



Native Agri Update

No. 388 April 2021

www.indianag.on.ca

It's great to be involved in farming and food production. Every spring brings warming weather, early plantings in the field and gardens, newborn livestock, and optimism for the year ahead. In the midst of the pandemic and its challenges, many are fortunate to be out in the countryside. Hopefully, an early spring is a sign of a good year including good health and safety for family and friends.

IAPO ANNUAL GENERAL MEETING

June 2021						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

IAPO's Annual General Meeting is planned for Monday June 7, 2021. This year's AGM will once again be via

video conferencing.

The AGM will start at 1:00 p.m. and call in-details will be available soon. For more information email info@indian-ag.on.ca.

PROGRAM & COMMUNICATIONS COORDINATOR

To help ensure IAPO's continued success, IAPO is seeking qualified applicants for the position of Program & Communication Coordinator.

The Program and Communications Coordinator supports the delivery and promotion of IAPO's various programs. Responsibilities include promotion and marketing of programs, as well as program management including performance and financial reporting. This entails a variety of clerical, financial and specialized administrative duties.

This is a six month contract working remotely from a home office, initially. In the event IAPO's offices reopen to staff, the Program and Communications Coordinator will be required to work in either the Stirling or Lambeth office on a limited basis.

Qualifications

Education and Experience

- College or University in a relevant area of study ie ag, accounting, marketing
- Program management and reporting
- Knowledge of accounting and bookkeeping practices and principles.
- Promotion & Marketing – including posting and content management: website, Facebook
- Demonstrated communication and interpersonal skills
- Effective organizational and planning skills

Specialized Skills

- Knowledgeable of First Nations culture
- Experience working First Nations and their members
- Farming/agriculture

Interested applicants are asked to submit a resume with cover letter to Jamie Hall, jamie@indianag.on.ca.

LOAN REVIEW COMMITTEE MEMBER

IAPO is seeking applications from interested First Nations candidates possessing a financial background to serve on the Loan Review Committee (LRC).

The LRC reviews and renders decisions on all client loan applications and submissions. Key responsibilities include: review and evaluation of financing applications, loan approval and recommendations to the Board of Directors as well as semi-annual portfolio reviews.

Participation on the Loan Review Committee is part-time commitment with compensation. The ideal candidate will have an agricultural and business background, including financing.

Interested applicants are asked to send a cover letter and resume to: Jamie Hall, jamie@indianag.on.ca.

JH

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Agribusiness

MAPLE SYRUP SEASON WRAP UP

source : <https://onmaplesyrup.ca/> by Jenny Liu, OMAFRA Maple Syrup Specialist



As quickly as the 2021 maple syrup season started, it has quickly passed. With the focus now on cleaning, marketing products and looking forward to next year. Producers noted that this year was the toughest year on record, with the exception of 2012. Several remarked on the unusual dryness of their sugar bushes.

In a very odd end to the season, most of the province ended around the exact same time. This is strange as there is usually almost a month difference in season end from southern producers to northern operations. This year's warmer weather also produced sap sugar content much lower than average throughout the season, leading to some producers running sap multiple times through reverse osmosis, and evaporators working overtime.

Buddy syrup did show up, but for the majority of producers but it seemed to be continuous warm weather stopping sap flow that ended many production seasons, rather than buddy flavour.

In terms of marketing and pricing strategies, most Ontario producers will not be making changes to their historical pricing. However, some will be raising prices slightly, especially those whose prices have remained the same for years. Some smaller producers have already sold their entire stock. Few will have enough to sell to packers this year in favour of keeping enough on hand for their regular customers. There will definitely not be an overflow of syrup in the market. Those looking to purchase their syrup should reach out to their local producers.

When looking at producers from all across Ontario production was way below average. Producers ended the season anywhere from 30% percent of production up, with very few getting full production numbers. The best area in Ontario based on producers was Grey-Bruce Region which some producers did get close to expected amounts.

