

# Native Meadows Invasive Plant Education and Management Project



Kelsey Sudol / Annette Lott  
Northwest Conservation District  
March 2024





# Why Native Meadows?

This 25 acre parcel was first purchased by NWCD back before 2012 using grant funding for the National Fish and Wildlife. It was then transferred to the Town of New Milford.

- Located in a key flood plain of the Housatonic River

Photo to right is Hurricane Irene, flooding through property onto Route 7

- A higher diversity of habitats

Including vernal pools, mixed grasses, forest/shrubland; riparian forest/buffer; wetlands and uplands.

- Safe haven for wildlife

Was identified as a key cross-over point in a highly developed corridor. Crucial for migratory birds, waterfowl, amphibians and more.

- Aquifer Protection

Area is above important aquifer to New Milford



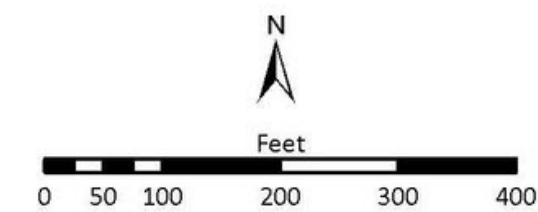


# Survey Maps



Proposed Wildlife Sanctuary  
New Milford, CT  
Field survey September 20, 2010

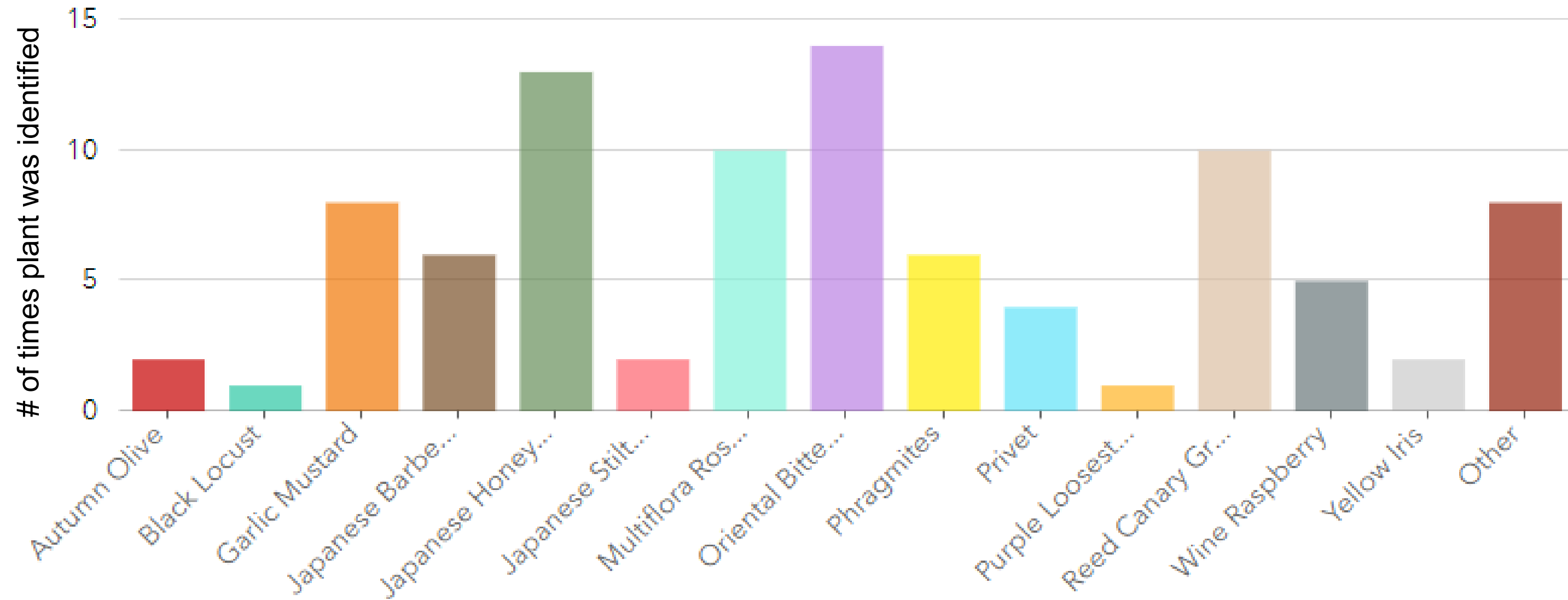
NCD GIS Center, 9.27.2010



Northwest Conservation District

- ★ plant sample location
- approx. phragmites area
- GPS collection 7/21

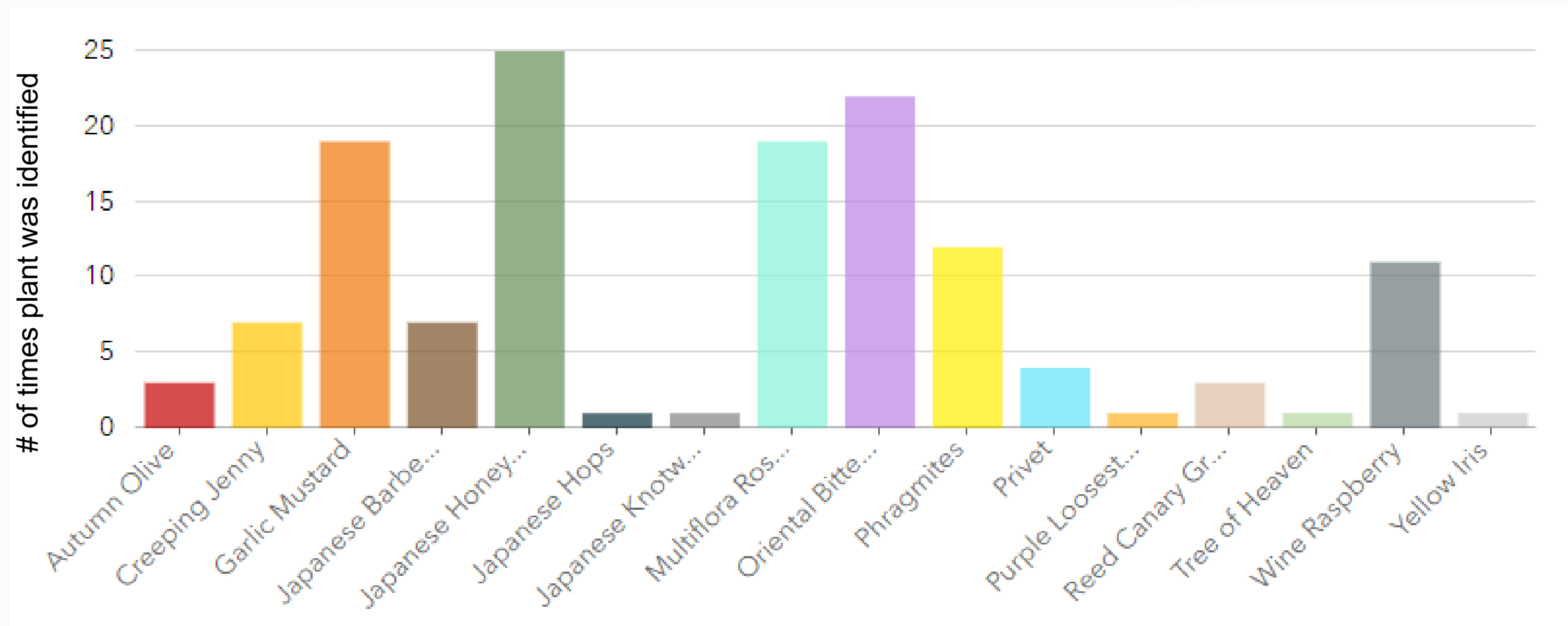
