

Nonnative and Potentially Invasive Species Sampled on Forest Inventory and Analysis (FIA) Plots Spaced a 4.8-km (3-mi) Intervals and Classed as Forest Land

Species banned from introduction on National Forest land are noted with an asterisk (*).

TREES

Northern

- European Alder *Alnus glutinosa*
- European mountain ash *Sorbus aucuparia*
- Norway maple *Acer platanoides*
- Siberian elm *Ulmus pumila* (≥ 5 in dbh)

Rocky Mountain, Pacific Northwest

- Saltcedar *Tamarisk* spp.

Southern

- Mimosa, Silk tree *Albizia julibrissin**
- Tung-oil tree *Aleurites fordii*
- Russian Olive *Elaeagnus angustifolia*
- Melaleuca *Melaleuca quinquenervia*
- Chinaberry *Melia azedarach*

Eastern and Western U.S.

- Tree-of-heaven *Ailanthus altissima**
- Royal Paulownia *Paulownia tomentosa**
- Chinese tallowtree, Popcorn tree *Triadica sebifera* (*Sapium sebiferum*)*

SHRUBS

Pacific Northwest

- English holly *Ilex aquifolium*
- Himalayan blackberry *Rubus discolor*
- Cutleaf blackberry *Rubus laciniatus*
- Scotch broom *Cytisus scoparius*
- Gorse *Ulex europaeus*

Southern

- Silverthorn *Elaeagnus pungens*
- Autumn olive *Elaeagnus umbellata*
- Winged euonymus or burning bush, *Euonymus alata*
- Chinese/European privet *Ligustrum sinense**/*vulgare* and Japanese privet *Ligustrum japonicum**
- Bush honeysuckles *Lonicera* spp.*
- Sacred bamboo (nandina) *Nandina domestica*
- Exotic roses *Rosa* spp.

VINES

Pacific Northwest

- English ivy *Hedera helix*

Southern

- Oriental or Asian bittersweet *Celastrus orbiculatus*

- Exotic climbing yams –air yam/chinese yam *Dioscorea bulbifera**/*Dioscorea oppositifolia*
- Wintercreeper *Euonymus fortunei*
- Japanese honeysuckle *Lonicera japonica**
- Kudzu *Pueraria lobata**
- Periwinkle *Vinca minor*, *V. major*
- Chinese/Japanese wisteria *Wisteria sinensis**/*floribunda*

GRASSES-Southern

- Giant reed *Arundo donax*
- Tall fescue *Lolium arundinaceum**
- Cogongrass *Imperata cylindrica**
- Nepalese browntop *Microstegium vimineum**
- Chinese silvergrass *Miscanthus sinensis**
- Exotic bamboos *Phyllostachys* spp., *Bambusa* spp

FERNS-Southern

- Japanese climbing fern *Lygodium japonicum**

FORBS/HERBS/OTHER HERBACEOUS

Pacific Northwest

- Thistle *Cirsium* spp.
- Foxglove *Digitalis purpurea*
- St. Johns wort *Hypericum perforatum*
- Wall lettuce *Mycelis muralis*

Southern

- Garlic mustard *Alliaria petiolata**
- Shrubby lespedeza *Lespedeza bicolor*
- Chinese lespedeza *Lespedeza cuneata**
- Tropical soda apple *Solanum viarum**

In addition, **North Central, Northeast, and Rocky Mountain FIA Regions** and elsewhere have inventoried selected non-native invasive species along with other nontree species in special or pilot studies, often in cooperation with other agencies. These include **Maryland**—non-native tree species within urban and other nonforest land; **Pennsylvania**—tree seedlings, exotics, and associated vegetation; **Wisconsin**—nontree species in forests indicative of wood productivity; **Wyoming**—non-native thistle species on forest and nonforest land in Bridger-Teton National Forest.

Special studies include observation data recorded by species for shrubs, vines, and other vegetation, often

by FIA Region or State. These understory vegetation studies may have included non-native invasive species in their list, but often the primary goal was to quantify understory vegetation structure for wildlife habitat or biomass assessments. The data may or may not be readily available for reexamination. Citations of reports about these data and other specialized subjects may be searched through the FIA bibliography website: <http://www.msstate.edu/dept/forestry/biblio.html>.

