



## Wildlife management in grapes

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[nysipm.cornell.edu/organic\\_guide/grapes.pdf](http://nysipm.cornell.edu/organic_guide/grapes.pdf).

Deer and birds have the potential to be economically destructive in a short period of time. Deer browse on young shoot growth early in the year and can destroy a training system if not caught early. Fencing and dogs are the two most reliable options of keeping deer out of the vineyard. Repellents can be used but they must be put in place prior to the deer discovering the presence of “food” as deer are much harder to deter once they have enjoyed a meal. Because much of the deer damage to vines occurs during the dormant season, repellent applications may be limited by cold temperatures or snow cover. Deer Damage Permits for shooting deer causing substantial damage may be available to reduce the population in some areas outside of the normal hunting season. During big-game hunting seasons, licensed landowners or hunters can remove deer with DMP or DMAP tags for female deer. Contact your regional NYS Department of Environmental Conservation wildlife office for technical advice and a permit application.

Flocking birds such as European starlings can destroy a crop in a matter of days. Netting is the best option to exclude birds from feeding on ripening grapes, but is a costly option for all but the more valuable grape varieties. Several types of netting, such as plastic, nylon, cotton, and polyethylene, are marketed for protecting fruits. A lightweight acrylic netting that can be draped directly over plants is available. It does not require support and it does not interfere with sunlight, pollination, or growth. Most netting is expensive, but it can be reused for many years. For more information see: “Bird Damage Prevention for Northern New England Fruit Growers” by Alan Eaton, UNH Cooperative Extension, [extension.unh.edu/resources/files/Resource001797\\_Rep2514.pdf](http://extension.unh.edu/resources/files/Resource001797_Rep2514.pdf). Repellents and scare tactics such as mylar tape, scare-eye balloons, distress calls, propane cannons and human activity in the vineyard have provided short-term success against birds. Current research has shown the use of air dancers may reduce damage to grapes. Birds quickly adapt to the noises and scare tactics as they learn they will not be hurt. Frequently moving noisemakers to different locations in the vineyard can increase the time frame of effectiveness from days to weeks.

There are no chemicals registered for vertebrate control in New York State vineyards. Specific practices for vertebrate management are listed in the following table.

## Vertebrate Damage Mitigation Practices - grape

| Animal Pest               | Management Practices <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Birds</b>              | Netting; visual scare devices (scare-eye balloons, silhouettes, raptor models, reflective tape); auditory frightening device (recorded alarm calls, pyrotechnics, propane cannon).<br>Population reduction through shooting by licensed hunter of game species in appropriate seasons (crows, turkeys); or unprotected species (European starlings). All state and local firearms laws or regulations must be followed <sup>1</sup> . |
| <b>Mice and voles</b>     | Close mowing of vineyard middles; vegetation reductions (<40% ground cover) under vines; removal of dropped fruit and prunings; habitat manipulations including elimination of unmowable areas within vineyards; monitor to determine the need for management.<br>Population control through trapping by landowner.                                                                                                                   |
| <b>Raccoons</b>           | Electrified exclusion fencing.<br>Population reduction through shooting by licensed hunters or landowners in appropriate seasons; through trapping by landowner, by licensed trapper, or by licensed nuisance wildlife control operator.                                                                                                                                                                                              |
| <b>Red and gray foxes</b> | Habitat manipulation including elimination of protective cover within or near vineyards.<br>Population reduction through shooting by licensed hunters or landowners in appropriate seasons; through trapping by landowner, by licensed trapper, or by licensed nuisance wildlife control operator.                                                                                                                                    |
| <b>White-tailed deer</b>  | Exclusion fencing, 8 ft. (244 cm) high-tensile woven-wire, or 5 to 6 ft. (152 to 183 cm) electric exclusion fencing); habitat manipulation including elimination of protective cover within or near vineyards.<br>Population reduction through shooting by licensed hunters and landowners, or their agents with DEC Deer Damage Permits or DMAP permits.                                                                             |
| <b>Woodchucks</b>         | Exclusion fencing (electrified exclusion fencing); habitat manipulation including removal of brush piles within or near vineyards and hedgerows.<br>Population reduction through shooting by licensed hunters or landowners; through trapping by landowner or by licensed nuisance wildlife control operator.                                                                                                                         |

<sup>1</sup> Conduct shooting and trapping only as defined by New York State Department of Environmental Conservation regulations. Shooting for nuisance wildlife control is allowed only when neighboring occupied buildings are >500 ft. distant; shooting when neighboring buildings are less than 500 ft. distant requires neighbor permission. Also check local ordinances, as shooting and trapping are prohibited in some areas. Note: It is illegal to trap a nuisance animal and release it onto public lands or someone else's property. It must be released on the landowner's property or killed.

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