Date of Hearing: April 16, 2024

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE
Diane Papan, Chair
AB 2552 (Friedman) – As Amended April 4, 2024

SUBJECT: Pesticides: first-generation anticoagulant rodenticides

SUMMARY: Expands an existing prohibition on the use of anticoagulant rodenticides to cover the use of the first-generation anticoagulant rodenticides (FGAR) chlorophacinone and warfarin. Specifically, **this bill**:

1) Defines FGAR as a pesticide product containing any of the following active ingredients: diphacinone, chlorophacinone, or warfarin.

2) Expands the definition of "wildlife habitat area" for purposes of prohibitions on the use of FGARs and second-generation anticoagulant rodenticides (SGAR) to include open-space land for the preservation of natural resources, outdoor recreation, and public health and safety. Excludes land primarily used or managed for agricultural purposes and lands subject to a utility easement from the definition of "wildlife habitat area."

3) Prohibits, except for use for specified health and safety activities, the use of chlorophacinone or warfarin in a wildlife habitat area.

4) Prohibits, except for use for specified health and safety activities, the use of SGARs of FGARs within 2,500 feet of a wildlife habitat area.

5) Prohibits, except for specified health and safety and agricultural activities (see #8, below), the use of chlorophacinone and warfarin in the state unless the director of the Department of Pesticide Regulation (DPR) takes the actions specified in #6, below.

6) Authorizes the director of DPR to suspend the prohibition on chlorophacinone and warfarin if the director makes a determination and certifies that both of the following have occurred:

    a) DPR has completed a reevaluation of chlorophacinone and warfarin; and,

    b) DPR, in consultation with, and with the concurrence of, the Department of Fish and Wildlife (DFW), has adopted any additional restrictions necessary to ensure a trend of statistically significant reductions in the mean concentration values of detectable levels of chlorophacinone or warfarin, respectively, or any of their metabolites, in tested tissues of a scientifically representative sample of wildlife. These additional restrictions shall be based on substantial evidence and include:

        i) Implementation of integrated pest management alternatives before the use of chlorophacinone or warfarin is allowed; and

        ii) A finding, made in concurrence with DFW, that the restrictions are necessary based on the best available science.

7) Designates chlorophacinone and warfarin as restricted materials.

8) Permits the use of chlorophacinone and warfarin in the following activities:

   a) Use by any governmental agency employee for mosquito or vector control or for public health activities;

   b) Use by any governmental agency employee to protect water supply infrastructure and facilities;

   c) Use for the eradication of nonnative invasive species inhabiting or found to be present on offshore islands;

   d) Use to control an actual or potential rodent infestation associated with a public health need, as defined, as determined by a supporting declaration from the State Public Health Officer or a local public health officer;

   e) Use, following a specified authorization process, for research purposes related to the reevaluation of SGARs;

   f) Use at a medical waste generator;

   g) Use at a facility for producing drugs or medical devices; and

   h) Use relating to agricultural activities (except in a wildlife habitat area or within 2,500 feet of a wildlife habitat area).

9) Specifies that biological control, habitat manipulation, and modification of cultural practices are considered to be integrated pest management alternatives.

10) Provides that a person who sells or uses a FGAR or SGAR in violation of prohibitions is liable for a civil penalty not to exceed twenty-five thousand dollars ($25,000) per day for each violation. Authorizes the civil penalty to be assessed and recovered in a civil action brought in any court of competent jurisdiction for each individual sale or use, and separate civil penalties for the exposure of each person or animal to a FGAR or SGAR.

11) Authorizes a person to commence a civil suit to enjoin a person who is alleged to be in violation of the FGAR or SGAR prohibitions and to seek civil penalties. Authorizes the suit to be brought by any person on their own behalf or on behalf of individual animals, wildlife, wildlife species, or any representative thereof that are at risk of being killed, injured, harassed, or harmed by the unlawful sale or use of a FGAR or SGAR.

12) Provides that a person may commence a civil action only if both of the following conditions are satisfied:

   a) Sixty days have passed since written notice of the alleged violation has been given to DPR and any alleged violator; and

   b) DPR, the Attorney General, a district attorney, a city attorney, or a prosecutor has not commenced or diligently prosecuted a civil or criminal action for the alleged violation.

13) Requires a person who brings an action pursuant to the provisions of this bill to notify the Attorney General and DPR that the action has been filed within 60 days of filing the action.

14) Requires a person who brings an action pursuant to this bill, after the action is dismissed or settled or a judgment is entered for the action, to report the dismissal or the results of the settlement or judgment and the final disposition of the case to the Attorney General.

