Native Agri Update

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www.indianag.on.ca

FIRST NATIONS FOOD AND FARMING PHOTO CONTEST

About the Contest

The goal of IAPO's First Nations Food and Farming Photo Contest is to highlight the success and diversity of First Nations food production and farming in Ontario. First Nations youth between 10 and 18 years of age are encouraged to submit pictures of First Nations gardening and farming. Selected photos will be shared on IAPO's website, promotional materials, as well as at public events. Photo contest winners will be awarded iPad minis. Up to five iPads minis will be awarded.

Eligibility

The Photo Contest is open to Status First Nations Youth between the ages of 10 and 18 residing in Ontario. Those under the age of majority must have permission from their parent or guardian before entering the contest. All entrants are eligible to win one prize only.

Contest Details

The contest will run for the duration of the summer, ending on September 15th, 2017.

Prizes will be awarded to two classes:

Class 1 – ages 10-14

Class 2 – ages 15-18

Each Class includes two categories:

Farming

Gardening

Personal interpretations of each category are encouraged. Photos can include plants, crops, livestock, people, activities, as well as traditional First Nation farming & crops. Photos can be of a contestant's garden, farm or related activities or those in their community. All photos must be original and be of First Nations gardens, farms, and/or related activities.

Submissions will be judged on quality, originality, relation to the theme, and creativity. A winner will be selected from each category within the two classes, and each winner will receive an iPad mini.

How to Enter

Submit **original photos as jpeg files** for either or both categories, Gardening and Farming **on or before September 15, 2017**. No more than two photos per category will be accepted.

Early-Bird Prize

For an additional chance to win an iPad mini, **photos submitted on or before July 31, 2017 will be eligible for the Early Bird prize.** Entries into the Early Bird category will not be sorted by age or category. The winning photo from the Early Bird Special will not be eligible for any other category prizes.

Complete details and rules will be available by July 7 at www.indianag.on.ca or photo@indianag.on.ca.

Inside

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Agribusiness

FARM SAFETY IS COMMON SENSE

Farming can be dangerous, but with common sense and a commitment to making your farm a safe workplace, you and your family can enjoy many years of safe farming.

Its important to be aware of the hazards and risks of farming as these farm safety statistics show:

Top five causes of farm fatalities: machine rollovers (23%), machine runovers (21%), machine entanglements (8%), animal related (6%), struck by non machine (6%).

For farm children under the age of 15, the leading causes of farm fatalities are: machine runovers (46%), drowning (16%), machine rollover (7%).

Top five causes of hospitalized injuries: animal related (16%), machine entanglement (16%), falls from height (14%), machine rollovers (10%).

For farm children under the age of 15, leading causes of hospitalized injuries include: falls from heights (22%), machine entanglements (18%), machine runovers (16%).

Source::www.cair-sbac.ia Agricultural Fatalities and Hospitalization in Ontario 1990-2008

Safety hazards shouldn't deter you from your farm or from moving to one. However, thinking about safety and making it a part of everything you do on your farm is important. Make your farm a safer place, and you'll be able to thrive on it. Here are common sense farm-safety tips for you to consider:

Farm Buildings and Grounds

- Perform a safety check of buildings and grounds for obvious fire hazards and hazardous materials.
- Store farm chemicals securely where kids and animals can't access them. Then make a list of the chemicals for firefighters in the event of a fire on your property.
- Keep weeds and grasses trimmed so tractor and ATV drivers won't run into hidden obstacles and holes that can cause the vehicle to overturn.
- Maintain clean and neat work areas with tools stored out of the way.
- Establish a safety boundary around gas and diesel fuel tanks and other flammable substances.

Personal Farm Safety

- Don't wear loose clothing around equipment or work areas.
- Use safety equipment the way it was intended. That means appropriate gloves, hearing protection and safety eyewear, not to mention face masks and respirators when working in dusty conditions.
- Always have a helper nearby when entering grain bins, breeding pens or other high-risk areas.
- Discuss safety concerns with children as you explain safe handling and operating procedures. Practice what you preach, and they will practice it, too.

