

2006 Restoration Day: Trent Hall Site
Status Update
As of September 2006

Update from Rich Takacs, NOAA Restoration Center

I've been back down to the Trent Hall site a number of times since the Restoration Day Event. Most notably was the filming of a kid's science/environment TV segment for a cable TV show called Aquakids, But we have also done a hands on "Restoration Day in miniature" as part of a Maryland SeaGrant Teacher Training program, and most recently we did a site visit and tour for a group of future Agricultural Leaders in Maryland program.



Oysters

The short and sweet is that the oysters in the area continue to thrive, and additional ones have been planted since June. Disease has been very low this summer, as the rains have kept salinity down after a fairly dry spring. We will not be able to get a good sense of any spatset until later this fall, but it is typically pretty low at this site and since the salinity is down that makes it more unlikely for this year.

Beach: Grass Plantings

The beach area continues to be quite stable, with only minor, expected shifts in sand locally, but no appreciable net loss or gain. The *Spartina alterniflora* that was planted in limited areas at the beach site is struggling to hang on in a couple of places, but I think we are right on the verge where that material can tolerate energy wise (Walter Priest had said that previously).



The beach has gotten extensive use by terrapins nesting this summer, though natural predation by foxes and raccoons can be pretty high. When we were there in July, we were able to count over 60 nests in just that day, so undoubtedly there were a lot more than that over the season. The back beach *S. patens* continues to grow, with good plant height, and we expect lots of seed dispersal to occur this fall, which should really help fill the site in over the next year.



Terrapin nest at beach area

Created Marsh: Plantings

Back in the created marsh, the *S. alterniflora* continues to exceed just about anything we've ever seen at any of our restoration sites, in height, shoots, health, and coverage. Many of the plants now have large seed heads, so with additional rhizome growth and seed dispersal this Fall the marsh will likely look even better next spring. Predation by geese (the reason for all the posts, fences, and string) has been minimal to none, and we'll be looking to take that down likely after this winter. The channels within the wetland site continue to take their own natural shape, moving slightly over time as the site matures. During each subsequent visit, we've seen osprey and herons back fishing within the marsh, a sure sign that larger fish are migrating in and out of the site with the tides, and blue crabs are throughout the channels as well. The small shrubs that we planted along the berm have done well in some areas, and not so well in others, and it looks like the biggest reason would be that in some areas they really suffered from lack of water (rainfall). Depending on the amount of roots they were able to put down, some of these poorer plants may overwinter and still come up next spring.

Beach: Underwater Grasses (SAV)

Lastly, it appears that our test plantings of underwater grasses grown in NOAA offices were indeed just that, test plantings. When we visited the site in mid-August, the enclosure was still intact, but all of the plant material inside of it was gone. When Peter Bergstrom checked the water clarity (recall that is principally the limiting factor for SAV in the mid-Patuxent), it was pretty poor that day. Though this is disappointing for volunteers (especially those who helped to grow the grass), the information learned through this type of test helps Bay scientists to better understand and predict successful plantings in the future.



Possible Reasons Why the Trent Hall SAV planting failed:

Water quality monitoring data collected by Maryland Department of Natural Resources show that the Patuxent has a strong and consistent gradient of water clarity--clearer water near the

mouth. Trent Hall is several miles north of the zone where water clarity should be adequate to support SAV growth. (Some SAV transplants have survived at Jefferson Patterson Park, within the zone where SAV was expected to survive). Peter Bergstrom hoped that by planting them in shallow water they might survive, but this did not happen. For more information about where SAV planting has been successful in the Patuxent, see: http://www.dnr.state.md.us/bay/sav/restoration/pax_gen_info.asp

Read more recent SAV information: <http://www.bayjournal.com/> (also attached as pdf)

We'll be continuing other activities out on the site over time, so will be able to provide additional update in the future.