

PROPOSED ACTION
NON-NATIVE INVASIVE PLANT CONTROL
Blue Ridge and Conasauga Ranger Districts
Chattahoochee-Oconee National Forests

Proposed Action

The Forest Service is proposing to treat non-native invasive plant infestations on National Forest land on the Conasauga (CRD) and the Blue Ridge Ranger Districts (BRRD) of the Chattahoochee-Oconee National Forests using a combination of manual, cultural, and chemical control methods. The purpose of this project is to conserve and enhance native populations of plants and animals through the treatment of non-native invasive species (NNIS). These infestations degrade natural habitat and decrease biodiversity. The project addresses one of the four major threats defined by the Chief of the Forest Service and addresses Executive Order 13112 that directs all federal agencies to detect and respond rapidly to control NNIS populations.

Although known priority sites will be treated initially, the intent of this proposal is to incorporate an adaptive management strategy for the life of the Land Management Plan (Forest Plan), allowing for treatment of new locations of NNIS, treatment of newly recognized NNIS and use of new herbicides. See Table 1 for the current Forest NNIS list of species known to occur on the Chattahoochee-Oconee National Forests.

Table 1. Chattahoochee-Oconee National Forests – NNIS plants

Scientific Name	Common Name
<i>Ailanthus altissima</i>	Tree of heaven
<i>Albizia julibrissin</i>	Mimosa; Silktree
<i>Carduus nutans</i>	Musk thistle; Nodding plumeless thistle
<i>Celastrus orbiculatus</i>	Oriental bittersweet
<i>Cirsium vulgare</i>	Bull thistle
<i>Dioscorea oppositifolia</i>	Chinese yam
<i>Elaeagnus umbellata</i>	Autumn olive
<i>Hedera helix</i>	English ivy
<i>Lespedeza cuneata</i>	Sericea lespedeza
<i>Ligustrum sinense</i>	Chinese privet
<i>Lolium arundinaceum</i> *	Tall fescue
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Melia azedarach</i>	Chinaberry
<i>Microstegium vimineum</i>	Japanese stiltgrass; Nepal grass
<i>Miscanthus sinensis</i>	Chinese silvergrass
<i>Paulownia tomentosa</i>	Princess tree
<i>Polygonum cuspidatum</i>	Japanese knotweed
<i>Poncirus trifoliata</i>	Trifoliolate orange
<i>Pueraria lobata</i>	Kudzu
<i>Rosa multiflora</i>	Multiflora rose
<i>Spiraea japonica</i>	Japanese spirea; Japanese meadowsweet

Sorghum halepense	Johnson grass
Vinca major	Large periwinkle
Vinca minor	Small periwinkle
Wisteria sinense	Chinese wisteria

* - applies only to endophyte-enhanced cultivars, (e.g. KY 31 tall fescue)

All NNIS populations are a concern across the Districts, but a priority system is needed to ensure that the NNIS populations that pose the greatest threat to biodiversity and native plant communities are highlighted. The following describes the order of priorities when considering treating NNIS across the Ranger Districts:

- NNIS infestations which threatened federally listed, Regional Forester’s sensitive, or locally rare species (see Forest Plan, p 2-13, FW-032)
- NNIS infestations of species that are early in their colonization of the Districts and are considered highly aggressive in spread and impacts to native plants. These species are considered to have a high I-rank. For example, Japanese knotweed is highly aggressive and only known on 2 locations across the Forest. These populations would be a high priority for treatment.
- NNIS infestations which are within or adjacent the following Management Prescriptions (MP) will receive higher priority than other areas:
 - Rare communities (MP 9F)
 - Botanical Areas (MP 4D)
 - Designated Wilderness Areas (MP 1A)
 - Recommended Wilderness Study Areas (MP 1B)
 - Appalachian Trail (AT) corridor(MP 4.A)
 - Natural Areas (MP 4I)
- NNIS infestations in areas that serve as vectors for spread into areas without infestations and areas where new populations are likely to establish. These include areas such as riparian corridors, roadsides, trails, wildlife openings, campgrounds, boat docks, administrative building, and parking areas.
- NNIS infestations in areas across the Districts that do not have the features described above.

