



Native Agri Update

No. 395 June 2022

www.indianag.on.ca

FARM & FAMILY SAFETY

sources: www.casa.acsa.ca

The time has come for school-aged children to be off for the summer break! As the weather warms up, it is likely that our families, including children, will be spending more time outdoors. As lovely as that is, it can also increase risk of injury so it is important to assess your farm safety and make any necessary changes. A farm safety checklist is provided on page 6 for your convenience!

Staying informed about risks while operating a farm is the first step of ensuring farm safety. The Canadian Agricultural Safety Association (CASA) is a national not for profit organization that provides safety information as well as provides statistics on ag related injuries/fatalities. CASA reports, “of all the child and youth fatalities on the farm, 82% of the victims were not performing agriculture-related work, but died while someone else was engaged in agriculture.” This alarming statistic reinforces the need for awareness and action.

According to CASA, of the child and youth ag-related fatalities in Canada:

- 29% are due to being run over
- 15% are due to roll overs
- 12% are due to drowning

Children, from 1 to 4 years old, had the highest number and rate of fatalities due to run overs. Youth, from 10-14 years old, are more likely to be killed due to roll overs. For all drowning fatalities, the children were less than 10 years of age.

SAFETY STRATEGIES

Keep kids away from tractors: 4 out of 5 farm children regularly ride tractors

Keep young children out of the work areas: equipment hazards can include skid steers, ATVs, PTOs, working in/

around grain, animals, gates, tires and environmental hazards.

Ensure age appropriate work: many agricultural work-related injuries and deaths are associated with children doing work that does not match their developmental level.

Ensure environment is as safe as possible: eliminate/reduce hazards such as distractions (cellphones), slippery/uneven surfaces, repetitive motions. Provide personal protective equipment (PPEs)

Provide training for work/tasks & ensure proficiency: model safe behaviours, train youth to do job, practice until proficient and supervise.

HEALTHY SOILS DEMONSTRATION PROJECT

During the month of May, IAPO staff were busy at various farms throughout Ontario doing earthworm counts and soil sampling as part of the Healthy Soils Demo Project. The project includes five different on farm tests that



Pit dug to do earthworm count

will allow producers to assess the health of their soil by looking at the biological, microbial and physical components. The tests include a Cotton Test, Earthworm Count, Soil Infiltration Test, Active Carbon and Soil Aggregate Stability (Slake Test). The team will be back on farms in July and August, completing the remaining tests.

Once completed, the demo project will help show crop and horticulture producers ways to easily measure and track the health of their soils.

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Agribusiness

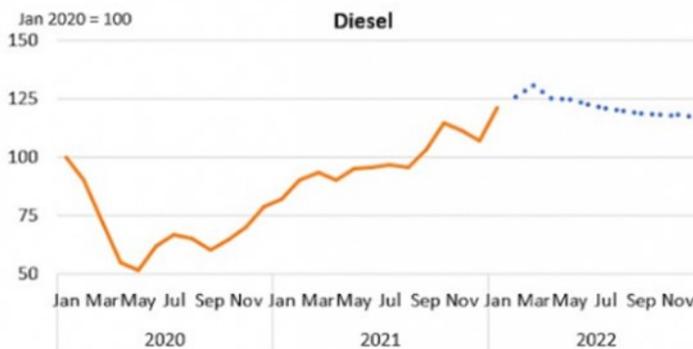
EFFECTS OF THE ECONOMY ON ONTARIO FARMING

If farming is not hard enough with the ever-changing climate conditions and day to day challenges of operating as farm, farmers now have the daily battle of facing the ever-changing economic conditions.

