

Content:

- 1: To Do List
- 2: Mowing
- 3: Mulching
- 4: Weed Identification
- 5: Spotted Lanternfly
- 6: Lawn Seeding
- 7: Horticulture Oils
- 8: Summer Fact Sheets

Connect with us!

Facebook - [facebook.com/
CumberlandRCE](https://facebook.com/CumberlandRCE)

Radio - 99.9

Rutgers Cooperative Extension of
Cumberland County
291 Morton Ave.
Millville, NJ 08332

856.451.2800 x4

mastergardener@cumberlandcountynj.gov

[https://cumberland.njaes.rutgers.edu/
resources-for-homeowners/](https://cumberland.njaes.rutgers.edu/resources-for-homeowners/)

What's Growing On?

VOLUME 26 ISSUE 2 SUMMER 2023 EDITION

To Do List:

- Remove infected plant material from vegetable and flower beds
- Get your soil tested
- Can or freeze Strawberries, Asparagus, and Parsley
- Look for spotted lanternfly eggs
- Water your plants deeply
- Mow grass 3" or taller to help it survive the heat
- Leave seed heads for birds to eat
- Buy local produce
- Remove summer annual weeds such as crabgrass before they go to seed

Resources for homeowners located on our website:

Lawns & Alternatives
Plant Problems
Weeds & Toxic Plants
Small Space & Urban Gardening
Insect & Wildlife Pests
Native Plants
Trees & Shrubs
Vegetable Gardens
Rain Barrels & Gardens

Mowing

Mowing your grass is recommended to be done at a height of 2 1/2- 3 1/2 inches during the summer. Excessive cutting at lower lengths increases the risk of pest and stress problems as well as weakening the turf. Mowing once a week is generally ideal depending on rainfall. Although bagging clippings is usually preferred aesthetically leaving clippings on your lawn will recycle nutrients to the soil and grass. The exception to this is grass that has been neglected for long periods of time causing large clumps which may smother the grass growing underneath. As well as removing Kentucky Bluegrass and Red Fescue clippings as they have long decomposition time and will build up. Bagging or raking may be necessary for the first cut of the season.

It is essential to keep your lawn mower blades sharp. Sharp blades prevent the turf from becoming brown and weakening. Dull mowing blades can also increase the damage caused by foliar diseases. Mowing wet grass should be avoided. It is shown to take longer to mow when grass is wet as well as causing more wear and tear to the mower due to wet grass pilling up and clogging.



Mowing should be done throughout the summer, until fall, when lawn growth has stopped due to a decrease in temperature. Frequent mowing is essential, at no time should 1/4 to 1/3 of the grass blade be removed in one mowing. Cutting your grass up until cold weather lessens the chance of vole damage and disease during the winter. To prevent additional stress on your lawn it is recommended to increase mower height by one inch or more during mid-summer. Changing the direction of the mowing also prevents downward shoot growth as well as thatch.

MULCHING



Do your mulching practices benefit or harm your landscape plants? Using mulch around trees and shrubs can be beneficial as it helps conserve soil moisture, moderate soil temperature, reduce weeds, and improve soil quality. However, applying too much mulch and piling it up the trunk like a volcano will ruin your tree. Over-mulching will starve the roots of oxygen, promote disease, insects, and rodents, and ultimately reduce the lifespan of your tree. Usually, 1-3 inches of mulch is sufficient, and the mulch should extend out to the trees drip line, which is the width of its foliage. If you have wet, poorly drained soils, you should use less mulch. To correct over-mulching, pull the mulch away from the trunk exposing the root flare and redistribute the mulch outwards. If the root flare is not visible, the tree was likely planted too deep.

Problems with over mulching:

Oxygen Starvation:

Root suffocation is the most common cause of tree and shrub death due to over mulching. Excessive mulch combined with heavy frequent irrigation or precipitation allows for water to occupy too much pore space in mulch and soil layers, restricting air content and oxygen availability.

