

OMAF *Virtual Beef*

Volume 2, Issue 2

April, 2003

Feel free to use the articles in this publication in your publications. We would like to ensure that as many producers as possible have the opportunity to benefit from the information provided. Details are listed on the inside of the cover regarding reproduction.

If there are any upcoming events or timely topics you would like to see covered give us an email; suggestions are more than welcome. Watch for the next issue in July!

Inside This Issue

Nitrogen Fertilization of Pastures	3
Internet Sites.....	3
Cull Cow Feeding Makes Dollars and Sense.....	4
Ontario Benchmark Beef Study Has Hit the Ground Running	5
Management Tips.....	5
Budgets.....	6
Managing Yearling Bulls	8
Recommended Wait Times for Livestock in Transit	9
OMAF Beef Team.....	9
Feedlot Rations in the Year 2010	10
Upcoming Events.....	10

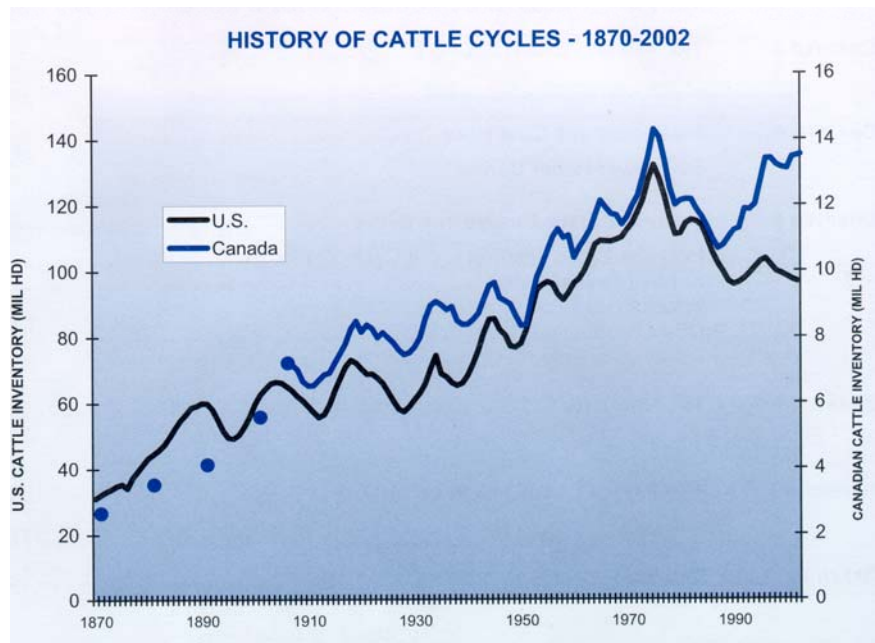
Stock Market Tips for Beef Herds – Part II

Can we use the Cattle Cycle as a management tool?

In Part I we took a look at the basic structure of the Cattle Cycle. This is the periodic rise and fall of cattle numbers, responding primarily to fluctuations in cattle prices. When the supply of cattle is low, prices are bid up, and production expands. After the supply expands significantly, prices drop, and producers respond by reducing production, selling off cows. Sounds pretty simple ... supply and demand come together in a free market economy. Each cycle lasts for about 10 years due to the biological time lag associated with decisions to increase or decrease production.

It has been proposed that beef producers who understand the Cattle Cycle can profit by expanding when breeding stock prices are low, producing maximum numbers of market cattle when prices are highest, and then selling off breeding stock before their value drops. With this strategy, they use their breeding herd as a medium term investment, cashing out when the brood stock is highly valued, then buying back into the market when brood stock value is low. And if this is coupled with a low cost of production, then things start looking pretty good!

In *The Cattle Cycle*, analyst Charley Gracey points out that there have been 10 cycles in Canada, going back to 1870 (see Fig. 1). Based on the historical trends, it certainly seems logical to assume that they will continue and provide a basis for a “stock market” strategy.



