## Creating a Sustainable Invasives Program in the East: Controlling Invasive Vegetation at Eight National Parks in Virginia, 2000–2002

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The National Park Service's (NPS's) Virginia invasive vegetation management team (the Virginia cooperative) was created in 2000 using grant funding to protect natural and cultural resources at eight parks threatened by invasive exotic plants. Participating parks are noted in Figure 1.

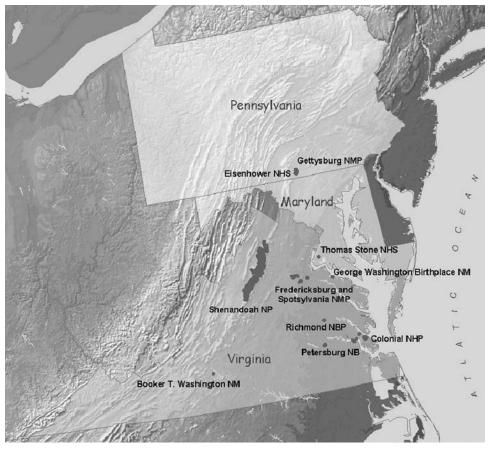


Figure 1. Virginia cooperative and Mid-Atlantic Network exotic pest management team sites. Note: Appomattox Court House National Historical Park, though not shown on the map, is part of the Virginia cooperative.

## **Countering Invasives, Restoring Natives**

The Virginia cooperative assessed the extent of invasive vegetation at all eight parks, created management plans, fulfilled environmental compliance requirements, conducted invasive plant treatments, and accomplished follow-up monitoring of treatment effectiveness. It augmented park capacities to manage exotics by training local staffs and purchasing equipment and supplies for implementing independent and cooperative invasive plant management.

Finally, the Virginia cooperative developed a public outreach program of media articles, posters, brochures and attendance at professional meetings. With the establishment of NPS base funding in 2003, the effort has broadened in scope to the Mid-Atlantic Network exotic pest management team that now includes two additional parks in Pennsylvania and one in Maryland (see Figure 1). Programmatic and on-the-ground cooperation has created increased effectiveness and an atmosphere for success.

## Accomplishments

- Field reconnaissance and initial assessments were completed at all eight parks.
- The Virginia cooperative treated 1,047 acres over three years, exclusive of park efforts; individual parks treated an additional 1,516 acres (Figures 2 and 3).
- Site restoration was initiated at three parks, totaling 12.1 acres. This included planting native grasses and shrubs and follow-up effectiveness monitoring.

- Management plans were completed for seven of the eight parks. The plans set a management framework, identified current and potential high-priority invasive plants, and prescribed control methods and longterm monitoring techniques. Environmental clearance was completed for all eight parks to begin active management.
- The Virginia cooperative worked with the National Capital exotic plant management team to increase the overall effectiveness of both teams. Larger projects were tackled at three parks in each region.
- Training was provided to team and park staff in species identification, integrated pest management, control techniques, safety issues, and monitoring techniques.
- Monitoring plots were established at seven parks to aid evaluation of treatment effectiveness.
- Public awareness of the threat of invasive exotic vegetation was increased through a series of newspaper and magazine articles, posters, speeches, and handout materials.
- Organizational capacity was expanded with the purchase of tools, supplies, and material for the Virginia cooperative and individual parks.
- The organization is well prepared to assist parks in Pennsylvania and Maryland, expanding its role to cover the NPS Mid-Atlantic Network for the NPS Natural Resources Challenge.

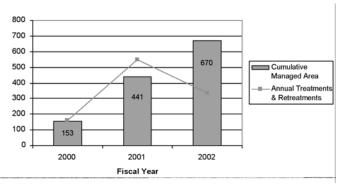


Figure 2. Cumulative management area and annual treatments accomplished by the Virginia invasive vegetation management team, FY2000–2002 (by fiscal year).

## **Countering Invasives, Restoring Natives**

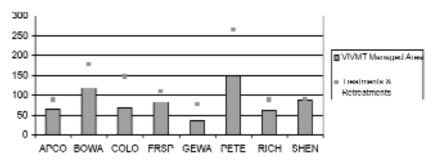


Figure 3. Managed area and treatments in the Virginia cooperative, FY2000–2002 (by park).

APCO = Appomattox Court House National Historical Park; BOWA = Booker T. Washington National Monument; COLO = Colonial National Historical Park; FRSP = Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park; GEWA = George Washington Birthplace National Monument; PETE = Petersburg National Battlefield; RICH = Richmond National Battlefield Park; SHEN = Shenandoah National Park.

