



USDA-NRCS Cape May Plant Materials Center

Developing Plant Technologies for a Changing Climate



Introduction

The Cape May Plant Materials Center has been working with native coastal plants since its inception in 1965. The USDA-NRCS recognizes that climate change and climate variability may impact the environment by potentially changing, among other things, soil and vegetation relationships. Due to the network of Plant Centers nationwide, the NRCS Plant Materials Program is particularly well positioned to design and conduct regionally and nationally coordinated studies needed to support the Agency's goals. In light of this, the Cape May Plant Materials Center (PMC) is taking a multipronged approach in relation to developing new plant technologies. The Center is screening existing PMC releases to determine tolerance to projected climate changes (e.g., increased drought, prolonged flooding, increased salt, etc.) and is developing new plant materials as needed to ensure sustained ecosystem diversity. Some of these priorities include selecting and testing more southern germplasm for adaptability to the northern Mid-Atlantic/southern New England area.

Carbon Sequestration

-Evaluating soil carbon increases with depth under six species of native warm season grasses. (with USDA-ARS)



Wildlife Habitat Improvement

-Direct seeding trials of native coastal shrubs for wildlife habitat. (with USFWS-Cape May Wildlife Refuge)



Shorelines/Streambanks



- Screening tidal shoreline species for salinity tolerances.

-Testing native warm season grasses for riparian buffer applications (with USDA-Ag. Res. Service)



-Developing seeding/planting technology for vegetating tidal shorelines, marshes and dredged material (with ACOE-NY District)



Coastal Sand Dunes



-Selecting a cold tolerant sea oats for the northern Mid-Atlantic

-Developing seeding technologies for sand dune stabilization