Tractors and Implements

- Keep tractor roll-over protection structures in place. If you have a tractor without one, get it installed today … and while you're at it, buckle your seat belt.
- Prohibit riders on tractor fenders, hitches, attachments or implements.
- Shield all PTO-powered equipment drive shafts, and keep kids at a distance from them.
- Never start or run gas or diesel engines in an enclosed area without being assured of good ventilation.
- Outfit tractors and farm trucks with fire extinguishers and first aid kits.
- Never exit a tractor or truck without placing it in park or engaging the emergency brakes.
- Never leave running power equipment unattended.
- Check and maintain equipment, especially hydraulic hoses and electrical cables showing cracks or other signs of wear.

Livestock

- Keep animals in good health. An animal in pain and discomfort can react aggressively.
- Treat farm animals with respect. If you understand their behavior, you'll be ready for their actions.
- Take extra care with farm animals at breeding and birthing.

The time that you invest in being safe provides a life time of benefits for you, your family and your business. Develop a plan for 2017 NOW! You Can be the Difference for Farm Safety.

ABSEP BUSINESS FINANCING REMINDER

If you're looking to finance your next business step, re-remember IAPO is still accepting applications for the Aboriginal Business Start Up and Expansion Program.

What businesses/projects are eligible?

Business start-up, business expansion and business acquisition costs. Eligible farms and agribusinesses across Ontario are encouraged to apply. As well, in Central and Eastern Ontario, all First Nations businesses are also welcome to apply.

What financing is available?

Financing, including term loans and working capital, of up to $200,000 and grants of up to $20,000 is available for eligible applicants. Generally a minimum of 10% cash equity is required.

Applications and information are available by calling 1-800-363-0329 or info@indianag.on.ca.

DM

Market Information

BEEF MARKET WATCH

Prices are courtesy of the Beef Farmers of Ontario Weekly Market Information Report for the week ending Thursday June 8, 2017.

Changes here reflect the difference in prices from the week of April 13, 2017 to the week of June 9, 2017. Weekly reports provide average prices for the week but do not include Friday sale results.

Prices across all categories are generally much stronger.

Rail grade steers are up $26 and fed steers and heifers are up $29 to $18.

Cull cows are $13 higher with cull bulls up $8. Stocker steers are steady to $45 higher depending on weight category. Stocker heifers are $15 to $20 stronger depending on weight category.

Stocker prices reflect some demand still for good grass cattle.

Kawartha Lakes Community Sale Barn, June 3, 2017

80 Bred cows, 100 Cow calf pairs

	Exotic and Exotic X	British and British X
Top quality bred cows	$2300-$2600	$2100-$2300
Avg. quality bred cows	$1800-$2200	$1600-$2000

	Exotic and Exotic X	British and British X
Top quality cow/calf pairs	$2600-$3200	$2000-$2500
Avg. quality cow/calf pairs	$2000-$2500	$1700-$2000

Category	Price Range $	Ave Price	Top Price	Change
Rail Steers	296-298			+26
Fed steers	168-187	179	195	+29
Fed heifers	162-179	173	195	+18
Cows	75-109	91	157	+13
Bulls	109-136	123	159	+8
Stocker steers				
700 – 799	162-218	193	239	Steady
600 – 699	187-243	216	254	+27
500 – 599	206-262	239	281	+45
Stocker heifers				
700 – 799	162-195	180	220	+16
600 – 699	160-204	185	230	+15
500 – 599	170-217	199	232	+20

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

CROP MARKET

Excerpts from Monthly Market Trends June July 2017 by Phillip Shaw GFO www.gfo.ca

Corn The corn market is entering a very critical time very similar to the last two years. For instance, last year the corn market topped out on June 18th. It was a time with ample old crop supplies but much uncertainty in new crop fields. When the rains came the market slid down into its lower to sideways range for the last 10 months. The same conditions exist in early June 2017 and producers should be cognizant of that.

