April 24, 2026

Minister Ron Kostyshyn
165 Legislative Building
450 Broadway
Winnipeg, MB R3C 0V8

Via email

Dear Minister Kostyshyn,

Re: Requests to allow the use of strychnine in Manitoba

I write to you on behalf of Animal Justice and the Manitoba Eco-Network. We are deeply concerned by recent media reports that some producers in the province have asked for permission to use strychnine to kill ground squirrels.[1] These requests follow the federal government's troubling decision to temporarily allow the use of this highly toxic, indiscriminate poison to kill Richardson's ground squirrels in Alberta and Saskatchewan. Using strychnine to kill ground squirrels is incredibly irresponsible and poses risks to both animal welfare and the environment. We urge you to reject these requests and instead encourage producers to explore humane, more environmentally responsible options.

I. Health Canada Banned Strychnine Products

In March 2024, Health Canada announced a complete ban on strychnine use in Canada.[2] The decision followed extensive scientific analysis, as well as consultations with the public and stakeholders. The full ban followed Health Canada's 2020 decision to cancel the registration of products containing strychnine to kill ground squirrels – a use that Health Canada acknowledged poses even greater risks to the environment than predacide uses of strychnine, which were not banned until 2024.

[1] See, e.g. https://www.cbc.ca/news/canada/manitoba/strychnine-ground-squirrels-9.7149401; https://www.manitobacooperator.ca/news-opinion/news/manitoba-farmers-want-in-on-strychnine-exception/

[2] https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/decisions-updates/reevaluation-decision/2024/predacide-uses-strychnine-sodium-monofluoroacetate.html

When Health Canada decided to phase out the registration of strychnine used to kill ground squirrels in 2020, Alberta and Saskatchewan were the only provinces where strychnine was used. Producers in Manitoba and all other provinces have long abandoned this cruel poison and have a demonstrated ability to rely on other approaches to ground squirrel cohabitation and management. Based on data and information from pesticide manufacturers, published scientific reports, and other regulatory agencies, Health Canada concluded that rodenticidal strychnine products pose unacceptable risks to non-target animals, including species at risk. Health Canada's Pest Management Regulatory Agency (PMRA) found that non-target animals consume treated bait that has been ejected from burrows, as well as the bodies of poisoned Richardson's ground squirrels and other animals. Thousands to tens of thousands of songbirds alone were being killed each year by strychnine intended to kill ground squirrels in Saskatchewan.[3]

Despite this clear evidence of harm to animals and the environment, on March 30, 2026, the federal Ministers of Health and Agriculture and Agri-food released a joint statement authorizing "a time-limited and controlled emergency registration" of strychnine in Alberta and Saskatchewan.[4]

II. Strychnine is Inhumane

Symptoms of strychnine poisoning are some of the most painful of any known toxic substance. Because strychnine poisoning is extremely painful and prolonged, it is considered an inhumane killing method by organizations including the Canadian Veterinary Medical Association, the Canadian Council on Animal Care, the American Veterinary Medical Association, and the American Society of Mammalogists.[5]

Once ingested, strychnine is absorbed into the bloodstream, causing uncontrollable muscle contractions and convulsions.[6] Early signs of strychnine poisoning include nervousness, rapid breathing, drooling, tenseness, stiffness, difficulty walking, and, occasionally, vomiting. Victims experience severe tetanic seizures as well as an extreme rigidity, causing animals to pull their

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[3] McKinnon, D. & P. Mineau. 2004. Effectiveness and non-target impact of zinc phosphide and various concentrations of strychnine in controlling Richardson's Ground Squirrels in Saskatchewan. Unpublished Report.

[4] https://www.canada.ca/en/health-canada/news/2026/03/statement-from-the-minister-of-health-and-the-minister-of-agriculture-and-agri-food-on-strychnine-in-alberta-and-saskatchewan.html. Note that a large coalition of national animal and environmental protection groups have expressed strong opposition to this decision (see enclosed letter).

[5] See, e.g. Canadian Veterinary Medical Association (https://www.canadianveterinarians.net/about-cvma/latest-news/concern-over-temporary-lifting-of-ban-on-strychnine/); Canadian Council on Animal Care (https://ccac.ca/Documents/Standards/Guidelines/CCAC_Guidelines-Wildlife.pdf at p67); American Veterinary Medical Association (https://www.avma.org/resources-tools/avma-policies/avma-guidelines-euthanasia-animals); American Society of Mammalogists (https://www.mammalsociety.org/uploads/Sikes%20et%20al%202011.pdf). See also: Proulx, Brook, Cattet, and Paquet. 2015. Poisoning wolves with strychnine is unacceptable in experimental studies and conservation programmes. Environmental Conservation 43:1-2.

