

**Louisiana Report
GSARP Update
Fall 2014**

INLAND SPECIES

Aquatic Plants

The Louisiana Department of Wildlife and Fisheries (LDWF) received reports of West Indian Marsh grass in a remote location. Locals claim that it's been there for years.

LDWF has treated approximately 28,000 acres of nuisance aquatic weeds to date in 2014. 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 U.S. Army Corps of Engineers (USACE) remain a priority in 2014, especially large areas of the Terrebonne marsh and Henderson Lake. Private applicators and LDWF sprayers have treated approximately 6,500 acres in these areas so far in 2014. The majority of this effort was directed toward water hyacinth control, but some giant salvinia was treated as well. The USACE Removal of Aquatic Growth Program has resumed on a limited basis and has already treated a significant water hyacinth infestation in Bayou Petit Caillou in Terrebonne Parish. They will also aid LDWF by providing water hyacinth control efforts in Henderson Lake and Bayous Lafourche, Terrebonne, Grand Caillou, and Pointe au Chien if necessary.

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. The unusually cold temperatures associated with the past winter significantly reduced the amount of giant salvinia present this spring. However, salvinia coverage in most waterbodies returned to near normal levels by mid-July. Regular herbicide applications and drawdowns are currently being used to keep salvinia infestations at manageable levels. A schedule of ongoing and planned drawdowns for LDWF-managed lakes in 2014 is located in Table 2. As part of the Saline Lake drawdown, a large-scale fluridone treatment will be made in an attempt to reduce giant salvinia growth in the heavily timbered areas of the lake. Liquid fluridone will be injected into the water column of approximately 1,700 acres of the lake. A similar treatment was made on the Saline Lake in 2009 with penoxsulam herbicide and resulted in three years of residual control.

Giant salvinia weevil stocking and monitoring efforts have continued in 2014. Weevils from the USACE ERDC in Lewisville, TX and the LSU AgCenter nursery ponds in Houma have been released throughout the state, including on relatively new infestations in Henderson Lake and the St. Bernard marsh. It appears that weevils have continued to increase their level of control on giant salvinia infestations in south Louisiana. Herbicide applications are necessary to maintain access in some areas, but the weevils seem to be slowing the growth rate of the plant significantly.

The LDWF and LSU Agricultural Center have entered into an agreement to research and potentially develop a population of cold-tolerant weevils for use in north Louisiana. Weevils that survived last winter in north Louisiana lakes will be the foundation of this population. As the population builds, it will continually be exposed to low temperatures in growth chambers to select for those individuals that can survive a cooler winter climate. After many generations and several cold exposures, it is expected that we will have access to a cold-tolerant weevil population that can be mass produced for stocking across north Louisiana. The LSU AgCenter will also be researching factors that may contribute to winter survival such as habitat type and flight ability.

Table 1. LDWF Spring Weed Estimates for 2010-2014.

Plant	1 st Year	Acres of Infestation				
		2010	2011	2012	2013	2014
Water Hyacinth	1884	86,530	80,750	90,197	75,730	69,720
Hydrilla	1975	75,810	66,925	47,481	33,975	28,033
Common Salvinia	1980	102,082	49,735	30,247	24,180	17,660
Giant Salvinia	1998	2,706	25,076	32,237	34,775	22,239

Table 2. 2014 LDWF Drawdown Schedule.

LAKE NAME	DISTRICT	PARISH	SURFACE ACRES	ELEVATION BELOW POOL STAGE	DRAWDOWN DATES 2014 - 2015	PURPOSE OF DRAWDOWN
Bussey Brake	2	Morehouse	2,200	10 – 12 ft.	July 22, 2013 – project completion	Lake Renovation
Clear-Smithport	10	Desoto	2,842	4 ft.	March 2014 – project completion	Drawdown structure repairs; vegetation control;
Kepler Lake	1	Caddo	1,925	1 st stage – 5 ft. ; 2 nd stage – 8 ft.	June 15 – Sept 15 ; Sept 16 – Dec 1	Vegetation control; shoreline and property maintenance
Black-Clear Lake	10	Natchitoches	13,800	4 ft.	July 5 – Nov. 1	Vegetation control; bottom oxidation
Saline Lake	10	Natchitoches/ Winn Parish	8,400	8 ft.	Aug. 1 – Jan. 1	Vegetation control; bottom oxidation
Lake Louis	3	Catahoula	1,000	Annual 4 ft. for turbidity control	Sept. 1 – Feb. 15	Bottom oxidation
Mill Creek Reservoir	1	Bienville	560	6 – 7 ft. below pool	Sept. 2 – No later than Jan. 31	Vegetation control; shoreline and property maintenance
Cheniere Lake	2	Ouachita	3,115	Annual 3 ft. water level fluctuation	Sept. 2 – Jan. 15	Vegetation control; bottom oxidation
Hardwater Lake	3	Grant	500	4 ft. max	Sept. 2 – Dec 1	Veg control (99% coverage) Triploid grass carp intro in spring
Chicot Lake	6	Evangeline	1,642	Annual 3 ft. water level fluctuation	Sept. 2 – Jan. 15	Vegetation control; bottom oxidation
False River	7	Point Coupee	3,000	2 ft.	Sept. 2 – Jan. 15	Dredging; , substrate consolidation and property maintenance
Henderson Lake	9	St. Martin	5,000	3 – 4 ft.	Fall 2014 Pending USCOE approval.	Vegetation control
Bistineau Lake	1	Bienville, Bossier, Webster	17,000	7 ft. below pool	Drawdown will be considered when GS exceeds 1,500 A	Giant salvinia control as needed
Grand Bayou Reservoir	10	Red River Parish	2,500	--	Drawdown will be considered when SAV exceeds 40% (1000 A)	Vegetation control

Inland animals

Interest in Apple snails has increased and has resulted in an Apple snail conference. At this conference, researchers who are studying some aspects of apple snails and state, parish and Federal agencies were present at this conference. This group will meet again in early 2015.

There has been no additional range expansions of Rio Grande cichlids reported to the agency since 2013.

MARINE SPECIES

From early Nov 2013 to August 2014 there were no reports of Tiger Shrimp. As of September 4, 2014 there have been approx 20 reports of tiger shrimp.

LDWF has made contacts within the commercial diving industry that has yielded a handful of reports of lionfish. One company has made contacting LDWF and recording lionfish as a company policy. Periodic spreadsheets of sightings are sent to LDWF.

RESEARCH

LDWF 2013 ANS grant to survey selected public urban ponds in Baton Rouge and Lafayette for the presence of ANS is complete with the exception of some analysis. Plants, invertebrates and fish were sampled in Baton Rouge and Lafayette. The only exotic species found so far in the samples were plants.

The 2014 ANS grant will be used to look at the trophic effects of Asian carp on some LA oxbows.

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.

OUTREACH

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

- LDWF Extension section:
 - 9 Public Festivals
 - 5 Fishing Tournaments
 - 5 Outdoor Exhibitions
 - 4 Boat Shows
 - 2 Scout Events
 - 1 Career Convention
 - 1 Archery Tournament
- 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.
- 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. So far one ANS related grant has been submitted for funding.