

# BACON BITS

Vol. XVII, No. 11, November 2003

## 2003 Canada-Alberta Farm Water Program

Long-term water supplies are vital for the continued long-term sustainability of Alberta's agriculture industry. In recognition of this fact, Alberta Agriculture, Food and Rural Development's (AAFRD) farm water program has provided support for more than 13,000 water development projects since its start in 2001. As of May 31, 2003, more than \$25 million has been paid through the program in grants to help producers develop reliable supplies of fresh water for domestic use, livestock watering, fish farming and small scale irrigation.

Thanks to the recently signed Agriculture Policy Framework (APF) Implementation Agreement, a cash injection of \$6 million in federal funding has increased water program funding to \$11.5 million for the 2003/04 year. The new Canada-Alberta Farm Water Program (CAFWP), which essentially replaces the previous program, pays one third of development costs, to a maximum of \$5,000 per producer, for the following eligible water supply projects:

- Wells that provide a long-term source of water that is more reliable than surface water sources during times of drought.
- Dugouts that meet minimum size standards and provide a long-term water supply.
- Stock dams, which are potentially eligible as reservoirs, that provide a source of water for livestock.
- Spring developments that collect and hold underground water sources that make otherwise unusable water sources available for livestock.
- Livestock, fish farming, small-scale irrigation or domestic water projects that are combined with field irrigation. While CAFWP does not fund field-scale irrigation, AAFRD recognizes that field irrigation development is often integrated with domestic, livestock or small-scale irrigation.
- Farmsite connections to a new water source, which are added to the existing yardsite distribution system. This approach would also include development of remote water for pastures as part of a long-term system.
- Pipelines for pastures, water co-op pipelines and water storage as part of a long-term system.
- Fencing that enhances and protects the water supply.
- Test holes, construction surveys, materials analysis or professional consultant fees to help producers make informed decisions related to sourcing of on-farm water supplies. These steps ensure the development of high quality, high volume water sources.

To be eligible under the CAFWP, active producers must produce \$10,000 worth of farm commodities annually. Applicants have until March 31, 2004, to complete their projects and until April 15, 2004, to submit an application. AAFRD encourages producers to contact the Rural Services Division for resource information before beginning CAFWP projects.

Rural services staff will advise producers on program and project eligibility, while Alberta Agriculture Water Specialists/Technologists can help producers make informed decisions on the best farm water solutions and options available for their farms. Water specialists have a wide range of technical experience and information, and can provide the producer with local surface and groundwater resource information, project design criteria, on-farm consultation and the latest water supply publications. Experience has shown that producers who accessed technical expertise on project design before construction realized a cost savings above and beyond the program funding.

For additional information on the program or help with application details, producers can contact their regional Alberta Agriculture Water Specialist (for more information, contact Alberta Agriculture's Ag-Info Centre toll free at 1-866-882-7677) or Rural Services Division at (780) 422-9167 (toll free in Alberta by first dialing 310-0000).

Applications for the CAFWP can be obtained through the Rural Services Division of AAFRD, at MLA constituency offices, or they can be downloaded from the department website at [www.agric.gov.ab.ca/farmwater/index.html](http://www.agric.gov.ab.ca/farmwater/index.html).

Charlene Noddings  
Information Officer – Edmonton  
Telephone: (780) 427-3012 Fax: (780) 427-5921  
E-mail: [charlene.noddings@gov.ab.ca](mailto:charlene.noddings@gov.ab.ca)

**Alberta Hog Prices and Alberta Average Feed Prices not available for this issue. The information should be available in time for the next issue of *Bacon Bits*.**

Reprinting of Articles (in full or in part) is permitted with acknowledgment of Alberta Agriculture, Food and Rural Development, *Bacon Bits* and the article author.

#204, 7000 - 113 Street, Edmonton, Alberta T6H 5T6 PH: (780) 427-5320 FX: (780) 427-1057  
Website: [www.agric.gov.ab.ca/livestock/pork/baconbits/index.html](http://www.agric.gov.ab.ca/livestock/pork/baconbits/index.html)

**Alberta**  
AGRICULTURE, FOOD AND  
RURAL DEVELOPMENT

# Rendering and the Hog Industry: Losing Meat and Bone Meal in Pig Diets

Since one cow tested positive for bovine spongiform encephalopathy (BSE) in Alberta in May 2003, meat and bone meal has been reconsidered as a feed ingredient for swine and poultry diets.

The price of meat and bone meal has plunged from \$280 to \$40/tonne since May 2003. Despite this astonishing drop in the price of this feed commodity, action has been taken by many production units to prevent further loss of confidence in our food system. This month's article on rendering and the hog industry addresses the effect of losing meat and bone meal as an ingredient for swine diets.

