Native Agri Update

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www.indianag.on.ca

Holiday Hours: The Stirling and Lambeth offices will close for the holidays at 1:00 pm Monday, December 24 and reopen at 8:30 Tuesday, January 2, 2019.

Inside

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Agribusiness

PREPARING FOR THE NEWYEAR

Reference: Native Agri-Update No. 363

We find ourselves at the end of another year! For most families there are a myriad of projects yet to complete, seasonal celebrations, gifts, parties, snow to remove and cookies to bake. It is a time that can tax anyone's time management strategy. Now is the ideal time to have a list and check it twice.

The two main statements most useful to farmers are an accrual income statement and a balance sheet. The accrual income statement measures the profitability of the business for the year. While the balance sheet measures the operator's level of ownership or equity in the business. The majority of farm operators use a calendar year and the financial statements should be prepared as of December 31.

Do not get discouraged by year end financials. Spend a bit of time ensuring all expenses are paid before December 31 and make a list of those expenses that will be carried over into the New Year. Deposit all income from sales and avoid keeping uncashed cheques in your wallet. For cash croppers, paying land rent is a task to complete before year end. This is your chance to feel like Santa. By completing all sales and paying bills you are well on your way to completing the farm's financial year end.

Once the bank statement arrives for December 31, the final bookkeeping items can be entered.

Accrual Adjustments

To arrive at an accrual income statement, adjustments to income and expenses are made based on differences in farm values between January 1 and December 31, for grain, livestock and other production inventories, accounts receivable, accounts payable and prepaid expenses.

The exact dollar amounts for these items are also used in preparing your balance sheet. Grain and livestock inventories are generally the most significant items to consider when making these adjustments. Therefore, it is very important to estimate the quantity and value of these items as accurately as possible. Grain should be valued based on the local market as of the end of the year. Determining the proper value for livestock can be more difficult. Again, it is important to get an accurate estimate of the number and weight of the animals. The current cash price can be used for estimating values for market livestock. A conservative "base value" should be used for breeding livestock. A conservative base value would reflect the value for slaughter purposes rather than for breeding stock purposes. However, judgment should be used in how these values reflect on individual circumstances. This base value can utilize local cash prices but should not fluctuate significantly from year to year. This prevents net farm income and net worth changes simply due to valuation changes in breeding livestock, an asset that normally wouldn't be liquidated for an on-going business.

Accrual adjustments are easily made once you have made a list of year end inventories on your farm. Your list should be detailed and include such items as seed, herbicide, hay in the barn, fuel in the tank in addition to the usual stored crops, hives in the yard, unsold maple syrup and so on. Once a list is completed then values are attached to each item.

Accounts receivable might include custom work, or product deliveries which have been performed but payment was not received prior to yearend. You may be expecting a cheque from an insurance claim that has not been received.

Accounts payable are expenses that have been incurred for the business year but have not been paid for as of Dec. 31. This could include a variety of items. Examples of accounts payable include outstanding drying and storage charges, accrued interest on operating and term loans, rent, and repairs

Prepaid expenses as of December 31 would include inputs and supplies that have been purchased and paid for in the present year, but are for the following year's crop. The most common items are seed, chemicals, fertilizer, fuel and feed. Fertilizer and nitrogen that have been applied in the fall for next year's crop are considered prepaid expenses.

Balance Sheet Considerations

Since machinery is usually a significant asset for most producers, it would be prudent to have a detailed machinery listing with individual valuations rather than just one total value. Machinery dealers can assist in estimating values for individual machinery. Once a list has been compiled it only needs to be updated at the end of the year. This list would make up majority of your Current Assets on your balance sheet.

Additional information needed for the balance sheet will be much easier after finishing your accrual adjustments. What has been calculated in the work above will round out the assets portion of the balance sheet.

This brings us to liabilities which is also taken from the work completed above but it is essential to look at all you long term debt and how you are managing these outstanding loan balances in the next year as well as the future.

