

FORAGE EXPO 2018

"Hay Making in Motion"



Thursday July 5, 2018 - Dufferin County
 Brakke Farms Inc.
 3213339 Concession 6/7 - Grand Valley

Tuesday, July 10, 2018 - Northumberland County
 Loyal Farms
 127 Honey Line - Warkworth

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Calling All Forage Producers!

The Forage Master Competition is available again this year from the Ontario Soil and Crop Improvement Association. Growers are encouraged to take the opportunity to see how their management practices measure up to industry best practices for growing, harvesting, storage and feeding of forage.

Once you complete the on-line assessment, you are asked to send it along with a recent soil analysis and feed analysis to the OSCIA Guelph office. If you don't have lab reports for the current crop, send one in from last year. There are 45-questions in all, but you only complete the ones that apply to your particular operation.

The deadline for submission is July 15, 2018. Your answers are tallied in the Guelph OSCIA office using a confidential grading system to generate an overall score. Gift certificates for seed purchases generously provided by General Seed Company will be awarded to the first, second and third-place scores in each of the eleven OSCIA Regions across the province.

The top finisher in each region will be invited to participate in the speaking contest sponsored by Pro Rich Seeds at the OSCIA Annual Conference in Kingston next February, where delegates will cast their votes to determine the 2018 Provincial Forage Master Champion.

Get the Self-Assessment package from ontariosoilcrop.org. From the home page click on the "Association" dropdown and select "Ontario Forage Masters."

A Message from the President Don Oliver



Spring is here, or at least that is what I am told! Every year seems to be different and this one is no exception, with plenty of moisture and cool temperatures slowing growth in the hay fields. As the days warm up, it is time to take a walk through your fields to see what winter weather has done to your crop and scout any problems that

might be coming this year. Be sure to check for thinning, diseases, and insects although some of our usual problems won't show up till later in the season. It is also never too early to look at the harvesting equipment that was put away last fall. I know from experience that there is always some maintenance to be done before you can go to the field, and now is a good time to do it.

Have an excellent haying season!

Don Oliver
President, Ontario Forage Council

Ontario Hay Marketing Forum Report

By Ray Robertson - Manager, Ontario Forage Council

Ontario Hay Marketing Forum



It seems so typical to immediately start talking about the weather as we get into the full swing of haying. Well – only a true farmer can understand the reason for that. The whole operation really does depend solely on the weather, and even with all the technology available to us, the weatherman has been known to be wrong the odd time.

Having come through an unusual winter season, it seemed that we went from winter and almost missed the spring season and right into summer. Despite those challenges, crops are looking pretty good in most regions of the province. We are seeing some good hay crops and all we need now is some good harvesting conditions. The hay inventory on many farms is certainly lower than in many years, and the prices for good quality hay were quite favourable for producers in the hay marketing field. There is certainly a growing awareness of the true value of good quality hay.

If you are in the hay marketing business, or regularly sell hay or straw, you may find it beneficial to join the Ontario Hay Marketing Forum. The Ontario Hay Marketing Forum is the first entity we think of when referring producers to a reputable hay supplier. It can be an excellent marketing tool, that gives you constant exposure to a broad clientele and at a reasonable price.

This is an exciting time for the forage industry and producers or potential hay producers are invited to join the Ontario Hay Marketing Forum and be part of this entrepreneurial endeavour. You could also become eligible to join the Canadian Forage Export Group.

If you would like an application form or have further questions, you are invited to contact our office.

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Ray Robertson, Manager, Ontario Forage Council.
Phone: 519-986-1484 or 1-877-892-8663
Email: ray@ontarioforagecouncil.com

Five Year summary of Foliar Fungicides for Alfalfa Production

"We need to select our opportunities based on scouting, yield potential, environmental conditions and alfalfa forage value as to where the probability of an economic return to a foliar fungicide application is likely. To apply fungicides to alfalfa without consideration for yield potential of individual cuttings or environments favorable to disease development would not follow proper stewardship of pesticide use nor result in maximizing profits." To read more, please visit the address below in the citation.

Lang, Brian and Pecinovsky, Kenneth (2017) "Five-Year Summary of Foliar Fungicides for Alfalfa Production," Animal Industry Report: AS 663, ASL R3148. Available at: https://lib.dr.iastate.edu/ans_air/vol663/iss1/21

OFC Manager's Report

By Ray Robertson - Manager, Ontario Forage Council



Having just returned from another mission to Nepal, I kind of missed the end of Winter and the beginning of Summer. Spring just seemed to get missed this year, according to the weather patterns. It was a productive mission and wonderful to see so many friends from previous missions. The Jet-lag is

almost gone, and I am back into the routine.

