

STARLAND AG TALK

Volume 3, Issue 3

IN TUNE...IN PROGRESS

October 2006



Events to Keep in Mind

November 8-11

Agri-Trade 2006

Location: Red Deer

November 3-11

FarmFair International, 2006

Location: Northlands Agricom, Edmonton

November 13

C-2000 Meeting

Location: Delia Community Hall

November 21

Drilling Mud Workshop

Location: Rumsey and Delia Community Halls

November 22-23

Direct Seeding Advantage

Location: Nisku

Call Rick Taillieu at 780-679-5174

December 5-6

S.A.C.A. Presents the 13th Annual Dryland and Irrigation Reduced Tillage Conference

Location: Cypress Center, Medicine Hat

December 6-8

Western Canadian Grazing Conference

Location: Edmonton

ARECA website: www.areca.ab.ca

January 22

C-2000 Annual Meeting

Location: Delia Community Hall

February 26

Remediation and Reclamation Process Workshop

Location: Rumsey and Delia Community Halls

The Starland County Agricultural Service Board has invited Alfredo Carcamo, an independent soil scientist from Amber EnviroServices, to lead information sessions on each Drilling Muds and the Remediation and Reclamation Process. The objective of these workshops is to introduce to the agriculture community some of the issues associated with oil and gas activities on agricultural land. The workshops will help you understand the nature of drilling muds that may be spread on the land, the environmental concerns that may arise during the operational life of a well site and review the Alberta Environment Reclamation and Remediation Program which came into effect October 2003.

Drilling Muds

Rumsey Community Hall ~ November 21, 2006 from 9 to 11am

Delia Community Center ~ November 21, 2006 from 1 to 3pm

Reclamation and Remediation Process

Delia Community Center ~ February 26, 2007 from 9 to 11am

Rumsey Community Hall ~ February 26, 2007 from 1 to 3pm

To register for this **FREE** workshop, contact Lindsay Cherpin at 772-3793.

Drilling Muds

This session will introduce to the landowners what drilling muds are; compare the use of water based muds vs oil based muds, and describe some of the characteristics of the drilling muds. This session will review some of the potential drawbacks as well as the benefits of applying it to their land. In addition, the session will review regulatory requirements for disposal of drilling muds on the lease or spread on land as well as landowner responsibilities. The session will review sample analytical reports and relate the significance of these parameters to soil quality and land productivity.

Remediation and Reclamation Process

This session will introduce the process and some of the environmental concerns that landowners should be aware when their land is undergoing application for Remediation and Reclamation Certificates. This session will compare the previous method and identify some of changes. Alberta Environment (AENV) requires oil and gas operators to share all material submitted as part of a Reclamation Certificate application with landowners. This session will review requirements that oil and gas companies return land to equivalent capability that allows for unrestricted land use; and, certificates issued in order to cancel the lease on the rental property once a well site is abandoned. A review of the avenues available to landowner for resolving conflicts with oil companies will be presented.



Agriculture, Food and Rural Development

Alberta Agriculture offers producers a selection of online calculators that address needs in the following categories:

- Crops
- Livestock
- Area and Volume
- Machinery
- Metric
- Farm Management

The calculators in the categories can help you to calculate ownership and operating costs of common farm equipment, cost comparison between conventional winter feeding systems and swath grazing, manure management planning, estimate costs and revenues on a per acre basis for a set of selected crops within a given soil zone. This is just a sample of the options available to producers. To access these calculators, visit Alberta Agriculture's Ropin' the Web website at www.agric.gov.ab.ca and select Calculators from the menu.

It's Time To Be Thinking of Shelterbelts!

Once again, trees are available from the P.F.R.A. shelterbelt center for farmstead and field shelterbelts. Applications are accepted until March 15, 2007, but in order to assure that you receive the trees that you selected, it is best to get your orders submitted in the Fall. For assistance in planning your shelterbelts, you can contact Starland County or refer to the P.F.R.A. website: www.agr.gc.ca/pfra/main_e.htm.



~ Photo from Prairie Farm Rehabilitation Administration, Agriculture and Agri-Food Canada

Winter Cereals for Grazing

"Intercropping spring cereals with winter cereals provides a crop that can be harvested for silage or greenfeed and allowed to regrow for fall grazing. The high quality of the leaf material from the winter cereals increases the quality of the silage or greenfeed. When allowed to regrow the winter cereals provide high quality pasture that can be grazed until covered with snow. Winter triticale and fall rye are more productive during the fall than winter wheat. These crops are capable of withstanding frosts and still maintain their green color and quality."

