

# INVASIVE PLANT CONTROL IN FORESTS

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There are a number of nonnative plants, referred to as exotic, noxious, alien, or invasive weeds that thrive in our southern forests in the absence of natural regulatory predators. Many of these plant species may be found under cultivation in yards, gardens and landscapes, but may become problems when they “escape” cultivation and invade forests, roadsides, and natural areas. These weeds displace native vegetation, increase management costs, reduce productivity, diminish diversity and impact wildlife habitat.

This section provides control options for plants that are of concern to the health and productivity of forest ecosystems. Be aware that in many cases these plants “escape” and spread into native habitats along roadsides, rights of way, streams, field edges, and fence rows. Controlling small infestations can minimize habitat impact and reduce future control costs.

These herbicide recommendations are specifically tailored for treatment of small areas using 3-gallon backpack sprayers.

## Recommendations are adapted from:

Miller, J.H., S.T. Manning and S.F. Enloe. 2010. A management Guide for Invasive Plants of Southern Forests. Gen. Tech. Rep. SRS-131. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 120 p.

To view this publication online, and for images and information on invasive plants, insects, diseases, and animals go to [www.invasive.org](http://www.invasive.org)

PLANT SPECIES Common & Scientific Name(s)	PRESCRIPTIONS
TREES	
Tree of Heaven ( <i>Ailanthus altissima</i> )	<p><b>Large trees.</b> Make stem injections and then apply Garlon 3A, Pathway, Pathfinder II, or Arsenal AC, Polaris AC, Imazapyr 4SL in dilutions and cut spacings specified on the herbicide label (midsummer best, late winter somewhat less effective). For felled trees, apply these herbicides to stem and stump tops immediately after cutting.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant (July-October). Arsenal AC*, Polaris AC*, Imazapyr 4SL* as a 1% solution (4 oz/3 gal mix), Kernite S as a 30% solution (3 qt/3-gal mix), Garlon 4 as a 2% solution (8 oz/3 gal mix), or Escort Xp at 1 oz/A.</p> <p>*Non-target plants may be killed or injured by root uptake</p>
Mimosa, Silk Tree ( <i>Albizia julibrissin</i> )	<p><b>Large trees.</b> Make stem injections using Arsenal AC*, Polaris AC*, Imazapyr 4SL* or Garlon 3A in dilutions as specified on the herbicide label anytime except March and April. For felled trees, apply these herbicides to stem and stump tops immediately after cutting.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p><b>Resprouts and seedlings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant. July-October-Garlon 3A, Garlon 4, or glyphosate herbicide as a 2% solution (8 oz/3 gal mix)</p> <p>July-September-Transline as a 0.2-0.4% solution (1-2 oz/3 gal mix)</p> <p>*Non-target plants may be killed or injured by root uptake</p>

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<b>TREES (continued)</b>	
Paper mulberry ( <i>Broussonetia papyrifera</i> )	<p><b>Large trees.</b> Make stem injections using Garlon 3A as a 10% solution (1 qt/3 gal mix) in water or a 15% solution (3 pts/3 gal mix) for larger trees. Or cut large stems and immediately treat the stumps with Garlon 3A as a 30% solution (38 ozs/1 gal mix) in water with a surfactant.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 20% solution in basal oil, vegetable oil, crop oil concentrate, diesel fuel or kerosene (2.5 qts/3 gallon mix) or apply Stalker* as a 3% solution (12 oz/3 gal mix) plus Garlon 4 as a 15% solution (3 pts/3 gal mix) mixed in basal oil applied as a basal spray.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant on young trees less than 10 ft tall. Garlon 3A at 2% (8 oz/3 gal mix) or Garlon 4 at 0.5-2% (2-8 oz/ 3 gal mix); a glyphosate herbicide as a 3% solution (12 oz/3 gal mix); Arsenal AC* as a 0.25% solution (1 oz/ 3 gal mix); or Arsenal Powerline* at a 0.5% solution (2 oz/3 gal mix).</p> <p>*Non-target plants may be killed or injured by root uptake</p>
Camphortree ( <i>Cinnamomum camphora</i> )	<p><b>Large trees.</b> Make stem injections using undiluted Garlon 3A during June-September or Vanquish* as a 75% solution (96 oz/1 gal mix) with water June-November in cut spacings as specified on the herbicide label. For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with Garlon 3A at a 30% solution (38 oz/1 gal mix) or Garlon 4 at a 50% solution (64 oz/1 gal mix).</p> <p><b>Saplings.</b> Apply Garlon 4 as a 30% solution in basal oil, vegetable oil, crop oil concentrate, diesel fuel or kerosene (38 oz/ 1 gal mix) as a basal spray for trees up to 4" in diameter.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant: A glyphosate product or Garlon 3A as a 2% solution (8 oz/ 3 gal mix); Garlon 4 as a 0.5-2% solution (2-8 oz/3 gal mix); or Clearcast as a 2% solution (8 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Russian Olive ( <i>Elaeagnus angustifolia</i> )	<p><b>Trees.</b> Make stem injections using Arsenal AC*, Polaris AC*, Imazapyr 4SL*, or Garlon 3A in dilutions and cut spacings as specified on the herbicide label anytime except March and April. For felled trees, apply the herbicides to stem and stump tops immediately after cutting.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qts/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant (July-October). Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution in water (4 oz/3 gal mix); a glyphosate herbicide, Garlon 3A, or Garlon 4 as a 2% solution in water (8 oz/3 gal mix) for directed spray treatments that have limited or no soil activity.</p> <p>*Non-target plants may be killed or injured by root uptake</p>
Glossy Buckthorn ( <i>Frangula alnus</i> )	<p>Thoroughly wet all leaves with a glyphosate product or Garlon 3A as a 2-3% solution (8-12 oz/3 gal mix) in water with a surfactant. Or, apply Arsenal AC* as a 0.25% solution (1 oz/3 gal mix) or Arsenal Powerline* as a 0.5% solution (2 oz/3 gal mix).</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides – a glyphosate herbicide or Garlon 3A at a 25% solution (32 oz/1 gal mix); in the winter, when the ground is not frozen, apply Garlon 3A at a 50% solution (64 oz/1 gal mix) in water with a surfactant. A subsequent foliar application may be required to control new seedlings and resprouts.</p> <p>Apply Garlon 4 as a 20% solution (2.5 qt/3 gal mix) in basal oil, vegetable oil, crop oil concentrate, diesel fuel or kerosene as a basal spray.</p> <p>* Non-target plants may be killed or injured by root uptake</p>