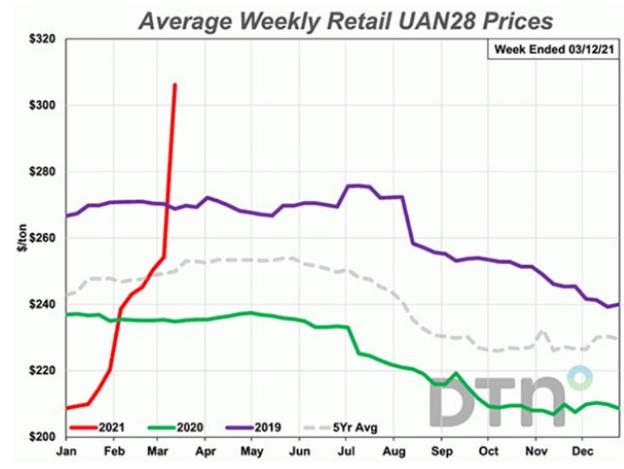
FERTILIZER PRICES ON THE RISE

<https://farmersforum.com/western-ontario-fertilizer-prices-spike-by-as-much-as-50-per-cent-2/> <https://www.dtnpf.com/agriculture/web/ag/crops/article/2021/03/17/uan28-leads-fertilizer-prices-higher>

As the pandemic continues to stay, and lockdown measures are reinforced we are all seeing the effects of COVID and the increased inflation on some everyday products we purchase. The question arising is how are these issues seen in every industry going to affect farmers and getting their inputs in. Crop prices may look good this year, but the rising cost of inputs such as fertilizer may give some farmers sticker shock. Fertilizer prices have risen by as much as 50 per cent, with a

strong surge in recent weeks according to a recent article in Farmers Forum.

The price spikes have been seen across the board on all goods traveling to Canada. Travel restrictions and border shutdowns as well as production delays in companies around the world are to blame for these price jumps. Border shutdowns have made it more and more difficult for companies to get products in and out of Canada, while over the last year many companies and producers of fertilizer have seen many lengthy shutdown meaning there is just less fertilizer available for purchase.



The graph above shows the market price of UAN 28(US) which is a liquid fertilizer containing three forms of nitrogen: urea, ammonium-N and nitrate-N, over the last three years. We are seeing record prices, with no signs of turning around in 2021.

As reported in Farmers Forum Marc 12, 2012, Jim Barclay, crop retail manager for the Hensall District Co-operative said fertilizer prices tend to be driven by crop prices, energy markets and global supply and demand. He also added, "Farmers should not be spooked at these crazy prices though and not be cutting back on their fertilizing plans with grain prices so strong. Just because prices are going higher don't skimp out because you have to put it all in relation to commodity prices. We have (rarely) seen prices like this, so don't let fertilizer prices skew your decisions," said Barclay

Also as reported, Michael Sharpe of Sharpe Farm Supplies in Guelph, said the recent fertilizer price increase may look steep compared to 2020 but he said last year was an "anomaly" and current prices are not far out of line with 2019.

For those who haven't ordered their fertilizer, it might be a good idea to get a hold of suppliers as early orders are already up about 25% on the year. With rising prices, it's always good to keep an eye on margins, aiming to maximize profit per acre.

CL

Market Information

BEEF MARKET WATCH

Prices are courtesy of the Beef Farmers of Ontario Weekly Market Information Report for the week ending Thursday April 1, 2021.

Changes in this chart reflect the difference in prices from the week of February 1, 2021, to the week of March 29, 2021. Weekly reports provide prices on a per cwt basis for the week but do not include Friday sale results.

Lighter receipts of fed steers and heifers sold through auction markets this week at 322 head, down 214 from last week and 432 fewer than this time last year.

Fed steers ranged from \$136.82-\$146.15 averaging \$141.96 up \$1.66 from last week and \$3.50 stronger than year ago prices.

Fed heifers sold from \$127.23- \$143.98 averaging \$137.66 down \$1.78 from last week and \$2.61 higher than the same week last year.

The Ontario rail grade market was fully steady this week with steers selling at \$240.00 dressed and heifers from \$239.00-\$240.00 dressed. Lighter volumes of fed/cull cows sold through auction markets this week at 1,911 head, down 534 from last week and 785 fewer than this time last year.

