



Delgado Community College

New Orleans, Louisiana

Curriculum

School

This project occurred through Delgado's City Park Campus in New Orleans, Louisiana. Delgado is a public two-year institution that has an enrollment of 19,258 students (according to Spring 2011 Office of Institutional Research data).

Abstract

In an ongoing project that applies service-learning teaching methods to the Horticulture program classes at Delgado Community College, students led by Assistant Professor Bettie Abbate work to restore the coastal barrier islands suffering from coastal erosion and the effects of 2010's B.P. oil spill. Using the Delgado City Park Campus Greenhouse, Horticulture students propagate native coastal sand dune plants that are re-planted along coastal habitats of Southeast Louisiana by students and community volunteers. Students learn effective propagation methods and care of these native plants that are necessary for land-building and wetlands stability, filtering pollutants from watersheds, and providing habitat for local animal and plant life.



GOALS AND OUTCOMES

Goals

The initial goals of the project were to apply what Horticulture students learn in the classroom to a real environmental issue: Coastal erosion. Through a teaching/ learning method called Service Learning, Horticulture students in Plant Propagation and Greenhouse classes propagate several hundred native coastal wetlands grasses at City Park Campus to address environmental challenges facing the Gulf Coast region. Students enrolled in the Horticulture program, along with volunteers from all over the country that were in New Orleans attending the American Student Association of Community Colleges (ASACC), planted those grasses on the sand dunes of Grand Isle in Southern Louisiana. Ongoing plantings on Grand Isle address coastal wetlands erosion and the effects of both Hurricane Katrina and the B.P. Gulf oil spill in 2010. Over the next two years, Assistant Professor Abbate hopes to lead her students in more plantings on Grand Isle and on nearby Elmer's Island.

Accomplishments and Outcomes

The goals of the project were fully met. Planning began in June 2010 through a partnership with the American Student Association of Community Colleges (ASACC) and the Louisiana State University (LSU) AgCenter's Wetlands Resource Center. The project commenced in the Fall 2010 academic semester— Horticulture students in Plant Propagation and Greenhouse Management classes propagated 500 wetlands grass starters at Delgado City Park Campus's greenhouse. The plants are native to southern Louisiana's coastal wetlands and are imperative for staving off further coastal land erosion in that area. The wetlands themselves act as barriers to the cities that lie inland in the case of large storm. Restoration and land-stability of this area is therefore an important issue facing New Orleans and other parts of southern Louisiana.

Five hundred starter plants were propagated in August. One hundred per cent of those stock-plant materials grew to maturity and were moved to the banks of Grand Isle on November 11, 2010 by a group of 40 ASACC volunteers and 15 Delgado students. On the following day, another group of 70 ASACC volunteers arrived at nearby LSU AgCenter City Park Pelican Greenhouse to continue the project, propagating another several hundred more plants for future plantings. The volunteers were led by the Delgado Horticulture students that had been working on the coastal wetlands project all semester.



The following April of 2011, two groups of volunteers through the American Association of Community Colleges (AACC), propagated more plants at both Delgado's City Park Campus Greenhouse and the Pelican Greenhouse. They successfully propagated another 500 plants that have been growing at Delgado City Park Campus throughout the summer. Planting trips to Grand Isle or Elmer's Island are being planned for this coming fall (2011).

Challenges and Responses

In the aftermath of the B.P. oil spill disaster, access to the regions affected has been difficult and this has been the biggest challenge facing Delgado's coastal wetlands restoration project. The Delgado Horticulture program attempted to make a trip in spring 2011 to the Grand Isle/ Elmer's Island region for planting, but was unable to gain clearance. Since last spring, clearance to gain access has been approved for fall 2011.

