

### Have You Started Thinking About Controlling Gophers?

It may only be March, but with the recent warm weather, reports of active Richardson's Ground Squirrels (aka Gophers) are coming in. After 2016's favourable conditions, effectively controlling these destructive pests should be a key priority this spring.



# So what makes gophers tick (besides eating your crops)?

**Biology**—Gophers eat a wide variety of broad-leafed and grass species, and can directly compete for forage with livestock herds. No-till or minimum tillage areas can see increased gopher

pressure. In addition to crop and rangeland feeding, gopher soil mounds are hard on machinery, and the bare soil can invite undesired vegetation including noxious and hard to control weeds. You may also see evidence of badgers on gopher infested land as gophers are an important source of food for these creatures. The larger badger holes can be dangerous to livestock, wildlife and cause additional machinery wear & tear. Adult male gophers are the first to emerge in the early spring, with adult females following 10-14 days later. Typically, the male mortality is high in spring due to weather conditions, predation, drowning, etc. One litter is born from an adult female each year, with a typical litter size of 5-6 on native pasture, and 9-10 when alfalfa or clover fields are adjacent.

The young will emerge from their burrows 25-30 days after birth, however 50-80% mortality is expected. A large portion of the surviving young gophers will then move to a new area and establish a new burrowing system during June and July. Movements of 3km are common so it is essential to continually monitor fields throughout the season as populations will fluctuate.

Adult males will enter hibernation during late June or early July, as soon as they have enough fat reserves stored to carry them through winter. The adult females will follow suit later on in July, with the young gophers beginning hibernation during mid-August and as late as September. (Cont'd)



#### Is Your Farm Family Being Safe? Canada's Ag Safety Week is Here!

#### MARCH 12-18 IS CANADA'S AG SAFETY WEEK

Adapted from <u>www.agsafetyweek.ca</u>

The <u>Canadian Agricultural Safety Associa-</u> <u>tion</u> (CASA) and the <u>Canadian Federation of</u> <u>Agriculture</u> (CFA) have launched a three-year campaign entitled "**Be an AgSafe Family**" to help farm families like yours stay safe.

While farm safety is a priority 365 days a year, March 12-18 helps by highlighting the tools available to help keep every generation on your family farm safe. From the young toddler; to the busy adult juggling family, farm, and work; to the older farmer with an age-defying drive to keep on farming. Just as each person is unique, so to are the specific risks impacting them and the tools available to manage them.

Last year, the campaign's focus was on children. For 2017, the focus will be on **Appealing to Adults**. So get ready to browse through the <u>www.agsafetyweek.ca</u> <u>resources</u>, tweet your support, and declare to your friends and followers that you and yours are an <u>AgSafe Family</u>.

#### **Additional Resources**

-<u>Farm Safety Walkabout</u> -<u>Toolbox Talks for Producers</u> -<u>Create a General Policy Statement for your Farm</u> -<u>Safe Ag Tasks for Children</u> -<u>Keep Children Safe on the Farm</u> -<u>The Flip Side of ATV's</u>

### <u>DID YOU KNOW?</u>

The Special Areas Ag Service Boards donate funds to provide farm safety training to elementary students within our municipal borders. In 2016 there were 764 kindergarten to grade 6 students from 14 rural schools that received in-class presentations from the Alberta Farm Safety Center. You can see the Alberta Farm Safety Center Annual Report<u>here</u>.



# Notes from the Field – March 2017

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**Control Methods**—Ground squirrels can be controlled by shooting, trapping or gassing, but these methods are time consuming and usually effective only in small areas. A gassing technique using liquid foam forced down the burrow under

pressure, drowning the ground squirrel works well in small areas where other techniques are difficult to use. The product is called EXIT and is available through commercial applicators. Aluminum phosphide called "Phostoxin" (a poison) is a new gassing control method recently registered, and is showing good

control results. Applicators must have an exterior rodent control licence to apply the product, and caution must be exercised to ensure safety as the gas is toxic to all life forms. One to two pellets are placed in each active burrow, and the entrance filled in with dirt. All label restrictions must be followed closely. Baiting should be done when the ground squirrels are underground for the day, which usually means baiting late in the day after Richardson ground squirrel activity has ceased. **2% Liquid Strychnine**—The raw product for strychnine is imported from overseas, with supply shortages leading to the illegal stockpiling of the poison. Additional risks from this include storing it on farm where it has the potential to poison anything and You do not have to contact your Ag Fieldman in order to purchase the strychnine, just request it from your local District Office. If you have questions or concerns, don't hesitate to call your local Ag Fieldman.

#### **STRYCHNINE NOW AVAILABLE**

2% Liquid Strychnine, a popular gopher poison, is available for sale from your local Special Areas Office (located in Consort, Hanna and Oyen) from March 1 to August 1, 2017.

anyone that ingests it. To prevent this from happening, the basic purchasing plan for 2% Liquid Strychnine is based on the supply and demand of the product and is up to the discretion of the local Agricultural Fieldman.

Currently, you may purchase <u>up to one</u> <u>case</u> (24 bottles), with an <u>additional one</u> <u>case</u> (24 bottles) TWO WEEKS LATER, <u>while supplies last.</u> Strychnine is available on a first come, first serve basis. Cases will <u>not</u> be held on your behalf.

The best time to use strychnine is in the spring before green vegetation is available as strychnine is mixed with grain for consumption by the ground squirrels, and are less likely to

consume grain when lush green plants are available. The optimal application time for strychnine is fast approaching in the Special Areas.

If using strychnine,

use caution and be aware all dead carcasses must be retrieved and disposed of to prevent secondary poisoning.

