Rodenticides threaten the balance of our ecosystem
By Rachel Roll

Rodenticides, or poisons targeting mice and rats, are harmful to more than just the animals they're marketed to target. One of the species impacted by these chemicals is the coyote. Love 'em or hate 'em, we need them to flourish for a healthy ecosystem.

Anti-coagulant rodenticide targets coyotes' food, slowly poisoning them, so their immune system deteriorates after eating poisoned rodents. One of the most obvious signs of this is mange. Mange is caused by mites that burrow into the animal's skin, and it appears as bald patches and skin sores across the animal's body. While a non-poisoned coyote would likely be able to manage this condition, those whose immune systems have been affected by rodenticide suffer terribly from an overgrowth of mites and the bacterial skin infections they cause.

The California Department of Fish and Wildlife (CDFW) reports findings of liver bleeds in foxes caused by the consumption of anticoagulant rodenticides. If wildlife is affected, your pets can be, too. Whether from direct consumption of the poison itself or indirect exposure through catching a mouse, pets can die from the chemicals used in rodenticides.

CDFW recommends the use of non-chemical methods like exclusion, trapping (not glue traps), and sanitation. They also suggest consulting an exclusion professional for advice and action. Sanitation and exclusion methods include not leaving food out for rodents to scavenge and keeping areas clean. Wildlife manages its own populations through the relationship between predators (i.e., bobcats, coyotes, mountain lions, raptors) and prey (i.e., mice, rats, squirrels, rabbits).

WildCare, Marin's wildlife rehabilitation hospital, has collected data on rodenticide exposure in non-target wildlife, and their results show that the animals suffering from secondary poisoning are the very same animals that reduce the population of rodents: owls, coyotes, raccoons, hawks, and bobcats. For example, a family of barn owls can eat as many as 3,000 rodents in a single four-month breeding cycle, thus the loss of just one owl is not just sad, but directly impacts the rodent population in the area.

Marin Humane has been working to educate the public on coyote populations by encouraging people not to feed the wildlife. Coyotes do hunt as well as scavenge to maintain the ecosystem's health. By keeping the coyote population healthy and away from urban environments (including not leaving poisoned rodents for them to consume), we

also establish communities free of unnecessary coyote interaction, pets stay safe from rodenticide and rodents will be managed by their natural predators.

Preventative measures are the most reliable when it comes to rodent population control in the urban or suburban setting. By removing ivy, debris, waste, etc., rodents will have fewer places to reside near human structures. Unsealed garbage and fallen fruit attract pests as well. By mitigating sources of food and shelter for unwanted visitors, we can reduce the population of rats and mice near homes and businesses.

Maintaining Marin's vast biodiversity means helping to maintain the population of animals in places where they can thrive. In doing so, we keep the beauty and magic of our home. Poisoning rodents risks the lives of pets and the balance of the ecosystem.

Rachel Roll is an animal services technician at Marin Humane, which contributes Tails of Marin and welcomes animal-related questions and comments. Visit marinhumane.org, email lbloch@marinhumane.org, or find us on social media @marinhumane.