



Native Agri Update

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First Nations Food & Farming Photo Contest

About the Contest

Open to Status First Nation youth between 10 and 18 years of age. Prizes will be awarded to two classes: Class 1 - ages 10-14 & Class 2 - ages 15-18. Each Class includes two categories:

Farming	Gardening
1st Prize - \$100	1st Prize - \$100
2nd Prize - \$75	2nd Prize - \$75
3rd Prize - \$50	3rd Prize - \$50

Pictures can include plants, crops, livestock, people, activities and traditional First Nation farming/ crops. All photos must be of First Nations gardens, farms, and/or activities.

How to Enter

Submit original photos as jpeg files for either or both categories, **on or before September 15, 2018**. Complete details and rules are available at www.indianag.on.ca or photo@indianag.on.ca.



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Agribusiness

MAKING FARM SAFETY A PRIORITY

source: adapted from: UFA Farm Safety Guide (<https://www.ufa.com>) Ontario Ministry of Labour (<https://www.labour.gov.on.ca>) Canadian Safety Council (<https://canadasafetycouncil.org>)

As we all know farming can be very unpredictable and a tough job even in the best conditions, but there is nothing more rewarding than a hard day's work. But do you know how dangerous that day of work really is? One area that is overlooked is the dangers that are always present on every farming operation.

There is a major responsibility of the farmer to ensure that the risks posed to all workers and guests is assessed and controls are put in place to keep everyone safe. The following article provides some simple tips that can help you implement farm safety.

Tractors and Equipment

Tractors and farm equipment equate to the most farm fatalities with 60% of all fatalities being related to some form of equipment. The following list are ways to keep all operators and farm guests safe:

- All farmers should provide the proper information, instruction and supervision on how to safely operate a tractor and/or equipment.
- A tractor and all attachments used with it must be maintained in good condition, including all safety devices.
- A tractor should be used for its intended purpose only.
- If a tractor or any attachments are modified, the employer and the operator should take into account how the modifications affect the safe operation of the equipment.
- All safety decals attached to a tractor should be visible and free from obstructing material. Damaged or missing safety decals should be replaced with new ones if available.
- Only the operator should ride on a tractor while it is in use. If a tractor has a training seat, the seat should be used solely for that purpose.
- Children and other bystanders should be kept away from tractors while they are operating.

Livestock

Animals and livestock are what attract most patrons out to farms across Canada, but handling livestock properly is vital in ensuring everyone's safety. 60% of all hospitalizations associated with agriculture across Canada are livestock related.

Farm employers and workers handling large animals can be killed or injured in a number of ways, including being: stepped on, knocked down, kicked, bitten, pinned against a hard surface, or exposed to a transmittable disease.

The following are ways to ensure the safety of everyone coming in contact with livestock:

- All farmers should provide the proper information, instruction and supervision to all workers and guests coming in contact with animals to ensure they are competent to do so safely.
- A worker coming into contact with an animal should wear appropriate personal protective equipment for the assigned work.
- A worker coming into contact with an animal should be made aware of any transmittable diseases that the animal may carry and should be instructed on how to prevent transmission, to themselves and to other animals.
- All farmers should ensure that workers know how to safely separate themselves from an animal while working in an enclosure occupied by animals.

Children on the Farm

Farming is a way of life for many Canadian families but too often, children and parents consider the entire farm a play space. Farm children live in a workplace – one that exposes them to many hazards. According to the Canadian Agricultural Injury Reporting (CAIR), from 1990 to 2005, 217 children aged 14 or younger were killed on Canadian farms. Approximately 45 per cent were under the age of five.

Every year, children are run over and killed by farm machinery. **Bystander runovers and extra rider runovers are the most common causes of agricultural fatalities among young children.** Bystander runovers occur when children playing on the farm are run over by a farm vehicle. The vehicle is generally reversing at the time and the child has fallen from where they had been riding as a passenger and were subsequently runover. Enforce a "no extra riders" rule on tractors and all farm machinery.

