

In Search of...Trash?

Usually, a long walk on the beach evokes images of shell collecting, exercise, or even romance. This week, volunteers from Covenant Presbyterian Church in Wendell, N.C. took a long walk for a different purpose. They were searching for marine debris at the Rachel Carson Reserve, and recording data about their collection efforts to assist in ongoing debris monitoring at North Carolina Coastal Reserve sites.

Wading through sand, wetlands, shrubs, and maritime forests, the group of teenage volunteers and their youth group leader, Jennifer Carnes gamely picked up trash of all varieties for recording and disposal. The youth group from Covenant Presbyterian travels to coastal North Carolina every year for service activities, including volunteering at the Rachel Carson Reserve near Beaufort, N.C. Ms. Carnes says volunteering for the N.C. Coastal Reserve motivates teenagers to become stewards of the environment, and encourages responsible behavior. She explains that “if they pick up trash here at the N.C. Coastal Reserve, and see what it does to the environment, the next time they see trash in a parking lot, they will already know to pick it up and throw it out.”



Trash and marine debris are a persistent problem for coastal environments. While trash at N.C. Coastal Reserve sites is a direct result of visitors leaving items behind, marine debris are waste products that are released into the marine environment and often wash ashore in coastal areas. Marine debris originates from construction activity, recreational boating, commercial shipping, or fishing activities. Trash and marine debris pose significant risks to vegetation and wildlife found at N.C. Coastal Reserves, including crushing vegetation and entanglement or ingestion by animals. Marine debris can also act as a vector for invasive species due to their unknown origins and lengthy decomposition time.

Waste has been monitored at the Rachel Carson Reserve for several years, in an effort to understand debris composition and how visitors perceive the impacts of trash and marine debris on their recreational experience at the Reserve. A survey conducted by former NOAA intern Katherine Strauss in 2008 found that the Reserve’s “pack-in pack-out” trash policy was well received with visitors, but that signage placement could be improved to better inform visitors of their trash responsibilities. The survey also found that while visitors knew about marine debris, they often struggled to understand what types and sources of marine debris were prevalent at the Reserve. Outreach and education for coastal landowners, construction companies, recreational boaters, and fishermen could illustrate the effect of marine debris on the environment and advocate simple solutions for preventing debris and trash from being released into coastal waters.

The N.C. Coastal Reserve has been taking concrete steps to clean up marine debris found at Reserve sites. At the Rachel Carson Reserve, over 14,000 pounds of trash and marine debris have been removed by volunteers and staff since 2008. The Covenant Presbyterian youth group joined over 682 previous volunteers who contributed to trash identification and removal at the Reserve. In conjunction with these efforts, the First Annual North Carolina Marine Debris Conference will be held at the NOAA Laboratory in Beaufort, N.C. September 18-20, 2013. The conference will focus on the environmental and social impacts of marine debris.



As the volunteers from Covenant Presbyterian learned, whether lying on the beach or hidden among the salt scrub, trash can impact natural places like the N.C. Coastal Reserves in a variety of different ways. Responsible use of the Reserve by visitors, increased awareness of the origins and effects of marine debris, and dedicated volunteer efforts to remove marine debris all play a significant role in limiting the negative impacts of trash on natural ecosystems and preserving pristine environments for conservation and public enjoyment.