For more Information, read Winter Cereals for Grazing, posted on Ropin' the Web, Alberta Agriculture, Food and Rural Development's website

Garborators Bad News for Rural Septic Systems

Rural household wastewater systems, such as septic tanks, are affected by both the quantity and quality of the sewage that goes into them. Kitchen sink food-disposal units, often called garborators, overload septic system with organic wastes and use large quantities of water to make them work properly.

Composting kitchen wastes conserves water, keeps improperly treated organic wastes from entering surface and groundwater resources and creates a useful by-product.

~ The Alberta Environmental Farm Plan Company, August 22, 2006

Environmental Farm Plan Workshops are coming to your community this Fall

If you are interested in attending a workshop, please contact Lindsay Cherpin, Technical Assistant, at 403-772-3793



The Alberta Environmental Farm Plan Company
Progressive Stewardship

Southern Alberta Grazing School for Women

Another successful grazing school was held July 19 and 20, 2006 at Antelope Creek Ranch. The School was at maximum attendance with 40 women from across southern and central Alberta. Topics covered at the school ranged from plant identification to pasture and riparian health to livestock handling and oil and gas reclamation. Planning for the 2007 Grazing School is underway and updates will continue to be posted in the Ag Talk newsletter. If you have any suggestions or questions regarding the Grazing School, please contact Lindsay Cherpín at 703-772-3793.

HOW CAN SWATH GRAZING REDUCE PRODUCTION COSTS?

Labour and machinery costs are decreased. There is no need to start a tractor and feed by hand. The costs associated with baling, stacking, storing or covering feed is eliminated, along with the reduced costs of corral cleaning and spreading manure for the period of time the animals are swath grazing. Manure is deposited throughout the field, improving overall fertility of the field. If swath grazing is managed properly, there should be no difference in body condition score between cattle that are swath grazing compared to those being fed in a traditional manner in dry lot.

~Alberta Agriculture, Food and Rural Development

Biological Control of Scentless Chamomile (Mayweed) in Starland County

Starland County has released the Scentless Chamomile seed weevil, *Omphalapion hookeri*, at several infestation sites throughout the summer and fall. Release sites throughout Alberta and Saskatchewan have shown 25 to 95% of seed heads are attacked by the weevil.

The weevils are a natural predator of Scentless Chamomile and control the weed by destroying the seeds. The life cycle of the weevil is explained by Dr. Alec McClay, "The adult females emerge from their over-wintering sites in the spring and lay their eggs into scentless chamomile flower buds as they open. The larvae that hatch from these eggs are small, creamy white, legless, C-shaped grubs. They feed inside the flower heads, destroying the seeds as they develop. Each larvae will eat about 11 scentless chamomile seeds before pupating. The adults emerge from the ripe seed heads in late summer, feeding on scentless chamomile foliage before over-wintering in the soil or litter. There is one generation per year."

Aside from the use of weevils to control the spread of the Mayweed, Starland County staff has been controlling the

weed by hand picking and some spraying. Landowners have also been contributing the control of Mayweed by handpicking on their property.



~ Starland County Scentless Chamomile
Biological Control Site

Small leaks, major damage

A small fuel tank leak can quickly add up to big environmental and economic consequences on the farm. A leak of just one drop per second can release about 900 litres (200 gallons) of fuel into groundwater over the course of one year. And it only takes a few litres of fuel to severely pollute a farmstead's drinking water — pollution that is virtually impossible to detect by taste.

~ The Alberta Environmental Farm Plan Company,
August 29, 2006

Starland Ag Talk is published by Starland County Agricultural Service Board four times annually. If you have an article suggestion or questions on the topics you see here feel free to contact Alan Hampton or Lindsay Cherpín.

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Stored Grain Insects, Mites and Molds

Frequently Asked Questions

Due to the hot and dry harvest conditions in the 2006 season, producers should monitor the pest conditions in their stored grain. Following is information on stored grain pests from Ropin' the Web ~ Alberta Agriculture, Food and Rural Development:

What can I do to prevent my crop from infestation by stored grain insects?

