

U.S./Canada

National EDRR Systems for Invasive Plants

State/Provincial EDRR Work Plan Template

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I. State/Provincial EDRR Coordinating Committee.

State/Provincial EDRR System Element	North Carolina	Your State or Province
Committee Co-Chairs	- Randy Westbrook, USGS, Whiteville - Rick Iverson, NCDA, Raleigh	
Principal EDRR Contact	Rick Iverson, NCDA, Raleigh	
Volunteer Training Coordinator		
Survey and Mapping Coordinator	Margaret Fields, TNC, Durham	
Cooperating Botanists and Herbaria (Specimen Identification and Vouchering)	- Alexander Krings, NCSU - Alan Weakly, UNC-Chapel Hill	
Preferred Regional/National Invasive Plant Atlas (Field Data Archival)	SE-EPPC – EDDmapS	
Federal/State Plant Biologists (Rapid Assessment of New Invaders):	- Rick Iverson, NCDA - Rob Emens, NC-DENR - Randy Westbrook, USGS - Rob Richardson, NCSU	
Cooperating Weed Scientists (Prevention and Control Recommendations)	- Rick Iverson, NCDA - Rob Emens, NC-DENR - Rob Richardson, NCSU - Wayne Batten, Burgaw - Nancy Fraley, NPS, Asheville - Robert Eplee, Whiteville	

	- Emily P. Hill, NC State Parks	
Public and Conservation Lands Liaisons	- Margaret Field, TNC - Nancy Fraley, NPS - Emily Hill, NC State Parks	
Natural Areas and Waterways Liaison	- Rob Emens, NC-DENR	
Federal Weed Regulatory Liaison (APHIS PPQ)	- Al Tasker, Riverdale, MD	- Al Tasker, Riverdale, MD
State Weed Regulatory Liaison	Rick Iverson, NCDA	
EDRR Outreach and Education Coordinator		

II. State/Provincial EDRR Target Species List.

****EDRR Zones of Concern:** Coastal Plain (CP), Piedmont (P), Southern Blue Ridge (M), or All

State/Provincial EDRR System Element	North Carolina	Your State or Province
Early Detection Target Species (Non-native invasive plants which threaten but do not already occur in the state)	Federal/State Regulated Species: - Branched Broomrape (All)** <i>(Orobanche ramosa)</i> - British Yellowhead (All) <i>(Inula britannica)</i> - Caulerpa – Marine Alga <i>(Caulerpa taxifolia)</i> - Crested Floating Heart (All) <i>(Nymphoides cristata)</i> - Cogongrass (All) <i>(Imperata cylindrica)</i> - Goatsrue (All) <i>(Galega officinalis)</i> - Japanese Dodder (All) <i>(Cuscuta japonica)</i> - Giant Hogweed (P) <i>(Heracleum mantegazzianum)</i> - Old World Climbing Fern (CP,P) <i>(Lygodium microphyllum)</i> Other Species: - Garlic Mustard (MP) <i>(Alliaria petiolata)</i>	
EDRR Species	Federal/State Regulated Species: - Beach Vitex (PCP)	

<p>(Non-native invasive plants which are limited in distribution yet potentially pose a serious threat to state resources)</p>	<p><i>(Vitex rotundifolia)</i> - Benghal Dayflower (CP) <i>Commelina benghalensis</i> - Giant Salvinia (All) <i>Salvinia molesta</i> - Hydrilla (All) <i>(Hydrilla verticillata)</i> - Itchgrass (CP) <i>(Rottboellia cochinchinensis)</i> Oriental Bittersweet (All) <i>(Celastrus orbiculatus)</i> - Purple Loosestrife (P) <i>(Lythrum salicaria)</i> - Small Broomrape (M) <i>(Orobanche minor)</i> - Tropical Soda Apple (All) <i>(Solanum viarum)</i> - Tropical Spiderwort (PCP) <i>(Commelina benghalensis)</i> Witchweed (CP) <i>(Striga asiatica)</i></p> <p>Other Species: - Bushkiller (P) <i>(Cayratia japonica)</i> - Canada Thistle (MP) <i>(Cirsium arvense)</i> - Chinese Tallow (PCP) <i>(Triadica sebifera)</i> - Deeprooted Sedge (CP,P) <i>(Cyperus enterianus)</i> - Saltcedar (CP) <i>(Tamarix ramosissima)</i></p>	
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III. State/Provincial EDRR Detection and Reporting Network (Contact Directory of Agency Field Personnel and Trained Volunteers)

EDRR Partners	North Carolina	Your State or Province
The Nature Conservancy	Margaret Fields, TNC, Durham, NC	
USDA APHIS PPQ		
USDA Forest Service		
USDA NRCS		
U.S. Geological Survey	Randy Westbrook, USGS, Whiteville	
U.S. Fish and Wildlife Service	Dale Suiter, FWS, Raleigh	
USDI National	Nancy Fraley, NPS, Asheville	

