

# National Park Service Exotic Plant Management Teams Invade the Southeast

by Nancy Fraley, National Park Service

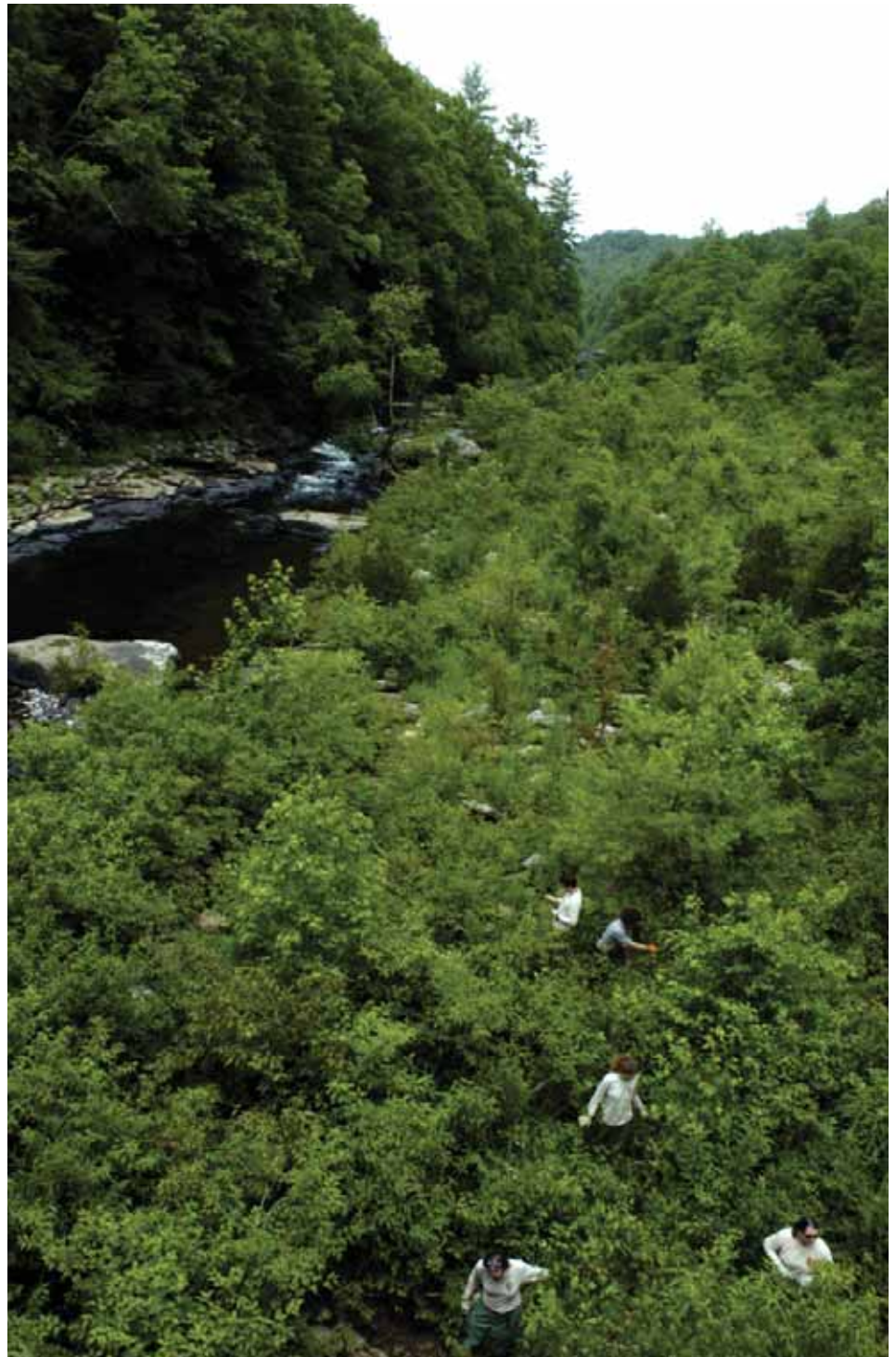
**M**odeled after the approach used in wildland fire fighting, Exotic Plant Management Teams (EPMTs) provide highly trained, mobile strike forces of plant management specialists to assist national park units in the control of invasive, exotic plants. Each Exotic Plant Management Team employs the expertise of local experts and the capabilities of local agencies. Each sets its own work priorities based on the following factors: severity of threat to high-quality natural areas and rare species; extent of targeted infestation; probability of successful control and potential for restoration; opportunities for public involvement; and park commitment to follow-up monitoring and treatment. In the southeastern United States, 40 national park units now can call upon the resources of an EPMT. The success of this initiative derives, in part, from the ability of these teams to adapt to the needs and conditions of the individual parks they serve.

As of January 2004, the National Park Service (NPS) has established three EPMTs in the southeastern US. Nationwide there are 17 EPMTs serving national park units. These teams are funded through the NPS Natural Resource Challenge, a multidisciplinary five-year program established in 1999 to strengthen natural resource management within the national park system. The teams represent a formidable tool for invasive, exotic plant control and play an integral role in reaching the goals identified in the NPS Natural Resource Challenge.

