



# BAN RAT POISONS

## that are Killing B.C. Wildlife

### Summary

Second-Generation Anticoagulant Rodenticides (SGARs) pose serious threats to B.C. wildlife species, the environment and human health. Their permitted use is inconsistent with the obligations owed by the government to protect its citizens and the environment from harmful chemicals. SGARs are dangerous, ineffective and unlawful - the government must take immediate action to prohibit the use of these products.

### Background

The federal and provincial governments have an obligation to treat the well-being and protection of the environment as a primary consideration. It follows that SGARs should not pose any unacceptable risks if their use is to be permitted. To the contrary, despite acknowledging that SGARs are highly acutely toxic compounds that pose serious threats to the health and safety of children and non-target species, the federal government continues to register these products for commercial use.

### Problem

#### SGARs are Dangerous

##### Poisoning native and endangered wildlife species

Many of B.C.'s treasured species face serious risks of SGAR poisoning. [Small non-target mammals, birds and invertebrates feed directly on the SGAR baits](#), giving rise to the contamination of the food-chain and wider ecosystem. Rodenticides can enter the [soil via decomposing carcasses](#), and poisons have even been found in the [aquatic food web](#).

The [highly toxic, persistent, bioaccumulative nature of SGARs](#) makes them particularly dangerous to a wide range of [predators and scavengers](#), including raptors, crows, raccoons, coyotes, weasels and snakes. [Owls and other birds of prey](#) are at a particularly high risk of secondary poisoning because of their dependence on rodents as a food source. Between 1988 and 2003, [70% of dead owls from B.C. had residues of at least one rat poison](#) – and the number of owls dying by poisons has only [escalated](#) over the recent years.

##### Threatening children and pets

The American Association of Poison Control Centers receives [approximately 10,000 reports](#) of rodenticide exposures in children annually in the United States. Health Canada has determined [observations in the U.S. to be representative](#) of the situation in Canada. Since rodenticides are intended to be palatable for their target species, pets will also be inclined to consume these toxic products. Dogs and cats alike may also hunt or catch poisoned rodents, putting them at risk of internal bleeding, and sometimes death.

#### SGARs are Ineffective

##### Short-term and counterproductive

SGAR baiting is not an effective method of controlling infestations long-term. Clearing a resident population simply [makes space for new groups to move in](#), and poisoned rats [mate faster](#) to compensate for their thinning numbers. By distracting from the root of the problem (i.e., accessible food and shelter), relying on SGARs [permits infestations to rebound](#). SGARs also reduce the efficacy of natural, costless and chemical-free rat control by poisoning raptors and other rodent predators. For instance, [a single barn owl consumes an average of 1,000 rodents per year](#).

#### SGARs are Unlawful

##### Failure of risk mitigation measures

The existing risk mitigation measures are incapable of adequately addressing the threats that SGARs pose to the environment. Requiring SGARs to be kept in tamper-proof bait boxes fails to stop target and non-target animals from directly consuming these products and thereafter being ingested by predators. Rats have been shown to feed on highly toxic indoor-restricted baits and [move outdoors](#). Further, poisoned rats have been found to [spend more time outside of their dens during all hours of the day](#) and [die above ground](#). Since rodents will disperse away from buildings and into surrounding natural habitats, the secondary-exposure risk for predators is not acceptably mitigated.

##### Inconsistent with the current regulatory framework

Despite the risks and contrary to the IPMA, SGAR use is not being replaced by non-toxic alternative measures of pest control. In B.C. alone, [brodifacoum sales have increased by 19% and bromadiolone sales have increased by 279%](#) between 2003 and 2015, with a total of 91kg of rodenticide active ingredient sold in 2015. While this may not seem like a significant amount, consider that most [SGARs are formulated at less than 0.01% active ingredient](#) given their high toxicity.

### Solution

The precautionary principle enunciated by the federal [Pesticide Control Products Act](#) provides that full scientific certainty is not required to amend or cancel the registration of a product where there are reasonable grounds to believe such action is required to deal with a threat to the environment. It follows that SGARs should cease to be registered.

In the interim, [B.C. must take action](#) to protect its precious wildlife by (a) implementing a regulation that prohibits the sale, purchase or use of SGARs; and (b) urging the Minister of Health to initiate a special review of the registration of SGARs.



For more information, please visit:  
Owl Watch BC: [www.facebook.com/owlwatchbc](http://www.facebook.com/owlwatchbc)  
Defend Them All Foundation: [www.defendthemall.org/pagero](http://www.defendthemall.org/pagero)  
Contact: [marie.turcott@defendthemall.org](mailto:marie.turcott@defendthemall.org)



# Questions & Answers

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## What are Rodenticides?

Rodenticides, colloquially referred to as “rat poisons,” are pesticides used to kill rats, mice, and other rodents. Rodenticides are typically formulated as baits, which are designed to attract animals by incorporating flavours such as ground meat, vegetables, fish oil, molasses, or peanut butter. Most of the rodenticides used today are anticoagulant compounds that interfere with blood clotting and cause death from excessive bleeding. [Deaths typically occur between four days and two weeks](#) after rodents begin to feed on the bait.

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## What are Second-Generation Anticoagulant Rodenticides?