### Do You Know a Cattlemen's Young Leader?

The <u>Cattlemen's Young Leaders</u> development program is <u>accepting online</u> <u>applications for mentorships until March</u> 31, 2017.

This program from the <u>Canadian Cattlemen's</u> <u>Association</u> gives young beef leaders from 18-35 years of age an opportunity to increase their industry knowledge and have a mentor of similar interests. A travel budget is provided to allow attendance at conferences, workshops and international beef events.

In 2016, Special Areas was proud to have two individuals recognized—Nicole Viste and

Jesse Williams. Nicole was paired up with Tim Hardman, the beef director the World Wildlife Fund US, based out of Kansas. Nicole and Tim are focusing on prairie conservation and environmental stewardship within the beef industry. Jesse's mentor is Lethbridge area feedlot owner Ryan Kasko. Their focus is economic beef production, risk mitigation, using technology on the ranch and vertically integrated operations.

The program will choose 24 semi-finalists to attend the 2<sup>nd</sup> Annual <u>Canadian Beef Industry</u> <u>Conference</u> August 15-17<sup>th</sup>, 2017. After round table discussion, 16 finalists are selected.



If you are interested, applying today at <u>www.cattelemensyoungleaders.com</u> Mentorships are awarded to any individual wanting to be an ambassador for beef production, regardless of their role currently in the industry. For more information you can contact the CYL youth leadership coordinator, <u>Emily Ritchie</u>.



# Notes from the Field — March 2017

### Winter Feeding on Native Rangelands—What's the Impact?

#### Have you ever considered the effects of your winter feeding sites on the area's established vegetation?

Whether you are feeding on crop stubble, perennial forages or native prairie, animal traffic and manure build impact existing soil and vegetation conditions.

Did you know that approximately 75-90% of the nutrients consumed by grazing animals are cycled back into the soil through manure and urine? When it comes to bale grazing, studies have shown perennial forages with at least one species of rhizomatous grass are your best option for recovery of the feeding site and nutrient use from manure. If you are rolling out bales or using a processor, both stubble and tame pasture will benefit from winter feeding sites. A simple harrow in the spring can help to more evenly distribute nutrients from the leftover litter and manure for even further benefit. Most tame forages are fairly hardy to winter traffic, but compaction of snow, icing over and plant damage can lead to winterkill of some of the more sensitive species such as alfalfa. Leaving at least 6" of stubble can help to alleviate some of these concerns.

When it comes to winter feeding sites on native prairie, avoidance is strongly advised. The soils of native rangelands making up the Northern Great Plains took between 5,000-10,000 years to develop. Over this time, a natural ecosystem formed in which nutrient levels are in equilibrium with the soil, the vegetation, grazing animals and climate. Additional nutrients from the manure and urine at a feeding site can cause a shift in the ecosystem's balance, leading to a change in species composition.

Maintenance of biodiversity of native species is a priority on lease land, so winter feeding sites with a visible shift in species will negatively impact a rangeland health assessment. In the dark brown soil zone (see map) this shift causes non-native, invasive species such as smooth brome, Kentucky bluegrass and crested wheatgrass to move in. In the drier brown soil zone, often you see a shift towards a monoculture of Western Wheatgrass and annual weeds at winter feeding sites. Although both non-native and native species in either soil zones can be productive grasses when adequate nutrients and moisture are available, they are less productive and less palatable than native species in average or drought conditions.

Imbalance in the nutrient equilibriumleading to species change-is the largest



concern related to feeding bales on native prairie range. Other stewardship concerns include the adverse effect on solonetzic soils from the salt content present in manure. These soils are the most common soils throughout the Special Areas, and will have reduced productivity when high levels of salt are deposited—ie: winter feeding sites.

Litter also plays a fundamental role in the maintenance of healthy range, providing insulation to keep the soil temperatures more consistent and to help preserve moisture. Winter feeding sites can lead to this layer of litter being greatly reduced, which over time can also be a factor in a species shift. On the other end of the spectrum, when excess feed litter is left (such as with bale grazing), extra buildup leads to the desirable plant species being choked out, and the resulting cooler ground temperatures lead to brome encroachment.

If wintering on native range continues to be your best option, there are other options besides feeding bales to look at. Native grass species often hold their nutrient value considerably well throughout the winter, so they can be left un-grazed during the summer months and stockpiled for winter grazing. Some species, such as Sand Grass and Plains Rough Fescue, are actually more palatable during the winter months, and will be better utilized if grazed after a killing frost.

If you are interested in more information or resources about rangeland management, contact Special Areas Agrologists at (403) 854-5600.



## Notes from the Field — March 2017

## **Upcoming Ag Events in the Special Areas**





#### Your Agriculture Fieldmen

JESSE WILLIAMS

#### DON HOGAN



(403) 854-5625/(403) 854-1114



(403) 664-3618/(403) 664-5585





(403) 577-3523/(403) 575-5525

#### We offer support for programs including:

- Plant identification & noxious weed control
- Grazing management & strategies
- Pest management & controls
- Growing Forward 2
- Environmental Farm Plans
- Shelterbelt programs & planning
- Animal predation concerns
- Equipment rentals including RFID tag readers & pest traps
- Concerns related to Soil Conservation Act, Weed Control Act, Agricultural Pest Act, Animal Health Act, and other legislation.

Special Area No. 2	Special Area No. 3	Special Area No. 4
Hanna District Office	Oyen District Office	Consort District Office
(403) 854-5600	(403) 664-3618	(403) 575-3523

For more information, go to www.specialareas.ab.ca or visit us on our Facebook page and Twitter @SpecialAreas.