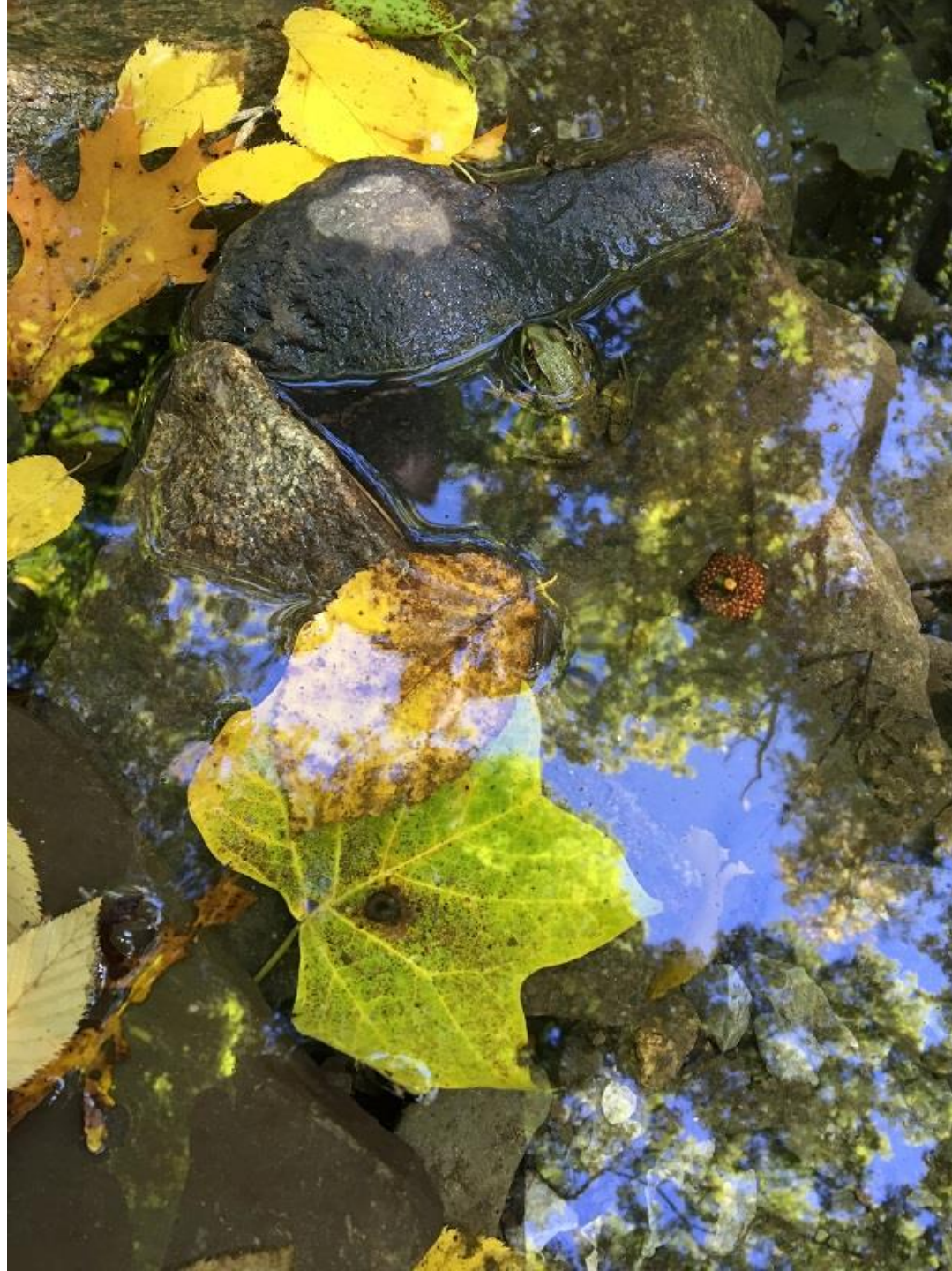


**Protecting
the
Descendants
of Our
Ancient
Deciduous
Hardwood
Forest
System**



Presented by:
Donna Sharrett
CCE Master Gardener Volunteer
Green Ossining representative



Tilia Americana
(American Basswood)

Photo: Chris Evan

Why We Need Trees!

