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Biography:

Tommy Socha graduated from Trident Technical College with an 'Associate in Agriculture' and has been employed by the Corps of Engineers for almost 30 years as a Plant Specialist and Engineering Technician. He has been in charge of plans and specifications for grassing and fencing for over 50 miles of Beach Dune Restoration Projects in South Carolina. He continues to coordinate with the NRCS Plant Material Center to have accession numbers assigned to plant material and is working to re-establish sweetgrass along the South Carolina coastline. Presently he sits on the "State Plant Materials Advisory Committee for the Brooksville Plant Materials Center in Brooksville, Florida where he makes recommendations on the use of plant materials.

Results from USACE Charleston District Dune Vegetation Shore Protection Project

The U.S. Army Corps of Engineers Charleston District has been incorporating passive dune creation into its shore protection projects since 1992. Passive dune creation is accomplished through the construction of V-shaped fence panels, spaced at even intervals along the landward edge of the beach berm. The fencing traps the wind-blown sand and allows for the formation of a dune where none existed previously. In addition, several species of beach grasses are planted immediately adjacent to the fencing. These grasses aid in trapping the wind-blown sand, but their primary purpose is to stabilize the newly formed dunes and encourage long-term dune growth after the fencing is buried. The Charleston District has a history of success using fencing and grass planting to create dunes at Federal projects in Folly Beach, SC and the Grand Strand (N. Myrtle Beach, Myrtle Beach, Garden City, and Surfside).

In 2005, sweetgrass plants (a.k.a. Gulf hairawn muhlygrass, *Muhlenbergia filipes*) were test planted at Folly Beach and added to the normal beach grass mix of sea oats (*Uniola paniculata*), bitter panicum (*Panicum amarum*), and marshhay cordgrass (*Spartina patens*). Sweetgrass is native to coastal areas of the South Atlantic and Gulf of Mexico. In addition to being an important component of the coastal plant community, sweetgrass is the foundation material for African-coiled basketry in the Southeast, particularly in the Gullah/Geechee community around Mt. Pleasant and Charleston, South Carolina. Development along the South Carolina coastline has greatly reduced the number of sweetgrass stands and endangered the basket weaving tradition in the area. Sweetgrass is the only source of grass that is used for the infamous Sweetgrass Baskets. Basket making, to the sweetgrass basket makers, is a direct link to their African heritage and their baskets today are objects of art, highly prized in the market place. Charleston basket makers are the direct descendants of enslaved Africans originally native to the West African Rice Kingdom, who brought this art with them. Production of sweetgrass baskets were an integral component of the colonial Rice plantations in the Lowcountry and were used in the processing, storage and transport of rice.

Presently, the Charleston District is working with Natural Resource Conservation Service (NRCS) on a sweetgrass planting study. The Charleston District has had success planting sweetgrass, but would like to maximize the survival rate. The District has partnered with NRCS to perform a study to find the best possible planting procedure and time of year to plant the sweetgrass. The study is designed to

determine if the plant needs any assistance (fertilizer, polymer, or combination) in order to maximize the survival rate. In addition, the District has asked NRCS to assess whether *Muhlenbergia filipes* or another *Muhlenbergia* grass can be used on the District's upland dredged material disposal basins to help reduce erosion.