Ref: *The Cattle Cycle*, *Canfax* and Charley Gracey *Continued on page 2.*

The graph also shows the history of the U.S. Cattle Cycle. Over time, the U.S. and Canadian cycles were closely tied together. This makes sense, since the border has been effectively open to trade in cattle. If significant price differentials built up, cattle simply flowed towards the higher prices, and the market evened up. So the cattle marketing game has essentially been played on a North American board. And since there are about 10 times the number of cattle south of the border, the Canadian market has traditionally been the tail of the American eagle. When the eagle soars, so does its tail. When the eagle dives, it takes its tail along as well.

But look closely at the graph again ... something strange happened, starting in the mid 1990s. The U.S. herd peaked and started to contract, but in Canada, national herd expansion continued!!

What's Up With This?

It's likely that several factors are involved. For one thing, we are becoming somewhat less dependent on the U.S. as an export market (but it's still our prime beef trading buddy). The single most important factor is probably the devaluing of the Canadian dollar (\$Cdn) relative to the U.S. dollar (\$US). This had the effect of making Canadian cattle and beef "look" pretty cheap to folks buying with US currency. The net impact was to keep Canadian market prices high, encouraging continued expansion in Canada. (Or, viewed from the other side of the border, we became a lower cost source of cattle and beef.)

The Canadian Cattle Cycle became disconnected from the U.S. cycle. The old thumb rules regarding the impact of U.S. price and herd dynamics on Canada have been fundamentally modified. While

North American market price is still determined by supply and demand, price signals go through a very significant, currency-based translation, from \$US to \$Cdn. This has created a large buffer between the American and Canadian Cattle Cycles.

This has made the job of interpreting and predicting the Canadian Cattle Cycle much more challenging. Now we need to predict the future valuation of our currency relative to that of the U.S. In addition, other factors may make exporting to the U.S. more difficult, whether it is a disease outbreak, or government policy (Country of Origin Labeling, softwood lumber ...).

Now, it seems, political events on this continent and others are capable of having much greater impacts on our cattle markets than the simple supply, demand and price model of the past. What if U.S. Homeland Security identified a potential health threat from imported beef? A closed or tightened border would have a much more dramatic impact on the Canadian industry than any cycle in history!

Predicting the future value of beef cows has always been as much art as science. But with the great variety of "external" factors which now are important, it is even more imprecise.

Advice?

Do the best job you can of forecasting the cattle cycle. Follow the principles set down by industry veterans:

1. Organize a low cost production system. (If you can't be a low cost producer, don't get into the beef cow business.)
2. Brood cows: buy cheap and sell high.
 - (a) Don't buy when others are optimistic. (They know

less than you and are by definition paying too much.)

- (b) Buy cows when everyone is getting out of a dismal industry, and they feel you are doing them a favour by taking them off of their hands. (This is the only time investing in beef cows makes sense.)

3. Produce low cost, value added calves from cheap cows, into the next price peak. Then sell out one year ahead of when you think you should.

Tom Hamilton, 705-647-2087,
tom.hamilton@omaf.gov.on.ca



Editor:

Joanne Handley
Ministry of Agriculture and Food
1 Stone Road West
Guelph, Ontario
N1G 4Y2
Phone: 519-826-3323
Fax: 519-826-3254
Email:
joanne.handley@omaf.gov.on.ca

OMAF Virtual Beef is produced quarterly by the OMAF Beef Team as a means to communicate research findings and results, recommended production practices and solutions to industry issues to beef cattle producers, agribusiness suppliers and industry stakeholders.

Reproduction in whole or in part is encouraged providing the source is identified. Material may not be changed without the permission of the author.

OMAF Virtual Beef is published in electronic format and is available online at <http://www.gov.on.ca/OMAF/english/newsletters.html> or by contacting 1-877-424-1300.