Disease:

Fungal and bacterial diseases thrive with moisture to spread. Overlapping mulch on tree bark can cause bark tissue to decay and diseases to begin. Disease organisms invade the bark of the tree disrupting the flow and storage of sugars created by photosynthesis.

Excessive Heat:

As bark is covered with mulch and begins to decompose, temperature can rise to 120-140 degrees Fahrenheit. This high heat can kill the inner bark of young plants. High heat may also alter the tree's ability to harden off in fall. If trunk flare tissue is unable to harden off freezing weather may cause tissue death, inadequate photosynthesis, and plant death.

Insects: Moisture from over piled mulch attracts insects like ants and termites that can exaggerate decaying of the tree trunk.

Rodents: Voles and mice use the deep mulch for tunneling and shelter. These pests chew on the xylem of young trees, girdling the stem. Extensive girdling can lead to the death of the tree and usually isn't noticed until the following spring.

Alternative Mulch Recommendations:

Leaf material can be used as an alternative to wood mulch. Leaf material isn't as tightly knit as mulch and allows water infiltration. Leaf material should be gone over with the lawn mower blades to break into smaller pieces and prevent compaction.

WEED IDENTIFICATION



Henbit

Lamium amplexicaule

Henbit (commonly confused with purple deadnettle) is an annual weed that can be controlled with herbicides or tillage.



Roughstalk Bluegrass

Poa trivialis

Roughstalk Bluegrass is a perennial grass, with no selective herbicide options, and dormancy from early summer until fall.



Bittercress

Cardamine spp.

Bittercress acts as a winter annual in the field, they have a shallow root system and can be controlled by pulling or post emergent herbicide.



Star of Bethlehem

Ornithogalum umbellatum

Star of Bethlehem is an attractive ornamental but is often found in large patches and highly toxic to children and animals. They are ephemerals that will return to dormancy a few weeks into spring.



Purple Deadnettle

Lamium purpureum

Purple deadnettle is a winter annual, herbicides can be applied for a control. However, they will likely die off naturally in 3-4 weeks.



Chickweed

Cerastium fontanum

Mouse Eared chickweed is a perennial, it becomes a serious and unsightly problem in early spring and can be controlled by pre or post emergent herbicides.

THE SPOTTED LANTERNFLY



ADULT SPOTTED LANTERNFLY

Control:

Remove egg masses late fall through early spring, prior to hatch. Scrape them into a plastic bag or container filled with alcohol. If egg masses are simply scraped onto the ground, they will still hatch. Whether or not control is necessary depends on several factors. There is no one-size-fits-all solution.

- How many Spotted Lanternflies are present?
- Are they on vulnerable or favorable plants?
- Is the plant they are on already stressed?

Pesticide use is often unnecessary and not recommended for large trees. Dish soap, vinegar, gasoline, or any other product not labeled for use as a pesticide should not be used in an attempt to control SLF. Only once you have determined that SLF are present in damaging numbers and/or on vulnerable plants (stressed, young, SLF favorites) then the following sprays may provide some level of efficacy. Products are listed from least toxic to off-target organisms, to most toxic to off-target organisms. Start with the least toxic options first.

1. Insecticidal soaps (Safer Brand Pyrethrin and Insecticidal Soap Concentrate)
2. Natural pyrethrins (Bonide Pyrethrin Garden Insect Spray Concentrate)
3. Carbaryl (Sevin SL Carbaryl Insecticide)
4. Neem Oil (Bonide Neem Oil Ready to Use)
5. Zeta-cypermethrin (Sevin Insect Killer Ready to Spray)
6. Bifenthrin (Ortho Home Defense Insect Killer)
7. Malathion (Spectracide Insect Spray Concentrate)

If you have vulnerable or favored trees, sticky band traps and circle traps are the most effective control methods. Sticky band traps should be covered with protective wire mesh to keep birds from getting stuck too. Systemic insecticides can be injected into trees that are at high risk of SLF feeding/damage, like tree of heaven, however this will require hiring a professional New Jersey Licensed Pesticide Applicator.



