

Managing and Preventing Damage from Wildlife in Fruits & Vegetables



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Slides and all resources posted at:



Voles are a species of rodent that measure 5-7 inches long. They like tall, grassy areas, are active year-round, and have population explosions.

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Habitat is habitat – no matter where it is.



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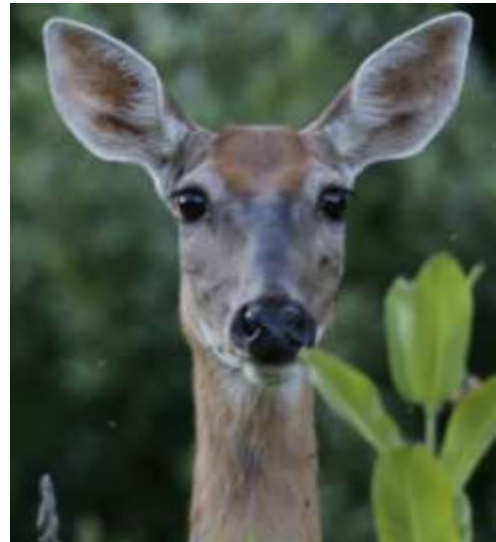
- Conservation and creation of natural areas
- Community gardens and landscapes
- Vineyards



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Bird Damage



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- Missing berries
- Peck marks in berries
- Remnants of berry skins on rachis, partially eaten fruit
- Damage occurs during day
- Activity/damage increases as berries begin to ripen
- Darker colored grapes preferred

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Bird ID & Damage Caused



These 2 species are **NOT** protected.
Firearms or trapping can be used.



House finches and house sparrows – peck at grapes

Starlings and robins – remove entire grape, puncture grape with feet, starling flocks can cause considerable damage

Wild Turkey – total fruit loss/large peck marks in grapes



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Managing & Preventing Bird Damage



- Netting
- Scare Devices
- Trapping
- Hunting/Shooting
- Chemical repellents

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Managing & Preventing Bird Damage - Netting

- Effective but costly
- Perform cost-benefit analysis
- Check regularly
- Place by before fruit ripe
- Secure netting on all sides, top and bottom



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Managing & Preventing Bird Damage – Scare Devices

- Switch out & move weekly to avoid habituation
- Use when protection most needed (veraison - harvest) and for a limited time
- Place before damage starts
- Use multiple devices with other management options
- Communicate with neighbors



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Managing & Preventing Bird Damage – Scare Devices

Visual Devices

- Scarecrow/inflatable tube dancer
- Reflective tape and materials
- Balloons or kites with reflective eyes (8/ac)
- Lasers (costly)



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Managing & Preventing Bird Damage – Scare Devices

Acoustic Devices

- Firecrackers (bangers and screamers) extend 1-6 acres
- Propane cannon (1/5 ac)
- Distress calls (species-specific)



Division of Wildlife
Tech Sheet linked at
u.osu.edu/wildside



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Letting Nature Work for You.

- Tall perches may be used by hunting hawks (day) and owls (night)
- Wooded habitat nearby may support Cooper's hawks (specialize in preying on small birds)
- Mow grass between rows and surrounding edges
 - Less cover
 - Easier predator access



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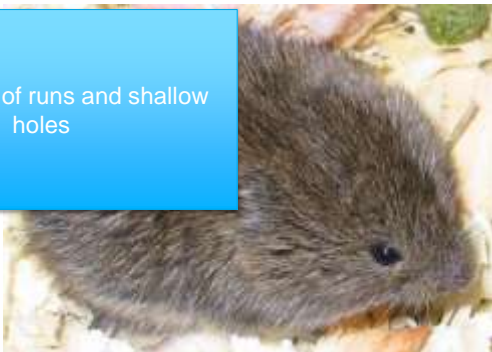
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Once vole numbers reach high levels, control becomes much more difficult and costly.

picture of runs and shallow holes



Starting in midwinter, monitor monthly in cover crops, weedy areas, and fields:

- Active runways: 1- to 2-inch wide
- Fresh vole droppings and short pieces of clipped vegetation, especially grass stems, in runways.
- Place snap traps in runways to detect pests.