- **Create Oxygen/Sequester Carbon**
- **Soil Stabilization**
- **Water Quality Protection**
- **Cooling Effect** (shade & evapotranspiration)
- **Flood Mitigation:** ex. “A healthy 100-foot-tall tree can take 11,000 gallons of water from the soil and release it into the air again, as oxygen and water vapor, in a single growing season.”



Amelanchier canadensis
(Shadblow)

Photo: Dow Gardens

Water & Forests: The role trees play in water quality: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5269813.pdf

The Threats:

- **Climate Change** – Unpredictable, more frequent and more extreme weather
- **Deer overabundance = loss of future tree generations**
 - Westchester deer populations: up to 120 per sq. mile
 - Sustainable deer populations: < 20 per sq. mile
- **Invasive Species** – Plants, Insects, Worms & Disease
- **Improper Maintenance & Neglect**
- **Light pollution** – Interrupted Circadian Rhythms
- **Loss of tree species** – removed deciduous trees replaced with evergreens
- **Us** – responsible for all the above

How to make trees happy & SAFE!!

- **Keep trees properly watered & maintained**
- **Have your trees routinely inspected for decay, structural defects & soil lifting**
- Plant hardy trees
- Right plant/right place
(sun/shade, moist or dry soils, proximity to power lines, exposure to road salt, etc.)
- Reduce deer pressure
- Turn off outside lights at night whenever possible

If a Tree Needs to Be Removed:










Contact the Town of Ossining Building Department

Plants need 1 inch of water per week

preferably rainwater - but if not, water deeply once a week rather than several shallow waterings



TABLE 2. FREQUENCY OF WATERING DURING EXTENDED DRY PERIODS

| | 1 st Year After Planting | | | 2 nd Year After Planting | | | 3 rd Year After Planting | | |
|------------------------------------|---|---|---|---|---|---|---|---|---|
| Water Needed Once Every WEEK | Spring | Summer | Autumn | Spring | Summer | Autumn | Spring | Summer | Autumn |
| 2 Weeks |  |  | | |  | | | | |
| 3 Weeks | | |  |  | | | | | |
| 4 Weeks | | | | | |  | |  | |
| 5 Weeks | | | | | | | | | |
| 6 Weeks | | | | | | |  | | |
| 7 Weeks | | | | | | | | | |
| 8 Weeks | | | | | | | | |  |

“Death of Newly Planted Trees” (with watering chart):

https://s3.amazonaws.com/assets.cce.cornell.edu/attachments/29331/Death_of_Newly_Planted_Tr_and_Sh_2009.pdf?1521128592

Don't move firewood!

Worcester, MA: > 35,000 trees lost

Cost to municipality: > \$146 million



In Pennsylvania. Anticipated here soon:

SPOTTED LANTERNFLY



Oak Wilt

Can kill Oaks in 3 months

ONLY Prune

October – February

So tree wounds can heal
before insect host
becomes active



62 Invasive Insect Species are known to be present in NYS

Invasive vines kill trees!

Cut vines 2x: at base and 12" up

Repeat on any regrowth
for at least 2 years

Don't pull vines off trees



Beware of native Poison Ivy!



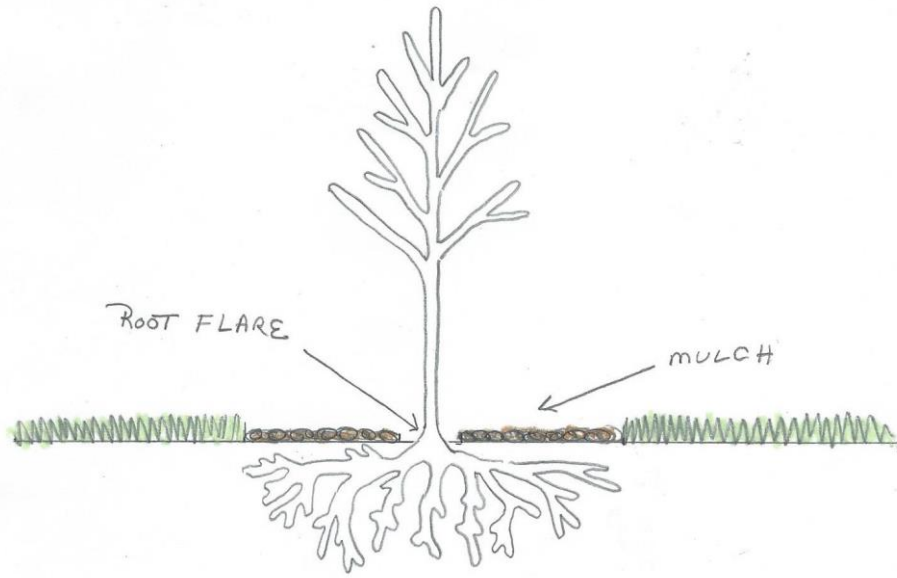
**Poison Ivy removal:
HIRE A PROFESSIONAL!**

