

Integrated pest management

An integrated pest management system should be used to control Richardson's ground squirrel populations on your property. Integrated pest management uses a mix of methods to control pests while protecting your crop, livestock and the environment.



Chemical
(last resort)



Biological
(natural enemies, beneficials)



Physical / Mechanical
(tilage, traps, barriers)



Cultural
(crop rotation, resistant varieties, sanitation)

Chemical controls, like strychnine, may be part of that system, but should only be applied when other methods are insufficient, and always as a last resort

Strychnine application is recommended for early spring (March 1 to June 15) before green-up, or late summer (July 15 to September 1) after vegetation dies down.

STOP



Once the decision to use strychnine has been made, applicators should no longer encourage biological controls. Encouraging predation could result in secondary poisoning of non-target species.

FURTHER INFORMATION

Learn more at alberta.ca/gophers

Contact Fish and Wildlife Stewardship Staff for assistance with identifying non-target species or to discuss species at risk you may find on your property.

Athabasca - Abbey Wilson

Email: epa.athabascawildlife@gov.ab.ca

Phone: 780-675-2419

Bonnyville - Brett Sarchuk

Email: brett.sarchuk@gov.ab.ca

Phone: 780-427-3574

Cochrane - Brett Boukall

Email: brett.boukall@gov.ab.ca

Phone: 403-875-0936

Edson - Kevin Downing

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Phone: 780-723-8244

Lethbridge - Stefano Liccioli

Email: stefano.liccioli@gov.ab.ca

Phone: 403-795-4013

Medicine Hat - Joel Nicholson

Email: joel.nicholson@gov.ab.ca

Phone: 403- 529-3680

Red Deer - Brett Boukall

Email: brett.boukall@gov.ab.ca

Phone: 403-875-0936

Rocky Mountain House - Brett Boukall

Email: brett.boukall@gov.ab.ca

Phone: 403-875-0936

Spruce Grove - Delaney Frame

Email: delaney.frame@gov.ab.ca

Phone: 780-960-8603

Whitecourt - Fauve Canavan

Email: fauve.canavan@gov.ab.ca

Phone: 780-778-7291

Learn more about the species protected under the federal *Species at Risk Act* at: canada.ca/en/services/environment/wildlife-plants-species/species-risk.html

Species at risk and strychnine use

Know who's nearby before you apply

Strychnine is approved for use to help control Richardson's ground squirrels. This approval comes with strict mandatory requirements designed to ensure safe use and protect other species in the treatment area.



Poison is not picky

Be sure to follow all label directions to minimize non-target mortalities and mitigate risk to species at risk that may be present near treatment areas.

Strychnine is highly toxic and can harm any animal that encounters the bait or poisoned animals. Proper application can help protect domestic and wild animals that may be present, forage on, or move through your property.



Risks to species at risk

Watch out for Alberta's most sensitive species when applying strychnine. The species included below are either protected under the provincial *Wildlife Act*, the federal *Species at Risk Act* or both.

Burrowing owls, Swift foxes, and Ferruginous hawks are closely associated with Richardson's ground squirrels and are at higher risk of secondary poisoning (i.e., consuming poisoned Richardson's ground squirrels).



Burrowing owl



Swift fox



Ferruginous hawk

Bullsnares, Prairie rattlesnakes, Loggerhead shrikes, Prairie falcons, Short-eared owls, Badgers and other predator species are also at risk of secondary poisoning if they consume Richardson's ground squirrels or other non-target species, like mice and insects.



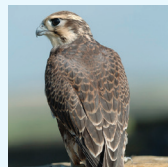
Bullsnares



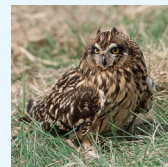
Prairie rattlesnake



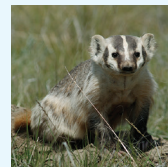
Loggerhead shrike



Prairie falcon

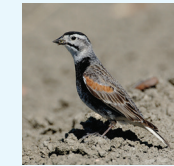


Short-eared owl



Badger*

Ground-foraging species, such as Chestnut-collared Longspur, Thick-billed Longspur, Greater sage-grouse, Sprague's pipit and Grizzly bears may be directly poisoned if they consume strychnine bait used for ground squirrel control.



Thick-billed longspur



Chestnut-collared longspur



Grizzly bear



Greater sage-grouse



Sprague's pipit

Ord's kangaroo rat is a medium-sized rodent with a long tail. Though its typical habitat rarely overlaps that of Richardson's ground squirrels, Ord's kangaroo rat burrows closely resemble those of ground squirrels, putting them at risk of accidental strychnine application within their environment.



Ord's kangaroo rat

*Alberta's *Wildlife Act* and Wildlife Regulation list the American Badger as a fur bearing animal that may be harvested by individuals holding a fur management licence. Residents on private land and municipal pest control officers may also harvest badgers. However, the population of American Badgers in Alberta is listed as special concern under the federal *Species at Risk Act* and unintended mortalities that could contribute to further population declines are undesirable.