LDWF Office of Fisheries

Louisiana's Aquatic Nuisance Species (ANS) Report Fall 2023

(April 2023 –October 2023)

New Reported ANS:
Northern Snakehead:
A video of 2 was snakeheads guarding a school of fry was sent to the LDWF ANS coordinator in June 2023. The video was reported to be from the MS River near Ferriday, LA. Numerous press releases and newspaper articles have asked the public for reports of snakeheads. At this time, there have been no more reports. LDWF will continue to monitor the MS River backwaters for snakeheads during regular sampling tasks.

Update to recently reported ANS:
Peacock Bass:
A Peacock Bass was confirmed in the summer of 2022. LDWF electro-fished the area but did not find the fish. This area is near a long-term sampling site so LDWF sampled in this area in the early summer and Fall of 2023. No additional Peacock Bass were found. This will be the last update on this species unless further specimens are detected.

Status of established ANS
Apple Snail:
Public reports for Apple Snails have slowed due to the drought and high temperatures over the summer. This resulted in virtually no reports in roadside ditches and fewer reports even from bigger waterbodies. No major range expansions were noted.

Asian Swamp Eels:
Asian swamp eels (*Monopterus cuchia*) were found in Bayou St John, New Orleans in June 2019. LDWF and a local university professor continue to monitor and sample the population. LDWF electrofishing did not detect any swamp eels. The sampling by the university only resulted in three swamp eels being captured. All three of them were captured in one of the 82 samples taken in 2022. It is believed that this is a population with very low numbers at this time. So far, there have been no reports of swamp eels in 2023.

Zebra Mussels
Zebra Mussels have been found to survive over the summer in areas where they were previously thought not to survive. The populations were found on telemetry receivers after being deployed under water for two years. The Zebra Mussels have persisted since that first observation. The mussels were detected on

the Atchafalaya River near Morgan City and in the Wax Lake Outlet near Vermilion Bay. These areas will be monitored as the telemetry receivers are serviced. These sites also had more mussels in May 2023. Continual monitoring will occur as the receivers are serviced.

Invasive Carp:

Since fiscal year 2020, LDWF has had projects funded through USFWS's Lower Mississippi River Invasive Carp Partnership and the Atchafalaya, Red, and White Rivers Invasive Carp Partnership. LDWF collaborated with Nicholls State University to investigate the presence of invasive carp larvae on rivers in the LMR. The objective of the study was to determine the extent of invasive carp spawning activity Mississippi River, Atchafalaya River, Ouachita River, Red River, and Tensas River Basins within Louisiana. Figure 1 below shows the results of that survey where carp were present. This data indicates that invasive carp are reproducing in the majority of the Lower Mississippi River (LMR) Basin sites sampled in LA. Reproduction is taking place on the Red, Mississippi, Atchafalaya, and the Ouachita Rivers. The surprising thing about this is that the Ouachita River seems to have more spawning than the Red River.

