

## From Charlotte to the Rachel Carson Reserve- Tales from a Middle School Field Trip

“Everyone chew on this plant for a few seconds, then I’ll tell you what it is” explains North Carolina Coastal Reserve Education Coordinator Lori Davis. So begin the squeals of delight as Countryside Montessori students of Charlotte, NC experience the tingling sensation that accompanies a chew on the leaf of the prickly ash tree (*Zanthoxylum americanum*). Davis then discusses how the leaves of the “toothache tree” were used by early dentists to numb patients’ mouths before pulling a tooth.

The Rachel Carson Reserve, part of the National Estuarine Research Reserve and the North Carolina Coastal Reserve, is an ideal location for students to use eyes, ears, and tastebuds to explore an important coastal habitat. In addition to tasting the leaves of the toothache tree, students also sampled pickleweed (*Salicornia sp.*) plants known for their salty and tangy taste. In the Reserve’s marsh grasses, students used the vibrations of their voices to coax mud snails (*Ilyanassa obsoleta*) out of their shells, and listened for shore birds overhead.



After investigating species like fiddler crabs (*Uca sp.*), whelks (*Busycon sp.*), and ghost crabs (*Ocypode quadrata*), the students spotted the Reserve’s most well-known inhabitants. Feral horses, their domestic descendants originally sent to Reserve islands for grazing in the 1940s, now roam the Reserve munching on marsh grass and drinking from fresh water lenses found in the interior of the island. Students also learned about the important nursery function of estuarine habitat for valuable fish and shellfish species.

For middle school educators at Countryside Montessori, the six hour bus ride from Charlotte to Beaufort is worth the trip. Beaufort and the NC Coastal Reserve offer “more than just entertainment” for student groups, says Countryside Montessori teacher Jarrett Murgolo. In addition to offering a pristine estuarine environment for students to explore, Mr. Murgolo emphasizes that learning about the relationship between estuaries and seafood provides perspective on the connections between humans and natural resources.



Students agree that getting up close to the inhabitants of the salt marsh increased their understanding of why estuaries are important. Student Charlie Synder says he has a better appreciation for the unique brackish conditions of estuary systems “where salt water and fresh water

from the rivers come together.” Estuary plants and animals also made a big impression on the students, with Ethan Funk exclaiming that “the different types of crabs on the beach” were the best part of his trip to the Rachel Carson Reserve. However, on the boat ride back to the Coastal Reserve Headquarters, chatter among students continued to focus on the toothache tree and its tingly taste!