

Evaluating and Implementing Practices to Control the Piute Ground Squirrel Epidemic in Southern Utah

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Introduction

The Piute ground squirrel, (*Urocyon mollis*), populations on agricultural lands in South West Utah are increasing. It is a small gray squirrel found in Nevada and western Utah. It eats grasses, alfalfa and other agronomic crops. High populations of ground squirrels can compete with livestock for forage; destroy food crops, golf courses, and lawns; and can be reservoirs for diseases such as plague. Their burrowing activities alter irrigation systems. Burrow mounds not only cover and kill vegetation, but can damage haying machinery. These squirrels are currently costing farmers hundreds of thousands of dollars in lost crops and in control costs. For the past 10 years USU Extension has conducted a number of trials to determine best management practices to reduce squirrel numbers. These control methods include using different types of bait, and using different methods of fumigation. The research showed that the few products currently labeled to control the Piute ground squirrels in Utah are not appetizing to the squirrels.



Results

- Most of the farmers are implementing several different methods to control the ground squirrels.
- The YouTube video, Ground Squirrel Control Methods, that Extension produced has had over 10,000 views in the last 3 years.
- The State of Utah issued a Section 24(c) Special Local Need Label for Rozol Vole Bait for the control of the Piute Ground Squirrel.
- Extension produced a factsheet on Piute ground squirrel control that we are distributing and it will be on the USU Extension Website.

Objectives

- Train farmers and landowners impacted by ground squirrels about integrated pest management approaches to controlling the Piute ground squirrel.
- Compare the effectiveness of different rodenticides and fumigants in field trials to control ground squirrels.
- License a squirrel bait in the State of Utah that is appetizing to the Piute ground squirrel.

Program Activities

- Agents conducted a number of field trials to determine which baits were most appetizing to the Piute ground squirrels and when is the best time to apply the baits.
- Agents conducted field trials to decide which fumigation methods would work best in controlling the squirrels.
- Crop schools and field days were held each year and the research information was disseminated to farmers and landowners.
- Dr. Roger Baldwin, California Extension Wildlife Specialist, come and present his ground squirrel research at a regional ground squirrel management workshop. This workshop and some of the field research was video taped and put on the web as a YouTube video.
- Agents conducted field trials with companies that produce ground squirrel bait, in order to have their product licensed in the state of Utah.



Impacts

- After holding many crop schools and ground squirrel control trainings most farmers and landowners have implemented a ground squirrel control program.
- By conducting numerous field trials we have scientific information on what baits and fumigation methods farmers can use to control the squirrel infestations.
- We are currently seeing over a 25% reduction of ground squirrels on the crop ground on the Milford Flat.