Cows sold from \$57.66-\$84.89 averaging \$70.17 down \$0.05 from last week, and \$8.72 easier than year-ago prices

Category	Price Range \$	Ave Price	Top Price	Change
Rail Steers	240			
Fed steers	140-147	143	159	+3
Fed heifers	133-142	140	149	+3.5
Cows	57-84	70	121	+16
Bulls	81-108	93	181	+8
Stocker steers				
700 – 799	164-199	182	218	-4
600 – 699	167-211	191	231	-5
500 – 599	165-225	199	248	-10.5
Stocker heifers				
700 – 799	137-174	156	195	-5.5
600 – 699	147-186	166	199	-6
500 – 599	150-208	183	241	N/C

All prices are on a hundred pound basis (cwt)

BB

CROP MARKET

Adapted from Market Trends USDA Report March 31, 2012 by Phillip Shaw GFO www.gfo.ca

Corn Is 91.1 million acres of corn (as estimated in the March 31 USDA report) enough, based on current demand? It's unlikely, which adds to the uncertainty in price direction this year. Of course, we all know this will be settled later this year with a big adjustment coming June 30th with spring weather patterns having a big say in it.

Keep in mind, USDA did what it did and both old and new crop corn were limit up on report day. Keep in mind the old crop and new crop have somewhat different market dynamics. There is much production risk ahead.

The May 2020 corn futures is currently 16 cents above the July contract, which is very bullish. Seasonally, corn prices tend to peak in early June and bottom in October

Soybeans Soybeans have quite the story. On the one hand, old crop stocks are

on fumes and the specter of that on the new crop side continues to be a theory. For instance, new crop soybeans were up 57 cents on the week of the March 31st USDA report. It's no secret, 87.6 million acres of soybeans as estimated in the USDA report is not enough headed into this season.

In 2021, soybeans will need good weather and rains in August to keep that new crop prices at bay.

The May soybean futures contract is currently 9 cents above July, which is considered bullish. Seasonally, soybeans tend to peak in early July and bottom in October.

Wheat Wheat hasn't joined the party lately vs corn and soybeans, as futures

prices topped out in late February and have been in slow decline since then. Export taxes in Russia and lots of wheat feeding might help. However, good rains in the American wheat belt have boosted prospects. As per usual, wheat is grown everywhere in all months of the year, so any problems are often covered up quickly. Weather reports and geopolitical events will surely shape the price picture into later spring and summer.

In Ontario, wheat looks good in southwestern Ontario. With 1.12 million acres of wheat in Ontario representing a higher number than usual. \$7 plus wheat off the combine is still to be had in Ontario. The Canadian dollar value continues to have a big effect on Ontario wheat cash prices.

Coming Events

April 22

Greenhouse, Vertical Farming & High Tunnels

7 p.m. contact: workshops@indianag.on.ca or 1 800 363 0329

April 28

Intro to Layers - Starting Chicks & Housing

7 p.m. contact: workshops@indianag.on.ca or 1 800 363 0329

Livestock Information

PASTURING GUIDELINES

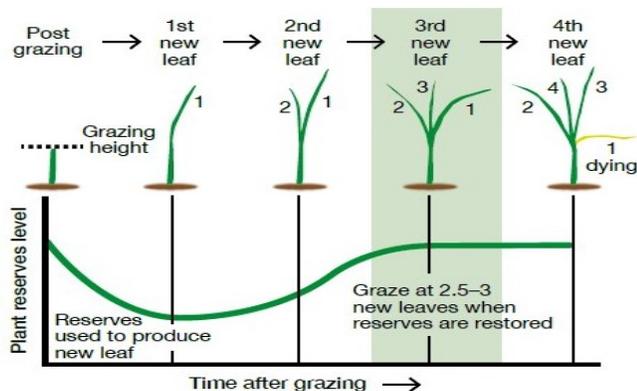
Mother Nature does a great job of taking care of the soil and providing our cattle with feed. After a long winter, that green grass is very welcome. However, there are a few things to consider when managing your pastures.

Being prepared for the spring turn out actually starts in the fall. For sufficient spring growth and adequate plant root reserves farmers need to pull cattle off the pastures in the fall when there is still growth showing. You want to prevent over-grazing in the fall causing depletion of root reserves, affecting growth the following spring.

You also don't want to ruin the soil by putting livestock out too early. Come spring, putting cattle out when the ground is still wet can create pugging — hoof holes in the sod, affecting the growth of the forage and esthetics of pasture. Grass should reach the three to four-leaf stage before cattle start to graze.