The best management programs for voles keep numbers at low levels.

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Voles – Vegetation Management

- Reduce/eliminate ground cover
 - Landscape grasses
 - Mulch
 - Grass/weeds around trees
 - Grasses cut short into fall
 - Increases predator access
 - Between rows, along edges
- Soil cultivation within plant rows and adjacent habitat



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Voles – Trapping & Repellents

- Impractical over large areas
- Use traps in active areas
- Snap traps – expanded trigger (use dozens) or multiple catch traps
 - *Hit population hard = longer recovery time*
- **Repellents** (chemical, ultrasonic, etc.) are ineffective.



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Voles - Baiting

No toxic baits are available for use in edible gardens or crops.

- Application best in fall
 - After breeding season
 - Gather food for winter
- Chlorophacinone, Diphacinone, Bromethalin
 - Must be used within 50-100 of building/residence with a bait station
- Other toxic baits are restricted use
 - **Pesticide Applicators License**



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Voles – Baiting with Restricted Use Pesticides

- Restricted Use:
 - Zinc phosphide
 - Second Gen Anticoagulants
- Specific site restrictions
 - Non-residential
 - Bare ground restrictions
 - Bait stations required
 - Dormant/non-bearing season
- *Tamper-resistant bait stations required*
- ***Special care must be taken to avoid non-target species exposure***



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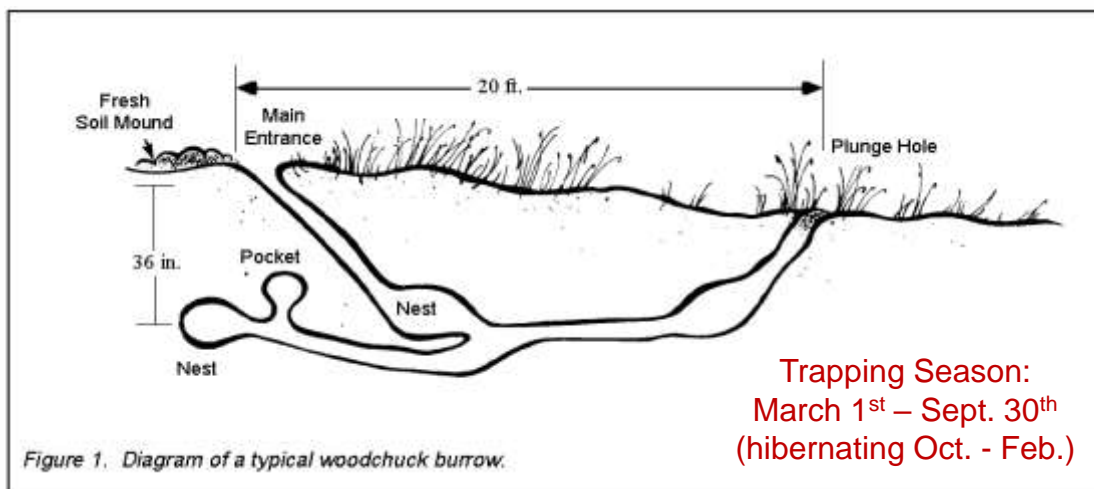
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Groundhog Den System



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Groundhogs - Trapping

- Locate dens during spring
- Activity – diurnal, avoid heat in summer
- Snares w/relaxing lock (if not NWCO)
- Cage traps (10"x 12"x 32") or lethal traps

Rules and restrictions for lethal traps:

- Body gripping trap less than 7 x 7 inches (#160 or 220)
- No more than 3 feet away from hole
- Must have enclosure or structure around trap
- Tag with name and address on trap and check every 24 hours