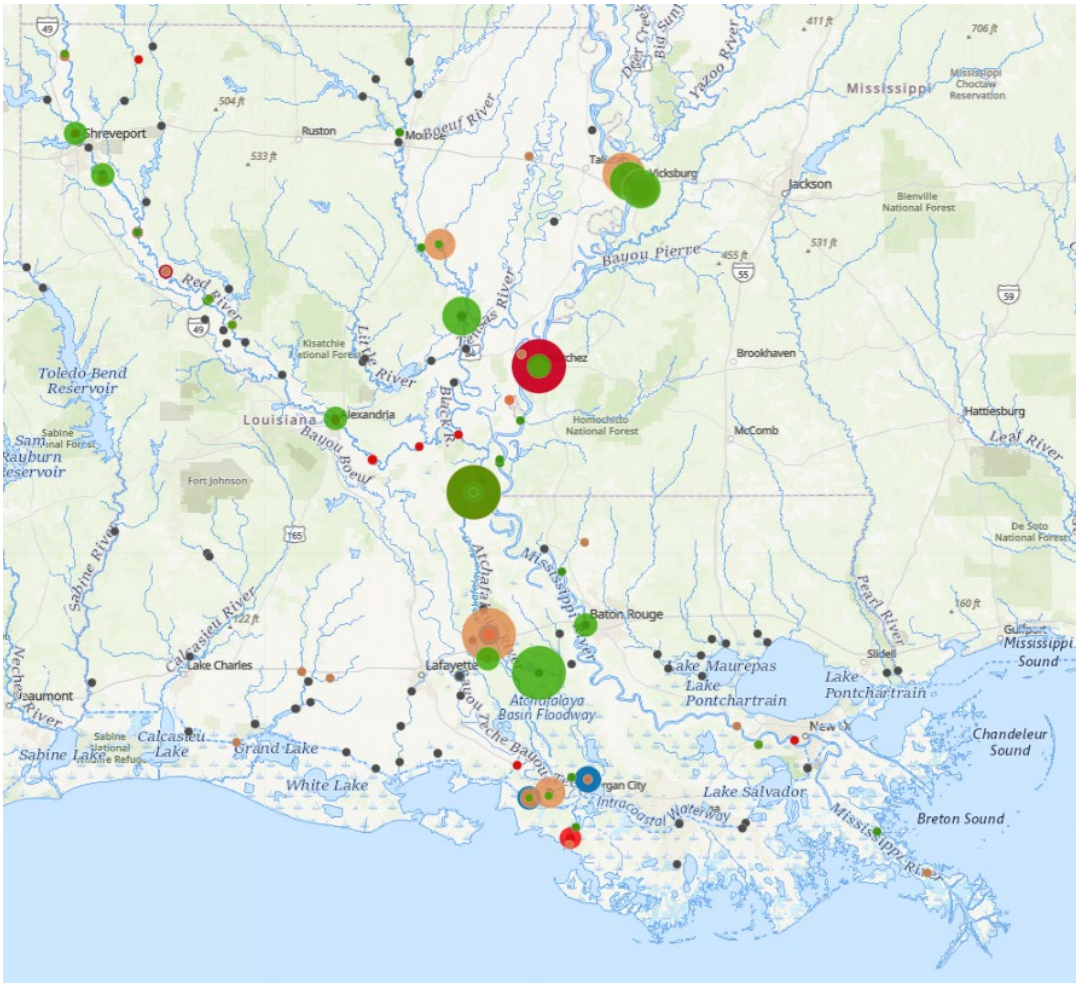
