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Testimony in Support
Senate Bill 26-062—Concerning Certain Rodent Control Products in the State
Before the Colorado Senate Agriculture and Natural Resources Committee

February 18, 2026

Dear Chair Roberts, Vice Chair Danielson, and the honorable members of the Senate Agriculture and Natural Resources Committee:

The Animal Welfare Institute, on behalf of our members in Colorado, strongly supports Senate Bill (“SB”) 26-062, concerning certain rodent control products in the state. The rodenticides and rodent glue traps addressed in this bill pose a danger to people, companion animals, and many of Colorado’s native wildlife species. We respectfully request that you vote in favor of this legislation and pass the bill out of committee.

The Animal Welfare Institute is dedicated to alleviating animal suffering caused by people. We seek to improve the welfare of animals everywhere: in agriculture, in commerce, in our homes and communities, in research, and in the wild. Since 1951, AWI has advanced its mission through strategically crafted policy and legal advocacy, educational programs, research and analysis, litigation, and engagement with policymakers, scientists, industry, educators, other NGOs, the media, and the public. We seek scientifically grounded protections for animals in all settings and robust enforcement of those protections.

SB 26-062 designates first generation anticoagulant rodenticides (“FGARs”), second generation anticoagulant rodenticides (“SGARs”), and nonanticoagulant rodenticides as restricted-use and limited-use pesticides. The bill directs the commissioner of agriculture to promulgate rules that limit the use of SGARs to places with documented rodent activity, with some exceptions; prohibit use in and around single-family residences; and require monitoring of rodent activity. The commissioner of agriculture must also promulgate rules for all types of rodenticides requiring rodent control services to prioritize and document their use of integrated pest management principles, limit the use of toxic rodenticides, and require control services to keep records on rodenticide use. The commissioner of agriculture may adopt rules that allow the temporary suspension of these requirements when necessary to protect “public health, food safety, housing conditions, livestock, agricultural resources, pet animals, wildlife, or the environment.” Additionally, SB 26-062 allows only licensed or registered applicators to buy and

use glue boards (or glue traps), and requires glue boards to be used indoors and to be inaccessible to non-target vertebrate species.

This legislation is a crucial step for Colorado to address the inhumaneness of toxic rodenticides and rodent glue traps, which can cause a painful and prolonged death, and to mitigate the risks these poisons present to humans, companion animals, and non-target wildlife, while recognizing that effective, humane, and safer nonlethal alternatives are readily available to manage rodent populations.

I. Death from Toxic Rodenticide Poisoning and Glue Traps can be Painful and Prolonged.

Rodenticides are designed to kill small mammals such as rats, mice, gophers, and ground squirrels. There are three general categories of rodenticides: non-anticoagulant rodenticides, including bromethalin and zinc phosphide; first generation anticoagulant rodenticides (“FGARs”); and second generation anticoagulant rodenticides (“SGARs”), all of which would be restricted under SB 26-062.

A. Anticoagulant Poisons

Both FGARs and SGARs induce death by stopping the liver from recycling vitamin K to make blood clotting enzymes.¹ This causes uncontrolled hemorrhaging throughout the body and eventual mortality.² During the time before death, poisoned animals may experience blood in the urine and feces, labored breathing, weakness, shock, and immobility.³ Due to the metabolic processes involved in vitamin K recycling and blood clotting, there is a lag time between ingestion of the poison and death, which varies between FGARs and SGARs.⁴ All vertebrate species are susceptible to compromised health or death from ingesting anticoagulants.⁵

FGARs, which include chlorophacinone, diphacinone, and warfarin, were developed and marketed beginning in 1950. FGARs generally require an animal to eat multiple doses of bait over several days to accumulate a lethal dose.⁶ SGARs were developed in response to target

¹ Masuda, B. M. et al. (2015). Residue profiles of brodifacoum in coastal marine species following an island rodent eradication. *Ecotoxicology and Environmental Safety*, 113(1), 1. Available at: <http://dx.doi.org/10.1016/j.ecoenv.2014.11.013>.

² *Id.*; Rattner, B. A. et al. (2014). Adverse outcome pathway and risks of anticoagulant rodenticides to predatory wildlife. *Environmental Science & Technology*, 48(15), 8433-8445. Available at: <https://pubs.acs.org/doi/abs/10.1021/es501740n>.

³ Rattner, B. A. and Mastrotta, F. N. (2018). Anticoagulant rodenticide toxicity to non-target wildlife under controlled exposure conditions. USDA National Wildlife Research Center - Staff Publications. 2103. Available at: https://link.springer.com/chapter/10.1007/978-3-319-64377-9_3.

⁴ California Department of Pesticide Regulation. (2013). Memorandum: Second Generation Anticoagulant Rodenticide Assessment.

⁵ Regnery, J. et al. (2019). Rating the risks of anticoagulant rodenticides in the aquatic environment: a review. *Environmental Chemistry Letters*, 17(1), 215-240. Available at: <https://link.springer.com/article/10.1007/s10311-018-0788-6>.

⁶ U.S. Environmental Protection Agency (1998). Reregistration Eligibility Decision (RED) Rodenticide cluster.

rodents' perceived resistance to the FGAR warfarin. SGARs, which include brodifacoum, bromadiolone, difethialone, and difenacoum, are single-dose anticoagulants that can deliver a lethal level of toxin in one feeding, with death resulting five to seven days later.⁷ Although SGARs were developed in response to a perceived resistance to FGARs, it is unclear whether resistance exists and to what extent it presents a problem because there have been no systemic studies of FGARs resistance in the United States for nearly thirty years.⁸ Furthermore, "resistance" to a rodenticide could mean that as little as five percent of the population is resistant.⁹ Thus, it is unclear whether SGARs are actually more effective than FGARs, and if so, how much more effective they are.

B. Bromethalin Poison

Bromethalin has been registered with the EPA since 1984.¹⁰ Bromethalin causes the cells of the central nervous system to expand, leading to cerebral edema (swelling of the brain).¹¹ A lethal dose leads to paralysis followed by death.¹² Signs of toxicosis may not occur for eight to 12 hours to several days once ingested. An animal that ingests a lethal dose may suffer for a week or more before death.¹³ It is a single-dose rodenticide,¹⁴ which means that it is intended to kill immediately after one-time ingestion.¹⁵ In the continental United States, bromethalin is used primarily to kill mice, rats, and meadow voles around infrastructure.¹⁶

C. Zinc Phosphide Poison

Zinc phosphide, first registered in 1947,¹⁷ is distributed as a grain bait, dust, pellet, or powder.¹⁸ It is intended to kill many small mammal species such as mice, jack rabbits, and

⁷ U.S. Environmental Protection Agency. (2008). Risk Mitigation Decision for Ten Rodenticides. Available at <https://www.regulations.gov/document?D=EPA-HQ-OPP-2006-0955-0764>.

⁸ *Id.*

⁹ Chiri, A. (2006). Memorandum: Analysis of Rodenticide Bait Use. U.S. Environmental Protection Agency, 15.

¹⁰ U.S. Environmental Protection Agency. (1998). Reregistration Eligibility Decision (RED) Rodenticide cluster.

¹¹ Roder, J. D. (2001). *Veterinary Toxicology*, 84, 106-108, 123.

¹² *Id.*

¹³ Dorman, D. C. (2001). Bromethalin. *Small Animal Toxicology* (ME Peterson; PA Talcott, eds.). B. Saunders, Philadelphia, Pa, 435-444; Roder, J. D. (2001). *Veterinary Toxicology*, 84, 106-108, 123; National Pesticides Information Center. (2016). Rodenticides Topic Fact Sheet. Oregon State University. Available at: <https://npic.orst.edu/factsheets/rodenticides.pdf>; Pasquale-Styles, M. A. et al. (2006). Fatal bromethalin poisoning. *Journal Forensic Sciences*, 51(5), 1154-1157. Available at: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1556-4029.2006.00218.x>.

¹⁴ U.S. Environmental Protection Agency. (1998). Reregistration Eligibility Decision (RED) Rodenticide cluster.

¹⁵ Coppock, R. (2013). Advisory: bromethalin rodenticide—no known antidote. *The Canadian Veterinary Journal*, 54(6), 557.

¹⁶ U.S. Department of Agriculture, APHIS-Wildlife Service. (2025). Use of bromethalin in wildlife damage management, Chapter 32, Final. Human Health and Ecological Risk Assessment for the Use of Wildlife Damage Management Methods by APHIS-Wildlife Services.

¹⁷ U.S. Environmental Protection Agency. (2004). Analysis of Rodenticide Bait Use.

¹⁸ *Id.*

burrowing rodents including marmots and ground squirrels.¹⁹ Zinc phosphide is flammable and can spontaneously ignite and explode.²⁰ When zinc phosphide is eaten, it mixes with stomach acid to create highly toxic phosphine gas that is absorbed into the bloodstream. In targeted animals, this damages the lungs, heart, brain, kidney, and liver, leading to mortality.²¹ Poisoned mammals may show signs of “death agony”²² and kick their abdomens for hours and exhibit other abnormal behaviors. Symptoms often start rapidly, less than 15 minutes after ingestion, but death can be prolonged over the course of days.²³

D. Rodent Glue Traps

Glue traps are advertised as nontoxic, but they cause tremendous, often prolonged, pain, suffering, and death to trapped animals.²⁴ A typical glue trap is made from a small tray of plastic, wood, or cardboard coated on the top side with a very sticky, non-drying adhesive.²⁵ The traps may be scented or baited to lure rodents to the trap.²⁶ A rodent that steps on the sticky tray becomes stuck by their feet. When they try to free themselves, other body parts may stick to the glue, and they can lose patches of fur, break bones, or gnaw off their legs in attempt to escape.²⁷ Stressed, trapped animals can become covered in their own



*Garter snakes and several invertebrates caught in glue traps.
Photo by: Richie Graham*

¹⁹ *Id.*

²⁰ *Id.*; Albretsen, J. C. (2004). Zinc phosphide. *Clinical Veterinary Toxicology*. K. H. Plumlee (ed). 456-459.

