

BEACH VITEX MEETING MINUTES
February 25, 2005 10:00 AM – 4:00 PM
New Hanover County Arboretum, Wilmington, NC

WELCOME AND INTRODUCTIONS

See list of attendees at the bottom of the meeting minutes.

HISTORY OF BEACH VITEX IN NC (Dale Suiter)

Dale Suiter gave a PowerPoint presentation on beach vitex in North Carolina, including photos of areas along Atlantic Beach, Emerald Isle, North Topsail Beach and Bald Head Island where beach vitex has escaped from landscape plantings and taken over large sections of the dunes. Various people have noticed beach vitex spreading along the coast of NC, but to the best of our knowledge, the surveys conducted in 2004 represent the first attempt to document locations of beach vitex in NC. Dale Suiter first noticed beach vitex in landscape plantings at Bald Head Island and brought it to the attention of biologists with the Bald Head Island Conservancy. Since that time, many beach vitex 'colonies' have been discovered on Bald Head Island, some are fairly large in size. While working with Doug Piatkowski with the U.S. Army Corps of Engineers, to conduct surveys for seabeach amaranth along Bogue Banks, Dale and Doug found several new populations from Atlantic Beach to Emerald Isle. Dale showed photographs of beach vitex dominating some sections of dunes along with comparisons of nearby dunes vegetated with native species.

The USFWS is concerned that beach vitex could negatively impact nesting sea turtles, turtle nests and hatchlings as well as occupy habitat for the federally threatened seabeach amaranth, a rare plant that grows on the ocean side of primary dunes. Beach vitex also has the potential to displace dune blue curls (*Trichostema* sp. 1), a new, undescribed species of *Trichostema*. It may also displace seaside little bluestem (*Schizachyrium littorale* ssp. *littorale*) which is believed to be the host plant for an undescribed skipper (a type of butterfly), *Atrytonopsis* sp. 1. Jackie Harris suggested beach vitex has the potential to impact colonial water bird nesting sites if it invades areas behind the sand dunes.

According to information provided by Richard Olsen, a graduate student in Horticulture at NCSU, beach vitex plants were given to the NCSU Arboretum in the early 1980's. It is believed that J.C. Raulston observed beach vitex in the wild in Korea in the mid 1980's and, upon his return, began to promote the plant as a good candidate for plantings on the sand dunes in North Carolina.

SC BEACH VITEX TASK FORCE UPDATE (Betsy Brabson)

Betsy Brabson, the SC Beach Vitex Task Force coordinator, first noticed the invasive qualities of beach vitex while conducting regular beach walks searching for sea turtle crawls and nests at Debidue Beach in SC. After trying to bring this plant to the attention of various state and federal government agencies, she finally was put in contact with Dr. Randy Westbrooks, US Geological Survey. As part of the Early Detection Rapid

Response (EDRR) program, Randy came to the site, surveyed the original plantings and volunteer seedlings. He then called for a symposium which was attended by federal, state and local agencies as well as groups such as sea turtle volunteers. A task force was formed and a National Fish and Wildlife grant was applied for and received.

Betsy's presentation included photographs of various colonies of beach vitex in SC including sites at Pawley's Island, Debidue Beach, and Isle of Palms. Betsy mentioned Jack Whetstone's (Clemson University) ongoing research to evaluate the effectiveness of various herbicides on beach vitex. They will know more about the results of that study after the plants leaf out (or not) this spring. Betsy mentioned the problem of seedlings and rooted cuttings that have resulted from yard waste that included beach vitex being chipped up and spread as mulch. The SC Beach Vitex Task Force and the SC Native Plant Society have conducted beach vitex identification workshops at Huntington Beach State Park, Seabrook Plantation and Hilton Head Island. She has been interviewed by various newspapers and television stations and there will be an article about beach vitex in an upcoming issue of SC Wildlife Magazine. The SC Beach Vitex Task Force has a web site that is hosted by the North Inlet – Winyah Bay National Estuarine Research Reserve in Georgetown, SC. The web address is: <http://www.northinlet.sc.edu/resource/vitex.htm> .

