

Richardson Ground Squirrels

They are small. They are frequently seen running around your pasture or rangeland. They go by many names. Some of those names have a curse word in front of them. I am speaking about the Richardson Ground Squirrel. These mid-sized rodents have a yellowish to grayish color and a tail about a quarter the size of their bodies, which are about seven to 10 inches long. These are perhaps the most common "squirrels" we see east of the Continental Divide. Extension offices across the state get calls each year about these critters.

Richardson Ground Squirrels are one of the many rodents in Montana. They are somewhat different from other rodents in that they hibernate. In early spring (about February or March in some areas around here), they emerge from hibernation and begin their breeding season. The males develop breeding territories and await the emergence of the females. Young are born from late April to early May. These are what most folks see scurrying around now. Richardson Ground Squirrels have one litter each year consisting of 6-7 small forage-eating balls of joy. By the end of the summer, these young mammals are almost adult-sized.

The greatest concern these rodents cause is not only their ability to reduce grass availability by feeding on grasses, forbs, and legumes, but in diminished carrying capacity of livestock. As squirrels make holes and develop colonies, the amount of grass or forage that cattle or sheep can graze is reduced by up to half. Squirrels especially like green, water-rich plants, as well as any seeds they can find.

As the cool season grasses dry down, adults - especially males - begin to hibernate. This can be as early as the first part of July. Adolescents are active as long as the weather is good, often until November. Their hibernation is similar to larger mammals, such as bears. They reduce their heart rate and breathing and also their metabolism. Like bears, their bodies survive off of the fat reserves they have accumulated by eating your pasture all summer long. They are considered one of the most economically significant rodents in Montana.

There are many control methods available for this squirrel. Due in large part to population explosions, you must control upwards of 90% of the population to be effective. Perhaps the most satisfying method for many is lead poisoning from the barrel of a rifle. Though extremely fulfilling, this control method is not very effective. Another method with greater impact is crop rotation or some form of tillage, even light tillage. Changing soil dynamics discourages colonies from populations from establishing housing.

Burrow fumigants and grain baits are the two most common methods for control. Burrow fumigants, such as an ignitable gas cartridge, are not a restricted use pesticide and can be used by anyone, unless municipal restrictions apply. I would encourage you to check this first if you live in town. They are essentially a smoke grenade. You pull the pin, throw it down the holes, and cover them with soil. This method is effective on Richardson Ground Squirrels, but not on some of the other rodents due to their tunnel systems.

Grain baits are simply some type of grain that has been treated with one of several chemicals. This is perhaps the most effective method for control of this squirrel. Zinc phosphide and Rozol are currently the only two rodenticides labeled for use in Montana and are both restricted use. As with all restricted use pesticides, read the label carefully. Grain baits are simply a tablespoon of treated grain placed at the entrance holes. Two applications, three to four days apart, are recommended in the spring when you see the squirrels running around. Do it before early July when the breeding adults begin to hibernate. You may wish to pre-bait. This is when you put some grain out that is not treated to get them used to eating it. Don't pile the grain, but rather spread it out over a few inches.

As you are out this spring, consider how big of an impact the Richardson Ground Squirrel is making on your rangeland, pasture, and hay fields. You must be diligent in your control methods of this rodent to be effective. If you'd like more information, the Montana Department of Agriculture has a great information bulletin called, "The Richardson Ground Squirrel, It's Biology and Control". It can be found at <http://agr.mt.gov/weedpest/pdf/VertBulletins/RichardsonGrSq.PDF>, or by contacting the Montana Department of Agriculture at (406) 444-5400. Dan Sullivan in Helena and Monty Sullins (406-652-3615) in Billings are both specialists

for the department. You can also contact your local Extension office for further details. If you'd like, you could contact me here at the Teton County Extension office at 466-2491 for more information. Good luck!