²¹ U.S. Environmental Protection Agency. (2004). Analysis of Rodenticide Bait Use, Memorandum. September 10. Available at: <https://downloads.regulations.gov/EPA-HQ-OPP-2004-0033-0007/content.pdf>; U.S Environmental Protection Agency. (1998). Zinc Phosphide, Reregistration Eligibility Decision. EPA 738-R-98-006.

²² *Id.* at 8.

²³ *Id.*

²⁴ Branco, A. R. V. et al. (2017). Compassionate conservation: concept and applications. *Archives of Veterinary Science*, 22, 116-30.

²⁵ De Ruyver, C. et al. (2023). Assessing animal welfare impact of fourteen control and dispatch methods for house mouse (*Mus musculus*), Norway rat (*Rattus norvegicus*) and black rat (*Rattus rattus*). *Animal Welfare*, 32, e2. Available at: Available at: <https://www.cambridge.org/core/journals/animal-welfare/article/assessing-animal-welfare-impact-of-fourteen-control-and-dispatch-methods-for-house-mouse-mus-musculus-norway-rat-rattus-norvegicus-and-black-rat-rattus-rattus/544526D4726AF91A238E776B0BAACAEB>; Royal Society for the Prevention of Cruelty to Animals. Undated. Wild Animals and Glue Traps. Available at: <https://science.rspca.org.uk/documents/1494935/9042554/Wild+animals+and+glue+traps+A4+webversion.pdf/03b3f893-12d4-0ef7-3630-f9780be9e96a?t=1553171468473>.

²⁶ Branco, A. R. V. et al. (2017). Compassionate conservation: concept and applications. *Archives of Veterinary Science*, 22, 116-30.

²⁷ *Id.*

excrement and urine.²⁸ If traps are not checked frequently, trapped animals may slowly dehydrate, starve to death, or die from exhaustion or exposure.²⁹ As the photo to the right illustrates, glue traps are indiscriminate and can capture a great variety of small and baby animals—both wild and domestic.³⁰

II. Toxic Rodenticides and Glue Traps Endanger People, Pets, and Wildlife.

Rodents play important ecological roles. However, human food attracts rodents and other small mammals to communities and farms where they can cause damage to infrastructure, eat crops, and transmit diseases.³¹ Exterminating rodents with toxic chemicals, however, is not only deadly to the rodents but also hazardous to humans, particularly children, companion animals, and non-target wildlife. SB 26-062 would help to reduce this risk.

A. Dangers to People

The National Poison Data System[®] documented 8,916 human rodenticide poisoning cases reported in 2024 to regional poison centers in the United States.³² SGARs made up over 33 percent of that total and bromethalin constituted 20 percent of reported cases.³³ Oral ingestion accounts for the majority of exposures, but inhalation, such as by rodenticide factory workers and skin contact and penetration, are additional routes of exposure.³⁴ Young children are at the greatest risk of accidentally ingesting rodenticides.³⁵ Most adult poisonings are by those attempting suicide.³⁶ Homicides, domestic abuse, and drug lacing also account for some human cases of rodenticide poisoning.³⁷ Few cases of human exposure are lethal, but rodenticide exposure can induce illness.

²⁸ *Id.*

²⁹ Wildlife Medical Clinic, College of Veterinary Medicine. 2025. The Good, the Bad, and the Sticky: Breakup with Glue Traps. University of Illinois Urbana-Champaign. Available at: <https://vetmed.illinois.edu/vetmed-wildlife-blog/the-good-the-bad-and-the-sticky-breakup-with-glue-traps/>.

³⁰ Desoky, A. E. A. S. S. (2018). Rodent control strategies in houses. *International Journal of Research*, 4(3), 28-31. Available at: https://www.academia.edu/37360731/Review_Rodent_Control_Strategies_in_Houses.

³¹ U.S. Environmental Protection Agency. (2004). Office of Prevention, Pesticides, and Toxic Substances. Analysis of Rodent Bait Use. U.S. Government Printing Office. Available at: <https://downloads.regulations.gov/EPA-HQ-OPP-2004-0033-0007/content.pdf>.

³² Beuhler, M. C. et al. (2025). 2024 Annual report of the National Poison Data System[®](NPDS) from America's Poison Centers[®]: 42nd annual report. *Clinical Toxicology*, 63(12), 1029-1280. Available at: <https://www.tandfonline.com/doi/abs/10.1080/15563650.2025.2571299>.

³³ *Id.*

³⁴ Tran, M. H., & King, N. C. (2015). Epidemiology and symptomatology of long acting anticoagulant rodenticide poisoning. *Journal of Epidemiological Research*, 2(2), 1.

³⁵ Isackson, B., & Irizarry, L. (2024). Rodenticide toxicity. In StatPearls [Internet]. StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/sites/books/NBK554428/>.

³⁶ *Id.*

³⁷ Tran, M. H., & King, N. C. (2015). Epidemiology and symptomatology of long acting anticoagulant rodenticide poisoning. *Journal of Epidemiological Research*, 2(2), 1.

Symptoms of anticoagulant ingestion largely involve bleeding, which can manifest as blood in the urine, nosebleeds, intestinal bleeding, bruising, or hematoma, while abdominal pain, leg pain, and headache can also occur.³⁸ Bromethalin ingestion can cause fatigue, headache, eye irritation and pain, dizziness, agitation, delirium, altered mental state, skin irritation, nausea, vomiting, diarrhea, and/or other symptoms.³⁹ There is no antidote for bromethalin toxicosis in humans or other animals.⁴⁰ When zinc phosphide exposure via ingestion and inhalation is not fatal, those affected can experience chronic health problems including, though not limited to, weight loss; lower levels of food consumption; reduced body temperature; lower brain, lung, heart, and kidney mass; lung damage; excessive salivation; hydronephrosis (kidney swelling and excess urine); and kidney infections.⁴¹

Additionally, glue traps pose a danger to people. Captured animals may urinate and defecate while stuck in the traps, increasing the risk of disease spread.⁴²

B. Dangers to Companion Animals

In Colorado, 2,125 pets were exposed to toxic rodenticides from 2020–2024.⁴³ All rodenticides slated to be designated restricted or limited use by SB 26-062 pose a danger to companion animals. Companion animals are at risk of accidental poisoning through direct exposure to rodenticides, such as by eating toxic bait, or through secondary poisoning if they eat poisoned rodents.⁴⁴ According to annual reports conducted by the American Society for Prevention of Animal Cruelty (“ASPCA”), the ingestion of rodenticides is consistently among the 10 most common types of poisoning in domestic dogs and cats.⁴⁵ Poisoning of domestic animals by second generation anticoagulants is, unfortunately, a common occurrence.⁴⁶

³⁸ *Id.*

³⁹ U.S. Department of Agriculture, APHIS-Wildlife Service. (2025). Use of bromethalin in wildlife damage management, Chapter 32, Final. Human Health and Ecological Risk Assessment for the Use of Wildlife Damage Management Methods by APHIS-Wildlife Services; Isackson, B., & Irizarry, L. (2024). Rodenticide toxicity. In StatPearls [Internet]. StatPearls Publishing. Available at: <https://www.ncbi.nlm.nih.gov/sites/books/NBK554428/>.

⁴⁰ Coppock, R. (2013). Advisory: Bromethalin rodenticide—No known antidote. *The Canadian Veterinary Journal*, 54(6), 557.

⁴¹ Gervais, J.A. et al. 2010. Zinc Phosphide/Phosphine General Fact Sheet; National Pesticide Information Center. Oregon State University Extension Services. Available at: Available at: <https://npic.orst.edu/factsheets/znpngen.html>.

⁴² Desoky, A. E. A. S. S. (2018). Rodent control strategies in houses. *International Journal of Research*, 4(3), 28-31.

⁴³ American Society for the Prevention of Cruelty to Animals. (2025). pers. comm. Data on pet exposures to rodenticides in Colorado.

⁴⁴ Gupta, R. C. (2018). Non-anticoagulant rodenticides. *Veterinary Toxicology*, 3rd Edition. Elsevier, Inc. pgs. 613-626.

⁴⁵ McLean, M. K. & Hansen, S. R. (2012). An overview of trends in animal poisoning cases in the United States: 2002–2010. *Veterinary Clinics: Small Animal Practice*, 42(2), 219-228. Available at: [https://www.vetsmall.theclinics.com/article/S0195-5616\(11\)00225-7/abstract](https://www.vetsmall.theclinics.com/article/S0195-5616(11)00225-7/abstract); Means, C. & Wismer, T. (2018). An overview of trends in animal poisoning cases in the United States: 2011 to 2017. *The Veterinary Clinics of North America. Small Animal Practice*, 48(6), 899-907.

