AGENDA INFORMATION		Dept. Manager	GM/ Director	CAO
√ Regular Meeting	Date: June 15, 2020			
☐ Other:	Date:			

The District of North Vancouver
REPORT TO COUNCIL

June 3, 2020
File:

AUTHOR: Megan Curren

SUBJECT: **Anticoagulant Rodenticides**

RECOMMENDATION:
THAT Council supports a complete ban of anticoagulant rodenticides on all District of North Vancouver owned properties;

AND THAT Council direct staff to petition the Province to ban anticoagulant rodenticides;

AND THAT Council direct staff to communicate the harmful impacts of anticoagulant rodenticides to all residents and businesses in the District of North Vancouver and to share findings about alternatives.

REASON FOR REPORT:
Anticoagulant rodenticides cause animals to suffer and die from primary and secondary poisoning and pose risks to human and planetary health.

BACKGROUND:
Rodenticide use is regulated at the Provincial level and therefore under current legislation the DNV is unable to ban anticoagulant rodenticides. However, we are able to create policies which would eliminate their use in all DNV owned facilities and lands.

The BC government acknowledges that anticoagulant baits "cause death by internal bleeding and present a moderate to high risk of secondary poisoning to other animals that might eat the poisoned rat," yet Provincial policy permits their continued use.

In a 2009 report entitled, Anticoagulant Rodenticides in three owl species from Western Canada, 1988-2003, scientists concluded that:
"Livers were analyzed for brodifacoum, bromadiolone, chlorophacinone, diphacinone, difethialone, and warfarin. Our results show that, of the 164 owl livers analyzed, 70% had residues of at least one rodenticide, and of these 41% had more than one rodenticide detected. Of the three species of owls examined, barred owls were most frequently exposed (92%, n = 23); brodifacoum and bromadiolone were most often detected, with liver concentrations ranging from 0.001 to 0.927 mg/kg brodifacoum, and 0.002 to 1.012 mg/kg bromadiolone. Six

of the owls (three barred owls, two barn owls, and one great horned owl) were diagnosed as having died from anticoagulant poisoning; all six owls had brodifacoum residues in the liver."

An article from Audubon magazine from 2013:
"There's no safe place or safe delivery system for second-generation rodenticides. After a rodent partakes, it stumbles around for three to four days, displaying itself as an especially tempting meal not just for raptors but for mammalian predators, including red foxes, gray foxes, endangered San Joaquin kit foxes, swift foxes, coyotes, wolves, raccoons, black bears, skunks, badgers, mountain lions, bobcats, fishers, dogs, and house cats – all of which suffer lethal and sublethal secondary poisoning from eating rodents. Deer, non-target rodents, waterfowl, waterbirds, shorebirds, songbirds, and children suffer lethal and sublethal poisoning from eating bait directly.

A four-year survey (1999 to 2003) by the Environmental Protection Agency found that at least 25,549 children under age six ingested enough rodenticide to suffer poisoning symptoms. Currently about 15,000 calls per year come in to the Centers for Disease Control from parents whose children have eaten rodenticides. Even if you place bait where children can't get it, rodents are apt to distribute it around your house and property.

Canada doesn't have near the rodent problems we do, but raptors there carry as much rodenticide as anywhere – a fact that puzzles Pierre Mineau, a leading ecotoxicologist who retired from Environment Canada's National Wildlife Research Centre in 2012. "There are high levels of exposure in every species we've looked at," he says. "Not just in the rodent eaters but in the accipiters [which eat mostly birds]. I wouldn't have expected that. It's still a mystery how this stuff is moving through terrestrial food chains. Insects may be picking it up and passing it to the songbirds that eat them. That might account for the accipiter [poisoning] connection"."

According to the SPCA:
"The beauty and diversity of B.C. wildlife are undeniable. However, some wild animals are better kept away from your home. Did you know the methods you choose to control them have an impact on other wildlife?

Wild rats are a good example. Anticoagulant rodenticide is commonly used in urban areas for rodent control, not only in homes but also by municipalities in parks and municipal facilities.

If you have seen black boxes around the outside of community centres, transit stations, and other buildings, you know they are using poison for rodent control. The problem with rodenticides is that when raptors and other animals eat poisoned prey, they also get poisoned.

In the case of rodenticides, anticoagulants thin the blood and prevent it from clotting, causing rodents to die from internal bleeding. These rodenticides have that same lethal effect on other animals.

Exposing animals to poisoned bait and prey is how rat poison is injuring and killing owls and other BC wildlife. The harm comes from direct and secondary poisoning.

Direct poisoning occurs when the bait is eaten by a non-target animal, like a cat, or a squirrel. These animals then die from internal bleeding caused by rodent poison.

Bait is made to smell like food and attract animals. Its odour and flavour attract squirrels, skunks, birds, and even cats and dogs.

Who wouldn't want to try a peanut butter treat left on a bait trap for wild rats? Curiosity and their acute sense of smell, drive small animals directly to tasty treats that also provide them with a lethal dose of anticoagulant rodenticide.

Secondary poison occurs when owls and other raptors eat poisoned animals. The risk of secondary poisoning expands to predators like coyotes and foxes that feed on rodents too.

The lethal effect of anticoagulant poison takes several days to kill rodents. During that time, poisoned mice and rats keep feeding on bait, providing a more toxic dose to their predators. At the same time, the internal bleeding caused by rodenticides weakens their systems, making them slow and more vulnerable to predators: the easier to catch, the more prey is consumed, which means more poison is ingested.

When owls and other animals eat poisoned rats and mice, the poison also causes a slow and painful death."

DNV staff report February 25, 2019 File: 13.6770/Pesticide Use/File states:
"There is strong evidence from both local and regional sources that document lethal concentrations of rodenticide in different types of predators. DNV owl populations (Barred owls, Great Horned owls and Pygmy owls) are being affected. A number of local owls have been confirmed, via toxicity testing, to have ingested fatal amounts of rodenticide. There is additional data that documents the presence of rodenticide occurring in other higher order predators such as weasels and coyotes, as well as scavenger species like birds and squirrels. Another issue making it difficult to determine the number of wildlife fatalities is sub-lethal poisoning. Sub lethal effects cause a poisoned predator or scavenger to behave unnaturally causing it to become prey itself or die of otherwise avoidable causes (car strike, building strike or dehydration)."

CONCLUSION:
It has been well-documented (for more than a decade) that anticoagulant rodenticides cause animals to suffer and die (from both primary and secondary poisoning), and that anticoagulant rodenticides pose harm to human and environmental health. Alternatives exist.

Community activists and volunteers have been seeking action and an online petition has recently gathered more than 4,700 signatures supporting the recommendations above.

Respectfully submitted,

Megan Curren
Councillor

REVIEWED WITH:

				External Agencies:	
❑ Community Planning	____	❑ Clerk's Office	____	❑ Library Board	____
❑ Development Planning	____	❑ Communications	____	❑ NS Health	____
❑ Development Engineering	____	❑ Finance	____	❑ RCMP	____
❑ Utilities	____	❑ Fire Services	____	❑ NVRC	____
❑ Engineering Operations	____	❑ ITS	____	❑ Museum & Arch.	____
❑ Parks	____	❑ Solicitor	____	❑ Other:	____
❑ Environment	____	❑ GIS	____		
❑ Facilities	____	❑ Real Estate	____		
❑ Human Resources	____	❑ Bylaw Services	____		
❑ Review and Compliance	____	❑ Planning	____		