Even good-tempered animals can become dangerous. Cattle can knock down and trample a toddler without noticing the child is even there. A calm animal can become dangerous if it or its offspring feel threatened. Keep children away from animals, especially in livestock-handling areas.

Teach small children the fundamentals of safety, such as which areas are off-limits. As they grow older, explain why certain things are dangerous. When they start helping with the work, make sure they are properly trained, keeping their limited strength and experience in mind. The safe way to do things is not always obvious to a child, so always explain and enforce safety first. Above all, farmers and their workers must set a good example, both for their own safety and as a role model for children.

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Market Information

BEEF MARKET WATCH

Prices are courtesy of the Beef Farmers of Ontario Weekly Market Information Report for the week ending Thursday June 22, 2018.



Changes here reflect the difference in prices from the week of April 12, 2018 to the week of June 22, 2018. Weekly reports provide prices on a per cwt basis for the week but do not include Friday sale results.

All categories are showing a large improvement in price since April. Stocker steer and heifer prices especially have recovered from the April slide.

Rail grade steers are up \$5 and fed steers and heifers are \$5 to \$7 stronger.

Cull cows and bulls are up \$9 and \$7 respectively.

Stocker steers are up \$10 to \$19 depending on weight category. Stocker heifers are \$10 to \$16 stronger depending on weight category.

Beef supplies are up in the U.S. which contradicts current prices. We are moving into the barbeque season with the seasonal increase in demand. Canadian dollar has dropped encouraging exports to U.S. Exports of feeder steers and heifers are up 67% year to date with 2017. Beef exports are up 10%

compared to date. Strong export markets are supporting prices. Canadian cow kill is up 12% with fewer cull cows going across the border.

Category	Price Range \$	Ave Price	Top Price	Change
Rail Steers	245-250			+5
Fed steers	138-157	146	159	+7
Fed heifers	128-151	143	159	+5
Cows	62-86	73	145	+9
Bulls	87-110	97	147	+7
Stocker steers				
700 – 799	157-204	191	216	+19
600 – 699	172-220	198	237	+10
500 – 599	171-231	206	257	+15
Stocker heifers				
700 – 799	154-179	168	189	+16
600 – 699	155-191	176	207	+14
500 – 599	157-195	179	213	+10

All prices are on a hundred pound basis (cwt) *ML*

CROP MARKET

Excerpts from Monthly Market Trends June July 2018 by Phillip Shaw GFO www.gfo.ca

Corn As of June 15th, it looks like the high in December 2018 corn came on May 24th when the December futures got to \$4.29 bushel. Of course, nobody knows, but a 47 cent drop since then has been very telling. The December corn futures high in 2017 came in early July, it came on June 18th in 2016, and if \$4.29 holds true, that critical pricing period came early this year in May.

Simply put, Argentina problems this past winter made things a bit different from 2016 in 2017. We need a major weather event going forward to change the production paradigm to affect prices. The June 29th USDA acreage report may also shift that debate, especially if American farmers decided to grow a lot more than 88 million acres. Needless to say, crop weather for the next month is still key.

Seasonally, corn futures tend to trend lower from now on going into October.

Soybeans Soybeans have definitely

been the whipping boy of all the political tariff talk between the Trump administration and China. Needless to say, any whiff of trouble between the world's biggest soybean buyer (China) and the United States spooks the market.

On the other hand, could an argument be made that these tariff implications are already factored in to a \$9.05 July futures prices as of June 15th? Generally speaking, soybean futures over the last 3 to 4 years spend very little time under \$9.00. Soybean demand though battered, can still be resilient.

Seasonally, the soybean high comes in

July, but looks to be early this year.

Wheat Hot temperatures and dry conditions have damaged the American wheat crop. There has also been somewhat of a ratcheting decline in wheat production estimates in places like Russia and the Ukraine. Wheat is special because it is grown everywhere and all the time, but even still, 2018/19 global ending stock are set to decline slightly. \$6 wheat prices for Ontario wheat don't lie. Historically, that's quite good compared over time. Ontario wheat producers can thanks to some extent the low Canadian dollar and the volatility in the wheat market.

