especially of the people. This unique approach also challenged producers to think about what they really want and to plan how to get there. Budget profit into the operation. The last two "Pasture Award Winners" also spoke during the conferences as well as Jack Kyle.
- OFC has participated at the Can-Am Equestrian Program in London during the past few years. In addition to the huge Trade Show and Demonstrations, a concurrent speaking program runs throughout the three days. The OFC has provided a speaker on Forages each day. It is an excellent opportunity to promote forages and the OFC to a large audience. It has been estimated that more than 40,000 people attend the event over the 3 days.
- Think Green! Newsletter continues to be a good source of information to the producers across the province. There has been a focus on including timely information on forages and forage related topics. Since such a large percentage of producers across the province still depend on a dial up internet system, newsletters are considered an important means of information. Even for those with high speed, a large percentage of producers have expressed a strong preference to having a paper copy to read at their leisure.
- The OFC web site is in the process of being updated. We have had to expand our web site capabilities. Come check out our new expanded technical information.
- OFC has been working with other Provincial Forage Organizations and have requested a seat on the Beef Round Table, to assist in representing the needs and views of forage producers in Ontario.
- OFC is working with people across Canada that we met through the Canadian Forum for Forages and Rangelands (*formerly Forage Expert Committee*) which has been a good networking opportunity. This develops a means of accessing research across the country.
- It has been a real pleasure to work with Joel Bagg and Jack Kyle from OMAFRA. The financial support that we have received from OMAFRA has been extremely helpful and although OFC does not have a big surplus, we have been able to focus on some of the issues that are in our mandate
- Throughout the year, the members have been very supportive in helping with the various events and have contributed additional funds to assist with some of the conferences. I think 2007 has been another productive year for Ontario Forage Council. There is always more to do!!!

I want to express appreciation to our president John Adema, for his excellent leadership this past year. John is truly committed to the Ontario Forage Council and it has been a pleasure to work with him. I would also like to thank all the directors who have been very supportive and helpful when needed.

And last, but certainly not least, I want to thank the staff at the Ag Centre in Markdale who have always been very supportive and have always risen to the challenge on your behalf. ✂

**Submitted by**  
**Ray Robertson, P.Ag.**  
**Manager,**  
**Ontario Forage Council**

# Research project: The Quantification and Identification of Hay Dust as it Relates to Hay Quality

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Horse owners have a great concern about dust in hay and its potential to cause allergic airway disease in horses, commonly known as heaves. Any sign of dust leads to panic, rejection of deliveries of hay, and ill feelings between hay producers and horse owners. The panic is a direct fear of horses developing allergic airways disease, chronic obstructive pulmonary disease (COPD), commonly referred to as heaves, in response to dust in hay. Hay producers are quite concerned by negative feedback from horse owners when hay is considered dusty.

A research project was initiated to investigate the biological components of hay dust and the affect of hay production practices on hay quality from a dust standpoint. The research project was sponsored by the Ontario Forage Council. Funding was provided by the Canada-Ontario Research Development Program (CORD IV) through the Agricultural Adaptation Council and from the Summer Experience program for youth.

This is a multi-year project with the overall objectives to:

1. Develop a standardized method for collecting and quantifying “dislodgeable” particles in hay;
2. Quantify the dislodgeable particles into size ranges;
3. Identify the sources of dislodgeable particles (e.g., inorganic or organic material, mites, mold spores, mold hyphae), which are in the respirable particle size for horses;
4. Validate the use of a particle counter for determining dust-particle size in hay against other laboratory methods (e.g., colony forming units from agar plate mould counts); and communicate these findings through industry talks and publications.

## What is Hay Dust?

The particles that we observe as dust in hay can come from a number of sources, both pre-harvest and post harvest.

