

Management of voles: Is it possible?

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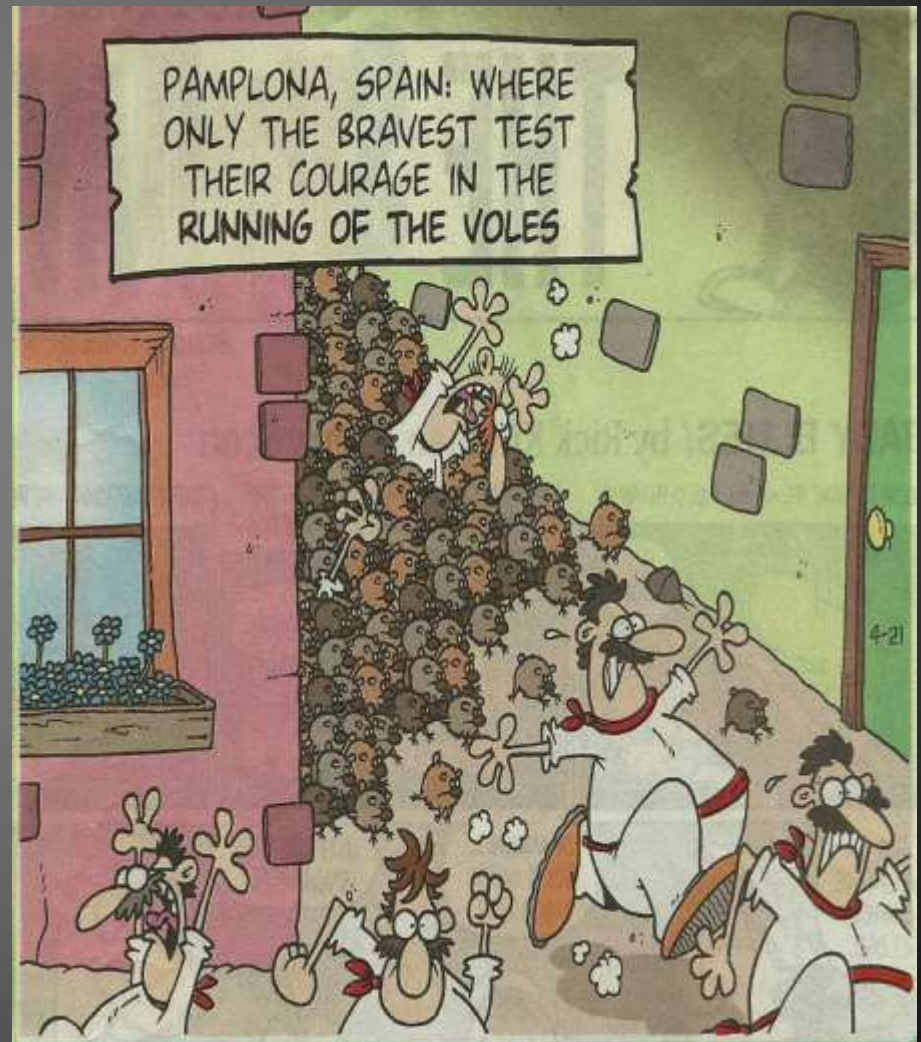


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Species Identification (Meadow Voles)

- Have dark grayish brown fur and are 4-6 inches in length.
- Populations tend to cycle, exhibiting irruptive growth patterns.



Species Identification (Meadow Voles)

- Dig shallow burrows and leave well-worn trails. Fecal pellets are often present.
- Average alfalfa loss of 11%.



Current Control Strategies

- Currently, we focus on an integrated approach that utilizes a number of strategies and tools to control vertebrate pests.



What Control Options are Available?

