

Foot and Mouth Disease

Foot and mouth disease (FMD) is a severe, highly communicable viral disease of cattle and swine. The disease also affects sheep, goats, deer and other cloven-hoofed ruminants. Elephants, hedgehogs and some rodents are also susceptible to the virus but do not develop clinical signs of the disease. Since February 2001, there has been a great deal of concern expressed by livestock producers about preventing FMD from entering Canada. The Canadian Food Inspection Agency (CFIA) has strict measures in place to address FMD. This includes comprehensive import controls on all foods, plants, animals and their

products. The CFIA is monitoring the European Union outbreak and is working with other federal departments, provincial veterinary authorities and industry to exchange information and raise awareness. The CFIA is providing the public with information through its Website, advertisements, brochures and handouts at airports and a toll-free line is in place to respond to the public's interest in FMD.

For further information on FMD please contact the Canadian Food Inspection Agency (CFIA):

Telephone: 1-877-227-0677 or website:
<http://www.inspection.gc.ca>

More information is available through:
<http://maff.gov.uk/animalh/diseases.fmd>

Brochures are also available from your local agriculture office.

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BCAC Agriculture Environment Green Fund

by: *Jim Tingle, P. Ag.*
Senior Agrologist, BCMAFF
Prince George

The Green Fund Management Committee gave conditional approval to two local projects. The Green Fund is a three-year federal/provincial program that provides funding assistance to resolve key agriculture/environment issues. The Green Fund is a companion program within the umbrella of the federal-provincial safety nets envelope. A key criteria of companion programs is that the funding must contribute to improved farm income through a combination of reducing costs and increasing revenues.

The "Fraser/Nechako On-Farm Riparian and Water Quality Program" was submitted by the BC Conservation Foundation (BCCF) with support from seven local farm organizations. Laura Grafton will chair a local Management Committee comprised of representatives from the producer organizations, federal and provincial governments and conservation groups. The application sought assistance: (a) to hire a technician to provide on-farm assistance, develop water quality projects and monitor for completion, and (b) to provide financial assistance to farmers on private land to comply with riparian and water quality regulations.

With the acquisition of Green Funds the local committee now needs to apply to other funding sources to top up the program to the targeted 70 percent assistance level. The local committee will be hiring a technician this fall and hopes to accept farmer applications next winter. The Prince George agriculture district is the targeted area for the program.

The "Winter Feed Protection Program" was submitted by the McBride Farmer's Institute to assist Robson Valley farmers to protect winter feed supplies from elk. The Green Fund will provide 33 percent of the full cost of fencing or other capital works to a maximum level to be determined by a McBride Farmer's Institute Management Committee. Glen Watts, wildlife biologist with Ministry of Water, Land and Air Protection, provided support for the project.

Green Fund Guidelines to applicants can be found at the BC Agriculture Council website under "Documents" or contact Brian Baehr at (250) 763-9790. **The next application deadline is August 17, 2001**

Notices:

New Publications:

Estate Planning for the BC Farmer
Estate Planning Checklist for Farm Families
Home and Garden Pest Management Guide

Whole Farm Insurance

Claim Deadline for the 2000 Taxation Year:
September 30, 2001

For information call:
1-888-576 (FARM) 3276

"Vanderhoof Office Re-Opens Part-Time"

The BC Ministry of Agriculture, Food & Fisheries would like to announce the re-opening of their Vanderhoof office. The office is back in its previous location in the Government Agent's office at 189 East Stewart Street. The office will be staffed on **Thursdays only**, however, voice messages can be left at any time. The phone number is (250) 567-6375. The Prince George office is available to assist you on days other than Thursdays.

Herbicide Update

by: Roy Cranston, Provincial Weed Specialist
BCMAFF, Kamloops

Three new selective broad-leaved weed control herbicides are now available for use in BC. These new registrations increase the options available to individuals and weed control agencies that target noxious and invasive weeds throughout the province.

