

Consult - 10.25.16



Rejuvenation pruning

Older/thicker limbs are removed at or close to base of plant. Younger, softer growth is left intact.

1. Pruning Recommendations

- Correctively prune Rhododendrons, Burning Bush, and Barberry shrubs
 - Over time, shearing a shrub (usually done with gas-powered hedge trimmers) causes excessive growth on the outside of the plant and the interior can become bare. This not only detracts from a plant's natural form, it can also lead to an overgrown shrub that is more difficult to maintain. For these reasons, corrective pruning is recommended.
 - When pruning, always use sharp hand pruners, loppers, or a pruning saw, depending on thickness of limbs being pruned. Home Depot/Lowes and most garden centers carry decent pruning tools, or they can be ordered on-line.

Rejuvenation pruning

- Gradual: remove several older limbs each spring prior to promote flush of new growth from base of shrubs.
- Extensive: prune all limbs down to approximately 1/3 height at the same time.
- Remove any dead, diseased, crossing or undesirable stems, canes, branches. Note: dead limbs can be removed at any time. Plants still attempt to send nutrients to dead limbs, so removing them will divert those nutrients elsewhere.

More info

- General pruning info: <https://njaes.rutgers.edu/pubs/fs1221/>
- Rhododendrons: <http://www.finegardening.com/3-ways-prune-rhododendrons>
- Barberry: https://youtu.be/doB_HGykkdo

2. Insect Damage on Azaleas

Lace bug

- Lace bugs (sometimes called lace wings) feed on host plants by sucking the sap from the underside of leaves. While this may never completely kill a plant, it causes the leaves to appear light in color or bleached and can stunt growth and flower production.
- Lace bugs overwinter either on the host plant or in the ground nearby. Unless control is established, they will continue to cause damage year after year.
- Damage begins to occur in spring when new eggs hatch.

Control with neem oil

- Fortunately, lace bugs can be treated effectively without the use of toxic pesticides. Neem oil is essentially a vegetable oil made by crushing the seeds of the neem tree (native to India.) It is effective against several plant pests and diseases but will not harm pets, humans, or pollinators.
- Neem oil can be applied periodically throughout the season (beginning in May) as a foliar spray or as a soil drench, depending on the concentration of the product. When spraying neem oil, it is essential to coat as much of the underside of the leaves as possible as this is where lace bugs are present.
- Bionide Neem Oil is a good product but plenty of other brands exist on Amazon or a decent garden center. Home Depot usually carries Triple-Action Neem Oil by Southern Ag.

More info

- <http://www.gardeningknowhow.com/plant-problems/pests/pesticides/neem-oil-uses.htm>



Lace bugs on underside of Azalea leaves



Lace bug damage on Azalea leaves

3. Fertilization/Soil pH Soil fertility basics



Healthy leaf

Leaf showing iron chlorosis

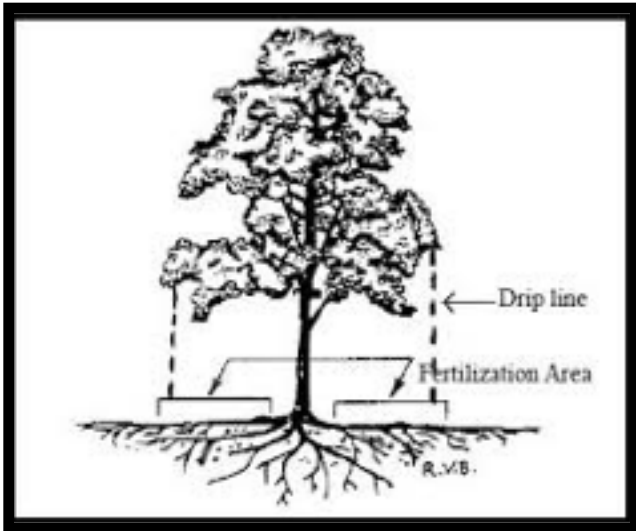
- All plants require specific nutrients in order to grow, flower, and conduct photosynthesis. As plants begin to deplete whatever nutrients were in the soil, supplemental nutrients need to be provided. Your lilac shrubs showed signs of iron chlorosis, indicating they were low on iron and manganese.
- Soil pH is also crucial to plant health. Soil with a pH < 7.0 is acidic and from 7-14 is alkaline, while 7.0 is neutral. Turf grass prefers neutral or slightly acidic soil, however, most evergreen plants (Azaleas, Rhododendrons) prefer a lower pH. The average reading of 3 areas on your property was 6.8
- Adding organic materials such as compost is the ideal way to safely replenish the soil, however, because beds are covered with stone this is currently not an option for your home.

Recommendation

- Applying a natural fertilizer next year in April and again in June will help to replenish the soil nutrients and help plants thrive. In subsequent years, one spring application should be sufficient.
- Holly-tone by Espoma is a good granular organic fertilizer for acid-loving plants. It can be purchased inexpensively at Home Depot and most garden centers in a 27lb bag. This size bag should be enough for 2 applications. A few handfuls can be applied in the drip line (or drip zone) of small trees/shrubs.
- Naturally derived fertilizers are preferable to synthetics as they typically contain a broader range of nutrients and help to improve the soil. They also cause far less environmental issues.

More info

- <https://content.ces.ncsu.edu/a-gardeners-guide-to-fertilizing-trees-and-shrubs>
- <http://www.isc-audubon.org/benefits-of-organic-fertilizers.html>



Fertilizer should be applied within the drip line of a plant where rain water will carry it to the root system



Deer have repeatedly eaten the soft growth from the tips of this yew shrub, reducing its capability for photosynthesis. If this continues, the plant will eventually die.

4. Deer Damage

- There are very few plants that are truly “deer-proof”. Instead most plants range from seldom damaged by deer to frequently damaged, depending on the amount of deer in the area and how hungry they are.
- When the surrounding woods are snow covered in winter or suffering from a drought in summer, deer may not have access to adequate food. At these times they are more likely to feed on the home landscape.
- Planting species that are less likely to be eaten by deer and periodically applying deer repellents can help keep damage to a minimum.

Recommendation

- For future plantings, consult a reputable listing of deer-resistance ratings and select appropriate plants.
- Apply repellents to deter deer from eating your plants. Both granular and liquid repellents work well and are relatively inexpensive and easy to apply. Keep in mind that using one particular repellent for a long period of time may render it ineffective if the deer become accustomed to its odor. Periodically switching products prevents this.
- Most repellents have a foul odor when first applied but don't smell once they dry, and most are completely safe for pets and other animals.
- Deer Off and Liquid Fence are two that I've used successfully, although there are plenty of other brands at Home Depot/Lowes and garden centers.
- As with any product, be sure to read the label for proper application directions and any cautionary statements.

More info

- Searchable database for resistance ratings: <https://njaes.rutgers.edu/deerresistance/>
- Deer repellents: <https://www.planetnatural.com/deer-repellent/>