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<b>TREES (continued)</b>	
Chinaberrytree ( <i>Melia azedarach</i> )	<p><b>Trees.</b> Make stem injections using Arsenal AC*, Polaris AC*, Imazapyr 4SL*, Pathway, Pathfinder II, or Garlon 3A in dilutions and cut spacings as specified on the herbicide label anytime except March and April. For felled trees, apply these herbicides to stem and stump tops immediately after cutting.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p><b>Sprouts and seedlings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant (July to October). Garlon 3A or Garlon 4 as a 2% solution (8 oz/3 gal mix); Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Paulownia, Princess tree ( <i>Paulownia tomentosa</i> )	<p><b>Large trees.</b> Make stem injections using Arsenal AC*, Polaris AC*, Imazapyr 4SL* or a glyphosate herbicide in dilutions and cut spacings as specified on the herbicide label anytime except March and April. For felled trees, apply these herbicides to stem and stump tops immediately after cutting.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 2% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p><b>Resprouts and seedlings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant (July-October). Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix); a glyphosate herbicide, Garlon 3A, or Garlon 4 as a 2% solution (8 oz/3 gal mix). *</p>
Hardy orange, Trifoliate orange ( <i>Poncirus trifoliata</i> )	<p><b>Large trees.</b> For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides: a glyphosate herbicide or Garlon 3A as a 25% solution (32 oz/1 gal mix). A subsequent foliar application of may be required to control new seedlings and resprouts.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with a glyphosate herbicide or Garlon 3A as a 4% solution (1 pt/3 gal mix) in water with a surfactant. Or apply Arsenal AC* as a 0.13% solution (0.5 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Callery pear or Bradford Pear ( <i>Pyrus calleryana</i> )	<p><b>Large trees.</b> For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with Garlon 3A or a glyphosate herbicide at a 25-50% solution (3-6 qt/3 gal mix). A subsequent foliar application of may be required to control new seedlings and resprouts. Make stem injections using undiluted Garlon 3A June-September in cut spacings as specified on the herbicide label.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant. A glyphosate product or Garlon 3A as a 2% solution (8 oz/3 gal mix); apply Arsenal AC* as a 0.13% solution (0.5 oz/3 gal mix); Arsenal Powerline* as a 0.5% solution (2 oz/3 gal mix).</p> <p>*Non-target plants may be killed or injured by root uptake</p>
Brazilian peppertree ( <i>Schinus terebinthifolius</i> )	<p><b>Trees.</b> For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with Garlon 3A or a glyphosate herbicide as a 25-50% solution (3-6 qt/3 gal mix); Garlon 4 as a 10% solution (12 oz/1 gal mix); or Stalker as a 50% solution (2 qt/1 gal mix) when they are not fruiting. A subsequent foliar application of may be required to control new seedlings and resprouts. For treatment of extensive infestations in forest situations, apply Velpar L* or Hyvar* to the soil surface within 3 ft of the stem (one squirt of spot gun or utility spray bottle per 1" of stem diameter) or in a grid pattern at spacings and dilutions as specified on the herbicide labels.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 15% solution in basal oil, vegetable oil, crop oil concentrate, diesel fuel or kerosene (3 pt/3 gal mix) as a basal spray in the fall when flowering.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant. A glyphosate product or Garlon 3A as a 2-3% solution (8-12 oz/3 gal mix); Habitat* as a 0.5% solution (2 oz/3 gal mix); or Clearcast as a 2% solution (8 oz/3 gal mix).</p> <p>*Non-target plants may be killed or injured by root uptake</p>