Pre-harvest dust particles can be caused by:

- Soil particles incorporated into the hay, either by raking, rain splash or proximity to dusty roads and fields.
- Trichomes (hairs, epidermal outgrowths, scales) are present on the surfaces of growing forages. Plants, such as red clover, have higher numbers of hairs than other plants.
- Mites - Storage mites feed on a variety of substances and can be found in many different products, such as grain, flour, hay and straw, but also in house dust samples.
- Leaf shatter that occurs under extremely dry harvest conditions. Equipment and handling result in pulverization of leaves. This material easily becomes airborne during horse feeding.
- Mold spores that are associated with airborne concentrations of spores and fungal plant pathogens. These fungi can be endophytes or saprophytes growing in or on living plants. Saprophytic fungal growth develops on forages during humid and wet conditions pre-cutting and/or between cutting and baling when drying is delayed in the windrows. Most of this increased fungal growth is caused by fungi that prefer ambient temperatures (e.g. 20-22°C) for growth and development (mesophiles).

Post harvest dust particles can be caused by;

- Fungi growing on stored hay. Higher spore counts will be associated with hay stored at moisture levels greater than 14 % (less than 86 % dry matter). Most of this increased growth is associated with fungi that prefer temperatures around 37°C (thermophiles).

## How can we Quantify hay dust?

A search of the literature was completed to determine if other research has been directed into the quantification of dust in hay. Very little information was found except for extensive literature on dust as it relates to stable hygiene and horse health.

During the 2007 harvest season, hay samples were collected by the summer student at a cooperator farm.

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## Potassium Levels in Forage Crops

Forage plants take up large quantities of potassium. A thriving alfalfa crop can absorb as much as 300 kilograms of potassium per hectare annually. Potassium fertilization can be critical for

ensuring high yields. Potassium is also important for ensuring the persistence of forage legumes such as alfalfa.

High levels of potassium fertilization do not have a negative impact on forage plants themselves. Most forage crops can absorb more potassium than they need. However, forage-based feed with high potassium concentrations can have adverse effects on livestock. For example, high potassium levels in livestock feed can interfere with calcium mobilization at calving.

What can be done to avoid potassium overfertilization? First of all, soil testing should be conducted to determine the appropriate rate of potassium fertilization. The timing of the harvest must also be taken into account when evaluating

the potassium content of forage crops, since the potassium level in forage decreases during the growing season. The potassium concentration is higher at the bud stage than at the early flowering stage. Analysis of forages can also provide useful information. Potassium levels below 2% indicate that the potassium content may be too low to ensure a maximum forage yield. However, concentrations exceeding 3% are often indicative of overfertilization.



Ensuring proper fertilization of forage crops is important. The application of excessive amounts of potassium is costly and can have a negative impact on livestock health. Luckily, this problem can be easily avoided.✂

**Gilles Bélanger**

**Agriculture and Agri-Food Canada Soils and Crops  
Research and Development Centre, Québec.**

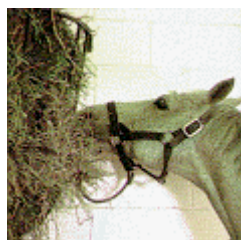
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## The Quantification and Identification of Hay Dust as it Relates to Hay Quality

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The samples were submitted to a commercial laboratory and were tested using the standard commercial laboratory methodology (Stomacher bags and Seward Stomacher laboratory blender). This methodology places 10 grams of hay into sterile water and pulverizes the sample prior to being plated onto sterile potato agar on Petri dishes.

For a comparison, equipment and techniques were developed to extract dislodgeable particles using the vacuum without using the pulverizing methodology. Preliminary extractions of dust particles from the same hay samples onto three different devices were completed. The two methodologies revealed very different results.



A surprising finding was the presence of the common alfalfa fungal pathogen (*Phoma* sp.) on the majority of Petri plates using the traditional commercial laboratory techniques. We believe that this fungus is the causal agent of the alfalfa disease, spring black stem, caused by *Phoma medicaginis* var. *medicaginis*. This fungus grows well in the spring on first-cut alfalfa. The fungus produces small fruiting bodies (e.g., pycnidia), which survive during the winter and summer in alfalfa stubble. During periods of cool (18-24°C), wet weather, spores ooze from these tiny fruiting bodies and are splashed to young leaves and stems. Plant breeders have not been able to develop varieties of alfalfa that are resistant to this pathogen.