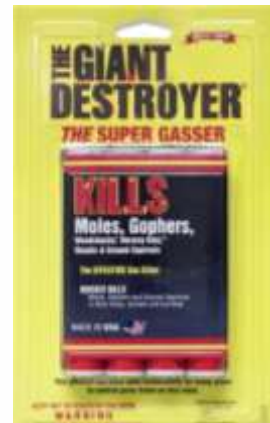


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Groundhogs - Gas Cartridges

- Sodium nitrate or potassium nitrate
- Non-restricted use
- **Where to find them:**
 - Pocatello - USDA, Wildlife Services (614-993-3444)
 - Farm supply stores – over-the-counter
- Not for use under buildings and structures
- Use during spring, after dusk, & plug all holes
- **Caution:** Avoid non-target burrowing animals



Giant Destroyer:
for use in open fields and non-crop areas, including residential

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Deer Damage



Torn rachises, roughly stripped leaves and shoot tips (jagged edges)

- Damage occurs dawn, dusk, overnight
- Look for scat and tracks

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Managing & Preventing Deer Damage



- Fencing
- Hunting/
Population Control
- Repellents
 - Grow tubes/mesh screens
 - Scare Devices
 - Element of surprise

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Managing & Preventing Deer Damage - Repellents

- Highest success in small areas
 - More cost-effective, **less human error**
 - Best success with low deer damage/when other foods are available
 - Always follow label and apply according to directions
 - Rotate products to avoid habituation
- Active ingredients - egg-based, hot pepper, or blood products



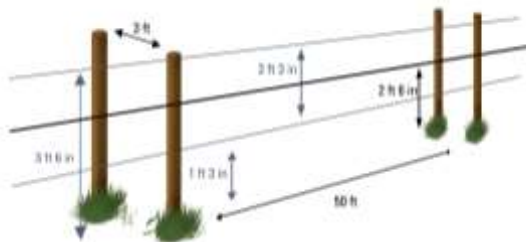
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Managing & Preventing Deer Damage - Fencing



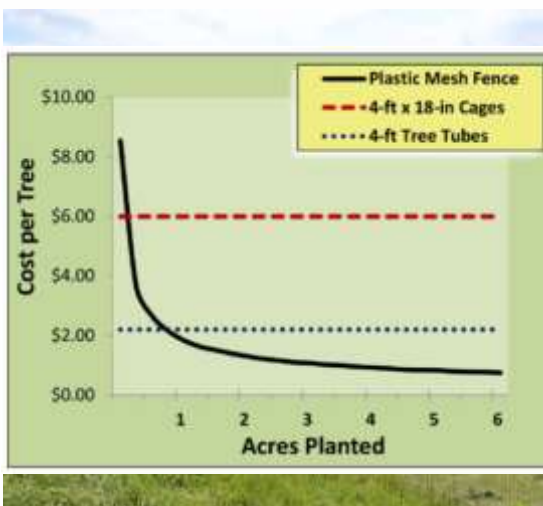
- Electric fence
 - Baited as additional option
- Offset electric fence

Offset



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Management Options for Deer - Fencing



- Polypropylene or wire mesh fencing
- How tall should the fence be?
 - Physical barriers – at least 8 ft



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Managing & Preventing Deer Damage – Population Mgmt.



Biologists agree that population management is the best long term-solution to deer damage.

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Deer Damage Control Permits (DDCPs)

- Allows farmers to remove offending antlerless deer while the damage is occurring (early spring – August 1st)
 - Must have active damage to obtain permit
- DDCPs sometimes a short-term solution
 - Need work to reduce deer densities at other times of the year

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Managing & Preventing Deer Damage – Population Mgmt.

- Consider allowing hunter access with restrictions
 - You say what is harvested
 - Target does
- Earn-a-buck program
 - Must harvest at least 1 antlerless deer before taking a buck



Hunter harvest continues to be the primary deer management tool in Ohio.

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