

# MOLES

& OTHER PESKY  
DIGGERS



Kentucky Cooperative Extension



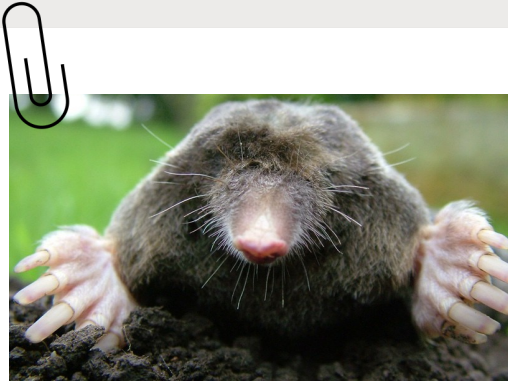
*It starts with us*

### CRIMINAL HISTORY REPORT

Destructive tunnelling in expensive lawns and gardens.

Separating roots of plants from soil causing dieback or death.

Notorious for raised tunnels irritating gardeners.



### MODUS OPERANDI

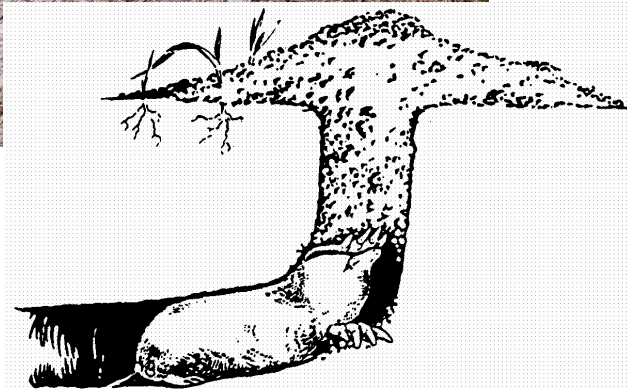
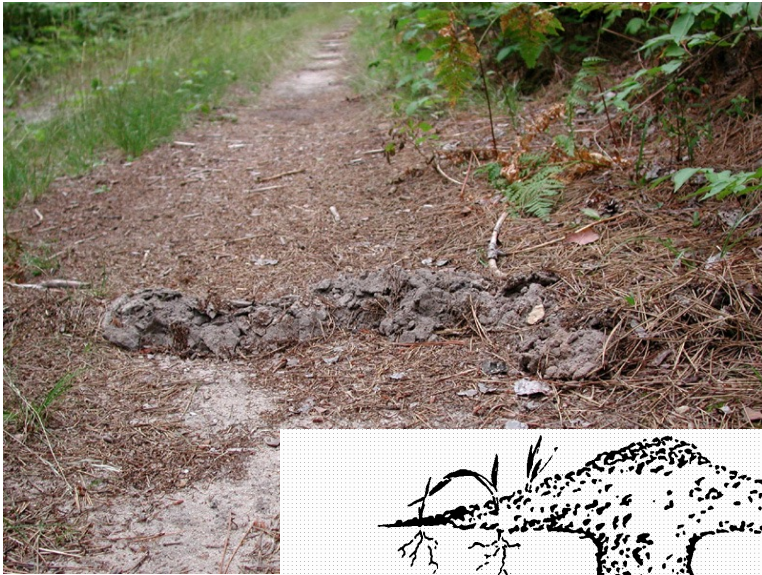
- Insectivore
- Adapted for life underground
- Solitary (works in small numbers)
- Most active early morning and evening-year round
- Voracious appetite for earthworms, grubs, invertebrates

## #1 The Mole aka The Eastern Mole





# Mole Tunnels



# Mole Management



The diagram consists of a dark gray background with six light gray circles of varying sizes. The circles are arranged in a way that they overlap. The top-left circle is labeled 'EXCLUSION'. The bottom-left circle is labeled 'PREDATORS'. The top-center circle is labeled 'REPELLENTS'. The center circle is labeled 'CHEMICAL'. The top-right circle is labeled 'BAIT'. The bottom-right circle is labeled 'TRAPPING'.