15) Provides that a person who prevails in an action brought pursuant to this bill is entitled to an award of reasonable attorney's fees and costs.

16) Authorizes a court, in an action brought pursuant to this bill, to enjoin the unlawful sale or use of a FGAR or SGAR, and to compel specific performance of an act or course of conduct necessary to protect a person, animal, crop, or property.

17) Authorizes a court, in addition to the civil penalty described in #10, above, to award medical costs and pain, suffering, and emotional distress damages on behalf of animals or persons that result from the violation.

18) Requires that civil penalties recovered pursuant to this bill be deposited into the Poison-Free Wildlife Account (established by this bill) and requires that the penalty monies be available for expenditure, upon appropriation by the Legislature, as follows:

    a) 40% for the support of programs for endangered and rare animals and native plant species, related conservation and enhancement programs, and programs for those species that may be candidates for determination as endangered or rare;

    b) 40% to acquire and restore to the highest possible level, and maintain in a state of high productivity, those areas that can be most successfully used to sustain wildlife and which will provide adequate and suitable recreation; and

    c) 20% for the recovery and rehabilitation of injured, sick, or orphaned wildlife, and for conservation education.

19) Requires that a civil action be commenced within two years of the violation.

20) Makes legislative findings about the public value of wildlife, conservation and biodiversity policy, the intrinsic value of animals, and the deleterious impact of rodenticides on animals, including nontarget animals.

21) Makes technical and conforming changes.

EXISTING LAW:

1) Authorizes the state's pesticide regulatory program and mandates DPR to, among other things, provide for the proper, safe, and efficient use of pesticides essential for the production of food and fiber; for the protection of public health and safety; and, for the protection of the environment from environmentally harmful pesticides by prohibiting, regulating, or ensuring proper stewardship of those pesticides [Food and Agriculture Code (FAC) § 11401 *et seq.*].

2) Defines "second generation anticoagulant rodenticide" (SGAR) as any pesticide product containing any of the following active ingredients: brodifacoum, bromadiolone, difenacoum, or difethialone [FAC § 12978.7(a)].

3) Prohibits, except as specified, the use of a SGAR in a wildlife habitat area, as defined [FAC § 12978.7(b)].

4) Prohibits, except for specified health and safety activities, the use of a SGAR in the state until the director of DPR makes a certification that DPR has completed a reevaluation of SGARs and has adopted restrictions to protect wildlife, as specified [FAC § 12978.7(c)].

5) Prohibits, except for specified health and safety and agricultural activities, the use of the FGAR diphacinone in the state and designates diphacinone as a restricted material until the director of DPR makes a certification that DPR has completed a reevaluation of SGARs and has adopted restrictions to protect wildlife, as specified [FAC § 12978.7 (d and i)].

6) Permits the use of SGARs and diphacinone for public health activities, to protect water supply infrastructure, for mosquito and vector control, to eradicate nonnative invasive species, for research purposes related to the reevaluation of SGARs, for medical waste generators, for facilities for producing drugs or medical devices, and for agricultural activities [FAC § 12978.7 (e – f)].

7) Defines, for the purposes of the SGAR and diphacinone prohibitions, "wildlife habitat area" as any park or wildlife refuge managed by a state agency, regional government, or quasi-government agency, or by a special district [FAC § 12978.7(a)(4)].

8) Defines, for the purposes of the SGAR and diphacinone prohibitions, a "public health need" as an urgent, nonroutine situation posing a significant risk to human health in which it is documented that other rodent control alternatives, including nonchemical alternatives, are inadequate to control the rodent infestation [FAC § 12978.7(e)].

9) Designates as "restricted materials" pesticides containing brodifacoum, bromadiolone, difenacoum, and difethialone (Title 3 California Code of Regulations § 6400).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

1) **Purpose of this bill**. This bill expands an existing prohibition on the use of anticoagulant rodenticides to include the FGARs chlorophacinone and warfarin. According to the author, "California needs to continue applying common-sense restrictions on some of the most dangerous rat poisons. By empowering community members to bring legal action on their own behalf or behalf of animal harmed by the illegal use or sale of anticoagulant rodenticides, [this bill] takes a thoughtful approach to better protect our wildlife and families. There are also a range of cost-effective alternatives to the most dangerous rat poisons for sale today that don't threaten some of California's most iconic wildlife like mountain lions and eagles."