⁴⁶ Stroope, S. et al. (2022). Retrospective evaluation of clinical bleeding in dogs with anticoagulant rodenticide toxicity—a multi-center evaluation of 62 cases (2010–2020). *Frontiers in Veterinary Science*,

Additionally, companion animals, especially small animals, are also at risk of getting stuck in rodent glue traps.⁴⁷

There are no known specific antidotes for treating bromethalin and zinc phosphide poisoning in companion animals.⁴⁸ Bromethalin poisoning is increasing in cats and dogs.⁴⁹ Corticosteroids can treat the symptoms, but symptoms typically return once the treatment is discontinued.⁵⁰ Gupta (2018), writing in *Veterinary Toxicology*, recommended inducing vomiting and warned that intravenous fluids must be given with care because they can worsen cerebral edema.⁵¹ Zinc phosphide can be highly toxic to domestic animals, including cats and dogs—especially if they have recently ingested food.⁵² Zinc phosphide baits are often flavored or scented to attract rodents, but this can attract companion animals as well.⁵³

C. Dangers to Wildlife

Rodenticides pose a significant threat to non-target wildlife, including birds of prey, carnivores, trout and other fish, and small mammals. In the last two decades, scientists from around the world have detected rodenticides in the bodies of non-target wild animals that consume the poisons directly, scavenge or prey on animals that ingested rodenticides, or use aquatic habitats tainted with rodenticides.⁵⁴ Most research has focused on anticoagulant rodenticides because they are the most widely used form of rodenticides.

9, 879179. Available at: <https://www.frontiersin.org/journals/veterinary-science/articles/10.3389/fvets.2022.879179/full>.

⁴⁷ Desoky, A. E. A. S. S. (2018). Rodent control strategies in houses. *International Journal of Research*, 4(3), 28-31.

⁴⁸ Coppock, R. (2013). Advisory: bromethalin rodenticide—no known antidote. *The Canadian Veterinary Journal*, 54(6), 557; Gupta, R. C. (2018). Non-anticoagulant rodenticides. *Veterinary Toxicology*, 3rd Edition. Elsevier, Inc. pgs. 613-626.

⁴⁹ Klainbart, S. et al. (2025). Bromethalin exposure in dogs and cats: a 14-year retrospective study (2010–2023) from the California Animal Health and Food Safety Laboratory System. *Journal of Veterinary Internal Medicine*, 39(3), e70057. Available at: <https://onlinelibrary.wiley.com/doi/full/10.1111/jvim.70057>.

⁵⁰ Gupta, R. C. (2018). Non-anticoagulant rodenticides. *Veterinary Toxicology*, 3rd Edition. Elsevier, Inc. pgs. 613-626.

⁵¹ *Id.*

⁵² Johnson, G. D., & Fagerstone, K. A. (1994). Primary and secondary hazards of zinc phosphide to nontarget wildlife: a review of the literature. DWRC Research Report Number 11-55-005. U.S. Department of Agriculture, Animal and Plant Health Inspection Service; U.S. Government Printing Office. Washington, DC. pgs. 7-13, 19-21; Gupta, R. C. (2018). Non-anticoagulant rodenticides. *Veterinary Toxicology*, 3rd Edition. Elsevier, Inc. pgs. 613-626.

⁵³ Elbaghdady, H. A. M. & Emara, H. A. (2016). Investigation of acute toxicity effect of zinc phosphide in male albino rat. *International Journal of Research*, 18(3), 452-464.

⁵⁴ *Id.*

1. Anticoagulant Poisoning

In a study on urban coyotes conducted in the Denver metro area in 2013, 100 percent of coyotes tested positive for brodifacoum, a second generation anticoagulant.⁵⁵ Scientists have detected rodenticide exposure in predatory mammals from across the country.⁵⁶ One study conducted in Washington tested the livers of 24 dead mountain lions and 4 dead bobcats.⁵⁷ Nearly 70 percent of the animals tested had at least one anticoagulant poison in their livers.⁵⁸ The researchers collected the carcasses opportunistically; they were the victims of lethal removal due to conflicts, harvest, vehicle collisions, and other causes.⁵⁹ The U.S. Fish and Wildlife Service has also documented rodenticide poisoning in pacific martens in California and Oregon.⁶⁰ A study conducted in Vermont and New Hampshire found 97 percent of the fishers tested had traces of rodenticides in their livers.⁶¹ In Pennsylvania, Facka et al. (2024) found that close to 45 percent of the 265 combined bobcat, fisher, and river otter carcasses tested were positive for anticoagulant poisons.⁶² This study was the first to detect anticoagulant rodenticide exposure in river otters, which are aquatic mammals.

Studies on aquatic environments and fish, including trout, as well as the predators that feed on fish, show that rodenticides can have negative effects.⁶³ For example, anticoagulant rodenticides have been found to cause anemia, hemorrhaging, and mortality under laboratory

⁵⁵ Poessel, S. A. et al. (2015). Anticoagulant rodenticide exposure and toxicosis in coyotes (*Canis latrans*) in the Denver metropolitan area. *The Journal of Wildlife Diseases*, 51(1), 265-268. Available at: <https://jwd.kglmeridian.com/view/journals/jwdi/51/1/article-p265.xml?isSearch=true>.

⁵⁶ Cunningham, S. A. (2025). Spatiotemporal drivers of rodenticide exposure in a mammalian forest carnivore. *Science of the Total Environment*, 982, 179605. Available at: <https://www.sciencedirect.com/science/article/pii/S004896972501246X>.

⁵⁷ Yovovich, V. et al. (2024). Wild felid anticoagulant rodenticide exposure in Washington. *Canadian Wildlife Biology & Management*, 13(2). Available at: <https://cwbm.ca/wp-content/uploads/2024/12/8.-Yovovich-et-al.pdf>.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ U.S. Fish and Wildlife Service. (2025). Coastal Oregon and Northern Coastal California Populations of the Pacific Marten (*Martes caurina*) Species Report 54. Available at: [https://www.fws.gov/oregonfwo/ExternalAffairs/News/2015/Coastal_Marten_Final_Species_Report_April_2015%20\(1\).pdf](https://www.fws.gov/oregonfwo/ExternalAffairs/News/2015/Coastal_Marten_Final_Species_Report_April_2015%20(1).pdf).

⁶¹ Buckley, J. Y. et al. (2023). High prevalence of anticoagulant rodenticide exposure in New England Fishers (*Pekania pennanti*). *Environmental Monitoring and Assessment*, 195(11), 1348. Available at: <https://link.springer.com/article/10.1007/s10661-023-11919-x>.

⁶² Facka, A. et al. (2023). Spatial patterns of anticoagulant rodenticides in three species of medium-sized carnivorans in Pennsylvania. *Canadian Journal of Zoology*, 102(5), 443-454. Available at: <https://cdnscepub.com/doi/full/10.1139/cjz-2023-0131>.

⁶³ Regnery, J. et al. (2020). Heavy rainfall provokes anticoagulant rodenticides' release from baited sewer systems and outdoor surfaces into receiving streams. *Science of the Total Environment*, 740, 139905. Available at: <https://www.sciencedirect.com/science/article/pii/S0048969720334252>; Regnery, J. et al. (2024). Rodenticide contamination of cormorants and mergansers feeding on wild fish. *Environmental Chemistry Letters*, 22(6), 2611-2617. Available at: <https://link.springer.com/article/10.1007/s10311-024-01762-y>; Regnery, J. et al. (2024). First evidence of widespread anticoagulant rodenticide exposure of the Eurasian otter (*Lutra lutra*) in Germany. *Science of the Total Environment*, 907, 167938. Available at: <https://www.sciencedirect.com/science/article/pii/S0048969723065658>.

conditions in rainbow trout, which the researchers determined to be particularly sensitive to these types of poisons.⁶⁴

Researchers examined a range of studies on the presence of anticoagulant rodenticides in surface water, stormwater runoff, groundwater, wastewater treatment plants, soils and sediments, suspended particulate matter, and aquatic organisms, as well as avian and mammalian predators in the aquatic food web. This review led them to conclude: “[a]nticoagulants entering the aquatic environment and accumulating in aquatic wildlife are likely to be transferred in the food chain, causing potentially serious consequences for the health of wildlife and humans alike.”⁶⁵ Pesticides may impair the swimming performance in salmon, and as the temperatures of waterways rise this will likely exacerbate impacts, further decreasing the swimming ability of fish.⁶⁶ In a laboratory study, researchers from Washington State University found coho salmon to be at risk of hemorrhaging and death from low levels of ingested anticoagulant rodenticides.⁶⁷ Brodifacoum, an SGAR, was found to impair development and decrease survival of coho salmon embryos under laboratory conditions.⁶⁸

Fish are an important food source for bald eagles, and scientists have found rodenticides in bald and golden eagles⁶⁹ as well as other birds of prey. For example, researchers studying northern spotted owls found 10 dead owls during the course of the study, and seven tested positive for anticoagulant rodenticides.⁷⁰ Golden eagles, similar to other avian predators, are particularly sensitive to anticoagulant rodenticides and may be exposed to these products because they commonly consume rodents and other animals that may have been poisoned by

⁶⁴ Schmieg, H. et al. (2025). Brodifacoum causes coagulopathy, hemorrhages, and mortality in rainbow trout (*Oncorhynchus mykiss*) at environmentally relevant hepatic residue concentrations. *Ecotoxicology and Environmental Safety*, 289, 117629. Available at: <https://www.sciencedirect.com/science/article/pii/S0147651324017056>.