REPELLENTS

BAIT

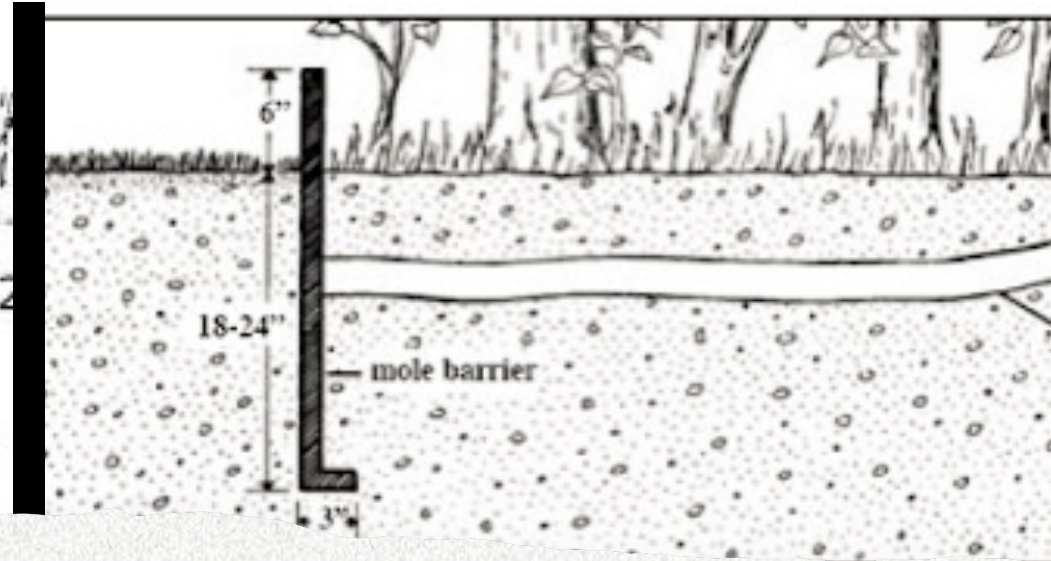
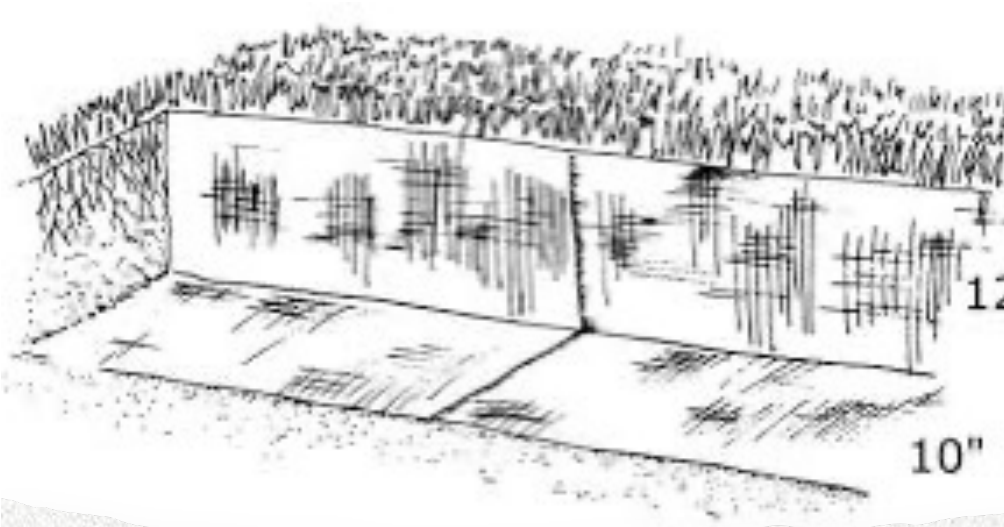
EXCLUSION

CHEMICAL

PREDATORS

TRAPPING





# Exclusion

- Option for small areas such as flower beds
- Hardware cloth 12 inches deep bent to 90° angle



# Repellents

- Thiram – may be applied to protect bulbs
- Castor oil and castor oil products, such as Mole-Med® or MoleChase® - show minor effectiveness in repelling the eastern mole
- Mole Bean Plant – not proven; also poisonous to humans and a weed/ not recommended





# Predators

- Domestic cats and dogs



# Chemical

- Insecticides may reduce grub / earthworm populations
  - success may be limited
  - timing is mid-June to mid-July
- Fumigants (e.g., Al. phosphide, sodium nitrate / sulfur)
  - limited success when placed in deep burrows
  - serious human health implications possible

