

Why do we need this bill?

The widespread use of anticoagulant rodenticides intended to control non-native rodents continues to poison wildlife, children, and pets. A 2022 study by the California Department of Fish and Wildlife (CDFW) found that almost half of the tested animals, which included imperiled species like mountain lion and San Joaquin kit fox, had exposure to three or more anticoagulant rodenticides.¹ Our national symbol, the bald eagle, is also frequently poisoned by anticoagulant rodenticides.²

Exposure to anticoagulant rodenticides can cause internal bleeding, decrease immune system response, severe skin diseases, and death in non-target wildlife.³ These poisons are so pervasive that the four unborn kittens of a mountain lion killed in a vehicle strike in 2022 tested positive for anticoagulant rodenticides,⁴ and 95 percent of deceased mountain lions tested in 2021 had been exposed.⁵

Is the State regulating these poisons?

Although CDFW has recorded thousands of cases of poisoned wildlife over the past two decades, the Department of Pesticide Regulation (DPR) has not taken adequate action to prevent more poisonings.

In September 2022, the First District Court of Appeal ruled that DPR failed to adequately evaluate the impacts of diphacinone on non-target wildlife.⁶ To date, DPR has not taken action to address this failure.

AB 1322 requires that DPR enact stronger, permanent restrictions on second-generation anticoagulant rodenticides and diphacinone to limit unintended wildlife poisonings.



How will we address rodent infestations?

Numerous safer alternatives to second-generation anticoagulant rodenticides (SGARs) and diphacinone are available. Exclusion, sanitation, and physical controls are the most sustainable long term rodent control solution. Fertility control products have also proved effective and are now widely available in California. In a 2022 Seattle pilot study of a fertility control product, rat populations were reduced by over 90 percent in just a few months.⁷

As of 2019, there were over 125 different rodenticide products registered for use in California that were not diphacinone or SGARs. Rodenticides can also be counterproductive to rodent control by poisoning and killing natural predators that help regulate rodent populations.⁸

Anticoagulant poisons may pose a risk to human health. A 2021 study by the Department of Conservation and Science at the Lincoln Park Zoo in Chicago found that rats poisoned with anticoagulants were more likely to be infected with *Leptospira*, a bacterium that can cause illness in humans. The study concluded that anticoagulant-poisoned rats could present a public health risk and recommended that instead of relying on anticoagulants, improved urban sanitation and rodent exclusion should be instituted to provide a safer solution.⁹



References:

- 1 California Department of Fish and Wildlife, "Pesticide Exposures & Mortalities in Non-Target Wildlife." 2022. https://www.biologicaldiversity.org/campaigns/pesticides_reduction/pdfs/2021_pesticide_summary_cdfw-cdpr.pdf
- 2 Niedringhaus, et al. Anticoagulant rodenticide exposure and toxicosis in bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) in the United States. 2021. *PLOS One* <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0246134>
- 3 Serieys, Laurel E.K., et al. 2018. Widespread Anticoagulant Poison Exposure is Linked With Immune Dysregulation and Severe Notoedric Mange in Urban Bobcats. UC Agriculture & Natural Resources Proceedings of the Vertebrate Pest Conference. <https://escholarship.org/uc/item/10p4x6t2>
- 4 National Park Service. 2022. News release: "Adult female mountain lion P-54 and her four full-term fetuses were exposed to multiple anticoagulant rodenticides." <https://www.nps.gov/samo/learn/news/adult-female-mountain-lion-p-54-and-her-four-full-term-fetuses-were-exposed-to-multiple-anticoagulant-rodenticides.htm>
- 5 California Department of Fish and Wildlife. 2022. "Pesticide Exposures & Mortalities in Non-Target Wildlife" https://www.biologicaldiversity.org/campaigns/pesticides_reduction/pdfs/2021_pesticide_summary_cdfw-cdpr.pdf
- 6 Raptors Are The Solution vs. California Dept. of Pesticide Regulation. First District Court of Appeal decision issued 9/27/22. Available at <https://www.courts.ca.gov/opinions/nonpub/A161787.PDF>
- 7 Poison Free by 2023: Queen Anne Pilot. <https://www.raptorsarethesolution.org/poison-free-by-2023/>
- 8 Baudrot, et al. 2020. Trophic transfer of pesticides: The fine line between predator–prey regulation and pesticide–pest regulation. *J Appl Ecol.* 2020; 57: 806– 818. <https://doi.org/10.1111/1365-2664.13578>
- 9 Murray, et al. 2021. Urban rat exposure to anticoagulant rodenticides and zoonotic infection risk. *Biology Letters*. <https://www.raptorsarethesolution.org/wp-content/uploads/2021/11/Urban-rat-exposure-to-ARs.pdf>



**Healthy
great horned owl
with
gopher prey.**

Photo credit: Lee Aurich



**Great horned owl
found in dumpster,
Stern Grove, SF.
Necropsy showed
anticoagulant
poisoning.**

Photo credit: Wild Bill Peacock



**Healthy bobcat kitten
with prey.**

Photo credit: Vishal Subramanyan



**Bobcat
sick with mange.**

Photo credit: Vishal Subramanyan



**Healthy
mountain lion.**

Photo credit: Joe Galkowski



**Mountain lion
(P-22) with mange.**

*Photo credit:
National Park Service*



**Healthy barn owl
with gopher prey.**

Photo credit: Jerry Ting



**Barn owl poisoned
by anticoagulants
found in
Sacramento (tested
by UC Davis).**

Photo credit: Cayce Wallace



Healthy red-tailed hawk with prey.

*Photo credit:
Pamela Rose Hawken*



Red-tailed hawk bleeding out from anticoagulants.

Photo credit: WildCare