Commentary and Reflection

Service Learning as a teaching/ learning method enhances the course content by cultivating partnerships between the college and the community. The strength of this project lies in its partnerships. Collaborating with Community Partners not only provides



local agencies with volunteers in addressing common environmental concerns, it also allows students to explore potential careers in the field of environmental advocacy and wetlands conservation, the business of growing and installing coastal plantings. Working with Community Partners also allows the students to apply the concepts they are learning in the classroom and in the lab to real issues facing their communities and the local ecology. Finding and creating strong partnerships in the community is imperative to the ongoing successes of an initiative in environmental education.

ENGAGEMENT AND SUPPORT

Leaders and Supporters

This project was initiated by the ongoing partnerships with LSU and Delgado's Horticulture program. The project was presented to the Plant Propagation class in Spring 2010 and the Greenhouse Management class in Fall 2010 as a Service Learning opportunity. Both these classes taught by Assistant Professor in Horticulture, Bettie Abbate, were excited about this opportunity to be involved in coastal restoration. The planting portion of the project was opened to the entire program as students in other classes asked to be involved. The classes were designed with a service learning component to enhance the course content. The courses worked in collaboration with their community partners to address this environmental issue in the community. For this project, students partnered with the LSU AgCenter and the American Student Association for Community Colleges (ASACC). Jerry O'Sullivan of the ASACC was a key contact and provided the 110 volunteers from the ASACC conference in New Orleans that planted and propagated in November. Caitlin Reilly, an associate with the LSU AgCenter and a student at Delgado at the time of the project's beginning, was directly involved in the donation of plant starters through the AgCenter and provided guidance and support to the project.

Funding and Resources

Because this was a class project, funding for basic materials came from the budget allocated to the Horticulture department for the implementation of greenhouse and planting projects. Plant starters were donated by the LSU AgCenter for the purpose of this wetlands restoration project. The space was provided by both the Horticulture Greenhouse on City Park Campus and the City Park Pelican Greenhouse. The time and efforts needed to complete the first wave of the project were provided by groups of volunteers with the ASACC and AACC conferences and Delgado Horticulture students.

Education and Community Outreach

Outreach to educate the community on this project occurred at several points during the year, beginning with first contact from Denise Dowell, at the Lt. Governor's Office on June 21, 2010 that established communication between Assistant Professor in Horticulture, Bettie Abbate, and Jerry O'Sullivan who was coordinating volunteers with the ASACC conference. Volunteers that participated in the planting on Grand Isle in November attended an ASACC conference in New Orleans the weekend after the project to share their experiences.

Further outreach to the community was conducted at a one-day conference called "The Environmental Classroom: Awareness & Restoration through Service Learning", hosted by Delgado Community College on January 28, 2011. The conference invited students, teachers, and representatives from environmentally-focused community agencies to attend and share their service initiatives addressing environmental issues facing the Gulf Coast region. Assistant Professor, Bettie Abbate presented the coastal wetlands restoration project to attendees during a panel discussion on ways to engage students through environmental community service. The project was also presented at a poster presentation at

the annual American Association of Community Colleges (AACC) Conference on April 9, 10, and 11, in 2011.

National Wildlife Federation's Campus Ecology Program

The Campus Ecology program Online Case Study Database has given much inspiration for this ongoing project as it expands to further address key issues in coastal wetlands erosion. The database lends some great insight into ways of incorporating this project into a larger campus greening/ sustainability initiative.

CONTACT INFORMATION

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Campus Sustainability History

While the college currently lacks a sustainability office, the Office of Service Learning has engaged students college-wide in projects that address the environmental concerns facing southern Louisiana and the Gulf Coast. Delgado Community College has several ongoing initiatives to green its campus: In the Business and Technology division, students have used their marketing and basic business skills to raise money to restore the bayou-habitat surrounding the campus in the ongoing "Save Our Pond" project. To mark Earth Day and to honor the legacy of Cesar Chavez, students in an "Activism and Change" General Humanities course, students have brought together community and environmental activists to campus to inspire and to encourage students to get involved.

Image credits:

Picture 1 - Bettie Abate, Horticulture Program Director at Delgado Community College

Pictures 2 & 3: Angela Lorenzo