[6] Patocka, Jiri "Strychnine" in Gupta, Ramesh C. ed, *Handbook of Toxicology of Chemical Warfare Agents*, 2nd ed, Chapter 17 (2015, Elsevier Inc.) pp.215-222; Nordt, Sean Patrick, "Strychnine" in Olson, Kent R. ed, *Poisoning and Drug Overdose*, 6th ed, Chapter 145 (202, The McGraw-Hill Companies Inc.).

neck and head back in a high arch with their front legs stiffened to point forward. They often display a 'sardonic grin' caused by spasms of the facial muscles and jaw. During these early stages, the animal remains conscious.

As more strychnine is absorbed into the animal's bloodstream, seizures increase in severity and length, the animal's body temperature rises, and their breathing is impaired due to spasms of the diaphragm and respiratory muscles. Death eventually occurs from exhaustion or suffocation during seizures. Prolonged convulsions before death can cause hemorrhages of the heart and lungs, as well as cyanotic congestion from low tissue oxygenation. Death can take anywhere between one and 24 hours or more, depending on the dose. Of course, over this period of time poisoned animals can travel vast distances, increasing the risk of secondary poisoning given that the bodies of poisoned song birds and other animals are scattered across vast distances.

Poisoning any animal with strychnine is inhumane and causes unnecessary suffering. Ground squirrels play an important role in grassland ecosystems, with their burrows providing important services for plants, insects, birds, and mammals.[7] While their presence may be troublesome to some, they are not properly considered "pests". Humans living and farming in grassland ecosystems should be required to treat these animals in a humane manner.

III. Strychnine Poses Significant and Irreversible Risks to the Environment

Scientific studies reviewed by the PMRA in 2020 show that the application of strychnine baits to kill Richardson's ground squirrels results in the presence of the bodies of poisoned ground squirrels on the surface near the site where the baits were applied. Non-target animals then scavenge these carcasses, resulting in secondary poisoning of predators and scavengers. Based on conservative estimates, the application of these baits on 60 hectares of land results in the bodies of approximately 221 dead ground squirrels on the surface, available to be scavenged by other organisms.[8] Repeated applications and applications at multiple sites could leave hundreds or even thousands of poisoned ground squirrel bodies available to hawks, eagles, coyotes, foxes, and other animals. Scavenging of these bodies then results in secondary poisonings of a significant number of other animals.

Rodenticidal strychnine also poses serious risks of primary poisoning of non-target animals given that when strychnine baits are placed in burrows, baits are often ejected, posing a risk to non-target organisms due to a significant number of small concentrated areas of strychnine-treated grain on the soil surface.[9] Deer mice, songbirds, migratory birds, and other

[7] See, e.g. Levi J Newediuk et al. "Burrowing Richardson's ground squirrels affect plant seedling assemblages via environmental but not seed bank changes" Current Zoology (2019).

[8] Bourne, J. B., Roy, L. D., Hiltz, M., Merrill, P. N., & Hoffmann, W. 2002. Strychnine baits to control Richardson's ground squirrels: an old story, a new twist. In Proceedings of the Vertebrate Pest Conference (Vol. 20, No. 20, pp. 11-16).

[9] McKinnon, D., Wilk, C., & Mineau, P. 2001. Potential for primary poisoning of non-target species from the use of strychnine-treated wheat bait to control Richardson's Ground Squirrels. Unpublished Report; Tansey, J. A. 2019.

animals who consume the bait are killed, with their bodies then presenting another means by which other non-target organisms can suffer secondary poisoning. As mentioned above, thousands of songbirds alone were killed each year in Saskatchewan when rodenticidal strychnine was being used.[10] The bodies of these poisoned songbirds would have then been a source of further secondary poisonings. Strychnine used as a rodenticide has contributed to the endangerment of the long-tailed weasel, and local extirpation of the American badger.[11] The use of poisons such as strychnine to kill ground squirrels has also had an adverse impact on populations of burrowing owl and swift fox, thousands of songbirds, and many other species.[12]

As acknowledged by the PMRA, reported target and non-target poisoning counts are likely underestimated because (a) people conducting searches of fields miss some bodies of poisoned animals, and (b) scavengers are quick and effective at removing dead animals from the surface of fields, removing many poisoned bodies before people attend a site to count them. Non-target animals can then travel great distances before the symptoms of secondary poisoning take effect, making it impossible to determine the number of non-target animals impacted by the use of strychnine to kill Richardson's ground squirrels.

