2025
Report of Activities

Golden Meadow Plant Materials Center

438 Airport Road – Galliano, LA 70354 – Telephone: 985.475.5280 - Fax: 844.325.6941

http://plant-materials.nrcs.usda.gov/lapmc

This report highlights the major accomplishments performed and achieved at the United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) Golden Meadow Plant Materials Center (LAPMC), Galliano, LA during calendar year 2025. For more detailed information, please contact the PMC Manager on 985.475.5280.

Coastal Studies and Evaluations

According to the U.S. Geological Survey's analysis in 2011, Louisiana lost an average of 16.6 square miles of land a year from 1985 to 2010. In total, the state lost 1,883 square miles of land between 1932 and 2010. The effects of the state's land loss include decreased flood protection during hurricanes and tropical storms.

Louisiana's coastal wetlands, which make up roughly 11 percent of the state, are one of the most unique ecosystems in the world, creating habitat for marine life. Seventy-five percent of Louisiana's commercial marine life depends on the state's wetlands for breeding and survival, according to the Louisiana Coastal Protection and Restoration Authority (LCPRA, 2017).

Coastal wetlands, such as the ones in Louisiana, also protect against floods by slowing flood waters and tidal surges through plant root networks. One acre of wetland can store roughly one million gallons of water, according to the Environmental Protection Agency (EPA, 2006). These coastal marshes, beaches and wetlands are composed primarily of hardy, salt tolerant grasses. The LAPMC currently has 2 projects under evaluation to identify native grass species that will help protect our coast from erosion, provide food and cover for wildlife and fisheries, and preserve the natural resources of coastal ecosystems.

Evaluation of *Distichlis spicata* for Coastal Restoration

Distichlis spicata (saltgrass) under evaluation for plant spread

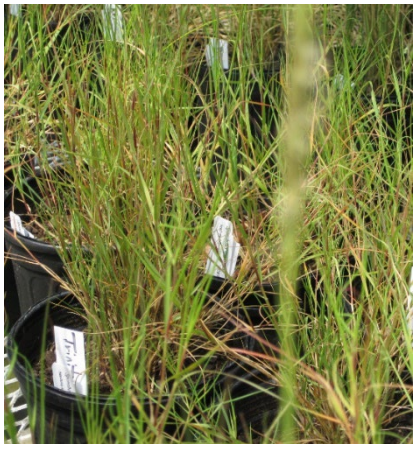
The LAPMC concluded an initial study with *Distichlis spicata*, also known as saltgrass. Saltgrass is a hardy perennial erect grass growing up to approximately 20 inches in height. This species spreads by rhizomes and sometimes stolons and thrives on salt flats and disturbed soils. Twenty-five accessions collected in coastal zones of Louisiana were planted in an experimental plot at the LAPMC. After several years of data collection, 5 of the 25 accessions were statistically greater in height, canopy cover and overall plant vigor. The 5 accessions are scheduled to be planted at multiple coastal locations in the spring of 2026 and the same growth characteristics will be evaluated. After the advanced field trials are completed, it is the LAPMC's intention to have a vegetative plant release of saltgrass.

Distichlis spicata (saltgrass) evaluation pond under flooded conditions

Evaluation of *Sporobolus virginicus* for Coastal Restoration

Sporobolus virginicus, also known as seashore dropseed, is a low growing perennial tussock or bunching grass growing from 3.9 to 19.7 inches in height. Its flowers are purple. It reproduces asexually by both stolons and rhizomes and is adapted to low fertility soils such as those found on Louisiana's beaches and marshes.

The LAPMC is evaluating 24 seashore dropseed accessions, which were vegetatively sampled across coastal areas of Louisiana. The accessions were planted in an observational pond that has the capabilities to be flooded and drained to mimic tidal fluctuations.



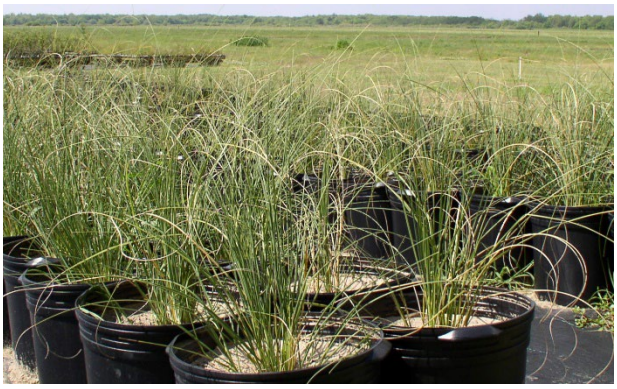
Sporobolus virginicus (seashore dropseed) grown in gallon pots for initial experimental plots

Characteristics such as plant height, percent canopy cover and overall plant vigor are measured and recorded several times a year. Intentions are to select five accessions to move on to advanced trials resulting in a vegetative release to fill a need for salt tolerant grasses for coastal and critical area restoration projects.

