

The Lake Conroe Habitat Management Plan

What's New In 2010



Exotic Vegetation is Under Control

Although the exotic plant hydrilla has been under control at Lake Conroe since the spring of 2008, the work to achieve a sustainable balance between exotic aquatic vegetation control and the native aquatic vegetation community (much needed for water quality and fish and wildlife habitat) continues. Complete aquatic vegetation surveys are conducted twice a year on Lake Conroe (late spring and early fall) by TPWD to monitor all of the aquatic vegetation. Based on these surveys the Lake Conroe Aquatic Habitat Management Plan is modified to meet the current needs. The latest survey conducted in September of 2009 indicates that we're on track with the control of exotic vegetation! The grass carp (vegetation eating fish) stocked in Lake Conroe from 2006 through 2008 continue to control hydrilla with less than 10 acres of hydrilla currently present in the reservoir. Because of the herbicide treatments conducted by the San Jacinto River Authority and their contractors, both giant salvinia (a highly invasive aquatic fern) and water hyacinth are also under control. The September survey found only 6.4 acres of giant salvinia and less than a quarter of an acre of water hyacinth!



Emergent plants like squarestem spikerush provide critical food and shelter for juvenile fish.

Flooded wooded plants like these "senna beans" provide spawning and ambush feeding structure for largemouth bass and sunfish. This type of structure is especially important until deeper water native vegetation recovers.



Native Plants Continue to Struggle

The native vegetation in Lake Conroe is slowly recovering from the collateral damage caused by the 111,000 grass carp stocked for hydrilla control. (Approximately 52,000 grass carp are still in the lake.) However, the current coverage of 254 acres is far below the healthy 1,500 acres of native plants that inhabited the reservoir four years ago. In addition, the plant community is now composed primarily of emergent species such as panicum, cattail, and water willow instead of submersed plants like coontail. Even though the shallow water emergents are extremely

valuable as nursery habitat for small fish, greater diversity is still needed.

What's Next?

Exotic Plants – The battle against exotic aquatic plants in Lake Conroe will probably continue as long as there is a Lake Conroe. For now, TPWD will continue surveying the vegetation twice a year and assisting SJRA with funds and support as they continue their excellent work in the treatment of giant salvinia.

Native Plants – Work to restore the native plant community at Lake Conroe is ongoing with thousands of native plants

transferred from the Seven Coves Bass Club nursery below the Lake Conroe Dam to the reservoir in 2009 by Bass Club members and other conservation minded individuals. For 2010, The Seven Coves Bass Club plans an even more aggressive schedule of planting. Also, everyone is reminded that it is illegal to remove ANY vegetation from Lake Conroe without a permit from TPWD and approval from SJRA. For more information on obtaining a vegetation control permit please go to the TPWD website at http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/nuisance_plants/ or send us an email at mark.webb@tpwd.state.tx.us. ♦

Please Help Stop the Spread of Exotic Vegetation In Lake Houston

For several years, Lake Houston has been infested with water hyacinth (*Eichhornia crassipes*). Water hyacinth, a floating plant with a showy purple flower, came to the United States from South America as an ornamental water garden plant in 1884. Because of the length of time it's been in our country water hyacinth is now found in most states along the Gulf Coast and

in most of the southern reservoirs and rivers in Texas. Water hyacinth spreads by daughter plants that break off from the main plant allowing water hyacinth to double its leaf area in one to two weeks under ideal conditions. Because this species of plant is capable of covering large areas of Lake Houston in a short period of time the City of Houston and the San Jacinto River Authority have an ongoing treatment program using herbicides to keep water hyacinth under control. The plant can also reproduce by seed that can remain viable for 15-20 years often sprouting after being dried during a drought then re-flooded. This means that just killing the water hyacinth that you see doesn't mean that it won't come back!

Although water hyacinth has long been considered the world's worst weed, a new exotic invader may be taking the title away. Gi-

ant salvinia (*Salvinia molesta*) was first found in the United States in the 1990's having been introduced to America as an ornamental wa-

ter garden plant (like water hyacinth over a

despite it's lack of sexual reproduction giant salvinia grows and spreads very rapidly with the capacity to double it's surface coverage in as little as 2.2 days! Although giant salvinia has not been found in Lake Houston it is upstream in Lake Conroe so please report any possible sightings to us. If possible, email us a picture of the plant you see since there are several plants that look similar to giant salvinia at different growth stages.

The time to stop these invaders is now but it takes everyone working together to control their spread. By following these simple steps you can help!

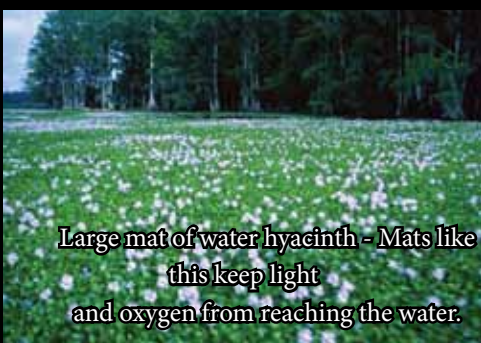
- Remove any visible mud, plants, fish or animals before transporting equipment
- Eliminate water from equipment before transporting
- Clean and dry anything that came in contact with water (Boats, trailers, equipment, clothing, dogs, etc.)
- Never release plants, fish or animals into a body of water unless they came out of that body of water.

If you have questions you can contact us at mark.webb@tpwd.state.tx.us or earl.chilton@tpwd.state.tx.us or by calling (979) 822-5067 or (512) 389-4652 or learn more on the Web at <http://www.invasivespeciesinfo.gov>. ♦



The growth forms of giant salvinia. (like water hyacinth over a

100 years before) then released into public water when it outgrew backyard ponds and water gardens. Because of the limited time it's been in our country, however it has only recently been found in Texas and only inhabits a few reservoirs. But giant salvinia is spreading rapidly with the discovery of new infestations in Lake Sam Rayburn, Lake Palestine, and Brandy Branch Reservoir in winter of 2007-2008! Giant salvinia is different from water hyacinth in that it is a fern so it does not produce seed. Further, giant salvinia doesn't produce viable spores so all the giant salvinia plants in the world are apparently clones that spread by vegetative fragments. However,



Large mat of water hyacinth - Mats like this keep light and oxygen from reaching the water.



Water Hyacinth flower



A close up of a mature giant salvinia plant.