2) **Background**. Many species of rodents inhabit California, including squirrels, chipmunks, beavers, gophers, rats, and mice. Rodents native to California play an important ecological role and are a major food source for predators and scavengers, including hawks, eagles, foxes, coyotes, and bobcats. Some types of rodents, especially non-native species like Norway rats, roof rats, and house mice, however, are pests when they infest houses, threaten public health, and destroy property. These rodents damage and destroy critical habitat, native

plants and animals, crops, property, and food supplies. They also can spread diseases such as hantavirus, leptospirosis, and salmonella to humans both directly and indirectly, posing a serious risk to public health.

Rodenticides. Rodenticides are pesticides designed to kill rodents, but the ingestion of, or sometimes contact with, rodenticides can have the same type of effect on any mammal. Contact with rodenticides can also affect birds and fish. Rodenticides are usually formulated as baits that are designed to attract rodents, but these baits can also be attractive to nontarget wildlife, children, and pets. Additionally, many rodenticides cause secondary poisoning risks to predators. According to the United States Environmental Protection Agency (U.S. EPA), most of the rodenticides used in the United States are anticoagulant compounds, either first or second generation, that interfere with blood clotting and cause death from excessive bleeding. Death typically occurs between four days and two weeks after rodents begin to feed on the bait.

FGARs. These include chlorophacinone, diphacinone, and warfarin and were developed as rodenticides before 1970. Chlorophacinone and warfarin lethality generally requires that an animal consumes multiple doses of the bait over several days. These are known as a multiple-dose anticoagulants. Chlorophacinone, diphacinone, and warfarin are registered to control rats and mice in the United States. Diphacinone has been prohibited for many uses in California since January 1, 2024. This bill proposes expand this prohibition to cover the use of chlorophacinone and warfarin as well.

SGARs. These include brodifacoum, bromadiolone, difenacoum, and difethialone and were developed beginning in the 1970s to control rodents that were resistant to FGARs. SGARs are more likely than FGARs to kill after a single night's feeding, and tend to remain in animal tissues longer than first-generation compounds. Because of this, SGARs pose greater risks to nontarget species that might feed on bait only once or that might feed upon animals that have eaten the bait. Due to these risks, SGARS are no longer nationally registered for use in products geared toward consumers and are registered only for the commercial pest control and structural pest control markets. Brodifacoum, bromadiolone, difenacoum, and difethialone have been prohibited for many uses in California since January 1, 2021.

Dangers of rodenticides. According to DFW, the use of poison baits to control rodents has injured and killed thousands of wild animals and pets throughout California. While all rodenticides pose a threat to nontarget animals, anticoagulant rodenticides have been found to pose a particular problem, especially due to secondary exposure, throughout the state. Secondary exposure occurs if an animal consumes another animal that has been poisoned by a pesticide, and the predator is then weakened or dies as a result of exposure to the poisoned prey. Large predators, such as mountain lions, can additionally be impacted by consuming smaller predators that have preyed upon poisoned rodents.

DFW’s 2023 "Pesticide Exposures & Mortalities in Nontarget Wildlife," which documents necropsies on wildlife remains, indicates that 81% of wildlife tested in 2022 were exposed to anticoagulant rodenticides, and DFW’s 2022 "Pesticide Exposures & Mortalities in Nontarget Wildlife," indicates that 70% of wildlife tested in 2021 (post enactment of AB 1788) were exposed to anticoagulant rodenticides.

According to the National Pesticide Information Center, chlorophacinone is one of the

rodenticides that pose the greatest secondary poisoning risks for wild mammals, dogs, and cats. The National Pesticide Information Center notes that both birds and mammals are of low risk of secondary poisoning from warfarin. U.S. EPA's 2020 analysis, "Seven Anticoagulant Rodenticides: Draft Ecological Risk Assessment for Registration Review," found, "On a subacute dietary exposure basis, the FGARs range from highly toxic (chlorophacinone) to moderately toxic (warfarin and diphacinone) to birds."

Alternatives to rodenticides. According to DFW and DPR, the most effective and safest ways to address rodent issues are through exclusion and sanitation—by eliminating factors that allow rodents to reproduce and thrive. DPR notes that rodenticides do not eradicate rodents and may not reduce their numbers for long. If there is an area-wide population of rodents, rodents from the edges move into the available space vacated by the poisoned rodents. Rodent numbers surge when people leave unpicked fruit on trees and pet food outside. Rodents find shelter when people ignore clutter and overgrown vines and allow access inside houses and garages.

