The mission of the Blue Ridge PRISM is to reduce the impact of invasive species in our targeted geography.

Supported by the Virginia Environmental Endowment

PRISM = Partnership for Regional Invasive Species Management
Blue Ridge PRISM

➢ PRISM = Partnership for Regional Invasive Species Management
➢ Generically a Cooperative Weed Management Area (CWMA)
➢ Collaboration of federal, state and local agencies, conservation organizations, contractors and private landowners
➢ Non-profit – funded by donations; volunteer driven
➢ Mission: reduce the impact of invasive species in our targeted geography
➢ Action focused – across a wide area
National CWMA map

www.invasiveplantcenters.org
Blue Ridge PRISM

Geography

- Ten counties
- Almost 3 million acres
- Includes the 200,000-acre Shenandoah National Park
- Roughly 50,000 landowners with 5 acres or more
The People Involved are from:

- Shenandoah National Park Trust*
- VA Native Plant Society**
- Piedmont Environmental Council**
- Shenandoah National Park**
- Smithsonian Conservation Biology Institute**
- VA Dept of Forestry**
- VA Dept of Conserv. & Rec**
- VA Cooperative Extension**
- Private landowners**
- The Nature Conservancy
- Cville AreaTree Stewards
- Virginia Master Naturalists
- Virginia Master Gardeners
- TJ Soil & Water Cons Dist
- Virginia Envir. Endowment
- The Farm at Sunnyside
- VDOT
- US Forest Service
- Rockfish Valley Foundation
- Ivy Creek Foundation
- 500 Year Forest Foundation
- NRCS
- RappU
- Other volunteers

*Fiscal sponsor
**Steering committee members
Identifying and Controlling Nonnative, Invasive Plants in Virginia’s Forests and Fields in Autumn and Winter

Blue Ridge PRISM

9 October, 2019

Tim Maywalt  William Hamersky  Ruth Douglas
Presentation Flow

• Part I: Introduction
• Part II:
  – Invasive fundamentals
  – Common local invasives
  – Identification
• Part III: Field Trip/Demonstration
• Part IV:
  – Overview of control
  – Species specific treatments in autumn and winter
Class Goals

1 – Identifying invasives
2 - Assessing and planning
3 – Removing / Treating
4 - Understanding herbicides
5 – Getting the job done!
6 – Restoration tips
What Are Nonnative Invasive Plant Species?

- A species that evolved in a different ecosystem from where it is now found, and flourishes in the new ecosystem at the expense of native species

  OR

- An introduced species that causes, or has the potential to cause, ecological or economic harm to humans.

- AKA weeds, invasives, exotics, noxious plants, etc.
How Do Invasives Kill Native Plants?

• Starves them
  – Compete for nutrients and water
  – Block sunlight, impeding photosynthesis
• Stresses them by adding weight
  – And Increases ‘sail effect’
• Poisons them
  – Toxins in roots/leaves stunt growth
• Smothers new growth
  – Disrupts natural ecosystems and succession
  – We lose new, native plant growth, but also . . .
  – Lose larvae and adult insects; and lose what eats them
How Do Invasives Outcompete Native Plants?

• Grow faster
• Greater seed production
• More effective seed dispersal
• Lack of predators and/or disease
• Alter native habitats
Seasonal Considerations

• Sap is rising in spring
  – Plant juices moving upward...
  – But herbicides need to move downward

• For maximum effectiveness apply herbicide before leaf out or after, but not during

• In winter, no ticks, bees, snakes, heat – easiest season for invasives work
Planning to Control Invasives  1/3

• Define your objective/end state, e.g., reset

• Inventory/assess the site and make a plan

• Map your control locations
Planning to Control Invasives  2/3

• A few suggested approaches:

• Target 1 small area and hit 1 or 2 species

• Target only 1 species and hit it everywhere

• Target 1 small area and hit everything
Planning to Control Invasives  3/3

• Eradicate, control or contain
• Rehabilitate and reclaim site
• Prevent re-entry and spread
• Monitor, monitor, monitor...
• Persistence! 5-10+ years
• Get your neighbors involved!
Fundamentals

• Take action when plants are young
• Pull, cut, or treat when seeds absent
• Be meticulous about sanitation
• Conduct manual activities when soil is moist to aid removal of roots
• Most invasive removal involves herbicides
• *Read and obey herbicide labels carefully!*
• There is no silver bullet!
How Invasives Spread

• Creeping
• Birds and animals eat fruit, spread seeds
• Wind and rain
• Along travel corridors: auto, railroad, etc
• Streams
• Shoes, boots, pants, socks
• Vehicle tires – bikes, ATVs, cars, tractors
• Animal fur and paws/hoofs
• Clean your gear!
Twenty Common Local Invasives

- **Vines:**
  - English Ivy
  - Japanese Honeysuckle
  - Oriental Bittersweet
  - Porcelain Berry
  - Winter Creeper
  - Kudzu

- **Grasses and Forbs:**
  - Japanese Stiltgrass
  - Wavyleaf Grass *
  - Garlic Mustard
  - Periwinkle (Vinca)
  - Ground Ivy
  - Japanese knotweed

* only plant on VA noxious weed list (list has 8 total)
Twenty Common Local Invasives

- **Trees:**
  - Ailanthus
  - Bradford Pear
  - Paulownia

- **Shrubs:**
  - Autumn Olive
  - Multiflora Rose
  - Chinese Privet
  - Japanese Barberry
  - Wineberry
  - Burning Bush
  - Bush Honeysuckle