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<b>TREES</b> <i>(continued)</i>	
Tallowtree, Popcorn tree ( <i>Triadica sebifera</i> )	<p><b>Large trees.</b> Make stem injections using Arsenal AC*, Polaris AC*, Imazapyr 4SL*, Garlon 3A, or Pathfinder II in dilutions and cut spacings as specified on the herbicide label anytime except March and April. For felled trees, apply the herbicides to stem and stump tops immediately after cutting (at least a 10% solution for Garlon 3A). Ortho Brush-B-Gone (triclopyr) and Enforcer Brush Killer (triclopyr) are effective for treating cut stumps and readily available to homeowners in retail garden stores. For treatment of extensive infestations in forest situations, apply Velpar L to the soil surface within 3 ft of the stem (one squirt of spot gun/1" stem diameter) or in a grid pattern at spacings specified on the herbicide label.</p> <p><b>Saplings.</b> Apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant July to October. Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix), Kernite S as a 30% solution (3 qt/3 gal mix), or Garlon 4 as a 2% solution (8 oz/3 gal mix) or Clearcast as a 2% solution (8 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Tung oil tree ( <i>Vernicia fordii</i> )	<p><b>Large trees.</b> Make stem injections using undiluted Garlon 3A during June-September or Vanquish* at a 75% solution (96 oz/1 gal mix) with water during June-October in cut spacings as specified on the herbicide label. For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides, Garlon 4 as a 25-50% solution (3-6 qt/3 gal mix) or Garlon 3A as a 30% solution (38 oz/3 gal mix).</p> <p><b>Saplings.</b> Apply Garlon 4 as a 15% solution in basal oil, vegetable oil, crop oil concentrate, diesel fuel or kerosene (3 pt/3 gal mix) as a basal spray in the fall when flowering.</p> <p><b>Seedlings and saplings.</b> Thoroughly wet all leaves with one of the following herbicides in water with a surfactant on young trees less than 10 ft (3 m) tall. Garlon 3A as a 2% solution (8 oz/3 gal mix); a glyphosate herbicide as a 2-3% solution (8-12 oz/3 gal mix); or Chopper Gen2* (or Arsenal AC*) as a 0.5% solution (2 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
<b>SHRUBS</b>	
Hen's eye or coral ardisia ( <i>Ardisia crenata</i> )	<p>Apply Garlon 4 as a 20% solution in basal oil, vegetable oil, crop oil concentrate, diesel fuel or kerosene (5 pt/3 gal mix) as a basal spray in the fall when flowering.</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with Garlon 4 at a 20-25% solution (5-6 pt/3 gal mix).</p> <p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant, a glyphosate product or Garlon 4 as a 5% solution (20 oz/3 gal mix).</p>
Japanese barberry ( <i>Berberis thunbergii</i> )	<p>Thoroughly wet all leaves with a glyphosate product or Garlon 3A as a 2% solution (8 oz/3 gal mix) in water with a surfactant.</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides, a glyphosate herbicide or Garlon 3A at a 25% solution (32 oz/1 gal mix). A subsequent foliar application of may be required to control new seedlings and resprouts.</p>
Silverthorn, Thorny Olive ( <i>Elaeagnus pungens</i> )	<p>Thoroughly wet all leaves with Arsenal AC*, Polaris AC*, Imazapyr 4SL*, or Vanquish* as a 1% solution in water (4 oz/3 gal mix) with a surfactant April-October.</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray January-February or May-October. Or, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant: Arsenal AC, Polaris AC, Imazapyr 4SL, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>

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<b>SHRUBS (continued)</b>	
Autumn Olive ( <i>Elaeagnus umbellata</i> )	<p>Thoroughly wet all leaves with Arsenal AC*, Polaris AC*, Imazapyr 4SL*, or Vanquish* as a 1% solution in water (4 oz/3 gal mix) with a surfactant April-October.</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray January-February or May-October. Or, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant. Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Winged Burning Bush ( <i>Euonymus alata</i> )	<p>Thoroughly wet all leaves with Arsenal AC*, Polaris AC*, Imazapyr 4SL*, or Vanquish* as a 1% solution in water (4 oz/3 gal mix) with a surfactant April-October.</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray January-February or May-October. Or, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant: Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Chinese Privet ( <i>Ligustrum sinense</i> )  European Privet ( <i>Ligustrum vulgare</i> )	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant August to December, a glyphosate herbicide as a 3% solution (12 oz/3 gal mix) or Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix), or Escort XP at 1 oz/A + 0.25% nonionic surfactant.</p> <p>During the dormant season November-February use a 3-5% glyphosate solution with water applied as a directed spray to completely wet the foliage of the privet. Use a glyphosate product that contains 41% or more active ingredient plus added surfactant. With no soil activity and low impact on dormant (leafless) plants, this treatment has low impact on desirable dormant non-target plants growing in close proximity to privet.</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray. Or, cut large stems and immediately treat the stumps with Arsenal AC*, Polaris AC*, Imazapyr 4SL*, or Velpar L* as a 10% solution in water (1 qt/3 gal mix) with a surfactant.</p> <p>* Non-target plants may be killed or injured by root uptake</p> <p>When safety to surrounding vegetation is desired, immediately treat stumps and cut stems with Garlon 3A or a glyphosate herbicide as a 20% solution in water (2.5 qt/3 gal mix) with a surfactant.</p>
Japanese Privet ( <i>Ligustrum japonicum</i> )	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant August-September-Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix) or Garlon 4 as a 3% solution (12 oz/3 gal mix); March-June-a glyphosate herbicide as a 3% solution (12 oz/3 gal mix), or Escort XP at 1 oz/A + 0.25% nonionic surfactant.</p> <p>During the dormant season, November-February, use a 3-5% glyphosate solution with water applied as a directed spray to completely wet the foliage of the privet. Use a glyphosate product that contains 41% or more active ingredient plus added surfactant. With no soil activity and low impact on dormant (leafless) plants, this treatment has low impact on desirable dormant non-target plants growing in close proximity to privet.</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray (January-February or May-October). Or, cut large stems and immediately treat the stumps with Arsenal AC*, Polaris AC*, Imazapyr 4SL*, or Velpar L* as a 10% solution in water (1 qt/3 gal mix) with a surfactant.</p> <p>* Non-target plants may be killed or injured by root uptake.</p> <p>When safety to surrounding vegetation is desired, immediately treat stumps and cut stems with a glyphosate herbicide or Garlon 3A as a 20% solution in water (2.5 qt/3 gal mix) with a surfactant.</p>

