

Gopher Control in the Special Areas

By: Jesse Williams

Richardson's Ground Squirrels, commonly known as gophers, are a popular topic of conversation this crop year. A strong population noted in Special Areas 2 and 4 is causing concern for agriculture producers and may be having an impact on crop/pasture returns. Reports of having to re-seed crop land where gophers made a significant reduction in yield are being told within our borders.

While producers are now frantically looking for baiting options, the ideal time to control gopher populations has passed. Short term control of severe populations may be achieved, however you should be making a long term plan for early spring control in 2017. Scroll down to **Control Methods** and **Strychnine Baiting** for more information.

Gopher Biology

Gophers eat a wide variety of broadleaved and grass species, and when their populations become large enough, can result in competition for forage with livestock. Lands that are in no-till or minimum tillage systems may see increased gopher pressure. In addition to the crop and rangeland feeding, their soil mounds can be 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 large holes that badgers cause can be dangerous to livestock, wildlife and cause additional machinery issues.

The 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 the spring due to weather conditions, predation, drowning, etc. One litter is born from a 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.

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, which actually drowns the ground squirrel, works quite well in small areas of squirrel infestation where other techniques are difficult to use. The product is called EXIT and is available through commercial applicators.

The poison aluminum phosphide "Phostoxin" is a new gassing control method just recently registered and has shown some 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.

Strychnine Baiting

2% Liquid Strychnine, a popular gopher poison, is available for sale from your local Special Areas Office (located in Consort, Hanna and Oyen). The raw product for the strychnine is imported from overseas, and supply has been an issue in the past which led to people illegally stockpiling the poison and storing it on farm where it has the potential to poison anything/ and anyone that ingests it. To prevent this from happening the basic purchasing plan for 2% Liquid Strychnine is as follows (this practice is based on the supply and demand of the product and is up to the discretion of the local Agricultural Fieldman): You may purchase up to one case (24 bottles), with an additional one case (24 bottles) **TWO WEEKS LATER, while supplies last.** You do not have to contact your Ag Fieldman in order to purchase the strychnine, simply just request it from the office staff. However, if you have questions or concerns, don't hesitate to give your Ag Fieldman a call. Strychnine is available on a first come, first serve basis. Cases will not be held on your behalf.

The best time to use strychnine is in the spring before green vegetation is available. Because strychnine is mixed with grain for consumption by gophers, they are less likely to consume grain when lush green plants are available. The optimal application time for strychnine has passed in the Special Areas. If using strychnine, adjust your expectations for short term control of severe populations, but not long term. If you are noticing high populations this year, expect to formulate an early spring control plan for 2017.

When baiting with grain and strychnine, safely place about one tablespoon of bait in each burrow. Each burrow will usually have several entrances so you do not need to bait every hole. Baited entrances do not need to be closer than 8-10m apart.

If using strychnine be aware that all dead carcasses must be retrieved and disposed of to prevent secondary poisoning of pets and wildlife.

Plan for 2017

Baiting with strychnine should be done in the spring prior to lush green vegetation, but after the females have emerged. In order to determine the population's demographics it is suggested to shoot 10 or more gophers in the spring and determine their sex. Do not start baiting until 50-75% of the population is females. If you bait too early, only males will be effected.

Try to only purchase as much strychnine as you will consume in one year. While the potency of the poison is not effected over time, the taste will change. Older supplies of strychnine will be less desirable to the gopher population.

More Questions?

Ask your local Agricultural Fieldman:

Special Areas 2
Jesse Williams
Office: (403) 854-5624
Cell: (403) 854-1114

Special Areas 3
Don Hogan
Cell: (403) 664-5585

Special Areas 4
Justine Simpson
Office: (403) 577-3523