Mice, rabbits (rodents), and deer can all cause severe damage to plants in the winter. These animals feed on the tender twigs, bark, and foliage of landscape plants during the winter. They can girdle trees and shrubs and eat shrubs to the ground line. Deer can cause significant injury and breakage by rubbing their antlers on trees during the fall.

Rodents

Trees can be protected from rodent damage by placing a cylinder of ¼-inch mesh hardware cloth around the trunk. The cylinder should extend 2 to 3 inches below the ground line for mice and 18 to 24 inches above the anticipated snow line for rabbit protection (**Figure**). Hardware cloth can be left on year-round, but it must be larger than the trunk to allow for growth. For small trees, plastic tree guards are also effective. You can protect shrub beds from rabbits by fencing the beds with chicken wire; however, check such fenced areas frequently to ensure a rabbit has not gained entrance and is trapped inside.



If you have many trees or shrubs to protect,

using screens and wraps may be too expensive and time consuming. In such situations, repellents may be the best solution. Remember that a repellent is not a poison; it simply renders plants undesirable through taste or smell. The most effective repellents for rodents are those containing thiram, a common fungicide. You can either spray or paint repellents on trees and shrubs. Repeat applications are necessary particularly after heavy precipitation.

If these methods are ineffective, commercial baits containing poisoned grain are available. However, baits may be hazardous to humans, pets, and beneficial wildlife. Injury or death can result for animals that eat the bait directly and for animals that consume bait-killed rodents. Shelter or containerize baits so they stay dry and are accessible only to targeted rodents. Beverage cans laid on their sides work well for this purpose. Trapping and shooting, where legal, will also control rodents.

Deer

Deer feed on and damage terminal and side branches of small trees and shrubs. Repellents containing thiram provide some control if feeding pressure is not extremely heavy. Plants can be sprayed or painted with the repellent; however, the most effective procedure is to hang heavy rags near the plants to be protected that have been dipped in concentrated repellant. Repeated plant applications or dipping of rags is necessary. Deer can also be successfully excluded with fencing. To be effective, fences must be high and constructed properly. If deer are starving, there is little that will prevent feeding. Providing a more palatable forage may help, but it may also attract more deer.

Repellents

Two basic types of deer repellents are available. Contact repellents are applied to the plants, causing them to taste bad. Area repellents are placed in the problem area and repel due to their foul odor.

- A study conducted in Connecticut tested six repellents. Generally, repellents were more effective on less preferred plants. Here are the findings:
- Big Game Repellent also known as Deer Away, made from putrescent (rotten) whole egg solids was 46% effective.
- Hinder, made from ammonium soaps of higher fatty acids was 43% effective.
- Thiram, a bitter tasting fungicide, now commonly used in repellents, was 43% effective.
- Mesh bags of human hair, collected from hair styling shops, was found to be 34% effective. (Hair should be dirty, not collected after a shampoo.)
- Magic Circle deer repellent, a bone tar oil which was soaked into 10 by 30 cm. burlap pieces, was 18% effective.
- Miller Hot Sauce, containing capsicum, an extract of hot peppers, was 15% effective.

No scientific studies have been made of the following two techniques, but they are offered for the reader's consideration. Perhaps they're worth a try!

1. Some people have had success with tying pieces of deodorant soap on the branches of trees. A large bar is cut into about six pieces and each piece is placed in a mesh bag and tied to the branches. Non-deodorant soap does not seem to work as well.

2. Two eggs and a cup or two of cold water mixed in a high speed blender, added to a gallon of water and sprayed on the foliage has been effective in some cases. This egg mixture does not wash off the foliage easily but re-application two or three times a season may be needed. (For a larger quantity, blend a dozen eggs into 5 gallons of water.) This mix should be used a distance from the residence as it has an unpleasant odor. It is also thought to repel rabbits.

Sources:

http://www.extension.umn.edu/garden/yard-garden/trees-shrubs/protecting-from-winterdamage/

http://www.extension.umn.edu/garden/yard-garden/wildlife/deer-in-the-home-landscape/