Escort (metsulfuron methyl) broad-leaved herbicide, previously registered for use in the Peace River region, has now received approval from the Pest Management Regulatory Agency for use throughout BC. It is registered for use in pasture, rangeland, rough turf and no-crop areas. Escort controls common tansy, kochia, Russian thistle, scentless chamomile, sweet clover, dandelion, field scabious and perennial pepperweed and suppresses Canada thistle and sow-thistle. Escort also controls western snowberry and wild rose.

The complete Escort herbicide label is available at: <http://64.26.129.82/label/23000%2D23999/23005.pdf>

Grazon (picloram + 2,4-D) broad-leaved herbicide is a new product registered for use in grass pastures and rangelands. Grazon controls broad-leaved weeds such as Canada thistle, sweet and red clover, wild carrot, dandelion, goldenrod, dock, plantain, prickly lettuce, burdock, fleabane and vetch. Grazon is also registered for control of woody brush such as alder, birch, cedar, maple, pine, poplar, spruce and other species. Local experience has also shown that Grazon is effective on other noxious weeds such as knapweeds, sulphur cinquefoil and orange hawkweed.

Grazon contains the active ingredient picloram, which is also found in the herbicide Tordon 22K. Most broad-leaved plants are very sensitive to picloram and residues may remain in soil for extended periods of time. Review the Grazon label for re-cropping restrictions, pre-harvest and grazing intervals and general use precautions.

The complete Grazon herbicide label is available at the following URL: <http://www.dowagro.ca>

Remedy (triclopyr) herbicide is a new product registered for control of woody plants and annual and perennial broad-leaved weeds on pastures and rangelands. Remedy lists 34 species of woody plants controlled including alder, blackberry, cottonwood, hawthorn, maples, poplar, willow and it lists 11 broad-leaved weed species controlled including burdock, curled dock, smooth bedstraw and vetch. Review the Remedy label for preharvest restrictions and grazing intervals. Use of Remedy for noxious weed control may be limited but it will increase options for control of brush and deciduous species on grazing areas.

The complete Remedy herbicide label is available at the following URL: <http://www.dowagro.ca>

When using herbicides READ THE LABEL before use. Post-herbicide management of treated areas should include fertilization, grazing techniques that avoid over-utilization and annual herbicide maintenance follow-up.

Did you know.....

- B.C.'s agrifood industry contributes \$2.2 billion to the GDP, which is similar to that of the mining industry.
- More than 147 hectares of vegetables, including cucumbers, lettuce, sweet peppers and tomatoes, are grown under glass in British Columbia hothouses.
- British Columbia is the largest producer of fresh mushrooms in western North America and markets a total of 18 million kilograms annually.

Improving Cattle Access to Clean Water

- Lethbridge Research Centre

A new study at the Lethbridge Research Centre aims to boost cattle performance, address environmental concerns, and offer producers valuable insight about animal behaviour that could affect how beef cattle are managed in the future.

The study follows a previous study that helped raise awareness in the research and producer community about the importance of clean water for maximizing cattle production. The previous study, conducted by Agriculture and Agri-Food Canada (AAFC) Lethbridge Research Centre researcher Dr. Walter Willms, found that cattle tend to perform up to 20% better when they drink clean water. Cattle drinking directly from a dugout spent significantly less time grazing than those who were offered clean water pumped from a well.

“Palatability was shown to be an important water quality factor,” says Willms. “Basically, cattle drinking from the dugout drink less and probably eat less, so they gain less.”

The new study, led by Willms at the Lethbridge Research Centre and Dr. Doug Veira at the Kamloops Ranch Research Unit, will investigate practical techniques for improving cattle access to clean water. “The study is exciting because it has management, environmental and animal behavioural components,” say Willms. “The benefits of the research will extend beyond cattle performance, hopefully offering clues for producers to help improve the sustainability of the cow/calf industry.”

In a previous study, Veira concluded that offering water off-site in a trough reduced the number of

times that cattle drank from the stream by 80%. This approach might also work with dugouts, Veira believes. “We’ve realized that ranchers don’t like to fence the dugout because if the equipment fails, the animals will be without water. What we’re hoping to find is, if water is readily available in a trough, cattle will simply avoid drinking from the dugout.” The research has many potential benefits, says Willms. “Our hypothesis is, if we keep cattle away from the dugouts, the water quality will eventually improve. A further benefit might be healthier vegetation in the riparian zone, which is a filter for surface run-off. It will also keep feces out of the dugout, alleviating the algae blooms and odors that are contributing to the reduction in weight gains”.