Nitrogen Fertilization of Pastures

As the pasture season begins there is always the concern about having sufficient forage to meet the livestock needs. Nitrogen fertilizer is one way to improve the grass growth and increase the quantity of pasture forage available. There are a couple of things that need to be in place to achieve this growth and make effective use of it.


Do you have the fencing and livestock numbers that will allow you to manage this growth? To take advantage of improved grass growth you need to have sufficient livestock numbers to utilize the grass. You also require enough paddocks/fields to be able to rotate the livestock to fresh pasture and to allow the pastured forage sufficient time to re-grow. It is the management and utilization of this re-growth that will provide the benefit of applying nitrogen to your pasture. If you can rotate livestock from pasture to pasture then you have the main requirement for taking the best advantage of the grass growth and optimizing its use.

The next factor will be fertility. Grass responds very well to nitrogen fertilization, provided there is a reasonable level of phosphorous and potassium available in the soil. Soil testing is required to determine existing levels of nutrients. If the phosphorous and potassium levels are low then there will be limited benefit to applying additional nitrogen. Nitrogen will give a response about 2 weeks after application and this increased growth will carry on for about 5-6 weeks. If the pasture has greater than 35% legume content then there should be adequate nitrogen produced by the legumes to meet the needs of the grasses. When estimating the amount of legume keep in mind that there needs to be an even distribution of the legumes across the pastures. Legume plants are often more visible than the grass plants in the stand and as producers we often overestimate the amount of legume present. Take a careful look and even harvest a small square and separate the grasses and the legumes to see just how much of

each are actually present.

To get an economic response to nitrogen a minimum of 40 lbs. per acre of actual nitrogen should be applied. Because of the high solubility of nitrogen, a maximum application rate of 75 lbs. per acre is suggested. If you have a very productive grass pasture that you want to put more nitrogen on then increase the number of applications, not the amount per application. Applications should be 4-6 weeks apart.

Timing of application will depend on a number of factors but mid-June will generally give the optimum results. By mid-June the lush spring growth will have slowed and the nitrogen will give the grass another boost. Once we are into July the risk of not getting enough rainfall to take the nitrogen into the root zone is a concern. The other consideration is that grass growth may slow in the heat of the summer especially if there is a shortage of moisture.

Jack Kyle, 705-324-5855,
jack.kyle@omaf.gov.on.ca 

Internet Sites

We hope to provide a few internet sites each issue that may be of interest and assistance to producers.

Ontario Ministry of Agriculture and Food (OMAF): www.gov.on.ca/omaf/

Here you will find a wealth of information on Ontario's dynamic agri-food industry and the services and programs OMAF provides.

Alberta Agriculture's Web site - Ropin' the Web:

<http://www1.agric.gov.ab.ca/app21/rtw/index.jsp>

Alberta Agriculture's web site provides a range of information on production agriculture in Alberta.

Genes for Cowboys: <http://skyway.usask.ca/~schmutz/Cowboys.html>

This is a web based book written by Sheila Schmutz, Department of Animal and Poultry Science, University of Saskatchewan, to help producers and agriculture students understand genetics relevant to beef cattle. In it she explains how genes affect traits such as horned and polled, behaviour, coat colour, meat quality and fertility.

Cull Cow Feeding Makes Dollars and Sense

When is the best time to sell cull cows? Most beef producers will ship the cows right after pregnancy checking, once they know who is open. However, seasonal price fluctuations and the compensatory gain potential of dry cows, may offer alternative marketing strategies.

Figure 1: Average U.S. Cull Cow Prices Source: USDA/AMS, 1991-2001.