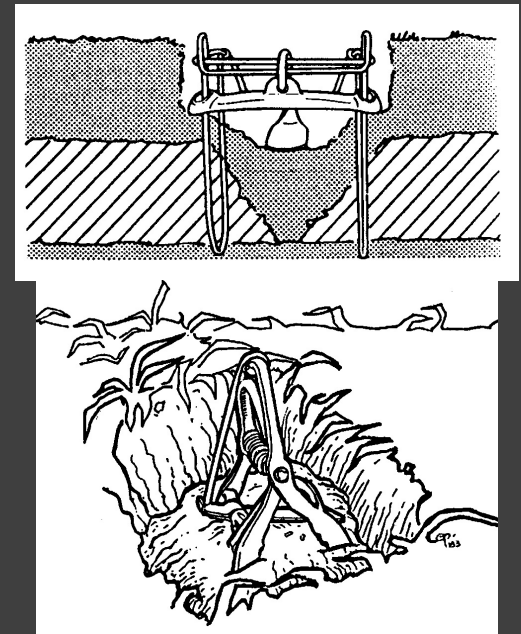
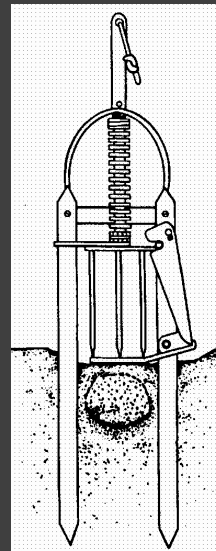


# Baits and Traps

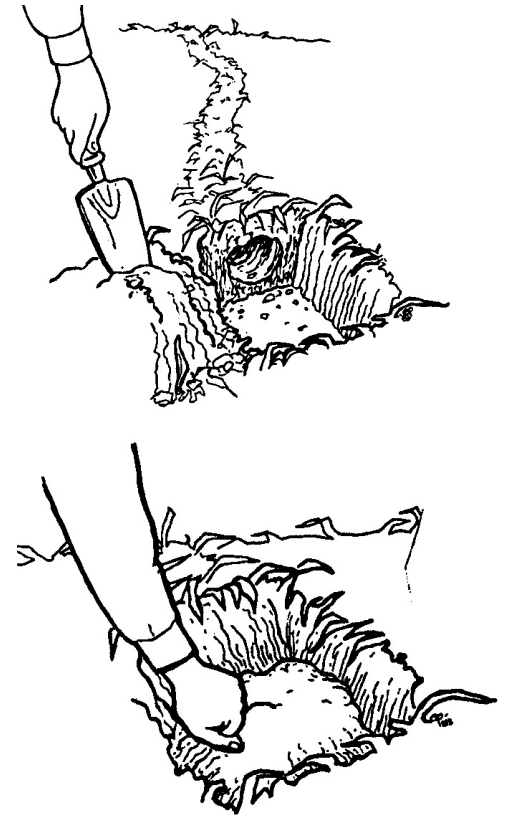
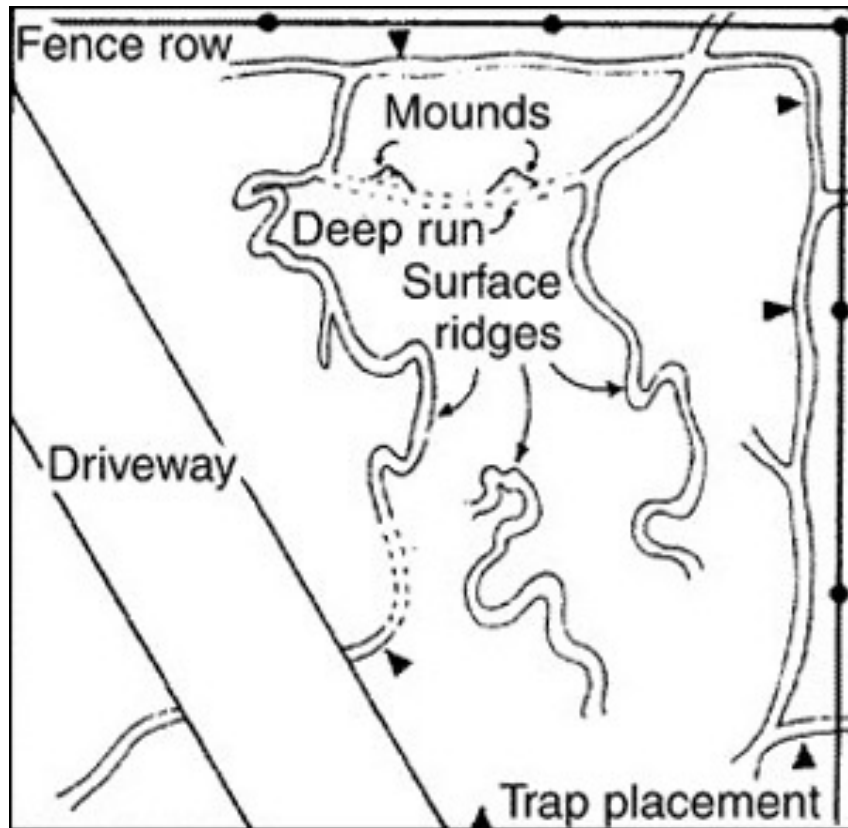
## Baits - Talpid



## Traps – harpoon, choker-loop, or scissor-jawed



# Baits and Traps





### CRIMINAL HISTORY REPORT

Outstanding Warrant for gnawing of plants, girdling trees and shrubs.