## Meat and Bone Meal as a Nutrient Source

Table 1 compares meat and bone meal with other common protein sources incorporated in swine feeds. Despite the high fat content, meat and bone meal is low in energy due to the bone (mineral) content. The protein content is high in meat and bone meal, but lysine availability, which might be reduced by the processing method, is slightly better than canola meal. But currently, at 0.2¢ per gram of available lysine, meat and bone meal is less than half the cost of crystalline lysine (0.45¢ per gram).

Furthermore, phosphorus is high and 90 per cent available to the pig in meat and bone meal compared to low and only about 22 per cent available in soybean meal and canola meal. Just compare \$1.60 per kilogram of available phosphorus from meat and bone meal to about \$2.20 per kilogram of available phosphorus from mono-dicalcium phosphate (21% P). And, save on phytase; phosphorus is not tied up in meat and bone meal as it is in grains and legumes. A minor issue is product variability from batch to batch and over time. Thus, routine lab testing and conservative amino acid availability values for meat and bone meal are suggested.

**Table 1. Comparison of meat and bone meal to other common protein sources for pig diets**

	Meat and Bone	Soybean Meal	Canola Meal	Feed Peas
Digestible energy, kcal	2440 <sup>a</sup>	3685 <sup>a</sup>	2885 <sup>a</sup>	3435 <sup>a</sup>
Fat, %	12.3 <sup>b</sup>	3.0 <sup>a</sup>	3.6 <sup>d</sup>	1.3 <sup>d</sup>
Protein, %	54.8 <sup>b</sup>	47.5 <sup>a</sup>	38.3 <sup>d</sup>	23.4 <sup>d</sup>
Lysine, %	2.6 <sup>c</sup>	3.02 <sup>a</sup>	2.28 <sup>d</sup>	1.6 <sup>d</sup>
Calcium, %	6.50 <sup>b</sup>	0.34 <sup>a</sup>	0.64 <sup>d</sup>	0.11 <sup>d</sup>
Available phosphorus, %	2.50 <sup>b*a</sup>	0.16 <sup>a</sup>	0.20 <sup>d*a</sup>	0.15 <sup>d</sup>

a NRC, 1998

b Norwest Labs on a Northern Alberta Processing Co. 2003 sample

c SGS Canada Inc on a Northern Alberta Processing Co. 2002 sample

d Research Summaries: Canola & Peas in Livestock Diets. Saskatchewan Pulse Growers and Saskatchewan Canola Development

## What are Producers Losing?

Table 2 compares the difference in margin (revenue minus feed cost) from a simulation of least-cost formulated diets. Using April 2003 prices, a producer would have earned an additional \$0.75 per hog by including meat and bone meal and tallow in the grower 1, grower 2, gestation and lactation diets. At current prices, a producer would forfeit almost \$4 per hog by not using meat and bone meal and tallow.

**Table 2. Difference in margin (revenue minus feed cost) from simulation feeding diets with and without meat and bone meal and tallow before and after the BSE incident**

	April 2003	October 2003
Meat and bone, \$/tonne <sup>a</sup>	280	40
Tallow, \$/tonne <sup>a</sup>	374	242
Difference, \$/hog <sup>b</sup>	0.75	3.97

a Northern Alberta Processing Co.

b Includes the sow herd and assumes 23 hogs marketed/sow/year; Pork \$1.30 kg, 107 index, no bonuses

In conclusion, producers are now facing a conundrum: implement the tight requirement to mix and feed meat and bone meal and capitalize on tremendous feed cost savings or pass on the opportunity altogether.

The reasons to pass on the opportunity were discussed in the October issue of *Bacon Bits*. These include solidarity with groups like Ontario Pork, who are discouraging their members from feeding meat and bone meal to their pigs to prevent eroding foreign confidence in their pork. As well, Maple Leaf Pork had made a decision to no longer accept pigs fed meat and bone meal after December 31, 2003.

Thus, there is an overall fear in the industry that there is too much at stake. Jeopardizing our pork exports, especially to Japan, could have enduring consequences. It is in the best interest of every hog producer for Canada to preserve its status as one of the largest exporters of pork in the world.

Eduardo Beltranena, PhD  
Pork Scientist – Edmonton  
Telephone (780) 427-4567 Fax (780) 427-1057  
E-mail: eduardo.beltranena@gov.ab.ca

### Do you dread that annual review with your banker?

### Do you sometimes feel ineffective at communicating your message to important people?

### Ever think that you will never attract/retain your best employees?

If you are experiencing any of the above, then you may need to consider some professional development. The Competitive Advantage Program for Agriculture (CAPA) is a 12-day business management training program for farmers.

The material and work involved in CAPA fits into two categories:

1. Business management skills for use in your business starting immediately.
2. Strategic planning and thinking about what business you are in and where you need to go.

The CAPA 12-day management training program will be delivered over three sessions at Olds College:

November 17 to 20, 2003

December 8 to 11, 2003

January 12 to 15, 2004

For more information and/or to register, please call Morley Kjargaard at 403-556-4316 (To call toll free, use the Rite Line at 310-0000.)