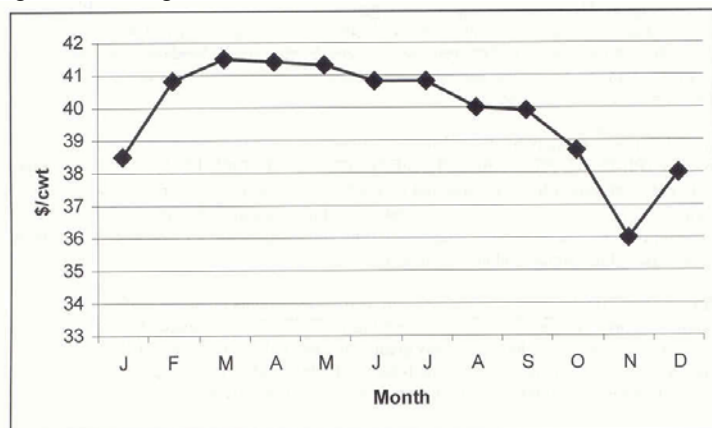
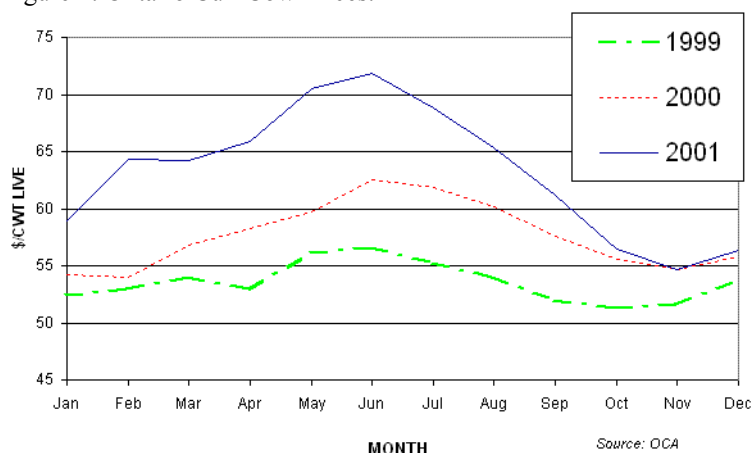


Figure 2: Ontario Cull Cow Prices.



Seasonal Price Variations

Both the U.S. and Ontario graphs show that the lowest price generally occurs during the October, November, December period. The U.S. data suggests that historically, by holding those cows from a fall weaning period and marketing the cows in early winter, farmers would increase their price per pound (lb.) by 14%. In 2001, Ontario producers would have received an 18% increase in price per lb. An example would be a 1500 lb. cow sold in November for 55 cents per lb., which would have grossed \$825.00. The same cow sold in February would have traded for 65 cents per lb. grossing \$975.00. The question remains would that extra \$150 have covered the cost of keeping the cow the two months. Obviously it depends on your feed and yardage costs.

Body Weight Gain Potential of Cows

The other interesting thing about keeping those cows for an additional 60 days is that research has shown that these cows may have tremendous compensatory gain potential. Most cows have been under the nutritional stress of providing milk for their calf, and tend to

get thin by weaning time. At this stage, the cows digestive system is primed to operate at peak efficiency ... if we provide some nutrients, the cow will absorb and utilize them in a very efficient manner. This is gain that compensates for the previous deficit of nutrients. At the New Liskeard Agricultural Research Station, dry cows in average condition gained over 3.5 lbs. per day for the first 50 days of fall grazing good quality pasture. A trial at New Mexico State University showed dry dairy cows gained 3.1 lbs. per day over 30 days on a TMR of 60% high energy concentrate and 40% quality alfalfa hay.

Part of this body weight gain is in the form of fat. Relative to thin cows, cows with some condition have more value per lb. for processors, so a premium may be available for these cows.

By keeping the cow above from November to February, and feeding her some higher energy feed for 60 days, her 1500 lbs. would change to 1710 lbs. The cull value would then have increased to \$1111. This represents an increase of \$286. A cull cow eating 3% of her body weight would consume 45 lbs. per day. A diet consisting of 50% energy source (corn) and 50% forage could cost approximately \$2 per day. Over 60 days the feed cost increase would be \$120, leaving \$166 to cover yardage costs.

