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

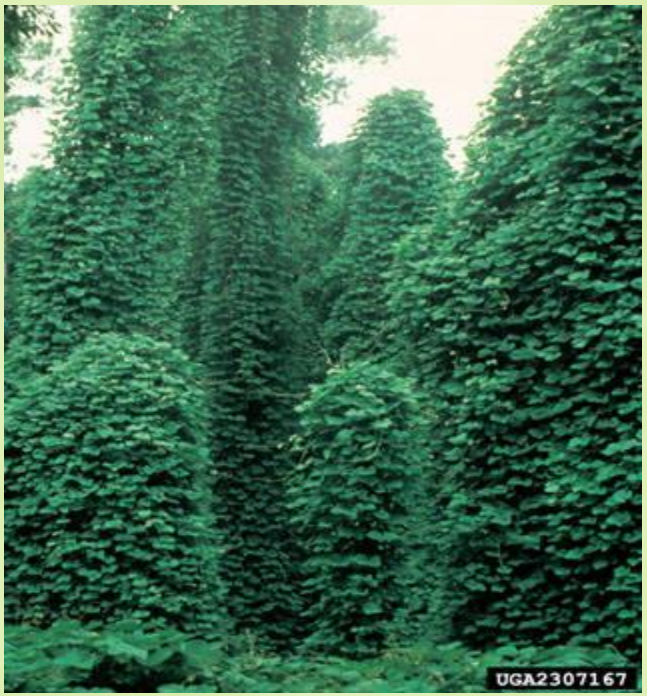
Kudzu

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

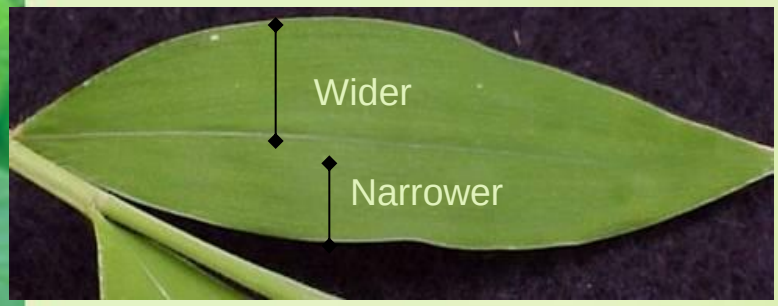
Triangular, sharply-toothed leaves with horseshoe base, branched veins, garlic odor if crushed.

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

Distinct silver midrib, marginal hairs on leaf sheath.

Stems always hairless, often bend at joints, “stilting”

Roots fibrous, not rhizomatic, plant roots from nodes.