⁶⁵ Regnery, J. et al. (2019). Rating the risks of anticoagulant rodenticides in the aquatic environment: a review. *Environmental Chemistry Letters*, 17(1), 215-240, at 4. Available at: <https://link.springer.com/article/10.1007/s10311-018-0788-6>.

⁶⁶ Fuller, N. et al. (2022). Dietary exposure to environmentally relevant pesticide mixtures impairs swimming performance and lipid homeostatic gene expression in juvenile Chinook salmon at elevated water temperatures. *Environmental Pollution*, 314, 120308. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0269749122015226>.

⁶⁷ Pavord, L. (2025). Impact of Anticoagulant Rodenticides on Juvenile Coho Salmon (*Oncorhynchus kisutch*): Assessing Lethal & Sublethal Effects (Master’s thesis, Washington State University); Pavord, L. et al. (2025). Toxicity of anticoagulant rodenticides on Pacific salmon: assessing lethal & sublethal effects. Available at SSRN 5473354.

⁶⁸ Driessnack, M. et al. (2025, November). Evaluating the Effects of Anticoagulant-Containing Bait Pellets to Early Life Stage Pacific Salmon. In SETAC North America 46th Annual Meeting. SETAC.

⁶⁹ Bodenstern, B. L. et al. (2023). *Haliaeetus leucocephalus* (bald eagle) and *Aquila chrysaetos* (golden eagle) mortality and exposure to lead, mercury, and anticoagulant rodenticides in eight western and midwestern states, 2014–17 (No. 2023-1016). U.S. Geological Survey.

⁷⁰ Gabriel, M. W. et al. (2018). Exposure to rodenticides in northern spotted and barred owls on remote forest lands in northwestern California: evidence of food web contamination. *Avian Conservation & Ecology*, 13(1).

rodenticides.⁷¹ SGARs have also been documented in burrowing owls,⁷² as well as red-tailed hawks, barred owls, eastern screech-owls, and great horned owls.⁷³ In one study, 96 percent of all birds of prey tested were positive for SGARs.⁷⁴

2. Bromethalin

Though scientists have conducted fewer studies on bromethalin than anticoagulants, there have been several case studies of bromethalin exposure in non-target wildlife.⁷⁵ Bromethalin has been detected in mountain lions and other mammalian carnivores and raptors.⁷⁶ Some of the species that have died from bromethalin poisoning include racoon,⁷⁷ black bear,⁷⁸ striped skunk, and gray fox.⁷⁹

3. Zinc Phosphide

Researchers have tested zinc phosphide toxicity effects on a variety of species including mammals, birds, fish and other aquatic species. Carnivorous mammals given zinc phosphide

⁷¹ Herring, G. et al. (2017). Characterizing golden eagle risk to lead and anticoagulant rodenticide exposure: a review. *Journal of Raptor Research*, 51(3), 273-292. Available at: <https://bioone.org/journals/Journal-of-Raptor-Research/volume-51/issue-3/JRR-16-19.1/Characterizing-Golden-Eagle-Risk-to-Lead-and-Anticoagulant-Rodenticide-Exposure/10.3356/JRR-16-19.1.full>.

⁷² Justice-Allen, A. & Loyd, K. A. (2017). Mortality of western burrowing owls (*Athene cunicularia hypugaea*) associated with brodifacoum exposure. *The Journal of Wildlife Diseases*, 53(1), 165-169. Available at: <http://www.jwildlifedis.org/doi/full/10.7589/2015-12-321>.

⁷³ Murray, M. (2017). Anticoagulant rodenticide exposure and toxicosis in four species of birds of prey in Massachusetts, USA, 2012–2016, in relation to use of rodenticides by pest management professionals. *Ecotoxicology*, 26(8), 1041-1050. Available at: <https://link.springer.com/article/10.1007/s10646-017-1832-1>; Gomez, E. A., Prestridge, H. L., & Smith, J. A. (2023). Anthropogenic threats to owls: Insights from rehabilitation admittance data and rodenticide screening in Texas. *PLoS One*, 18(8), e0289228. Available at: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0289228>.

⁷⁴ *Id.* at 1041.

⁷⁵ McMillin, S. et al. (2016). New rodenticide on the block: diagnosing bromethalin intoxication in wildlife. *Proceedings of the Vertebrate Pest Conference*, 27(27), 419-421. Available at: <https://escholarship.org/uc/item/87p45686>; Murray, M. & Cox, E. C. (2023). Active metabolite of the neurotoxic rodenticide bromethalin along with anticoagulant rodenticides detected in birds of prey in the northeastern United States. *Environmental Pollution*, 333, 122076. Available at: <https://www.sciencedirect.com/science/article/abs/pii/S0269749123010783>.

⁷⁶ Murray, M. & Cox, E. C. (2023). Active metabolite of the neurotoxic rodenticide bromethalin along with anticoagulant rodenticides detected in birds of prey in the northeastern United States. *Environmental Pollution*, 333, 122076; Rudd, J. L. (2024). Detection of rodenticides in pregnant mountain lions (*Puma concolor*) and their fetuses in California. *Canadian Wildlife Biology & Management*, 13(2).

⁷⁷ Bautista, A. C. et al. (2014). Bromethalin poisoning in a raccoon (*Procyon lotor*): diagnostic considerations and relevance to nontarget wildlife. *Journal of Veterinary Diagnostic Investigation*, 26(1), 154-157. Available at: <https://journals.sagepub.com/doi/full/10.1177/1040638713510296>.

⁷⁸ Cox, S. L. et al. (2022). Bromethalin exposure in a free-ranging American black bear (*Ursus americanus*). *The Journal of Wildlife Diseases*, 58(1), 235-237. Available at: <https://jwd.kglmeridian.com/view/journals/jwdi/58/1/article-p235.xml>.

⁷⁹ McMillin, S. et al. (2016). New rodenticide on the block: diagnosing bromethalin intoxication in wildlife. *Proceedings of the Vertebrate Pest Conference*, 27(27), 419-421. Available at: <https://escholarship.org/uc/item/87p45686>.

poisoned rodent prey species have experienced toxic effects, including red, kit, and gray foxes; and Siberian ferrets.⁸⁰ Zinc phosphide can be fatal to birds fed zinc phosphide laden grain bait.⁸¹ Great horned owls fed zinc phosphide-poisoned voles roosted on the ground instead of on perches and did not escape by taking flight upon disturbance.⁸² Experimentally tested bald eagles have also shown signs of toxicity.⁸³ Though phosphine gas is not highly water soluble, it can cause acute toxicity to aquatic species when it does become soluble.⁸⁴

4. Risks of Rodenticides to Rodents and Small Mammals

Rodenticides also pose a risk to native small mammals, which are facing declining populations across the United States and Canada.⁸⁵ Scientists recently found that over 90 percent of the 66 small mammal species they studied are declining, the majority of which are native rodents.⁸⁶ Rodenticide use is likely a factor contributing to this decline.⁸⁷ As small mammals, these species are at risk of consuming toxic rodenticides intended for target rodents such as the house mouse or Norway rat.

5. Risks to Colorado Species of Greatest Conservation Need

The findings outlined above have concerning implications for Colorado's Species of Greatest Conservation Need ("SGCN"), which are species identified in Colorado's State Wildlife Action Plan as species "that most urgently need conservation action."⁸⁸ Below is a list of Colorado SGCN that are at risk of primary and/or secondary poisoning from rodenticides.

⁸⁰ Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances. 2004. Potential Risks of Nine Rodenticides to Birds and Nontarget Mammals: A Comparative Approach. Available at: <https://www.raptorsarethesolution.org/wp-content/uploads/2017/08/EPA-HQ-OPP-2006-0955-0005.pdf>.

⁸¹ Glahn, J.F. and L.D. Lamper. 1983. Hazards to geese from exposure to zinc phosphide rodenticide baits. California Fish and Game. 69(2): 105-114; Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances. 2004. Potential Risks of Nine Rodenticides to Birds and Nontarget Mammals: A Comparative Approach.

⁸² Bell, H.B. and R.W. Dimmick. 1975. Hazards to predators feeding on prairie voles killed with zinc phosphide. The Journal of Wildlife Management. 39(4): 816-819. Available at: <https://www.jstor.org/stable/3800250>.

⁸³ Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances. 2004. Potential Risks of Nine Rodenticides to Birds and Nontarget Mammals: A Comparative Approach.

⁸⁴ World Health Organization. 1988. Phosphine and selected metal phosphides. Available at: <https://pesquisa.bvsalud.org/portal/resource/pt/who-37212>.

⁸⁵ Medd, A. et al. (2025). Continental declines in North American small mammal populations. Biological Conservation, 306, 111109. Available at: <https://www.sciencedirect.com/science/article/pii/S0006320725001466>.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ Criteria for identifying vertebrate SGCN include: "Endangered Species Act status;" "urgency of action: abundance, distribution, trend vulnerability;" "Colorado's contribution to the species overall conservation;" "lack of scientific knowledge;" and "threats likely to increase in scope and severity." From Colorado Parks and Wildlife. (2025). 2025 Colorado State Wildlife Action Plan: What's Changed Since 2015?. Website (storymap). Available at: <https://storymaps.arcgis.com/stories/dd2c3b8bba544db487d9ca7c6c59e9fe>.

