

Thank you for the opportunity to share my thoughts about H.326 this morning. I have included my testimony and some additional information.

Testimony

Good morning Chair Durfee and Members of the Committee,

My name is Laura Ireland. I teach animal law and policy, and live in Barre.

I am testifying in support of H.326. The scientific evidence overwhelmingly demonstrates that first- and second-generation anticoagulant rodenticides are toxic chemicals that are inhumane and pose significant threats to our wildlife, and I urge you to support this important legislation.

Anticoagulant rodenticides work by interfering with an animal's ability to clot blood, causing a slow and painful death due to internal bleeding. While this is really horrible in its own right the impacts extend far beyond the targeted mice, rats, and whatever small critters enter the bait boxes. The very nature of these rodenticides ensures that animals who hunt rodents will also be poisoned. These poisons accumulate in the food chain, leading to widespread secondary poisoning in non-target species such as owls, hawks, foxes, bobcats, and other essential predators. Numerous studies have found that more than 70% of tested raptors in New England have been exposed to anticoagulant rodenticides, with devastating effects on their populations.

Fortunately, humane and sustainable rodent control solutions exist. Integrated pest management strategies, including habitat modification, exclusion techniques, and non-toxic deterrents, provide effective long-term solutions without endangering Vermont's ecosystems. There are Vermont companies, such as Heart Wildlife Removal and Greniers Pest Control who have proven there are successful alternatives to poisons.

While I'm testifying in my personal capacity, I've learned more about this issue as students are exploring ways to eliminate rodenticides on campus. I'm proud of our students and alumni who are working to advance these protections at the law school and throughout the state.

We explore these types of issues in our animal ethics class—what is it that we allow for animals who we call pets versus what we allow for animals we call pests.

Poisoning animals and allowing them to suffer for days is only something we're tolerating for the little animals we call pests.

Vermont has long been a leader in environmental protection and wildlife conservation. Passing this bill would reaffirm our commitment to safeguarding our native species and maintaining balanced ecosystems while being more humane.

I urge you to take action to eliminate the use of these dangerous chemicals in our state by supporting H.326 to protect Vermont's wildlife from the unnecessary harms of anticoagulant rodenticides.

Thank you for your time and consideration.

Background information

Vanessa Kranz, third year law student at Vermont Law and Graduate School, has compiled this research.

The majority of rodenticides are made from second-generation anticoagulants. These poisons stop the normal process of blood clotting in the targeted animal.^[1] Rodenticides do not kill their targets quickly, which is one of the main reasons they are so popular. The poisons cause slow internal bleeding and by the time the animal dies, they are no longer at the location where they ingested the poison. Thus, making the culling of these animals easy, convenient, and digestible to businesses that use them (out of sight, out of mind). However, as the poison is slowly killing the small rodents, they make easy prey for predators like raptors,^[2] with the poisons continuing to kill each animal through the food chain.^[3] There are three types of unintended poisonings: primary, secondary, and tertiary. Primary poisoning is when an unintended animal eats the poison from the bait box (e.g. a dog accesses the bait box), secondary poisoning is when a predator eats an animal that consumed the poison (e.g., a red-tailed hawk eats a mouse that ingested the poison from a bait box), and tertiary poisoning is when an animal eats an animal who ate the poison (e.g. a snake eats a mouse that ingested the poison from a bait box, and then an owl eats the snake).