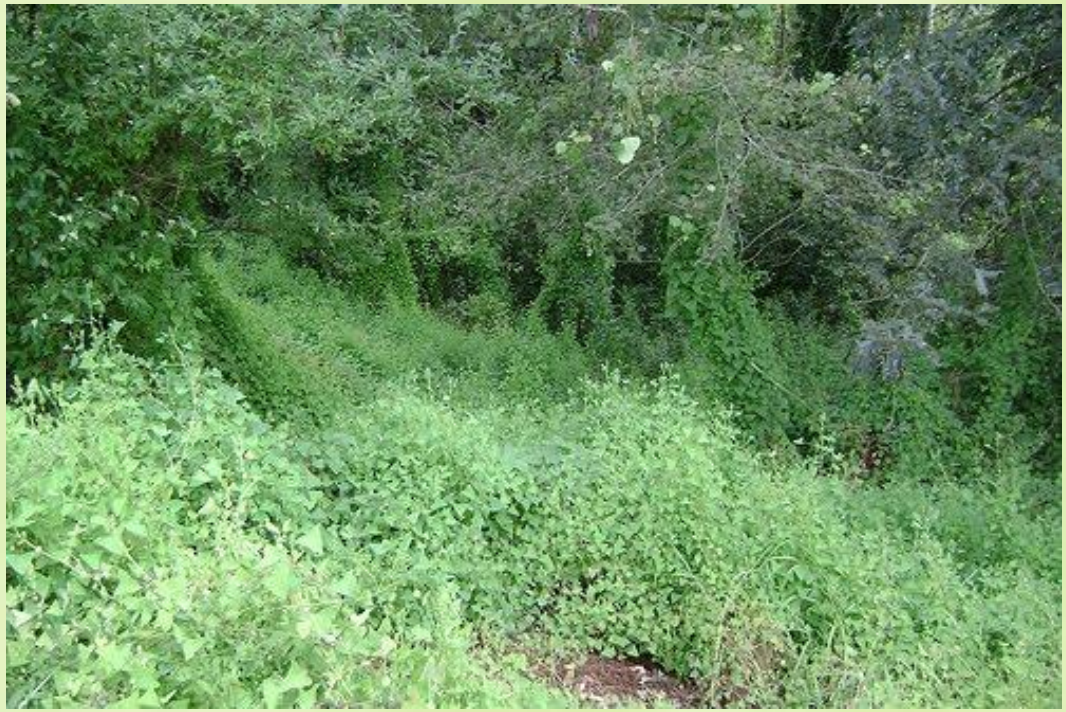
Mile-a-Minute

Leaves are an equilateral triangle

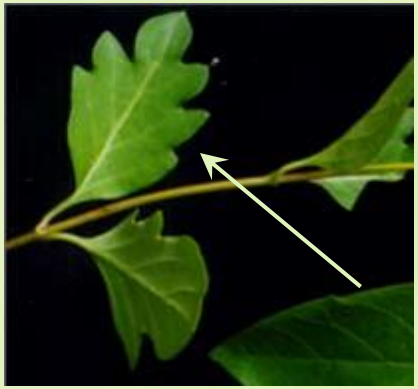
Blue berries

Cup-shaped bract at base of leaf petiole.

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.

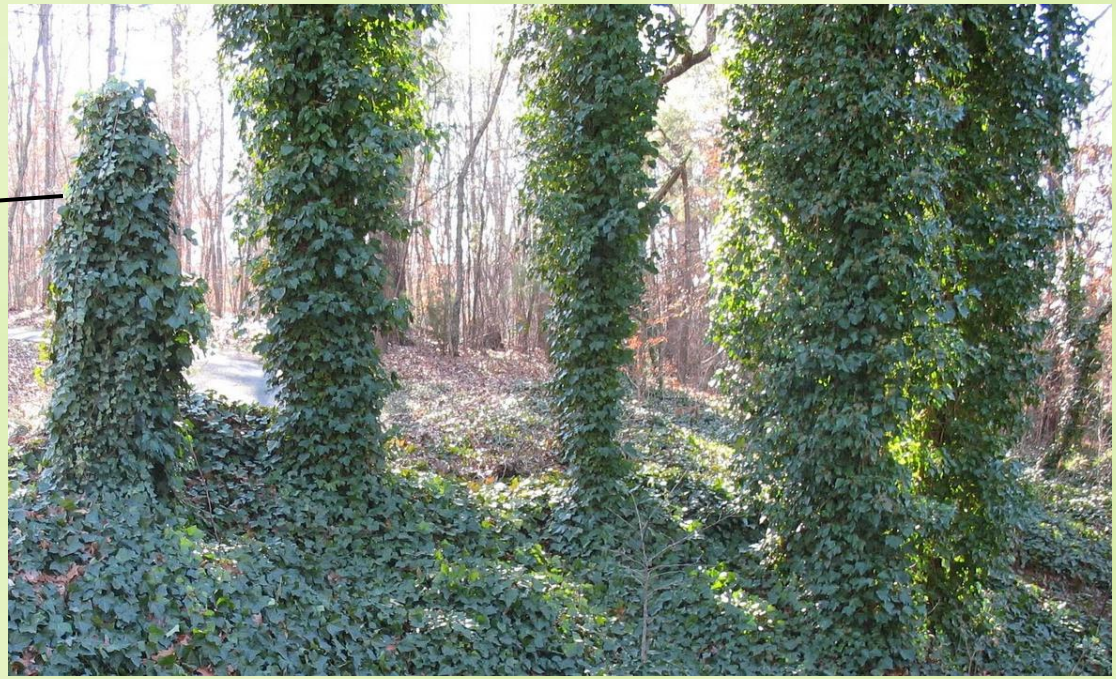
Older stems have shredding bark, hollow pith.

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.

Red berries called rose hips persist through winter.

Small white flowers, 1/2-3/4”.

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

Thorns curve down towards ground.