We believe that when this pathogen is present on alfalfa that it will be responsible for an overestimation of the dustiness of hay when using traditional laboratory analyses. Future research will focus on evaluation and validation of our experimental methodology in comparison to traditional laboratory methods. The hay samples collected in the past two harvest years will be used for these comparisons. Collaborative studies have also been initiated to evaluate the significance of *Phoma* sp., on the respiratory health of horses.✂

Research projects funded through OFC with Canada Ontario  
Research and Development, CORD IV funding

**Dr Bob Wright**  
Lead Veterinarian—Disease Prevention,  
Equine & Alternative Livestock  
OMAFRA

**Dr Greg J Boland**  
Environmental Biology  
University of Guelph

# Pasture Feed Budgets

Managing a pasture is similar to managing a feed bunk. Treat your pastures as a feeding system not an exercise yard or housing system. Preparing a feed budget and planning ahead will allow you to get the most production from both your pasture and the livestock that are grazing the pasture. In the countries that are recognized as the grazing leaders, producers are constantly doing feed budgets. Canadian livestock producers frequently do feed budgets for confinement feeding – rebalancing the ration being fed. Pasture is a feed system and requires this same attention to detail.

There are two components to a pasture budget; the amount of forage available and the needs of the livestock that are to utilize this forage. It is the interaction of these two components that determines the productivity of the pasture.



The needs of the livestock can be determined by using their body weight and the rate of growth that is expected. The nutritional needs of the type of livestock will have a major influence. Lactating females or growing and finishing animals require much higher

levels of nutrition than animals that only need to meet their maintenance needs. Maintenance animals will require about 2% of their body weight in dry matter intake. Growing and finishing animals will require about 2.5% of their body weight in dry matter intake. Feed quality is also a factor with higher quality forage required for those animals with higher demand levels. To achieve this higher quality forage, pay close attention to the stage that the grasses and legumes are grazed. The plants should be approximately 30 cm (12 inches) tall, leafy and succulent.

Estimating the amount of forage available on a daily basis takes a bit of practice. A good stand of forage will have about 200 lbs of dry matter (DM) per acre inch (each inch of height represents 200 lbs of dry matter on an acre). As an example an acre of good pasture that is 10 inches high would have 2000 pounds of dry matter. Not all of this is available for grazing as we want to leave a residual of about 1000 pounds, so there is 1000 pounds of DM available for livestock.

Estimate the weight of your livestock and determine their needs for the grazing period (preferably one day). Example: If we had 10 yearling cattle weighing 700 pounds this would give a total of 7000 pounds of animal requiring 2.5% of body weight  $7000 \times .025 = 175$  pounds of dry matter required.

We have 1000 pounds available and require 175 pounds for one day's feed. This group of cattle require  $175/1000$  of an acre or 7623 square feet ( $175/1000 \times 43560$ ).

Giving these animals a paddock that is approximately 80 by 100 feet should provide the required feed for the day. With experience you will quickly learn what adjustments are needed to come up with the correct size paddock to provide the necessary feed for these animals for a day.

Doing a pasture feed budget allows the pasture manager to provide the correct amount of feed for the livestock's needs and have a residual amount of grass that will re-grow quickly to provide more feed for the next rotation.

Budgeting is the key to developing a strong grazing program that can provide high quality forage throughout the growing season.✂

**Jack Kyle**

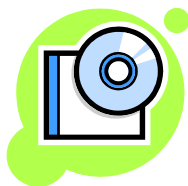
Provincial Grazier Specialist OMAFRA

An Environmental Farm Plan (EFP) applies to pastures too. Once your plan is completed you can have access to grants for fencing, water systems and pasture management mentoring.