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<b>SHRUBS (continued)</b>	
Bush Honeysuckles Amur Honeysuckle <i>(Lonicera maackii)</i> Morrow's Honeysuckle <i>(Lonicera morrowii)</i> Tatarian Honeysuckle <i>(Lonicera tatarica)</i> Sweet/breath/of/spring <i>(Lonicera fragrantissima)</i>	<p>Thoroughly wet all leaves with glyphosate herbicide as a 2% solution in water (8 oz/3 gal mix) with a surfactant August-October. Or, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant. Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Beale's barberry or mahonia <i>(Mahonia bealei)</i>	<p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides Garlon 4, Garlon 3A or a glyphosate herbicide as a 25% solution (32 oz/1 gal mix).</p> <p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant: A glyphosate herbicide or Garlon 3A as a 5% solution (20 oz/3 gal mix) applied during the growing season above 70%; apply Arsenal AC* as a 0.13% solution (0.5 oz/3 gal mix) or Arsenal Powerline* as a 0.25% solution (1 oz/3 gal mix) plus Accord as a 2% solution (8 oz/3 gal mix) plus Escort* at 0.8 dry oz/ 3 gal mix in water. Spray as a low volume application to lightly wet leaves.</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Nandina, Scared Bamboo <i>(Nandina domestica)</i>	<p>Thoroughly wet all leaves with glyphosate herbicide as a 1% solution in water (4 oz/3 gal mix) with a surfactant August-October. Or, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant. Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake. Collect and destroy fruit.</p>
Japanese knotweed <i>(Polygonum cuspidatum)</i>	<p>Thoroughly wet all leaves with glyphosate herbicide as a 1% solution in water (4 oz/3 gal mix) with a surfactant August-October. Or, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray.</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant: Arsenal AC*, Polaris AC*, or Imazapyr 4SL*, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>

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<b>SHRUBS (continued)</b>	
<p>Nonnative Roses</p> <p>Multi flora Rose (<i>Rosa multiflora</i>)</p> <p>Macartney Rose (<i>Rosa bracteata</i>)</p>	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant April-June (at or near the time of flowering): Escort XP* at 1 oz/A in water (0.2 dry oz/3 gal mix); August-October: Arsenal AC*, Polaris AC*, or Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix) or Escort XP* at 1 oz/A in water (0.2 dry oz/3 gal mix); May-October: repeated applications of a glyphosate herbicide as a 2% solution in water (8 oz/3 gal mix), a less effective treatment that has no soil activity to damage surrounding plants.</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to young bark as a basal spray (January-February or May-October). Or, cut large stems and immediately treat the stumps with one of the following herbicides in water with a surfactant: Arsenal AC*, Polaris AC*, or Imazapyr 4SL*, as a 10% solution (1 qt/3 gal mix) or a glyphosate herbicide as a 20% solution (2.5 qt/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
<p>Japanese spiraea (<i>Spiraea japonica</i>)</p>	<p>Thoroughly wet all leaves with Garlon 3A or a glyphosate herbicide as a 3% solution (12 oz/3 gal mix) in water with a surfactant. While September is best applications may be made almost any time of year, as long as the air temperature is above 65°F to ensure absorption by the plant, while September is best.</p> <p>For stems too tall for foliar sprays, cut large stems and immediately treat the stumps with one of the following herbicides: A glyphosate herbicide or Garlon 3A at a 25% solution (32 oz/1 gal mix).</p>
<b>VINES</b>	
<p>Five/leaf akebia or chocolate vine (<i>Akebia quinata</i>)</p>	<p>Thoroughly wet all leaves with Garlon 3A as a 2-3% solution (8-12 oz/3 gal mix) in water with a surfactant applied in the early to mid fall.</p> <p>To control climbing vines in trees, cut large stems and immediately treat the stumps with Garlon 3A or a glyphosate herbicide as a 25% solution (32 oz/1 gal mix). A subsequent foliar application of may be required to control new seedlings and resprouts.</p>
<p>Amur peppervine or porcelainberry (<i>Ampelopsis brevipedunculata</i>)</p>	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant: A glyphosate herbicide or Garlon 3A as a 2-3% solution (8-12 oz/3 gal mix); or, apply Arsenal AC* as a 0.25% solution (0.5 oz/3 gal mix) or Chopper Gen II applied as a 0.5% solution (2 oz/3 gal mix) in water.</p> <p>* Non-target plants may be killed or injured by root uptake</p> <p>To control climbing in trees, cut large stems and immediately treat the stumps with Garlon 3A or a glyphosate herbicide at a 25% solution (32 oz/1 gal mix).</p>
<p>Oriental Bittersweet (<i>Celastrus orbiculatus</i>)</p>	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant (July-October): Garlon 4, Garlon 3A, or a glyphosate herbicide as a 2% solution (8 oz/3 gal mix).</p> <p>For stems too tall for foliar sprays, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to the lower 16" of stems. Or, cut large stems and immediately treat the cut surfaces with one of the following herbicides in water with a surfactant: Garlon 4 or a glyphosate herbicide as a 25% solution (32 oz/1 gal mix).</p>
<p>Climbing Yams</p> <p>Air Yam (<i>Dioscorea bulbifera</i>)</p> <p>Chinese Yam (<i>Dioscorea oppositifolia</i>)</p> <p>Water Yam (<i>Dioscorea alata</i>)</p>	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant July-October. Garlon 3A or Garlon 4 as a 2% solution (8 oz/3 gal mix). Sometimes the air yams take up the herbicide; otherwise, they must be collected and destroyed (not composted).</p> <p>Cut climbing plants just above the soil surface and immediately treat the freshly cut stem with undiluted Garlon 3A (safe to surrounding plants).</p>

