Region-Wide Monitoring of Exotic Pest Plants in Southeastern Forests by Forest Service and State Partners

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The USDA Forest Service Research in partnership with State forestry agencies has initiated monitoring of 32 exotic plant taxa invading forests in the 13 southeastern States. The monitoring is on all forestlands, all ownerships, and is a recent addition to the National Forest Resources Inventory, ongoing since the 1930’s. This is the first multi-state survey of exotic pest plants within the U.S., and other regions will be following this lead effort.

Exotic pest plants were selected that are currently and projected to invade forests, their edges, and gaps, throughout the region. The exotic trees species selected for monitoring are tree-of-heaven, paulownia, tallowtree, chinaberrytree, mimosa, and Russian olive. Shrubs are autumn olive, Chinese/European privets, Japanese privet, bush honeysuckles, winged burning bush, exotic roses, nandina, and silverthorn (Elaeagnus pungens). Vines are kudzu, Japanese honeysuckle, oriental bittersweet, winter creeper, wisterias, Japanese climbing fern, vines, and exotic climbing rams (Dioscorea oppositifolia and D. rotundifolia). Grasses are cogongrass (Imperata cylindrica), miscanthus, microstegium, giant reed (Arundo donax), tall fescue, and exotic bamboos. Forbs and subshrubs are garlic mustard, Chinese lespedeza (Lespedeza cuneata), shrubby lespedeza (L. bicolor), and tropical soda apple. In Florida, 30 additional subtropical species are being monitored.

Percent cover (by categories) of these species is being recorded on permanent plots clusters located across the landscape on a 3-mile grid. Monitoring is being initiated over a 3-year period on a State-by-State basis with one-fifth of the plots per State being surveyed annually, and thereafter on a continuing cycle. The first complete cycle of all States and plots will take about 8 years. This monitoring project will yield estimates of range, coverage, and eventually spread rate for these 32 severe invaders. These data are crucial for ecological and socioeconomic impact assessments and for building effective control and management programs. Factors contributing to exotic plant invasion will be assessed through plot characterization and overstory tree data. Monitoring procedures and a color identification manual for these species can be viewed and downloaded at:
http://www.srs.fs.fed.us/fia/manual/. Partners are being sought for publishing the ID manual for wider distribution and use.