As we move into the middle of June corn will remain in a weather market until the heat breaks or the rains comes. Standing orders for new crop corn will be helpful within this anticipated volatile market. Seasonally, the corn market tends to trend down through August.

Soybeans Soybeans have bounced off their Brazil harvest lows. Prices have been under bearish pressure because of the big US crop last year as well as the record Brazilian crop. Still, demand is very strong to keep price at the $9.40 level. This is happening in an environment where the US crop is yet to be planted totally. There is much risk ahead especially with soybeans, as August rains are so critical. This is happening in a price environment where global soybean new crop beginning stocks are rising. Seasonally, the soybean markets tend to trend up through late June.

Wheat Wheat continues to suffer under its bearish market conditions, but has shown some resilience over the last few weeks. In Ontario, prices have continued to be stimulated by the low Canadian dollar and any futures rise will be accentuated. Prices now are higher than they were a year ago at harvest time.

Marketing It's time to really focus those marketing plans. Flashpoints to come will be the June 30th USDA reports releasing of information with regard to acres, stocks and yields, which could be explosive for prices. The July 4th weekend, which represents a three-day holiday from market action sometimes, can actually be pivotal for grain market direction once markets open up. The key for Ontario producers is to take advantage of the opportunity where they are comfortable and profitable.

Coming Events

July 6	**Ontario Forage Expo** "Hay Making in Motion" - Nepean, Contact: Ontario Forage Council. 1-877-892-8663
July 13	**Farmsmart-Expo -** Elora Research Station Contact: FarmSmartAdm@gmail.com
July 14	**Ontario Maple Syrup Producers Summer Tour** - Midland https://www.omspa.ca/events

Livestock Information

FARMING IN SYNC WITH NATURE

Adapted from an article by Bryan Weech, Sustainable Agriculture Consultant

We often hear about farming in sync with nature particularly with ruminant livestock. This involves working with nature following its seasons.

Here are 5 steps:

1. Birth to maximize grass

Birthing in harmony with green grass minimizes hay feeding, and can increase number of animals weaned and general herd health. New born problems like scours are reduced. This generally means birthing around the same time as the local populations of deer.

2. Extend the grazing season

Reduce the need for purchased and stored feeds. Take advantage of animal's ability to harvest grass, fill forage gaps with grazable annual forages and by applying changes in grazing management.

3. Develop a herd or flock that is capable of high reproduction efficiency on a forage-based system

Animal genetics are not all the same. Changing genetics to match a management strategy that is in sync with nature is a critical consideration. Some First Nation farmers have moved to a smaller frame animal particularly with beef herds to match available feed resources especially in more northern parts of Ontario.

4. Use rotational grazing

Use some form of rotational grazing based on a grazing management plan. A rotational grazing program that imitates the movements of the historic bison herds is key to grazing in harmony with nature., grazing and moving on to the next pasture.

5. Take Advantage of Forage Genetics

Modern forage genetics provide varieties of grass that are much better able to endure management intensive grazing, with better yields, higher nutritional levels, and improved persistence.

Farming with nature requires a dependance on well managed grazing to fill the nutritional needs of the herd/flock for an extended period together with timely birthing. Feed is a major cost for livestock farmers. The number of animals weaned to females exposed for breeding has an impact on income. Higher weaning rates, improved animal health, lower costs per breeding female and reduced work load for the farmer are the usual results of farming in sync with nature.

MANAGING BULLS ON PASTURE

Adapted from an article by Glen Selk OSU

Some First Nation beef farmers have replaced older mature bulls this spring with yearling and two year old bulls. Here are some suggestions for managing multiple bull herds.

Multiple bulls are common for some cowherds on pastures. In community pastures with cows from two or more herds, bull numbers are larger. Also cows from one farm may split off from the main herd and graze separately. Extra bull power is needed in these situations.