## INVASIVE PLANT CONTROL IN FORESTS

PLANT SPECIES Common & Scientific Name(s)	PRESCRIPTIONS
<b>VINES (continued)</b>	
Winter Creeper ( <i>Euonymus fortunei</i> )	<p>Thoroughly wet all leaves (until runoff) with one of the following herbicides in water with a surfactant July to October for successive years. Tordon 101* as a 3% solution (12 oz/3 gal mix) or Tordon K* as a 2% solution (8 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p> <p>Or, repeatedly apply Garlon 4 or a glyphosate herbicide as a 2% solution (8 oz/3 gal mix) in water with a surfactant, a less effective treatment that has no soil activity to damage surrounding plants.</p> <p>Cut all vertical climbing stems to prevent fruiting and spread by birds.</p>
Kudzu ( <i>Pueraria montana</i> )	<p>Thoroughly wet all leaves, including those on climbing vines, as high as possible with one of the following herbicides in water with a surfactant: (June-October for successive years when regrowth appears) Tordon 101* as a 3% solution (12 oz/3 gal mix) or Tordon K* as a 2% solution (8 oz/3 gal mix), either by broadcast or spot spray; (July-early September for successive years) Escort XP* at 3-4 oz/A (0.8-1.2 dry oz/3 gal mix) or Milestone VM* at 7 oz/A (2 oz/3 gal mix) in water.</p> <p>When safety to surrounding vegetation is desired, use Transline* as a 0.5% solution in water (2 oz/3 gal mix) or Milestone VM* can safely treat kudzu under many desirable trees and shrubs if herbicide is not applied directly to them. For partial control and no soil activity, repeatedly apply Garlon 4 or a glyphosate herbicide as a 4% solution in water (1 pt/3 gal mix) with a surfactant during the growing season. Or cut large vines and immediately apply the herbicides to the cut surfaces or apply the ready-to-use Pathway* or Ortho Brush-B-Gon, Enforcer Brush Killer, and Vine-X readily available in retail garden stores (safe to surrounding plants). Ortho Brush-B-Gon, Enforcer Brush and other "poison ivy" herbicides can be used as foliar sprays.</p> <p>To control vines less than 2" in diameter, apply basal sprays of Garlon 4 as a 20% solution (5 pt/3 gal mix) in a labeled basal oil product, vegetable oil, kerosene, or diesel fuel (where permitted) (January-April); or use undiluted Pathfinder II.</p> <p>For larger vines, make stem injections using Tordon 101*, Stalker*, Arsenal AC*, or a glyphosate herbicide using dilutions and cut-spacings as specified on the herbicide label (anytime except March and April).</p> <p>* Non-target plants may be killed or injured by root uptake.</p> <p>When using Tordon herbicides, rainfall must occur within 6 days after application for needed soil activation. Tordon herbicides are restricted use pesticides. Transline controls a narrow spectrum of plant species.</p>
English Ivy ( <i>Hedera helix</i> )	<p>Thoroughly wet all leaves (until runoff) with one of the following herbicides in water with a surfactant July-October for successive years. Garlon 3A or Garlon 4 as a 3-5% solution (12-20 oz/3 gal mix), or a glyphosate herbicide as a 2% solution (8 oz/3 gal mix). Use a string trimmer to reduce growth layers and injure leaves for improved herbicide uptake. Cut large vines and apply these herbicides to cut surfaces.</p> <p>Or, apply Garlon 4 as a 20% solution in commercially available basal oil, diesel fuel, or kerosene (2.5 qt/3 gal mix) with a penetrant (check with herbicide distributor) to large vines being careful to avoid the bark of the host tree.</p>
Japanese honeysuckle ( <i>Lonicera japonica</i> )	<p>Apply Escort XP* with a surfactant to foliage June-August-either by broadcast spraying 2 oz/A in water (0.6 dry oz/3 gal mix) or by spot spraying 2-4 oz/A water (0.6-1.2 dry oz/3 gal mix). * Non-target plants may be killed or injured by root uptake.</p> <p>Or, treat foliage with one of the following herbicides in water with a surfactant July-October or during warm days in early winter, keeping spray away from desirable plants: A glyphosate herbicide as a 2% solution (8 oz/3 gal mix) or Garlon 3A or Garlon 4 as a 3-5% solution (12-20 oz/3 gal mix).</p> <p>Or, cut large vines just above the soil surface and immediately treat the freshly cut stem with a glyphosate herbicide or Garlon 3A as a 20% solution (2.5 qt/3 gal sprayer) in water with a surfactant July-October (safe to surrounding plants).</p> <p>Prescribed burning in spring will reduce dense ground mats and sever climbing vines for more effective herbicide treatments to resprouting vines.</p>