## Forage and Pasture Resources

Get your copy of the Forage and Pasture Resources CD includes OMAFRA Factsheets + Manitoba Forage & Grassland 2004 Reference Manual

Contact Ontario Forage Council at 519-986-1484 or e-mail [info@ontarioforagecouncil.com](mailto:info@ontarioforagecouncil.com)



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# 2008 Ontario Pasture Award Winner

February 21, 2008 (Toronto) - The sponsors of the Ontario Pasture Award - the Ontario Cattlemen's Association (OCA), MAPLESEED and the Ontario Forage Council (OFC) - are pleased to announce that Scott Honey of Loyal Farms at RR 5 Warkworth, in Northumberland County, is the winner of the 2008 Pasture Award. The award was presented today at the OCA Annual General



Winner of the 2008 Ontario Pasture Competition, Scott Honey (left) pictured with Steve Bent Sales Manager, MAPLESEED (centre) and Ray Robertson, Manager, OFC.

Meeting. For his environmental and pasture improvements and management, Scott will receive a cash award of \$750 and a bag of forage seed.

Scott Honey is the fifth generation to farm the lands at

Loyal Farms. The operation consists of a cow/calf operation of 85 beef cows. About 2000 acres is cash cropped and consists of corn, soybeans, wheat and hay. Much of the hay is exported to the United States for the horse market. In addition to the work on their own operation, they are involved in working about another 1500 acres of custom planting and harvesting in the local area. The farm has gone through many changes, and in the past 14 years, Scott has increased the beef cow numbers from 35 to 85. A good rotational pasture management system is the key to the success of the pasturing operation. As Scott says, "Every time I subdivide a pasture field into more paddocks, it increases production."

The pastures consist mainly of an alfalfa/orchard grass mix, and are over-seeded in the spring using a mix of Red Clover, Orchard Grass and Ladino Clover.

The livestock are restricted from a woodlot on the property as well as the springs and swamp areas of the farm. The pasture area is divided into 18 paddocks, which allows an adequate rest period for each paddock after being grazed. "I believe the intensive rotational pasture system, combined with clean water that is closely accessible at all times, has contributed greatly to improved herd health and improved daily gain," Scott comments. Scott has also had a major focus on extending grazing days by using a variety of different crops to greatly minimize his costs. Steve Bent, Sales Manager with MAPLESEED, thinks Scott Honey is an ideal candidate for the 2007 award, because of the innovation he has demonstrated in his farming operation and his willingness to share ideas, for the benefit of agriculture and the industry in general.

Ray Robertson, Manager of the Ontario Forage Council, said that as producers try to cope with challenging times, they will look to practical and sustainable management practices like these to maximize their net returns.

The deadline for applications for the 2009 Ontario Pasture Award is November 21/08. For details, call the Ontario Forage Council at 1-877-892-8663 or visit either the Ontario Forage Council's Web site at [www.ontarioforagecouncil.com](http://www.ontarioforagecouncil.com) or the Ontario Cattlemen's Association Web site at [www.cattle.guelph.on.ca](http://www.cattle.guelph.on.ca).

For further information contact: Scott Honey, Loyal Farms, 1-705-924-3809, Ray Robertson, Ontario Forage Council, 1-877-892-8663, Steve Bent, MAPLESEED, 1-800-461-7645✂

## **New Study Investigates the Economic Impact of Forage Industry in Ontario**

In February and March of this year researchers at Kemptville Campus (University of Guelph) conducted a survey into the value of the forage industry in Ontario. The purpose of this survey was to determine the quantity of forage produced in Ontario and at what price it was being valued. A survey was necessary since only a fraction of forage produced is sold into the market.