From a forage perspective, there are a lot of things on the go. As I write this article in late May, I saw my first hay field being swathed this morning, so let's hope we are starting into a much better hay making year than 2017. In reflecting on the weather conditions during the past couple of years, 2016 was extremely dry and 2017 was extremely wet; hopefully 2018 should be the perfect year for haying.

The forage faculty at the University of Guelph is back on our agenda, as their last forage breeder / specialist is about to retire this summer, leaving Ontario without the expertise producers and extension personnel require. The Dean of University of Guelph, Dr. Rene VanAcker and some of his staff are very supportive of the need for a faculty person, but attracting investment seems to be the challenge. During the past few weeks, there has been considerable discussion and that will continue, as we strive to attract the required support to put this much needed structure together. At a time when there is so much hype around soil health, organic matter, loss of soil and cover crops, forages are right at the root of everything soil. The forage faculty position should be a no-brainer, so we cannot allow this topic to be swept under the rug.

As I prepare this message, we are just starting into the 2018 haying season, the forage crop is certainly lush and plentiful in most regions across Ontario.

During the past few months, the hay prices have been slightly above the normal levels, as most producers had smaller reserves of good quality hay than usual. Current hay prices are a little difficult to establish at this point, until we get a better handle on the overall yield and weather conditions during the season. The Ontario Hay Listings web site is a good place to get an idea of prices, as we start to get the 2018 hay crop listed on the site for sale.

The Ontario Hay Marketing Forum continues to attract considerable attention and is an excellent way to constantly market good quality hay and keep abreast of hay export market opportunities. OHMF members are also eligible to join the CFGA Export Group, to further expand your reach.

The 2018 Milk Maker Forage competition at the Canadian Dairy XPO in Stratford was a huge success this year. The overall attendance was a record high this year and the forage competition certainly created more interest, as our entries increased significantly. OFC manned the booth and was assisted by directors of the Ontario Hay and Forage Co-operative. A special thank you to them for their assistance at this event. We also worked with CFGA and Forage Councils across Canada to encourage national participation and we continue to work with DFC for English/French translation of forms and press releases. There is an even greater response anticipated for 2019.

OFC continues to see increased use of social media on Twitter and Facebook accounts as we use it as a tool to encourage producers and potential members to visit the OFC and Ontario Hay Listings web sites.

The dates for the 13th Annual Ontario Forage Expo 2018 is fast approaching as we have teamed up to deliver another outstanding event with Dufferin County and Northumberland County Soil & Crop Improvement Associations on July 5th and July 10th respectively.

Dufferin County will host the western location on Thursday, July 5th, 2018 at Brakke Farm Inc. near Grand Valley, Ontario

Northumberland County will host the eastern location at Loyal Farms near Warkworth, Ontario on Tuesday, July 10th, 2018

Tradeshows and sponsorship opportunities are still available for this year's Ontario Forage Expo.

As we look to the near future, Canada's Outdoor Farm Show is just around the corner. Hard to Believe!!! We need to decide on the format of this year's display. The Ontario Forage Focus Conferences are also on our radar, so the committee will be looking for speakers. Your ideas are always encouraged and welcomed

Canadian Forage & Grassland Association

In addition to my role as manager of OFC, I represent Ontario as the Chair of the Canadian Forage & Grassland Association (CFGFA). This year's 9th Annual CFGFA Conference will be held in Calgary, Alberta on November 14th & 15th at the Sheraton Cavalier Hotel. The theme of this year's conference is, "FOUNDATION FORAGE: BUILT FROM THE GROUND UP"

At this time, the 2018 growing season is off to a good start, and I look forward to your support and participation, as we anticipate some very successful activities and events.

Best regards,
Ray Robertson, P.Ag.
Manager, Ontario Forage Council

Selecting an Energizer for Your Electric Fence

By Christine O'Reilly, OMAFRA Forage and Grazing Specialist

The energizer (also called a fencer) is the cornerstone of any electric fence. Selecting the right one for your farm is crucial to making an electric fence work for you. Understanding electricity and all the jargon that goes with it can be a challenge. Luckily, thinking about water is often a great way to imagine electricity, so I'm going to draw comparisons between electricity and water throughout this article.