Coming Events

- July 10** **Production Insurance - 2018 Program Year**
Pay your premium for spring-seeded grains and oilseeds
- July 11-14** **Ontario Maple Syrup Producers Association Summer Tour**
Sault Ste. Marie For info: summertour2018@gmail.com
- July 16** **IAPO Member Barbeque** 12 - 1:00 pm All Saints' Anglican Church, Tyendinaga. All IAPO members welcome to attend.
RSVP at 1 800 363 0329
- July 26** **Wikwemikong Farmers Meeting**, 6 - 8pm,

Livestock Information

PREGNANCY TOXEMIA IN MEAT GOATS

Adapted from an article by Susan Schoenian, Maryland Extension

Farming livestock involves managing disease at different stages of the life cycle. An understanding of a specific disease, the causes, prevention and recommended treatment is necessary to manage it.

Pregnancy toxemia is an example of an illness with pregnant does. It is common in sheep flocks as well. Here we will look at meat goats in particular. Dairy goats have to cope with heavy milk production. Pregnancy toxemia is a metabolic disorder triggered by low glucose (blood sugar) levels in the blood. Body fat is broken down to compensate. Ketones are produced from this breakdown.



Lack of quality feed in the form of energy during the last quarter of the pregnancy is often the cause as the doe is unable to eat enough to meet the demands of one or more rapidly growing fetuses. About 70 % of the fetal growth takes place in the last 4 to 6 weeks of gestation.

Fat or over-conditioned does are prone to pregnancy toxemia because of fat accumulation in the abdomen. There isn't enough room in the gut for the doe to eat enough causing a rapid breakdown of fat to compensate. On the other hand thin does are susceptible as well because they have to consume enough feed to meet their own nutritional needs as well as the developing fetuses. Often the thin doe is unable to meet both needs.

To put the increased nutritional needs in the last third of pregnancy in perspective, does carrying twins require almost twice as much dry matter as a doe with a single. Does with triplets need about 2.3 times as much dry matter. In general any condition that limits a doe's intake of dry matter in late gestation can lead to pregnancy toxemia. The list includes multiple fetuses, fat or thin does, does with poor teeth, older does, lame does, does with worms, lack of exercise etc.

Symptoms of pregnancy toxemia are similar to other diseases. Does will go off feed in early stages and are lethargic. They may lag behind the herd and wander aimlessly. They may experience twitching and teeth grinding. Affected does become weak and depressed and eventually lie down unable to rise resulting in death if not treated.

Early detection and treatment to meet the animals glucose needs is required to save the doe. Drenching with propylene glycol 2 or 3 times a day is a common treatment. Force feeding and injections of B vitamins may stimulate the appetite. A caesarian section may be necessary to save the life of the doe and kids if near term.

As usual prevention is the best route. This means does should be in good body condition but not fat going into pregnancy and must receive adequate energy in their ration during the last third of pregnancy. Feed good quality hay along with grain supplementation. Start grain at about a half pound per day and increase to 2 pounds at time of kidding. Hay alone doesn't provide enough energy dry matter for does with twins and triplets. Avoid abrupt feed changes and provide enough feeder space for all to eat comfortably at the same time. Avoid stressful situations where animals may go off feed. If some does are thin particularly those in their second pregnancy and older does consider separating them from the herd and feeding as a second group to improve body condition. Encourage exercise as well.

Managing pregnancy toxemia involves understanding the disease, practicing prevention and being familiar with treatments as required. Develop a flock preventative health plan with your veterinarian.

GROUNDING ELECTRIC FENCE

Many livestock farmers use some electric fencing either as permanent or temporary fence. Electric fence is cost effective and a great tool for managing grazing with pasture rotation. Proper grounding is a must in controlling livestock. Dry conditions, heavy forage growth and branches on wires reduce the effectiveness of the ground.

In an earth ground system current travels out from the energizer and returns to it. It moves from the energizer along the wire, passes through the animal touching it to earth. Here it moves through the moisture in the soil to the ground rod at the energizer. Grounding must provide enough shock to control livestock. Not enough ground wires, poorly joined wires, improper wire type, bad wire to ground rod connections or rods too close together can cause a poor ground.