“At the one to two-leaf stage the plant is still utilizing root reserves to support growth,” says Jack Kyle, grazing management consultant. “If the plant is bitten off at one to two-leaf stage the root reserves will be depleted and the entire plant will weaken.”

At six to eight inches in height there is sufficient leaf area for proper plant growth and recovery from grazing.



ROTATIONAL GRAZING

While waiting to let cattle until the pasture is ready, waiting too long, to put cattle on pasture can create some negative effects on the livestock production, says Christine O'Reilly, forage and grazing specialist with OMAFRA. “Once plants enter their reproductive stages, feed quality and palatability decline quickly.”

As the forage plants mature, the lignin content increases as the nutritional value of the forage is decreasing. That affects milk production so calf growth is reduced.

Rotational grazing can be considered if land and resources allow rotational grazing can be used. This allows individual

fields to be managed, grazed when ready and moved on when needed ensuring higher forage quality, quantity and animal performance. “A paddock system gives the opportunity to rest paddocks and allow for sufficient regrowth before the paddocks are grazed again,” says Kyle.

The rest period before a pasture is grazed again depends on temperature and moisture conditions. “Rest periods range from approximately 25 days in the spring/early summer to 45 or more days in the mid to late summer,” says Kyle. Spring and early summer bring times of rapid plant growth, making rotation move quicker. Soil fertility is usually the most limiting factor in forage species production. It is important to take soil tests and use an appropriate fertilizer program, says O'Reilly.

With all this in mind, pasture season will soon be here and many producers will have cattle out on grass. After what seems a long winter, that grass will look heaven-sent. Let's not forget the importance of mineral feeding while on pasture. Calf growth, cow reproductive status and general health are all influenced by the intake of adequate amounts of salt and mineral!

FEEDING MINERAL ON PASTURE



Pasture mineral feeding studies show interesting results. Heavier weaning weights and improved conception rates are well documented from pasture trials where the correct quantity and analysis of minerals were supplied. Please note that minerals are sold by proportions of calcium to phosphorus to magnesium. Example: 20:10:6 tag guarantee means 20% calcium, 10% phosphorus and 6% magnesium. Consider the following when feeding minerals on pasture.

- Use sheltered mineral feeders and supply quantities that will last no longer than 5 days.
- Choose the mineral suitable for your pasture type. Grass-based? Use a higher calcium mineral-like 3:1 or 2:1. Mixed legume/grass? Use a balanced mineral, typically 2:1 or 1:1. Heavy legume? Consider a 1:2 mineral.
- If additional phosphorus is required (such as near breeding time), consider a flavouring agent mixed in the mineral.
- Evaluate the magnesium levels required. Normally a 4% magnesium content mineral is adequate but in the case of fast-growing grass pasture, higher levels may be required to avoid grass tetany.
- The salt content of the mineral offered usually drives mineral intake. Cattle have a natural physiological requirement for salt, so don't offer salt separately. Most cattle salt and mineral needs are met with an intake of about 2-3 ounces of a salt/mineral mix per day. If conditions warrant additional salt, consider offering it in block form.
- For more information on pasture feeding and mineral, contact your mineral supplier or IAPO.

BB

Crop Information

GROWING POTATOES

sources: OMAFRA Pub 363, <https://extension.umaine.edu/publications/2412e/>
<https://www2.gnb.ca/content/gnb/en/departments/10/agriculture/content/crops/potatoes.htm>

The potato planting season extends from late April until early June, depending on location and climatic conditions. April planting is limited by frost potential and wet soils in many areas.

Potatoes should be planted as early as conditions permit but soil temperature should be at least 7°C. Planting in cold or wet soils will delay emergence, increase the chance of seed piece decay and result in poor plant stands.

Seeding Rate, Spacing and Depth

No specific depth of planting will give equally good results under all conditions and recommended planting depths vary. OMAFRA recommends planting near ground level, covered with 2-3" of soil by the planter while others recommend planting 3-5" depths. It is very important for good germination to place seed in warm, moist soil. Shallow planting helps early emergence but does make hilling more important. Shallower plantings may also be prone to drought, particularly in dry springs or non irrigated production making for uneven stands. Planting too deep may delay emergence, increase chances of disease and seed decay, reduce vigour and result in poor stand. As with many crops, consider shallower planting depths on heavy, cold soils, deeper on lighter sandy soils. For hand planting, starting with a 3-4" trench and backfilling works well, followed by hilling after the crop is up.