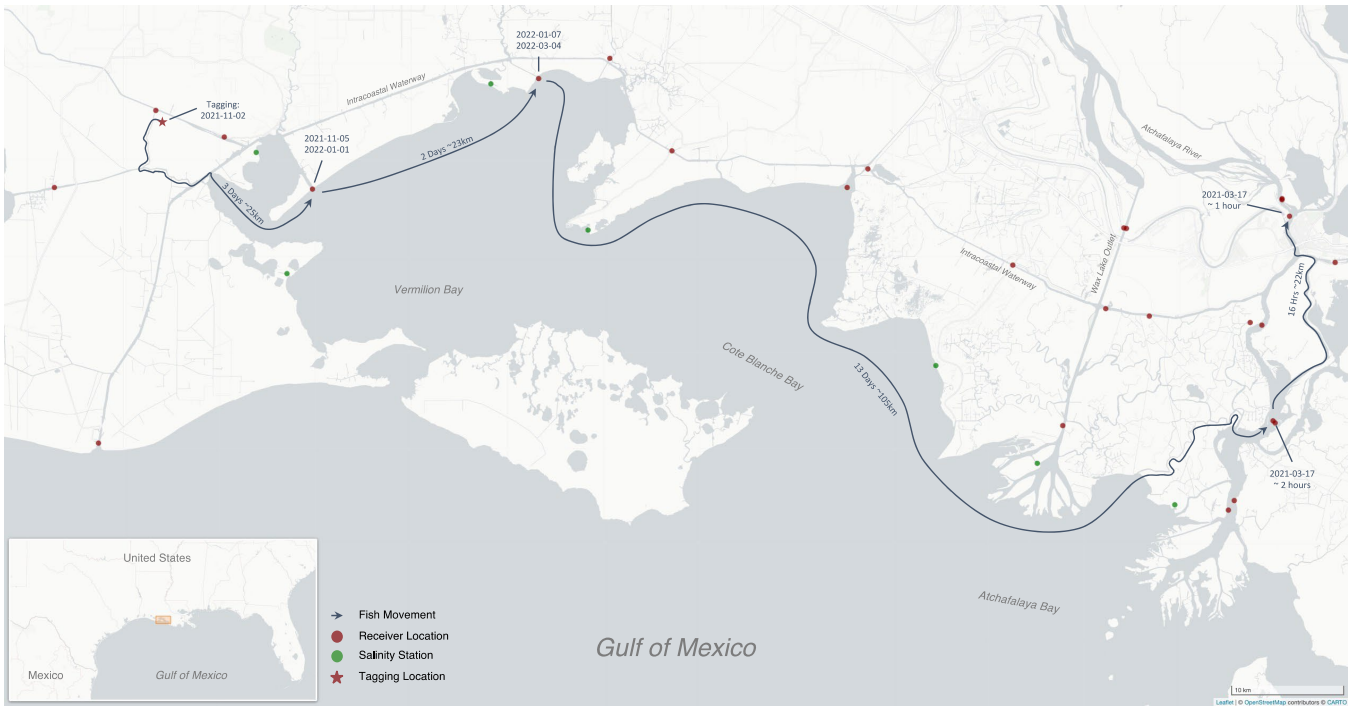