Any NNIS control proposal in Wilderness would be reviewed through the Minimum Requirement Decision Guide (MRDG) to determine if the proposed actions are necessary for the Wilderness Area, or if a less intrusive method could be implemented. Depending on the method of NNIS control proposed, final approval of the action would come from the Forest Supervisor or from the Regional Forester. The MRDG can be found at <http://www.wilderness.net/mrdg/>

Invasive plant infestations have been documented on both the CRD and BRRD. Existing populations which would be treated are listed in the following table (Table 2).

Table 2. Existing Populations to be Treated

Ranger District	Site	Species	Acreage
Blue Ridge	Starr Creek Road-Richard Knob	Kudzu	1.0
Blue Ridge	Lake Chatuge	Kudzu	2.0
Blue Ridge	Hwy 180 near Sosebee Cove	Kudzu	3.0
Blue Ridge	Forest Drive – Lake Nottley	Kudzu	2.0
Blue Ridge	West Skeenah Road	Oriental bittersweet	0.25
Blue Ridge	Appalachian Trail – Woody Gap	Oriental bittersweet	0.25
Blue Ridge	Sea Creek Falls trailhead	Chinese privet	0.5
Conasauga	Watson Gap	Japanese knotweed	0.25
Conasauga	Gates Chapel	Japanese knotweed	0.25
Conasauga	Mountaintown Creek	Chinese privet	0.25
Conasauga	Hurricane Creek	Chinese privet	1.0
Conasauga	Alaculsy Valley	Kudzu	0.5
Conasauga	Dyer Gap	Kudzu	0.5
Conasauga	West Cowpen Road	Kudzu	1.0
Conasauga	East Cowpen Road	Kudzu	1.0

Environmental effects of the proposed action and alternatives will be disclosed in a National Environmental Policy Act (NEPA) document. However, considering the broad scale of the proposal and its adaptive nature, additional site-specificity would be ensured through the use of an implementation checklist (see Appendix A).

Prior to any treatments, management actions authorized through the NEPA document would be subject to additional site-specific review by Forest staff in the areas of botany/ecology, wildlife biology, aquatic biology, hydrology/soils, and heritage resources. A Wilderness manager would also be consulted for treatments with Wilderness Areas. The use of the implementation checklist would ensure that potential environmental impacts are within the scope of the impacts predicted in the NEPA document.

Maximum annual treatment acreage on National Forest lands over the life of the Forest Plan will be limited to:

- 150 acres of manual or mechanical treatments
- 30 acres of spot treatments using cultural methods
- 350 acres of herbicide treatments

Methods

Proposed Manual and Mechanical Methods: Hand-pulling, cutting, digging, mowing, or plowing would be the principal manual methods employed. Manual methods are primarily effective for controlling small spot infestations. Examples of hand tools that might be used include shovels, saws, axes, loppers, hoes, or weed-wrenches. Other equipment could include chain saws, brush blades, mowers, and small bulldozers.

Proposed Cultural Methods: Cultural methods may include the use of fire, mulch, or other gardening techniques such as weed cloths and plastic sheeting, or propane weed torch to spot-burn specific invasive plants. The weed torch works to burn a single target plant, and is primarily used in plant communities such as bogs or areas with low potential to carry a fire. Other use of prescribed fire would be applied in accordance with approved burn plans.