There is ample evidence from researchers and wildlife rehabbers showing the incredible amount of secondary and tertiary poisoning to unintended wildlife. In a 2020 study, forty-three red-tailed hawks were evaluated for second-generation anticoagulants. One hundred percent of them were positive.^[4] Santa Monica National Park Service reported results from bobcats, coyotes, and mountain lions that were tested for second-generation anticoagulants.^[5] They found ninety-two percent (93 of 105) of bobcats, eighty-three percent (23 of 27) of coyotes, and ninety-four percent (21 of 22) of mountain lions were positive for the poison.^[6] Last spring, in Middlesex, Vermont, four fox kits died due to local rodenticide.^[7] They lived next to a business that used bait boxes and their mother was tragically bringing them poisoned food.^[8] In New York, the City's beloved owl Flaco was found dead after striking a building. New York's Central Park Zoo performed Falco's necropsy that revealed the presence of four anticoagulants in his system and pigeon herpesvirus.^[9] The zoo said, "These factors would have been debilitating and ultimately fatal, even without a traumatic injury, and may have predisposed him to flying into or falling from the building."^[10] Last year, Harvard's Animal Law & Policy Clinic submitted a petition on behalf of bird rehabilitators to the Massachusetts Department of Agricultural Resources to request they suspend the registrations of anticoagulants.^[11] These examples are just a tiny glimpse into the worldwide lethal consequences of rodenticides.

There are many other ways to humanely deal with rodent activity. Some of the recommended actions include:[12]

- Seal small holes that mice and rats use to access buildings;
- Clean up trash outside and tightly secure garbage bags and waste bins;
- Secure compost bins tightly;
- Remove growth next to buildings as rodents dislike moving in the open;
- Use snap traps or catch-and-release traps;
- Encourage raptors like owls to hunt nearby (install an owl box).

Further, the California Department of Pesticide Regulation has a great document that describes integrated pest management for schools located here:

https://www.cdpr.ca.gov/docs/pestmgt/pubs/rats_color.pdf.

As we have learned more about the impacts of rodenticides, we have an opportunity to address these issues in a more thoughtful and environmentally friendly way.

Again, I appreciate your time and attention to this issue.

Sincerely,

~Laura Ireland

[1] Rodenticides Topic Fact Sheet, National Pesticide Information Center, <http://npic.orst.edu/factsheets/rodenticides.html>.

[2] Rodenticides, Urban Raptor Conservancy, <https://urbanraptor.org/seattle-urban-raptors/threats-to-urban-raptors/rodenticides/>.

[3] Avoiding Unintentional Poisoning, National Park Service Santa Monica Mountains, <https://www.nps.gov/samo/learn/management/rodenticides.htm>.

[4] Maureen Murray, Continued Anticoagulant Rodenticide Exposure of Red-tailed Hawks (*Buteo jamaicensis*) in the Northeastern United States with an Evaluation of Serum for Biomonitoring, Environmental Toxicology and Chemistry, <https://pubmed.ncbi.nlm.nih.gov/33405327/>.

[5] See *supra* note 3.

[6] As of April 2019. *Id.*

[7] Final Report, Pennsylvania Animal Diagnostic Laboratory System, <https://drive.google.com/file/d/1Fprkw05en4LTlofPZLeQPjJ0kW138ul/view>.

[8] The Insidious Effects of Rodenticide, Protect Our Wildlife, <https://mailchi.mp/073ff504487d/trapping-truths-perfect-week-to-connect-with-legislators-6369918?e=8111c2085d>.

[9] Dennis Romero, Flaco, owl whose death shocked NYC, had evidence of bird herpes and rat poison, NBC news, [https://www.nbcnews.com/news/animal-](https://www.nbcnews.com/news/animal-herpes-and-rat-poison)

[news/flaco-owl-whose-death-shocked-nyc-evidence-bird-herpes-rodenticides-rcna145030](#).

[10] *Id.*

[11] Rodenticides Are Killing Massachusetts Wildlife; Will Authorities Step Up?, Animal Law & Policy Clinic, Media Release, <https://animal.law.harvard.edu/news-article/rodenticides-are-killing-massachusetts-wildlife-will-authorities-step-up/>.

[12] [See] *See supra note 2*; PestInfo, Integrated Pest Management For Schools, California Department of Pesticide Regulation, <https://discoverwildcare.org/take-action-against-rat-poisons-rodenticides/>; Got Restaurant Rats?, Raptors Are The Solution, https://raptorsarethesolution.org/wp-content/uploads/2023/09/GotRats_Restaurant_r5.pdf.