

# STARLAND AG TALK

Volume 4, Issue 1

IN TUNE...IN PROGRESS

February 2007



## Events to Keep in Mind

### February 19

Alberta Surface Rights Federation Annual Meeting  
Norseman Inn, Camrose  
9am ~ \$25  
Contact: Tony Nichols, 882-2343

### February 22

Biodiesel Information Seminar  
Three Hills Community Center  
1:30pm  
Contact: Bruce Sommerville  
443-5541

### February 26

Reclamation on Agricultural Lands  
Information Sessions  
Delia 9-11am  
Rumsey 1-3pm

### March 7

KWAC Annual General Meeting  
Three Hills Community Center  
7pm ~ \$5  
Topics: Grain markets, Town of Three Hills Lagoons, Cattle Reproductive Nutrition  
Contact: Callie Fox  
443-5541

### July 5&6

Southern Alberta Grazing School for Women  
Cypress Hills

### July 12

Starland-Kneehill Pasture Beneficial Management Practices Field Day  
Morrin Bridge Campground

### Environmental Farm Plan Workshops

Contact: Lindsay Cherpin, Technical Assistant, 772-3793  
Watch your mailbox for a notice of March Workshop dates

## LANDOWNER INFORMATION SESSION

# RECLAMATION ON AGRICULTURAL LANDS

## February 26, 2007

**DELIA Community Center 9-11 am**

**RUMSEY Community Hall 1-3 pm**

For more information or to register for this **FREE** information session, contact Lindsay Cherpin at 403-772-3793 or [lindsay@starlandcounty.com](mailto:lindsay@starlandcounty.com).

### Objective

To introduce topics in the oil and gas industry activity that may impact landowners. The workshops will help landowners understand 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 in 2003.

The format of the presentations will consist of presentation and case studies that provide different scenarios.

### Remediation and Reclamation Process

This session will introduce the requirements of the certification 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.

## Deadline for Hay and Pasture Insurance is February 28

### Farmers Must Decide Soon

With the deadline fast approaching, Alberta farmers and ranchers have only a few weeks left to decide whether to insure their hay and pasture this year.

The cutoff date for enrolling in perennial crop insurance programs is February 28, reports Agriculture Financial Services Corporation (AFSC), the provincial Crown corporation that administers the program.

It can be a difficult decision to make so early in the year, says Gordon Hutton, a Provincial Forage Industry Specialist with the Alberta Ag-Info Centre. "It's soil moisture during April and May that makes or breaks a forage crop."

You can't simply look out the window in February and count on "a good crop year" just because there is decent snow cover or "normal" soil moisture conditions, warns Hutton.

Soil Moisture Specialist, Ralph Wright, agrees. "The correlation between soil moisture conditions now and the summer ahead is at best a shot in the dark," says Wright, who tracks soil moisture reserves across the province for Alberta Agriculture and Food (AF).

### Soil Moisture Levels Can Change Quickly

Most of Alberta is currently seeing

near normal to high soil moisture levels – with the exception of the Peace Region, where most areas have moderately low to extremely low soil moisture reserves.

"It's not reliable to base crop insurance decisions on current conditions because things can change very quickly," says Wright. "You can have excellent soil moisture reserves now and then hit a month of dry weather that puts you right back to zero."

Rather than trying to out-guess the weather to pick and choose the best years to buy perennial crop insurance, farmers should consider it a long-term risk management tool, says Ted Darling, a Business Risk Management Specialist with AF. "It's there to protect them each year in the event of unpredictable catastrophes like the 2002 drought" and to help keep their operations stable from one year to the next.

### Subsidized Premiums

The provincial and federal governments recognize the risks producers face, so they help by covering more than 50 per cent of premiums and all administration costs for crop insurance in Alberta, explains Merle Jacobson, Vice-President of Business Risk Management for AFSC.

"We have 45 local insurance offices and field staff across the province to help producers make the best choices for their operation," says Jacobson, adding there are a variety of programs and options to choose from. All farmers with 20 acres or more of hay or pasture are eligible for perennial

crop insurance.

### Farmers Must Decide Now

"Farmers can contact our call centre at **1-888-786-7475** to find the nearest AFSC office and get a personalized quote over the phone." But all new applications and any changes to existing policies must be completed before February 28, he stresses.

**A 5 minute shower with a standard shower head uses 100 liters of water.**

**A 5 minute shower with a low-flow shower head uses less than 50 L of water.**

~ The Green Lane™, Environment Canada's World Wide Web site

### Farmstead Shelterbelts

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 as soon as possible. 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](http://www.agr.gc.ca/pfra/main_e.htm)**



## Plugging Abandoned Water Wells

When a well is no longer being used or maintained for future use, it is considered abandoned. Abandoned wells pose a serious threat to the preservation of groundwater quality. They are also a serious safety hazard for children and animals.

There are approximately 59,000 farmsteads in Alberta and most of these have at least one well. In addition there are a great number of non-farming rural residents that rely on water wells. The exact number of abandoned wells in Alberta is unknown but is estimated to be in the tens of thousands. Plugging an abandoned well prevents:

- Downward movement of water in the well or well annulus
  - Surface contamination from reaching aquifers
  - Intermixing of water between aquifers of different water quality
  - Serious accidents from happening
- Unfortunately, groundwater contamination and its effects are usually not recognized until groundwater quality is seriously affected and nearby wells have been contaminated. Surface contaminants can enter a well several ways:

- Directly through the surface opening if the cap is loose, cracked or missing
- Through unsealed spaces along the outside of the casing

When the steel casing of an abandoned well starts to corrode, holes will develop. When this takes place, surface contaminants or poor quality water from shallow aquifers may migrate into the deeper aquifers of nearby operating wells.