Summary

Here is a short list of year-ends of requirements from the discussion above:

Inventories: list of all farm inventories - quantities of supplies, fuel, feed, crops, livestock, honey, maples syrup etc. as of December 31 with values

Receivables, Payables and Prepaid Expenses: list sales made for which money has not been received, bills still lingering out there to be paid and all prepaid expenses such as subscriptions, seed and other crop inputs.

Assets: Complete updated list of machinery, equipment, land and buildings with values, list of additions or sales.

Liabilities: list loan balances and long-term debt.

CL

Market Information

BEEF MARKET WATCH

Prices are courtesy of the Beef Farmers of Ontario Weekly Market Information Report for the week ending December 7, 2018

Changes here reflect the difference in prices from the week of October 11, 2018 to the week of December 7, 2018. Weekly reports provide prices on a per cwt basis for the week but do not include Friday sale results.

Rail grades are holding since October. Fed steers and heifers are steady to a slight decline. Stocker steer and heifer prices have fallen. Rail grade steers are steady on a limited interest market. Fed steers and heifers are off $4 to steady respectively again with limited demand.

Cull cows and bulls are down $10 and $6 respectively. Stocker steers are off $13 to $24 with heavier weights experiencing the larger discount. Stocker heifers are down $13 to $39.

Cull cows and bulls are showing the normal downward fall trend, but impacted greatly by a heavy run of cull cows in the U.S. with cow slaughter up 7% over 2017. Canadian exports of cull cows to the states is down 18% compared to the same time last year showing less demand for our cull cows. This is a result of U.S. herd expansion since 2014. Similarly there are near record numbers of calves coming to market in the U.S. also due to expansion. It appears we are near the peak of production for the current beef cycle for North America.

Strong consumer demand and greater exports are offsetting heavier beef supplies in the U.S.

Category	Price Range $	Ave Price	Top Price	Change last month
Rail Steers	244			steady
Fed steers	108-139	131	146	-4
Fed heifers	115-138	128	146	steady
Cows	36-54	44	105	-10
Bulls	61-89	78	149	-6
Stocker steers				
700 – 799	153-200	180	211	-24
600 – 699	162-213	191	227	-17
500 – 599	178-230	216	238	-13
Stocker heifers				
700 – 799	110-169	141	189	-39
600 – 699	130-177	156	205	-34
500 – 599	137-194	168	218	-18

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

CROP MARKET

Excerpts from Monthly Market Trends Nov-Dec 2018 by Phillip Shaw GFO www.gfo.ca

In Ontario it has been one of the most challenging harvests. Wet weather since September packed much of the soybean harvest into a period between October 12 and October 23 and there have been very few good days on either side of that. Winter wheat planted during that period is hardly showing in many areas of the province.

High DON levels have been an issue across the province and the GFO has been instrumental in helping farmers deal with the inherent problems.

Yields have been high for both corn and soybeans. Basis levels for soybeans have dropped since last month, corn remains about the same. If it weren't for the high DON levels in corn and the tough weather, this harvest would be one for the ages.

Corn Seasonally, corn prices tend to trend up in the late fall toward spring. The nearby futures contract is currently priced in the 31st percentile of the past five-year price distribution range.

Soybeans Soybeans continue to be in the news partly because a trade solution is looked at as key to higher prices and political machinations that are always swirling. US Exports have been cut, mainly because of the Chinese market. In fact, at the present time soybean exports are 25% below the past five years average.

Seasonally, soybean prices tend to trade higher from November into next summer.

Wheat In the Southwest plains of the United States where much of the wheat is grown, planting is way behind because of inclement weather. However, the wheat market has not moved very much for whatever reason. In Ontario it is likely that 950,000 acres of wheat were planted however, heavy rain and cold has inundated Ontario since and many wheat acres have not emerged.