The peak price time to sell those Ontario cows would traditionally be the May, June, July period. Depending on hay costs, there could be a benefit to holding these cows through and selling them then. However, the compensatory gain efficiency period is roughly between 50 to 60 days. After this, the rate of gain slows dramatically.

Some cows are ready to sell immediately at weaning. However, there may be a benefit with average to thin cows to feeding them for 50 to 60 days. This will provide more lbs. of cow to sell, at potentially higher prices.

Barry Potter, 705-647-2086,
barry.potter@omaf.gov.on.ca

Ontario Benchmark Beef Study Has Hit the Ground Running

Are you a high or low cost producer? Financial and production benchmarks will be published this fall to help determine where you fit within the industry. Ontario Ministry of Agriculture and Food (OMAF) has launched the Ontario Benchmark Beef study with participants receiving their record books last month. The goal of the program is to record, analyze and summarize financial and production information from a minimum of 50 commercial beef herds in the province.

Seventy participants have received a desk record to capture 2002 information and begin recording 2003 data. The goal is to have 85 participants in the program to maintain a minimum of 50 participants over the 3 years of

the study. Participants have over 50 cows calving per year.

“We have been extremely pleased with the acceptance of the Ontario Benchmark Beef study” said Joanne Handley, Beef Cattle Program Lead with OMAF. “To have so many progressive producers willing to share their records to attain accurate financial and production benchmarks for the Ontario cow-calf industry, further demonstrates the need for cost of production analysis.”

The information collected will provide the participants an in-depth analysis and comparison with the rest of the Benchmark group and also provide the Ontario cow-calf industry with benchmarks for financial and production parameters. The main result will be

an accurate cost of production figure for the Ontario cow-calf industry. The Ontario Beef Industry Council, an organization with representatives from all sectors of the beef industry including the Ontario Cattlemen’s Association, identified the need for accurate cost of production data as a high priority. Do you know your cost of production?

For more information or to participate in the Ontario Benchmark Beef Study please contact Joanne Handley, OMAF, 519-826-3323 (joanne.handley@omaf.gov.on.ca) or Nancy Noecker, OMAF, 613-258-8476 (nancy.noecker@omaf.gov.on.ca).

Management Tips

Do It Now! ... Spring Checklist for the Cow Herd

For most herds in Ontario the cows have calved, or will shortly. Spring is just around the corner, and when that hits there is never enough time to get all the jobs done. So in the next few weeks, here are a few things on your to do list to check off.

- ✓ Are your bulls ready for the coming season? Are they vaccinated?
- ✓ Check that any new lads you’ve bought are doing the job, not just giving a show or going through the motions. Check now rather than have open cows later.
- ✓ Are the cows vaccinated? Talk with your vet about using a live vaccine while the cows are open – this may pay big dividends when advertising the 2004 calf crop.

- ✓ Are the calves dehorned and castrated? Doing it now saves a lot on calf and owner stress, makes weaning simpler (only need vaccinations and weaning), and makes those calves worth more on the fall market (2 to 5 cents/pound for horns and the same for castration).
- ✓ Are your National ID tags in, and recorded, or ordered for this fall?
- ✓ Review the calving records – note who did her job in getting the calf out, up and nursing. Remember calving is **Her Job Not Yours!** Put a black mark beside those who shared the job with you.
- ✓ Transfer the above record to your weaning page. Use it to jog your memory come cull date in the fall. It should matter

- as much then as it did at 3 am, at minus 30°C on Jan. 30th.
- ✓ Make your last picks from the replacement pen. Make sure they come from low labour cow families, i.e., cows that do the job themselves. Remember biggest isn’t always best.
- ✓ Follow up with last years’ calves. Can you go see how they are finishing out? At least try to talk to who bought them and ask for suggestions. It may help with next falls sales.
- ✓ Start to plan your fall marketing campaign. Talk to sales barns, and or sale committees now. Plan for weaning procedures; set your vaccination dates.