Water quality within a dugout will also be assessed. To determine the distribution of “better quality” water in the dugout, the researchers plan to pump from different parts of the dugout and offer it to cattle in a cafeteria-style selection system. “That type of information will likely vary for different dugouts,” says Willms. “For example, in Kamloops where some of the studies will take place, there is a high concentration of salt in the water. We know that salt breaks down in gradients of concentration, so the effect in Kamloops is going to be different than at other sites in Alberta where salt is not a factor.”

The best location for the water trough will be the focus of tests at the Lethbridge Research Centre Onefour Ranch in southeastern Alberta. It is suspected that if the trough is too close to the dugout, there will be a greater tendency for the animals to go into the dugout if they don’t have ready access to the

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Access to Clean Water - con't...

trough. If the trough is too far away, the animals might go to the dugout instead, if it is more convenient. “We want to look at the optimal distance to catch the majority of animals,” says Willms.

A behavioural aspect of the study aims to determine how learned behaviour affects animals’ tendency to drink from troughs. The researchers are collaborating with Alberta Agriculture, Food and Rural Development Behaviour Specialist, Karen Schwartzkopf-Genswein, and UBC’s Dan Weary, to look at how and where the animals distribute themselves. Differences in watering behaviour between naïve animals and experienced animals, and domi-

nant and sub-dominant animals will also be examined. “We really want to get all animals out of the dugout, but even if we get most of them, that would still be worthwhile.” Willms says.

The new study is being supported by the Waldron Grazing Association and the Beef Cattle Industry Development Fund and is matched with funding from AAFC’s Matching Investment Initiative Program. Prairie Farm Rehabilitation Association and the Western Beef Development Centre are also supporting components of the study. Lethbridge Research Centre is national headquarters for AAFC’s beef sustainability research.



Small Woodlands Program of BC

*Adapted from “Your Land - Your Forest” brochure
Produced by Forest Renewal BC*

Small Woodlands Program is a Forest Renewal BC initiative to increase wood supply, create forest jobs, and stimulate traditional sources of rural income. The program focuses on non-industrial private forest land, first nations reserves, and agricultural leases.

A fundamental goal of the program is to encourage sustainable forest practices on private land by helping landowners acquire the necessary skills, knowledge, and financial resources to do this. Forest Renewal BC is providing temporary administrative support and guidance from a steering committee. The role of the administrative agency and steering committee is to facilitate collaboration amongst landowners and to help stakeholders develop the capacity to deliver program initiatives. It is hoped that this will lead to a self sustaining organizational network with the interest, authority, and ability to represent landowners.

Who Will Benefit ?

The program focuses on non-industrial private land which lies outside the Provincial Forest and Forest Land Reserve. These include:

Residential class land	Farm land
First nations reserves	Agricultural leases
Unmanaged private forest land	

Non-industrial land owners are those who do not have an interest in a large processing facility but do have land which will support a forest between 8 hectares to 4000 hectares.

The program sponsors workshops and lectures on topics relevant to private forest land management. To get on the mailing list and for further information contact the Small Woodlands Program of BC at:

College of New Caledonia, Prince George
(250) 562-8253 or 1-877-561-2302

E-mail: swpglen@telus.net or
swpdonna@telus.net

Website: www.swp.bc.ca

Are You a Farmer?

by: *Jim Tingle, P. Ag., Senior Agrologist
BCMAFF, Prince George*

Consider joining a local farm organization listed below! Most are affiliated with the BC Agriculture Council (www.bcac.bc.ca) which lobbies government cross-commodities on your behalf. BCAC has developed several new programs including AgAware BC, Agriculture Environment Green Fund, Farmer Identity Card, Farm and Ranch Safety and Health Agency (FARSHA) and Policy Development.

Most local groups offer seminars, field days and other agricultural awareness promotions which benefit us all. Most groups also receive ALR, zoning and use-permit referrals from your Regional District.

