

Southeast Coast Exotic Plant Management Team

June 26th – July 1st, 2013



Cape Hatteras National Seashore

1401 National Park Dr, Manteo, NC 27954

During this trip to Cape Hatteras (CAHA), the Southeast Coast Exotic Plant Management Team (SEC-EPMT) returned to the Cape Point marsh area to treat the *Phragmites australis* (European reed) infestations. CAHA staff member, Sara Strickland, and volunteer, Andrew, provided valuable assistance with the field treatments. Despite rainy weather that slowed field work, the team was able to treat *Phragmites* in all the areas that were treated the previous year (due in part to Cape Hatteras providing two extra members to the team). In addition to the field commitment, CAHA's ability to provide the team with herbicide and housing was greatly appreciated, making Cape Hatteras one of the SEC-EPMT's strongest partners this year. The *Phragmites* treatment areas had a variable response to the 2012 herbicide treatments. Some areas that had dense *Phragmites* cover with a height of 3.5 feet responded very well to the treatment and showed very little regrowth this year, while other areas that had dense *Phragmites* six-feet in height still contained a large population of healthy *Phragmites* in 2013. Ideally, these same treatment areas need to be treated again in September of 2013, ensuring a biannual treatment schedule to help knock the older, denser infestations back. CAHA plans for 2014 should include pretreatment path work, treatment with the SEC-EPMT in mid-late May, and two follow-up treatments by CAHA to make the SEC-EPMT treatment worthwhile in order to begin controlling the smaller *Phragmites* populations.

Dates Visited:

June 26-July 1st, 2013

CAHA Admin day at CONG, July 2

Species Targeted:

Phragmites australis (European Reed)

Focus Areas:

Hatteras Island, Cape Point marsh
Between access ramps 44 and 45

Acres Inventoried/Gross Infested:

5.84 acres

Acres Treated:

3.79 acres

Team Members:

Amorita Brackett (Field Crew Leader)
Abby Prieur
Chris Sheldon
Darrin Gobble



Figure 1. SEC-EPMT treats *Phragmites australis* in Cape Point marsh at CAHA. Note the mixture of both live and dead *Phragmites* stalks.

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Equipment Used:

Backpack Sprayers

Area Hazards:

Extreme sun exposure, heat, ticks, snakes, lightning

Herbicide Use:

Name	Active ingredient	% Herb	Total mix used	Volume of Undiluted Herbicide	Diluent	Species	Treatment	Gross Infested Acres Treated
Rodeo	Glyphosate	2%	555 L	11.1L	Water	<i>Phragmites australis</i>	foliar	5.84



Figure 2. A SEC-EPMT crewmember observes a successfully treated area of *Phragmites australis* from 2012 at CAHA off Ramp 45.

Treatment Notes:

In conjunction with the significant rain encountered by the SEC-EPMT this trip, the rising water-level in the marsh slowed treatment of the Cape Point *Phragmites*. Next year, the SEC-EPMT should be prepared to have waders and snake chaps available in case of rain/high snake activity. CAHA's commitment and assistance with field treatments and contributions to the SEC-EPMT was valued and appreciated. The success of the 2012 treatments varied, as the smaller *Phragmites* areas off Ramp 45 had significant biomass die-back, while the denser sections of tall *Phragmites* in the eastern treatment polygons were a mixture of dead stalks and tall healthy plants. Last year's treatment recommendations for the Cape Point Marsh site remain in place for this year; previously treated areas must be maintained before starting any new treatments.

The crew took advantage of rainy weather to visit Bodie Island Lighthouse and view the *Phragmites* patches on the island from above (thanks to NPS Staff Charley Kolb for the access).

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The SEC-EPMT took the opportunity to wash the EPMT Truck using CAHA's car wash, although its main purpose is to remove salt and sand, its ability to remove invasive plant vegetation and seed from equipment should be noted and we encourage any CAHA staff who drive through or mow *Phragmites* to utilize this type of wash for their equipment, as *Phragmites* can be spread via fragments of the rhizomes as well as by seed.



Figure 3. The SEC-EPMT washes vehicles that have been contaminated with invasive *Phragmites australis* rhizomes and seeds after working at CAHA.



Figure 4. The dense *Phragmites australis* infestation at Cape Hatteras observed from the Bodie Island lighthouse.

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GLOSSARY OF TERMS

Inventoried Area

The inventoried area is the total area covered by the Exotic Plant Management Team (EPMT) during the course of invasive plant management/control activities. An area may be considered “inventoried” regardless of the presence/absence of target invasive plant species. The inventoried area is obtained by GPSing the perimeter, GPSing perimeter points, or digitizing the perimeter on screen using landform references.

Gross Infested Area

The gross infested area is defined as the general perimeter of an infestation. Gross infested areas contain the target species and the spaces between these populations, colonies or individuals. A gross infested area is described by a polygon or a line feature (i.e. riparian course, roadway) which is buffered to account for the maximum distribution of individuals within the inventoried area.

Infested Area

The infested area is the actual area covered by the canopy of an invasive plant species within the gross infested area. The infested area does not include the spaces between individuals, colonies or populations of the target invasive plant species. The total infested area may be comprised of multiple infested areas, which are defined by polygons, buffered points, buffered lines, or calculated from a stem count in which each individual is assigned a coverage multiplier that was derived by monitoring.

Treated Area

Treated area is defined as either the entire infested area if it was treated during the course of work conducted by the EPMT or a subset of an infested area which has received treatment action(s). Treatment area is defined by polygons, buffered points, buffered lines, or calculated from a stem count in which each individual is assigned a coverage multiplier.

***All of these terms apply to single species measurements. When there is more than one invasive species in an area, the above measurements need to be applied to each species (population) individually.**