Species of Greatest Conservation Need⁸⁹ at Risk of Secondary Poisoning

Birds of Prey

American Goshawk (*Astur atricapillus*)
American Kestrel (*Falco sparverius*)
American Peregrine Falcon (*Falco peregrinus anatum*)
Burrowing Owl (*Athene cunicularia*)
Golden Eagle (*Aquila chrysaetos*)
Mexican Spotted Owl (*Strix occidentalis lucida*)
Northern Harrier (*Circus hudsonius*)
Prairie Falcon (*Falco mexicanus*)

Mammalian Carnivores

Black-footed Ferret (*Mustela nigripes*)
Canada Lynx (*Lynx canadensis*)
Gray Wolf (*Canis lupus*)
Plains Spotted Skunk (*Spilogale interrupta*)
Wolverine (*Gulo gulo*)

Fish

Arkansas Darter (*Etheostoma cragini*)
Bluehead Sucker (*Pantosteus discobolus*)
Bonytail (*Gila elegans*)
Brassy Minnow (*Hybognathus hankinsoni*)
Colorado Pikeminnow (*Ptychocheilus lucius*)
Colorado River Cutthroat Trout (*Oncorhynchus clarkii pleuriticus*)
Common Shiner (*Luxilus cornutus*)
Eagle River Sculpin (*Cottus annae*)
Flannelmouth Sucker (*Catostomus latipinnis*)
Flathead Chub (*Platygobio gracilis*)
Greenback Cutthroat Trout (*Oncorhynchus clarkii stomias*)
Humpback Chub (*Gila cypha*)
Lake Chub (*Couesius plumbeus*)
Mountain Whitefish (*Prosopium williamsoni*)
Northern Redbelly Dace (*Chrosomus eos*)
Orangespotted Sunfish (*Lepomis humilis*)
Orangethroat Darter (*Etheostoma spectabile*)
Plains Minnow (*Hybognathus placitus*)
Plains Topminnow (*Fundulus sciadicus*)
Razorback Sucker (*Xyrauchen texanus*)
Rio Grande Chub (*Gila pandora*)
Rio Grande Cutthroat Trout (*Oncorhynchus clarkii virginalis*)

⁸⁹ Colorado Parks and Wildlife. (2025). State Wildlife Action Plan.

Rio Grande Sucker (*Pantosteus plebeius*)
Roundtail Chub (*Gila robusta*)
Southern Redbelly Dace (*Chrosomus erythrogaster*)
Stonecat (*Noturus flavus*)
Suckermouth Minnow (*Phenacobius mirabilis*)

Rodents

Black-tailed Prairie Dog (*Cynomys ludovicianus*)
Gunnison's Prairie Dog (*Cynomys gunnisoni*)
New Mexico Meadow Jumping Mouse (*Zapus hudsonius luteus*)
Preble's Meadow Jumping Mouse (*Zapus hudsonius preblei*)
White-tailed Prairie Dog (*Cynomys leucurus*)

III. Nonlethal Alternatives Provide a More Effective and Longer-term Solution to Rodent Population Management.

Nonlethal rodent management techniques provide safe, effective, humane, and long-term solutions to human-rodent conflicts. Attempting to manage rodent populations using bromethalin and anticoagulant poisons does nothing to permanently fix the underlying causes of rodent problems, and poisoning may exacerbate unwanted rodent situations and lead to other concerns, including risks to human, pet, and wildlife health.⁹⁰ Without addressing the root cause of the conflict—access to food and shelter—rodents will likely return to previously poisoned areas. Moreover, rodents can become “bait shy” and will not feed on poisoned bait, and some experts believe repeated poisonings in the same area can lead to genetic resistance to the toxicant.⁹¹ Additionally, as stated by Stuart et al. (2025):

Some studies have also revealed increased pathogen prevalence/transmission in surviving animals following efforts that focused on lethal control, such as with leptospirosis in rats, and killing rats in endemic plague foci could lead to the dispersal of rat flea vectors.⁹²

⁹⁰ Stuart, A. M. et al. (2025). Alternative domestic rodent pest management approaches to address the hazardous use of metal phosphides in low-and middle-income countries. *Journal of Pest Science*, 98(1), 89-111. Available at: <https://link.springer.com/article/10.1007/s10340-024-01825-7>.

⁹¹ *Id*; Witmer, G. W. (2019). The changing role of rodenticides and their alternatives in the management of commensal rodents. *Human-Wildlife Interactions*, 13(2), 186-199.

⁹² Stuart, A. M. et al. (2025). Alternative domestic rodent pest management approaches to address the hazardous use of metal phosphides in low-and middle-income countries. *Journal of Pest Science*, 98(1), 89-111, at 98, Available at: <https://link.springer.com/article/10.1007/s10340-024-01825-7>, citing Lee, M. J. et al. (2022). Reconsidering the “war on rats”: what we know from over a century of research into municipal rat management. *Frontiers in Ecology and Evolution*, 10, 813600; Belmain, S. et al. (2018). A new rat control strategy for Madagascar to prevent plague outbreaks. Natural Resources Institute, University of Greenwich; Rahelinirina, S. M. et al. (2023). Assessing the effectiveness of intervention to prevent plague through community and animal-based survey. *PLOS Global Public Health*, 3(12), e0002211. Available at: <https://journals.plos.org/globalpublichealth/article?id=10.1371/journal.pgph.0002211>.

Therefore, Colorado residents and businesses will likely be motivated to implement, and will benefit from implementing, strategies that incorporate nonlethal alternatives to warding off rodents.

Effective nonlethal alternatives include habitat modification, certain types of biocontrol, and fertility control. Habitat modification, which includes sanitation and exclusion measures, is achieved by removing food and potential shelter to make areas less favorable to rodents.⁹³ The following simple steps are actions that property owners and businesses can take to make potential rodent habitat less desirable for the animals:

- Seal any holes in roofs, basements, crawlspaces, and walls;
- Use wire mesh extending partially into the ground to block off spaces under porches;
- Seal openings around cables, pipes, and wires where they enter your space;
- Never leave pet food out for prolonged periods;
- If you feed birds, only use small amounts of seed at a time, bring in feeders at night, and pick up fallen seed;
- Harvest all food in gardens promptly; and
- Keep garbage cans securely covered.⁹⁴

These methods can be undertaken by residents and business owners directly, as well as by rodent control operators on behalf of their clients.

Another effective method of habitat modification includes the use of biorepellants, which are a non-toxic, environmentally friendly way to protect infrastructure without the use of poisons. Biorepellants rely on strong scents or tastes to make the environment unappealing to rodents. Examples include cayenne powder, certain essential oils, and other botanical extracts. Commercial biorepellants designed to address rodent issues include Fresh Cab,⁹⁵ Rataway,⁹⁶ DeTour RoadBlock,⁹⁷ and Pro-Pell.⁹⁸

Biocontrol methods, which use a target organism's natural predators to suppress and maintain their populations,⁹⁹ have also proven to be very effective at controlling rodent populations. The most common rodent biocontrol method is attracting birds of prey, such as hawks, owls, and eagles, by installing nesting boxes and perches. While biocontrol will not

⁹³ Gurr, G. M. et al. (2017). Habitat management to suppress pest populations: progress and prospects. *Annual Review of Entomology*, 62(1), 91-109. Available at:

<https://www.annualreviews.org/content/journals/10.1146/annurev-ento-031616-035050>.

⁹⁴ Mass Audubon, NH Audubon, and Audubon of Rhode Island. Undated. Integrated Pest Management Toolkit. verbatim excerpt. Available at:

https://docs.google.com/document/d/18KNWDVHsqL17F9KAi48I_ZOk4P97uR7zQBhGtGsED7U/edit?usp=sharing.

⁹⁵ Available at: <https://www.earthkind.com/product/fresh-cab-rodent-repellent/>.

⁹⁶ Available at: <https://rataway.com/>.

⁹⁷ Available at:

https://www.nixalite.com/SiteContent/Documents/PDFs/DeTourBrochure1.pdf?srsId=AfmBOorvMg3AdmCcJ8ae-17rcPD_hTgxNSw9VfXVKwkg_SoXLOLoApbc.

⁹⁸ Available at: <https://www.pestmanagementsupply.com/pro-pell-gallon.html>.

⁹⁹ Available at: <https://www.nifa.usda.gov/grants/programs/biological-control-program>.

necessarily remove rodents entirely, this method does help keep rodent populations to manageable levels.¹⁰⁰

More recently, scientists have been investigating rodent fertility control tools as a humane method of population control.¹⁰¹ There are several commercially available rodent fertility control products that have been approved by the U.S. Environmental Protection Agency, including ContraPest and Evolve, which reduce rodent populations by making them temporarily infertile.¹⁰² Multiple cities, including Chicago, New York City, San Francisco, and Washington, D.C., have piloted rodent fertility control programs.¹⁰³

IV. Conclusion

If enacted, SB 26-062 would be a crucial step toward tackling the tragic problem of non-target poisoning by toxic rodenticides and rodent glue traps. With safer, effective, more humane, alternatives readily available, the risk that they present to humans and wildlife is unacceptable. We therefore respectfully request that you vote in favor of this legislation. If you have any questions or if there is any additional information we can provide, please do not hesitate to contact us.