Why not take out a membership and get involved in agriculture activities in your community or commodity? Contacts names and phone numbers for the following associations are available by calling the Prince George office of the BC Ministry of Agriculture, Food and Fisheries at 963-2501 or 1-800-334-3011

District "C" Farmer's Institutes

Pineview
Mud River/Beaverly
Reid Lake
Salmon River
Willow River
McBride

Cattlemen's Associations

Punchaw
Cluculz Lake
Sinkut Mtn.
Fort Fraser
Prince George
Robson Valley

Other Associations

Fraser-Nechako Bred Heifer Co-op
Central Interior Feeders Co-op
Fort George Shepherd's Association
Interior Bison
Heartland Feed Co-op
Cariboo Organic Producer's
Northern Interior Dairymen
Cariboo Bred Heifer Co-op
Top of the Fraser Co-op Feeders

Sizzling Steak Promotion on CJCI Radio

Three local farm organizations (Nechako Valley Regional Cattlemen, Prince George Cattlemen and District "C" Farmer's Institute) with assistance from the Beef Industry Development Fund are promoting beef and agriculture facts on CJCI radio.

Facts are heard four times daily and the caller's names are entered to win six AAA T-bone steaks each Friday at 5:40 pm from June to August. The steaks are sourced at either Shopper's Food Mart or the Co-op Association in Vanderhoof, or Homesteader Meats in Prince George. Winners also receive barbecue sauce and a cookbook donated by the Beef Information Centre.

A sample of some of the facts are:

Did you know

... that Canada has one of the healthiest national cattle herds and one of the most wholesome beef products in the world and that the Cattle industry contributes over \$30 billion dollars to Canadian economy?

... that a properly managed cattle operation is totally compatible with most forms of wildlife and can contribute to an increase in some species of game animals?

New Product Could Prevent Alfalfa Bloat

- Lethbridge Research Centre

There's new research showing that a product used to control cattle bloat in Australia and New Zealand for over 20 years could allow safe grazing of alfalfa in North America. That would allow gains from grazing almost equal to feedlot levels.

In recent studies, scientists at Lethbridge Research Centre examined the effects of *Blocare* on cattle and sheep grazing alfalfa for short durations. They found that if *Blocare* is adequately consumed, it is 100 percent effective for controlling bloat, without reducing productivity.

Alfalfa is the only forage that maintains productivity similar to that in feedlot diets, but the legume can cause pasture bloat, an accumulation of gas in the rumen which can lead to cattle loss. "Bloat is the number one problem with cattle grazing," says Dr. Tim McAllister, a rumen microbiology and nutrition scientist involved in evaluating the product. "Many producers are reluctant to graze alfalfa, despite its productivity benefits, because of the potential for bloat."

Blocare is a combination of alcohol ethoxylate and pluronic detergents, which are water-soluble surfactants. It was developed as a preventative and treatment for pasture bloat. They are nontoxic to ruminants when administered at recommended concentrations.

The studies were a joint effort by McAllister and his Lethbridge Research Centre colleague Dr. Yuki Wang, along with Dr. Kim Stanford and Bjorn Berg of Alberta Agriculture, Food and Rural Development, Duane McCartney and Dr. Vern Baron of the Lacombe Research Centre and Dr. Walter Majak of the Kamloops Range Research Unit.

The new studies, published in a recent edition of the *Journal of Dairy Science*, focused on three scenarios. One looked at *Blocare*'s effect on the digestibility of freshly harvested alfalfa, using sheep

in confinement. A second looked at the product's effect on grazing sheep. And a third looked at its effect on grazing cattle.

In the first study, half of the sheep were given a daily dose of *Blocare* solution one hour before feeding, and the other half were given water. The symptoms of bloat were reduced in *Blocare*-treated sheep, relative to the controls, for the first two hours after feeding but not at four hours after feeding and beyond.

In this study, scientists found that treatment with *Blocare* did not affect dry matter intake, digestibility of dry matter, acid or neutral detergent fiber or nitrogen digestion and retention. "That's good news for cattle producers, because it implies that *Blocare* likely would not affect production," McAllister says.