The first step in selecting an energizer is to determine your power source. If the fence is close enough, an energizer that plugs into the hydro is often the cheapest and easiest solution. As the fence gets further away from an outlet, running wires becomes expensive and other power options start to look more attractive. Deep-cycling 12 volt marine batteries are another potential power source for an energizer. These work best when you have at least two to swap out – one battery can charge while the other powers the energizer. An energizer being powered by batteries needs to be fairly accessible, so that batteries are easy to change before they run down. For electric fences in more remote locations, a solar panel may be the best solution. These tend to be the most expensive power source for a fence, but because the panel recharges the battery, it's less likely to lose power than batteries alone. For solar panels to be effective, they need to receive a minimum of 4-6 hours of direct sunlight every day.

An electric fence is a psychological barrier: livestock learn not to touch the fence because the shock is unpleasant. Untrained animals or a non-electrified fence may enable livestock to go right through the fence, because it is not physically strong enough to stop them. To ensure the fence is "hot" enough to convince livestock to stay in the paddock, you need enough voltage. **Volts** are a measure of electric potential. If we draw a comparison with water, voltage is akin to water pressure. See Table 1 for minimum output voltages. Check that the energizer can deliver an appropriate amount of voltage.

Energizers are rated in **joules**, which is a unit of energy. Your energizer must put out enough energy to deliver the right voltage along the entire fence. Imagine a drip irrigation line. To be effective at watering plants, you need a high enough flow rate and water pressure to meet the water needs of whatever is at the far end of the line. The more holes you have in that drip tape, the less water will make it to the end. Those holes are comparable to weeds, tall grass, and branches touching your electric fence. They drain energy from the fence, reducing the voltage it delivers. This is called loading. Your energizer must deliver enough joules to overcome

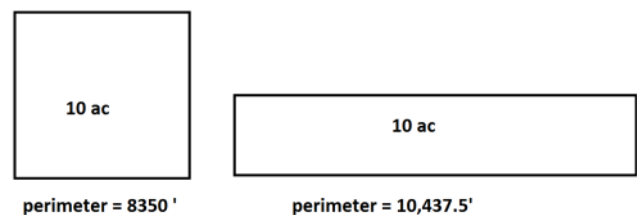
the load and provide enough voltage along the length of the fence.

Table 1. Minimum output voltages for different livestock and predator species

Species	Minimum Voltage	Comments
Cattle	2000 – 4000	Dairy cows are often very quiet and the low end voltage may be sufficient. Bulls can be aggressive and need higher voltage to contain them.
Sheep	4000 – 5000	Wool is an excellent insulator, so sheep fences need high voltage to ensure the shock is felt.
Goats	4000 – 5000	Some breeds of goats are well insulated – see comments on sheep
Horses	2000 – 3000	Stallions can be aggressive and need higher voltage to contain them.
Deer and Elk	3000 – 5000	Some sources suggest a minimum of 5000 volts to discourage all predators.
Wolves and Coyotes	4000 – 5000	
Bears	5000	

Compiled from Stafix and Rutland Electric Fencing

At this point, I need to remind you that fences are linear. Not because I think you don't know that, but because some energizer manufacturers have forgotten. Many energizers state on the box that they will power a certain number of acres of fence. This is not helpful, because the length of a fence around a square 10 ac paddock will be less than one around a long, skinny 10 ac paddock (Figure 1). Measuring an energizer's size in acres gets even less useful when you think about the different lengths of cross fencing it might have to power, so it's probably best to ignore acreage numbers on an energizer.



The other point to bear in mind is that energizers power miles of wire, not of fence. If you have a single strand fence that goes five miles, it requires much less power than a five strand fence going five miles,

Continued on page 8

Milk Maker Forage Competition

Congratulations to the 2018 Winners!!

Grass Hay Class

- 1st Place-Roger Wikkerink, Wikkerink Farms Ltd., Norwich, ON,**
Innoc./Pres.: None Variety: Barenburg-Speare Seeds
2nd Place-Pedro Slits, Slits Dairy Farm Ltd., Brunner, ON

1st Cut Hay Silage Class

- 1st Place-Henk Dirksen, Dirksen Holsteins, Alma, ON**
Innoc./Pres.: Silo-King Variety: General Seeds
2nd Place- Roger Wikkerink, Wikkerink Farms Ltd., Norwich, ON
Innoc./Pres.: Silo-King Variety: Barenburg-Speare Seeds
3rd Place-Sherman Martin, Springflo Holsteins, Fergus, ON
Innoc./Pres.: Silo-King Variety: Pioneer

