
THE PESTICIDE REVIEW

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California Code of Regulations

Keeping up to date with Title 3, Division 6

Have you overheard others talking about the 2003 California Code of Regulations? Do you have a 1995 edition and wish you, too, could have the most updated version of the code?

If you would like a hard copy of Title 3, Division 6 of the California Code of Regulations, you can purchase a copy from Barclays for \$35.00. Barclay's phone number is (800) 888-3600. You can also subscribe with Barclays and receive regular updates to the Code.

For those of you online, you can view California's Code of Regulations at this website:

<http://www.calregs.com/default.htm>



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Ground Squirrels & Burrowing Owls

Factors to consider when planning ground squirrel control (Photo by Jack Kelly Clark, UC IPM Project)



Ground Squirrels (*Spermophilus beecheyi*)

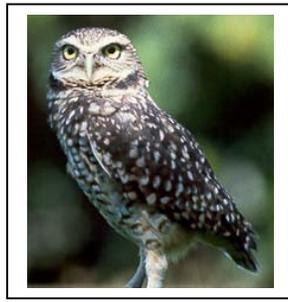
Ground squirrels can become a major problem in both agricultural and urban settings. They damage crops, ornamentals, vines, trees, lawns, and compete with grazing animals for forage. Furthermore, their burrowing undermines the soil structure creating hazards to people and livestock. The Department of Fish and Game classifies ground squirrels as a non-game animal. Property owners and pest control companies can, therefore, use any legal method to control populations found to be damaging property.

A variety of methods are available to control ground squirrels. The best method will depend on the specifics of the situation such as population level and season. Fumigation is most effective in spring when soil is moist. Fumigants such as aluminum phosphide require the user to obtain a Restricted Materials permit from our office. Other devices, such as Rodex, do not utilize a pesticidal active ingredient. However, they still require the user to be licensed if they are performing pest control for hire (the definition of pest control includes the use of "devices"). Treated grain baits are effective in summer and fall when ground squirrels typically feed on seeds. For more information about ground squirrels or control options, visit this website: <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7438.html>

An important factor that must be considered when performing any type of pest control is the potential impact to non-target wildlife. In the case of ground squirrel control in Santa Clara County, we are primarily concerned about the presence of burrowing owls.

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Ground Squirrels & Burrowing Owls



Burrowing Owls (*Athena cunicularia hypugaea*)

Burrowing owls stand approximately 8.5-11 inches tall, are brown with a cream belly, and have long legs. They typically inhabit open, dry grasslands, agricultural and range lands, and desert habitats. They are often found along the margins of airports, golf courses and in vacant urban lots. The Santa Clara Valley Audubon Society estimates that about 120 nesting pairs of burrowing owl remain in Santa Clara County. Their nesting season is generally from February through August and they often prefer to nest in abandoned ground squirrel burrows. They feed on a range of prey from beetles and grasshoppers to small mammals. They can be an important part of natural rodent control systems.

Habitat destruction due to development and poor land management practices have been the biggest threat to burrowing owl populations. Burrowing owls are listed as a Species of Special Concern by the California Department of Fish and Game and are federally protected under the Migratory Bird Treaty Act. Killing an owl or destruction of an active nest is a punishable offense under State and Federal law.

If you would like more information on burrowing owls, contact the Santa Clara Valley Audubon Society at (408) 252-3747.

What should you consider when planning ground squirrel control?

1) Presence of ground squirrels

Obviously, for control to be effective the pest must be present! This may sound simple, but it can be difficult to determine if a burrow is currently being utilized by ground squirrels. Look for signs that would indicate an inactive burrow system such as a lack of tracks, spider webs covering the burrow entrance, or the germination of weeds on excavated soil. Applications using fumigants require the squirrels to be inside the burrow, so make sure they're home before you apply.

Something else to keep in mind is that squirrels enter periods of inactivity during the winter and the hottest summer months. Do not fumigate during these hibernation periods. The squirrels usually plug their

burrows with soil, which can prevent the fumes from reaching the nest chamber. This plug cannot be seen by examining the burrow entrance!

2) Presence of burrowing owls

The presence of burrowing owls can be determined by observing the burrow systems over a period of time. Owls like to perch on fence posts or on top of mounds outside their burrows. Feathers, droppings, or insect parts around burrows may also indicate the presence of owls. If burrowing owls are present, a pest control operation using fumigants or Rodex type devices cannot proceed!