# Winter 2023 Data: 17 total points





# Spring 2023 Data:

## 36 total points



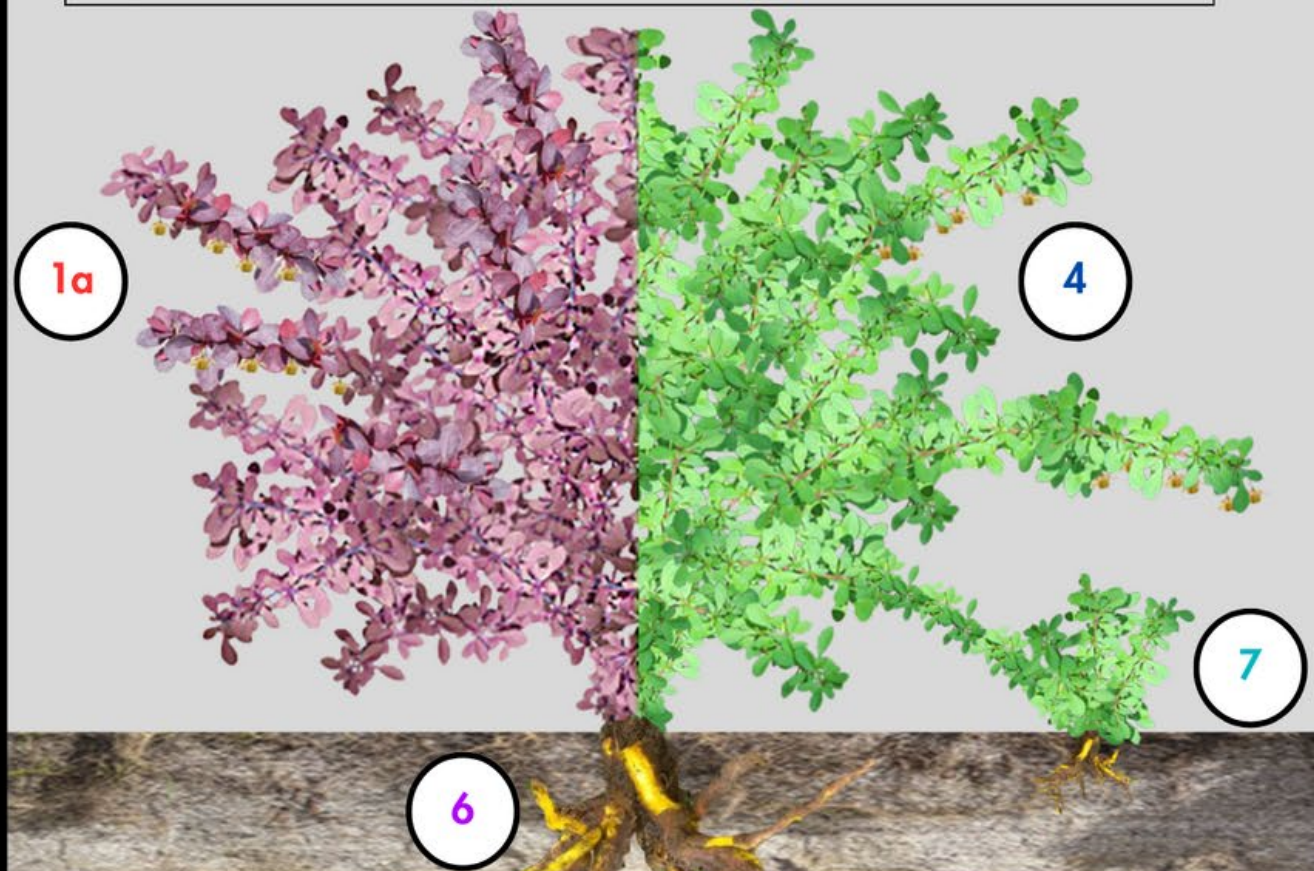
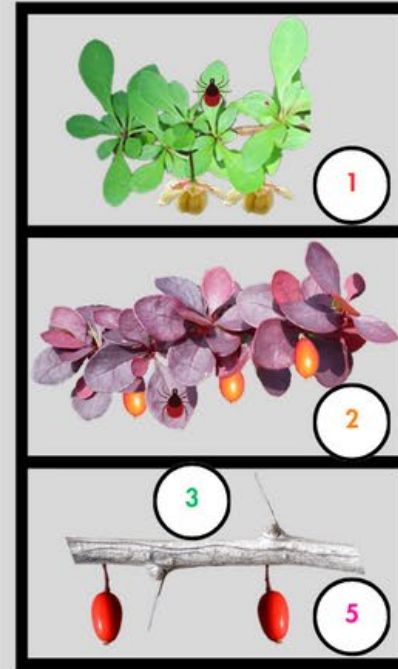




# Japanese Barberry

**Japanese Barberry (*Berberis thunbergii*)** is a thorny bush native to Japan, introduced to the US in 1875 to create large thickets on property lines for privacy. *B. thunbergii* forms dense thickets with arching stems that can create new growth when the branch touches the ground. *B. thunbergii* outcompetes native plants, is tolerant to most soil and light conditions, and can provide a haven for Lyme-carrying ticks due to its dense foliage and supply of berries for infected mice.