Responses to the survey were very positive with a total of roughly 1050 recorded responses. Within the survey some questions were answered more frequently than others, perhaps reflecting what forage information farmers had on hand. Some questions with good response rates were those on forage quality, dry hay purchased and sold, and amount of inputs used on forage. There were lower response rates for questions regarding silage production, and silage storage. We also had a wide variety of responses from different parts of the province. Respondents were asked to provide the beginning of their postal code to help identify their region. In total we had 310 responses from Eastern Ontario (K-postal codes), 159 from Central Ontario (L-postal codes), 501 from South West Ontario (N-postal codes), and 74 from Northern Ontario (P-postal codes).

It is intended that the results of this survey be made available to organizations and farmers all across Ontario. The final report will be published in the summer of 2008 and will be available through the Ontario Forage Council.

We would also like to once again express our thanks to the various producer organizations that helped facilitate the survey. Support from the Dairy Farmers of Ontario, the Ontario Cattlemen's Association, the Ontario Federation of Agriculture, the Ontario Soil and Crop Improvement Agency, and the Ontario Sheep Marketing Agency was much appreciated.✂

# Research Report: Ontario Forage Council

## Project Title: Weed and Disease Survey in Forage Crops

**Executive Summary:** Pest surveys provide valuable benchmark data that can identify production-limiting species and help to prioritize management tools in cropping systems. This inaugural survey of weeds and diseases in Ontario forage crops was conducted in 2007. The first documented occurrence of Brown Root Rot (*Phoma sclerotoides*) was detected in 70% of samples collected. It is possible that this disease is a significant contributor to winter kill. Its detection should provide motivation for bringing resistant alfalfa varieties to the Ontario marketplace.

Seventy three different weed species were detected through the field survey. Of those 73 species, 14 were considered poisonous according to the Canadian Poisonous Plant Information System ([www.cbif.gc.ca/pls/pp/poison](http://www.cbif.gc.ca/pls/pp/poison)), though many of these species occurred at low enough levels so as to have no negative impact on livestock production. Although lambsquarters has been cited to cause nitrate poisoning in livestock and was the second most abundant species found in our survey, the risk of nitrate poisoning it poses is equivalent to that of an annual forage crop such as cereal green feed or forage sorghum. Predominant weed species found in new seeding stands were different compared to established stands. Documentation of this difference is important for identifying possible control options since stand establishment is greatly affected by weed competition. Results of this survey provide a list of predominant species to target for evaluating new, safer, reduced risk products for weed management in new seeding stands.

Nutritive quality of weed species tested at the request of participants was similar to that of the forage species being grown. Palatability of the weed species was not considered. All weed species that underwent nutritional analysis had higher moisture contents than the forage species sampled. This may increase drying time and therefore increase the risk of weathering or reduced forage quality due to processing the forage crop when it is not dry enough.

### Results – Weed Survey:

- 73 different weed species were document in the 132 fields surveyed (Table 1)
- Dandelion was the most prominent species in all regions, but other prominent species varied from region to region (Table 2).
- Predominant species were different in new seeding versus established stands. Annual species dominated new forage stands, whereas perennial weeds dominated established forage stands (Table 3).
- Fourteen poisonous weed species (19% of total) were detected (Table 4).

### Results, Brown Root Rot:

Of the samples processed, the Brown Root Rot pathogen was detected in 70 % of the fields. Brown Root Rot found in these positive fields varied from 5% (very low) to 30% (moderate-high) of the roots or crowns being infected. Although these results are preliminary they support the U.S. data which suggest that the disease is widespread in alfalfa production systems in the region but undiagnosed. The next step is confirmation by molecular techniques of these preliminary results.

This is the first time that Brown Root Rot has been detected in Ontario. It is an increasing disease issue in the U.S. and management strategies have focused on developing resistant alfalfa varieties; however the development of resistant alfalfa varieties for Ontario has not been done since the disease has previously been thought not to exist. Although, other management strategies such as avoiding late or excessive fall harvest (reduce plant stress going into winter), maintaining proper soil fertility and rotating out of alfalfa for at least three years can help reduce losses and increase stand longevity, the ability to plant resistant varieties will have the greatest impact on minimizing losses due to this disease.