SC Beach Vitex Task Force received \$47,000 in 2004 from the National Fish and Wildlife Foundation's Pulling Together grant and recently learned that they will receive an additional \$30,000 to continue their work in 2005. The purpose of the grants is to document the occurrence of beach vitex on SC's eleven major beaches and two National Wildlife Refuges; remove seedlings; train volunteers; hire a coordinator (Betsy Brabson) and purchase necessary equipment. The Task Force enlisted the help of the turtle volunteer network to help document plantings of beach vitex by GPS. Volunteers have found the plant growing at James Island, Folly Beach, Isle of Palms, North Island, DeBordieu, Pawleys Island, Litchfield, N. Litchfield, Huntington Beach State Park and Garden City Beach. Over 400 seedlings have been removed. This work will continue in 2005.

Melanie Doyle mentioned her personal experience with beach vitex that was planted in the landscape around the Aquarium. She has extensive experience with various methods of control and eradication and she noted that roots left in the ground during removal are able to send up new shoots.

Randy Westbrook credits Tommy Socha, plant specialist for the Charleston District, U.S. Army Corps of Engineers, as the first person to notice the invasive qualities of beach vitex. Originally, he thought it would be a good species to use in dune stabilization and revegetation projects, but then he became concerned about its growth because it had taken over sections of dune and created a monoculture.

Stacy Samuelson pointed out that there could be political problems if the State allows the sale of this species in some counties but not in others.

David Nash noted that the use of spray irrigation in coastal landscapes can wash off salt spray and allow species to grow in the dunes or near the beach that otherwise wouldn't be able to grow there.

Eelco Tinga, Jr. said that he doesn't believe that stopping the production and sale of beach vitex will negatively affect the nursery trade business. He has already stopped selling beach vitex and said that it was such a small part of his business that he didn't miss the income from it. He also doesn't think it will be controversial within the nursery industry if they are asked to stop selling it.

RESEARCH

Chuck Gresham gave a short presentation on the work that he and his student (Amber Neal) have done on beach vitex colonies in Georgetown County, SC. They looked at the ability of beach vitex to displace native dune species as well as the growth rate, seed production, seed germination, seedling growth and allelopathy of beach vitex.

Significant findings from his research include the average annual seaward growth rate was 188 cm with a maximum growth of 330 cm. Seed production averaged 10,920 seeds/square meter and the most productive area had a seed crop of 22,352 seeds per square meter. Beach vitex also creates hydrophobic soils and dense shade at the ground level. Allelopathic qualities were not found, but more research needs to be done. The manuscript that summarizes their work can be found on the internet at:
http://northinlet.sc.edu/resource/VITEX%20manuscript_%2011-17.pdf

LUNCH

We broke for lunch at the Bridge Tender Restaurant and then visited a beach vitex site at the ocean front end of Mallard Street toward the north end of Wrightsville Beach. David Nash is working with the Town of Wrightsville Beach to make this a demonstration project. CAMA requires that oceanfront houses be setback 60 feet from native vegetation line.

Ron Perozzi, Terra Company, Inc. showed photographs taken at a beach vitex planting on Surf City/Topsail Island. According to his observations, beach vitex plants that are watered regularly with drip irrigation are not out-competing other (native) plantings, including bitter panicum and yucca. He removed beach vitex from an irrigated area with little problem and so far no beach vitex has come back.

DISTRIBUTION

North Carolina

Atlantic Beach - escaped from plantings

Emerald Isle - escaped from plantings, seedlings observed on the beach

North Topsail Beach - escaped from plantings

Surf City - escaped from plantings

Topsail Beach - escaped from plantings

Figure Eight - escaped from plantings

Wrightsville – scattered throughout; we visited a site on the dunes at Mallard Street

Carolina Beach / Kure Beach - probable

Fort Fisher – aquarium staff found a plant that was presumably a seedling
Oak Island - escaped from plantings
Holden Beach - seedlings
Ocean Isle Beach – probable
Sunset Beach / Bird Island – no reports, Sunset is NC’s only accreting beach

South Carolina

North Myrtle Beach – probable
Myrtle Beach - present
Garden City - present
Huntington Beach State Park - seedlings
Litchfield Beach - present
Pawley’s Island – escaped from plantings
Debidue Beach – escaped from plantings
North Island / Hobcaw - seedlings
Isle of Palms - escaped from plantings
Folly Beach - escaped from plantings
James Island – planted in a landscape setting
Hilton Head? – training workshop in 2004, no plants observed yet

Georgia

Sapelo Island (Ann Gill, Mecklenburg Co.)
Little Tybee Island

Florida

Fernandina Beach - near the north end entrance, in the dunes past the Condos (Ann Gill, Mecklenburg Co.)
Scattered on beaches along the northern gulf coast (Al Schotz, AL NHP)

Alabama

Herbarium specimen from Dauphin Island, Montgomery County, AL

INVENTORY

Additional surveys

Matthew Godfrey, NC Wildlife Resources Sea Turtle Coordinator agreed to request the assistance of sea turtle volunteers throughout NC to help with beach vitex detection. Randy Westbrook agreed to attend their sea turtle training session on April 4 at Hammocks Beach State Park and give a short talk on how to identify beach vitex and the data that we would like for the sea turtle volunteers to collect.

