

Invasive species prevalent in preserve

PLANTS, from B-1

Plant analysis

As the team traveled by airboat through the preserve's lakes and canals, Ferguson periodically picked up a garden rake and ran the tines just below the water's surface, bringing up samples of submerged plant life. She closely examined the greenery and, if the plant already was inventoried, returned it to the water.

The preserve's topography varies by region. Thursday's stops included hard-bottom sandy areas as well as marshy spots, where scientists had to step gingerly to avoid sinking to their hips in mud. The day's last stop was the site of a former homestead. There the biologists spotted several ornamental plants, probably once part of the home garden, Ferguson said.

The team, along with scientists who will join them in analyzing the results, are eager to see whether the area's natural and man-made alterations, such as coastal erosion and the Davis Pond Freshwater Diversion Project, have significantly changed the park's plant life, Walters said. Such changes in the environment can bring in more non-indigenous, invasive plants, which she said "can have devastating effects on the whole environment."

The park has lost between 600 and 800 linear meters of shoreline to coastal erosion, she said.

The monitoring phase of the project will include measuring and analyzing such key indicators of the ecosystems as water quality and salinity levels, Walters said.

Out of their element

The most out-of-place specimen the trio located to date was a cherry tomato plant spotted near Lake Salvador on Thursday morning. The popular salad ingredient native to South America, Ferguson said, probably sprouted from the seeds of a snack someone dropped nearby.

One of the most frustrating invasive plants in the region is the persistent Chinese tallow tree, Walters said. If a tree falls in the park, the first thing to come up in its root system space is the Chinese tallow because the plant self-propagates and grows so quickly, she said.

An especially invasive aquatic plant is salvinia, a tiny floating variety that already covers several thousand acres of the preserve's waterways, Walters said.

Wildlife management specialists continually work to control the park's invasive plant species, Walters said. The preserve has contracted an aquatic weed cutter, who will soon clear some of the waterways of salvinia and is introducing a weevil that eats the floating leaves, she said.

The preserve also has re-



Nancy Walters, natural resource manager for Jean Lafitte National Historical Park and Preserve, and members of the Louisiana State University research team head out on a collection run near Twin Canals in the Barataria reserve. The team is collecting a plant inventory of the 16,000-acre nature preserve.



Natural resource manager Nancy Walters, left, wades through a marsh with LSU researchers Stephanie Gunn and Jesse Williams as they collect plant life. The inventory is the first for the nature preserve in more than 20 years.



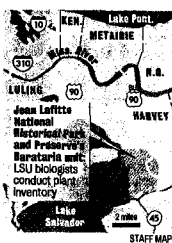
Diane Ferguson, LSU Herbarium collections manager, uses a rake to harvest a plant while on a collection run Thursday in the Barataria unit of the Jean Lafitte nature preserve.



Yellow mullein, a species that migrated from Europe, now grows in the Jean Lafitte National Historical Park and Preserve in Barataria. The researchers need to snag plants when they are in bloom.



Stephanie Gunn, a member of the LSU research team, looks at a mullein plant, a non-native species, as it's collected Thursday for the plant inventory.



STAFF MAP

ceived approval for financing to conduct a controlled burn in an effort to decrease the proliferation of the Chinese tallow, she said.

At the end of each collection trip, scientists remove the specimens, preserved in a cooler on the boat to prevent wilting, and mount the plants in a press to absorb the plants' oils and water. Once dried, the specimens will be mounted and added to the LSU Herbarium collection.

The results of the inventory will eventually be scanned for public viewing on the virtual herbarium at the Fairchild Tropical Botanic Garden's Web site, www.virtualherbarium.org. Those who spot something they would like to see up close will be able to view it at the LSU Herbarium housed in the Life Science Annex in Baton Rouge.

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