In the second study, five sheep were given *Blocare* in drinking water. In this treatment, the product was 100 percent effective for preventing bloat in sheep grazing early-bloom alfalfa for four hours daily. Similar results were found in the third study with dairy cattle. Those studies were conducted with cattle in Alberta and B.C.

These results could have implications beyond Western Canada, McAllister says. "For example, the dairy industry in the U.S. is moving towards grazing to address animal welfare concerns with confinement dairying, but on pasture, milk production drops sharply. By using *Blocare*, producers should be able to maintain milk levels by letting their animals graze alfalfa while preventing bloat."

Further study is required to develop an integrated model for best treatment under a variety of climatic conditions, he says. "There are some situations where the product may not be as effective. The animals have to consume the product in water for bloat prevention. Under conditions of high rain fall, the risk of bloat may increase because of a lack of consumption of the product in provided water."

Editor's Note: On the Renegade Gardener's website an interesting section is "Myth of the Week." Here Don Engebretson debunks myths and legend about gardening. The following article is from his Myth of the Week column.

Roundup - Friend or Foe?

by: Don Engebretson, *The Renegade Gardener*
web site: www.renegadegardener.com

Myth of the Week:

Roundup, and its devil-spawn, Kleen-up, are hideous, monstrously toxic chemicals created in smoking vats by evil, monolithic corporate chemical companies who are reaping huge profits while poisoning our children.

How can anyone have a problem with Roundup <<http://www.roundup.com/>>? It kills grass, for God's sake! Kills it! Dead, dead, dead!

I recall sitting in Master Gardener Core Course when our professor for Plant Pathology mentioned matter-of-factly that such-and-such could be handled by spraying it with a little Roundup. One person in the class rose up and darn near walked out when he/she couldn't get the professor to denounce Roundup as something that a Master Gardener should never recommend for use.

The professor patiently tried to explain the facts. Roundup is a chemical, by name Glyphosate, or isopropylamine salt. Spray it on a plant and it essentially salts it to death, killing the plant by preventing it from making its own food. That's what goes on when you spray Roundup. Chemists found a chemical that starves plants to death.

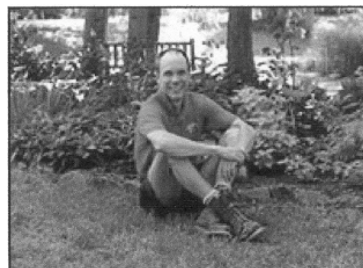
That makes it toxic. Anything that kills anything is considered toxic. Very little on the planet is not toxic. Eat enough butter at one time, or asparagus, and you will die. Butter and asparagus are toxic, in that regard. So is beer.

Of course, some people don't let a little chemistry get in the way of their logic. If it kills plants, it must hurt the environment.

No, it doesn't. Give industry some credit. About 25 years ago the chemical companies were under severe scrutiny, the EPA* was passing tougher laws, and look how industry responded - things changed for the better. Roundup (and Kleen-up, same deal) were the chemists' answer to one of our concerns. You want something that's not going to affect soil and ground water, OK, we've come up with this.

Roundup is systemic, meaning it is absorbed into the plant, all the way to the roots. The plant starves, dies, then the Glyphosate breaks down in the soil at a very quick rate. It needs the plant to hold together, but the plant is gone. Nothing is left to leech into ground water, nothing remains to "poison" anything.

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Don Engebretson
University of Minnesota Master Gardener

*Editor's Note: The EPA is the Environmental Protection Agency that regulates the use of herbicides and pesticides in the United States.

Roundup con't

You can seed an area sprayed with Roundup a week after the application. One of the top native restoration experts in the county was speaking in Minnesota recently, and how do you think his firm starts a native restoration project? They spray the area with Roundup!

Children and pets can walk on grass treated with Roundup as soon as it has dried - after about two hours, on a sunny day.

Of course we need to be careful with any chemical. Of course we need the EPA, and other industry watchdogs. But give credit where credit is due. Roundup is the absolute least of your worries.

Producers Flock to Prince George

*Submitted by: Evelyn Pereira
President, Fort George Shepherds Association*

On Saturday May 5, 2001 sixty-five sheep producers and a few goat producers converged at Prince George to attend "Ewe Daze", a one day sheep symposium sponsored by the Fort George Shepherds' Association with help from the Sheep Industry Development Fund and the BC Ministry of Agriculture, Food and Fisheries.

