## U.S./Canada

## **National EDRR Systems for Invasive Plants**

#### State/Provincial EDRR Work Plan Template

- I. State/Provincial EDRR Coordinating Committee
- II. Invasive Plants EDRR Target Species List
- III. State/Provincial EDRR Detection and Reporting Network
- IV. Rapid Assessment Guidelines
- V. Rapid Response Initiatives
- Appendix 1. National, Regional, and State/Provincial Invasive Plant Info. Systems
- **Appendix 2.** State/Provincial Geographical Index

#### I. State/Provincial EDRR Coordinating Committee.

State/Provincial EDRR System Element	North Carolina	Your State or Province
Committee Co-Chairs	- Randy Westbrooks, 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):	<ul><li>Rick Iverson, NCDA</li><li>Rob Emens, NC-DENR</li><li>Randy Westbrooks, USGS</li><li>Rob Richardson, NCSU</li></ul>	
Cooperating Weed Scientists (Prevention and Control Recommendations)	<ul> <li>Rick Iverson, NCDA</li> <li>Rob Emens, NC-DENR</li> <li>Rob Richardson, NCSU</li> <li>Wayne Batten, Burgaw</li> <li>Nancy Fraley, NPS, Asheville</li> <li>Robert Eplee, Whiteville</li> </ul>	

	- Emily P. Hill, NC State Parks	
Public and Conservation Lands Liaisons	<ul><li>- Margaret Field, TNC</li><li>- Nancy Fraley, NPS</li><li>- Emily Hill, NC State Parks</li></ul>	
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	North Carolina	Your State or Province
Element Element		
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)** (Orobanche ramosa) - British Yellowhead (All) (Inula britannica) - Caulerpa – Marine Alga (Caulerpa taxifolia) - Crested Floating Heart (All) (Nymphoides cristata) - Cogongrass (All) (Imperata cylindrica) - Goatsrue (All) (Galega officinalis) - Japanese Dodder (All) (Cuscuta japonica) - Giant Hogweed (P) (Heracleum mantegazzianum) - Old World Climbing Fern (CP,P) (Lygodium microphyllum)	
	Other Species: - Garlic Mustard (MP) (Alliaria petiolata)	
EDRR Species	Federal/State Regulated Species: - Beach Vitex (PCP)	
(Non-native invasive plants	(Vitex rotundifolia) - Benghal Dayflower (CP)	

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which are limited	Commelina benghalensis	
in distribution yet	- Giant Salvinia (All)	
potentially pose a	Salvinia molesta	
serious threat to	- Hydrilla (All)	
state resources)	(Hydrilla verticillata)	
	- Itchgrass (CP)	
	(Rottboellia cochinchinensis)	
	Oriental Bittersweet (All)	
	(Celastrus orbiculatus)	
	- Purple Loosestrife (P)	
	(Lythrum salicaria)	
	- Small Broomrape (M)	
	(Orobanche minor)	
	- Tropical Soda Apple (All)	
	(Solanum viarum)	
	- Tropical Spiderwort (PCP)	
	(Commelina benghalensis)	
	Witchweed (CP)	
	(Striga asiatica)	
	Other Species:	
	- Bushkiller (P)	
	(Cayratia japonica)	
	- Canada Thistle (MP)	
	(Cirsium arvense)	
	- Chinese Tallow (PCP)	
	(Triadica sebifera)	
	- Deeprooted Sedge (CP,P)	
	(Cyperus enterianus)	
	- Saltcedar (CP)	
	(Tamarix ramosissima)	

# 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 Westbrooks, USGS, Whiteville	
U.S. Fish and Wildlife Service	Dale Suiter, FWS, Raleigh	
USDI National Parks	Nancy Fraley, NPS, Asheville	
State Dept. of Ag.	Rick Iverson, State Weed	

– Nursery	Coordinator	
Inspectors, etc.	Coordinator	
State DNR	Rob Emens, NC-DENR, Raleigh	
State DNK	ROU Elliells, INC-DENK, Raleigh	
State Perls System	Emily P. Hill, NC State Parks	
State Park System		
State Forestry	NC State Forestry Commission	
Commission	NG DOE	
State/Provincial	NC-DOT	
DOT	D I DI I I VIGOVI D I I I	
State Universities	Rob Richardson, NCSU, Raleigh	
and Colleges		
County Extension		
Agents		
State Bass Masters	NC Bass Masters Association	
Association		
State Association	NC Association of Certified	
of Certified	Foresters	
Foresters		
State Association	NC Association of Environmental	
of Environmental	Professionals	
Professionals		
State Native Plant	NC Native Plant Society	
Society	·	
Friends of Parks	Lake Waccamaw State Park –	
Groups	Friends Group	
<u> </u>	•	
State/Local Master		
Gardener Groups		
Other	- Friends of the Green Swamp,	
Conservation	Lonnie Fox, Lake Waccamaw	
Groups	- Winyah Rivers Foundation,	
	Christine Ellis, Coastal Carolina	
	University, Conway, SC	
Farmers,		
Cattlemen, Timber		
Producers		
Industry		
Representatives,		
Railway Workers		
Coastal Residents,		
Scout Groups		
Fishermen,		
Boaters		
Doucers		
<b>—</b>		
I		
U.S./Canada Ports	- Port of Wilmington, NC	
of Entry –	- Port of Willington, NC - Port of Morehead City, NC	
Maritime Ports	1 of tof Wordhoad City, Ive	
ivianume i orts		
U.S./Canada Ports	- Wilmington International Airport	
U.S./Callada FUITS	- willington international Airport	