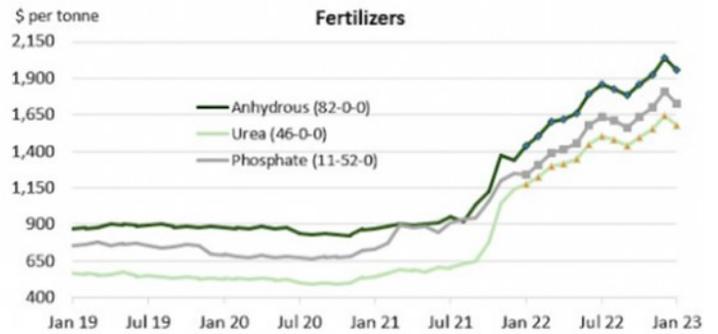
With the pandemic behind us we now see the economy veering into a state of what analysts called Stagflation. This is caused by governments bailing out the economy and preventing it from entering into a downturn or recession. Stagflation is where the country sees slowing economic growth mixed with high inflation, but is better than a recession. The last time Canada saw a stagflation economy was from 1973 to 1982 where prime rates rose to a high of 22.75% in August 1981. Rates this high are not foreseen, but they are definitely on the way up.

Current rates are on the rise with the prime rate in Canada rising to 3.70% at the start of June. This is the highest the prime rate has been since the fall of rates in the March 2008 when the US housing market crashed. This is not the end of the hike on rates as the Bank of Canada is looking to raise rates again in September and October of this year. This will be hard on variable interest rate loans and operating lines that are needed for equipment and farm operations.

With the war in Ukraine we are seeing shortages in many products creating huge demand and huge price increases on essential items that are needed on farms across the province. Fuel is reaching all time highs with shortages from the lack of Russian supply. This paired with the carbon tax is hitting every industry hard. There are carbon tax exemptions for dyed fuels like gasoline and diesel, but farmers must pay carbon tax on many other inputs, like those with large livestock barns or those who use fuels for grain drying.



Combined, Russian and Belarus previously provided 40% of the worlds exports of potash which is used as the base for many fertilizers, as well combined they produce 28% of the fertilizers made from nitrogen and phosphorus. These shortages have seen prices skyrocketing, and having farmers really debating their planting options for this year.



With many of these large increases, the affects are felt by many Ontarians at the grocery stores. As of March 2022, cost of groceries has risen 5-7% depending on the item being purchased. Unfortunately, this increase in prices does not see more profits for local farmers. These extra costs are to cover the increased cost of operations whether it be from fuel, fertilizer or other increased expenses.

Some farmers, in an effort to find solution to increase costs, have gotten creative with one dairy farmer in Ontario moving from feeding corn to his cows to now feeding potatoes. Cost of corn is currently \$400 per tonne, while potatoes cost less than \$50. He needs to feed 5 kg of potatoes to replace every kilogram of corn but even at that ratio he is still at half the cost. And as the farmer mentions, the cows love them, (<https://www.thestar.com/news/canada/2022/06/06/>). In short, farmers are finding creative solutions to manage increased operating costs.

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PLANNING FOR THE FUTURE OF FOOD

The Omushkego's Nation Rebuilding Initiative developed the Planning for the Future of Food: Potato Seed Kit and webinar series. The program was created to promote food sovereignty while revitalizing the potato belts in their region. Omushkego youth on and off reserve from Attawapiskat, Peawanuck, Fort Albany, Kashchewan, Moose Cree, Taykwa Tagamou, Missanabie Cree and Chapleau Cree were invited to attend. The program had 25 seed kits available but was well received and had 36 youth registered.



The participants were provided seed kits to grow from the comfort of their backyards. The webinar series included topics such as How to Grow Potatoes presented by IAPO; Virtual Community Tour by the Mennonite Central Committee; and Pests, Diseases, Harvest and Storage presented by IAPO. Once the participants have grown their potatoes, there will be a potato competition for biggest yield and most unique shape. IAPO staff are grateful to be a part of such an amazing program!

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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 Friday, June 3, 2022. Changes in this chart reflect the difference in prices from the week of April 4, 2022 to the week of May 30, 2022. Weekly reports provide prices on a per cwt basis for the week but do not include Friday sale results.

The fed cattle market saw an active week of trade with 319 fed steers and heifers sold through auction markets this week down 106 head from last week and 231 fewer than the same time last year.

Fed steers ranged from \$184.07-\$196.04 averaging \$191.17 up \$5.38 from last week on average and \$35.99 stronger than year ago prices.

