Fact Sheet 7
How have deer affected horticulture?

When dealing with the environment, nothing lives in a vacuum. The plant population is affected by the animal population, the insect population, disease, the condition of the soil, the climate, and, the humans. Any one of these, or a combination of them, can change the fauna.

Deer are native to our area and some browse is advantageous. The way to strike a balance between a desirable-sized deer population, humans and plant life is to recreate the native environment (Linske, 2018).

The greatest contributors to the decline of plant numbers and diversity are climate change and human manipulation of the land. As we divide the landscape through development, we push deer out of their habitat (woodlands, wetlands, stream banks and meadows) and into our yards and roads.

However, deer are not the only factor that can affect local vegetation. A very visible change to our landscape over the last few decades has been the invasion of non-native plants. Some were introduced through shipping containers but many were originally planted here as ornamentals.

In addition, the presence of non-native worms (earth, jumper, night crawler, etc.) has changed the composition of our soils by degrading leaf litter faster than it would normally decompose. This adds nutrients to the soil, making it richer and more conducive to the growth of non-native species and less so for our natives (Gorres, 2014).

One particular species of invasive plant plays a significant role in the understory/deer/Lyme disease cycle: Japanese barberry (Berberis thunbergii), which can increase the tick population in an area by 12 times. One recent study found that eliminating it in our yards and

open spaces can reduce the tick population by up to 80%.

It is the first plant to leaf out in the spring (late March/early April), providing the perfect habitat for the white footed mouse (the primary blood meal for black-legged tick nymphs). The mice make their nests under the barberry, the nymphs emerge and climb onto the plant and find a willing host for their next meal when a deer, fox, chipmunk, dog, or human walks by.

Because the deer find the barberry unpalatable, they leave it alone and browse the native understory (if there is any) or find their way into our yards (Williams, 2010, 2017, 2018).

The Bottom Line

Deer are only one of many factors that affect the local horticulture. The greatest contributors to the decline of plant numbers and diversity are climate change and human manipulation of the land.

Plants that Deer Like

- Dahlia, Hosta, Impatiens, Lilies
- Chrysanthemum, Roses, Tulips, Azalea
- Rhododendron, Apples, Arbovitae Firs
- Pears, Yew

Plants that Deer Rarely Browse

- Aster, Allium, Astilbe, Baptisa, Begonia
- Boxwood, Crocus, Columbine, Daffodils
- Hellebores, Marigolds, Salvia
- Tiarella (Foam flower), Yarrow
- Ferns, Herbs, Grasses
- Most trees (once established)

What Can We do to Keep Deer out of Our Yards?

- Eliminate invasive plants and encourage the return of natives to woodlands and wetlands. This will keep deer in the woods.
- Populate your yard with plants deer don't like.
- Bird feeders attract deer. Use seed they don't like—nyjer, safflower and those treated with hot pepper. Or feed the birds in the colder months only.
- Support the creation of large areas of open space in town. Deer prefer large tracts of unfragmented land to urban and suburban landscapes.

Aster

Yarrow

Hellebore

Columbine