

URI CELS Outreach Center  
 Invasive Plant Management Certification Program  
**Herbicide Recommendations**

(Note\* All herbicides listed below are **not** restricted for use in Rhode Island)

Herbicide	Trade Name	Target Species	Environmental Hazards	Recommended Land Use
Glyphosate	Rodeo™	Common Reed <i>(Phragmites australis)</i>  Oriental bittersweet <i>(Celastrus orbiculatus)</i>  Japanese knotweed <i>(Polygonum cuspidatum)</i>	When cleaning equipment or disposing of equipment washwaters, prevent contamination of nearby surface waters by containing runoff.  In case of leak or spill, soak up and remove to a landfill.	For control of annual and perennial weeds and woody plants in forests, non-crop sites, and <b>in and around aquatic sites</b> ; also for use in wildlife habitat areas, for perennial grass release, and grass growth suppression and grazed areas on these sites.  Avoid contact of herbicide with plant foliage, green stems, exposed non-woody roots or fruit of crops and desirable plants and trees. Severe injury or destruction of the plant may result.
	Round-Up Pro™	Oriental bittersweet <i>(Celastrus orbiculatus)</i>  Black swallow-wort <i>(Vincetoxicum nigrum)</i>  Japanese knotweed <i>(Polygonum cuspidatum)</i>	<b>DO NOT apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.</b>  When cleaning equipment or disposing of equipment washwaters, prevent contamination of nearby surface waters by containing runoff.	Round-up™ should only be applied when the potential for spray drift to adjacent sensitive areas (e.g., residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g., when wind is blowing away from the sensitive areas).  <b>Avoid direct application to any body of water.</b>
Imazapyr	Habitat™	Common Reed <i>(Phragmites australis)</i>	<b>DO NOT apply to water except as specified in the label. Treatment of aquatic weeds may result in oxygen depletion or loss due to decomposition of dead plants. This oxygen loss may cause the suffocation of some aquatic organisms.</b>  <b>DO NOT apply this product within one-half mile upstream of an active potable water intake in flowing water</b>	Applications to private waters: Applications may be made to private waters that are still, such as ponds, lakes and drainage ditches where there is minimal or no outflow to public waters. Application to public waters: Applications may be made to public waters such as ponds, lakes, reservoirs, marshes, bayous, drainage ditches, canals, streams, rivers, and other slow-moving or quiescent bodies of water for control of aquatic weeds or for control of riparian and wetland weed species.

			<p><b>(i.e., river, stream, etc.) or within one-half mile of an active potable water intake in a standing body of water, such as a lake, pond or reservoir.</b></p> <p>When cleaning equipment or disposing of equipment washwaters, prevent contamination of nearby surface waters by containing runoff.</p> <p><b>This pesticide is toxic to vascular plants</b> and should be used strictly in accordance with the drift precautions on the label.</p>	<p>Consult local state fish and game agency and water control authorities before applying this product to public water. Permits may be required to treat such water.</p>
<b>Triclopyr</b>	Renovate 3™	<p>Common Reed (<i>Phragmites australis</i>)</p> <p>Oriental bittersweet (<i>Celastrus orbiculatus</i>)</p>	<p>When cleaning equipment or disposing of equipment washwaters, prevent contamination of nearby surface waters by containing runoff.</p> <p>In case of leak or spill, soak up and remove to a landfill.</p>	<p>For control of annual and perennial weeds and woody plants in forests, non-crop sites, and <b>in and around aquatic sites</b>; also for use in wildlife habitat areas, for perennial grass release, and grass growth suppression and grazed areas on these sites.</p> <p>Avoid contact of herbicide with plant foliage, green stems, exposed non-woody roots or fruit of crops and desirable plants and trees. Severe injury or destruction of the plant may result.</p>
	Garlon 3A™	<p>Black swallow-wort (<i>Vincetoxicum nigrum</i>)</p> <p>Japanese knotweed (<i>Polygonum cuspidatum</i>)</p> <p>Oriental bittersweet (<i>Celastrus orbiculatus</i>)</p>	<p>Do not contaminate water when cleaning equipment or disposing of equipment washwaters. Prevent contamination of nearby surface waters by containing runoff.</p> <p><b>This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.</b></p> <p><b>DO NOT apply to salt water bays or</b></p>	<p>For the control of woody plants, broadleaf weeds in forests and industrial non-crop areas, including manufacturing and storage sites, rights-of-way such as electrical power lines, communication lines, pipelines, roadsides, railroads, fence rows, non-irrigation ditch banks, and around farm buildings; including application to grazed areas, and establishment and maintenance of wildlife openings on these sites, and in Christmas tree plantations.</p> <p>Use within production forests and industrial non-crop sites (including those listed above) may include applications to control target vegetation in and around standing water sites, such as marshes,</p>

			<p>estuaries.</p> <p><b>DO NOT apply directly to unimpounded rivers or streams.</b></p> <p><b>DO NOT apply on ditches or canals currently being used to transport irrigation water or that will be used for irrigation within 4 months following treatment. It is permissible to treat irrigation and non-irrigation ditch banks.</b></p> <p><b>DO NOT apply where runoff water may flow onto agricultural land as injury to crops may result.</b></p> <p><b>When making applications to control unwanted plants on banks or shorelines of moving water sites, minimize overspray to open water.</b></p>	<p>wetlands, and the banks of ponds and lakes.</p> <p>It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands (such as flood plains, deltas, marshes, swamps, or bogs) and transitional areas between upland and lowland sites.</p> <p>Seasonal Irrigation Waters: Garlon 3A may be applied during the off-season to surface waters that are used for irrigation on a seasonable basis provided that there is a minimum of 120 days between applying Garlon 3A and the first use of treated water for irrigation purposes, or until residue levels of Garlon 3A are determined by laboratory analysis, or other appropriate means of analysis, to be 1 ppb or less.</p> <p>Irrigation Canals/Ditches: Do not apply Garlon 3A to irrigation canals/ditches unless the 120-day restriction on irrigation water usage can be observed or residue levels of Garlon 3A are determined by laboratory analysis, or other appropriate means of analysis, to be 1 ppb or less.</p>
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**Note:** All information on this sheet can be found on the herbicide product labels, available on the Invasive Plant Management Information Portal: [www.uri.edu/cels/ceoc/invasives/ceoc\\_programs\\_clp\\_imcp\\_cpm.html](http://www.uri.edu/cels/ceoc/invasives/ceoc_programs_clp_imcp_cpm.html)

#### REFERENCES:

RI Department of Environmental Management (RIDEM). 2004. Federally Registered Restricted Use Pesticides. Available at: <http://www.dem.ri.gov/programs/bnatres/agricult/geneslb.htm>, last accessed 2 June 2008.

University of Rhode Island. 2008. Invasive Plant Management Certification Program Information Portal: Certification Program Materials. [http://www.uri.edu/cels/ceoc/ceoc\\_programs\\_clp\\_imcp.html](http://www.uri.edu/cels/ceoc/ceoc_programs_clp_imcp.html), last accessed 2 June 2008.