of Entry –	- Raleigh International Airport	
International	- Charlotte-Douglas Intl. Airport	
Airports		

## 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/Eradication Methods
- Potential for Success as an EDRR Initiative (Total Eradication from EDRR Zones of Concern)
- j. Estimated Cost of Eradication/Acre
- k. Potential Funding Sources
- 1. 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	Sandhills Cooperative Weed	
Management Areas	Management Area	
	- Tracy Rush, Pinehurst, NC	
Invasive Plant Task	NC Beach Vitex Task Force	
Forces	- Melanie Doyle, Ft. Fish	
	Aquarium, Carolina Beach	
	NC Giant Salvinia Task	
	Force	
	- Wayne Batten, Burgaw	
Agency Invasive Plant	NC Witchweed Eradication	
Eradication Programs	Program	
Li adication i rogi ams	- Rick Iverson, NCDA	
	NCDA Itchgrass Eradication	
	Project	
	- Rick Iverson, NCDA	
D. Potential EDRR	Bush Killer (Cayratia	
Initiatives	japonica) in NC	
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**Appendix 1. State, Regional, and National EDRR Information Systems** (Archival of Invasive Plant Distribution Records).

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National Databases	EDDMapS (Early Detection & Distribution Mapping System)	
	URL: <a href="http://www.eddmaps.org/">http://www.eddmaps.org/</a>	
	<b>Director:</b> Chuck Bargeron, University of Georgia	
	Phone: 229-386-3298 E-mail: cbargero@uga.edu	
	APHIS National Agricultural Pest Information System (NAPIS)	
	URL: http://ceris.purdue.edu/napis/	
	integrit consequence and integrity	
Regional Databases	Invasive Plant Atlas of the New England	
Regional Databases	URL: www.ipane.org	
	OKL. www.ipane.org	
	7 4 70 440 40 75116 4	
	Invasive Plant Atlas of the Mid-South	
	URL: <a href="http://www.gri.msstate.edu/ipams/">http://www.gri.msstate.edu/ipams/</a>	
	John Madsen, Director, MS State	
	Phone: 662-325-2428); E-mail: <u>imadsen@gri.msstate.edu</u>	
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	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	
	E-man. peter.nce@uniontalia.edu	
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	North Carolina	Your State or Province
Organization		
State/Provincal	URL: http://www.ncgov.com/	
Official Website		
Counties	Wikipedia	
	URL:	
l .	http://en.wikipedia.org/wiki/List_of_coun	
l .	ties in North Carolina	
Cities, Towns,	URL:	
Villages	http://www.sog.unc.edu/library/cities.html	
National Parks,	URL:	
Monuments,	http://usparks.about.com/blpknc.htm	
Battlefields		
U.S. Fish and	URL:	
Wildlife Service	http://www.fws.gov/southeast/maps/nc.ht	
Refuges	<u>ml</u>	
l .		
l .	URL:	
l .	http://www.fws.gov/Refuges/profiles/ByS	
	tate.cfm?state=NC	
National Forests	URL: <a href="http://www.cs.unca.edu/nfsnc/">http://www.cs.unca.edu/nfsnc/</a>	
USDA NRCS	URL: <a href="http://www.nc.nrcs.usda.gov/">http://www.nc.nrcs.usda.gov/</a>	
Department of		
Energy		
Dept. of Defense	URL: <a href="http://military-hotels.us/north-">http://military-hotels.us/north-</a>	
Installations	carolina/nc-bases.html	
State/Provincial	URL:	
Parks and	http://www.ncparks.gov/Visit/main.php	
Historic Sites		
State Forests	URL:	
	http://en.wikipedia.org/wiki/List_of_Nort	
<u> </u>	h Carolina state forests	
Federal and	URL: <a href="http://www.ncdot.org/">http://www.ncdot.org/</a>	
State DOT		
State DNR		
Lands	The Name of	
Private	The Nature Conservancy	
Conservation	URL:	
Lands	http://www.nature.org/wherewework/nort	
T 100 (	hamerica/states/northcarolina/preserves/	
Land Trusts	NC Land Trusts	
	URL: http://www.ctnc.org/ltmap.htm	