## INVASIVE PLANT CONTROL IN FORESTS

PLANT SPECIES Common & Scientific Name(s)	PRESCRIPTIONS
<b>VINES</b> <i>(continued)</i>	
Vincas, Periwinkles Common Periwinkle <i>(Vinca minor)</i> Bingleaf Periwinkle <i>(Vinca major)</i>	Thoroughly wet all leaves (until runoff) with one of the following herbicides in water with a surfactant July-October for successive years. Tordon 101* as a 3% solution (12 oz/3 gal mix), Tordon K* as a 2% solution (8 oz/3 gal mix), or Garlon 4 as a 4% solution (15 oz/3 gal mix). Or, during the growing season, repeatedly apply Garlon 4 or a glyphosate herbicide as a 2% solution in water (8 oz/3 gal mix) with a surfactant. In winter, herbicide treatments should be limited to warm days.  * Non-target plants may be killed or injured by root uptake
Nonnative Wisterias Chinese Wisteria <i>(Wisteria sinensis)</i> Japanese Wisteria <i>(Wisteria floribunda)</i>	From July-October for successive years when regrowth appears, apply Tordon 101* as a 3% solution (12 oz/3 gal mix), Tordon K** as a 2% solution (8 oz/3 gal mix), or Garlon 4 as a 4% solution (15 oz/3 gal mix) * Non-target plants may be killed or injured by root uptake  From July-September for successive years when regrowth appears, apply Transline as a 0.5% solution in water (2 oz/3 gal mix) when safety to surrounding vegetation is desired.  September-October with repeated applications-a glyphosate herbicide as a 2% solution (8 oz/3 gal mix)
<b>GRASSES</b>	
Giant Reed <i>(Arundo donax)</i>	Foliar applications in September–October with a glyphosate herbicide as a 2% solution (8 oz/3 gal mix), Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix) or a combination of the two herbicides.  * Non-target plants may be killed or injured by root uptake
Weeping lovegrass <i>(Eragrostis curvula)</i>	Thoroughly wet all leaves with one of the following herbicides in water with a surfactant: A glyphosate herbicide as a 2% solution (8 oz/3 gal mix) or Arsenal AC* as a 0.5% solution (2 oz/3 gal mix), or apply Arsenal Powerline* as a 0.75% solution (3 oz/3 gal mix). All applications should be made in early summer when foliage is developed but before seeds have been produced.  * Non-target plants may be killed or injured by root uptake
Cogongrass <i>(Imperata cylindrica)</i>	Thoroughly wet all leaves with one of the following herbicides in water with a surfactant Arsenal AC*, Polaris AC*, or Imazapyr 4SL* as a 1% solution (4 oz/3 gal mix), a glyphosate herbicide as a 2% solution (8 oz/3 gal mix), or a combination of the two herbicides.  * Non-target plants may be killed or injured by root uptake  Repeat before flowering in spring to suppress seed production and again in successive years for eradication.  This is a Federally listed invasive species. Report suspected infestations to your Georgia Forestry Commission country Extension office.
Tall Fescue <i>(Lolium arundinaceum)</i>	On forest lands, apply a glyphosate herbicide as a 0.5% solution in water (2 qt/10 gal mix/A), or Arsenal AC*, Polaris AC*, or Imazapyr 4 SL*, as a 1% solution (25 oz/20 gal mix/A) in spring.  * Non-target plants may be killed or injured by root uptake  On noncroplands, apply 10-12 dry ounces of Plateau/20 gal mix/A (consult the label for additives) in spring. Mixing Plateau* with a glyphosate herbicide or Arsenal AC*, Polaris AC*, or Imazapyr 4SL*, will improve control but may damage associated native plants. Vantage (sethoxydim), Poast (sethoxydim), Assure (quizalofop), and Select (clethodim) may be useful on pastures, but they are usually more costly than a glyphosate mix with Plateau or Arsenal AC*, Polaris AC*, Imazapyr 4SL*.  Early spring burning, if repeated, inhibits fescue and encourages native warm/season grasses.