Figure 1. Ichthyoplankton sample locations (colors represent years but were ignored to look at the overall pattern)

LDWF has collaborated with Louisiana State University (LSU) since 2020 to tag 200 invasive carp and set up a receiver array. The object of the project was to determine intrabasin and interbasin movement to inform placement of potential deterrent technologies and removal efforts. Figure 2 shows 3 examples of Silver carp using low-salinity estuaries to move between river basins



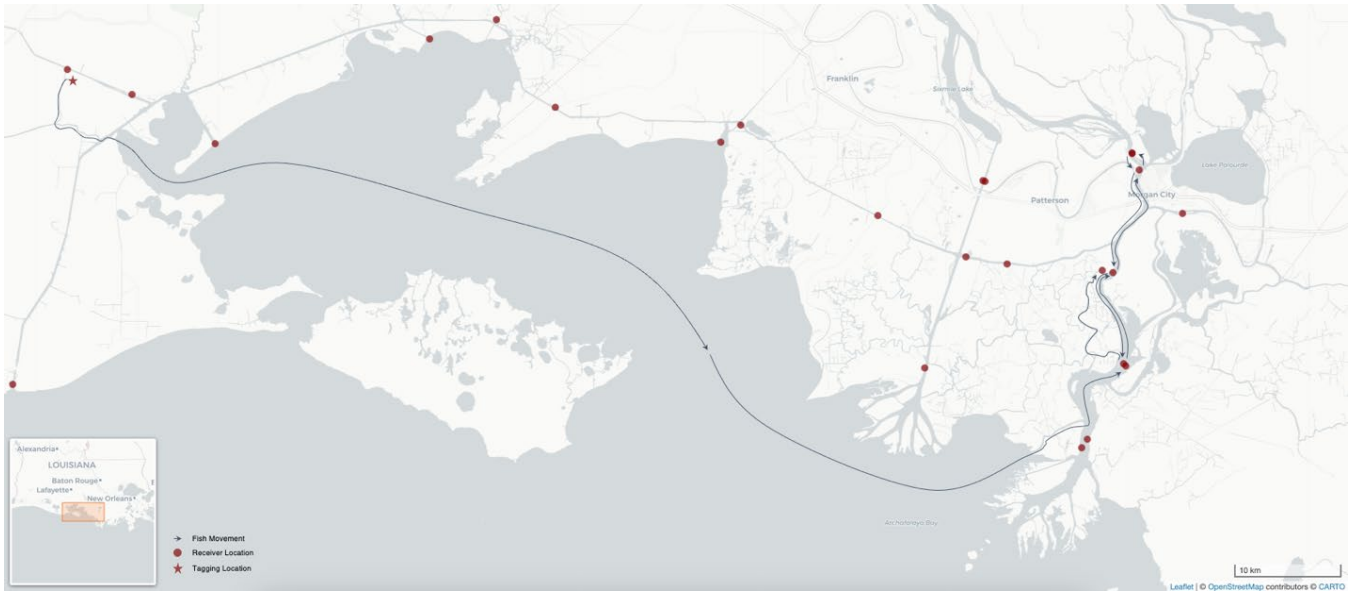
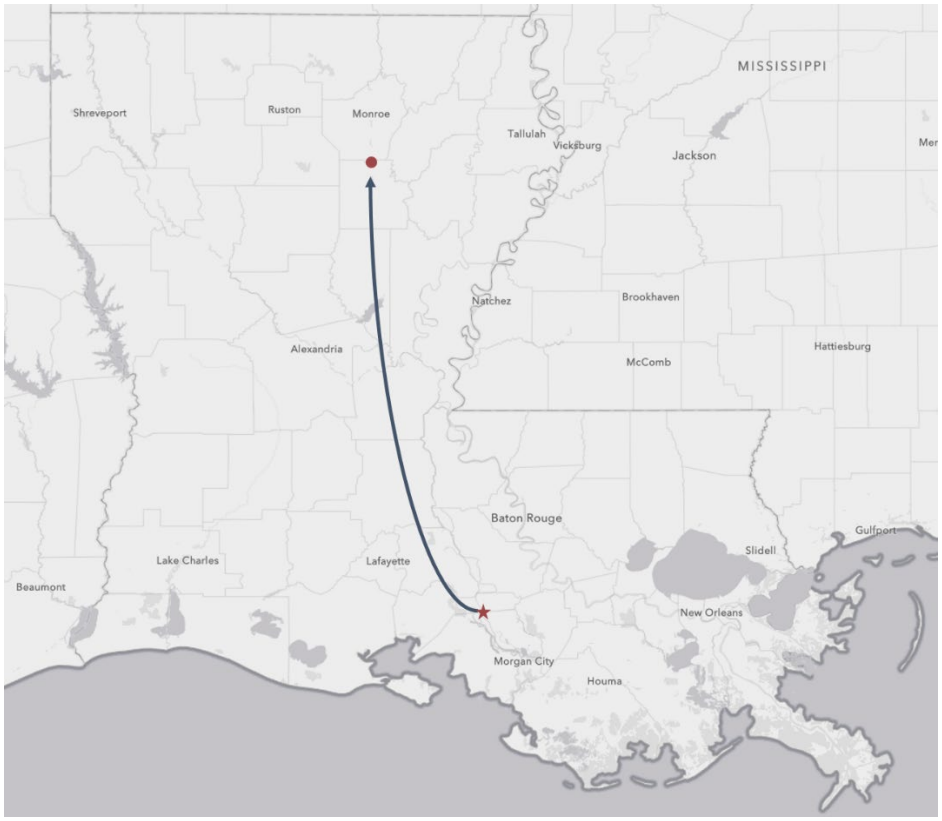


Figure 2. Silver carp used low salinity waters to move from one river basin to another. Salinity in these areas varied between 3 and 7ppt.