Fed heifers traded from \$178.65-\$195.41 averaging \$188.59 up \$3.01 from the previous week and \$37.91 above year ago prices.

2,157 fed/cull cows sold through auction markets this week up 375 head from last week and 295 more than this time last year. Cows sold from \$86.02-\$119.71 averaging \$102.41 up \$2.71 from last week's weighted average price and \$21.91 stronger than last year at this time. Auction markets reported a strong demand with prices steady to last week, with quality considered. By mid-week trade on the

beef cows was reported as \$5.00-\$7.00 cwt higher with lots of demand.

Category	Price Range \$	Ave Price	Top Price	Change
Rail Steers	310-320			
Fed steers	176-194	187	214	+9.4
Fed heifers	181-195	189	225	+11.2
Cows	86-120	102	155	+7.4
Bulls	118-141	130	167	+4.8
Stocker steers				
700 – 799	205-238	225	260	+13
600 – 699	213-259	238	280	+12.8
500 – 599	211-269	243	299	+8.4
Stocker heifers				
700 – 799	157-201	181	225	+2.3
600 – 699	160-214	194	239	+7.8
500 – 599	160-222	197	246	+2.6

All prices are on a hundred pound basis (cwt)

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CROP MARKET

Adapted from Market Trends June July 2020 by Phillip Shaw GFO www.gfo.ca

Corn Crop weather coming up will surely affect corn in the field at this stage. Heat is moving into the American Midwest in mid-June, and this is likely to start off as very beneficial. However, if it lasts into July traders will surely become nervous.

Keep in mind that the ethanol processors are making money and continue to represent a strong demand for corn. With gasoline prices at all-time highs the incentive to blend will likely continue in 2022 and 23.

The December 2022 corn futures contract is currently priced 4.25 cents below the March contract which indicates a more neutral position for new crop corn. The old crop spread is extremely bullish. Seasonally, corn prices tend to peak in early June and bottom out in early October.

Soybeans The June 30th USDA acreage report will surely shed some light on how many soybeans did get planted this past spring. Pair it with weather issues in several areas of the United States and

this might mean more soybeans than we expected. That would be saying something because we were looking at record acreage figures. As it is, over the last few weeks soybeans have been the leader of the agricultural commodity complex. It is no secret that the hot vegetable oil market continues to boost prices.

The November 2022 soybean contract is currently priced 2 cents below the January 2023 contract which is considered a neutral position. However, the old crop spread of July/August is extremely bullish. Seasonally, soybeans tend to peak in early July and bottom in early October.

Wheat Wheat supplies are tight largely because of the Ukraine situation, but also because of declining wheat ratings around the world. In places like France, Germany and India the crop has deteriorated. India has also banned the export of wheat and sugar.

The trial balloons being floated out of Russia regarding a shipping corridor for Ukrainian grain is also impacting the daily price trade in wheat.

All of this is impacting the Ontario wheat marketplace with frenetic price changes over the last month. It is also likely to continue especially when Ontario has a short crop of wheat.

Coming Events

- July 11** Living Fences, Silvopasture, and Sheep Products– 2pm to 3:30pm
To register: <https://efao.ca>
- July 13 -15** Maple Syrup AGM and Summer Tour
To register: <https://www.omspa.ca/summer-tour>
- July 14** Forage Expo– 161 Hawkesville Road, St. Jacobs
Info: <https://onforagenetwork.ca/ontario-forage-council/forage-expo/>
- July 15** Local Food Infrastructure Fund– Deadline
Info: <https://agriculture.canada.ca/en/agricultural-programs-and-services/local-food-infrastructure-fund>
- July 25** Pasture-Raised Chickens– 2:30pm to 4pm
To register: <https://efao.ca>

Livestock Information

WIKWEMIKONG PASTURE WORKSHOP JUNE 2022

A pasture workshop was held in Wikwemikong on June 10 at the Annette Peltier farm. Annette and a local agricultural crew manage a Hereford herd at this location. The guest speaker was Christine O'Reilly the Forage and Grazing Specialist with OMAFRA. Her areas of focus include the benefits of forages and grazing within cropping systems, forage production and grazing systems for northern Ontario, and improving the productivity and profitability of forages.