Sincerely,



Lauren McCain
Senior Policy Advisor
Terrestrial Wildlife Program
Email: lmccain@awionline.org

¹⁰⁰ Jamil, M. et al. 2024. Advances in vertebrate pest management. *Zoology: Advancements and Research Trends* (Ijaz et al. eds): FahumSci. pp: 305-311. Available at:

https://www.researchgate.net/profile/Warda-Mustfa/publication/385278610_Advances_in_Vertebrate_Pest_Management/links/67459e1eb5bd9d17d608897c/Advances-in-Vertebrate-Pest-Management.pdf.

¹⁰¹ Hess, R. A. et al. (2024). Male animal sterilization: history, current practices, and potential methods for replacing castration. *Frontiers in Veterinary Science*, 11, 1409386; Chen Charlotte, Y. I. (2024). *Modelling Effects of Fertility Intervention on Population Dynamics of Brown Rat (Rattus norvegicus)*. Thesis, Mageningen University.

¹⁰² Available at:

https://senestech.com/?srsltid=AfmBOortimQq5wVtq8BITzkG07cm_aC2R1FWO8qqWrZfOLPZ_i_ObEps; Available at: https://senestech.com/pages/contrapest-liquid?srsltid=AfmBOoqwCk_QQ30ShiL9Rf_vEIN6FcWbmq5yZB0F7jOTA6CwgoHiN9u.

¹⁰³ Available at: <https://phys.org/news/2025-09-based-birth-chicago-rats-deaths.html>; Available at: <https://council.nyc.gov/shaun-abreu/2025/02/12/rat-birth-control-and-rat-walks-among-new-initiatives-to-curb-nycs-rat-population/>; Available at: <https://www.ktvu.com/news/san-francisco-using-contraceptive-to-control-thriving-rat-population/>; Available at: <https://senestech.investorroom.com/2020-06-08-Washington-DC-Set-to-Expand-the-Use-of-ContraPest/>;

A handwritten signature in black ink, appearing to read "Johanna Hamburger". The signature is written in a cursive style with a large initial "J" and "H".

Johanna Hamburger
Director and Senior Attorney
Terrestrial Wildlife Program
Email: johanna@awionline.org

February 10, 2026

The Honorable Dylan Roberts, Chair
Senate Committee on Agriculture and Natural Resources
Colorado State Capitol
200 East Colfax Avenue
Denver, CO 80203

RE: SB 26-062 – Rodenticide / Glue Trap Use Restrictions

POSITION: Oppose

Chair Roberts and Members of the Senate Committee on Agriculture and Natural Resources:

On behalf of the Household & Commercial Products Association (HCPA), I write in opposition to SB 26-062. The bill would broadly prohibit the sale and consumer use of nearly all rodenticide products and ban rodent glue traps in Colorado—eliminating common, EPA-registered tools that households and small businesses rely on for timely, affordable rodent control.

HCPA represents manufacturers and distributors of pest management products used—consistent with their EPA-approved labels—to protect public health, food safety, homes, and businesses. While SB 26-062 includes narrow allowances for licensed professionals, it would largely place effective rodent control out of reach for everyday Coloradans, renters, and small businesses that often need immediate action before an infestation spreads.

Rodent control is a public health and habitability issue

SB 26-062 raises serious public health concerns. Rodents contaminate food and food-preparation areas, damage wiring and building materials, and can spread pathogens associated with serious illness. In multi-unit housing, one unresolved infestation can quickly become a building-wide problem. Policies that sharply reduce access to effective control tools risk increasing rodent populations and related hazards—especially for residents with limited ability to pay for repeated professional service calls. Rodent infestations are also associated with diseases such as hantavirus, leptospirosis, and salmonellosis.

Peer-reviewed research indicates that pest infestation is also a mental health stressor. In a *Journal of Urban Health* study of 461 adults across 16 Boston public housing developments, current cockroach infestation was associated with almost three times the odds of high depressive symptoms (adjusted OR 2.9; 95% CI 1.9-4.4), and combined cockroach and mouse infestation was associated with over five times the odds (adjusted OR 5.1; 95% CI 3.0-8.5). The authors reported that 38% of participants had depressive symptoms. (Shah et al., 2018).

Experience in large multi-unit housing systems shows that when repairs, sanitation, waste management, and pest control are not coordinated, residents can face persistent and unsafe rodent conditions. Effective policy should prioritize coordinated IPM—structural repairs, exclusion, sanitation, monitoring, and targeted control—rather than removing the consumer tools that help stop infestations early.

SB 26-062 removes practical tools that consumers rely on to protect their homes

SB 26-062 eliminates consumer access to first- and second-generation anticoagulants, bromethalin, zinc phosphide, and glue traps. That is not a narrow restriction—it is a near-total removal of proven, affordable tools for addressing active infestations. Many remaining options are preventive, slower to work, require significant expertise to deploy effectively, or become cost-prohibitive once infestations are established. This is particularly concerning for:

- Renters in multi-unit housing, where rodent pressure is shared across units and residents cannot control building-wide conditions;
- Low-income households that cannot afford ongoing professional pest control services or repeated service calls; and
- Small restaurants and neighborhood businesses that must address rodent issues quickly to remain in compliance with health codes.

For these populations, accessible consumer products are often the first—and sometimes only—line of defense. Removing them does not eliminate rodent problems; it delays intervention, increases costs, and can make professional treatments less effective once populations expand and become entrenched.

For many HCPA member companies, the most significant impacts would fall on bait products and on maintaining access to active ingredients that enable those baits to remain effective. In particular, restrictions affecting commonly used non-anticoagulant active ingredients could reduce the availability and effectiveness of bait-based rodent control options. Following EPA's 2011 consumer risk-mitigation measures for second-generation anticoagulant rodenticides, non-anticoagulant bait options are an integral component of many rodent control programs.

Zinc phosphide is one of the few tools effective for certain "field" rodents (for example, voles, gophers, and ground squirrels) that can cause serious agricultural and property damage. In some commodities, restricting zinc phosphide can translate into crop losses and higher costs that flow to consumers. Zinc phosphide also breaks down in moist soil, limiting environmental persistence when used according to label directions.

When infestations persist, the risks compound: more contamination incidents, more tenant-landlord disputes, and higher costs for municipalities and property owners. In practice, the bill trades managed, labeled products for unmanaged rodent pressure.

Sweeping prohibitions can also create perverse incentives: consumers may turn to unregistered products sold online, illegal "street" rodenticides, or improvised poisons. Those alternatives are less controlled, more prone to misuse, and can increase risks to children, pets, and wildlife. The committee should also consider substitution regression: when regulated, labeled products are removed, some consumers will seek unregistered products or illegal anticoagulants that persist in rodent tissues longer - potentially increasing secondary exposure risks and undermining the bill's intent. For example, Montreal removed a rat poison from its list of banned pesticides after home-infestation complaints to help exterminators respond.¹

¹ Luca Caruso-Moro and Matt Grillo, "Montreal re-allows use of rat poison after home-infestation complaints," CTV News Montreal (Jan. 12, 2023). <https://montreal.ctvnews.ca/montreal-re-allows-use-of-rat-poison-after-home-infestation-complaints-1.6228211>

Glue traps serve important roles in IPM and sensitive settings

SB 26-062 also bans rodent glue traps, which are *non-chemical* tools widely used for monitoring and control in settings where rodenticides are not preferred and snap traps pose safety concerns—such as homes with small children or pets, childcare facilities, hospitals, and food handling areas. Glue traps can also help identify the presence and location of rodent activity so that exclusion and sanitation measures can be targeted. Concerns about humane use are largely tied to misuse (for example, failing to monitor traps). Those concerns are better addressed through clear labeling, usage standards, and education rather than prohibition. Banning this category reduces flexibility for consumers and undermines integrated pest management (IPM) principles, which rely on having multiple control options suited to different environments.

From a consumer-use perspective, glue traps provide several practical benefits that are often overlooked in policy debates:

- Low cost - they are inexpensive and are often purchased in bulk;
- Ease of use - no springs to set and no toxic chemicals to handle;
- Monitoring value - professionals use them as "monitors" to identify the type of pest, entry points, and severity of activity;
- Silent and low-profile - they fit in tight spaces under appliances where bulkier devices may not work;
- Utility in food areas - unlike poisons, there is no risk of toxic bait being moved onto food-contact surfaces or a poisoned rodent dying inside a wall and creating an odor issue.

Concerns about humane use should be addressed with clear instructions and education (including frequent checking and prompt dispatch) rather than a categorical ban that removes a common monitoring and control tool. If the committee's concern is improper use, a better approach is targeted safeguards: strengthen retailer and consumer education, support enforcement against misuse, and invest in coordinated local rodent-control efforts that pair product compliance with sanitation, building maintenance, and professional intervention.

EPA and Colorado already regulate these products through a rigorous, science-based framework

Rodenticide products are among the most highly scrutinized pesticide products in the United States. Before any product can be sold, the U.S. Environmental Protection Agency (EPA) must determine that, when used according to label directions, it can be used with a reasonable certainty of no harm to human health and without posing unreasonable risks to the environment. EPA evaluates ingredients, use sites, application methods, exposure pathways, and mitigation measures—and it approves the precise language that appears on every label. Colorado's pesticide regulatory program and enforcement authorities further reinforce these requirements at the state level.

State-level policy should complement—not override—this framework by focusing on compliance and the conditions that drive rodent pressure: trash management, exterior harborage, building openings, and landlord accountability.

