Dear Representative Durfee and Representative Surprenant and Esteemed Committee Members.

As a former Vermont resident and graduate alumni of the Rubenstein School of Environment and Natural Resources at the University of Vermont, I am writing to implore you to support H.326. I am a conservation [wildlife] biologist and natural resource scientist by degree and training as well as an environmental journalist who currently resides in the Boston metro area. I am the founder and director of both the grassroots group Save Arlington Wildlife (SAW) and the nonprofit, Save Massachusetts Wildlife, both of which advocate against the use of rat poisons. As a reporter, I have authored several feature articles on SGARs, including one that was shortlisted for the David Carr Award for investigative reporting. I am presently under contract with Island Press to author a nonfiction book based on my research on Second Generation Anticoagulant Rodenticides (SGARs) due out next year in Fall 2026. My extensive academic and professional experience gives me special insight to the damage these poisons are inflicting on our natural environment and public health.

After the SGARs-related death of the first bald eagle to hatch in Arlington in 60 years in 2021, SAW worked with a long-standing Arlington Town Meeting member to successfully pass two warrants related to SGARs in 2022. One of the warrants was a prohibition of SGARs on all municipally-owned/managed properties, while the other was a Home Rule petition resolution to restrict SGARs on private properties. Both passed Town Meeting by a landslide. Since 2022, eight other municipalities have passed their own municipal bans on SGARs. Six have filed their own Home Rule petitions. Another six municipalities are deliberating their own Home Rule petitions this spring Town Meeting. This groundswell has inspired Massachusetts state legislators to submit their own bills seeking to prohibit anticoagulant rodenticides in the Commonwealth--S. 644/H. 965. Both of these bills are experiencing widespread support in the Massachusetts State House.

SAW is also party to a historic legal petition to the Massachusetts Pesticide Board Subcommittee to suspend the use of anticoagulant rodenticides (ARs) and evaluate their environmental impacts. Our coalition is represented by the Harvard Animal Law & Policy clinic. Our petition included the submission of a 127+ page report documenting formal necropsies and liver panel testing for scores of wild animals over a two year period proving AR exposure is killing many wild animals. In December 2024, over 20 organizations submitted letters to the Subcommittee supporting our petition and asking it prohibit anticoagulants. Among these groups were the MSPCA, the American Bird Conservancy, and the Center for Biological Diversity. Since establishing a necropsy fund in late November 2024, Save Massachusetts Wildlife has subsidized testing of 24 dead raptors from Arlington and several surrounding communities. Every single animal except one had hemorrhaging associated with SGARs exposure and all of them tested in the lethal range of exposure (100 parts per billion); most of them tested at at least triple to quadruple that rate (if not often much more).

In Massachusetts, <u>96 percent of birds of prey</u> have been found to be exposed to anticoagulant rodenticides (<u>up from 86 percent</u> in just a matter of years), while <u>100 percent of red-tailed hawks</u> have been exposed in the state. New England Wildlife Centers reports getting between 100 - 200 wild animal patients annually afflicted with SGARs poisoning. Many of them die. One case included a family of Great Horned Owls. Both parents from this nest perished from confirmed fatal SGARs exposure. One of the owlets was in critical condition, <u>bleeding "from every orifice."</u> He hemorrhaged to death. The only surviving owlet required nine months of daily treatments until her blood would clot on its own again and she could be released. In other words, these poisons are wiping out entire family units and those that do survive are taking much longer to recover and requiring more in-depth treatment due to the volume and ubiquity of these chemicals. Snowy owls, which are <u>an IUCN Red-listed species</u>, are also <u>extremely vulnerable to SGARs poisoning</u>. As wildlife--particularly birds of prey--do not adhere to state borders, Massachusetts is affected by our neighboring and nearby state policies on rodenticides (and vice versa).

A recent study conducted in the northeastern US region across five states--including Vermont--found universally high SGARs exposure rates among fishers. Of all of the states in the survey, Vermont fishers had the highest rates of exposure. In fact, *all* of the Vermont fishers necropsied--100 percent--were exposed to SGARs, with the majority containing more than one anticoagulant compound. The study concluded that "residential use of ARs is implicated as potentially the main driver of exposure for forest carnivores in this region." Animals from the weasel family are "bio-indicators"--meaning how well they fare in their respective habitats can indicate how well those habitats are functioning in general. Rarely seen by people, fishers in particular have been found to play a critical role in forest health as they are one of the few predators that can successfully kill porcupines. Porcupines eat tree bark and when left unencumbered, can do significant damage to conifer and hardwood trees. Previous fisher declines across the country were linked to a corresponding increase in porcupine populations and with that, destruction of tree stock in some forests. As fishers have recovered, trees have replenished in many wooded corridors. As this study shows, ARs are undermining this recovery and the situation is disproportionately dire for the species in Vermont.

Some may argue we need these poisons to rein in rodents. But here's the rub: There is no peer review data that show SGARs are effective in reducing rodents in contiguous landscapes. Instead, what data does exist reveals rodent sightings and activity have continued to increase throughout the United States in tandem with the precipitous rise in the use of SGARs throughout our nation. This isn't surprising to me as a conservation biologist whose research focused on predator-prey dynamics. Rats and mice can develop rather robust biological resistance to anticoagulant poisons (similar to antibiotic resistance) in surprisingly short timespans. Their predators generally cannot develop this resistance. By using these poisons so pervasively, we are creating super resistant rats while killing off our best solution to reining in rodents: natural predators. When predators are decimated, it inflates the number of their prey, a phenomenon known as a top-down trophic cascade. This means we are actually making rodent problems worse by depending on these poisons.

Unfortunately, most pest control professionals do not have training in predator-prey dynamics or biological systems and are not familiar with how these poisons unravel the food chain. This includes pest control professionals that are supposedly trained in or utilize "Integrated Pest Management." In 2017, Tufts University conducted a formal survey of 35 pest management professionals in Massachusetts. The study found these professionals "showed a low level of awareness regarding SGARs potency and half-life...All responding companies reported using integrated pest management (IPM) strategies, with nearly all utilizing chemical rodenticides..." As such, it is clear most industry representatives are not in a position to make claims on the credibility of these poisons to reduce rodents and especially, on their environmental impact. The financial incentive they have to keep them in circulation serves as a conflict of interest.

I hope the state of Vermont will follow in the footsteps of California and do the right things passing H.326 and enforcing widespread prohibitions against these noxious and dangerous chemicals. Thank you for your consideration.

Sincerely,

Laura Kiesel, M.Sc. Natural Resources Sciences & Management Founder and Director, Save Massachusetts Wildlife