Coming Events

January 3 & 4 **Southwest Ag Conference,** Ridgetown

January 10 **Curve Lake Maple Syrup Meeting** 5:30 pm, Cultural Centre

January 17 **Wiky Farmers Meeting** 5:30 pm, Band Council Chambers

January 18 **First Nation Maple Syrup Seminar**, 10 am,Whitefish River First Nation Community Centre, Birch Island.
Contact Keith Nawegahbo705-285-4335

January 23 **Alderville Small Business Financing Workshop** 5:30 pm, Alderville Community Centre

Livestock Information

LOOKING AT HAY ANALYSIS

Last newsletter we looked at early results from IAPO's hay analysis project and how the results impact a cowherds' winter ration. It was quite apparent that low quality protein hay is not sufficient for cow body maintenance and supporting pregnancy. With poor quality hay a supplement is needed to meet a cow's needs. Supplement can be costly and require time and labour to supply. This can be overcome with hay of sufficient quality to meet the cowherd needs. How can a beef farmer grow and harvest hay of a quality to meet these needs with just salt and mineral as supplement?

Certainly weather has an impact on quality whether it is a drought burning up hay fields or moisture slowing cutting, drying and reducing quality. Equipment breakdowns and long waits for parts are a challenge. Further hay analysis results show some quality trends. Cutting early increases nutrient content. Mostly grass hay cut by the first week in July was 8-9% protein. Numbers are on a dry matter basis. Similar hay cut a month or more later was as low 5%. First cut mixed hay containing 50% or more legume ranged from 9 to 11.5% protein. Legume hay tends to be higher in calcium. Second cut hay made up of mostly legumes ranged from 14 to 17%. High quality second cut is best used with mature cows in poor body condition, 1st and 2nd calf heifers or growing out herd replacements.

The secret to producing quality hay for wintering the cowherd based on hay analysis starts with cutting hay early. Consider June 15th as a target date. Earlier is better particularly with grass hay. Reseeding with a hay mixture of at least 50% legume like alfalfa improves quality. Early cutting of mixed hay encourages a second cut.

Recommendations for hay quality apply to feeding sheep and goats as well.

Research shows that cows in a good body condition with a score of 3 out of 5 increase pregnancy rates, rebreed sooner after calving, have heavier calf weaning weights and less dystocia and stillbirths.

ENCOURAGE DAYTIME CALVING

Close observation at calving time can reduce losses and limit after calving health concerns particularly with a heifer's first calving. It also means middle of the night checks and limited sleep. Daytime checks are best with more challenges observing in the nighttime hours.

Nighttime calving can be reduced with nighttime feeding. Rumen contractions or pressure have an impact on calving. Keeping the rumen active during the night will encourage calving during the day.

In a Canadian study of cows fed at 11:00 a.m. and 9:00 p.m. almost 80% calved during daylight hours. In a U.S. study cows were fed once daily between 4 and 6 p.m. Over 85% of the calves were born between 6:a.m. and 6:00 p.m.

In another U.S. study cows had full access to round bales. A supplement was fed at dusk with 70% calving during daylight hours.

Nighttime feeding might be most practical for first calf heifers fed separately from the main herd.

NEW REGULATIONS FOR ANTIMICROBIAL USE

Health Canada has initiated new regulations for the use of certain antimicrobials in livestock care. These changes affect all livestock producers. Now considered medically important antimicrobials (MIA) the list includes penicillin G, tylosin, virginiamycin, chlortetracycline and oxytetracycline.

As of Dec. 1, 2018 these products can only be purchased with a veterinarian's prescription either directly from a veterinarian or a commercial feed mill. Where a product is normally included with a feed formulation, a prescription is required before the feed mix can be processed. After December 1, 2018, feed manufacturers including local feed mill mixes can only sell feed/supplements containing medically important antimicrobials under the authority of a veterinarian.

Not all feed additives are considered medically important antimicrobials. Ionophores including monensin sodium and lasalocid, MGA for heifer cycling and some antibiotics are not included. Check with your veterinarian and feed mill in advance for situations where you normally feed livestock diets with feed additives.

With the new changes, the veterinarian must have a "veterinary-client relationship" with a farm business before prescribing medically important antibiotics. This means the veterinarian must have first-hand knowledge of your operation.

The intent of these changes is to promote the careful use of MIA and to strengthen veterinary supervision regarding their use in an effort to combat the development and spread of antimicrobial resistance.

