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## **Symptoms**

If you live near a wooded area, you may find your plants look as if they have been eaten. Shrubs and ornamentals may have the buds, leaves, flowers, and twigs eaten and their bark rubbed off. A home garden may have leaves, flowers, stems, fruits, and vegetables eaten along with trampled plants. There may be an area 2 to 5 feet long by 2 to 3 feet wide in an oblong shape that is flattened as if someone had laid there. These symptoms can be very harmful or even fatal to the plant; they can severely reduce photosynthetic capabilities of the plant, allow insects and disease into the plant, or just kill the plant by breaking its vascular tissues. So, what could be harming the plants like this and how do you fix it?

How Can You Tell What is Causing the Problem?

It isn't difficult to assess that a deer is responsible for the problems found in your garden. Deer do not have upper front teeth so they cannot bite off vegetation cleanly. Rather, they jerk or tear the part of the plant off that they are eating, leaving ragged edges. In contrast, other animals such as woodchucks and rabbits have upper and lower incisors and leave clean cuts. Deer also exhibit preferences for different plants and certain portions of plants. In gardens, deer will consume the recent growth and the most succulent plants. On plants that are less than three feet tall, they typically consume portions on the top and sides as opposed to the lower areas that other animals may attack. Deer can reach to approximately six feet high, while other smaller animals, such as rabbits, cannot.

Another surefire way to diagnose the problem as deer is to look for signs.

Signs may include tracks, droppings, or nearby beds. It is important to look closely if tracks are found; the tracks may be running or walking. If the tracks are running or if there is only one set then there is probably not a problem.

## Solutions

There are several different methods to attempt to prevent deer from eating your plants. The three main options for management of deer browsing are putting up fences or barriers, using repellents, and considering deer food preferences. There are benefits and drawbacks to each option so it is important to consider all options before implementing a management plan.

First, fencing may be the most effective but it can also be very expensive. It has been found that high tensile, electric fencing using wooden posts is the most permanent and durable fencing alternative. There are also other options, such as polytape (nylon mesh with stainless steel woven into the mesh) and deer netting. For some of the less expensive options, like the deer netting, it is suggested that a double barrier be used because two barriers confuse deer. Some suggestions on the construction of the fence are that it should be constructed in only one day to keep the deer from persistently trying to enter. The fence should be at least 6 ½ feet tall and possibly sloped away from your garden because deer hate the fencing to touch their ears. Always secure the bottom of the fencing so that they cannot get underneath it and keep vegetation away from the fence.

Another alternative similar to fencing is to directly wrap your individual plants in deer netting or fence off singular plants. When wrapping individual plants, wrap around the plant about two or three times and secure the netting by stapling it to itself or wrap rope around the netting and tie it off. Make sure to let the netting hang down about six inches on the ground and either cover the entire plant or extend it at least 6 feet high. This method is used for short term only, such as in the winter months when deer are the hungriest and food is scarce. When fencing individual plants, the posts should be 6 feet tall and 18 inches from the plant so the deer does not knock the fencing over onto the plant.

Repellents are also an effective way to deter deer from eating desired plants. Some of the most effective are hot pepper wax, garlic oil, predator urine,

and fragrant soaps. It is best to combine repellents because deer will almost always stay away from plants that offend two or more of their senses. For example, it is very effective to coat hot pepper wax on the plant and hang dispensers of coyote urine (a deer predator) in the plant. The repellents may need to be replaced or reapplied every few weeks so it is important to investigate the products before application. Also, if applied incorrectly, it may be harmful to the plant. More information on repellents can be found at My Deer Garden by Rebecca Ann Green on the World Wide Web at the following site:

http://www.mydeergarden.com/Solutions/solutions.htm.

Finally, it is adventagous to plant gardens with deer preferences in mind. A detailed list of deer preferences, prepared by Jonathan Kays et all, that are grouped by frequency of damage can be found at <a href="http://www.agnr.umd.edu/ces/pubs/pdf/FS655.pdf">http://www.agnr.umd.edu/ces/pubs/pdf/FS655.pdf</a>. It may be useful to reference this information while choosing plants for your garden. Planting your garden with preferences in mind should keep plants healthier and reduce the chances of a deer problem in the future.

## References

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