2nd Cut Hay Silage Class

- 1st Place-Todd Schnarr, Farfield Farms Inc., Elora, ON**
Innoc./Pres.: Silo-King Variety: PICKSEED
2nd Place-Vernon Martin, Elmira, ON
Innoc./Pres.: Silo-King Variety: Dow Seeds
3rd Place-Dennis Gingrich, Gorrie, ON
Innoc./Pres.: Silo-King Variety: Quality TFB

Corn Silage Class

- 1st Place-John Fuller, Martin Holsteins, Palmerston, ON**
Innoc./Pres.: Silo-King Variety: Dekalb
2nd Place-Wayne Erb, Canuck Holsteins, Milverton, ON
Innoc./Pres.: None Variety: Masters Choice
**3rd Place- Martin & Erika Van Rooyen, ERIMAR Farms Inc.,
Tavistock, ON**
Innoc./Pres.: Pioneer 11C33 Variety: Masters Choice

BMR Corn Silage Class

- 1st Place-Jason Martin, Elmira, ON**
Innoc./Pres.: Silo-King Variety: Mycogen 498
2nd Place-Douglas Grant, Les Fermes Grantholm Inc., Howick, QC
Innoc./Pres.: Silo-King Variety: Dow Seed F2F346
3rd Place- Dennis Gingrich, Gorrie, ON
Innoc./Pres.: Silo-King Variety: Mycogen 498

**THANK YOU TO OUR 2018
COMPETITION PARTNERS!!**



For information on how to participate in next year's competition, please contact us:
1 877 892-8663
support@ontarioforagecouncil.com

Please stay tuned to our website for announcements on the 2019 Competition!!
www.ontarioforagecouncil.com

**THANK YOU TO OUR 2018
COMPETITION SPONSORS!!**

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Bronze Sponsors



Next year's winning entries will be displayed for all to admire at the "Milk Maker Forage Competition" display at the CDX in April 2019!

Assessing Alfalfa Winter Injury

By Christine O'Reilly, OMAFRA Forage and Grazing Specialist

Many alfalfa fields across Ontario may be at risk for winter kill this year. Potato leafhopper damage was severe in some parts of central and eastern Ontario in 2017. Rain delays pushed final cuts back into the critical fall harvest period in many regions. Freeze-thaw cycles throughout the winter created ponding and ice in low-lying areas. Freeze-thaw conditions also can cause heaving, particularly on clay soils. Table 1 outlines many risk factors and can help you identify which of your alfalfa fields are at highest risk before you scout.

	Points	Your Field
Years Harvested for Forage		
1 year	1	
2 years	2	
3 years	3	
Disease Resistance (R=resistant, HR=highly resistant)		
R or HR to all diseases	2	
R or HR to both verticillium and bacterial wilt	3	
R or HR only to bacterial wilt	4	
Potassium Soil Test		
High (above 150 ppm)	1	
Medium (80 – 150 ppm)	2	
Low (less than 80 ppm)	3	
Soil Drainage		
Excellent (example: sandy loam)	1	
Good	2	
Moderate	4	
Fair (example: clay loam – no tile)	6	
Cutting Schedule – for Eastern, Central, and Western ON Southern ON add 1 cut Northern ON subtract 1 cut		
2 cuts, last cut prior to Critical Fall Harvest Period	1	
2 cuts, last cut during CFHP	2	
3 cuts, last cut prior to CFHP	2	
3 cuts, last cut after CFHP	3	
3 cuts, last cut during CFHP	4	
4 cuts, last cut 5-6 weeks after CFHP	4	
4 cuts, last cut during CFHP	5	
	TOTAL:	
7 points or less = low risk 8-12 points = medium risk 13-16 points = high risk 17 points or more = very high risk		

Table 1. Risk of Alfalfa Winter Injury from OMAFRA Factsheet by S.R. Bowley and H. Wright

Plant counts can be done as soon as the alfalfa breaks dormancy (Table 2). This is also a good time to check for heaving and plant health. Healthy tap roots will be a white or cream colour, be firm, and the skin will not peel easily. Heaving of more than 1.5" often breaks the tap root, and the alfalfa will not survive.

Table 2. Alfalfa Plant Count Guidelines from Check Alfalfa Stands This Spring and Make a Plan by J. Bagg

Age of Stand	Minimum Number of Healthy Plants/ Square Foot	Consider Replacement
New seeding	25	<15
Year 1	12	<8
Year 2	8	<5
Year 3	6	<4
Year 4+	4	<3

Because alfalfa can produce the same yield at different plant densities, a stem count is a more accurate assessment of changes in yield potential from winter injury (Table 3). Stem counts can be done once the new regrowth is 4-6" tall.