BRED COW & HEIFER PRICES

This fall has seen a number of bred cow and heifer sales.

At Keady on Nov. 30 quality exotic cross bred heifers ranged from $2200 to $2700. British cross heifers ranged from $1800 to $2300. Average quality were about $400 less.

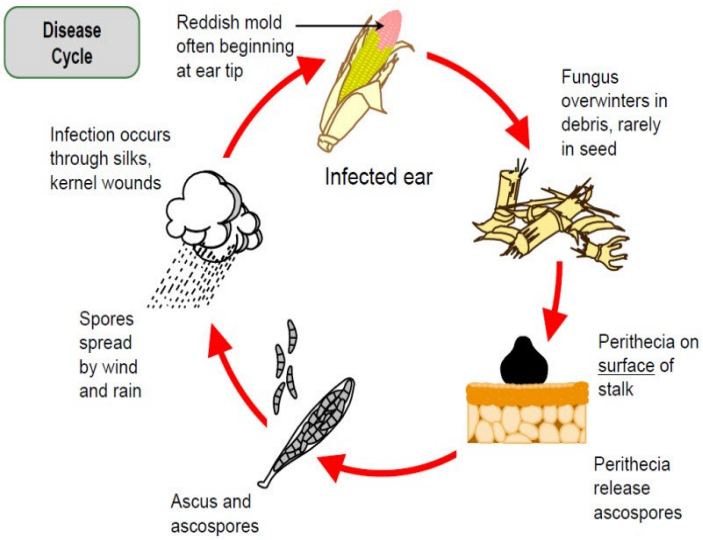
At Brussels on Nov. 21 saw quality exotic cows at $1400 to $1800 while British brought $900 to $1300. A Dec.7 sale at Keady had quality exotic cows at $1700 to $2175 and British at $1400 to $1700.

ML

Crop Information

UNDERSTANDING DON

During the 2018 corn harvest, DON levels have been particularly challenging and a serious problem for many producers. DON (deoxynivalenol) is one of two mycotoxins produced by the fungus gibberella zeae (fusarium graminearum). Gibberella ear rots, commonly called 'pink mold', develop when there is cool wet weather during silking or during extended periods of rain during the fall. Other factors affecting the development of Gibberella ear rot include; hybrid susceptibility, previous crop and insect damage.



Gibberella Ear Rot source: Dupont/Pioneer

DON, also known as vomitoxin, is important because it can result in feed refusal or vomiting in livestock, especially in pigs. As such, Health Canada sets Advisory levels for DON in grain. For the corn grower at the elevator a DON level above 8ppm will likely result in rejection of the load while lower levels between 4.1ppm to 8.0ppm can result in price discounts ranging from $15 and $25 per tonne.

During harvest it is really important to manage DON levels by blowing the light kernels and fines out the back of the combine, as this really will help to improve grain quality and reduce DON levels. If there was a significant problem in a field don't rely on a visual inspection to determine DON levels, rather send a corn sample to a laboratory for testing. The Grain Farmers of Ontario (GFO) website offers a complete list of laboratories that will test for mycotoxins. For example two laboratories on the list are A&L Canada in London and SGS Canada Inc. in Guelph, with costs running in the vicinity of $25 per toxin per sample. For those with crop insurance make sure to contact Agricorp to both report a problem and to understand what support you can expect to receive in terms of production claims or salvage benefits. Utilize any special assistance offered through the Canadian Agricultural Partnership program, which may include financial assistance with the costs of DON testing.

Going forward, pick corn hybrids that are rated as being less sensitive to DON. Consider your crop rotation as corn, wheat and potatoes can all be infected by fusarium graminearum and the pathogen can over winter in crop residues as well as the soil

Control insects such as Western Bean Cutworm and consider if a fungicide application at silking time is warranted based on weather conditions.

