

What is an Invasive Plant?

✿ *“An ‘invasive species’ is a species that does **not naturally occur** in a specific area and whose introduction does or is likely to cause **economic or environmental harm** or harm to human health.”*

✿ President's Executive Order 13112, 1999

Exotic

=

Non-Native

=

Alien

~~=~~

Invasive

Not all plants are created equal!

Native



Non-Native



Invasive

Exotic and *Invasive*



Exotic but *Not Invasive*



Warning:

Exotics can become new invasives, i.e. Callery Pear!!



A visual definition of invasive species
along the W&OD trail in Arlington

Invasive Plants Have a Competitive Advantage...



Invasive Plants in Northern Virginia: they *thrive* on stress



- Land Disturbances, Fragmentation and Climate Change

Vectors (Pathways) for Invasives

- Vehicles--cars, planes, trains, boats, bikes
- Commercial sales (landscaping, agriculture)
- Animals--consumption, on fur, in feet, nesting materials
- Human recreation--boats, boots, clothing, global travel
- Flood waters, wind





Yard debris dumped on park land is a major way that landscape plants become invasive in natural areas

Threats to Plant Communities

- Creating dense monocultures
- Hybridizing with natives, polluting the gene pools of both species
- Impacts on tree canopy
- Inhibits natural forest regeneration



Threats to Wildlife

- Displacing native habitat for wildlife
- Displacing nutritious food sources



🌿 Invasions can be swift, rapidly altering the health and balance of native plants and animal communities

In a nutshell:

- ✱ Invasive species are plants that were brought from different ecosystems to areas where they did not evolve.
- ✱ Because they didn't evolve here they have little or no benefit to our local insects, butterflies, birds and animals.
- ✱ Invasive plants have few, if any, natural predators or controls (evolution takes a *very long* time!)
- ✱ Once they become established they grow rapidly and spread throughout our backyards, forests, parks, and fields, crowding out native flora and undermining the fauna that depend upon those plants for their survival.

Invasive Control Methods:



Lubber Run, Sept 21, 2002



Same Place, May 12, 2004





Species List

1. Kudzu
2. Garlic Mustard
3. Japanese Stiltgrass
4. Mile-a-minute
5. Japanese Honeysuckle
6. English Ivy
7. Asian Bittersweet
8. Porcelainberry
9. Multiflora Rose
10. Amur (Bush) Honeysuckle

Kudzu

Alternate, compound leaves with three broad leaflets



Hairy, flat seed pods with up to ten seeds each



Green hairy stem, changing to brown smooth bark as plant matures



Purple, fragrant flowers in upright clusters



2nd Year Garlic Mustard Plants



Triangular, sharply-toothed leaves with horseshoe base, branched veins, garlic odor if crushed.



Stalked, 5-46 inch tall plants, leaves are alternate, and reduce in size towards top of stem.



Dried Seed Heads

Four petal, small white flowers about 1/4" in size



Japanese Stiltgrass



Leaf divided into unequal halves, sparse hairs, distinctly tapered at both ends



Stems always hairless, often bend at joints, "stilting"



Distinct silver midrib, marginal hairs on leaf sheath.



Roots fibrous, not rhizomatic, plant roots from nodes.



Mile-a-Minute



Leaves are an equilateral triangle

Cup-shaped bract at base of leaf petiole.



Blue berries



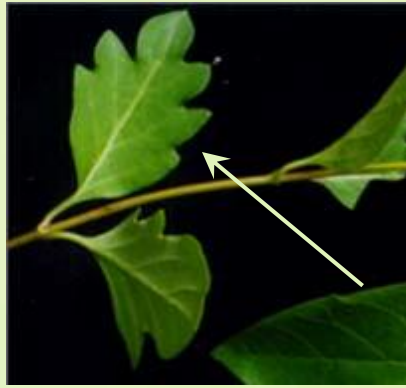
Small thorns on stem curve towards ground.



Japanese Honeysuckle



Leaves opposite, semi-evergreen, typically ovate, sometimes lobed, hairy underneath.



Vine with minute hairs that always twine around host plant.



Black fruit.

Older stems have shredding bark, hollow pith.



English Ivy

Fruits only on climbing vines, clusters of berries persist through winter.



Climbs tree using aerial roots that secrete a glue. All climbing vines attached to trees have these rootlets.



Trailing or climbing vine with glossy evergreen leaves. Leaf shape changes from three or five-lobed to unlobed when mature and fruiting or in full sun.