Building extensive surface runways without a permit.



### MODUS OPERANDI

- Rodent
- Eats grasses, forbs, seeds, tubers, bulbs, rhizomes, bark
- Active day and night, year-round
- Breed year-round
- 3 species in KY – Meadow Vole, Prairie Vole, Pine Vole

## #2 The Ghost aka The Vole





# Vole Tunnels





# Vole Management



The diagram consists of a dark gray background. In the upper left, the title 'Vole Management' is written in a white serif font. To the right of the title, there are four light gray shapes: a large circle in the top right, a circle in the center, a circle in the bottom right, and a semi-circle in the bottom left. Each of these shapes contains a management method in a black serif font. The methods are 'TOXICANTS', 'EXCLUSION', 'TRAPPING', and 'HABITAT MODIFICATION' respectively, arranged in a clockwise direction starting from the top right.

TOXICANTS

EXCLUSION

TRAPPING

HABITAT MODIFICATION



# Exclusion

- hardware cloth under bulb plantings and flower beds
- hardware cloth cylinders protect seedlings / young trees





# Habitat Modification

- mow yard closely and often
- eliminate weeds, ground cover, and litter in shrubbery
- mulch with a gap around tree trunks





# Toxicants

- Toxicants
  - Zinc Phosphide most commonly used
  - single-dose, restricted-use pesticide
  - pelleted, grain bait, and powder formulations
  - also sold as mole / gopher bait
- Anticoagulant baits

A photograph of a cardboard box trap set in a field of dry grass. The box is open, revealing a snap trap inside. The trap has a yellow plastic cover and a metal spring. The text 'Traps' is overlaid in white serif font, and a subtitle 'baited snap traps during fall / winter can be effective' is below it.

# Traps

baited snap traps during fall / winter can be effective



### CRIMINAL HISTORY REPORT

Aggressive when threatened.

Unlawful Entry – by digging in lawns, under house foundations; taking residence under house, porches, etc.

Known to kill poultry, beehives



**WARNING! Armed and Dangerous.**

### MODUS OPERANDI

- Omnivore
- Weasel Family
- Inactive in winter
- Nocturnal
- Very susceptible to rabies

# #3 The Muscle aka The Striped Skunk, aka polecat







# Skunk Holes

- 3- to 4-inch cone-shaped holes
- or patches of upturned earth

# Skunk Management

HABITAT MODIFICATION

SHOOTING

TRAPPING





# Habitat Modification

- Keep property clean of debris where skunks could find shelter or food
- Clean up after pets eat outside
- Seal off all openings to the foundation with hardware cloth
- Fence out skunks from landscaped areas, gardens





# Trapping

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- Variety of live traps available (10"x 10"x 30")
- Cover the trap with a heavy canvas
- Bait with canned or fresh fish
- Locate near the den entrance if know
- Transport in the back of a truck

#### CRIMINAL HISTORY REPORT

High populations lead to turf damage.



#### MODUS OPERANDI

- Decomposers
- Improve soil composition
- Considered beneficial

## #4 The Insiders aka Earthworms







# Earthworm Damage

### CRIMINAL HISTORY REPORT

Damages lawns, flower beds by burrowing in the ground or rooting for insects or grubs.



**WARNING! Recently sighted.**

### MODUS OPERANDI

- Insectivore (mostly)
- 12-17 lbs
- Mainly nocturnal
- Poor eyesight
- Do not tolerate freezing temperatures
- Related to anteater, sloth

## #5 The New Guy aka The Nine-banded Armadillo







# Armadillo Damage

# The Authorities

- Kentucky Department of Fish and Wildlife Resources:  
<https://fw.ky.gov/Wildlife/Pages/Nuisance-Wildlife.aspx>
- Internet Center for Wildlife Damage Management  
<http://icwdm.org/>

## Contact Info:

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UK Forestry : <http://forestry.ca.uky.edu/matthew-springer>

UK Wildlife Damage Website: <http://forestry.ca.uky.edu/wildlifedamage>

Facebook: <https://www.facebook.com/UKWildlifeExtension/>