### Conclusions: Impact to Ontario Forage Production

1. Brown Root Rot was detected in Ontario for the first time. Diseases such as Brown Root Rot, which weaken the crown root can be significant contributors to winter kill. Resistant varieties are a key management strategy for Brown Root Rot. The availability of resistant varieties to the Ontario marketplace has been limited since the disease was not believed to exist. Confirmation of this disease should provide motivation to seed manufacturers to bring resistant varieties into the Ontario marketplace.
2. Nineteen percent of all weeds identified (14 species) have caused document cases of livestock poisoning. Fortunately, many of the poisonous species were found at very low levels and are unlikely to cause any adverse affects to livestock production. Effective management options for those species considered poisonous and found at relatively high levels must be made a priority for weed management research in forage crops.
3. Weed species found in first year forage stands are completely different than those found in established stands. Annual and winter annual weed species dominate new seeding forage stands whereas perennial weeds tend to dominate established stands. Weed competition in the year of forage stand establishment is critical for maximizing forage yields. This survey identified the most prominent annual species found in new seeding forage stands (Table 3) and provides focus for research efforts.
4. Regional variations in weed spectrum were identified and will allow for effective priority setting of weed management research in forage crops.
5. Basic production information collected through a management questionnaire provides insight into production practices.✘

**Principal Researcher: Mike Cowbrough,**  
Agriculture Development Branch, OMAFRA

**Collaborating Partners:**  
Joel Bagg—OMAFRA, Lindsay  
Gilles Quesnel—OMAFRA Kemptville



## **Johnston Named the 2007 Ontario Forage Master**

**November 8, 2007** - Listowel. Doug Johnston, a dairy farmer from Listowel, has been named Ontario Forage Master for 2007.

Johnston was one of the contestants who competed in the 20<sup>th</sup> Annual Ontario Forage Masters Competition at the Royal Agricultural Winter Fair, where he and the others had the opportunity to present innovative ideas and forage management techniques to peers and visitors. Pickseed Canada, Agri-Food Laboratories, and the Ontario Soil and Crop Improvement Association (OSCIA) sponsored the competition. Johnston now qualifies to compete in the 2008 American Forage and Grassland Council's Forage Spokesperson Contest to be held January 26-31 in Louisville, Kentucky.



Maplevue Farm, owned and operated by Johnston and his brother, Dave, is a corporation that strives for very high conformation cows. With 1,000 acres of land under production, growing of forages is an integral part of their operation. "A high level of production is reached by planning ahead -- from crop rotation to selection of seed, equipment, and method of harvest," Johnston stated.

Forages are considered a versatile, nutritional, economical and environmentally friendly crop. Johnston stated that, "In our view, alfalfa is the queen of the forages, and provides the base of our TMR." Forages account for the greatest number of crop acres grown in the province and contribute millions of dollars to Ontario's agri-food economy.✂

### **Our Thanks to Gencor**

The Ontario Forage Council would like to recognize Gencor who have supported them over the last number of years with provision of the board room for Directors and Annual meetings We thank them sincerely for their continued support of the Ontario Forage Council.

## **Gold Level Members**

Dairy Farmers of Ontario

Ontario Cattlemen's Association

Ontario Harness Horse Association

Ontario Sheep Marketing Agency

Pickseed Canada Inc.

Pioneer Hi-Bred Limited

## **Corporate Members**

Brussels Agri-Services

Can Grow Crop Solutions Inc

Gallagher Power Fencing

GROWMARK

General Seeds Co(2000) Ltd

Mapleseed

Ontario Soil & Crop Improvement Association

ProRich Seeds

Quality Seeds Limited

Speare Seeds

University of Guelph

**The Ontario Forage Council thanks the  
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Rural Affairs for its support**



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