So as the commercials say...“Do it Now”! You’ll thank yourself later! Nancy Noecker, 613-258-8476, nancy.noecker@omaf.gov.on.ca

Budgets

These one page budgets focus on the economics of feeding cattle and features such things as calculating the total cost of gain, feed efficiency and net return/animal. The budget programs (which can be downloaded from <http://www.gov.on.ca/OMAFRA/english/busdev/downtown.htm#beefbud>) can evaluate past performance as well as projecting ahead. It allows you to look at "what if" scenarios before you purchase cattle. This issue features a Finishing Scenario and a Pasture Scenario.

\$\$\$ Ontario Feedlot Cost of Production Budget \$\$\$ Finishing Scenario

Calf Information

			\$/Head	\$/lb
Sale Weight (lb.)	1,438	Sale Value	\$ 1,553	
Purchase Weight (lb.)	951	Purchase Value	\$ 1,141	
Days on Feed	168	Death Loss Value	\$ 13	
Death Loss %	1.00	Margin	\$ 398	\$ 0.82

Expected Cost of Gain

			\$/Head	\$/lb
Feed (\$/lb of gain)	\$ 0.52	Feed	\$ 252	\$ 0.52
Health & Vet. Expenses (\$/hd)	\$ 16	Health & Vet. Expenses	\$ 16	\$ 0.03
Marketing/Trucking (\$/hd)	\$ 27	Marketing/Trucking	\$ 27	\$ 0.06
Yardage** (\$/hd/day)	\$ 0.25	Yardage	\$ 42	\$ 0.09
Interest Rate %	5.5	Interest	\$ 34	\$ 0.07
		Expected Cost of Gain	\$ 371	\$ 0.76
		Net Return	\$ 28	\$ 0.06

Expected Market Situation

			\$/Head	\$/lb
Sale Price (\$/lb.)	\$ 1.08	Breakeven Sale Price	\$ 1,525	\$ 1.06
Purchase Price (\$/lb.)	\$ 1.20	Breakeven Purchase Price	\$ 1,169	\$ 1.23
Total Gain (lbs.)	487	A.D.G. (lbs./day)	2.90	

Feed Requirements

	\$/tonne	Kgs. per Head/Day		Percent DM
Hay	\$ 70	1.3	\$ 15	90
Haylage	\$ -	-	\$ -	45
Corn Silage	\$ 30	5.7	\$ 29	35
Dry Corn	\$ 160	6.1	\$ 164	86
H.M. Corn	\$ -	-	\$ -	70
Beef Supplement	\$ 350	0.7	\$ 41	90
Salt & Mineral	\$ 480	0.03	\$ 2	100
Other	\$ -	-	\$ -	
Other	\$ -	-	\$ -	

Total Feed Cost	\$ 252
Feed Cost per lb. of Gain	\$ 0.52
Feed Conversion (lbs. - as fed basis)	10.52
Feed Conversion (lbs. - dry matter basis)	6.90

** Yardage is hydro, telephone, taxes & insurance, bedding, manure removal, housing, equipment repairs
This budget looks at the actual costs and close-out value of a group of crossbred steers marketed in March 2003. The ration listed is the average over 168 days. The steers were fed in a stepwise fashion; therefore more roughage was fed in the early stages and mainly corn was fed the last 100 days or so. **Cost of production is \$0.76/lb of gain, profit margin is narrow, \$28/head, but not in the Red! Feed conversion is not bad – 6.9 to 1.**

Managing Yearling Bulls

Many factors will affect the longevity and usefulness of the bulls you use. Bringing home that fresh yearling bull is always exciting. You have invested time and money in making the purchase. Evaluating the bulls available and carefully selecting one that will improve your herd's genetics can be challenging. Seeing him fade to a shadow by the end of the breeding season soon puts a few questions in your mind regarding your investment choice. We need to remember that yearling bulls have just reached adolescence and still have a lot of growth and development ahead of them. They do require higher management than mature bulls.