Proposed Chemical (Herbicide) Methods: All LMP Forest-wide standards (FW-011 through FW-028) for herbicide use will be followed. Herbicides would be used according to manufacturer's label direction for rates, concentrations, exposure times, and application methods. Herbicides would be directly applied to the target plants. Techniques that could be used include direct foliar applications using systems mounted on trucks, tractors or all-terrain vehicles, backpack sprayers, hand-held brushes, basal bark and stem treatments using spraying or painting (wiping) methods, cut surface treatments (spraying or wiping), and woody stem injections. No herbicides would be applied aerially. Only formulations approved for aquatic-use would be applied in or within 100' of wetlands, lakes, and streams.

Specific herbicides that could be used in the project area are listed below. Detailed descriptions of these chemicals including comprehensive risk assessments for each can be found at: <http://www.fs.fed.us/foresthealth/pesticide/risk.shtml>

- **Glyphosate** (Accord™, Roundup™, and Rodeo™) is a non-selective, broad spectrum herbicide that can be used to control many grasses, forbs, vines, shrubs, and tree species. Specific formulations of glyphosate have been labeled for aquatic application.
- **Triclopyr** (Garlon 3A™, Garlon 4™, and Pathfinder II™) is a selective herbicide that controls many species of herbaceous and woody broadleaf weeds, but has little to no effect on grasses.
- **Clopyralid** (Transline™) is a selective herbicide that controls broadleaf herbs, primarily composites, legumes, and smartweeds.
- **Imazapic** (Plateau™) is a selective herbicide that is used primarily in and around populations of native, warm season grasses.
- **Metsulfuron methyl** (Escort™) is a systemic herbicide that is selective to woody species, broadleaf weed species, and many annual grasses.
- **Dicamba** (Vanquish™ and Overdrive™) is a somewhat selective herbicide that controls most annual and perennial broadleaf herbs and some woody species.
- **Hexazinone** (Velpar™ and Pronone™) is a photosynthetic inhibitor selective to most hardwood tree species, shrubs and some grasses.
- **Imazapyr** (Arsenal™ and Chopper™) is a selective herbicide that is used primarily in the control of hardwood trees and some species of grasses.

- **Sethoxydim** (Poast™) is selective postemergence herbicide used to control annual and perennial grasses.

Monitoring

NNIS infestations are rarely eradicated, or even controlled, with a single treatment. Follow-up monitoring to evaluate the success of the treatments would be necessary to successfully implement the control program. It is anticipated that most infested sites would require multiple treatments over several years to gain the desired level of control. Monitoring would be a necessary component in determining the frequency and type of successive treatments.

Appendix A. Implementation Checklist for the Treatment of NNIS Species

NRIS Site ID: _____ Species name: _____

Lat/Long in decimal degrees: N _____ W - _____

GIS Acres: _____ (*calculated from GIS*) % of Site Infested: _____

List other NNIS species present at site:

Treatment method (List methods, chemicals used, date to be treated, by whom, etc)

Designated Wilderness or Recommended Wilderness Study Area? (Y/N) _____

If yes, coordinate with District Wilderness Manager. This will require analyzing the proposed control method through the Wilderness Minimum Requirement Decision Guide (MRDG) and documenting in the project file. Final approval will be by the Forest Supervisor or Regional Forester, depending on control method chosen

Botanist Review: (Describe any special circumstances including the presence of TES species and rare or unique communities. List all recommended mitigations below.)

Wildlife Biologist Review: (Describe any special circumstances including potential impacts to forage and wildlife investments. List all recommended mitigations below.)

Aquatic Biologist Review (only required when treating sites within riparian area):
(Describe any special circumstances including the presence of aquatic TES species. List all recommended mitigations below.)

Hydrologist/Soils Review: (Describe any special circumstances regarding potential impacts to water quality. List all recommended mitigations below.)

Archaeologist Review (only required if treatment involves ground disturbance): (Describe any special circumstances regarding historical or cultural significance. List all recommended mitigations below.)

Signatures:

Botanist/Ecologist

Wildlife Biologist

Aquatic Biologist

Hydrologist

Archaeologist

Wilderness Mgr.(if appropriate)