SGARs were developed in the 1970s to control rodents that are resistant to first-generation anticoagulants (FGARs), and such as, were designed to be highly toxic. Despite delivering a lethal dose in a single feeding, these poisons cause a slow, painful death for all consumers. Today, SGARs are the predominant form of rodent control worldwide. SGAR active ingredients that are currently registered in Canada include brodifacoum, bromadiolone, difenacoum and difethialone.

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## Why should we ban SGARs?

Wildlife advocates believe that banning SGARs is imperative to protect vulnerable and endangered species, including the barn owl, who are critically threatened by the widespread use of SGARs in agricultural and urban areas. SGARs are particularly dangerous in comparison to other means of rodent control because they are highly toxic, but take days to kill. This means that rodents may continue to feed on the bait and end up ingesting far beyond the lethal dose by the time of their deaths. Worse yet, these poisons can persist in animal tissues at high levels, posing greater risks to non-target species that feed upon animals that have consumed the bait.

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## Will banning SGARs make rat problems in B.C. worse?

No - in fact, SGARs may actually be making rat problems worse. Again, by poisoning animals that feed on rodents, SGARs are effectively reducing a natural and chemical-free method of pest control. By eliminating the ability to rely on poisons, the pest control industry will be incentivized to develop informed, efficacious rodent management solutions. Some humane and sustainably-focused pest management companies have introduced more effective means of approaching rat infestations that do not involve harmful chemicals.

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## If poisons are ineffective, why do people still use them?

Poisoning is the easiest and cheapest method of controlling rats, and it is in the economic interests of pest control operators using poisons not to inform customers that results will only be temporary if preventative measures are not implemented. [Surveyed pest control professionals have admitted that poisons alone fail to provide a long-term solution.](#) Broader public education is needed to dispel the myth that using SGARs is the key to managing rodent infestations.

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## What alternative methods of pest control are available?

The primary step that sustainability-oriented pest management companies (like [Humane Solutions](#)) recommend is “rat-proofing” the premises of your home by addressing the active and potential access-points in the structures. Food and other resources that attract rats must be secured or eliminated. There are many resources online that can help homeowners manage rat problems themselves. [Goodnature traps](#) are nontoxic, and have been shown to be [effective, more humane, and are inaccessible](#) by non-target species, such as squirrels.

## How are Rodenticides Regulated in Canada?

Pesticides in Canada are regulated by a multi-tiered legislative scheme. The mandate of the federal [Pest Control Products Act \(PCPA\)](#) is to protect the health of Canadians and the environment against unacceptable risks from the use of pesticides. Reasonable certainty that no unmitigable harm to the environment is required to justify the registration of pest control products. B.C.’s [Integrated Pest Management Act \(IPMA\)](#) builds on this mandate by implementing a proactive and preventative approach to managing pest populations. Toxic chemicals must be treated as a last resort, and used in a manner that minimizes hazards to the environment.

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## How does the Federal Government Regulate SGARs?

The PCPA sets the standards for regulation of pesticides in Canada. The Pest Management Regulatory Agency (PMRA) is the Health Canada branch responsible for administering the PCPA and Regulations. Its main responsibilities include registering pest control products, re-evaluating pesticides currently on the market, and promoting sustainable pest management strategies. Pesticides must be registered under the PCPA before they can be manufactured, possessed, handled, stored, imported, distributed, or used in Canada. The PMRA must conduct a science-based evaluation of a product’s risks and efficacy controlling the intended pest before approving registration.

SGARs are currently registered for commercial use only, meaning that are not available to the general public for use around the home. In response to concerns regarding secondary exposure risks, the PMRA imposed requirements that SGARs must be contained in tamper-resistant bait stations or placed in locations inaccessible to children and animals.

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## Does B.C. have jurisdiction to regulate SGARs?

Yes - Provinces may further restrict or prohibit the use, sale, storage, transportation and disposal of registered pesticides in their jurisdiction through the enactment of regulations, as long as they are consistent with and no less protective than the federal legislation. B.C.’s IPMA sets out requirements for the use and sale of pesticides in the province.

Licenses are required to sell, use or provide a service respecting SGARs. The IPMA Regulation sets out that licensees must act in accordance with integrated pest management principles (e.g., considering practical alternatives to pesticide use and the protection of human health and the environment). When they are needed, pesticides must be used in a manner that minimizes hazards to human health and the environment.

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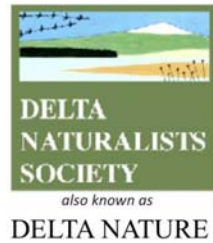
## What can municipal governments do?

While municipalities do not have the jurisdiction to pass community-wide bans on rodenticides, they can implement bans on the use of poisons on City-owned property. Local governments can also submit and endorse resolutions to the Union of B.C. Municipalities for consideration.

In June 2020, the [District of North Vancouver adopted a landmark motion](#) to ban anticoagulant rodenticides on all District-owned properties and petition B.C. to follow suit. The ban was met with tremendous support as recent owl deaths have raised awareness of the harmful effects of rodenticides on wildlife. The [District of Saanich council unanimously passed its own motion](#) in July 2020. The City of Richmond is currently considering a similar motion that has been referred to staff and will be heard in fall 2020.

## Organizational Supporters

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For more information, please visit:  
**Owl Watch BC:** [www.facebook.com/owlwatchbc](http://www.facebook.com/owlwatchbc)  
**Defend Them All Foundation:** [www.defendthemall.org/pagero](http://www.defendthemall.org/pagero)  
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