

**Louisiana Report
GSARP Update
Fall 2013**

MARINE SPECIES

From early Nov 2012 to July 2013 there were no reports of Tiger Shrimp. From August 1, 2013 to Sept 15, 2013 there have been approx 50 confirmed reports of tiger shrimp. Many of these shrimp appear smaller than years past and there is an early increase in the red stripe variant than previous years. One shrimper has reported catching 15 in a 10 day period but only turned in 6 of those. Two live tiger shrimp are currently being housed with a small white shrimp in order to see if the tigers prey upon the white shrimp and to use these shrimp LDWF's National Hunting and Fishing Day event in Baton Rouge.

LDWF has ceased the diver program so our reports of lionfish have stopped. Discussions with dive clubs and spear-fisherman have not resulted in any reports yet. Outreach to this users group will be emphasized in the coming months to try and increase the reporting of these fish. There have been no additional reports of marine invasive species since October.

INLAND SPECIES

Aquatic Plants

The Louisiana Department of Wildlife and Fisheries (LDWF) treated 79,321 acres of nuisance aquatic weeds in 2013 as of September 12. These herbicide applications were completed by both LDWF spray crews and private spray contractors. Statewide spring aquatic weed estimates for our major nuisance species during the past five years are found in Table 1.

Areas previously controlled by the USACE have remained a priority throughout the year, especially large areas of the Terrebonne marsh and Henderson Lake. Private applicators have treated a total of 17,150 acres in these areas to date in 2013. The majority of this effort was directed toward water hyacinth control but some giant salvinia was treated as well.

Giant salvinia has been a major focus of aquatic plant control efforts in Louisiana since 2006. The combination of herbicide applications, water level fluctuation, and biological control is being used to keep giant salvinia coverage at a level that allows for recreational use of the waterbodies. With the passing of successive mild winters, giant salvinia coverage continues to grow at rates that are difficult to control. Because of this, Lake Bistineau and Saline Lake are currently in a drawdown. This will allow us to strand and kill thousands of acres of giant salvinia. The water control structures will be closed on November 30, 2013 and January 31, 2014 for Bistineau and Saline, respectively to allow the lakes to refill.

Giant salvinia weevil stocking efforts have continued in 2013. Early spring weevil samples indicated that overwintering took place in Lake Bistineau, Caddo Lake, Saline Lake, and Turkey Creek Lake, all located in north Louisiana. This is encouraging considering winter survival had

been extremely poor in these waterbodies in the past and made weevil control a non-factor. Despite the successful survival, 306,900 weevils have been stocked into those north Louisiana lakes to date in 2013. Giant salvinia infestations in southern Louisiana appear to be decreasing in coverage. Three years following initial weevil releases in these areas, giant salvinia weevil stocking efforts have proven to be very successful and their effect on the plant's reproduction and growth rate are evident. One problem area that has developed recently is in St. Bernard Parish. Salinity levels provide control in some areas, but giant salvinia infestations have spread throughout the freshwater marsh. Giant salvinia weevils were stocked throughout the area in fall 2012 and efforts have continued in 2013.

Table 1. LDWF Spring Weed Estimates for 2009-2013.

Plant	1 st Year	Acres of Infestation				
		2009	2010	2011	2012	2013
Water Hyacinth	1884	134,413	86,530	80,750	90,197	75,730
Hydrilla	1975	98,352	75,810	66,925	47,481	33,975
Common Salvinia	1980	188,815	102,082	49,735	30,247	24,180
Giant Salvinia	1998	13,691	2,706	25,076	32,237	34,775

Inland animals

Apple snails continue to be reported in more of the canals in the New Orleans area and the upper Barataria Basin, indicating either range expansion or improved reporting by the public. The new infestations appear to be in the cement lined drainage canals in the areas west of the previously known areas. Also a few members of the public have started removing eggs and killing adults when observed on their property. None of the new reports have been surprising,

so we expect this to be normal expansion and not man assisted. Some new reports have occurred in City Park in New Orleans. This is not surprising since the water bodies nearby have had apple snails. This appears to be a small infestation at this time based on the small amount of egg masses.

RESEARCH

LDWF 2013 ANS grant to survey selected public urban ponds in Baton Rouge and Lafayette for the presence of ANS is underway. Plants, invertebrates and fish will be sampled one time so far with only exotic species found so far in the samples. In October the ponds will be sampled one additional time. Currently this project is part of a senior thesis project which may look upstream and downstream of some of the ponds to determine if the ANS present are outside of the ponds.

LDWF received a USFWS grant to extend and expand our 2012 ANS grant for drift net sampling for Asian Carp. We have finished our first summer of sampling ichthyoplankton and we are currently analyzing the samples to determine the presence, relative abundance and distribution of Asian carp. This baseline information from 2012 will be used to model distributions, understand recruitment and metapopulation dynamics, assess impacts, and inform management of these aquatic invasive species. The 2013-2014 grant will be used to expand sample site coverage and help further our understanding of these species.

Table 2. Ichthyoplankton Sample list by Inland district. Each station was sampled monthly during May, June and July. Three samples were taken each station – right bank, left bank and mid-stream. All samples have been submitted to Nicholls State University (contractor) for sorting and identification. Sampling stations are depicted in Figure 1 below.

District	Number of stations	Number of Samples
1	8	66
2	7	62
3	7	63
5	6	54
6	6	54
7	8	72
8	9	81
9	7	63
10	6	54
Totals		569



Figure 1. The larval Asian carp sampling locations in Louisiana during 2013.

OUTREACH

A large effort is being made for better public outreach/education of ANS.

- LDWF Extension section:
 - 2 School Fairs
 - 3 Seafood Promotion Gatherings
 - 7 Public Festivals
 - 4 Boat Shows
 - 5 Exhibitions
 - 3 Fishing Tournaments
 - 1 Fishing Rodeo, devoted solely to ANS species
 - 1 Camp- day camp for youth.
- Facebook: LDWF is taking full advantage of the social media network, posting brochures, links, and articles about ANS species/concerns. To date, information on Tiger Shrimp, Rio Grande Cichlids, Lionfish, & Northern Snakehead have been shared.
- This year the ANS coordinator and others LDWF employees have really increased the effort to inform the public about reporting Tiger Shrimp. Posters asking for reports and traditional media outlets have been used. To date, we have given 6 newspaper interviews some of which were picked up by newspapers on both the East and West coasts. We have also given a couple of radio interviews and one television interview for LA public broadcasting. This has resulted in an

increase in reporting and in awareness from the public since many of our public reports mentioned seeing or hearing one of these interviews or posters.

- The revision of the state wildlife action plan is underway and the Introduced and Exotic Species section will be expanded in this version. This will hopefully result in an increase in State Wildlife Grants to provide needed research on ANS species.