Importantly, EPA is actively reevaluating rodenticides, including anticoagulants and bromethalin, through FIFRA registration review, and under the Endangered Species Act has completed a final biological evaluation and Rodenticide Strategy for 11 rodenticide active ingredients. EPA has already implemented substantial risk-mitigation measures to reduce risks to children, pets, and wildlife, and any additional protections would be implemented through registration review decisions and enforceable labeling (including geographically targeted measures via Bulletins Live! Two) or registration terms, where warranted. A sweeping state prohibition is premature, risks creating a confusing patchwork, and does not address the root causes of rodent pressure.

A patchwork of state bans can also complicate distribution and labeling for EPA-registered products without necessarily improving safety, while doing little to address the conditions that drive rodent pressure in the first place.

One-size-fits-all bans undermine integrated pest management

IPM is a science-based approach that emphasizes prevention, monitoring, and the use of multiple control methods. Effective rodent management depends on flexibility and site-specific solutions—exclusion, sanitation, trapping, and (when appropriate) targeted use of EPA-registered products. SB 26-062 removes multiple categories of tools from the consumer toolbox, undermining IPM and making it harder to respond quickly when infestations occur.

If Colorado wants to reduce secondary exposure risks, there are tailored options short of a ban: Limit certain uses to tamper-resistant bait stations; restrict outdoor placement near sensitive habitats; require training or education for higher-risk products; and expand enforcement against improper placement.

Any remaining tools untouched by this bill can be useful components of IPM, but they do not reliably replace the removed categories - especially for time-sensitive infestations. Snap traps can be effective and humane when set correctly, but they require correct placement, repeated checking, and user comfort handling rodents; some rodents also become trap-shy, and many consumers prefer baits for discreet, continuous control. High-volume CO2 traps and similar systems are typically expensive, require power or consumables, and demand ongoing servicing - making them unrealistic for many renters, low-income households, and small businesses.

Rodent contraceptives are long-term population management tools, not acute-response tools. In settings like hospitals, food warehouses, and restaurants, a 12-24 month horizon for population reduction is not compatible with immediate disease, contamination, and property-damage risks.

Finally, removing baits and certain active ingredients tends to shift control toward more labor-intensive approaches (repeated trapping, exclusion, and cleanup). That can increase the cost of professional service - again disproportionately affecting renters and lower-income households.

SB 26-062 would unintentionally increase risk for the people it aims to protect by limiting practical, affordable tools, shifting costs to those least able to pay, and undermining the flexible, coordinated approach that real-world rodent control requires. We respectfully urge the committee to oppose SB 26-062 and instead pursue targeted, science-based measures that strengthen IPM, education, and accountability.

For these reasons, HCPA urges a NO vote on SB 26-062.

Thank you for the opportunity to submit comments. If the committee would like to discuss more effective, targeted approaches to improving rodent control while protecting children, pets, and wildlife, HCPA would welcome the opportunity to be a resource. Please do not hesitate to contact me at cfinarelli@thehcpa.org.

Best,



Christopher Finarelli
Sr. Director, State Government Relations & Public Policy

Senate Agriculture & Natural Resources

02/19/2026 01:30 PM

SB26-062 Rodenticide Use Restrictions

Typed Text of Testimony Submitted

Name, Position, Representing	Typed Text of Testimony
Mike Robinette For themselves	<p>Mike Robinette 66900 La Plaza Road Montrose, Colorado 81401 (520) 576-0871</p> <p>February 10, 2026</p> <p>Re: Please Support SB26-062</p> <p>Dear Members of the Agriculture and Natural Resources Committee,</p> <p>My name is Mike Robinette and I am a resident of Montrose, Colorado and SD5. I write to you today to urge your support of SB26-062 (Prohibiting Toxic Rodenticides in Colorado). This bill prohibits the sale, use and application of anticoagulant rodenticides as well as rodent glue traps. Rodenticides are highly toxic chemicals that create prolonged suffering in targeted animals, poisoned pets, children and other wildlife while having an incredibly deleterious effect on our environment. Rodenticides have been proven to harm children who are accidentally exposed to them and are a leading cause of pet poisoning in Colorado. Furthermore, rodenticides bioaccumulate through the food chains of Colorado wildlife poisoning myriad species of animals in various ecosystems. Lastly, the use of rodenticides has been shown to destabilize those ecosystems and worsen rodent problems.</p> <p>Your support of SB26-062 would ensure that the negative impact to the health of our children, our pets, our wildlife, our ecosystems and our environment would be minimized through the prohibition of rodenticides and rodent glue traps.</p> <p>Thank you so much for your service to Colorado and your support of SB26-062.</p> <p>Warm Regards,</p>

	<p>Mike Robinette</p>
<p>Joann Maneri For themselves</p>	<p>I am firmly in favor of limiting the use of rodenticides in Colorado. I have attempted to submit a photo of a healthy coyote next to a coyote with mange. The photo was taken from my kitchen window in late January in Superior. I was unable to submit the photo as the file size exceeded your maximum. Mange is a serious problem and rodenticides ingested by small rodents are transmitted to coyotes and contribute to mange. Please seriously consider passing this legislation.</p>
<p>Peter Ruprecht For themselves</p>	<p>Dear Ag and Nat Resources Committee,</p> <p>Thank you for your upcoming consideration of SB26-062 Rodenticide Use Restrictions. I ask that you please support this bill.</p> <p>I help to coordinate community science raptor and wildlife monitoring programs in Superior. These groups find a number of dead and dying birds of prey each year. We believe that some of these birds are victims of secondary poisoning due to eating rodents that have consumed rodenticides. For example, several years ago a Great Horned Owl was found bleeding from its mouth and vent, which is a classic symptom of acute anticoagulant poisoning. It had to be euthanized.</p> <p>Residents here also frequently photograph coyotes with advanced cases of sarcoptic mange. Many predators become more susceptible to mange when their immune systems are suppressed due to exposure to rodenticides. Mange is a terrible way for an animal to die, as it loses its coat and then either freezes to death or suffers fatal infections.</p> <p>I appreciate that rodent control can be important in some settings. However, placing rodenticides that end up in the food chain and kill predators can have the opposite effect on rodent populations. One raptor will eat over 1000 small rodents per year, and a coyote eats about 1.5 pounds of food per day most of which is rodents and rabbits. When secondary poisoning removes these natural sources of rodent control, mouse and rat populations can skyrocket.</p> <p>Thank you, Peter Ruprecht</p>
<p>Tracey Bain For themselves</p>	<p>This important issue will protect our children, pets, and wildlife. As the coordinator of a wildlife monitoring program in the Town of Superior, I see the devastating effects of rodenticides on our coyote population. I strongly encourage your support of SB26-062.</p>

<p>Jamie Dixon For themselves</p>	<p>I volunteer with several raptor and wildlife monitoring efforts in Superior, Colorado. We have seen the tragic effects of rodenticide use on our coyotes and raptor populations. We developed a handout for distribution to residents "Safer Alternatives to Pesticides" to educate and encourage methods that discourage pest issues and still protect our wildlife. Raptors and predators like coyotes are our partners in rodent and rabbit population control. When their food is poisoned, we damage this natural cycle. Please pass this very important legislation.</p>
<p>Lisa Turturici For themselves</p>	<p>Hello,</p> <p>I am voting FOR Rodenticide Use Restrictions. We need wildlife and nature to thrive for many reasons including for humans to live a healthier life. I personally have pets and don't want them exposed to poison nor watch them die a cruel death. I have watched a black bear eat a neighbor's pesticide mouse trap later praying it wouldn't fall ill or die. How Pesticides bestow a slow cruel death on other animals is alarming and extremely unnecessary to say the least. Please do the right thing and save Colorado's wildlife!</p> <p>Thank you, Lisa Turturici</p>
<p>Bridgette Gigi For themselves</p>	<p>I am writing as a concerned Colorado resident to strongly urge you to support SB26-062, the Rodenticide Use Restrictions bill, sponsored by Senators Lisa Cutter and Cathy Kipp (and Representative Elizabeth Velasco in the House). This important legislation would:</p> <p>Prohibit the sale, distribution, application, and use of highly toxic rodenticides (including second-generation anticoagulants and certain others) and cruel glue traps, except in limited public health emergencies.</p> <p>Require professional pest control services to prioritize safer, non-chemical integrated pest management strategies such as sealing entry points, using monitoring tools, and improving sanitation before resorting to poisons.</p> <p>These measures are essential to protect our children from accidental poisonings, safeguard pets and beloved wildlife (including birds of prey and other non-target</p>