Christine talked about fencing, pasture species, rotational grazing, and many other topics. Here is an abbreviated summary of her talk:

Electric Fencing

The key to an effective electric fencing system is establishing a good ground. There should be 1 ground rod per 3 joules of output. Joules is how long a fence can effectively be, so many miles per joule. You want enough joules to deliver effective power over a distance. The average requirement lies between 3 - 6 joules per mile. Ground rods should not be spaced too close together or they will act as one rod. Consider a minimum of 10 foot spacing. An electric fencing system is basically a circuit, and when livestock touch the charged fence they close the circuit and receive a shock.



lowing them to graze under the hot wire, keeping it high enough for that purpose. Otherwise, it takes labour to constantly trim weeds and brush from under the fence line- cost considerations. Use a tester on the fence system. 5kv is effective with 3kv bare minimum at a good distance along the fence. Other considerations of an electric fencing system are training animals to it, single versus multiple strands, size of charger, solar versus plug in, etc. A single strand will become a psychological not physical barrier to livestock of properly trained to the fencing system.

Grazing Management for Parasites:

Cattle can pick up eggs while grazing, as worm eggs are located in the bottom of the stand, with 90% of them residing in the bottom 4 inches of growth. Effective rotational grazing will reduce worm loads. Manure from the cattle will fertilize the pastures. Harrowing pastures while a common practice can result in spreading parasite eggs over a wider area. Two paddocks are good for this but the more the better.

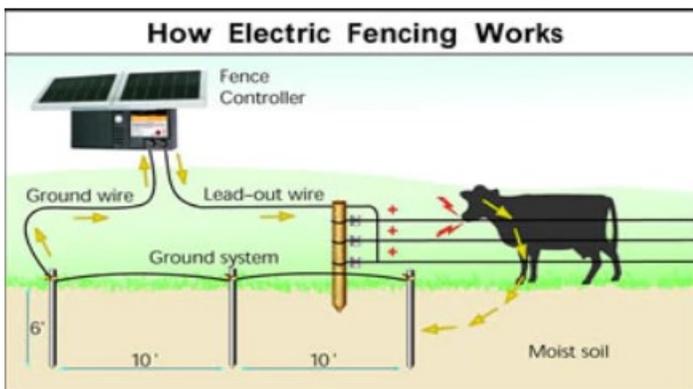
Principles of Rotational Grazing:

The premise is to allow the pasture grasses and legumes to recover after being grazed. As the cattle clip off the pasture you want the plants to recover. Without enough effective photosynthetic surface, energy in the stems and roots become depleted. It is important to balance the grazing of forage with recovering sugar levels by the plant, with the recommendation to have 3-4 fully developed leaves before grazing occurs again. The plants will recover faster at this stage. You don't want the plants however, to go to seed.

The number of cattle on pasture can vary widely, from 1 cow per acre to 1 cow to 10 acres and up. This is greatly dependent on local climate, species, fertility and rotation management. To put pressure on pastures, for instance to control weeds, increasing the stocking density will result in less selective grazing. With brand new land for pasture, consider planting only fence posts. The grazing pressure will influence the plant inventory and species. Watch for apple bloat in the fall from wind fall apples and small trees with low lying fruit. Thorn bushes can be removed via land clearing techniques. Refer to a research article done by NOFIA.

Here are some resources that might be of interest:

- There is an article about [grounding](#) and another about [choosing an energizer](#) on FieldCropNews.com.
- Pesticide information for managing weeds, insects, and plant diseases is now available on the [Ontario Crop Protection Hub](#).
- Guide to land clearing- Research from NOFIA. [NOFIA's guide](#)



Source: Gallagher Fence gallagherfence.net/blog/electric-fencing

You can also have a line directly connected to the ground, so as an animal touches both live and ground they will receive a shock. This is effective for livestock that jump fences.