To address these issues, DPR and DFW suggest that people who have identified a rodent population eliminate rodent entrances to the structure (seal holes, fill cracks, and install door sweeps); remove brush piles and debris near the structure; and, remove other food sources, such as pet food, wild bird seed, and fruit from trees. In addition to exclusion and sanitation, traps and electrocution devices can also be employed to address rodent pests. The sponsors of the bill also point to rodent fertility control as a potential alternative, which appears to already be in use by the city of San Francisco.

3) **Arguments in support**. This bill is sponsored by the Center for Biological Diversity, Animal Legal Defense Fund, and Raptors are the Solution (sponsors) who argue that "anticoagulant rodenticides pose an unreasonable risk to wildlife." The sponsors cite a number of studies that demonstrate that poisoning of non-target species is common; 2023 data from DFW "found that 81% of animals tested had exposure to anticoagulant rodenticides, including 88.2% of tested birds with 56.7% dying as a result of anticoagulant poisoning." The sponsors maintain that anticoagulant rodenticides also pose a significant risk to children, citing 2021 data from The National Poison Data System documenting over 2,300 cases where a child under the age of six was poisoned by anticoagulant rodenticides. Finally, the sponsors contend that there are viable alternatives to anticoagulant rodenticides available today: "There is a wide array of cost-effective alternatives available on the market today to better address rodent infestations. Sealing buildings and eliminating food and water sources are a necessary first step. Sustainable rodent control strategies that involve snap traps, electric traps, fertility control, and other non-toxic methods can then be implemented to address any infestations. Several types of less toxic rodenticides are available as well."

4) **Arguments in opposition**. A coalition of agricultural trade associations (ag coalition) opposes this bill maintaining that California already has robust review and regulation of pesticide use by DPR. The ag coalition argues that this bill circumvents this established process and "unilaterally prohibits use of the first-generation anticoagulant rodenticides warfarin and chlorophacinone in the state." The ag coalition notes that the U.S. EPA is currently undergoing a review process of anticoagulant rodenticides to assess the need for additional measures to protect non-target species. This review is expected to be completed by the end of the year and the ag coalition contends that this bill is premature. The ag coalition also objects to the expansion of the definition of "wildlife habitat area" and asserts

this expansion will preclude the use of anticoagulant rodenticides at recreation areas where rodent-human interactions can result in disease transmittal to humans. In addition, the ag coalition argues that the buffer zone added by this bill "is not required to be substantiated by a finding of wildlife species impact, a reevaluation by DPR, or any other state specified scientific method." Finally, the ag coalition asserts that this bill will be detrimental to the agriculture industry and diminish food safety.

5) **Policy consideration**. This bill establishes civil penalties for violations of existing prohibitions on SGARs and diphacinone and for the new prohibitions on chlorophacinone and warfarin. In addition, this bill creates a private right of action that a person may exercise on behalf of themselves or an animal if DPR, the Attorney General, a district attorney, city attorney, or prosecutor has not commenced a civil or criminal action within 60 days of an alleged violation of the prohibitions on the use of FGARs or SGARs. These enforcement provisions are within the jurisdiction of the Assembly Judiciary Committee and will be addressed in greater detail should this bill pass out of this Committee.

6) **Proposed committee amendments**. This bill significantly expands the definition of "wildlife habitat area" through the incorporation by reference of "open-space land" as defined in Government Code § 65560(h)(1), (3), and (4). The extent of this expansion is not completely clear, but tens of thousands of acres of land, including privately held land, that a local agency has zoned as "open-space land" would now fall under the definition of "wildlife habitat area." When combined with the 2,500 foot buffer zone in this bill, large swaths of land in the state that are not currently subject to the prohibition on the use of FGARs and SGARs will now be so. Given the uncertainty about how much more land would be captured under this expanded definition, the Committee may wish to ask the author to retain the definition of "wildlife habitat area" under existing law. The following accomplishes this:

   Amend § 12978.7(a)(7) of the Food and Agricultural Code to read:
   "Wildlife habitat area" means a park or wildlife refuge managed by a state agency, regional government, or quasi-government agency, or by a special district~~*, or an open-space land as defined in paragraph (1), (3), or (4) of subdivision (h) of Section 65560 of the Government Code. Open-space or other land primarily used or managed for agricultural purposes is not a wildlife habitat area, even if that land is also used or managed in a manner that supports fish or wildlife. "Wildlife habitat area" does not include land subject to a utility easement*~~.

7) **Triple-referral**. This bill has also been referred to the Assembly Environmental Safety and Toxic Materials Committee and the Assembly Judiciary Committee. This bill passed the Assembly Environmental Safety and Toxic Materials Committee by a vote of 4 to 2 on April 9, 2024.