## INVASIVE PLANT CONTROL IN FORESTS

PLANT SPECIES Common & Scientific Name(s)	PRESCRIPTIONS
<b>GRASSES (continued)</b>	
Nepalese Browntop ( <i>Microstegium vimineum</i> )	<p>Apply a glyphosate herbicide as a 2% solution in water (8 oz/3 gal mix) with a surfactant in late summer. Or, apply Vantage (see label) for situations that require more selective control and less impact on associated plants.</p> <p>Repeat treatments for several years to control abundant germinating seeds. Mowing or pulling just before seed set in September will prevent seed buildup.</p>
Chinese Silvergrass ( <i>Miscanthus sinensis</i> )	<p>Make foliar applications of Arsenal AC*, Polaris AC*, Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix); a glyphosate herbicide as a 2% solution (8 oz/3 gal mix), or a combination of the two herbicides.</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Bamboos ( <i>Phyllostachys spp.</i> ) ( <i>Bambusa spp.</i> )	<p>Thoroughly wet all leaves with one of the following herbicides in water with a surfactant in September or October with multiple applications to regrowth: Arsenal AC*, Polaris AC* or Imazapyr 4SL* as a 1% solution (4 oz/3 gal mix), a glyphosate herbicide as a 2% solution (8 oz/3 gal mix); or a combination of the 2 herbicides.</p> <p>Apply Velpar L* as a soil treatment (rate dependent on soil texture) following cutting or burning of stand.</p> <p>* Non-target plants may be killed or injured by root uptake</p>
Johnsongrass ( <i>Sorghum halepense</i> )	<p>Recommendation for mature grass control: Apply Outrider* as a broadcast spray at 0.75-2 oz/A plus a nonionic surfactant to actively growing johnsongrass. For handheld and high volume equipment, apply 1 ounce of Outrider*/100 gal of water plus a nonionic surfactant at 0.25%. Or apply Plateau* as a 0.25% solution (1 oz/3 gal mix) post emergence when plants are 18-2" (45-60 cm) tall or larger.</p> <p>Recommendation for seedling control: Apply Journey* as a 0.3% solution (1.2 oz/3 gal mix) pre-emergence when desirable species are dormant.</p> <p>Apply a glyphosate herbicide as a 2% solution (8 oz/3 gal mix)</p> <p>* Non-target plants may be killed or injured by root uptake</p>
<b>FERNS</b>	
Japanese Climbing Fern ( <i>Lygodium japonicum</i> )	<p>Thoroughly wet all leaves from July-October with one of the following herbicides in water plus surfactant Escort Xp* at 1-2 oz/A in water (0.3-0.6 dry oz/3 gal mix): Arsenal AC*, Polaris AC* or Imazapyr 4SL*, as a 1% solution (4 oz/3 gal mix), Garlon 3A, Garlon 4, or a glyphosate herbicide as a 3% solution (12 oz/3 gal mix).</p> <p>* Non-target plants may be killed or injured by root uptake</p>
<b>FORBS</b>	
Garlic Mustard ( <i>Alliaria petiolata</i> )	<p>To control 2 generations, thoroughly wet all leaves with a glyphosate herbicide as a 2% solution in water (8 oz/3 gal mix) during flowering April-June. Include a surfactant unless plants are near surface waters.</p> <p>In locations where herbicides cannot be used, pull plants before seed formation. Repeated annual prescribed burns in fall or early spring will control this plant, while "flaming" individual plants with propane torches has also shown preliminary success.</p>
Alligatorweed ( <i>Alternanthera philoxeroides</i> )	<p>Thoroughly wet all leaves with one of the following herbicides in water:</p> <p>Habitat* applied as a 0.5% (2 oz/3 gal mix) solution in a 100 gal/A mix.</p> <p>Clearcast as a 1% solution (4 oz/3 gal mix) if foliage is emerged; A glyphosate product (Rodeo for aquatic sites) or Garlon 4 (Renovate 3 for aquatic sites) as a 2% solution (8 oz/3 gal mix) for good control above the water line.</p> <p>* Non-target plants may be killed or injured by root uptake</p>