Bush Honeysuckle

Vertical ribbing on bark, starts to shred on larger shrubs

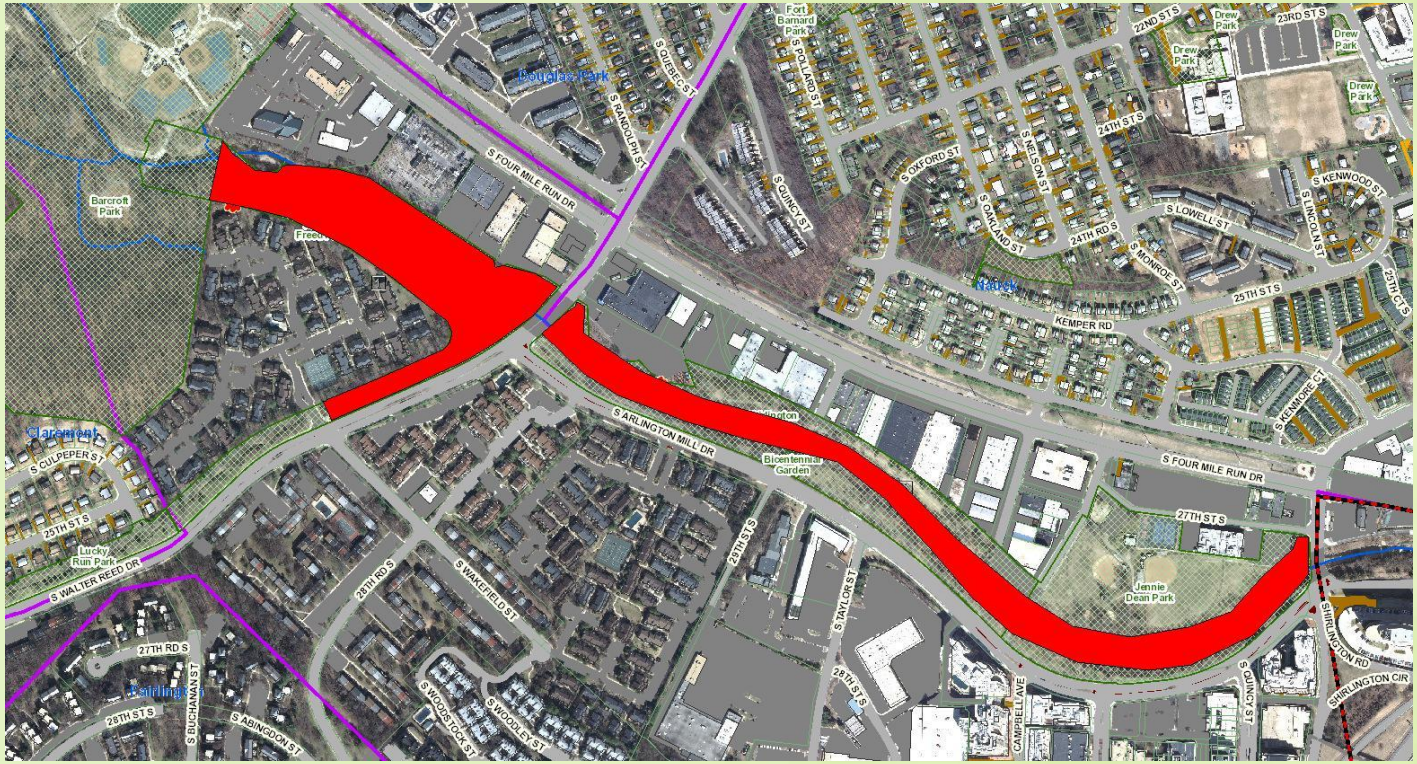
Leaves opposite, taper to a point, with smooth edges, no teeth.

Vase - shaped branching pattern

Fragrant flowers white fading to yellow

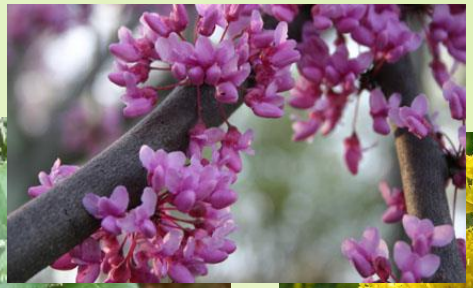
Red berries

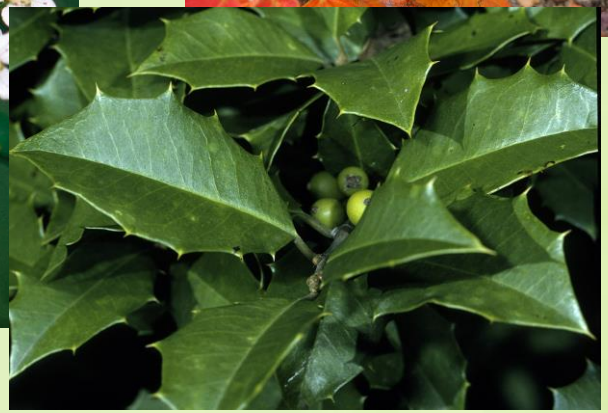
Overview of project area:
Lucky Run/Allie Freed Park – invasive plant removal and re-planting including buffer plantings
Four Mile Run- invasive plant removal along stream bed



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:

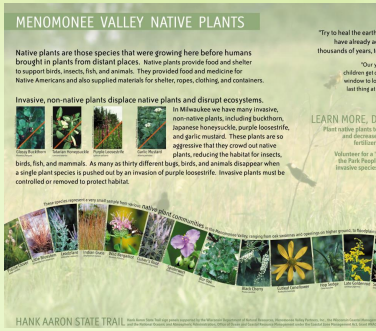
Remove invasive plants through a 5-year invasive plant removal plan.

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.



Informational Signage for park entrance off of Walter Reed

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.

Contacts:

- Kathy von Bredow
  Landscape Architect for Neighborhood Conservation, Project Manager
  Arlington County, Parks and Recreation, Park Development Division
  703-228-7598
  kvonbredow@arlingtonva.us

- Sarah Archer
  Invasive Plant Program Coordinator
  Arlington County, Parks and Natural Resources
  703-228-1862
  Sarcher@arlingtonva.us

- Alonso Abugattas
  Natural Resources Management Specialist
  Arlington County, Parks and Natural Resources
  703-228-7742
  aabugattas@arlingtonva.us

Thank You!