Parks		
State DNR	Rob Emens, NC-DENR, Raleigh	
State Park System	Emily P. Hill, NC State Parks	
State Forestry Commission	NC State Forestry Commission	
State/Provincial DOT	NC-DOT	
State Universities and Colleges	Rob Richardson, NCSU, Raleigh	
State Bass Masters Association	NC Bass Masters Association	
State Association of Certified Foresters	NC Association of Certified Foresters	
State Association of Environmental Professionals	NC Association of Environmental Professionals	
State Native Plant Society	NC Native Plant Society	
Friends of Parks Groups	Lake Waccamaw State Park – Friends Group	
Other Conservation Groups	- Friends of the Green Swamp, Lonnie Fox, Lake Waccamaw - Winyah Rivers Foundation, Christine Ellis, Coastal Carolina University, Conway, SC	
U.S./Canada Ports of Entry – Maritime Ports	- Port of Wilmington, NC - Port of Morehead City, NC	
U.S./Canada Ports of Entry – International Airports	- Wilmington International Airport - Raleigh International Airport - Charlotte-Douglas Intl. Airport	

IV. Rapid Assessment Guidelines – Evaluation of New Exotic Plants for Invasiveness.

Rapid Assessment Guidelines - Report Template.	
a.	Identity, Biology, Ecology
b.	Current Distribution (World, U.S., State EDRR Zones of Concern)
c.	History of Invasiveness
d.	Regulatory Status (other Countries, Federal, State, Local)
e.	Pathways of Introduction and Spread
f.	Impacted Stakeholders and Resources
g.	Potential Stakeholders and Resources
h.	Control/Containment/Eradiation Methods
i.	Potential for Success as an EDRR Initiative (Total Eradication from EDRR Zones of Concern)
j.	Estimated Cost of Eradication/Acre
k.	Potential Funding Sources
l.	Short Term/Long Terms Impacts if no action is taken.

V. Rapid Response Initiatives – Eradication of Confirmed EDRR Target Species

Group	North Carolina	Your State
Cooperative Weed Management Areas	Sandhills Cooperative Weed Management Area - Tracy Rush, Pinehurst, NC	
Invasive Plant Task Forces	NC Beach Vitex Task Force - Melanie Doyle, Ft. Fish Aquarium, Carolina Beach	
	NC Giant Salvinia Task Force - Wayne Batten, Burgaw	
Agency Invasive Plant Eradication Programs	NC Witchweed Eradication Program - Rick Iverson, NCDA	
	NCDA Itchgrass Eradication Project - Rick Iverson, NCDA	
D. Potential EDRR Initiatives	Bush Killer (<i>Cayratia japonica</i>) in NC	

Appendix 1. State, Regional, and National EDRR Information Systems (Archival of Invasive Plant Distribution Records).

National Databases	<p>EDDMapS (Early Detection & Distribution Mapping System) URL: http://www.eddmaps.org/ Director: Chuck Bargeron, University of Georgia Phone: 229-386-3298 E-mail: cbargero@uga.edu</p>
	<p>APHIS National Agricultural Pest Information System (NAPIS) URL: http://ceris.purdue.edu/napis/</p>
	<p>USGS NBII EDRR Framework URL: http://edrr.nbii.gov/portal/server.pt Director: Annie Simpson, USGS BRD NBII, Reston, VA Phone: 703-648-4281 E-mail: asimpson@usgs.gov</p>
Regional Databases	<p>Invasive Plant Atlas of the New England URL: www.ipane.org</p>
	<p>Invasive Plant Atlas of the Mid-South URL: http://www.gri.msstate.edu/ipams/ John Madsen, Director, MS State Phone: 662-325-2428; E-mail: jmadsen@gri.msstate.edu</p>
	<p>Invaders Plant Database (Northwestern U.S.) URL: http://invader.dbs.umt.edu/ Director: Peter Rice, Director, University of Montana Phone: 406-243-2671 E-mail: peter.rice@umontana.edu</p>
State/Provincial Databases	

Appendix 2. State/Provincial Geographical Index (Natural and Administrative Land Units to help in identifying habitats at risk, impacted and potential stakeholders, as well as responsible agencies and organizations).

Agency or Organization	North Carolina	Your State or Province
State/Provincial Official Website	URL: http://www.ncgov.com/	
Counties	Wikipedia URL: http://en.wikipedia.org/wiki/List_of_counties_in_North_Carolina	
Cities, Towns, Villages	URL: http://www.sog.unc.edu/library/cities.html	
National Parks, Monuments, Battlefields	URL: http://usparks.about.com/blpknc.htm	
U.S. Fish and Wildlife Service Refuges	URL: http://www.fws.gov/southeast/maps/nc.html URL: http://www.fws.gov/Refuges/profiles/ByState.cfm?state=NC	
National Forests	URL: http://www.cs.unca.edu/nfsnc/	
USDA NRCS	URL: http://www.nc.nrcs.usda.gov/	
Department of Energy		
Dept. of Defense Installations	URL: http://military-hotels.us/north-carolina/nc-bases.html	
State/Provincial Parks and Historic Sites	URL: http://www.ncparks.gov/Visit/main.php	
State Forests	URL: http://en.wikipedia.org/wiki/List_of_North_Carolina_state_forests	
Federal and State DOT	URL: http://www.ncdot.org/	
State DNR Lands		
Private Conservation Lands	The Nature Conservancy URL: http://www.nature.org/wherewework/northamerica/states/northcarolina/preserves/	
Land Trusts	NC Land Trusts URL: http://www.ctnc.org/lmap.htm	