

HOGG BIRD SANCTUARY PROJECT



- To restore a section of Hogg Bird Sanctuary by removing exotic, invasive plants and replanting with appropriate native species to create healthy habitat for birds and other wildlife
- To educate the Houston community about habitat restoration and its importance to birds

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The Garden Club of Houston has teamed up with undergraduates in a Field Bird Biology course at Rice University to develop a habitat plan for resident and migrating birds.

This collaboration will allow students to apply their knowledge of ornithology, botany, ecology and sociology to real world problems and, at the same time, provide a unique entry into the nature in urban Houston.



Left to right (Carolina Osuna, Carrie Pepi, Glenn Olsen, Cin-Ty Lee, Kelly Weinersmith, Linda Giang)

Rice Team

Project Leaders

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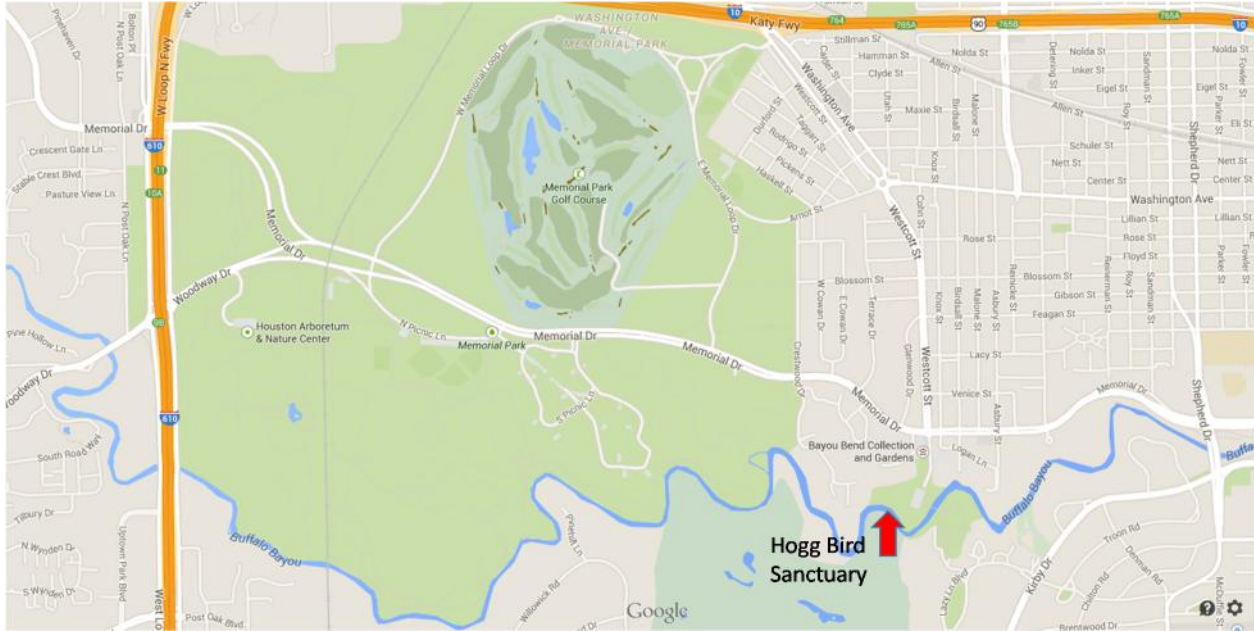
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Advisers

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Background

The Hogg Bird Sanctuary is a “satellite” of Memorial Park. It is situated on a bend of the Buffalo Bayou and characterized by riparian bottom land forest and a small area of upland habitat. The sanctuary currently receives less foot traffic and no bicycle traffic because of its isolated location. But because of the diversity of habitat in such a small area, the close proximity to the bayou, and the ease of access, the Hogg Bird Sanctuary could become one of the premier birdwatching hotspots within the inner loop.

So far, approximately 130 species of birds have been recorded in the Memorial Park – Houston Arboretum – Hogg Bird Sanctuary complex. Careful planning could increase the number of recorded species to 170.





Study area

Our study area is an approximately 200 x 10 m long strip high up on the north bank of Buffalo bayou. It is situated on an old terrace, sandwiched to the south by a steep bluff and to the north by single family homes. Below the bluffs lies an extensive riparian forest, composed of sycamores, yaupon, cherry laurel, willows and invasives (ligustrums and golden rain trees). The strip of land defining our study area consists of open grass, shrubs, and some pines.

We will develop a series of micro-habitats that provide food and shelter for birds, specifically generating a natural transition to the riparian forest below. Our habitat plan must be drought-tolerant, visually appealing to the neighboring community, satisfy the fire code, and permit occasional access for heavy equipment.

Proposed tasks by the Rice Working Group

Biodiversity assessment

- Inventory of plant species
- Conduct bird surveys to develop a more comprehensive bird check-list

Habitat restoration plan

Stage 1 (by March 15, 2015)

- Students will develop a plant list for three micro-habitats
 - hummingbird/butterfly garden
 - grassland and wildflower
 - shrubs and low trees

Stage 2 (by April 1, 2015)

- Students will identify locations within the study area to place micro-habitats.
- Transitions between habitats and within habitats will then be developed.

Stage 3 (April 30, 2015)

- Students write up their final reports to be turned in as assignments for class. These reports include recommendation for numbers of plants and habitat structure, along with justification for why certain plants and their abundances were chosen.

Stage 4 (May 30, 2015)

- Lee, Weinersmith, and Olsen synthesize student reports and present a formal recommendation

Post-project evaluation

Our habitat restoration project will be considered successful if we succeed in the following:

- Increase the number of migratory songbirds passing through in spring. Key bird species include tanagers, orioles, warblers, grosbeaks, thrushes, vireos and flycatchers. These require fruiting trees, variable edge habitats, healthy understory and canopy, and an ample supply of dead snags for perching.
- Increase the number of wintering sparrows. This can be done by defining native grass prairie interspersed with a few small shrubs and bordered by dense shrubby thickets. The regular presence of Eastern Towhee in winter would signal success.
- Increase the number of nesting birds, such as Downy and Red-bellied Woodpecker, titmice, chickadees, American Robin, Carolina Wren, etc.