Biologists with the U.S. Army Corps of Engineers conduct surveys for seabeach amaranth on 175 miles of beach every summer. Stacy Samuelson offered additional beach vitex survey assistance during 2005 from the U.S. Army Corps of Engineers. Staff that will already be conducting surveys for seabeach amaranth will also look for populations of beach vitex on the beach and dunes. We agreed that this additional work should not add a substantial amount of time to the survey work already being conducted

for Seabeach amaranth. If possible, Corps staff will collect GPS points where they encounter beach vitex and will categorize the colony according to size and location. We agreed to meet with Corps staff prior to the 2005 seabeach amaranth survey season to discuss our data needs.

Jackie Harris also requested that beach vitex training/identification materials be sent to the NC Aquarium for use in their environmental education program. Jackie will check on the possibility of creating a small display dedicated to beach vitex concerns.

REPORTING (Dale Suiter)

Dale Suiter showed an Excel spreadsheet that he created to keep track of various aspects of beach vitex activities. Separate pages are dedicated to various aspects of beach vitex monitoring and education including: 1.) recording information on the location, size and invasiveness of beach vitex plantings, seedlings or rooted ramets; 2.) town hall education; 3.) real estate (rental company) education and 4.) nurserymen and landscaper education.

Betsy Brabson noted that Laura Schmidt, a GIS person at the North Inlet – Winyah Bay National Estuarine Research Reserve accepts addresses and GPS locations of SC populations of beach vitex and maintains an electronic map of the species range in SC.

CONTROL

Chuck Gresham mentioned that Jack Whetstone's (Clemson University) research to evaluate the effectiveness of various herbicides on beach vitex is ongoing. They will know more about the results of that study after plants begin to leaf out this spring.

Melanie Doyle mentioned that they use the herbicide Bushmaster with a surfactant and apply it using the "cut and brush" method. Stems are cut and the open cut is then painted with the herbicide.

RANKING SYSTEM (Dale Suiter)

Dale Suiter developed a ranking system to prioritize beach vitex sites for eradication. The following list includes the suggestion from Randy Westbrook that we should make small, isolated sites with a high probability of successful eradication a top priority.

- A- covering a small area on the dunes (seedlings, cuttings, etc.); high likelihood of successful eradication
- B- covering a large area, escaped on the dunes
- C- small or large, inland
- D- small, isolated, inland site

OUTREACH / EDUCATION

Articles about Beach Vitex (up to now):

Betsy Brabson and others have been interviewed by various newspapers and television stations and articles have appeared in the Sun News, Wilmington Star, Pawley's Island Coastal Observer, Charleston's Post & Courier, Columbia's State Newspaper, etc. One

article was picked up by the Associated Press and run in at least 20 newspapers around the country.

Fact Sheet / Handout (Betsy Brabson)

Betsy Brabson and Randy Westbrook have produced a one page fact sheet about beach vitex. The beach vitex poster (mentioned below) can also be printed as an 8.5 x 11 handout.

Poster

Patty Matteson and Dale Suiter produced a beach vitex poster that was displayed at the Green n' Growin' plant show in Greensboro (January 2005), the International Sea Turtle Symposium in Savannah, GA (January 2005) and the Piping Plover Recovery Meeting in Jekyll Island, GA (February 2005). Electronic copies of the poster were available at the meeting on CD and the poster is also available at the web site listed below.

Web Sites

Again, the SC Beach Vitex Task Force has a web page at <http://www.northinlet.sc.edu/resource/vitex.htm>. The web page includes photographs, contacts and other information regarding the species and Betsy makes regular updates to the site.

Patty Matteson added that the Raleigh Field Office of the U.S. Fish and Wildlife Service recently added a poster about beach vitex to their web site. The address is: <http://nc-es.fws.gov/port/BeachVitexposter.pdf>.

The NCSU Cooperative Extension Service web site currently includes beach vitex. Dale Suiter asked Richard Olsen to see if they would remove it from their list of recommended plants.

