Education, Outreach, and Training Efforts to Address Invasive Species in National Estuarine Research Reserves (NERRs) and their Watersheds

Jennifer (Spicer) Plunket, Stewardship Coordinator
North Inlet-Winyah Bay National Estuarine Research Reserve
• ACE Basin, SC
• Apalachicola, FL
• Chesapeake Bay, MD
• Chesapeake Bay, VA
• Delaware
• Elkhorn Slough, CA
• Grand Bay, MS
• Great Bay, NH
• GTM, FL
• Hudson River, NY
• Jacque Cousteau, NJ
• Jobos Bay, PR
• Kachemak Bay, AK
• Mission Aransas, TX
• Narragansett Bay, RI
• North Carolina
• North Inlet-Winyah Bay, SC
• Old Woman Creek, OH
• Padilla Bay, WA
• Rookery Bay, FL
• San Francisco Bay, CA
• Sapelo Island, GA
• South Slough, OR
• Tijuana River, CA
• Waquoit Bay, MA
• Wells, ME
• Weeks Bay, AL

27 Reserves, 21 States, 1 US Territory
North Inlet-Winyah Bay NERR
North Inlet-Winyah Bay NERR
Federal-State Partnerships

- Universities
- Dept of Natural Resources
- Dept of Marine Resources
- Dept of Environmental Protection
- Dept of Fish and Game
- Dept of Conservation and Recreation

... and partners
• Protected for
  – Long term research
  – Water quality monitoring
  – Education
  – Coastal stewardship

• Reserves as Sentinel Sites
  – Climate change
  – Sea level rise
  – Species distribution
  – Habitat change
National Invasion Monitoring Workshop

- Baseline biological monitoring
- Include both native and non-native species
- Sample physical variables in conjunction with biological parameters
- Reserve system as a platform for biological monitoring at unprecedented spatial and temporal scales
- Central database
- Estuarine reference collection
- Taxonomic expertise:
- Question-driven monitoring
The Southeastern NERRs

• North Carolina
• North Inlet-Winyah Bay
• ACE Basin
• Sapelo Island
• Guana Tolomato Matanzas (GTM)
Research, Monitoring, Management

• Eradication (physical removal, chemical treatment)
• Chemical treatment research testing
• Database records
• Distribution mapping
• Passive monitoring (presence/absence, volunteer groups)
• Active monitoring (research plots, volunteer groups)
• Native species restoration
Education, Training, Outreach

- Publications
- Meetings/Workshops
- Public Involvement
- Brochures/Educational Materials
- Collaboration w/ Partners
Beach Vitex Task Force

- Active Monitoring
- Passive Monitoring (e.g. by SCUTE and other volunteer groups, on-line report forms)
- Database/Website Management
- Annual Conference
- www.beachvitex.org
Sapelo Island NERR/CTP & GA EPPC Exotic Pest Plant Identification & Control Workshop

- Invasive Plants in GA Coastal Plain
- I.D. & Control Methods—classroom and field exercises
- Mapping programs/other management techniques
- Credits offered for pest control applicators
- ~40 participants, great feedback, planned for repeat with TNC and GA EPPC
• Florida Coastal Training Programs
• Landscaper BMP Training Program
• Certification required by municipalities
• Landscaping Ordinances
• >1000 landscapers trained
• Moving towards state legislature requirements
Southeast Native Landscape Project

• Expansion of Project Greenscape concept to regional training for landscapers, nurseries, etc on invasives and native landscaping

• Administered through partnership between NERRs and partners (e.g. stewardship, education and coastal training programs, university extension, TNC, EPPC, others)

• Could include demonstrations, workshops, distribution of materials, possible legislation(?)
**Resources and Publications**

- Assisted with variety of
  - Manuals
  - Articles
  - Brochures
  - Posters
  - Other educational materials
- Capacity for distribution via
  - Education
  - Stewardship
  - Training
Next Steps…

• Future Regional Workshop
• Landscaper/Nursery Training
• Material Development/Distribution
• Building Additional Partnerships