Avoid loads on the fence system from weeds, brush and other debris that can short out or greatly reduce the voltage over distance. It is effective to allow cattle to control weeds by al-

Crop Information

INTEGRATED INSECT, DISEASE AND WEED CONTROL FOR YOUR GARDEN

sources: Birgit Martin, Certified Crop Advisor

What is integrated pest management or IPM? IPM combines cultural, natural, mechanical and pest control measures to their fullest to reduce the need for chemical control.

Cultural measures include crop rotation, crop diversity, crop selection, soil drainage and growth management. Natural measures are using the effect of predator or beneficial insects. Mechanical measures are cultivating, hoeing and sanitation practices. IPM requires some knowledge of your plants and their pests with an understanding of pest preferences and life cycles.

For cultural measures, crop rotation breaks disease and insect cycles. Examples include club root in brassicas (cabbage family), and blights in the nightshade family (tomatoes, potatoes). Ideally you would plant a crop only once every 4 years in same spot in garden. Consider dividing your garden into 4 quadrants and combine plants of similar types into each quadrant as shown below. Here's a sample

<p>Plot A- brassicas (cabbage family) Broccoli, brussels sprouts, cabbage, chinese cabbage, cauliflower, collards, kale, kohlrabi * These plants are heavy feeders, needing deep, fertile, nearly neutral soil (pH 6.8-7.0)</p>	<p>Plot D- warm weather crops Corn, cucumbers, eggplant, melons, peppers, pumpkin, squash, tomatoes, zucchini * These plants require fertile soil especially at surface; not too alkaline (pH 6.5) Try to plant potatoes on one end of their plot (Plot B) and tomatoes, peppers and eggplant at the opposite end of their plot to prevent overlapping nightshade crops.</p>
<p>Plot B- root crops Carrots, parsnips, potatoes, rutabagas, beets, winter radishes (chinese type) * These plants like fertile soil; not too alkaline (pH 6.5), high in phosphorus and potassium but not excessive nitrogen, no fresh manure (causes hairy roots) or lime (causes potato scab).</p>	<p>Plot C - legumes, cool-weather & salad crops Broad beans, green beans, lima beans, peas, celery, green onions, storage onions, leeks, lettuce/salad greens, spinach, summer beets, summer radishes, summer turnips, swiss chard * These plants like moderately fertile soil; onions, leeks and leafy crops need extra nitrogen; all but lettuce take moderately acidic soil (pH 6.0-6.5)</p>

rotation chart. Rotate these quadrants clockwise.

Cultural control also includes crop diversity. Growing a wide variety of plants in a small location can make it more difficult for insects to find their host crop. Interplant instead of planting large blocks. Consider crop selection as well. There are varieties that have some resistance to certain diseases and insects. Choose varieties hardy to your climatic zone. Growing plants 'out of zone' predisposes them to disease, insects and secondary problems.

Cultural control also includes conditions at planting time like the weather. Temperature, humidity and rainfall all can affect the egg-laying stage of many pests. Soil moisture can be critical to minimizing potential for seed and seedling rot. Don't plant large seeded veggies when the soil is cool and

wet rot can overcome seedlings. Wait until the soil warms and is moist, not saturated.

Depth and spacing is also important when planting. You want proper depth so the seedlings emerge quickly and reduce risk of damping off, yet deep enough for proper root development. Even, wide-spacing eliminates crowding which otherwise leads to spindly succulent growth, poor air flow and drying. Crowding increases the risk of botrytis, white mould, root rots, damping-off and foliar diseases like mildew.

Since many diseases are spread by spores, avoid overhead watering. Spores require moisture on leaves and stems to germinate and infect plants. Also consider watering in the morning so plants are dry by nightfall. Finally, do not work in garden when plants are wet – you may spread the disease as you brush against plants.

Plant trap crops. As an example, eggplant attracts the Colorado Potato Beetle – easy to pick; large leaves and vigorous growth withstand their attack. Use row covers. Use cylinders around plant stems, like tin cans, cardboard cups (bottoms removed) pressed into soil to prevent cutworms from girdling, and cutting off cabbages and tomatoes. Bait insects by using shallow dishes of beer or juice for slugs and snails; placing wooden boards in evening for slugs, snails, earwigs, then remove in morning. Place damp burlap in evening for earwigs and remove in the morning.