If you have an active burrowing owl area with ground squirrels, the best-case scenario would be to leave the site alone. In a case where that is not an option and a treatment must take place, baits may be the only alternative. If you do use baits in the area, we suggest that you place the baits in a tamper-proof bait station and place the station as far away as possible from active owl burrows. Burrowing owls hunt near their burrows and an active hunting area will usually encompass a 300+ meter radius from the burrow. Though the majority of a burrowing owl's diet is comprised of insects, they do predate on small mammals. Be sure to regularly check your bait stations and the surrounding area to monitor for dead rodents. Dead rodents should be removed as promptly as possible to avoid any problems with secondary poisoning.

3) Presence of other endangered species

Be aware of the signs of non-target species inhabiting inactive ground squirrel burrows. In other parts of California, species such as kit foxes commonly use ground squirrel burrows for shelter. In Santa Cruz County, an endangered species of salamander uses old burrows. Contact the Santa Cruz County Agricultural Commissioner for more information if you have questions about the salamander and where they are known to occur (831) 763-8080.

City of San Jose Disking Ordinance

In 2001, the City of San Jose passed an ordinance to help protect burrowing owl habitat. For more information contact the City of San Jose or log on to this website to see the details of this ordinance: http://www.amlegal.com/sanjose_ca/

Decontamination Sites

3CCR Section 6734

Mixing and loading pesticides is the activity that puts pesticide applicators at most risk of pesticide exposure. It's therefore not surprising that the Code of Regulations requires a decontamination site be available to employees when they are performing this activity in certain situations.

What is required to be at the mix load site?

1. Clean, cool, drinkable water
2. Soap and single use towels
3. A change of coveralls

The first requirement is that "sufficient" water be available for routine washing of hands and face. There also has to be enough water for emergency eye flushing and washing of the entire body.

As regulators, we don't like the words "sufficient". Words such as this one leave the situation open for interpretation. What one person thinks is sufficient, may be deficient in another's opinion. The U.S. EPA recommends at least three gallons of water for each handler. This amount, however, may need to be increased if the employer determines that the handling activity might require more. An important question you must ask yourself: If an emergency occurs, do I have enough water on hand? Pretend you splashed a corrosive material in your face and eyes and you need that water. Would you be satisfied with the amount you have on hand? Would you have wished you brought more with you? It's always a good rule to be over-prepared than to be caught unprepared. Having more water on hand than what you think you will need will not raise the question of whether you had enough, and more importantly, you'll be safe!

The second requirement of this code section is to supply the decontamination site with soap and single use towels. Having soap on site is self-explanatory. The sticking point of this section is that it specifically calls for single use towels. Towels you wash and re-use are not adequate. Make sure you have disposable towels at your decontamination site!

The third requirement is that a clean change of coveralls must be available at the site. If you wish, this could be a disposable Tyvek® suit. We're looking for clothing the applicator can change into if their coveralls become saturated with pesticides.

How close does the decontamination site have to be to the handler?

Pest control companies must have a decontamination site within 100 feet of the mixing / loading site. If companies supply their applicators with pesticide concentrate to mix in the field, a decontamination site must be located where the employee mixes the pesticides. If the applicator is in a residential area, a homeowner's garden hose that dispenses clean drinkable water can suffice for a "sufficient" water source. Make sure the applicator has the soap, single use towels, and coveralls, and you will be in compliance.

What chemicals require a decontamination site?

Any pesticide with the signal words "Danger" or "Warning" on the label.

Although not required by the regulation, we recommend that companies supply their employees with a means to decontaminate themselves regardless of the pesticide category.

Signal Words and LD₅₀

Danger, Warning, Caution...

When a pesticide product is placed in a given category, many different factors are considered, one of which is the chemical's LD₅₀.

The definition of LD₅₀ is the lethal dose in mg / kg that will kill 50% of a test population. The following is a breakdown of the LD₅₀ values for each pesticide category.

Category 1 / Danger

- 1) Oral LD₅₀ is up to and including 50 mg/kg
- 2) Dermal LD₅₀ is up to and including 200 mg / kg
- 3) Skin effects: Corrosive

Category 2 / Warning

- 1) The Oral LD₅₀ is from 50 - 500 mg / kg
- 2) The Dermal LD₅₀ is from 200 - 2,000 mg / kg
- 3) Skin effects: Severe irritation at 72 hours

Category 3 / Caution

- 1) Oral LD₅₀ is from 500 - 5000 + mg / kg
- 2) Dermal LD₅₀ is from 2,000 - 20,000 + mg / kg
- 3) Skin effects: Moderate irritation at 72 hours