Other Outreach Opportunities

Misty Franklin (NC Natural Heritage Program) announced the upcoming meeting of the NC Exotic Pest Plant Meeting to be held at the NC Botanical Garden on March 2, 2005. Richard Olsen, a graduate student in Horticulture at NCSU will give a presentation on the history of beach vitex in North Carolina at this meeting. Dale Suiter will give a presentation on the status of beach vitex in NC and the results of this meeting.

David Nash mentioned that he gave a talk to the NC Shore and Beach Preservation Association about seabeach amaranth and beach vitex and suggested that we interact more with that group as well as the American Shore and Beach Preservation Association.

Jackie Harris mentioned that the NC Aquarium produces an online newsletter that could be used to get out information about beach vitex.

Jesica Blake mentioned a company, Invasive Species Control, Inc. that specializes in invasive species control as well as presentations about invasive species. The NC Coastal Land Trust has hired them to address English ivy issues on Ocracoke Island.

Other outreach suggestions and the person making the suggestion:

SC Nursery show, Myrtle Beach, SC, February (Eelco Tinga)

Radio spots for the aquarium (Jackie Harris)

Extension service radio show (David Nash)

Coastal Gardner on local television (David Nash)

Carolina Gardener Magazine (Dale Suiter)

Paul Hosier, ecologist UNCW (David Nash)

Bill Cleary, geologist UNCW (Stacy Samuelson)

William Cleary (910-962-2320), but he is a coastal geologist. Probably your best bet would be to call Martin Posey (910-962-3470)

Public Service Announcement on the local cable station

Sea Grant's Coastwatch Magazine (David Nash)

Interpretive signs at the north end of Wrightsville Beach (Alan Cradick)

NC Coastal Federation (Jessica Blake)

PARTNERS (Randy Westbrooks and Dale Suiter)

Below is a list of potential partners that may be potential cooperators in our efforts to prevent the spread of beach vitex:

Government Agencies

U.S. Geological Survey

U.S. Army Corps of Engineers

U.S. Fish and Wildlife Service

Natural Resources Conservation Service

National Park Service (National Seashores)

NC Department of Agriculture and Consumer Services

NC Natural Heritage Program

NC Botanical Garden

NC Aquariums

NC Division of Coastal Management

NC State Parks and Recreation Areas

NC Division of Coastal Management

NC Coastal Reserve Program

Nursery Industry

NC Association of Nurserymen

NC Landscape Association

Sea Turtle Volunteers

NC Wildlife Resources Commission

Municipalities

Bald Head Island / Bald Head Island Conservancy

Atlantic Beach

Emerald Isle
North Topsail Beach
Surf City

Other

NCSU Extension / NCSU Arboretum
NC Exotic Pest Plant Council
Homeowner Associations
Coastal Land Trust
Sea Grant
Audubon Society of NC
The Nature Conservancy
NC Coastal Federation
BASF

WHERE DO WE GO FROM HERE? (Randy Westbrook)

Randy Westbrook suggested that NC needs an invasive species council and that a NC Beach Vitex Task Force would be a working group under this bigger umbrella. We can work cooperatively with the SC Beach Vitex Task Force to learn from their experiences, share ideas, develop joint projects and team together to apply for grants. David Nash agreed to take on a leadership role regarding the development of a NC Beach Vitex Task Force

Misty Franklin noted that there is already the NC Exotic Pest Plant Council that fulfills some of the needs that an invasive species council might fill. In fact, beach vitex is the featured plant at this year's annual meeting at the NC Botanical Garden on March 2, 2005.

It was also recommended that we consider a Beach Vitex Symposium modeled after the upcoming SC Beach Symposium to be held on March 10 in Georgetown, SC. Jackie Harris suggested that the NC Aquarium might be able to host such a symposium and offered to check with Aquarium management to see if we could use their facility.

THINGS I FORGOT TO MENTION AT THE MEETING:

Alexander Krings, Curator of the Herbarium at NCSU received a specimen of beach vitex in 2001. It was collected at Pawley's Island, SC by a NCSU employee.

Little is known about beach vitex seed transport, viability and germination. Dale Suiter placed 25 seeds in a plastic cup with approximately a cup of tap water on November 23, 2004. Additional water was added as evaporation took place. In January, 2005, the seeds and water were placed in a glass jar with a lid and stored in the refrigerator. To date, all but one of those seeds is still floating. This makes one wonder about the potential for beach vitex seeds to float out to sea (note that salt water makes things more buoyant than fresh water) and once seeds are in the Gulf Stream, they could be transported to various locations in the Atlantic Ocean.