Row spacing is usually 36 inches based on equipment and can vary with seed spaced anywhere from 8-16" apart within the row with wider spacings for production of larger tubers required for the fresh market and processing. The variety, soil fertility, soil moisture & availability of irrigation, as well as length of the season will also influence the choice of spacing. According to OMAFRA, 12" space between seed pieces is recommended for varieties with heavy tuber set, smooth tubers, resistance to hollow heart and low numbers of off-shaped tubers. Closer spacing of 8-10" is recommended for varieties with lower tuber set to reduce the number of oversized tubers.

The size of a potato seed piece affects early plant vigor a great deal. Larger seed pieces usually emerge faster than smaller ones. Cut seed tubers into blocky pieces about 1.75 ounces in size. Discard poorly cut seed pieces, such as slivers or slabs. Remove seed pieces ripped or torn by dull knives. Each seed piece

should have at least one eye. Seed pieces smaller than 1.5 ounces should not be used. Higher total yields are generally associated with larger seed pieces, but at some point, the seed piece size will not result in increased yield. A good rule is to keep the number of cut surfaces per tuber to a minimum.

Row Spacing	Plant Spacing Inches	1.75 oz	2 oz.	2.25 oz.
		Seed Cwt/acre		
36 "	7	27.2	31.1	35
	8	23.8	27.3	30.6
	9	21.2	24.2	27.6
	10	19.1	21.8	24.5
	11	17.3	19.8	21.8
	12	15.9	18.2	20.4

To estimate seed needs—take spacing, for example on 36" rows, 10" apart in the row, with an average cut size of 1.75 ounces = 19.1 Cwt (hundred weight) or 1910 lbs. of seed potatoes are required to plant one acre.

Seed Handling and Management

Warm seed to at least 5°C-10°C prior to handling as cold potatoes bruise easily. Bruising acts as an entry site for pathogens leading to seed piece decay. Mishandling may physiologically age seed, leading to more stems per plant, smaller tubers and more stress susceptibility.

Cut seed not being planted immediately should be given special attention to ensure healing by:

- forced-air circulation through the shallow pile
- temperatures of 10°C-15°C
- high relative humidity of 90%-95% (prevent free water from forming on tuber surfaces)

Maintain these conditions for 3-4 days. After this, temperature may be lowered, but humidity must be maintained and fans run intermittently.

Never allow cut seeds to stand in the hot sun or in drying wind. This causes minute cracks in the skin that allow bacteria and fungi to establish. Do not plant seed tubers that have been washed.

Seed Piece Treatments

Serious problems with seed piece decay are often related to adverse weather during the planting season. Fungal seed piece decay is usually caused by several species of the fungus *Fusarium*. These pathogens need wounds to enter the seed piece. There may be little benefit from seed piece treatments if soil conditions are optimal during planting and crop emergence. However, if unfavourable environmental conditions develop soon after planting, treated seed usually produces a better stand. Treatments may also help in managing other diseases, including Rhizoctonia canker, late blight and blackleg. Mancozeb also protects healthy seed pieces against late blight. The late blight fungus can produce spores on cut surfaces of infected tubers in 24 hours. These spores will infect healthy seed pieces. Seed treatments that do not contain mancozeb, do not protect healthy seeds against late blight infection. Mancozeb does not cure existing late blight infections; it only prevents new infections.

Seed Piece Culls

source: U of Maine



Other News

SHESHEGWANING VERTICAL FARM PROJECT

source : Brian Bell interview with April Folz, March 17, 2021. TVO Ontario Hubs article, Why this First Nation bought a shipping container during COVID-19, Charnel Anderson - Published on Oct 23, 2020

Sheshegwaning, located on the west side of Manitoulin Island, is home to about 130 residents. The community has an active interest in food security and has undertaken some food-related projects. The most recent is a vertical farming system. The Covid-19 pandemic drove community interest, as their community is 30 miles from the nearest grocery store in Gore Bay. Community leaders came up with a locally grown solution, by purchasing a container farm in June 2020 from the Ottawa-based company Growcer. (<https://www.thegrowcer.ca/>)



Growing Area of the Unit

April Folz is in charge of the vertical farming project in Sheshegwaning. April describes the setup as a repurposed shipping container divided into six growing sections, with a separate room housing climate controls and a monitoring system. The growing sections are outfitted with shelving, LED lighting, and a hydroponic growing system in which plants grow with their roots in water rather than soil, in a closed-loop system.

