

Managing and Preventing Damage from Deer, Raccoons and Birds



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Habitat is habitat – no matter where it is.





Maria Smith

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

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Management Options for Wildlife Damage in Grapevines

Management Option	Birds	Raccoon	Deer
Repellents	X		X
Fencing		X	X
Netting	X	X	
Habitat Modification		X	
Trapping	X	X	
Hunting/Shooting	X	X	X
Scare Devices	X		X

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Bird Damage




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- Missing berries on intact rachis (*left*)
- Peck marks in berries
- Remnants of berry skins on rachis
- 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.





Annual hunting of wild turkeys can help reduce overall numbers.

- 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 early veraison
- 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)
- Propane cannon (1/5 ac)
- Distress calls (species-specific)



Division of Wildlife
Tech Sheet linked at
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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)
- Consider kestrel nest boxes



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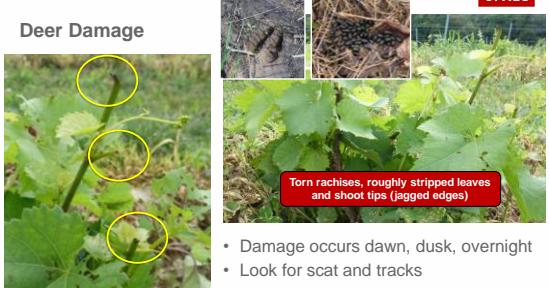
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Deer Damage



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

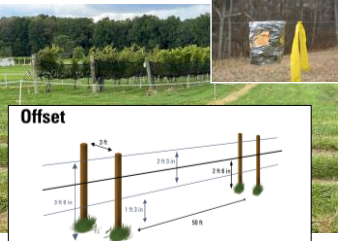
- Higher success in small areas
 - More cost-effective, **less human error**
 - Best success with low deer damage/when other foods are available
 - Always follow label and apply according to directions
 - Rotate products to avoid habituation
- Active ingredients - egg-based, hot pepper, or blood products



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Managing & Preventing Deer Damage - Fencing

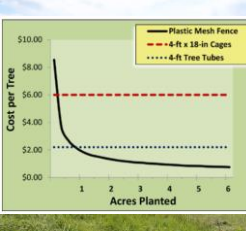


- Electric fence
 - Baited as additional option
- Offset electric fence

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Management Options for Deer - Fencing



Acres Planted	Plastic Mesh Fence (\$)	4-ft x 18-in Cages (\$)	4-ft Tree Tubes (\$)
1	~8.00	~6.00	~2.00
2	~4.00	~6.00	~2.00
3	~3.00	~6.00	~2.00
4	~2.50	~6.00	~2.00
5	~2.20	~6.00	~2.00
6	~2.00	~6.00	~2.00

- 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.



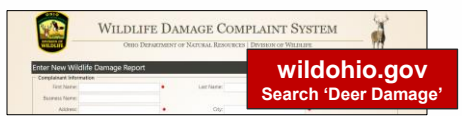

Biologists agree that population management is the best long term-solution to deer damage.

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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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Raccoon, Opossum, and Skunk Damage






- Damage localized
- Occurs at night, when grapes begin to ripen
- Piles of grape skins left behind
- Damage to plants when accessing grapes

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Managing & Preventing Raccoon Damage



- Fencing
 - Deer fence
 - Electric wire 4-6" off ground
- Netting
- Trapping
- Habitat modification

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Managing & Preventing Raccoon Damage - Trapping



- In Ohio, nuisance raccoons can be trapped without a permit
 - Euthanize
 - Re-release back onto property
 - **Illegal to relocate**

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Resources:

- Midwest Grape Production Guide
- North Carolina Winegrape Grower's Guide
- Grape Pest Management Guidelines, *University of California Agriculture & Natural Resources, Statewide Integrated Pest Management Program*
- Nonlethal Bird Deterrent Strategies: Methods for reducing fruit crop losses in Oregon, *Oregon State University Extension Service*
- An IPM Counting Guide for Common Problems of Grape in Kentucky, *University of Kentucky Cooperative Extension Service*

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