Asian Bittersweet



Glossy leaves finely toothed, tip can be rounded or narrow to a point.

Berries and flowers occur at leaf joints along branches.



Twining vine has bark with distinct lenticels.



Porcelain-berry

Flowers in compact, broad clusters.

Berries are hard and vary in color from white to yellow to lilac to magenta to blue.



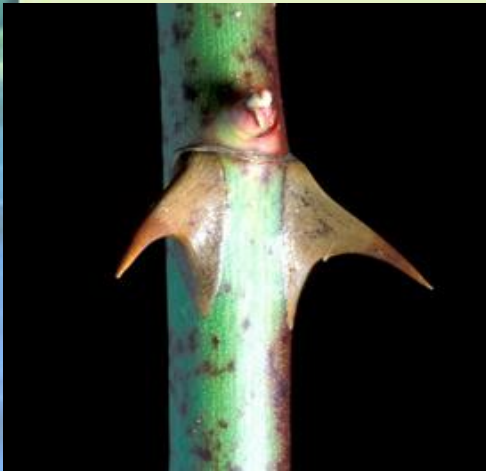
Leaves three-lobed--
shapes may vary, bark
has lenticels, stem pith
is WHITE.



Multiflora Rose



Compound leaves have small teeth. Leaflets 1-2 inches long.



Thorns curve down towards ground.



Small white flowers, 1/2-3/4".



Has a pointed, bristled petiole at base of leaf--not found on native roses.



Red berries called rose hips persist through winter.



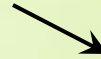
Bush Honeysuckle

Vertical
ribbing on
bark, starts
to shred on
larger shrubs



Vase -
shaped
branching
pattern

Leaves
opposite,
taper to a
point, with
smooth
edges, no
teeth.



Red berries

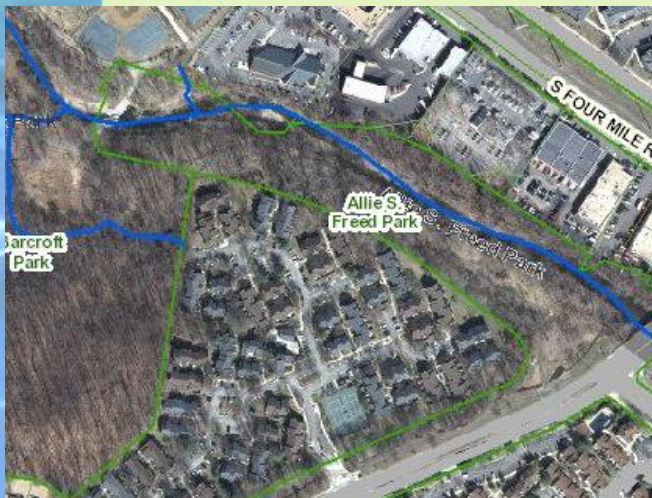


Fragrant flowers
white fading to
yellow



Lucky Run:

- Remove invasive plants through a 5-year invasive plant removal plan.
- Create pollinator habitat between stream bank and bike trail. June-Sept flowering plants critical.
- Create a buffer using native ornamental trees along woods edge and stream bank along South Walter Reed.
- Create a buffer using a mix of evergreens and shrubs, larger evergreen sited appropriately near residential side of buffer.



Suggested Natural Screening
includes:

Ilex opaca

Juniperus virginiana

Magnolia virginiana

Pinus virginiana

Chionanthus virginicus

Cercis canadensis

Hamamelis virginiana

Prunus americana

Viburnum nudum

And more not pictured...



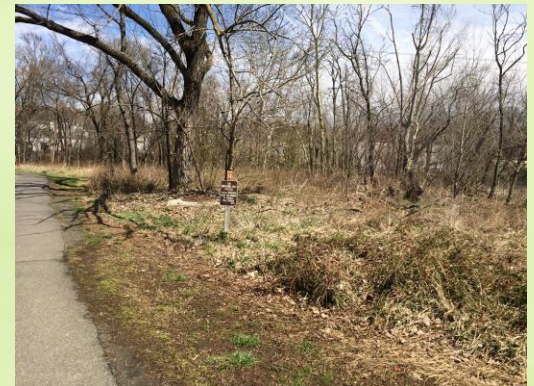
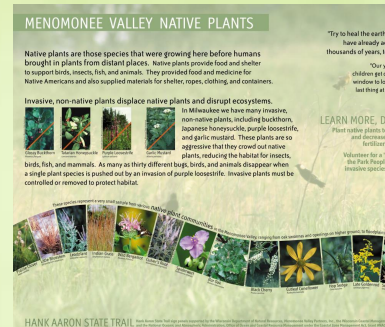
Lucky Run/Allie Freed:

Remove invasive plants through a 5-year invasive plant removal plan.