April stated that the company's mandate is to work with remote communities and provide in-field technical support and training. The growing unit site preparation and electrical work were done by community members. The company provides remote monitoring of the system, keeping close tabs on temperature and lighting.

Harvest is expected to include bok choy, lettuce, kale, spinach and herbs. The potential capability is up to 400+ head of lettuce a week. This is achieved by utilizing a rotational planting schedule, with continuous year-round production. April described the interior mechanics, how the nutrients are mixed with water automatically, with fans controlling temperature and humidity and used for cooling during the summer months. April said this type of production system has the benefit of no soil born pathogens or disease. The first harvest has been delayed but, once the system is fully operational, April plans to start a weekly subscription box that members can sign up for to get fresh produce delivered right to their door. The community has expansion plans in mind with the acquisition of a second unit. **BB**

SAFE STORAGE OF VETERINARY PRODUCTS

Adapted from an article by Glenn Selk, Oklahoma State University

Recommendations are relevant for all farm livestock. A good working relationship with your veterinarian is the first line of defence for healthy animals.

Calving time often requires treating for various reasons

including injections for vitamin E and selenium, sick calf treatments, vaccinations for calves and cows and other cow and calf concerns that come up. Cold wet calving conditions put stress on the newborn and mother. Proper storage of products is required even in cold weather. Low winter temperatures can have an adverse effect on vaccines stored in refrigerators located in unheated barns. The pickup truck is not ideal for long-term storage.

Products can cost \$5 a head and more and need to be properly stored to be effective and provide value on your investment.

Many products should be stored under refrigeration at 35 to 45°F (2-7°C) unless the product instructions indicate otherwise. Read the insert or box label carefully. If vaccines are not stored within the recommended temperature range, their effectiveness will be reduced. Killed vaccines are especially susceptible to freezing temperatures. Modified live viruses (MLV) are more stable but can be inactivated. After mixing, MLV's effective life will be reduced to 1-2 hours and need to be maintained at 35° to 45° F (2-7°C). Only mix the doses that you will use right away and use a cooler to maintain temperature while working cattle. While in storage it doesn't hurt to use a thermometer to maintain the correct refrigerator setting.

As always, your veterinarian is your first contact.

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CLEANING COLLECTION EQUIPMENT

source : <https://onmaplesyrup.ca/> by Jenny Liu, OMAFRA Maple Syrup Specialist

Timely cleaning will save maple syrup producers much headache. The task of cleaning everything up is a big job, but it will be easier the sooner it is done after harvest.

Tubing Step 1: Flush the sap tubing with potable water as soon as possible after the season. If left to sit unripped, spring temperatures begin to warm, the collection of organisms inside the tubing can quickly fill the inner tube walls with mould.

Step 2: Sanitizing is an important step in preventing mould growth, and can also extend the life of your tubing. Sanitize with bleach, oxisan, or 70% isopropyl alcohol (IPA). The most common is IPA. Note if using bleach, as it contains salt it is very attractive to squirrels.

Step 3: Rinse tubing after sanitizing with potable water and/or with the first run of sap the following season.

Spiles Ideally, spiles should be removed from maple trees before new leaves emerge and spring growth begins. The fastest healing of tap holes will occur during spring and early summer when the trees are adding a new layer of wood. To remove the spile, carefully give the spile a gentle twist before pulling it out of the tap hole. Twisting first before pulling will help prevent separating the bark and cambium layer.

Bucket Systems Wash buckets thoroughly with hot water, by hand or using a machine. If you use a sanitizing agent, make sure you rinse out each bucket thoroughly.

With another season in the books it is time to look forward to 2022. If you're interested in Maple Syrup production feel free to reach out to IAPO for information & support.

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