

April 4, 2024

House Bill 7783

An Act Related to Health and Safety — Pesticide Control Introduced by: Representatives Kislak, Bennett, Speakman, Ajello, Boylan, Carson, Cortvriend, Cruz, and Felix Referred to: the Environment and Natural Resources Committee

Submitted by: Jonathan Schroeder, Co-Director, Congress of the Birds

Distinguished Members of the Committee,

My name is Jonathan Schroeder. I'm a historian and professor at RISD, but I'm here as a statelicensed wildlife rehabilitator and as the co-director of Congress of the Birds, an organization that annually rehabilitates over 1000 wild birds.

Today I am here to support this bill by advancing three arguments: first, that second-generation anticoagulant rodenticides (SGARs) constitute a form of animal cruelty; second, that the environmental risk posed by SGARs dramatically outweighs the social need for using them; and finally, third, that the use of SGARs does not reduce the spread of diseases but actually compounds the problem.

1. Animal Cruelty

The most basic function of blood is to deliver oxygen from the lungs to all other tissues in the body. Imagine for a moment that you've been fed poison and you are now internally hemorrhaging. As the loss of red blood cells grows your body begins to deliver less and less oxygen to your tissue. The technical words for what's happening, hypoxia and anemia, fail to convey how bad this situation is. What they fail to convey is what it feels like to inhabit a body that is being progressively disabled. You are now condemned to die from the sheer inability to breathe and the dissolution of your insides. Multi-organ failure is your future. Blood pools in your lungs, blood gathers between your skull and brain, the blood that builds up around your

liver puts pressure on your sciatic nerve, paralyzing your leg, and producing the most obvious clinical sign of the mass destruction taking place inside your body.

This is what SGARs do to rats and mice. But before that rat is dead, it becomes slow, confused, and wobbly and becomes easy prey for hawks, owls, and bald eagles. These birds then become victims too. Can you understand now why the use of SGARs should be classified as a form of animal cruelty?

2. SGARs: Environmental Risk > Societal Need

We are not rats, of course. But rats are here because of us. This is why scientists designate them as a "commensal" species, which literally means "sharing a table." In the near future, if not now, we are going to have to assume responsibility for the ways we continue to harm this planet, if not for the animals, then for our own survival. Just as we are accustomed to thinking about how best to govern people, we need to start thinking about the best practices for governing people's impact on the environment. This is the larger significance of this bill and bills like it. Rather than throwing a bait box at the problem, we need to devise better measures to manage the environments we have built and the rats who follow us to our cities and farms.

This is an issue about how to balance environmental risk and societal need. The history of rodenticide is unfortunately a history of considering human need and completely ignoring environmental risk. We need to change that, as California has already done and other states are starting to do. Since 1984, when cases of SGAR-poisoned barn owls began to be reported in England, the percentage of raptors with poison buildup in their tissues has increased at an alarming rate. They die, or they have their life spans radically shortened, or they die of another cause because of being disabled by this poison. This brings me to my final point:

3. SGARs are the problem, not the solution.

The problem with SGARs extend beyond its cruelty and beyond the failure to consider environmental risk. SGARs actually create the problem. They definitely don't solve it, as we can see by an analogy. The current approach in the pest control industry to killing rodents is similar to Monsanto's method of monocrop farming. Heavy reliance on a single method usually leads to declining effectiveness and growing resistance. It is deeply ignorant of nature, the environment, and the conditions that allow human and animal life to thrive.

Recent studies show that rats are becoming resistant to SGARs, which means more and more of them survive poisoning and pass this poison up the food chain. In a British study, 93 of 109 Norway rats (87%) were found to possess a DNA mutation that made them resistant to three separate SGARs. Two out of the three SGARs were either partially or wholly ineffective, while one remained effective. And given how natural selection works, it is only a matter of time before further adaptations emerge.

And the most common argument in favor of rodenticide—that it reduces the spread of humantransmissible disease—also turns out to be false. Remarkably, a 2021 study conducted in Chicago "found that rats that had been exposed to [anticoagulant rodenticides] and survived until the time of trapping...were significantly more likely to be infected with *Leptospirosis* than other rats." In other words, when rats eat the bait and live, their immune systems become compromised, and they become vulnerable to diseases like Lepto, Hepatitis E, and the bubonic plague. Using SGARs does not solve the problem. It compounds it.

The question isn't whether SGARs will be banned. The question is when. Will Rhode Island play a leading role in banning these ineffective, problematic, cruel poisons? Do we want to lag behind other states or do we want to be on the front lines of a change that needs to happen? The ball is in our court. Thank you for your time and consideration.

Sincerely,

Jonathan Schroeder Co-Director, Congress of the Birds