Gibberella ear rot – Red/pink mould which often begins on ear tip. Photo: OMAFRA
References https://gfo.ca/DON , Ontario Farmer: Dec 4, 2018 ,Nov 20, 2018

ROBOTICS ON THE FARM

Growing vegetables can be very time consuming especially when it comes to the task of keeping vegetable fields clean and free of weeds. Maybe, the chore of hand weeding will soon be a thing of the past.

Meet R2-Weed2 or Hal-bot, the autonomous vehicle being developed by Nexus Robotics, a Canadian start-up company located in Dartmouth, Nova Scotia. In May, Nexus Robotics won the Weed-and-Feed competition at the international agBOT Challenge, a competition between agricultural robots held in Rockville, Indiana.

R2-Weed2 uses Artificial Intelligence (AI) to identify weeds from the crop and has the ability to both, cut the weed or spray herbicide. The benefits are immediately apparent. The use of multiple modes of action to remove weeds results in reduced herbicide usage and mechanical cutting will help to combat those troublesome herbicide resistant weeds.

The machine is trained by feeding it with lots of examples of both the crop and the weeds. Data images fed into the machine are labelled right down to the pixel level and include the probabilities that it is a certain kind of plant. That data then steers the robots arm. The machine is even taught to leave a plant behind if it is unsure if it is the weed or the crop. Current tests show R2-Weed2 to be 99% accurate.

In 2019 Nexus Robotics will be testing R2-Weed2 on carrot and onion fields in the Holland Marsh under the guidance of an experienced team. R2-Weed2 is certainly shaping up to be an innovation worth keeping our eyes on.

Sources: CBC News, May 29, 2018., FRUIT & VEGETABLE November/ December 2018. JH

Other News

WINTER COLD SAFETY

Source: adapted from Agricultural Safety Topics- Cold Weather Exposure, Workplace Safety and Prevention Services

With winter here, working outside on the farm can be a challenge. Make sure you take steps to ensure you and those working on the farm stay warm and safe. When getting prepared, keep in mind these points:

- Wear several layers of loose clothing as layers provide better insulation. As well, if you get too warm, you can always take a layer off.
- Tight clothing can reduce blood circulation and warm blood needs to be circulated to keep you warm,
- When choosing clothing remember that some tight fitting clothes may restrict your movement and create a hazard. As well, be careful as too loose of clothing could be hazardous around equipment and machinery.
- Make sure you wear a hat and protect your face, ears, hands and feet from the cold as these are common areas for cold weather injuries.

Cold Weather Injuries

Frost Nip is the freezing of the top layers of skin tissue and normally reversible. It mostly affect cheeks, earlobes, fingers and toes.

Frost Nip symptoms include:

- Numbness
- Top layer of skin feeling hard and rubbery, but deeper tissue is soft.
- Skin becomes white and waxy

Treatment:

- Rewarm the area gently, generally by blowing warm air or placing the area against a warm body part.
- The area should not be rubbed as it can damage the effected tissue.

Frost Bite is the actual freezing of the tissue and/or body part. Ice crystals for inside the skin that can destroy the tissues, and you could lose skin or part of a finger, toe, or foot, for example. It affects the ears. nose, fingers and toes most often. Superficial frostbite includes all layers of skin, and deep frostbite can include freezing of muscle and/or bone.

Frost Bite symptoms include:

- Skin is white and has a “wooden” feel all the way through.
- Numbness, possible anesthesia(can’t feel pain).

Treatment:

- Move the person to a warm area. Put the affected body part in warm water (105-110 F, 40.5-43 C) until the skin becomes flush. No hotter or additional damage will result.
- After warming, the injured are should be wrapped in sterile gauze, keeping affected fingers and toes separated.
- If you cannot guarantee the affected area will stay warm, do not rewarm the tissue until it can be kept warm.
- If normal sensations haven't returned within thirty minutes, seek medical attention.

FIRST NATIONS FOOD & FARMING PHOTO CONTEST WINNERS

A big thanks goes out to everyone who took the time to submit photos for this year’s photo contest. Here’s this year’s winning entry in the 10-14yr age category for farming submitted by Hope E..

This years winning entry in the 10-14yr age category for gardening submitted by Sophia T. is below.

JH