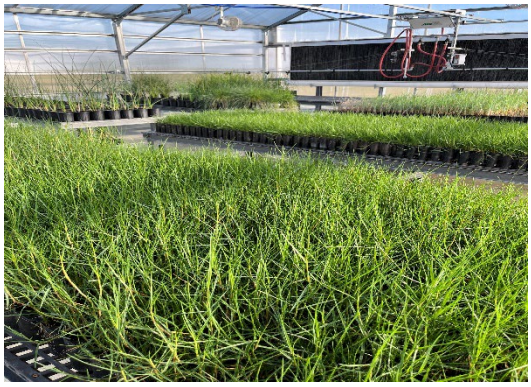
Sporobolus virginicus (seashore dropseed) evaluation pond under flood condition

Plant and Seed Distribution

The LAPMC has been increasing vegetative material of 'Vermilion' smooth cordgrass, 'Gulf Coast' marshhay cordgrass, Timbalier Germplasm gulf bluestem, Brazoria Germplasm seashore paspalum, Fourchon Germplasm bitter panicum, Caminada Germplasm sea oats, West Bay Germplasm gulf cordgrass and Bayou Lafourche Germplasm California bulrush. In 2026, the LAPMC will continue to increase vegetative material for distribution to commercial growers. The vegetative material fills the need for coastal and critical area planting restoration projects.



LAPMC foundation material of *Uniola paniculata* (Caminada Germplasm seaoats)



LAPMC foundation material of *Paspalum vaginatum* (Brazoria Germplasm seashore paspalum)

Staffing Changes

Hannah Ramirez-Porter, biological science technician, left in April 2025 to return to Illinois to be closer to family. Dr. Brian S. Jordan joined the Plant Materials Center in December of 2024 as our study leader and agronomist. Dr. Jordan hails from Seymour, Indiana. He received his Bachelor of Science degree at Purdue University and his Masters and PhD at the University of Georgia. Dr. Jordan came to Louisiana to work for the Agriculture Research Service for 13 months before coming to the LAPMC.

Presentations

Sixth Ward Middle School AG Career Day, Thibodaux, Louisiana in December 2024.

NRCS Ecological Sciences and Conservation Staff Coastal Plant Training, PMC Galliano, Louisiana in June 2025.

LDAF Coastal Reveg Employee Training 2025, PMC Galliano, Louisiana, in August 2025.

Publications FY 2025

Jordan, B. and G. Thomassie. 2025. Bitter Panicgrass *Panicum amarum* Elliott. Bitter Panicgrass Plant Guide.

THE GOLDEN MEADOW PMC: WHO WE ARE….

The LAPMC is part of a national program consisting of 25 PMCs across the United States, selecting conservation plants and developing innovative planting technology. The Plant Materials mission is to assemble and test plant species for use in conservation programs for solving natural resource concerns. The Plant Materials Program functions as the plant experts for NRCS, fully integrated and coordinated with technical and field office staff. We develop and deliver vegetative solutions and conservation technology for NRCS customers. All work conducted here reflects the current plant materials needs identified by our state and field offices, and our Technical Advisory Committee.

The LAPMC was established in 1989 on approximately 85 acres of land and currently operates on approximately 82 acres to provide a solution to aid in the incessant battle of coastal restoration. The LAPMC conducts numerous technical research activities to better understand how different plant species can thrive and reproduce in coastal marshes. The PMC also provides pertinent information on coastal marsh plants to the community in the promotion of coastal restoration and conservation.

….AND WHAT WE DO

The activities of the PMC are guided by a long-range plan. The priority work areas consist of:

- Plant Materials for Marsh Re-Vegetation
- Plant Establishment Techniques
- Critical Area Plantings to Address Soil Erosion
- Seed Technology for Selected Wetland Species
- Technology Development and Transfer

Electronic Documentation and Information

All Golden Meadow PMC publications can be downloaded from the following website:
https://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/southeast/lapmc/

Golden Meadow Plant Materials Center Staff:

Garret Thomassie – Manager
Dr. Brian S. Jordan – Agronomist / Study Leader
Alexis Luke – Program Assistant / Plant Materials Webmaster
Vacant – Biological Science Technician

Visit our website with your smartphone….

References

EPA. "Wetlands: Protecting Life and Property from Flooding." May 2006.

Louisiana Coastal Protection and Restoration Authority. "Louisiana's Comprehensive Master Plan for a Sustainable Coast." 2017.