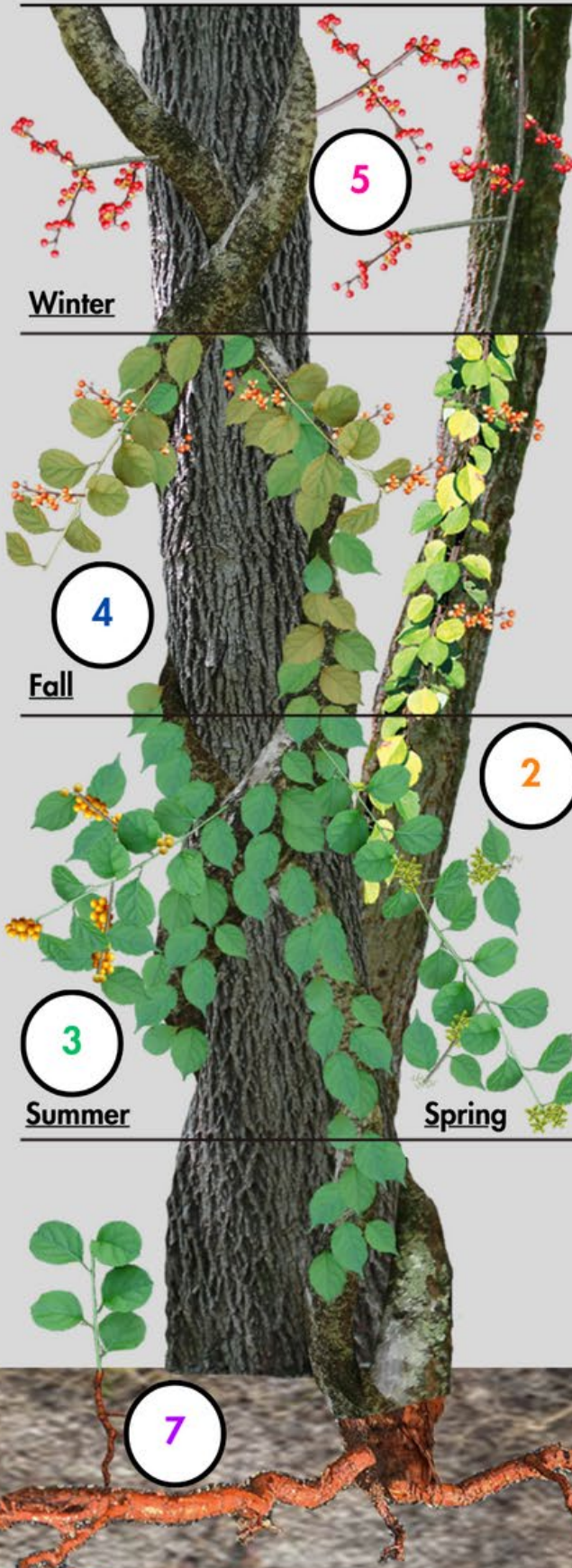
- *B. thunbergii* have thick spoon-shaped leaves (1.5") with smooth edges. The leaves are green/purple during the spring and summer (#1, #1a) but turn maroon/red in the fall (#2).
- *B. thunbergii* stems have simple spines that line each branch and protect the plant from herbivory (#3). The American Barberry (*Berberis canadensis*) which is a native *Berberis* species has three thorns per cluster.
- *B. thunbergii* blooms in April with groups of 2 - 4 yellow and white bell-like flowers that hang along the branch (#4). The flowers of *B. canadensis* bloom in a raceme orientation (attached to a single stem).
- Red oblong berries (#5) form in July and will stay on the plant through the winter until the berries are eaten or fall from spring foliage. These berries are toxic to humans and pets but edible to rodents that can carry Lyme.
- Roots are thick, orange in coloration, and form a right angle under the soil (#6). Cloned plants can sprout from preexisting roots or through layering (#7).
- To remove *B. thunbergii*, cut the plant stem close to the ground before it flowers or fruits to stunt its growth. Remove any branches and new growth seasonally to weaken the roots. Remove the roots from the ground and place all stems and sprouts away from the soil.



