

Planting vegetation is an accepted dune management practice, but there are few studies of the plantings ten years later. Vegetation was planted at North Beach dune ten years ago to stabilize the dune. Our research project investigated the success of the planted vegetation compared to the natural vegetation on the dune. We created a grid of the dune and randomly chose places on the windward slope and slipface where we collected vegetation samples using transects and quadrats. We used the variables of vegetation height, health, density, and the soil moisture content to determine the effects of the vegetation on the now stable dune. Results show that the dune has significantly increased in its vegetation density, allowing stabilization of the dune. The edges of the dune, near the sand fences, are more

Vegetation is planted on a dune to slow dune advance. The most common vegetation type is *A. breviligulata* (Figs. A and B). Ten years ago *A. breviligulata* was planted on North Beach dune for the purpose of stabilizing the dune. We studied North Beach dune to see how the planted *A. breviligulata* compare to the vegetation that has grown naturally on the dune.

Planted and natural vegetation at North Beach dune are similar in their height, density, and health, but differ in their water content and sand movement. Even though planted vegetation was an overall success, a weakness was the lack of diversity compared to the natural locations.

- [1] Françoise, R. and S. Lemauiel. 2004. "Dune Restoration in North Brittany, France: A 10-year Monitoring Study." *Restoration Ecology* 12 (1): 29-35.
- [2] D. H. Slaymaker, M. S. Peek, J. Wresilo, D. C. Zeltner, and Y. F. Saleh. 2015. "Structure of Native and Restored Populations of American Beachgrass (*Ammophila breviligulata*)". *Journal of Coastal Research* 31 (6): 1334-1343.
- [3] Maun, M. and J. Lapierre. 2003. "Sand on *Ammophila breviligulata*". *Journal of Ecology* 72: 827-839.