Today, exotic plants infest some 2.6 million acres in the National Park System, reducing the natural diversity of these great places.

The **Florida Exotic Plant Management Team** was established in 2000 as a result of the partnership between the National Park Service and the Florida Department of Environmental Protection

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## Weeding the wilderness...

*The Southeast Exotic Plant Management Team works to eradicate multiflora rose (Rosa multiflora) in the Obed Wild and Scenic River in Tennessee. The Obed River contains one of only three naturally occurring populations of the federally protected Cumberland rosemary (Conradina verticillata) in the world. Photograph reprinted by permission of The Knoxville News-Sentinel Company.*



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(FL-DEP). Through a cooperative agreement with the University of Florida under a grant from the U.S. Department of Agriculture Subtropical Agricultural Research Program, the Florida EPMT expanded in 2003 to include the U.S. Virgin Islands. It now is recognized as the **Florida/Caribbean Exotic Plant Management Team** (FLC-EPMT).

The FLC-EPMT serves 14 national park units and is well known for implementing successful partnerships and effec-

tively utilizing contractors to address invasive plant problems. These include Melaleuca (*Melaleuca quinquenervia*), Australian pine (*Casuarina equisetifolia*) and Old world climbing fern (*Lygodium microphyllum*). The South Florida Water Management District, the US Fish and Wildlife Service and the FLC-EPMT began a partnership in 2003 to conduct biennial aerial surveys for invasive plants on 8 million acres of south Florida natural areas. Most recently, the FLC-EPMT conducted

aerial surveys of two million acres in the Bahamas.

The **Gulf Coast Exotic Plant Management Team** (GC-EPMT) was established in 2003 to serve 10 national park units in Texas, Louisiana, and Mississippi. Based at Big Thicket National Preserve in Texas, the GC-EPMT has been battling acres of kudzu (*Pueraria montana*) in Mississippi, especially at Vicksburg National Military Park and along the Natchez Trace Parkway. Some of these plots are over 40 acres in size and have provided the team with a welcomed challenge. Other species vying for their attention include Cogon grass (*Imperata cylindrica*), which is fast becoming the number one weed control priority in many of the parks assisted by the GC-EPMT.

At Gulf Island National Seashore in Mississippi the major priority for the GC-EPMT has been to halt the spread of Chinese tallow (*Sapium sebiferum*) into a freshwater marsh on Horn Island. One of the only such marshes managed by the National Park Service, it is home to alligators and a diversity of migratory and breeding bird species such as the White pelican and the Least tern. At Jean Lafitte National Historic Park and Preserve in Louisiana, the GC-EPMT is looking forward to working more closely with other agencies on the restoration of the Barataria-Terrebonne estuary system. This system recently was added to the National Estuary Program administered by the U.S. Environmental Protection Agency. This multi-agency effort will focus on restoring the severely eroded floodplain and halting the aggressive movement of Chinese tallow into bottomland hardwood and floating marsh communities.

The **Southeast Exotic Plant Management Team** (SE-EPMT) became fully staffed in February of 2004 and in March began serving 16 national park units in North Carolina, South Carolina, Georgia, Alabama, Tennessee and Kentucky. Based at the Blue Ridge Parkway in North Carolina, the team has focused on developing a familiarity with

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the invasive plant problems in their assigned parks and working with the park Resource Managers to develop and implement management strategies. Exploring partnership opportunities and supporting educational efforts also are high priorities for the team.

Species that have presented some of the greatest challenges to the SE-EPMT include Multiflora rose (*Rosa multiflora*), Garlic mustard (*Alliaria petiolata*) and Callery or Bradford pear (*Pyrus calleryana*). Recently the SE-EPMT worked in the rugged Obed Wild and Scenic River gorge carefully removing multiflora rose from areas containing the federally protected Cumberland rosemary (*Conradina verticillata*). Located in Tennessee, this park boasts one of the richest floras in the southeastern US including, unfortunately, many invasive plants. In March and April at the Big South Fork National Recreation Area in Kentucky and Tennessee, the team attempted to gain a foothold against garlic mustard, hand-pulling over 20,000 plants threatening an area of rich riverine flora. Cumberland Gap National Historic Park, also in Kentucky, provided an unexpected foe, the Callery pear. Work in this park



Members of the Gulf Coast EPMT treating kudzu (*Pueraria montana*) on the Natchez Trace Parkway in Mississippi.

had focused on the treatment of coltsfoot (*Lespedeza cuneata*), when a thicket of Callery pear was found down slope of an old home site. (Tussilago farfara), tree of heaven (Ailanthus altissima) and lespedeza

For more information on the EPMTs, the Natural Resource Challenge and invasive species, see: <http://www.nature.nps.gov/biology/invasivespecies/index.htm> and <http://invasivespecies.gov/> or contact Nancy Fraley, Liaison, Southeast Exotic Plant Management Team, 51 Ranger Drive, Asheville, NC 28805, 828-350-3821 x213, Nancy\_Fraley@nps.gov

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