# Oriental Bittersweet

**Oriental Bittersweet (*Celastrus orbiculatus*)** is a woody vine native to China, Korea, and Japan, introduced into the US during the 1860s as an ornamental plant. *C. orbiculatus* is a fast-growing plant that sprouts in early spring and climbs trees and other tall objects to search for sunlight.

- The berries are edible to a few species of birds but are toxic to pets and people. *C. orbiculatus* girdle and weaken trees while climbing, leaving the tree susceptible to ice, wind, and insects. Vines can grow over 100 feet tall, 5 or more inches in diameter, and weigh hundreds of pounds on a tree.
- *C. orbiculatus* have rounded-ribbed leaves (#1), some with an elongated point, that line the vine and branches in an alternate orientation. The leaves are green during spring and summer but turn yellow and brown before other plants in the early fall.
- *C. orbiculatus* have greenish-yellow five-petaled flowers (#2) at the base of each leaf, along the plant's extended branches. American Bittersweet (*Celastrus scandens*) have white flowers at the end of each offshoot instead.
- Smooth green-yellow berries (#3) appear at the end of the summer season. In the fall months, the berry shells open to reveal a shiny red color (#4). (Only for the female plant)
- The stem is woody and has a cracked fishnet texture (#5) that wraps and leaves indentations on the branches and trunks of trees.
- The roots are orange and spread horizontally within the soil (#6). *C. orbiculatus* can vegetatively sprout from their roots (#7) if the plant is cut or damaged above the surface.
- To remove *C. orbiculatus*, cut once at eye level and another near the vine base. Use a weed wrench to pull roots up and out of the ground, or continue to remove all reappearing stems to weaken roots.





# Once you Find an Invasive

Document your invasive species findings on Survey123. Surveys help the NWCD map outbreaks and removal programs.

## NWCD INVASIVE SURVEY LINK



- SCAN LINK TO OPEN SURVEY
  - OPEN LINK IN BROWSER OR APP
  - TYPE NAME, EMAIL, DATE, AND TIME
  - SPECIFY INVASIVE SPECIES AND QUANTITY
- SKETCH AREA:
- |    |       |              |          |
|----|-------|--------------|----------|
| 1. | CLICK | PLACE POINTS | CLICK OK |
|    |       |              |          |
- TAKE PHOTOS AND CLICK SUBMIT

We need your help to fight against these invasive species to protect our CT wilderness.

FOR MORE INFORMATION ABOUT  
INVASIVES VISIT THE WEBSITE



**NORTHWEST  
CONSERVATION  
DISTRICT**  
[www.nwcd.org](http://www.nwcd.org)

## NWCD RESOURCES LINK



This survey is for invasive plants and insects for the Northwest Conservation District. Funding for this survey was through the 2023 Les Mehrhoff Grant from the Connecticut Association of Wetland Scientists.



# New Milford: A Bee City Town

- This is town owned property, as a a Bee City Town, no chemical treatments is recommended.
- The focus is then on mechanical harvesting and education.
- Creating a volunteer base to help maintain mechanical work, and build interest around the upkeep of Native Meadows
- Targeted invasives: Bittersweet, Autumn Olive, Japanese Barberry, Multiflora Rose and Phragmites

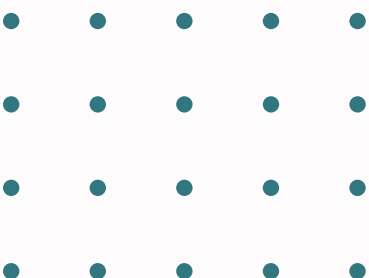






# Moving Forward

- Hold additional educational programs with town
- Continue build volunteer base via list -serv, and in spring 2024 hold at least one invasive pulling event
- Continue to hold at least one invasive event per year, ideally multiple
- Train volunteers with new Survey form





Thank you to the  
CT Association of  
Wetland  
Scientists for  
their support  
through the 2023  
Les Mehrhoff  
Grant.  
Questions?

Kelsey Sudol and  
Annette Lott

[kelseys@nwcd.org](mailto:kelseys@nwcd.org)

[annettel@nwcd.org](mailto:annettel@nwcd.org)

[nwcd.org](http://nwcd.org)