The best time to minimize the potential for stored grain insects is before the grain is in the bin. A thorough cleaning of the bin prior to filling is the best method to reduce any small populations of stored grain insects that may become a problem later in the year. Storage bins, especially if there's a history of infestation, can be sprayed or dusted with a recommended insecticide before grain storage. *Producers can help prevent problems by cleaning up any spilled grain around the bin. Spilt grain, exposed to environmental moisture, can easily build up populations of insects that could migrate into the bin later in the year. Cleaning up and removing any outside grain can minimize future problems within the bins.*

What conditions would make stored product more susceptible to stored grain damage?

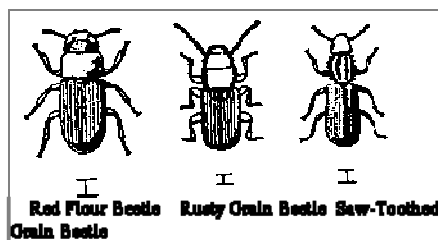
Warm, moist or weedy crops would be most susceptible to damage. Warm or moist grain will contribute to moisture migration within a bin. These conditions can cause locations within the bin where grain will spoil and result in insect infestation, mite and mold development. In fall the outside of the bin cools quickly. The cool heavy air associated within the bin wall drops, while the warmer air, located in the interior rises, causing a circular flow within the bin. This air pattern deposits moisture, through condensation, at the top center of the bin. In spring the reverse occurs, where warming from the sun warms the outside layer, causing a circular air movement depositing moisture at the bottom of the bin. Moulds that develop give off additional heat and moisture, resulting in a microclimate

more favorable for stored grain insect populations. Mold byproducts can be toxic if fed to farm animals. The more moisture in the grain, the more likely it is to have a zone with enough moisture to start a stored grain insect problem if the pests are present.

Weed seeds, which often have higher moisture content than the harvested crop, can be concentrated in the central core as the grain when binned. This situation can cause more moisture to buildup in this area. If the stored grain is particularly weedy and/or moist, cleaning or drying the grain may reduce insect problems in storage at a later date.

How do I identify the pest?

The most common and serious insect pest is the Rusty Grain Beetle. Large populations can cause grain to heat and spoil. Look for a distinct emergence hole in the germ area of the seed. The Red Flour beetle is another common pest, but it cannot feed on undamaged dry seed with less than 12% moisture. Saw-toothed grain beetles occur most commonly in oats. These beetles can be confused with other beetles that feed on fungus, including the foreign grain beetle. Grain mites are whitish and very small (.2-.5 mm).



Can I protect the grain in the bin if stored grain insects are a risk?

If a stored grain insect problem is anticipated, products can be added while augering or moving grain. Products with diatomaceous earth such as [Protect-It®](#) can keep potential insect problems in check. Addition of these products at recommended rates while augering grain will provide protection against stored grain pests. Other products are also registered for control of stored grain insects. Call the Ag-Info Centre for more information (1-866-882-7677).

What if stored grain insect problems develop?

If a problem is determined, a producer

can move grain in cold weather (Minus 20 Celsius or colder). Moving the grain cools and dries the grain and insects, reducing populations and dispersing any warm or moist grain pockets. Pneumatic conveyors (grain vacs) will kill most free-living insects, especially fungus feeding insects and mites.

Incorporating diatomaceous earth products while rebinning can also help minimize stored grain pest buildup. Dry grain will be most effective with Protect It®.

Fumigation with a chemical such as Phostoxin® is also possible at this stage. This is a Restricted product and use can only be performed by a licensed applicator.

UPDATE: Changes to the Natural Resources Conservation Board applications process for confined feeding operations

“Effective October 1, 2006, the Natural Resources Conservation Board is introducing a new applications process for new or expanding confined feeding operations and manure storage facilities. The revised applications forms and guides will reflect changes to the *Agricultural Operations Practices Act* regulations, which come into effect on October 1.

Changes to the process involve:

- ⇒ Forms that will be custom tailored to each application to eliminate unnecessary paperwork
- ⇒ A new, plain-language guide to the applications process
- ⇒ Increased communication with applicants before the detailed technical information is submitted
- ⇒ Improved communication with directly affected parties
- ⇒ A site visit and a technical review of the application before it is considered complete, to ensure that all required information is provided
- ⇒ Shorter, less technical and less legalistic decision reports and public notices

For more information, contact your nearest NRCB office by dialing 310-0000 for toll free access, or contact and Alberta Agriculture, Food and Rural Development extension specialist by dialing 310-FARM.”

~Natural Resource Conservation Board, September 2006