DEER AND ECOSYSTEM HEALTH



Information for Landowners

Deer can be a threat to forests.

The white-tailed deer, one of New York's largest mammals, is an important part of our forest ecosystems. However, deer have become too abundant in many parts of the state, particularly around many residential communities. Not only does this lead to frequent deer-vehicle collisions and damage to cultivated plants, but deer can also threaten the future of the very forests they inhabit.



Deer prefer forest edges, so populations thrive in suburban and semi-rural areas where lawns and fields are interspersed with patches of forest. Gardens, landscaping and crops supplement the deer's natural forest-based diet, supporting population growth. With fewer hunters and predators in these areas to offset reproduction, deer populations can grow unnaturally high, devastating forest plant communities.





Over time, heavy browsing by deer produces profound and long-lasting ecological damage:

- Disappearance of the understory (the shrubs and plants growing beneath a forest's mature trees), eliminating habitat for other wildlife species
- Invasive plants crowding out native species
- Lower biodiversity of both animals and plants
- Low survival of tree seedlings, so they can't replace old trees that die
- Fewer mature trees, until eventually the forest is no longer a forest
- Fish and waterbodies are threatened, as the forest no longer filters water pollution, nor shades and cools the water.

(See http://www.dec.ny.gov/animals/104911.html for more information.)

Signs that a forest may be suffering from too many deer include:

- An open, park-like appearance under the trees
- · Lack of spring wildflowers like trillium and jack-in-the-pulpit
- Forest floor covered with grass, ferns or invasive plants
- Absence of young trees between 1 and 5 feet high
- A visible browse line: no green leaves below 5 feet off the ground (Go to aviddeer.com for information on monitoring deer impacts on your land.)

Allowing hunting on your land is the easiest way to reduce deer numbers and ecological damage. Hunting must focus on female deer to be effective.

Don't feed deer! It's illegal and will make the problem worse.

Common concerns landowners may have about allowing hunting on their land

"I don't know any hunters."

Get in touch with a local fish and game or rod and gun club. There may be an umbrella organization through which you can find a number of different clubs. For example, the Federation of Dutchess County Fish and Game Clubs (www.dutchessfishandgame.org/clubs---links.html), the Onondaga County Federation of Sportsmen's Clubs (www.federationofsportsmen.com/wp/?page_id=4), and the Erie County Federation of Sportsmen's Clubs (www.eriectyfsc.org/members.htm) all have long lists of affiliated clubs in their respective parts of the state. Ask the membership coordinator to recommend someone experienced and responsible. Meet with the prospective hunter at least once before the hunting season to make sure you're both comfortable with the arrangement and agree on how things will work. If you're not happy with that meeting, ask for a new recommendation.

"I'm worried about safety."

New York hunters have an excellent safety record. Walk your property with the hunter and have him or her describe to you how and where he or she might hunt it so you understand the process better. To address specific concerns, you can set conditions on hunters you allow on your land. For example, you can restrict them to certain parts of your property, you can require that they only hunt from tree stands so that shots will always be aimed down toward the ground, and you can limit the days of the week and times of day when they may be there.

"What about liability?"

The New York State General Obligations Law (section 9-103) protects landowners from liability for non-paying recreationists hunting on their property. For more information, see the "Recreational Access and Owner Liability" fact sheet at www2.dnr.cornell.edu/ext/info/pubs/#fact.

"I don't want animals hurt or killed."

Deer are prey animals that evolved under high levels of mortality from predators, so they have a high reproductive rate. When there's plenty of food available, an average of 30-40% of the deer in a population have to die every year to keep the population from growing. A well-placed shot with either a bullet or an arrow results in a quick, relatively painless death. On the other hand, deaths from natural sources such as predation, disease and starvation are typically not quick, and involve substantial pain, fear, or both. In areas with a high degree of human development, most deer die as a result of vehicle collisions, often being maimed and suffering for an extended period of time in the process. Reducing deer populations through hunting is more humane than allowing large numbers of deer to fall victim to vehicle collisions. It can also provide needed food for people in your community.

Questions? Contact wildlife@dec.ny.gov or 518-402-8883.