A yearling bull may be able to look after 15 to 20 females, a two year-old maybe 25 and a mature bull up to 45 females. Managing bull power is important to maximize breeding efficiency. Often bulls are released in late June to control the calving season.

These suggestions will improve calves born per female exposed to a bull:

- It is best if bulls that will be pastured together can be in the same area for at least 3 weeks to establish who is "bull of the pasture". This social order can be established before bulls are turned out with the cowherd.

- Pasture young bulls with young bulls, and mature bulls with mature bulls. Mature bulls dominate younger bulls and may cause serious injury. When rotating bulls during the breeding season, use the mature bulls first, and follow with the yearling bulls in the last third of the breeding season. The young bulls will have fewer cows to breed, and will be 1 - 2 months older when they start breeding.

ANOTHER LOOK AT COW HERD NUTRIONAL NEEDS

Traditionally, beef nutrition experts have considered the National Research Council (NRC) nutrition requirements as the guideline for feeding beef cows and heifers for successful breeding. In the case of heifers this meant heifers need to be 65% of their anticipated mature weight. However, recent research out of Montana conducted under commercial herd conditions shows a change in emphasis.

Under the standard NRC with 100% of NRC nutrition requirements met, the expected pregnancy rate is 90% or 9 out of 10 females bred. If 85% of NRC recommendations are fed the expected result is 80% or 8 out of 10 females bred.

In Montana the herd was separated in two with one half fed to NRC specifications and the second half fed a more restricted diet. The cowherd was a cross of about 50% Red Angus, 25% Charolais and 25% Tarentaise. The herd was followed for seven years. Over that time there was no significant difference in pregnancy rate between the two groups, 90% for the group fed to specifications and 89% for the restricted herd. From this research it was concluded that animals managed under more normal farm conditions have lower nutritional requirements to get in calf than anticipated.

The end result is lower feed quality is required than expected based on NRC to achieve a 90% pregnancy rate. In the long-term it was determined that cows managed with less, produce offspring that can grow and breed on less. These animals tend to be smaller because of management not genetics.

If you'd like more information on feeding heifers, or other cattle feeding information, don't hesitate to contact mark@indianag.on.ca.

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Crop Information

THREATS TO WHEAT & OTHER CROPS

source:fieldcropnews.com 2017/05/cereal-leaf-beetle-and-true-armyworm-the-next-threats-for-wheat-and-other-crops/T. Baute, OMAFRA

Two pests deserve our attention over the next month.

Cereal Leaf Beetle

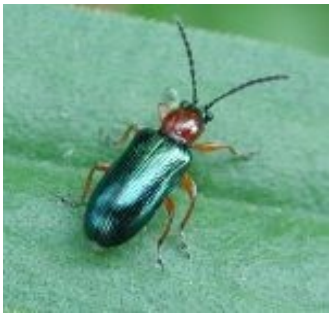


Fig 1.Cereal leaf beetle adults have reddish orange heads and legs. J. Smith, UGRC

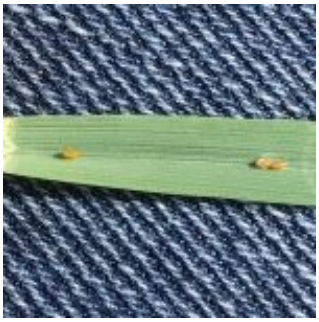


Fig 2. Cereal leaf beetle eggs. S. Gowan, Gowan Crop Consulting

Cereal leaf beetle (CLB) is starting to show up in some fields in Ontario. Levels are still low but adults, eggs and/or larvae are being found by scouts at various locations during routine scouting trips. A few locations tend to experience a higher frequency of infestations including fields near Dresden, Bolton, Stayner, Seaforth, and Clinton. But this does not mean that other fields in Ontario are not at risk. Susan Gowan, a crop consultant in Haldimand, for example is finding CLB more easily in that county over the last few weeks than in previous years. Nothing of concern yet, but it does indicate that other areas not known for being a CLB hot spot should be scouted. Control is warranted if an average of 3 larvae per tiller are found before boot stage. After boot stage but prior to heading, one CLB adult or larvae per stem warrants control.