8) **Related legislation**. AB 1322 (Friedman), Chapter 836, Statutes of 2023, prohibits the use of the FGAR diphacinone in wildlife habitat areas and prohibits the use of diphacinone in the state until DPR has completed a reevaluation and developed and adopted further restrictions on its use. Makes changes to existing restrictions on the use of SGARs consistent with those placed on diphacinone.

   AB 1298 (Bloom), Chapter 479, Statutes of 2021, makes technical corrections related to the prohibition of the use of SGARs.

AB 1788 (Bloom), Chapter 250, Statutes of 2020, prohibits the use of SGARs until the director of DPR certifies a completed reevaluation of SGARs.

AB 2422 (Bloom) of 2018 would have prohibited the use, except as specified, of any pesticide that contains an anticoagulant. AB 2422 was referred to this Committee, but never heard the request of the author.

AB 1687 (Bloom) of 2017 would have prohibited the use of any pesticide that contains one or more of nine specified active ingredients (including all FGARs and SGARs and some acute toxicants). AB 1687 was referred to the Assembly Environmental Safety and Toxic Materials Committee, but never heard at the request of the author.

AB 2596 (Bloom) of 2016 would have prohibited the use of SGARs. AB 2596 was referred to the Assembly Environmental Safety and Toxic Materials Committee, but never heard at the request of the author.

AB 2657 (Bloom), Chapter 475, Statutes of 2014, prohibits the use of SGARs in wildlife habitat areas.

REGISTERED SUPPORT / OPPOSITION:

Support

Animal Legal Defense Fund (co-sponsor)
Center for Biological Diversity (co-sponsor)
Raptors are the Solution (co-sponsor)
A Voice for Choice Advocacy
All About Owls
Animazonia Wildlife Foundation
Arroyos & Foothills Conservancy
Brentwood Alliance of Canyons & Hillsides
California Association of Professional Scientists
California Wildlife Center
Canyon Back Alliance
City of Agoura Hills
Cleanearth4kids.org
Coastal Ranches Conservancy
Defenders of Wildlife
Defiance Canyon Raptor Rescue
Endangered Habitats League
Felidae Conservation Fund
Filoli Gardens
Friends of Griffith Park
Friends of Plumas Wilderness
Greenspace - the Cambria Land Trust
Happy Hen Animal Sanctuary
Hills for Everyone
Humane Wildlife Control
In Defense of Animals

International Fund for Animal Welfare
Klamath Siskiyou Connectivity Project
Mojave Desert Land Trust
Morro Coast Audubon Society
Mountain Lion Foundation
Oakland Museum of California
Ojai Raptor Center
Old Agoura Homeowners
Pathways for Wildlife
Poison Free Agoura
Poison Free Conejo Valley
Poison Free Malibu
Preserve Wild Santee
Project Coyote
Rodent Alliance of Tiny Scurriers
San Bernardino Valley Audubon Society
San Diego Humane Society
Save Joshua Tree Wildlife
SC Wildlands
Socal 350 Climate Action
Social Compassion in Legislation
Teranga Ranch Wildlife
The Cougar Fund
The Escondido Creek Conservancy
The Human Society of The United States
The Nature of Wildworks
The River Otter Ecology Project
The Wildlands Conservancy
Unchainedtv
United Neighborhoods for Los Angeles
Urban Wildlife Research Project
Ventura Land Trust
Voters for Animal Rights
Wild Earth Guardians
Wildlife Emergency Services
Wishtoyo Foundation
Women United for Animal Welfare

Opposition

Almond Alliance of California
American Pistachio Growers
Association of California Egg Farmers
California Agricultural Commissioners & Sealers Association
California Association of Pest Control Advisers
California Association of Wheat Growers
California Association of Winegrape Growers
California Bean Shippers Association
California Business Properties Association

California Cattlemen's Association
California Citrus Mutual
California Cotton Ginners and Growers Association
California Fresh Fruit Association
California Grain & Feed Association
California League of Food Producers
California Pear Growers Association
California Rice Commission
California Seed Association
California State Floral Association
California Strawberry Commission
California Tomato Growers Association
California Walnut Commission
California Warehouse Association
Household and Commercial Products Association
Pacific Egg and Poultry Association
Pest Control Operators of California
Responsible Industry for A Sound Environment - Rise
Rodenticide Task Force
Western Agricultural Processors Association
Western Growers Association
Western Plant Health Association

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