Stage 1: Egg Masses



Stage 2: Nymph (3 stages)

As spotted lanternflies grow, nymphs become red and black with white spots. The presence of these “polka dot” like spots on the nymphs is distinct from most other insect species present in New Jersey.



Stage 3: Juvenile

Lawn Seeding

If you are looking to establish a new lawn, August 20th through October 10th is the ideal time to do so. A late summer-early fall seeding will give the grass enough time to set roots and grow before the winter. In addition, seeding in late summer is better than seeding in the spring as the grass doesn't have to compete with the emerging spring weeds.

Prior to establishing your new lawn, you should get a soil test to determine how much fertilizer or lime you will need to add. Soil test kits can be purchased from your local Rutgers Cooperative Extension. Allow 2-3 weeks to receive your soil test results. In the meantime, think about what type of grass seed you would like to use. Mixtures of various grass seeds are commonly used as these can be used in a variety of areas (wet, dry, sunny, shady). Common grass types in New Jersey are: Kentucky bluegrass, tall fescues, fine fescues, and perennial rye grass.

Kentucky bluegrass varieties have been adapted to better tolerate shade and have improved disease resistance. Kentucky bluegrass is known for its color and texture. Tall fescue is a coarser grass, ideal for less fertile soils, and has excellent drought tolerance. Fine fescue establish quicker than Kentucky bluegrass and persist in shady areas, however it does not fair well in high traffic areas. Perennial rye grass also has excellent color and texture, it is adapted to a wide variety of soils, however it tends to grow poorly in extremely wet areas.

Once you receive your soil test results, apply the recommended amounts of lime and fertilizer. Till into the top 3-4 inches of soil. To prepare the area for seeding, rake up any debris or stones. Spread the seed with a drop or rotary spreader, working in two directions to apply 1/2 the recommended seed in each direction. The seed should then be raked in 1/4 inch deep and lightly rolled. Keep the soil moist, especially during the germination period. 2-4 weeks after establishment, top-dress with 3-5 pounds of 20-10-10 fertilizer per 1000 square feet.



Horticulture Oils

Horticulture oils are pesticides used to control insects, mites, and plant diseases. Oils work by controlling insects by direct contact. Horticulture oils are widely known as dormant oils because historically they could only be used when the plant was in a dormant state. Refining has been done and now there are multi season oils available.

Oils are most effective against immature stages of insects, as well as soft bodied insects. They can also be used as disease control for rust, mildews, and leaf spots. The oil is non effective after it dries, and works through direct contact with the insect or disease making it non selective. The oil will kill nearly every insect it covers as well as disrupting how the insects feed on the treated plant.

Horticulture Oils do come with disadvantage. They can cause damage to bees unless applied in early morning and late evening. Oils should not be applied during freezing temperatures or when temperatures are near 90 degrees fahrenheit. Fall treatments can lead to winter injury. Oils should also be avoided on plants with drought stress. Oils can not be combined with sulfur products or used within 30 days of sulfur application.

In conclusion, horticultural oils work well to control pests and disease and when used properly are less toxic than insecticides. Dormant or delayed dormant application can kill many of the overwintering insect pests that would become a problem in late spring. Treating in the winter or early spring can save time and avoid later plant problems. Correct application rate can provide excellent pest control with the least amount of damage to beneficial insects or the environment. Always read and follow all label directions for timing and rate of application.



Phytotoxicity of frasier fir from an improper oil spray treatment. (Photo Credit: Steven K. Rettke, Rutgers Coop. Ext.)



Dormant oil sprays require excellent coverage & often repeat applications. (Photo Credit: Steven K. Rettke, Rutgers Coop. Ext.)