Cultural practices

Baiting

Burrow fumigation

Trapping

Exclusion

Repellent

Frightening

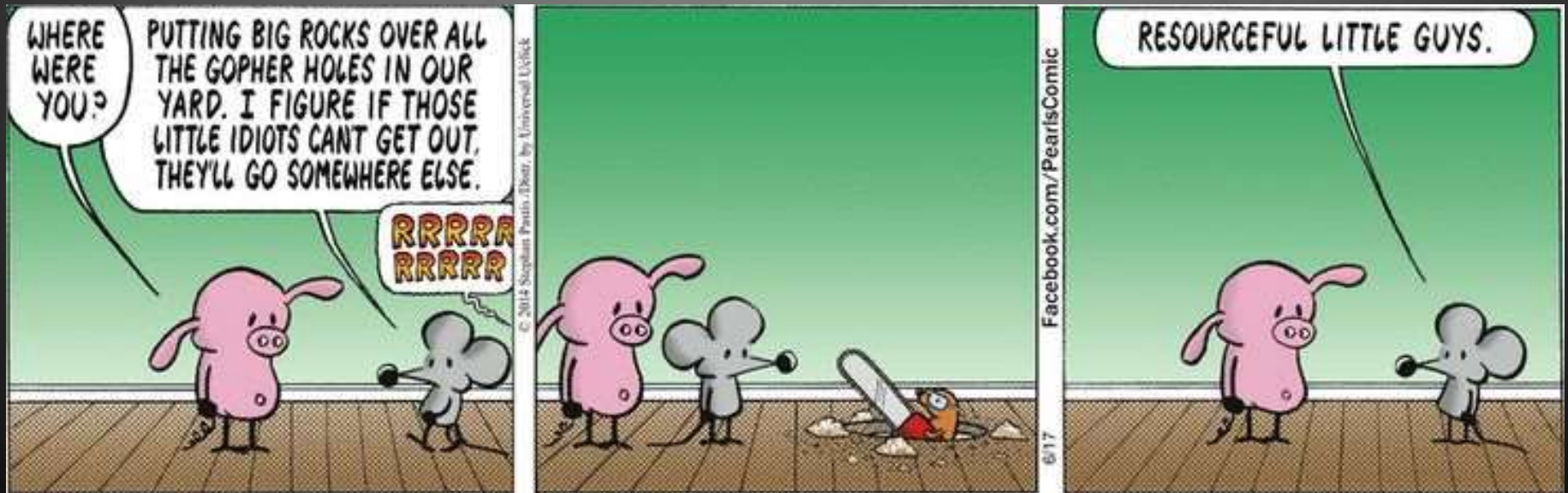
Shooting

Vole

X

X

X



Control Options—Biocontrol

- Natural predators have been used to control vertebrate pests.



Control Options—Biocontrol

- Natural predators have been used to control vertebrate pests.
- Owl boxes are inconclusive for voles.



Control Options—Habitat Modification

- Involves altering habitat to reduce the desirability for pests, including cultural practices.
- **Examples:**
 - destroy old burrows



Control Options—Habitat Modification

- Involves altering habitat to reduce the desirability for pests, including cultural practices.
- **Examples:**
 - destroy old burrows
 - flood irrigation



Courtesy R. Bourbour

Control Options—Exclusion

- May be a control option to consider for voles.
- Plastic mesh-style fencing has been effective at slowing movement of voles into artichoke fields.
- Fencing should be buried at least 6 inches below ground and extend 6-10 inches above ground.
- Aluminum flashing may provide more long-term functionality.
- Must consider equipment movement into and out of fields.



Control Options—Trapping

Voles

- tend to be too numerous for trapping to be practical



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Voles

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Control Options—Baiting

- Involves use of poison baits to control vertebrate pests.
- All are restricted use against rodents in agriculture.

	Anticoagulants	Zinc phosphide	Strychnine
Voles	X	X	

Control Options—Baiting

Zinc phosphide for voles:

- is an acute toxin.
- potential bait shyness.
- prebaiting can be helpful.
- can be used for spot treatments and broadcast baiting.
- not to be used in or around buildings.



Control Options—Baiting

Changes to rodenticide regulations:

- moratorium on ARs in CA, but ag exempt.
- new EPA restrictions likely in the future.
 - could include carcass searches
 - greater PPE requirements
 - greater restrictions in T&E ranges



Vertebrate Pest Control Handbook

<http://vpcrac.org/about/vertebrate-pest-handbook/>

The screenshot displays the homepage of the Vertebrate Pest Control Handbook online. The page features a blue header with navigation tabs for Home, History, Publications, Contact, About, and Contact. Below the header, the main content area is titled "The Vertebrate Pest Control Handbook online" and lists various resources. On the right side, there is a sidebar with a "Home" button and a "Contents" menu.

The Vertebrate Pest Control Handbook online

Current CDFA Roadside Labels:

- CDFA Anticoagulant Labels - Chondrocinone
 - [Roadside Label Chondrocinone Treated Antelope Grass \(2012\)](#)
 - [Roadside Label Chondrocinone Treated Grass \(2012\)](#)
 - [Roadside Label Chondrocinone Treated Grass \(2012\)](#)
- CDFA Anticoagulant Labels - Diphacinone
 - [Roadside Label Diphacinone Treated Grass \(2012\)](#)
 - [Roadside Label Diphacinone Treated Grass \(2012\)](#)
 - [Roadside Label Diphacinone Treated Grass \(2012\)](#)
- CDFA Zinc Phosphide Labels
 - [Roadside Label Zinc Phosphide Treated Grass \(2012\)](#)

Chapter 1 Laws and Regulations (Review)

Chapter 2 Toxicants and Fumigants

Chapter 3 The Role of Wildlife in Spreading Diseases (Review)

Chapter 4 Materials, Introduction and Rating Guidelines Part 1

Sub

Chapters

Cotton Rat

Coyle

Deer (Review)

Chapter 4 Materials Part 2

Golden Marmot, Ground Squirrel

California Ground Squirrel

Ground Squirrel (Review)

House Mice

Chapter 4 Materials Part 3

Kangaroo Rats

Marmot

Mountain Squirrels (Review)

Moles

Muskrat

Muskrat Rat

Chapter 4 Materials Part 4

Opuscul

Porcupine

Yellow Backed Woodrat, Cotton Rat (Review)

Road Rat

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Statewide Legislation

Vertebrate Pest Handbook

Links

Questions?