Table 3. Stem Counts from OMAFRA Factsheet Alfalfa Stand Assessment by S. Banks

Stems per Square Foot	% Maximum Yield
55 or more	100%
40 to 50	75 – 92%
Less than 40	Stand is too weak to keep

If the alfalfa is too damaged to keep, there are options. It may be possible to re-establish a stand that was planted in 2017. Older alfalfa stands are auto-toxic – their roots produce chemicals that prevent new alfalfa plants from establishing. If the field was a mixed grass/alfalfa sward, you can treat it like a straight grass stand and provide some nitrogen to improve yields. Severely injured pure alfalfa stands should be rotated into a different crop. Other forage species will not be affected by auto-toxicity, and non-legume crops (grasses, cereals, and corn) will benefit from the nitrogen credit.

Ontario Hay and Forage Co-operative Inc. Update

By Fritz Trauttmansdorff, OHFC Chair

It is an exciting time for our co-op! We are now responding to buyers and building an inventory of pure timothy and alfalfa to fill contracts.

If you are, or are considering producing pure stands of timothy or alfalfa, we want to hear from you! Your high quality inventories could be destined for overseas!

In April we hosted a seminar on “How to Grow Quality Hay for Overseas Export” in Mount Forest. The day offered practical advice from knowledgeable speakers on every step of hay production from fertility to storage and shipping. Members who were unable to attend are invited to contact us for the information shared at this meeting. We intend to host more of these information packed seminars, so contact us to be added to the mailing list.

Later in April, we were privileged to host a visit with delegation of buyers from the UAE, Saudi Arabia and Lebanon. The delegation was guided and accompanied by OMAFRA and the Canadian Trade Commissioner for ME,
Andre Maharaj.

The visit was positive as we were able to show them samples of the high quality forages we are producing here in ON.





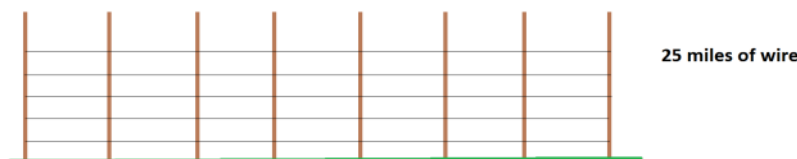
because the multi-strand is actually 25 miles of wire (Figure 2). Many manufacturers claim their energizers can power 8-20 miles/joule of output, but these are numbers obtained under ideal laboratory conditions. In practice, if you have a one- or two- strand fence that is free from weeds, tall grass, and branches touching it, you might get 3 -6 miles/joule. Under heavy loads (i.e. lots of debris touching your fence), you might only get 1 mile/joule. If you're powering a multi-strand sheep fence, you might want a ratio of 0.16-0.33 miles/joule (between 3 and 6 joules per mile) to accommodate the high number of wires and the insulation value of wool.

There are two different energy ratings you might see on the box. Output joules indicate the amount of energy sent through the fence. Stored joules are the amount of energy in an energizer's capacitors – multiply stored joules by 0.7 to get an estimate of the output.

What's a capacitor? Remember your power source? If the energizer is plugged in to an outlet, it's receiving 120 V of electric potential (that's your water pressure). If batteries or a solar panel is providing the power, likely the input voltage will be a multiple of 12 V. However, the output voltage is much higher – probably over 3000 V. The energizer contains a transformer, which creates that increase in electric potential. Capacitors store the higher electric potential and release it in pulses to the fence. Think of a tippy bucket at a water park. A small amount of water flows into the bucket, but once it gets full the bucket dumps the water out, rights itself, and starts collecting again. Capacitors build up electric potential and “dump” higher voltage down your fence line. However, not all the water in a tippy bucket gets dumped; there's a little residual in the bottom when the bucket starts to refill. Capacitors have a similar residual, which is why stored joules are about 30% more than output.

When in doubt, buy a bigger energizer. This is a point where it pays to think ahead. If there is a chance you will add onto your electric fence in future (either by fencing other fields, or subdividing existing paddocks), factor in how many more output joules you will require, and buy an energizer that can handle that future load. If you are in the process of expanding your fences, upgrading the energizer as you go gets expensive quickly.

If both fences are 5 miles long:



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

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