Poison Ivy – Native Plant
with high eco-service:
Nutritional seeds
for migrating birds

Good plant for:
forests & open spaces

Difficult plant for:
residential properties

Do not burn Poison Ivy



Reduce competition for rainwater

- Remove grass away from tree trunk
- Place < 3 inches of natural (non-dyed) mulch over root zone to control weeds
- Do not use synthetic landscape fabric

Do not suffocate trees

- Keep mulch away from tree trunk
- Make sure tree flare is above soil level



Do not strangle trees

- Don't damage sapwood
- Don't Weed Wack trees
- Don't tie things around trees - including permanent strings of decorative lights!

"How to plant a tree" videos: www.urbanforestrytoday.org

Tree Abuse



Impacts: Increased Disease and Insect Pressures and Early Death

Plant Native!

Native plants = Habitat & Food for Native Insects, Birds & Mammals

Native Plants = Bird Food

- 1 native oak tree = 500 (+/-) species of butterfly & moth caterpillars
- More than 90% of moth & butterfly caterpillars eat only 1 plant or group of plants
- Caterpillars are a critical food source for over 96% of songbirds
(ex. a pair of Carolina chickadees needs > 5000 caterpillars to raise one brood of young.)



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E-Bird: <http://www.ebird.org>.

National Wildlife Foundation: <https://www.nwf.org/NativePlantFinder/>

New York Flora Atlas: <http://newyork.plantatlas.usf.edu/>

Road-Salt Tolerant Small Trees & Shrubs
for roadsides & under utility lines



Blooms: May
Ripe Fruit: August

Prunus maritima
(Beach Plum)



Blooms:
July/August
Fragrant!

Clethra alnifolia
'Ruby Spice'



Blooms:
October -
November

Hamamelis virginiana
(Witch Hazel)

Have questions? Contact:

Westchester Cornell Cooperative Extension

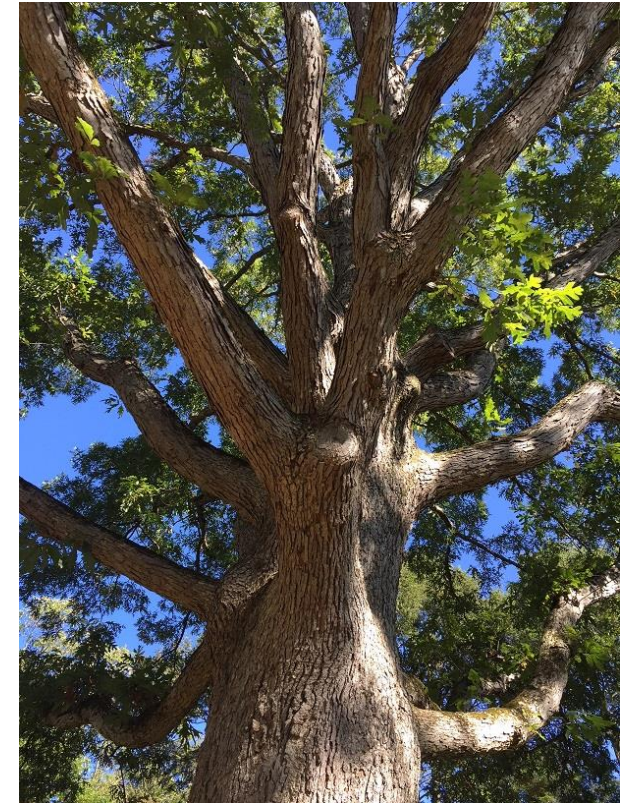
3 West Main St, Suite 112, Elmsford, NY 10523

914-285-4620

westchester@cornell.edu

<http://westchester.cce.cornell.edu/horticulture-environment>

\$\$\$ saving tip: Have your soil tested before buying/using fertilizers!



Unless otherwise noted:
photos & illustrations: Donna Sharrett