

## Nature in the Neighborhood – April 2023

How much collateral damage is acceptable in humankind's war against mice and rats?

On June 20, 1782, the Second Continental Congress designated the Bald Eagle as the national symbol of the United States. Its visage appears on our flag, our currency, the Seal of the President of the U.S., and pretty much all federal buildings and official documents.

The Bald Eagle was chosen because, like the fledging country it was to represent, it symbolized bravery, strength, and determination.

Unfortunately, our national symbol is once again under attack, caught in humankind's war against pests.

Back in the 1970s, these majestic birds were in a steady decline because of the now banned pesticide dichloro-diphenyl-trichloroethane (or, as it's commonly known, DDT). It was discovered that DDT, a pesticide that was sprayed extensively and indiscriminately across the country, was causing the eggshells of Bald Eagles and other birds of prey to thin and break, resulting in a dramatic decline in their populations. In a true environmental success story, after the banning of DDT, the Bald Eagle rebounded back from the brink of extinction.

Today, Bald Eagles are victims of another human introduced pest control chemical: second-generation anticoagulant rodenticides (or SGARs). Commonly used by exterminators, SGARs are placed in those ubiquitous black bait boxes you see outside buildings. Because SGARs stop the natural blood clotting process, the rodents that eat the bait slowly die. As they sicken, they become an easy target for birds of prey, like eagles, hawks, and owls. Unfortunately, these birds then themselves become sick and slowly die, internally bleeding to death.

Just last month a Bald Eagle nicknamed "MK", known and loved throughout the Mystic River watershed, died after ingesting rodenticides. This was not an isolated case. Numerous birds and other animals are poisoned by SGARs each year, and a 2020 study conducted by the Tufts Wildlife Clinic found that 100% of the more than 40 red-tail hawks it tested were positive for anticoagulant rodenticides.

Recognizing their harm to wildlife, the EPA had banned the use of SGARs by homeowners, but they can still be used by licensed pest control professionals who prefer them because, as it takes days for a poisoned rodent to die, there's no need to come back to dispose of the dead rodent which would be the case with more traditional methods like snap traps.

## **An Act Relative to Pesticides**

Senator Paul Feeney and Representative Jim Hawkins have re-filed a bill in the State Legislature titled *An Act Relative to Pesticides* (S. 487 and H. 825). The bill previously passed in both houses but the legislative session ended before Gov. Baker could review and sign it. While not going as far as banning SGARS outright (as the Canadian province of British Columbia and the State of California have done), it does take meaningful steps to address the problem by:

(1) requiring the increased use of Integrated Pest Management (IPM) strategies which incorporate multiple methods to address rodent infestations and encourage safer control methods; and

(2) improving and modernizing the way use of SGARS by professional pest control companies is reported and shared in Massachusetts thereby allowing for better tracking and regulation of rodenticide use statewide.

## **What Can You Do?**

First, you can email your state senator and representative in support of S.487 and H.825. While a personal message is best, the Animal League Defense Fund has an on-line form you can use at: [aldf.org/article/massachusetts-ask-your-state-representative-to-help-protect-animals-from-rat-poisons/](http://aldf.org/article/massachusetts-ask-your-state-representative-to-help-protect-animals-from-rat-poisons/)

Second you can rodent-proof your home by removing or securely containing potential food sources and repairing any exterior areas of your home to prevent rodents from coming inside. Audubon provides more tips on critter proofing at: [mspca.org/animal\\_protection/about-rats-and-mice/](http://mspca.org/animal_protection/about-rats-and-mice/)

But if you choose to use a professional exterminator, look for an integrated pest management company that uses multiple approaches to pest control instead of relying solely on poisons. Whoever you choose, request that they not use SGAR products including brodifacoum, bromadiolone, difenacoum, or difethialone.

Finally, take the time to become more educated about the problem by reading about it on-line. On April 11, the Conservancy and the Town of Swampscott hosted a presentation on rodenticides and S.487 and H.825 by Representatives Jim Hawkins and Jenny Armini, and Wildlife rehabilitator Dan Proulx. If you missed the presentation, a video of it will be posted on the Town's and Conservancy's website in the near future.

## **As we Celebrate Earth Day**

Sixty-one years ago, Rachel Carson wrote a book that started an environmental movement. Published in 1962, "Silent Spring" awakened the country to the very real dangers of chemical pesticides, not just to Bald Eagles, but to many other species as well -- including ours. It is a sad commentary, as we celebrate Earth Day this month,

that pesticides are once again threatening wildlife -- and, once again, threatening the bird that is our national symbol.

And it's not just SGARs that we need to be concerned about. We are filling our environment much more powerful rodenticides, insecticides and fungicides, and at much higher rates than in Carson's time, threatening non-target birds, fish, mammals, and beneficial insects – as for the latter, studies are now demonstrating that the insecticide neonicotinoid and fungicide chlorothalonil are killing bees and other pollinators.

In the end of her seminal book, Carson wrote that we “stand now where two roads diverge” and she urged us to take the less traveled road, the one that “rejects the counsel of those who tell us that we must fill our world with poisonous chemicals,” and look instead to alternatives to chemical controls. This Earth Day we again need to heed her words, and get back on that less traveled road, the one she said “assures the preservation of our earth.”