



Request for Quotes:

The Mobile Bay National Estuary Program is seeking quotes for a work crew to help with the eradication of Island Apple Snails and their eggs in Langan Park lake as part of an overall habitat management plan for the Three Mile Creek Watershed. This work is being done in partnership with the City of Mobile Parks and Engineering Departments as a precursor to dredging the lake.

Background:

The invasive Island Apple Snail was first noted in Langan Park lake in the early 2000s and thought to have been introduced through aquarium releases. Since then the Island Apple Snails have taken over the lakes. Island Apple Snails eat vegetation, out compete native species, destroy wetland habitats, and can turn an aquatic system into an algae-based system. Many efforts have been made to eradicate the Island Apple Snails in the park, but a multi-pronged strategy including longterm mechanical removal and copper sulfate chemical treatments are necessary for full eradication. Chemical treatments are outside of this RFQ.

The Island Apple Snails lay bright pink egg masses that can contain up to 2,000 eggs and the eggs begin hatching within a few days of being laid. Getting ahead of the egg hatch out rate is crucial. Female snails will lay their eggs on vegetation stems or solid structures that can support their weight such as a dam, cypress knees, bridge pilings, and the inside and outside of culverts. Management of emergent vegetation around the lake is critical to reduce the snail egg laying opportunities, and the City of Mobile Parks and Recreation is partnering with us to chemically manage vegetation within the lake.

Work Needed:

A dedicated and consistent work crew is needed to mechanically remove and collect Island Apple Snail eggs (to prevent the chance of hatch out) and adult snails from Langan Park lake. Due to the fast reproductive rate of the apple snails, two days per week (evenly spaced, such as Tuesday and Friday) are needed for this effort. The entire perimeter of the lower lake must be surveyed for snails/egg masses and many of these areas are only accessible by kayak or canoe, although it will likely be necessary to have at least one person on foot. Data sheet templates will be provided by MBNEP and are required to be submitted weekly to MBNEP in order to track success as well as number of eggs and snails collected per hour. Vegetated areas within the lake that require herbicide application (where vegetation has re-sprouted) will need to be reported to MBNEP so that herbicide treatments can be coordinated with the City.

Applicants must be licensed and insured.

Start Date: ASAP through October 30, 2020

Map Showing Langan Lake Perimeter to Be Worked:



Expectations:

- All crew members will use a clicker to tally the number of egg masses smashed, collected, and destroyed.
- Crew members will use either their paddle or a long pole to smash/destroy eggs. All floating eggs should be collected. Each paddler should have a bucket and a trash picker or dip net in their kayak for grabbing adult snails (which can also be grabbed with a gloved hand).
- Rubber or nitrile gloves should be worn at all times due to the potential of these snails to carry diseases such as schistosomiasis, rat lungworm, liver flukes, etc.
- At the end of each workday, the crew will report their egg/snail numbers to MBNEP. The crew will then take snails to pre-dug holes for burial.
- City of Mobile Parks and Recreation is currently providing pre-dug holes at their Parks Complex on Museum Dr. for this project.
- The crew leader will report egg and adult snail numbers at the end of each workday to MBNEP.
- A "How-To" video for working on the snails can be seen here:
<https://www.facebook.com/watch/?v=703147407185241>

Please submit quotes via email to Katie Dylewski at kdylewski@mobilebaynep.com by COB on July 7, 2020.