Ann Gill with Charlotte Mecklenburg recycling program is currently conducting experiments to determine the viability of seeds after they have passed through the composting process.

ORIGINAL MEETING ANNOUNCEMENT:

Hello Folks

I'm sure that many of you have heard about beach vitex (*Vitex rotundifolia*), a potentially invasive plant species that was brought to the southeastern U.S. through the horticulture trade. Native to Asia, beach vitex has been promoted as a fast growing dune stabilizer. It has been planted on many of our dunes and coastal landscapes and appears to be overtaking the native plants on some sections of our beaches. Cursory surveys indicate that it is present on most of the beaches between Atlantic Beach, NC and Folly Beach (Charleston), SC. There is currently one report each from Florida and Alabama.

Sea turtle enthusiasts in SC recently brought this plant to the attention of biologists interested in coastal issues and the SC Beach Vitex Task Force was formed. As a result of the awareness they raised about beach vitex, several large stands of this species have been found on NC beaches. There are concerns that beach vitex may impact sea turtle nesting areas and occupy habitat for the endangered seabeach amaranth as well as several other rare plants and animals. Beach vitex may also be crowding out native dune vegetation such as sea oats, bitter panicum, American beachgrass, etc. For additional information about beach vitex, please see the attached fact sheet prepared by the SC Beach Vitex Task Force or visit their web site at <http://www.northinlet.sc.edu/resource/vitex.htm>.

Since the key to addressing invasive species is to catch the problem early, I am proposing a meeting on Thursday, January 20, 2005 in Wilmington, NC to discuss beach vitex issues on the North Carolina coast. David Nash with the NC Cooperative Extension Service has kindly offered to host the meeting at the New Hanover County Arboretum at 6206 Oleander Drive in Wilmington, NC. Directions to the facility are at the bottom of this email. The meeting will begin at 10:00 am and we will break for lunch and visit a beach vitex site in Wrightsville Beach. If you wish to have lunch as a group at a seafood restaurant in Wrightsville Beach, please bring small bills so that you can pay with exact change.

I appreciate your interest in beach vitex and I hope that you can attend this important meeting. Since the meeting space is limited, please RSVP as soon as possible so we know how many to expect and also please contact me if you think someone should be invited who is not on the "To:" list. Finally, please review the draft agenda below and let me know if you have additional topics that you would like to discuss at the meeting.

Directions to the New Hanover County Cooperative Extension Office

From I-40

Upon entering Wilmington, I-40 officially ends and becomes NC 132 (College Road). Stay on this four lane road heading South until it intersects with Oleander Drive (US 76). Turn left (heading east) at the intersection of College Road and Oleander Drive. Travel approximately 5.5 miles to 6206 Oleander Drive. The New Hanover County Extension Center will be on the right side of the road.

From Hwy 17 coming from North of Wilmington

Upon entering Wilmington via Hwy 17, take Hwy 17 Truck by-pass (Military Cutoff Rd.). Stay on this for next several miles. The road changes names to Oleander. Roughly 1/4 mile past the Bradley Creek bridge, the Extension Center offices will be on the left.

From Hwy 74/76 heading East and from Hwy 17 coming from South of Wilmington
Highways 74/76 & 17 merge together coming over the Cape Fear River Bridge into Wilmington. Come over the bridge and go straight at the light. This will put you on Dawson Street. Travel approximately 3 miles on Dawson Street until you reach Oleander Drive. Travel approximately 8.5 miles on Oleander Drive until you reach 6206 Oleander Drive. The New Hanover County offices for Extension Center will be on your right.

Attached is a list of meeting attendees. If you attended, please review your entry and make sure we have included your contact information correctly.