Yearling bulls will lose weight during their first breeding season, but minimizing this loss will extend a bull's usefulness and productivity. Minimizing the loss starts as soon as you bring him home. They need to be fed to continue gaining 2.0-2.5

lb./day, until they are turned out with the cows. Remember yearling bulls need to be fit not fat. Ample opportunity for exercise is required for muscle tone.

Once you do turn him out you need to be sure he is not overworked. A good rule of thumb is to turn him out with 1 cow for every month of age. Thus, a 15 month old bull can be turned out with 15 cows. Remember he needs to get the cows inseminated but he also needs to learn to be a bull. Observe him regularly to ensure he knows to go from one cow to another and to make sure he doesn't get injured.

Length of season is also important. Leaving him out all summer will just run more pounds off him, so leave him out for no more than 45-60 days. If this isn't long enough for your herd, use artificial insemination (AI) to maintain the length of your breeding season and to shorten the breeding period for the yearling bull.

When you do bring him in, he needs to gain not just the weight he lost during breeding season, but also enough weight that he will be 75% of his mature weight by the time he reaches his second birthday. If a bull's potential mature weight is 2000 lbs., he should weigh at least 1500 lbs. at 2 years of age. Therefore, that 1250 lb. yearling bull at turnout who lost 200 lbs. during his first breeding season would have to gain 2.0 lbs. per day during the nine months before his second birthday.

Remember yearling bulls can be used effectively if they are critically selected, properly developed and carefully managed. Protect your investment and increase the longevity of the bulls in your herd with a little timely management.

Joanne Handley, 519-826-3323,
joanne.handley@omaf.gov.on.ca



Recommended Wait Times for Livestock in Transit

Shipments of livestock and poultry from Ontario into the United States may be delayed at border crossings, due to increased inspection procedures by customs officials. Potential extended delays could mean drivers are unable to provide the proper ventilation or care for the animals on board. It is imperative that loaded units are apprised of border conditions **before** they enter the lineup and find they cannot move on.

- Any delay must be factored into the time that livestock are in transit. Maximum recommended transport times are listed in Table 1.

Emergency Procedures during Transportation

In the case of an incident or event that significantly increases the delay at any of the Ontario-U.S. border crossings, OMAF will co-ordinate

with the Canadian Food Inspection Agency (CFIA) to manage issues related to the humane transport of livestock. In Ontario, drivers can call the Canadian Food Inspection Agency Transportation Emergency Number (1-877-814-2342) in the event that their situation becomes critical during a border-crossing delay and their load is at risk.

Table 1: Maximum Recommended Time for Transport and Minimum Time for Feed, Water and Rest**.

Species/Class	Maximum Transport Time	Minimum "Offload" Time to Provide Feed, Water and Rest
Early weaned pigs	24 hours	Not applicable
Market pigs	36 hours	5 hours
Cattle	48 hours*	5 hours
Lactating dairy cows	12 hours	5 hours
Nursing and pail fed calves	18 hours	5 hours
Calves on special diet	12 hours	5 hours
Sheep	48 hours*	5 hours
Horses	24 hours	5 hours
Poultry	36 hours	Generally slaughtered

* Unless they can reach their final destination in 52 hours.

** Note: These standards are contained within the federal *Health of Animals Act* and are enforced by the Canadian Food Inspection Agency. Source: *Recommended Code of Practice for the Care and Handling of Farm Animals* series.