Mechanical pest control includes proper tillage. The benefits of tillage include: Incorporating diseased material deep into soil where it is broken down by micro-organisms; harmful pathogens survive poorly on rotted material or deep in soil; exposes soil insects, slugs, and invertebrates to adverse weather and to predators. Hoeing removes weed pressure and cultivating aerates the soil.

Mechanical control also includes good sanitation. Many insects & diseases overwinter in plant debris and weeds. Remove and compost plant residues and weeds. Remove all *infected* plants and weeds and dispose of them outside of the garden. You can bury this material 60 cm deep or put in your garbage. Do not compost *infected* plants as the temperature may not be high enough to kill pests. Weeds can host insects and diseases and compete for nutrients and moisture. Control weeds all season long. Some insects overwinter under wood and stones so remove these hiding places.

Consider natural pest control. Predator insects feed on smaller/weaker insects. Lady beetles and larvae eat aphids, thrips, mites, other small insects and insect eggs. Parasitoids live in/on bodies of hosts and compromise them. Numerous bacteria, fungi and viruses help control pests. An example would be Bt bacteria for corn borer control. Some parasitoids and predators can be purchased to introduce to your garden.

In summary, IPM can work for your garden. Keep your gardens clean, keep plants healthy through plant/seed selection, fertility, drainage, water, spacing, and rotate your crops to disrupt pest cycles. Understand your particular pests' life cycles and biology

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Other News



IAPO Farm Safety Checklist

First Nations Farm & Business Financing

Safe Play Area

	YES	NO
Is there a securely fenced safe play area for children visible from the house?	<input type="checkbox"/>	<input type="checkbox"/>
Is the safe play area separated from farm machinery, animals, bodies of water and other hazards?	<input type="checkbox"/>	<input type="checkbox"/>
Is there adequate shade and interesting things for children to do?	<input type="checkbox"/>	<input type="checkbox"/>
Are there 'out of bounds' rules in place so that children know where they are not allowed to play?	<input type="checkbox"/>	<input type="checkbox"/>

Vehicles, Machinery & Bikes

	YES	NO
Are children appropriately restrained when travelling in vehicles on the farm?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a rule that children never ride in the back of quad runners/trailers or as passengers on tractors?	<input type="checkbox"/>	<input type="checkbox"/>
Are children taught to keep away from tractors and machinery?	<input type="checkbox"/>	<input type="checkbox"/>
Are keys removed from tractors and machinery ?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a rule that children under 16 years old cannot ride quad bikes?	<input type="checkbox"/>	<input type="checkbox"/>
Are children and adults over the age of 16 years old properly trained and use appropriate safety equipment?	<input type="checkbox"/>	<input type="checkbox"/>

Animals

	YES	NO
Are animal pens and stockyards inaccessible to children?	<input type="checkbox"/>	<input type="checkbox"/>
Are children always supervised when near animals?	<input type="checkbox"/>	<input type="checkbox"/>

Water

	YES	NO
Are children actively supervised by an adult at all times when in and around bodies of water such as dams, channels?	<input type="checkbox"/>	<input type="checkbox"/>
Are bodies of water such as wells, tanks, post holes, dams and ponds securely covered or fenced to prevent unsupervised child access?	<input type="checkbox"/>	<input type="checkbox"/>

Other Hazards

	YES	NO
Are all poisons, firearms and other hazards locked up and out of children's reach?	<input type="checkbox"/>	<input type="checkbox"/>
Are silos, grain storage bins and trucks inaccessible to children?	<input type="checkbox"/>	<input type="checkbox"/>
Is the workshop always locked after use?	<input type="checkbox"/>	<input type="checkbox"/>
Are children given suitable chores for their age and development?	<input type="checkbox"/>	<input type="checkbox"/>
Have you completed first aid and CPR training and have a first aid kit?	<input type="checkbox"/>	<input type="checkbox"/>

Adapted from Agriculture Victoria, www.kidsafevic.com.au