Another interesting movement which is also tied into the reproduction of the carp shows 2 carp tagged in different years following the same pattern of moving from the lower Atchafalaya Basin to the Ouachita river. These fish stayed around a lock and dam structure on the Ouachita River. Figure 3 shows the general movement of those fish from where they were tagged to where they were detected on near the lock and dam.



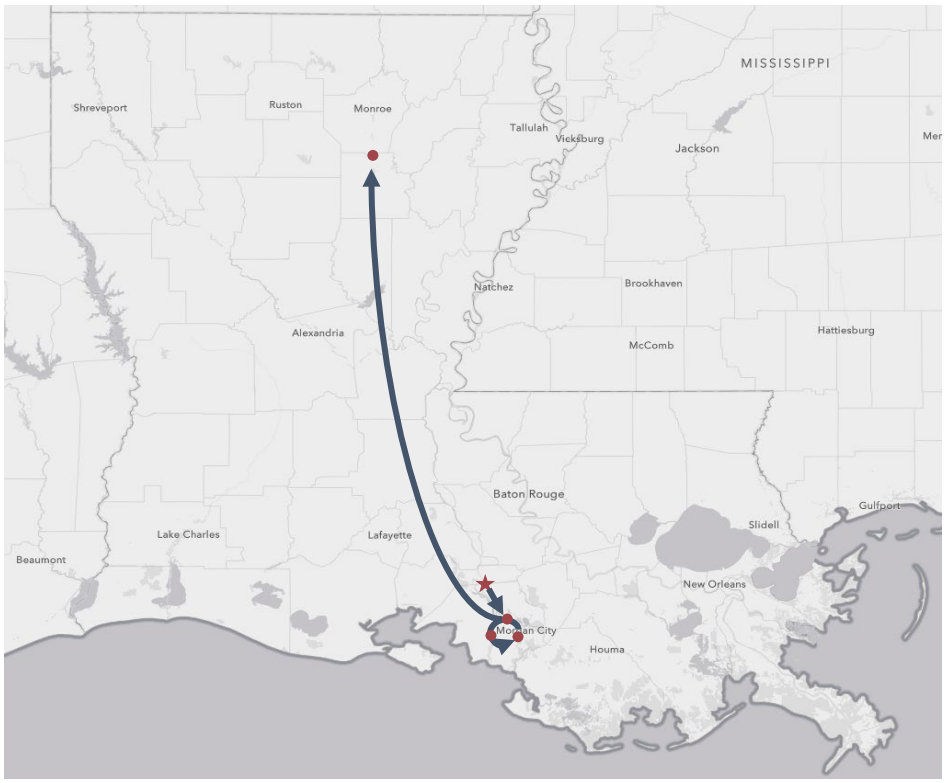


Figure 3. The Top most figure shows the movement of a carp tagged in August 2022 and its movement up t the Columbia Lock and Dam in May 2023. The bottom figure shows a cap tagged in Dec 2021 which

stayed in the lower Atchafalaya basin for all of 2022 before moving up to the Columbia Lock and Dam in May 2023

LDWF is working with partners on more larval sampling as well as other market development projects which will hopefully increase the removal of carp from Louisiana waters.

Aquatic Plant Control Program:
LDWF continued with our control of invasive aquatic weeds using a variety of techniques. Aquatic plant control plans were developed for 53 different waterbodies during the reporting period. A total of 12,670 acres of nuisance vegetation were treated in 2023. Giant Salvinia continues to be the most problematic invasive plant in Louisiana, with herbicides being applied to over 10,036 acres during that time. Additionally, 675 acres of Water Hyacinth and 785 acres of Alligator weed were treated across the state during the reporting period. LDWF uses an integrated pest management (IPM) 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. In 2023, LDWF had an Aquatic Plant Control Program budget of approximately $6,500,000, of which a large portion was spent on the monitoring, treatment, and research of Giant Salvinia.