Penny Lawlis, 519-873-4090, penny.lawlis@omaf.gov.on.ca

Lynn Tompkins, 519-537-7936, lynn.tompkins@omaf.gov.on.ca

OMAF Beef Team

Name	Specialty	Location	Phone Number	Email Address
Nancy Noecker	Cow-calf	Kemptville	613-258-8476	nancy.noecker@omaf.gov.on.ca
Joanne Handley	Genetics	Guelph	519-826-3323	joanne.handley@omaf.gov.on.ca
Donald Blakely	Quality Assurance	Fergus	519-846-3396	donald.blakely@omaf.gov.on.ca
Tom Hamilton	Production Systems	New Liskeard	705-647-2087	tom.hamilton@omaf.gov.on.ca
Barry Potter	Livestock Advisor	New Liskeard	705-647-2086	barry.potter@omaf.gov.on.ca
Christoph Wand	Nutrition	Woodstock	519-537-8422	christoph.wand@omaf.gov.on.ca
Lynn Tompkins	Veal	Woodstock	519-537-7936	lynn.tompkins@omaf.gov.on.ca
Jack Kyle	Pasture	Lindsay	705-324-5855	jack.kyle@omaf.gov.on.ca
Craig Richardson	Animal Care	Kemptville	613-258-8298	craig.richardson@omaf.gov.on.ca
Ron Lackey	Feed Ingredients and By-products	Stratford	519-271-7407	ron.lackey@omaf.gov.on.ca
Harold House	Engineering	Clinton	519-482-1488	harold.house@omaf.gov.on.ca
Dennis Martin	Feedlot	Clinton	519-482-5976	dennis.martin@omaf.gov.on.ca
Rick Norkooli	Manager	Guelph	519-826-3291	rick.norkooli@omaf.gov.on.ca

Feedlot Rations in the Year 2010

Change Drivers

The continued push for food safety/product quality while maintaining viability will continue. Clearly environmental issues will increase; the specific driving factors will be climate change and Green House Gases (GHGs), nitrogen (N) and phosphorus (P) output and loss to the environment, and air quality/odour. It is foreseeable that these factors will be change drivers.

Making the Change

Reduce protein costs and N output – excess or poorly managed ration protein is excreted as excess manure nitrogen which can either evolve into one of the more powerful GHG, or leach as nitrate which can affect groundwater. Avoid over-feeding protein and make sure that degradable (rumen available) and undegradable ('bypass' or rumen escape protein) protein sources are properly balanced.

Reduce supplemental P – ruminants can access most plant phosphorus (P) unlike poultry and hogs. Many corn based rations in Ontario could be formulated with

zero supplemental phosphorus, as corn is commonly 0.3% P, and few feedlot cases demonstrate a need for a P level over 0.28%. Carefully evaluating the P need versus the overfeeding of P as a safety margin can save money and reduce land needed for manure application.

Increased use of phase and split-sex/breed feeding – the requirements for protein amount and type as well as P are not constant over the feeding period. Nor are they constant across genders or breed type. Phase feeding is the concept that allows the ration to more closely match cattle needs. By matching the phase to the correct needs, overfeeding of various ration constituents can be reduced. This efficiency needs to be balanced against the labour and resources factor, but it is clearly an advantage for 'economies of scale' or sorted cattle.

Feed efficiency tools – more gain per unit of feed means less methane (a GHG) and less manure. As a result, improving feed efficiency is good for the environment! This includes such products as implants and ionophores, but there are opportunities to improve feed


efficiency using improved forage, health and bunk management.

Future Feedstuffs

It appears that the future will hold greater use of ethanol and bio-diesel blends as fuel for mass transportation. Assuming this to be true, the future may hold more rations built on co-products from these processes, such as distillers' grains and so on. Additional opportunities may exist for individuals that can utilize these products in their wet form.

So in the Year 2010....

Expect more precision formulation for protein sources and ration phosphorus on better sorted cattle. As always, good health and feed efficiency management is good on all fronts. Also, be prepared for more grain co-products resulting from the fuel sector trying to solve its' own environmental problems. Some of these environmental drivers will result in economic gain for producers that adopt innovative ration and feeding practices early and efficiently!

Christoph Wand, 519-537-8422, christoph.wand@omaf.gov.on.ca 

Upcoming Events

November 7-16

The Royal Agricultural Winter Fair – Toronto
