

Guidelines for Removing Invasive Plants
Friends of Glen Providence Park
2019

OUR APPROACH:

We take a pragmatic approach and prioritize those invasive plants that both cause the most harm and are effective to remove. We will not realistically eradicate invasive plants from the park, but we can limit their negative impact, reduce their area, and/or limit their spread.

PURPOSE:

- Keep trails clear
- Improve habitat for native wildlife by giving beneficial native plants room to grow
- Prevent invasive vines from strangling native plants and pulling down trees
- Beautify the park

“First of all, do no harm”

DO NOT REMOVE:

- If not sure that you know what it is
- If it is on a steep slope, streambank, or in an area of erosion - instead clip it at ground level, so the roots remain to hold in the soil.
- If you are clearing an area & leaving bare ground (as opposed to keeping a trail clear). Invasive plants will just move right back in!

Invasive plants can temporarily serve a purpose:

- Erosion control
- Cover for wildlife
- Food for wildlife

NATIVE vs. NON-NATIVE vs. INVASIVE:

(Great definitions on [USDA site](#), with nine categories)

- **Non-native plants** are those that have been introduced to an area (in our case the Mid-Atlantic region) by human activity, whether deliberately or accidentally.
- **Invasive plants** are those non-native species that aggressively outcompete and displace native species, upsetting the local ecosystem.
- **Opportunistic native plants** can aggressively out-compete other native plants.
- **Not all non-native plants are invasive**, and even among invasive species, we prioritize removing those that are the most harmful, and are also effective to remove.

Poison Ivy is not invasive!

- It is a native plant, and greatly beneficial to wildlife
- We only remove it along trails where people could brush against it

Not all thorns are invasive:

- Native & beneficial: Greenbriar, Blackberry, Raspberry
- Invasive: Multiflora rose, Wineberry, Mile-A-Minute

Stinging Nettle: identification of native vs. invasive is confusing (to experts!), and sources are contradictory. Will watch. Only remove (carefully!) where it could be brushed against along trails.

PROCEDURES

REMOVAL:

- Be careful not to step on or damage native plants
- Confirm that what you are removing is invasive
 - We carry copies of *Invasives Plants & their Native Look-alikes* and *Non-Native Invasive ID and Control* for reference
- Manual removal
 - For smaller plants, just pull by roots
 - For larger plants, can cut in pieces to remove (careful not to cut the native plants), then remove by roots as much as possible
 - Can dig when necessary, but try to disrupt the soil as little as possible
 - Trimming most invasives will just make them grow more aggressively!
- With thick leather gloves, you can bunch the invasives into the bag, and/or clip them into pieces
- You can judiciously trim or remove native plants if they are growing into the trail itself
- We do not use herbicide

BAGGING:

- **Why we generally bag & remove the invasives:**
 - Most invasive plants re-sprout, and any berries or seeds would spread
- **Bag as you go - don't wait to the end!**
 - Or you may end up with a big pile to bag all at once, and possibly not enough time or enough bags to remove it all
 - Don't pull more than can be carried out - that is the hardest part!
- **Bags go to drop points in the park or to an entrance:**
 - We notify County Parks & Recreation of where there are bags to pick up

SAFETY:

- Eye protection - sunglasses are great
- Long pants & sleeves are recommended
- Water bottle for hydration
- Be aware of surroundings: poison ivy, steep slopes, and fellow volunteers!
- Check for ticks when you get home

SUPPLIES & TOOLS:

- Thick leather gloves - we can provide medium thickness leather gloves, but you'll probably want thicker ones when dealing with Multi-flora Rose & Wineberry
- Contractor bags - we provide
- Loppers & hand saws - we'll have one of each for the group
- Pruners - let us know and we can bring extra
- Weeding tool - we'll have one for digging roots
- Shovels and/or trowels - when we are working on Japanese Knotweed

INVASIVES BY PRIORITY:

