A STITCH IN TIME ACTUALLY SAVES NINE CALIFORNIA GROUND SQUIRREL CONTROL

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THE PRESIDENT CALLED UPON ALL CALIFORNIANS TO DESTROY THE GROUND SQUIRREL. THIS ACTION FOLLOWED THE GOVERNOR PROCLAIMING SQUIRREL WEEK. WHEN DID THIS HAPPEN?

1.1808
✓2.1918
3. IT NEVER HAPPENED
4.1945
5.1984





The Rodent Control Division of the California wanted to control squirrels in 1918 because..?

1. THEY WERE NOT NATIVE
 2. THEY DESTROYED TOO MUCH FOOD
 3. THEY HARBORED BUBONIC PLAGUE
 4. THEY DESTROYED WATER CONTROL
 3. STRUCTURES



History of California Ground Squirrel Control

CA State

Commission of Horticulture

November-December 1918

When was the first notable effort to control ground squirrels in California?



Squirrel infestations around the California missions were attributed to...?



WHAT WERE SQUIRRELS EATING ON RANGELAND?

NATIVE BUNCHGRASSES.
 ✓2. BUR CLOVER.
 ✓3. FOXTAILS.
 ✓4. FILAREE



200 SQUIRRELS = 1 STEER



DESPAIR.



SUCCESS.



HOW IS IT, NEIGHBOR?

COMMON, NATIVE CALIFORNIA GROUND SQUIRREL



POSSIBLE VALUES





Squirrel Fricassee

SPECIES OF SPECIAL CONCERN WESTERN BURROWING OWL



endangered CALIFORNIA TIGER SALAMANDER





endangered SAN JOAQUIN KIT FOX



WHY DO WE CONTROL SQUIRRELS?



CONTROL METHODS

- Habitat modification
- Trapping
- Fumigation
- Toxic bait
- On the Horizon

MODIFY HABITAT

- □ MOST PALATABLE, LESS EFFECTIVE
- Remove brush piles and debris
- Flood irrigate
- Cultivate frequently
- Dog presence



- Deep rip old burrows
- Provide for natural predators i.e. rattlesnakes, coyotes

California Ground Squirrel - Calendar of Management



From: University of California Ground Squirrel BMP website: http://groups.ucanr.org/GSBMP/index.cfm

KILL TRAPS

- Most effective Feb-Oct
- Keep away from pets and kids
- Some traps require baiting i.e. box and tunnel
- Coniber traps do not require baiting
- Check traps daily
- Dispose of properly

LIVE TRAPS

- Most effective Feb-Oct
- Check traps daily



• Dispatch humanely and dispose of properly

Why are traps most effective February-October ...



What should you do with a live squirrel?



FUMIGATION

- Use when soil is moist (Feb-April)
- Identify active burrows
- Fill in entrance where smoke escapes
- Do not use under or near occupied buildings

TOXIC BAIT (EARLY SUMMER)

- Anticoagulant treated grain
- Must be eaten in several feedings
- Use bait station or box
- Kills over 2 to 4 weeks



Live Trapping Versus Treated Grain Bait Experiment

CONTRA COSTA COUNTY DEPARTMENT OF AGRICULTURE MORTAY MENDOZA

PURPOSE

To determine the effectiveness of live trapping moderate to high populations of ground squirrels and to perform a comparison study of time, expense and effectiveness of live trapping versus broadcast treatment of 0.01% diphacinone treated bait.

LIVE TRAPPING

12 live traps were placed

•152 Ground Squirrels were captured

•\$7,349.38 per linear mile or \$5,074.36 with projected efficiencies

TREATED GRAIN BAIT

DIPHACINONE 0.01% TREATED GRAIN WAS USED

\$220.40 per linear mile

925 Linear Miles

1st GENERATION ANTICOAGULANTS

Diphacinone and chlorophacinone are first generation anticoagulant.

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Breakdown of the compound occurs naturally with sunlight and soil microbial action.

It requires multiple feedings for effective control and breaks down relatively rapidly in animal tissues when compared to second generation anticoagulants.

2ND GENERATION ANTICOAGULANTS

Second generation anticoagulants are intended for a single feeding.



Brodifacoum, Bromadialone or Difethialone

ALTERNATIVE RESOURCES



Kaput **GROUND SQUIRREL BAIT** This product may only be used within 100 feet of buildings to control California Ground Squirrels

KILLS CALIFORNIA GROUND SQUIRRELS AND THEIR FLEAS



NET WT. 5 LBS. (2.26 kg)

KEEP OUT OF REACH OF CHILDREN SEE BACK PANEL FOR FIRST AID AND ADDITIONAL PRECAUTIONARY STATEMENTS.

SECONDARY KILL FROM GROUND SQUIRREL POISON IS MOST COMMON FROM....?

1.1st GENERATION