In Alberta, responsibility for plugging a water well is defined by legislation. The well owner is responsible for plugging the well when:

- The well is no longer being used as a water supply
- The well is in a poor state of repair and the pumping equipment

has been removed or cannot be repaired or replaced

- The well produces water that is unsuitable for drinking

**It is generally best to hire a drilling contractor to complete the plugging of your well. This person has the expertise and equipment to do a proper job. Unless you use the right plugging materials and have them properly placed in the well, you will end up with a poorly sealed well that will continue to allow contaminants to enter into the groundwater. When a replacement well is drilled, your old well should be immediately plugged.**

### Steps to Plugging a Well

#### Step 1

Remove all pumping equipment from the well. Thoroughly flush out the well using a bailer or air compressor.

#### Step 2

Measure the total depth of the well, the diameter and the non-pumping water level. If possible, compare these figures with the information on the original drilling report. Confirm whether the well is open to its original depth.

#### Step 3

Use these figures to decide which plugging material is appropriate and how much you will need. A drilling contractor can help you decide. Whether or not the casing can be successfully pulled out will also determine which material to use and what method is appropriate for placing it into the well. If the casing cannot be removed, choose a slurry that can be pumped under pressure into the well so that any space around the outside of the casing will also get filled in.

#### Step 4

Disinfect the well. Add enough chlorine to bring the water standing in the well to a chlorine concentration of 200mg/L. For every 450 L (100 gal.) of water in the well, add 2 L (0.4 gal) of household bleach (5.25% chlorine).

See Module 6 “Shock Chlorination—Well Maintenance” to calculate how much water is in your well. Leave this chlorine in your well.

#### Step 5

If possible, remove the well casing. If not possible, perforate the casing left in place.

#### Step 6

Place the plugging material into the well. It must be introduced at the bottom of the well and placed progressively upwards to the ground surface. The only exception to this rule is when the plugging material being used is a bentonite pellet that has been designed and manufactured for pouring into the well from the ground surface.

#### Step 7

If the casing was not already removed, dig around it and cut it off a minimum of 0.5 m (20 inches) below the ground surface.

#### Step 8

Backfill and mound this portion of the hole with material appropriate for intended use of the land (i.e. clay).

#### Step 9

Use the worksheet at the end of this module to record the details of your well plugging. Include the well owner name, location, total depth, casing diameter, type and amount of plugging material used, date and method of placing material into the well. Send a copy of this record to:

Alberta Environment  
Groundwater Information Center  
10th Floor, Oxbridge Place  
Edmonton, Alberta T5K 2J6

~ Material from “Water Wells that Last for Generations” by:

Alberta Agriculture and Food, Alberta Environment, Agriculture and Agri-Food Canada, P.F.R.A. (Copies of this publication can be ordered from Ropin’ the Web or picked up at Starland County)

**Funding at a 50% cost share is available for decommissioning water wells through the Canada-Alberta Farm Stewardship Program.**

# Starland County Agricultural Service Board

## Spring Notices

### Water Transfer System

Rate: \$250 per dugout

### 15' JD 1590 No-till Drill Rental

We will be taking drill bookings starting March 15, 2007.

Rate: \$6 per acre

### Gopher Poison

Once again Starland County will put submitting orders for premixed gopher poison starting at the end of March.

Obtain 2007 pricing by calling Starland County at 772-3793

Quantities available:

2.5 gal (8 kg)

5 gal (12kg)

## Winter Stored Grain Insect Control

An Alberta winter can be the perfect time to deal with stored grain insect problems. "We may not like our winters, but the insects like them even less," says Doon Pauly, crops specialist, Alberta Agriculture and Food, Stettler. "The current cold weather is a great time to get rid of stored grain insects at a low cost."

"If the grain is in aeration bins, try to get the bin temperature down to at least  $-5^{\circ}\text{C}$ ," says Pauly. "If you can get it even colder you can get an even more complete kill in a shorter time. At  $-5^{\circ}\text{C}$  you can kill the bugs in a couple of months. At  $-32^{\circ}\text{C}$  you can kill them in a few days." If aeration isn't an option, Pauly suggests exposing them to cold temperatures by augering, and maybe by putting it in a truck overnight. "Moving the grain cools and dries the grain and insects, reducing populations and dispersing any warm or moist grain pockets."

When it comes to turning grain, there's caution especially for canola.

"Make sure you keep canola out of any bins that have been treated with malathion, or held cereal grains treated with malathion, within the last four-to-six months," says Pauly. "To maintain our export markets we need to ensure that our canola is malathion free."

Another option for controlling stored grain insects is by phosphine fumigation. Prepared pellets release phosphine gas when they come in contact with humid air. Phosphine gas is toxic to insects. It doesn't change or impair the commodity in any way, and does not leave residues which could be hazardous to the consumer. However, the gas itself is extremely toxic. Phosphine fumigation should only be attempted on grain that is  $10^{\circ}\text{C}$  or warmer, since the pellets do not release gas under colder conditions.

"Fumigation must take place in a tightly sealed bin," says Pauly.

"Once the exposure time has ended. Aerate the bin to dissipate all gas before handling or shipping the grain."

For more information contact one of the crop specialists at the Alberta Ag-Info Center by calling 310-FARM.

~Article from January 29, 2007 issue of Agri-News

**Environmental Farm Plan Workshops are in  
YOUR community**

**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

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 Cherpin.

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