True Armyworm

True armyworm larvae. T. Baute, OMAFRA

True armyworm is also expected to be a higher risk this year, given very early and higher than normal trap catches this spring, both here and in neighbouring states.

Moths prefer to lay their eggs on grassy vegetation, including grassy weed species, cereals, mixed forages and grassy species of cover crops. Larvae hatch from the eggs and feed at night for approximately a month. Full grown true armyworm are 4 cm (1 1⁄2 in.) long and are dull-green to brown in colour. No matter what colour they are, they always have white-bordered stripes running laterally along the body and to be true armyworm larvae, they must have dark diagonal bands at the top of each abdominal chubby proleg.

There are two to three generations but the first generation is the most problematic here in Ontario. Most feeding activity is done in June to early July but can start as early as late May. In corn, larvae strip the leaf margins, but as they grow in size and numbers, can leave only the midribs left on the plants. As long as the growing point of the plant is not damaged, the corn plant will be able to recover from moderate feeding. In cereals and mixed forages, feeding begins on the leaf margins, but larvae may quickly move up the plant to feed on the kernels and awns or clip the wheat, timothy or other small grains heads completely off of the stem. Clipped heads can be found on the soil surface and can impact yield if taking place in many areas of the field.

The best time to scout for true armyworm is shortly after dusk when larvae are actively feeding. In corn, examine 20 plants in five areas in the field (100 plants total). In cereals and mixed forages, examine 10 areas of the field, assessing the number of larvae per 30 cm^2 (1 ft^2). Pay particular attention to the border area directly adjacent to other grassy host crops. During the day, if it is cloudy and overcast, you might be lucky enough to see larvae in the whorl, leaf axil, or on the head of the plant but on sunny days, they will be down on the ground among the crop debris or under soil clods. Brown frass may also be present on the plants and on the soil surface.

GARLIC MANAGEMENT

Source OMAFRA Factsheet 97-007 by J Allen

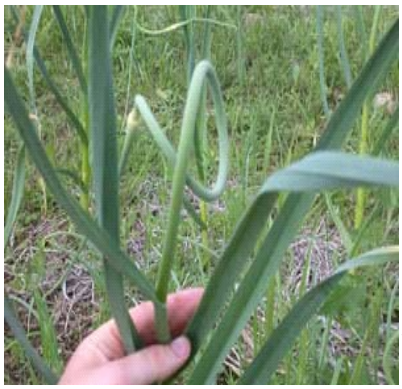
Irrigation

Garlic is sensitive to moisture stress throughout the growing season. Periods of dry soil conditions, especially during bulbing, will result in yield reductions.

For most soils, approximately 2.5 cm of water per week is required during the growing season. In sandy soils, however, 5.0 cm or more of water may be required during hot, dry weather conditions.

The preferred time of irrigation is morning to mid-afternoon, thus allowing sufficient time for the plant foliage to dry before nightfall. Stop irrigating when garlic becomes mature and ready to harvest. This will increase harvesting ease and reduce the potential deterioration and staining of exterior bulb sheath leaves.

Scape Removal



Hardneck varieties produce a scape. Research has shown that when the scape is left on the plant, bulb yields can be decreased by as much as 30%, because energy is diverted to bulbil production rather than bulb sizing. Remove scapes by pulling, breaking or cutting just after curling but before they straighten out .

GE

Other News

VEGETABLE PEST MANAGEMENT TIPS

With the arrival of summer, it's worthwhile for vegetable growers to focus attention on protecting their crops from pests in order to maximize the marketable crop. Whatever the crop, follow these steps to ensure you have a quality and profitable market garden.