## INVASIVE PLANT CONTROL IN FORESTS

PLANT SPECIES Common & Scientific Name(s)	PRESCRIPTIONS
<b>FORBS (<i>continued</i>)</b>	
Nodding plumeless thistle <i>(Carduus nutans)</i>	Thoroughly wet all leaves with one of the following herbicides in water with a surfactant: Transline as a 0.5% solution (2 oz/3 gal mix) applied during the rosette stage or prior to flowering; Garlon 3A, Milestone or a glyphosate herbicide as a 2% solution (8 oz/3 gal mix); or Overdrive as a 0.8% <sup>b</sup> solution (0.3 oz/3 gal mix) applied at the rosette growth stage.
Spotted knapweed <i>(Centaurea stoebe ssp.)</i>	Thoroughly wet all leaves with one of the following herbicides in water with a surfactant: Milestone as a 0.1% solution (0.4 oz/3 gal mix) applied at the spring bolting or fall rosette stages; Tordon K* at 0.25-0.5 lb/A will control spotted knapweed plants and seedlings for 2-3 years. Tordon K* should be applied either in fall when the plant is in the rosette growth stage, or in spring during the bud to bloom stage; Vanquish* at 1-2 lb (acid equivalent/see label)/A. May require annual follow-up treatment for a minimum of 2 years; Overdrive as a 0.2% solution (0.6 oz/3 gal mix) plus Tordon 101* as a 4% solution (2 pt/3 gal mix); or Garlon 3A as a 2-3% solution (8-12 oz/3 gal mix) 3-4 times/year for 2 years. * Non-target plants may be killed or injured by root uptake
Introduced Lespedezas  Shrubby (bicolor) Lespedeza <i>(Lespedeza bicolor)</i>  Chinese (sericea ) Lespedeza <i>(Lespedeza cuneata)</i>	Thoroughly wet all leaves with one of the following herbicides in water with a surfactant July-September Garlon 4 as a 2% solution (8 oz/3 gal mix), Escort XP* at 3/4 of an ounce per acre (0.2 dry oz/3 gal mix), Transline as a 0.2% solution (1 oz/3 gal mix), a glyphosate herbicide as a 2% solution (8 oz/3 gal mix), or Milestone at 7 oz/A (2 oz/3 gal mix), or Velpar *L as a 2% solution (8 oz/3 gal mix). * Non-target plants may be killed or injured by root uptake Mowing 1-3 months before herbicide applications can assist control.
Big blue lilyturf <i>(Liriope muscari)</i> , <i>(L. spicata)</i> creeping liriop <i>(Liriope spicata)</i>	A glyphosate herbicide as a 2% solution (8 oz/3 gal mix) applied June-October. Arsenal AC* as a 0.5% solution (2 oz/3 gal mix) or Arsenal Powerline* as a 1% solution (4 oz/3 gal mix) or Journey as a 3% solution (12 oz/3 gal mix) applied to actively growing shoots. * Non-target plants may be killed or injured by root uptake
Crownvetch <i>(Securigera varia)</i> or <i>(Coronilla varia)</i>	Thoroughly wet all leaves with a glyphosate product or Garlon 3A as a 1-2% solution (4-8 oz/3 gal mix) in water with a surfactant during the vegetative stage prior to branching or during flowering. Apply Transline as a 0.5% solution (2 oz/3 gal mix) or apply Arsenal AC* as a 0.5% solution (2 oz/3 gal mix) or apply Arsenal Powerline* as a 1% solution (4 oz/3 gal mix) in fall, before frost or leaf drop. Milestone at 7 oz/A (2 oz/3 gal mix) * Non-target plants may be killed or injured by root uptake

## INVASIVE PLANT CONTROL IN FORESTS

PLANT SPECIES Common & Scientific Name(s)	PRESCRIPTIONS
<b>FORBS (continued)</b>	
Crownvetch ( <i>Securigera varia</i> ) or ( <i>Coronilla varia</i> )	<p>Thoroughly wet all leaves with a glyphosate product or Garlon 3A as a 1-2% solution (4-8 oz/3 gal mix) in water with a surfactant during the vegetative stage prior to branching or during flowering.</p> <p>Apply Transline as a 0.5% solution (2 oz/3 gal mix) or apply Arsenal AC* as a 0.5% solution (2 oz/3 gal mix) or apply Arsenal Powerline* as a 1% solution (4 oz/3 gal mix) in fall, before frost or leaf drop.</p> <p>Milestone at 7 oz/A (2 oz/3 gal mix) * Non-target plants may be killed or injured by root uptake</p>
Tropical Soda Apple ( <i>Solanum viarum</i> )	<p>Thoroughly wet leaves and stems with one of the following herbicides in water with a surfactant at times of flowering before fruit appear:</p> <p>Garlon 4 (or Remedy in pastures) or Arsenal AC, Polaris AC, Imazapyr 4SL, as a 2% solution (8 oz/3 gal mix); a glyphosate herbicide as a 3% solution in water (12 oz/3 gal mix).</p> <p>Milestone at 5-7 oz/A (2 oz/3 gal mix) at any growth stage, but application before flowering can reduce seed production Collect and destroy fruit to prevent reestablishment. If mowing is used to stop fruit production, delay herbicide applications until 50-60 days to ensure adequate regrowth. This is a federally listed invasive species.</p>

\* **Tordon101 and Tordon K are Restricted Use Pesticides.** Rainfall must occur within 6 days after Tordon application for soil activation.

## RESTRICTED ENTRY INTERVAL (REI) FOR HERBICIDES LISTED IN INVASIVE PLANT CONTROL IN FORESTS

HERBICIDE	RESTRICTED ENTRY INTERVAL (REI)
Arsenal AC	12 H
Arsenal Powerline	48 H
Assure II	12 H
Chopper Gen2	48 H
Clearcast	4 H
Enforcer Brush Killer	Do not enter treated area until after spray has dried.
Escort XP	4 H
Garlon 3A	48 H
Garlon 4	12 H
Habitat	No restriction
Hyvar	12 H
Imazapyr 4SL	12 H
Journey	12 H
Kernite S	12 H
Milestone	48 H
Ortho Brush-B-Gone	Do not enter treated area until after spray has dried.
Outrider	12 H

HERBICIDE	RESTRICTED ENTRY INTERVAL (REI)
Overdrive	24 H
Pathfinder II	12 H
Pathway	48 H
Plateau	12 H
Poast	12 H
Polaris AC	12 H
Remedy	Do not enter treated area until after spray has dried.
Renovate 3	48 H
Select	24 H
Stalker	48 H
Tordon 101	48 H
Tordon K	48 H
Transline	12 H
Vanquish	24 H
Vantage	12 H
Velpar L	48 H