It was a full day starting with Glen Wonders from the College of New Caledonia, bringing us up to date on the Small Woodlands Program available to farmers.

Next on the agenda was Peter Shroeder, a well known sheep producer from Manitoba. Peter covered many topics dealing with ideas on how to help the small producer. The 80-20 idea really hit home with lots of producers and I'm sure they went home and looked at their flock with a different point of view. (80% of your revenue is generated by 20% of your time). Another idea that generated considerable interest was Peter's method of taking the sheep to the feed to reduce labour requirements and to reduce feed costs. In the afternoon Peter showed some slides of how things are done at P & L and covered the topic of predator control with guardian dogs.

Basil Bactawar from the BCMAFF in Abbotsford brought us up to date on what is happening with the "on-Farm Food Safety Program". We were informed of the development of HACCP and the objectives of the program, where it is today and what we can expect in the future.

Dave Lehman of Gallagher Fencing explained about the different options with electrical fencing. Lots of trouble shooting ideas were discussed and then he proceeded to build 200' of 6 wire electric fencing. Even though it was miserably cold outside it was worth watching just to see how quickly it can be done.

Sandra Peterson rounded out the day with a demonstration of her herding dogs. She explained and demonstrated how she trains the young dogs and showed us what the older dogs can do and how it can make the shepherds' life easier.

The Fort George Shepherds' Association would like to thank everyone for attending and we look forward to presenting another symposium in the future. (Another event is being planned for February, 2002.)

Internet (On-Line) Resources

Most information today is created electronically, printed and then distributed. An electronic version is also loaded onto the internet so producers can access the information from their home computer. If a producer doesn't have an internet connection, most libraries have connections to the net, merely phone ahead and reserve a time to use the computer. Three sites worth keeping in your favourites are:

1) *BC Ministry of Agriculture, Food and Fisheries*. The following address will bring you to the ministry's homepage. Follow the links to locate factsheets etc. produced by BCMAFF staff. (From the homepage under "Other Links" click on "Agriculture". At top of next page displayed click on "Reports and Publications")
<http://www.gov.bc.ca/agf/>

2) *BC Ministry of Agriculture, Food and Fisheries InfoBasket* Our specialists have linked you to information sources from around the world, including governments, universities and research institutes. InfoBasket project is a filtering of agricultural information on the internet so that searches are faster

and more productive. Using a regular search engine, a search brings back many documents some of which are not relevant to agriculture, some are not relevant to BC and others are relevant. With Infobasket only those documents relevant to BC Agriculture are kept, a short abstract is written about the paper and the source is indicated. A search of Infobasket yields the relevant papers and you see the title and source along with a short abstract. If you want to see the whole document you simply click on the title to see the complete document. Currently Ornamentals, Organics, Bison, and Specialty Crops are subject areas available to the public. Additional areas being worked on are Beef/Forage and Microfood Processors. They will be available in the year 2002.

<http://infobasket.gov.bc.ca/communities/community.asp>

3) *Farm Business Management (British Columbia)* This site was developed by the Farm Business Management Council and is maintained by Kelleen Wiseman at UBC. In addition to FBM and economics there is a good set of links to all aspects of agriculture. <http://fbminet.ca/bc>

Upcoming Events:

August 19 **Garden Party**, Birchcreek Nursery, Prince George
Contact: Prince George Symphony Orchestra at 562-0800
or Birchcreek Nursery at 964-6684 for ticket information

Sept 13 - 15 **"Bioengineering Riparian Areas"**, sponsored by the Chilako Watershed Council
Contact: Laura Grafton Phone 250-967-4272

Sept 20 - 21 **Project Agriculture**, Vanderhoof
Contact: Denise McLean at BC Ministry of Agriculture

Disposal of Old Chemicals

Do you have chemicals such as herbicides and pesticides which you want to get rid of? You can take them to:

Nechako Bottle Depot
1st Avenue, Prince George
Phone: 562-3871

All chemicals must be in their **original container** and must have **original label**.