Additional screening trees and shrubs.

Allow for mowing along trails, maintain and amend the open meadow by re-planting and also moving plants from the meadow at Barcroft.

Add additional trees and shrubs, create natural colonies to allow for better cross-pollination
Add informational signage.



MENOMONEE VALLEY NATIVE PLANTS

Native plants are those species that were growing here before humans brought in plants from distant places. Native plants provide food and shelter to support birds, insects, fish, and animals. They provided food and medicine for Native Americans and also supplied materials for shelter, ropes, clothing, and containers.

Invasive, non-native plants displace native plants and disrupt ecosystems.



Glossy Buckthorn
(Rhamnus fraxinifolia)



Tatarian Honeysuckle
(Lonicera tatarica)



Purple Loosestrife
(Lythrum salicaria)



Garlic Mustard
(Alliaria petiolata)

In Milwaukee we have many invasive, non-native plants, including buckthorn, Japanese honeysuckle, purple loosestrife, and garlic mustard. These plants are so aggressive that they crowd out native plants, reducing the habitat for insects,

birds, fish, and mammals. As many as thirty different bugs, birds, and animals disappear when a single plant species is pushed out by an invasion of purple loosestrife. Invasive plants must be controlled or removed to protect habitat.

LEARN MORE, DO MORE...

Plant native plants to provide habitat and decrease use of chemical fertilizers and pesticides.

Volunteer for a "Weed-Out" with the Park People to help remove invasive species from our parks.



Milwaukee has been a national leader in promoting natural landscaping. Lorrie Otto helped found Wild Ones (Advocating native plants in natural landscapes) in 1977. Lorrie, a member of the Wisconsin Conservation Hall of Fame, has inspired many lively, environmentally sound, regionally appropriate natural landscapes, in Milwaukee and across the land.



Lorrie Otto



HANK AARON STATE TRAIL Hank Aaron State Trail sign panels supported by the Wisconsin Department of Natural Resources, Menomonee Valley Partners, Inc., the Wisconsin Coa and the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act



Informational Signage for park entrance off of Walter Reed



The Spread of Invasive Species of Exotic Plants

What are they?

Exotic plants are species that did not historically grow in our region. These plants are considered invasive if they grow or spread rapidly and are not kept in check by natural controls.

Why are they a problem?

Invasive exotic plants outcompete native plants for sunlight, water, nutrients and growing space. This causes a decline in biodiversity, displaces rare plants, and decreases food supplies for mammals, birds and insects.

How Can You Help?

- clean shoes, clothes, and pets to prevent spreading seeds
- landscape your yard and garden with native plants and seeds
- learn how to identify these plants and educate your friends
- get involved in volunteer monitoring and control projects



The Tennessee Exotic Pest Plant Council (TNEPPC) works to raise public awareness about the spread of invasive exotic plants throughout Tennessee, especially natural areas, by sharing information on prevention, identification, management, and control of invasive, non-native plants. For the Tennessee Invasive Plant list or other information on invasive plants and how to manage them, visit the website: www.tneppc.org



TENNESSEE
EXOTIC PEST
PLANT
COUNCIL

Please use the boot brush below
To remove dirt and seeds from your shoes before and after hiking
Thank you

A few of the proposed
trees/shrubs for Lucky
Run/Allie Freed





Funding – Neighborhood Conservation Bond Fund

Next steps:

- Civic Association approval (April 2014)
- NCAC (Neighborhood Conservation Advisory Committee) approval (June 2014)
- Arlington County Board Approval (October 2014)
- Invasive plant removal may begin in late Fall 2014 upon approval by the AC Board.

Cost of Project: \$379,000

Includes 5 year invasive plant removal for Lucky Run/Allie Freed and Four Mile Run areas (approx. 16 sq miles), buffer screening planting, pollinator planting, general RPA and meadow planting, required RPA plantings (4 Mile Run), informational signage, contingency and escalation, AC staff time.

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Thank You!