Here are some suggestions to maintain a strong ground system:

- Use 12.5 gauge insulated lead out wire from energizer to the ground rods rated.
- Use galvanized steel rods at least 4 feet long and preferably 6 feet. Rusted ground rods reduce voltage flow. Copper rods are not recommended.
- If power on the fenceline is not sufficient add 2 or 3 ground rods placed in a triangle at least 10 feet apart. Locate rods in a moist area if possible. Use 12.5 gauge wire to connect rods.
- Tighten all connections. Current is lost with loose connections.
- A digital readout fence meter is a good investment.
- If the herd or flock has escaped, check for fallen branches on the fence and check the ground system. Both wet and dry conditions can reduce fence current.

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Crop Information

EUROPEAN CORN BORER

source: www.omafra.gov.on.ca/english/crops/facts/97-019.htm

The European corn borer *Ostrinia nubilalis* (Hubner), a major pest of sweet corn, can also damage peppers, snap beans, potatoes, tomatoes, apples and other horticultural crops. It is an introduced species which arrived in the Great Lakes area in the early 1900's. It is now found throughout eastern and central North America, including most parts of Ontario.

Within Ontario, there are two strains of corn borers - bivoltine and univoltine. In the southwestern counties of Essex, Kent and Elgin, the bivoltine strain completes two generations in most summers and can go on to a partial third generation in unusually warm years. In the rest of the province, the univoltine strain normally completes only one generation per year but may begin a second generation in warm years. Both strains exist in significant numbers in a broad area of overlap including Lambton, Middlesex, Oxford, Brant, Haldimand-Norfolk, Hamilton-Wentworth and Niagara Counties.

The bivoltine and univoltine strains appear identical, are attracted to the same pheromone lure, and respond to control measures in the same way. They differ in their response to temperature and day length. Under similar environmental conditions, the bivoltine strain emerges earlier in the spring and enters diapause (the inactive over-wintering stage) later in the summer or fall. The risk of crop damage by and the timing of control strategies for corn borers depends partly upon which strain is present.



Corn Borer Moths

Biology

The corn borer has four stages in its life cycle - adult (moth), egg, larva (caterpillar), and pupa. The winter is spent as a fully grown caterpillar in or near last year's host plant. While most corn borers probably over-winter in field corn, they can also be found in other host plants such as large-stemmed grasses and various vegetables.

Adult

In the spring, the corn borer caterpillar changes to a pupa in its over-wintering site and then a few weeks later emerges as an adult moth. Males usually emerge a few days before fe-

males. While emergence begins around the third week of May in the southern-most part of the province, moths do not usually appear until mid-June in eastern Ontario.

Corn borer moths are 1.5 - 2 cm long and about 1 cm wide when the wings are folded at rest. Their colour varies from pale yellowish-brown to medium grey. The forewings have wavy dark lines running across them. Males have darker wings and are a little smaller than females.

Sweet Corn Damage

Sweet corn is susceptible to corn borer damage from the late whorl stage until harvest. Although the borers feed on all above-ground parts of the plant, the greatest economic damage occurs when borers feed on the ears. They may enter the ear through the tip, shank or husk and cause extensive feeding damage to the kernels. Ears infested with caterpillars or their frass (droppings) or ears with damaged kernels are unmarketable.

A corn borer infested field may also attract blackbirds, initially searching for insects, but later damaging the corn.



Corn borer damage on ears.

Chemical Control

When pheromone traps or local agriphone messages indicate that corn borer moths are flying, growers should begin to scout fields to help time insecticide sprays. Spraying according to results of weekly or biweekly scouting ensures optimal use of sprays. Field trials have shown that scouted fields require fewer sprays to achieve a similar level of control as calendar-sprayed fields. While many growers may choose to scout their own fields, consultants offer this service in some parts of the province.

