LDWF Office of Fisheries

Louisiana - Aquatic Invasive Species report to GSARP, 2020

Current status of established ANS

Apple Snail:

During 2020, the Louisiana Department of Wildlife and Fisheries (LDWF) received approximately 1250 reports of apple snail infestations. Reports of invasive species from the public were logged and the public was contacted to get additional information as needed. Most calls were apple snail reports with no new parishes or watersheds reported to be infested. LDWF ANS Coordinator has started to receive detailed reports from a bridge inspections crew which has added to our apple sail ranges.

Asian Carp:

LDWF ANS Coordinator and Inland Fisheries personnel developed 2 projects that were funded by the USFWS. One of the projects will sample ichthyoplankton in the major river basins in LA. The second will be a telemetry project. Carp will be tagged in the Intercoastal Waterway to see if they are migrating between river basins. These 2 projects should assist LDWF in locating breeding areas and identifying locations for carp barriers.

Asian swamp eels:

Monopterus cuchia were found in Bayou St John, New Orleans in June 2019. LDWF and a local college professor continued monitoring/sampling the population. Small eels were found in samples collected in Sept 2020. LDWF plans to monitor the area and

sample in the Spring and Summer of 2021. The species has not expanded its range from 2019. LDWF has started an eel removal control program via electrofishing and removal of nonnative aquatic plants that the eels inhabit. In 2020, the number of removal trips has been reduced by COVID-19 restrictions.

Lionfish:

LDWF's planned sampling during the reporting period was canceled due to COVID-19 restrictions on research cruises.

Tilapia:

The existing populations in Plaquemine parish was not sampled at the time of the report due to COVID-19 impacts to field sampling.

Blue Tilapia (*Oreochromis aureus*) were found in routine sampling by LDWF in University Lake located in Baton Rouge in October 2019. Thirteen tilapia were found in samples collected in December 2019. Sampling efforts in February 2020 and March 2020 did not result in any tilapia being collected. Three tilapia were collected in April 2020 including one brooding eggs in its mouth. Sixteen tilapia were collected in August 2020. These were similar sized as the initial capture fish from October 2019 and December 2019 so we believe this is reproducing population. LDWF will continue to remove tilapia from this location as manpower allows. The vicinity to residential areas makes eradication using rotenone very difficult. LDWF has a long term dataset on the lakes which will allow us to track an impacts to native fish.

The LDWF ANS Coordinator received a call from a nuisance alligator trapper that he had seen tilapia in a private pond. LDWF Enforcement investigated the tip to our LA ANS hotline and the owner admitted the stocking of tilapia. Inland Fisheries personal treated the pond with rotenone to remove all of the tilapia present. In the Spring/Summer of 2021, Inland Fisheries personnel will sample the pond to verify the eradication.

Tiger Shrimp:

In 2020, LDWF received 2 reports of Tiger Shrimp from commercial and recreational angler catches. LDWF Marine Fisheries collected a small Tiger Shrimp(75mm) while electrofishing in Bay Adams (29.410832N, 89.655278W). A few more unconfirmed reports were received.

Aquatic Plant Control Program:

The program is housed within the LDWF's Inland Fisheries Section. LDWF continued with our control of invasive vegetation species using a variety of techniques. Aquatic plant control plans were developed for 72 different waterbodies during the reporting period. Giant Salvinia continues to be the most problematic invasive plant in Louisiana. Since 2010, LDWF has treated an average of 21,373 acres of Giant Salvinia per year with herbicides. LDWF uses an integrated approach to control aquatic plants, consisting of chemical, physical (booms and drawdowns), and biological (insects and grass carp) methods in an effort to achieve a greater combined benefit. LDWF has an annual Aquatic Plant Control Program budget of $3,100,000 of which more than 50% of that is spent on Giant Salvinia alone for monitoring, treatment, and research.

COVID-19 Impacts:

COVID 19 has reduced the number of events that typically LDWF distributes ANS outreach to the public. LDWF published social media posts during the year on apple snails, snakeheads, and invasive vegetation.

COVID-19 restrictions impacted our regular sampling as well as our outreach programs. The benefit of the restrictions was many people were outdoors and reported more apple snail locations and also took on the duty of scraping eggs during their time at home.