FIA also conducts an all-vegetative species inventory with botanists and others during the growing season on a subset of FIA plots in selected, and eventually all States. Formally known as the **Forest Health Monitoring (FHM) program**, this survey characterizes downed woody debris, damage by ozone, insects, diseases, fire, plant biodiversity, soils, etc. to address broader climate and health issues, assess regional trends, and provide more detailed measurements for modeling purposes.

For more information

FHM Vegetation Inventory

- Beth Schulz bschulz@fs.fed.us 907-743-9424

Northeast

- Rachel Riemann rriemann@fs.fed.us 518-285-5607
- Will McWilliams wmcwilliams@fs.fed.us 610-557-4050

North Central

- John Vissage jvissage@fs.fed.us 651-649-5200

Pacific Northwest:

- Andrew Gray agray01@fs.fed.us 541-750-7252
- Beth Schulz bschulz@fs.fed.us 907-743-9424

Rocky Mountains:

- Renee O'Brien robrien@fs.fed.us 801-625-5371

South

- Jim Miller jmiller01@fs.fed.us 334-826-8700
- Vic Rudis vrudis@fs.fed.us 662-338-3109

Recent Manuscripts

- Gray, A. In press. Distribution of non-native plants in western Oregon: effects of environment and management. 4th Annual FIA Science Symposium, 2002 November 19-21; New Orleans, LA.
- Jacobs, D.M.; Rudis, V.A. In press. Providing confidence in regional maps: predicting where non-native species are invading the forested landscape. 4th Annual FIA Science Symposium, 2002 November 19-21; New Orleans, LA. [5 p.]
- Miller, J.H. 2003. Nonnative invasive plants of southern forests: a field guide for identification and control. Gen. Tech. Rep. GTR-SRS-62. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 93 p. <http://www.srs.fs.usda.gov/pubs/viewpub.jsp?index=5424>
- O'Brien, R.A. and others. 2003. Indicators of rangeland health and functionality in the Intermountain West. Gen. Tech. Rep. GTR-RMRS-104. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 13 p. http://www.fs.fed.us/rm/pubs/rmrs_gtr104.html [Reference to Bridger-Teton National Forest survey, noxious are thistles and St. Johnswort].
- Riemann, R. [Review draft]. Pilot inventory of Forest Inventory and Analysis plots traditionally called nonforest, Baltimore-Washington urban counties. General Technical Report. USDA Forest Service, Northeastern Research Station.
- Rudis, V.A., Jacobs, D.M. [Review draft]. Regional status and change in selected non-native invasive plants: results from 1984-1997 forest surveys of southeastern United States forests. [27 p.]

- SRS FIA Field manual Regional Supplement http://www.srs.fs.fed.us/fia/manual/sections/Section_4.0.pdf (Item R401-R408, invasive exotic pest plants)

Florida Supplement:

- Eric Ford (State) 850-414-9955
 - Doug Longshore 386-792-2068
- Mark Brown mbrown03@fs.fed.us 865-862-2033
- Terry Riley triley@fs.fed.us 828-230-9508

FL TREES

- Australian-pines *Casuarina* spp.
- Camphor tree *Cinnamomum camphora*
- Carrotwood *Cupaniopsis anacardioides*
- Melaleuca *Melaleuca quinquenervia*
- Schefflera *Schefflera actinophylla*
- Java plum *Syzygium cumini*

FL SUBSHRUBS

- Coral ardisia *Ardisia crenata*
- Lantana *Lantana camara*

FL SHRUBS

- Surinam cherry *Eugenia uniflora*
- Guava spp. *Psidium* spp.
- Downy rose myrtle *Rhodomyrtus tomentosa*
- Brazilian pepper *Schinus terebinthifolius*
- Wetland nightshade *Solanum tampicense*

FL VINES

- Rosary pea *Abrus precatorius*
- Cat's-claw vine *Macfadyena unguis-cati*
- Skunk vines *Paederia* spp.

FL OTHER

- Hairy indigo *Indigofera hirsu*
- Napier grass *Pennisetum purpureum*
- Old World Climbing fern *Lygodium microphyllum*
- Sword fern *Nephrolepis cordifolia*