There have also been numerous documented incidents involving the death of dogs from strychnine poisoning. Media reports suggest that at Saskatchewan's Western College of Veterinary Medicine alone, there were approximately 6-7 cases of dogs poisoned by strychnine each year when rodenticidal strychnine products were in use in that province.[13]

Based on the unacceptable environmental risks of products containing strychnine used to kill Richardson's ground squirrels, the PMRA concluded as follows in 2020:

> As a result of repeated bait applications over a relatively large area during a full-scale RGS control program with strychnine, the level of exposure is expected to be high. Potential mitigation measures, such as placing the bait deeper into the burrow or covering the burrow, have been shown to be ineffective at reducing the number of poisoned ground squirrels available on the surface or the frequency of bait ejections from treated burrows. No further label improvements or additional mitigation measures have been identified

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Evaluation of Strychnine Baiting on Richardson's Ground Squirrel, Urocitellus richardsonii, Control and Effects on Non-Target Organisms. Saskatchewan Ministry of Agriculture. 26 pages.

[10] McKinnon, D., Wilk, C., & Mineau, P. 2002. Potential for secondary poisoning from the use of 2% strychnine-treated wheat bait to control Richardson's Ground Squirrels. Unpublished Report.

[11] Proulx and MacKenzie, 2012. Relative abundance of American badger (*Taxidea taxus*) and red fox (*Vulpes vulpes*) in two landscapes with high and low rodenticide poisoning levels. Integrative Zoology 7: 41-47.

[12] Hjertaas, Brechtel, De Smet, Dyer, Haug, Holroyd, James, and Schmutz. 1995. National recovery plan for the Burrowing Owl. Report No. 13. A report prepared for the Committee for the Recovery of Nationally Endangered Wildlife. Canadian Wildlife Federation. 33 pp, at 17, 26; Swift fox (Vulpes velox) COSEWIC assessment and status report 2009; PMRA. 2005. Proposed Acceptability for Continuing Registration document PACR2005-08, Re-evaluation of Strychnine. Catalogue number: H113-18/2005-8E (H113-18/2005-8E-PDF).

[13] https://www.cbc.ca/news/canada/saskatchewan/health-canada-considers-strychnine-ban-gophers-1.4771402

that could reduce the potential exposure to non-target organisms to a level that would be considered acceptable. Therefore, based on a scientific evaluation of the available data, the environmental risks associated with the use of strychnine to control RGS are not considered to be acceptable.[14]

IV. Alternatives Are Available

It is worth noting that an integrated pest management approach including monitoring, preventative cultural practice, and humane control methods which do not cause injury or death to Richardson's ground squirrels can, and should, be used to maintain Richardson ground squirrel population densities at acceptable levels without the use of strychnine or other poisons.[15] As farmers and producers in Manitoba have demonstrated for years, strychnine use is unnecessary.

V. Conclusion

Manitoba should not follow the irresponsible lead of Alberta and Saskatchewan by allowing producers to use strychnine to kill ground squirrels. In the event that the Minister does consider allowing the use of strychnine in this province, we respectfully request that he consult animal protection groups, environmental groups and local experts before rendering a decision.

Thank you for your attention to this matter. Please do not hesitate to contact us at kmitchell@animaljustice.ca if we can be of further assistance to your office.

Sincerely,

Kaitlyn Mitchell
Director of Legal Advocacy, Animal Justice

James Beddome
Executive Director, Manitoba Eco-Network

CC: Minister Mike Moyes
Deputy Minister of Agriculture Scott Sinclair

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[14] https://www.canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/pesticides-pest-management/decisions-updates/reevaluation-decision/2020/strychnine.html#a1.

[15] See, e.g. Witmer, G. and Proulx, G., 2010. Rodent outbreaks in North America. *Rodent outbreaks: ecology and impacts*, at p253; Calgary Wildlife: https://www.calgarywildlife.org/post/poison-in-the-prairies-the-hidden-costs-of-poisoning-ground-squirrels#:~:text=Rather%20than%20contaminating%20the%20prey,more%20resilient%2C%20not%20more%20fragile.&text=For%20assistance%20with%20injured%20wildlife,at%20403%2D214%2D1312.