Beach Vitex Meeting, February 25, 2005, Wilmington, NC

Name	Agency	Address	Phone	Email
Dale Suiter	US Fish & Wildlife Service	P.O. Box 33726 Raleigh, NC 27636	919-856-4520 ext. 18	Dale_Suiter@fws.gov
Patty Matteson	US Fish & Wildlife Service	P.O. Box 33726 Raleigh, NC 27636	919-856-4520 ext. 25	Patty_Matteson@fws.gov
Alan Cradick	Audubon NC	7741 Market Street Wilmington, NC 28411	910-270-9316	VUFINDER@bellsouth.net
Eelco Tinga Jr.	Tinga Nursery Inc.	2918 Castle Hayne Rd. Castle Hayne, NC 28429	910-762-1975	Tinnur1913@bellsouth.net
Jackie Harris	NC Aquarium Ft. Fisher	900 Loggerhead Rd. Kure Beach, NC 28449	910-796-0100	Jackie.e.harris@ncmail.net
Wayne Batten	Pender Co. Coop Ext	801 S. Walker Street Burgaw, NC 28425	910-259-1235	Wayne_batten@ncsu.edu
Jesica Blake	NC Coastal Land Trust	131 Racine Dr. Suite 101 Wilmington, NC 25403	910-790-4524	jesica@coastallandtruust.org
Maureen Dewire	Bald Head Island Conservancy	P.O. Box 3109 Bald Head Island, NC 28461	910-457-0089	Maureen@bhic.org
Matthew Godfrey	NC Wildlife Resource Comm.	1507 Ann St. Beaufort, NC 28516	252-728-1528	mgodfrey@seaturtle.org
Joanne Harcke	NC Aquarium Ft. Fisher	900 Loggerhead Rd. Kure Beach, NC 28449	910-796-0100	Joanne.harcke@ncmail.net
Melanie Doyle	Horticulturist, NC Aquarium	900 Loggerhead Rd. Kure Beach, NC 28449	910-458-8257 ext. 250	Melanie.doyle@ncmail.net
Randy Westbrooks	US Geological Survey	233 Border Belt Dr. Whiteville, NC 28472	910-640-6435	rwestbrooks@usgs.gov
Betsy Brabson	SC Beach Vitex Task Force	320 Bonnyneck Dr. Georgetown, SC 29440	843-546-9531	wbrabson@sccoast.net
Anthony Snider	NC Coastal Reserve	P.O. Box 15404 Wilmington, NC 28408	9110-262-8228	asnider@fastmail.fm
Chuck Gresham	Clemson Univ.	P.O. Box 596 Georgetown, SC 29442	843-546-6314	cgrshm@clemson.edu
Ron Perozzi	Terra Co. Inc.	2542 Highway 210 E. Hampstead, NC 28443	910-329-1290 910-279-4902	terracoinc@yahoo.com

Stacy Samuelson	USACE	69 Darlington Ave. Wilmington, NC 28403	910-251-4480	Stacy.d.samuelson@saw02.usace.army.mil
Misty Franklin	NC Natural Heritage Program	1516 Mail Service Center Raleigh, NC 27699-1615	919-715-8700	mistyfranklin@ncmail.net
David T. Patterson	NCOA & CS	Plant Protection Section PO Box 27647 Raleigh, NC 27611	919-733-6930 ext. 246	David.patterson@ncmail.net
David Nash	NCCE	6206 Oleander Dr. Wilmington, NC 284003	910-452-6393	David_nash@ncsu.edu

The following people were interested in the meeting, but couldn't attend:

Name	Agency	Address	Phone	Email
Rob Evans	NC Plant Conservation Program	1060 Mail Service Center Raleigh, NC 27699-1060	919-733-3610	Rob.Evans@ncmail.net
Johnny Randall	NC Botanical Garden	NC Botanical Garden, Campus Box 3375 Chapel Hill, 27599-3375	919-962-0522	jrandall@unc.edu
Joe Neal	NCSU Horticulture	NCSU, Box 7609 Raleigh, NC 27695-7609	919-515-9379	jcneal@unity.ncsu.edu , joe_neal@ncsu.edu
Jack Whetstone	Clemson University, Baruch Institute	P.O. Box 596 Georgetown, SC 29442	843.546.6231	jwhtstn@clemson.edu
Courtney Murren	College of Charleston	58 Coming Street Room #214 Charleston SC 29424	843-953-8077	murrenc@cofc.edu
Andrew Bell	NC Botanical Garden	NC Botanical Garden, Campus Box 3375 Chapel Hill, 27599-3375	919-962-0522	bell@unc.edu
Richard Olsen	NCSU Horticulture	Kilgore Hall Box 7609 Raleigh, NC 27695-7609	919-515-3178	rtolsen@unity.ncsu.edu

OTHER

Invasive Plant Atlas of New England (IPANE) a model for detecting and databasing invasive species.

Jennifer Koches spoke about an incident on Isle of Palms, SC where sea turtle hatchlings crawled toward artificial light on a condo (away from the beach) and got caught in beach vitex stems. Approximately 80 sea turtles died.