	<p>animals that suffer secondary poisoning), and promote more humane and effective rodent control across the state. Colorado has an opportunity to lead by reducing reliance on these dangerous chemicals and embracing proven alternatives that work without widespread environmental harm. With the bill scheduled for a hearing in the Senate Agriculture & Natural Resources Committee on Thursday, February 12, 2026, at 1:30 PM in SCR 352 (Senate Committee Room 352, Colorado State Capitol, Denver), I respectfully ask you to:</p> <p>Vote YES on SB26-062, and speak in favor of its passage if possible</p> <p>Thank you for your time and for considering the health and safety of Colorado families, animals, and ecosystems. I appreciate your service and look forward to your support on this commonsense protection.</p> <p>Sincerely, Bridgette Gigi</p>
<p>Ingrid Moore For themselves</p>	<p>I urge a YES vote on this bill.</p> <p>This bill protects children, pets, and wildlife from dangerous rodenticide poisonings. Data show that children under 5 account for 70% of anticoagulant rodenticide exposures, and studies also show extremely high exposure rates in Colorado wildlife.</p> <p>The bill urges prioritization of safer, science-based integrated pest management approaches while still allowing rodenticide use during genuine public health emergencies.</p> <p>Objections may be based on reluctance try new practices. But IPM can work by utilizing nature as an ally to control pest populations.</p>
<p>Julia Archer For themselves</p>	<p>In support of SB26-062 Rodenticide Use Restrictions.</p> <p>I have 2 personal experiences that I wish to share.</p> <p>Some years ago, a coyote with severe mange raced through our backyard. His or her entire body was raw to the skin, with no fur at all. It was very thin with visible ribs jutting out- clearly starving.</p>

	<p>But the worst and saddest part was its disorientation and obvious suffering. It was running and leaping in agony, twisting in the air, falling and running again, as if it was trying to escape its skin. I hoped that it would die soon to be out of its misery. It is something that I will always remember.</p> <p>Many animals that consume infected rodents who are dying but are not yet dead from these rodenticides suffer as well. Hawks, owls, eagles, falcons, foxes, coyotes, bobcats, raccoons, skunks, mountain lions, even various snakes and of course our beloved domestic dogs and cats. This accumulation of toxins through the food chain is widespread and causes significant mortality. This bill clearly illustrates the cost to animals, people and the environment, and provides ample integrated pest management strategies to be implemented before these poisons are used. These changes are urgently needed.</p> <p>My comment on glue traps is simply that if you have ever seen mouse feet left on a glue trap after the animal has chewed the limbs off as I have, or seen an animal that has died horribly stuck, with a pool of waste around it, you will wonder why the glue trap users didn't simply maintain a clean and sanitized waste area and thus avoid the entire problem. Healthy, sustainable solutions are here. Let's insist that individuals and businesses use them.</p> <p>Thank you, Julia Archer Colorado Springs</p>
<p>Dylan Heberlein Against Colorado Airport Operators Association</p>	<p>My name is Dylan Heberlein, and as President, I am speaking on behalf of the Colorado Airport Operator's Association. CAOAs serves the common interests of the owners, operators and users of the 74 public use airports located throughout the State of Colorado. We wanted to express our concern on SENATE BILL 26-062. Colorado Airports are heavily reliant on the zinc phosphide pesticides applied either by State Certified 3rd party contractors or airport employed applicators to address wildlife issues in the airport environment. Commercial service and General Aviation airports alike are required by FAA regulations and grant assurances to plan and execute a Wildlife Hazard Management Plan, which includes the potential safety issues posed by wildlife in the immediate airport environment. Airports are required to assure the utmost safety in and around the runways through limiting the burrowing, undermining, chewing of wires, and attractants to birds of the species that these pesticides target. Outlawing the use of these pesticides and expanding the process to file paperwork to properly apply these could pose a major safety risk to airports and put them in jeopardy of fulfilling their federal obligations.</p> <p>We formally oppose this bill as proposed and would like to assure that Colorado's airports operational safety and federal obligations are considered in the drafting of this bill.</p>



Raptors Are The Solution

A PROJECT OF EARTH ISLAND INSTITUTE

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February 5, 2026

Colorado State Senate
Agriculture and Natural Resources Committee

Honorable Senators,

Raptors Are The Solution is a national organization based in California dedicated to educating the public about the dangers of rodenticides in the food web and to educating people about the role of birds of prey in the ecosystem. We respectfully ask for your **yes vote on SB26-062**. This bill takes a commonsense approach to stemming the use of dangerous poisons in the food web.

Anticoagulant rodenticides (ARs) pose a significant threat to wildlife. Rodenticides disrupt the critical predator-prey relationship that is a keystone of healthy ecosystems. A lethal dose of second generation AR can be ingested in a single feeding and, most alarming, they can persist in an animal's liver for up to 100 days. These factors make ARs especially problematic to predators and scavengers – such as hawks, owls, eagles, foxes, bobcats and many others – who tend to feed on the animals that have been poisoned with bait. This concern for protection of non-target wildlife—as well as pets and children—led the US EPA to pull second generation ARs from consumer shelves in 2015. Leaving a loophole for the pest control industry was a terrible mistake, as evidenced by the ongoing poisoning of wildlife throughout the country.

Due to the grave and scientifically demonstrated harm to wildlife from anticoagulants (numerous international and national studies and decades of data amassed by the CA

Dept. of Fish and Wildlife), California has passed three bills in the past four years, putting ALL of the anticoagulants—both first and second generation products—under a moratorium while the state Department of Pesticide Regulation reevaluates their impacts on wildlife.

SB26-062 takes the additional strong and admirable steps of banning Bromethalin, a deadly nerve toxin that is now showing up in wildlife, including raptors, and the horribly inhumane glue traps that not only kill and harm rodents in an incredibly cruel fashion but other wildlife as well. We applaud those efforts.

It is past time to heed Rachel Carson's warning in her groundbreaking book "Silent Spring" about chemicals that poison the entire food web. If we do not finally take smarter action on these poisons, we will no longer have healthy populations of songbirds, birds of prey, and the other wild animals that we all cherish and want to preserve for future generations.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Owens Viani". The signature is fluid and cursive, with the first letter of each name being capitalized and prominent.

Lisa Owens Viani

Director

Raptors Are The Solution

Senate Agriculture & Natural Resources

02/12/2026 01:30 PM

SB26-062 Rodenticide Use Restrictions

Typed Text of Testimony Submitted

Name, Position, Representing	Typed Text of Testimony
Meghan Shannon For themselves	<p>As a small animal veterinarian, and veterinary practice owner (Cherry Knolls Veterinary Clinic) for 22 of those years, I have treated at least two dozen cases of anticoagulant rodenticide ingestion in dogs. Generally, the bait was found on the property and ingested by the dog. Owners were often surprised the dog could eat enough to become ill, because they did not understand how the poisons work. They would say they tried to place the bait in areas that were inaccessible to the pet, not realizing the baits have an attractant. In order to save some of these dogs, blood transfusions and days of hospitalization, and perhaps thousands of dollars, were needed. Some owners witnessed the ingestion or knew it happened recently enough that I was able to use an emetic to remove the poison prior to it being digested and absorbed. Some owners were financially unable to afford the care required to save the pet. Many dogs did not survive.</p> <p>Anticoagulant rodenticides, other rodenticide chemicals, and glue traps are all indiscriminate in who they injure. Let's remove this source of avoidable collateral damage and heartache and instead work to improve integrated pet management options to minimize unintended harm. I wholeheartedly support SB26-062.</p> <p>Respectfully, Meghan Shannon DVM</p>

Arvada Kestrel Project
7677 Torrey Ct.
Arvada, CO 80007
kirstinaec@gmail.com
February 6, 2026

To: Members of the Agriculture and Natural Resources Committee
Colorado State Senate

Re: Testimony in Support of SB26-062, Rodenticide Use Restrictions

Dear Committee Members,

I run a small American Kestrel nest box program in Arvada and am writing in full support of SB26-062, regarding rodenticide use restrictions. American Kestrels are North America's smallest and most abundant falcon, approximately the size of an American Robin or Blue Jay. Their habitat includes open grassland, forest edges and farmland, where they are commonly seen hovering over fields or perched atop trees or roadside wires, waiting to spot their prey. Their diet consists primarily of insects, small mammals like mice and voles, songbirds and reptiles. They are cavity nesters, relying on old nest sites excavated by woodpeckers, and they readily use human-made nest boxes. Kestrels typically lay one clutch of 4-6 eggs per year.

The primary kestrel nest box in my program is equipped with an interior nest camera that streams 24/7, allowing me to observe and quantify prey items being delivered to the nest throughout the breeding season. This monitoring confirms that kestrels routinely bring in 20+ mice and voles, as well as insect prey, to their chicks each day. In addition to this backyard nest box, I also monitor three kestrel nest boxes on City of Arvada Property, where these falcons provide ongoing, natural rodent and insect control. These observations demonstrate that healthy raptor populations offer a measurable, non-toxic alternative to chemical rodenticides in both residential and municipal settings.

Although American Kestrel populations rebounded after the discontinuation of DDT use in the 1970's, current migration trends are showing a species decline. The Raptor Population Index (RPI) report (rpi-project.org) lists the American Kestrel as a species at risk, labeling them as "high conservation priority". Audubon estimates that the American Kestrel population *in Colorado* is decreasing by almost 2% per year (audubon.maps.arcgis.com). There are no definitive reasons for this population decline, but one of the possibilities is that rodenticides and insecticides reduce the kestrel's prey and cause indirect poisoning to this predatory species.

The use of rodenticides ultimately undermines their intended purpose. These poisons not only kill rodents; they harm the raptors that naturally prey on mice, voles and

insects and keep those populations in check. By poisoning the prey base, rodenticides place kestrels and other birds of prey at risk of secondary poisoning, reducing the effectiveness of a proven, non-toxic form of pest control that already exists.

For these reasons, I respectfully urge the Committee to support SB26-062 to protect American Kestrels and the natural pest control they provide.

Sincerely,

Kirstin Chapman
Arvada Kestrel Project
Arvada, CO
(The photos below were taken in my backyard)