When scouting your fields, look for egg masses, small caterpillars or feeding damage on the corn plants. Corn borer egg masses are usually found on the undersides of the leaves, near the midrib. Since most egg masses are laid on the central part of the plant, examine three leaves above and three leaves below the ear. Look for small caterpillars on the leaves, in leaf axils or in the silks. Feeding damage may be found:

- on the leaves as window panes or shot holes
- as broken tassels, or as ear or husk damage

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Other News

RECOVERING FROM WINTER BEE LOSSES WITH NUCS

A recent study from the Ontario Beekeepers Association indicated about 70 per cent of beekeepers in the province suffered “unsustainable losses” over the winter. About 43 per cent of these beekeepers blame the weather. It is the opinion of some beekeepers that the long, cold winter that followed the horrible summer of wet, rainy weather, was a perfect storm for winter losses.

Winter losses leave beekeepers scrambling to rebuild and replace colonies as fast as possible and most beekeepers buy small nucleus colonies or “nucs” to rebuild. The late spring in some regions of Ontario delayed new queen production and thus the availability of replacement nucs. A nuc has a queen and four frames of bees brood and honey. Nucs were not available until June this year. In fact some producers are just now having their nuc orders filled. My nucs did not arrive until mid June which is not the optimum. Below are the practices that I follow to ensure my nuc progresses to a thriving productive hive as quickly as possible

Recommendations

When you get your nuc keep it from overheating. Take the nuc to the hive stand and set it in front. If you cannot install it at this time open the front entrance and let them fly in and out. Close the other ventilation screens if it is cold at night.

To begin installation, open the top of the nuc box and give a little smoke.

REMOVE THE FRAMES WITH CARE SO AS NOT TO DAMAGE THE QUEEN.

Start with the outside frames. The Queen should be in the middle frames.

Put the frames in the hive in the same order as you take them out, then fill the super as indicated.:

Empty Frame #1

Empty Frame #2

Nuc Frames #3, 4, 5 & 6

Empty Frame #7

Empty Frame #8

Empty Frame #9

To get the maximum production it is important to make sure the bees have ample food supply. It is recommended to feed a pollen patty. The patty should be just big enough so the bees use it up in a week. Also at this time give the nuc some sugar syrup (50-50 solution). A hive needs the pollen as the protein to build young bees and honey for energy. **This is extremely important if using undrawn comb.**

After 10 to 14 days go back and see if the queen is laying

well. Remove enough of the nuc frames to allow you to see if there are larvae or capped brood present.. If so and there are enough bees to cover a new frame move 1 empty frame (1 between) a brood frame as shown below.

Empty Frame #1

Nuc Frames #2 & 3

Empty Frame #4

Nuc Frames #5 & 6

Empty Frame #7

Empty Frame #8

Empty Frame #9

After another 10 days you should be able to put an empty frame between 3 & 4 and 5&6. Keep feeding the bees pollen substitute and sugar syrup till a good honey flow starts. A shortage of feed is a signal to the queen to slow down laying and your hive will not build to its full potential.



Transferring nuc frames into the hive source:<https://www.youtube.com/watch?v=7Q7g2pJthdc>

As the brood nest fills up you can add a second brood chamber (hive box) on top of the first or if you want to run the hive as a single brood chamber add an excluder and a honey super. If there is not a honey flow the bees will not successfully draw out foundation and you have to make a decision to feed or not. Make sure there are enough stores to keep the hive building till fall. There should be 3-4 frames of honey at all times.

Keep a close eye on your hive for diseases. If there are feral colonies in the area and they die out your hive will try and rob them and any problems they have will come back to your hive. Check for mites and make sure the brood is healthy. Be careful of using old equipment that has not been inspected thoroughly. This includes smokers, gloves and hive tools. Check with the provincial apiarist or Ontario Beekeepers Association Tech team to see what is the recommended treatment in the fall before packing the hive away.

CAUTION

Feeding honey from unknown sources can harm your hives. It can carry American Foulbrood and Nosema plus other pathogens and possibly insecticides. It is not even recommended to feed honey from your dead colonies to your hives in the spring.

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