Ranked by prevalence & aggressiveness

1. **Multi-flora Rose** – *park enemy #1!*
2. **Japanese Knotweed** – *highly aggressive - we are removing along the streambank*
3. **Garlic Mustard** – *it poisons the soil for other plants! - flowers April-May*
4. **Mile-a-minute** - *there is very little in the park, but should be immediately removed*
5. **Bamboo** - *there is very little in the park, but should be immediately removed*
6. **Tree of Heaven** - (those small enough to remove) *it is the preferred host plant for the invasive Spotted Lanternfly*
7. **Japanese Honeysuckle**
8. **Oriental Bittersweet**
9. **English Ivy**
10. **Wineberry**

PARK INVASIVES THAT ARE NOT YET PRIORITIES, but are on the radar:

Not in any order

- Winged Euonymus (Burning Bush)
- Privet
- Japanese Barberry
- Pachysandra
- Periwinkle, *Vinca*
- Chinese Wisteria
- Japanese Angelica - *difficult to distinguish from native Devil's Walkingstick*
- Japanese Spiraea? (or other non-native viburnum)
- Norway Maple - *would require replanting!*

EXTENSIVE, BUT HARD TO FIGHT:

- Lesser Celandine
- Japanese Stiltgrass

OPPORTUNISTIC NATIVE - remove if harming trees:

- Wild Grape: remove strategically - good food source for wildlife, but can weigh down & kill canopy trees. Sever vine 1-2' above ground. <https://extension.psu.edu/invasive-weeds-wild-grape>

EDIBLE INVASIVES!

Bring separate bag for them when in bloom!

- Garlic Mustard (said to be good in pesto!)- April & May
- Wineberries – June & July

APPENDIX

Glen Providence Park is owned and managed by Delaware County, and we work with the permission of, and in consultation with, Delaware County Parks & Recreation and the Delaware County Conservation District, in addition to consulting other natural lands managers and resources.

We have consulted with volunteers and land managers from Bucktoe Creek Preserve, Tyler Arboretum, Taylor Memorial Arboretum, Scott Arboretum, CRC Watersheds, Stroud Water Research Center, Longwood Gardens, and John Heinz NWR at Tinicum.

We take a pragmatic approach and prioritize those invasive plants that both cause the most harm and are effective to remove. We do not do structural trail maintenance or use power tools.

USEFUL REFERENCES:

- ★ **Non-Native Invasive ID and Control** (published by Fairfax County, VA Park Authority): The most user-friendly guide we have found to invasive plant identification and practical control methods. Includes native look-alikes. Most of its 28 species are found in Glen Providence Park. The whole booklet is online, and we always carry a copy on Fridays: <https://www.fairfaxcounty.gov/parks/sites/parks/files/assets/documents/naturalcultural/non-native-invasive-id-control-booklet.pdf>
- *Mistaken Identity? Invasive Plants and their Native Look-Alikes* (published by Delaware Department of Agriculture) we carry a copy of this with us for reference: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_024329.pdf
- DCNR website (Department of Conservation and Natural Resources): http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_20026634.pdf & fact sheets: <https://www.dcnr.pa.gov/Conservation/WildPlants/InvasivePlants/InvasivePlantFactSheets/>
- John Heinz NWR website tutorial: <http://www.friendsoftinicummarsh.org/weedwarriors/intro.html> & Invasive Catalogue: <http://www.friendsoftinicummarsh.org/weedwarriors/invasivecatalogue.html>
- PA Field Guide – Common Invasive Plants by PA DEP: <http://www.dep.state.pa.us/dep/deputate/watermgmt/wc/subjects/streamreleaf/Docs/Invasive%20Plants.pdf>
- Wissahickon Restoration Volunteers website lists & explains priority invasives: http://wissahickonrestorationvolunteers.org/resources/invasive_plants/
- Penn State Extension: has some good individual articles, but does not seem to have dedicated invasives section. <https://extension.psu.edu/>
- USDA's Natural Resources Conservation Service has invasives definitions: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ct/technical/ecoscience/invasive/?cid=nrcs142p2_011124