1. Ensure good cultural practises which deter the development of pests. For example: using barriers or row covers to keep out pests and weeds. Also, avoid working in the crop until the dew has dried to prevent the spread of disease.

2. Properly identify the pest. There are numerous resources available to assist in identifying pests, both hard copy and on-line. If you are having difficulty identifying a pest, a picture is worth a thousand words. Take a few pictures and send them to IAPO for help.

3. Determine if the pest is of economic significance. Does the level of crop damage exceed the cost of control? For example a *minor infection* of bacterial spot in fresh market tomatoes may go completely unnoticed by the end consumer, whereas a late blight infection can completely destroy a tomato crop.

4. Take timely action. Regular scouting of your vegetables will help you to identify pests early before they become a problem and allow timely action to protect your crop.

Some Common Diseases

In tomato plants there is absolutely no tolerance for **late blight.** It develops when temperatures are between 15 to 21˚C so anytime between mid-June and the end of September. Moist weather warm days and cool nights are ideal for disease development.

Late Blight on Tomato Leaves picture source: OMAFRA Ontario Crop IPM

"Key diagnostic features on foliage are lesions that are not stopped at leaf veins. Symptomatic leaves can be sealed in a plastic bag with a damp paper towel overnight, and then checked for a gray to white moldy growth on the underside."
Source: OMAFRA Ontario Crop IPM

In squash plants, **powdery mildew** is usually the disease of greatest significance and normally develops in mid to late July as it prefers hot, dry weather when there are heavy dews. Powdery mildew is characterized by small white powder spots on the upper part of the leaves. The powder spotted leaves will turn yellow, then brown and shrivel. There is no cure for powdery mildew so crops must be treated preventatively prior to development and treatment is ongoing until the vines die down at crop maturity.

Picture Source: The Regents of the University of California, UC Davis

A nice bean crop can quickly be destroyed by **white mold**. The disease is most prevalent when cool, wet conditions occur during flowering or near harvest, so the disease can occur from early July to early September. White mold cannot be cured so preventative treatments must begin at flowering in advance of disease development. As well, cultivation and harvest should be done when the crop is dry as the disease can quickly spread from infected to healthy plant tissue. White mold is initiated by soil borne structures called sclerotia which can live in the soil for up to 8 years. White mold can develop squash, peppers and tomatoes.

Source: Department of Horticulture, Oregon State, White Mold of Snap Bean and other Vegetable Crops 01/28/2014

During the summer months, market gardeners should be on the on the lookout for any pests. OMAFRA Integrated Pest Management scouting calendars can be helpful guides.

www.omafra.gov.on.ca/IPM/english/tomatoes/scouting-calendar/index.html

Tomato Scouting Calendar

DISEASES	May		June		July		Aug		Sept	
Bacterial Canker	■	■	■	■	■	■	■	■	■	■
Bacterial Speck	■	■	■	■	■	■	■	■	■	■
Bacterial Spot	■	■	■	■	■	■	■	■	■	■
Viruses	■	■	■	■	■	■	■	■	■	■
Late Blight				■	■	■	■	■	■	■
Septoria Leaf Spot				■	■	■	■	■	■	■
Verticillium Wilt				■	■	■	■	■	■	■
Grey Mold						■	■	■		
Black Mold (Alternaria)						■	■	■	■	■
Buckeye Rot						■	■	■	■	■
Early Blight						■	■	■	■	■
White Mold						■	■	■	■	■
Anthracnose							■	■	■	■
INSECTS	**May**		**June**		**July**		**Aug**		**Sept**	
Black Cutworm	■	■	■							
Colorado Potato Beetle	■	■	■							
Cabbage Looper		■	■	■	■	■				
Tomato Hornworm					■	■	■	■		
Stink Bug					■	■	■	■	■	■
Tarnished Plant Bug					■	■	■	■	■	■
Aphids						■	■	■	■	
Variegated Cutworm						■	■	■	■	■
Two-spotted Spider Mite								■	■	
Sap Beetles								■	■	■

JH