Summer Fact Sheets

Rutgers Cooperative Extensions Fact Sheets:

Fact Sheet #	Fact Sheet Name :
FS011	Blossom End Rot: Tomatoes, Peppers, Eggplant
FS020	Weed Control Around the Home Grounds
FS058	Mulches for the Vegetable Garden
FS077	Aphids
FS099	Problems With Over-Mulching Trees and Shrubs
FS102	Your Lawn and Its Care
FS106	Blueberry Pest Management for Home Gardens
FS119	Weed Control in Home lawns
FS122	Tree Problems Caused by People in the Suburban Landscape
FS129	Planning a Vegetable Garden
FS385	Broadleaf Weed Control in Cool Season Turfgrasses
FS399	Vole Ecology and Management
FS426	Moss in the lawn
FS450	Using Water Wisely in the Garden
FS555	Best Management Practices for Watering Lawns
FS610	Harvesting Melons at Peak Flavor
FS626	Fertilizing the Home Vegetable Garden
FS678	Growing Tomatoes in the Home Garden
FS811	Home Composting
FS814	Managing Diseases of landscape Turf
FS871	Understanding the Fertilizer Labels
FS944	Roses and their Care
FS988	Picking Vegetables for the Home Garden
FS1019	Poison Ivy and Brush Control Around the Home Grounds
FS1102	The Stake and Weave Training System for Tomatoes in the Home Garden
FS1140	Incorporating Native Plants in Your Residential Landscape
FS1153	Growing Dahlias
FS1155	Cannas
FS1158	Black Spot of Rose

Call 856-451-2800 Ext. 4 when calling to request a fact sheet. All fact sheets are free unless otherwise noted.



**CONGRATULATIONS
TO
OUR
2023**

*Rutgers
Gardening
Education
Series Graduates*

The Gardening Education Series is a 16-week prerequisite course for those interested in becoming certified Master Gardeners.

The course is online and runs from February until May. Topics include but are not limited to botany, soils, entomology, plant pathology, pruning, lawn care, vegetables, small fruits, tree fruits, ornamental plants, and composting.



Hats off to the Grads

RESOURCES

Mulching:

<https://extension.psu.edu/mulching-landscape-trees>

<https://extension.umd.edu/resource/trees-planted-too-deeply>

<https://njaes.rutgers.edu/fs099/>

Mowing:

<https://njaes.rutgers.edu/fs102/>

<https://extension.umn.edu/lawn-care/mowing-practices-healthy-lawns>

Weed Identification:

<https://turblog.rutgers.edu/>

<https://njaes.rutgers.edu/weeds/weed.php?starofbethlehem>

<https://njaes.rutgers.edu/weeds/weed.php?mouseearchickweed>

<https://burlington.njaes.rutgers.edu/2022/03/21/henbit/>

Spotted Lanternfly:

<https://njaes.rutgers.edu/spotted-lanternfly/#:~:text=Spotted%20lanternfly%20is%20distinctive%20from%20most%20other%20native,marmorated%20stink%20bugs%20%28see%20Figures%202%20and%203%29>

<https://extension.psu.edu/spotted-lanternfly-management-guide>

Lawn Seeding:

<https://njaes.rutgers.edu/fs584/>

Horticulture Oils:

<https://extension.unr.edu/publication.aspx?PubID=3029>

<https://plant-pest-advisory.rutgers.edu/a-primer-on-dormant-oil-applications/>

SCAN THESE QR CODES USING A SMARTPHONE CAMERA TO VIEW ONLINE.



Wesley L. Kline, Ph.D
Cooperative Extension Agent
Vegetable Production and Food Safety
wkline@njaes.rutgers.edu

Timothy J. Waller, Ph.D
Cooperative Extension Agent
Nursery Production
twaller@njaes.rutgers.edu

Salvatore Mangiafico, Ph.D
Extension Department Head
Environmental and Resources Mgmt. Agent
mangiafico@njaes.rutgers.edu

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The user is responsible for the proper use of pesticides, residues on crops, storage and disposal, as well as damages caused by drift.
Use of Trade Names: Trade names are used in this publication with the understanding that no discrimination is intended and no endorsement is implied. In some instances the compound may be sold under different trade names, which may vary as to label.