GEORGIA
DEPARTMENT OF NATURAL RESOURCES

Gulf and South Atlantic Regional Panel (GSARP) Update for Georgia

GEORGIA DEPARTMENT OF NATURAL RESOURCES
WILDLIFE RESOURCES DIVISION

GEORGIA DEPARTMENT OF NATURAL RESOURCES
COASTAL RESOURCES DIVISION

REPORTING PERIOD:
April 1, 2020 – December 1, 2020

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Like many of our sister states, the COVID-19 pandemic has certainly impacted much of our invasive species efforts. Though our agency has tried to remain as available as we safely could to respond to invasive species issues, the ongoing pandemic during this reporting period has certainly impacted our ability to accomplish all that we had hoped to achieve. Nonetheless, the following provides our accomplishments for the reporting period.

FRESHWATER SPECIES

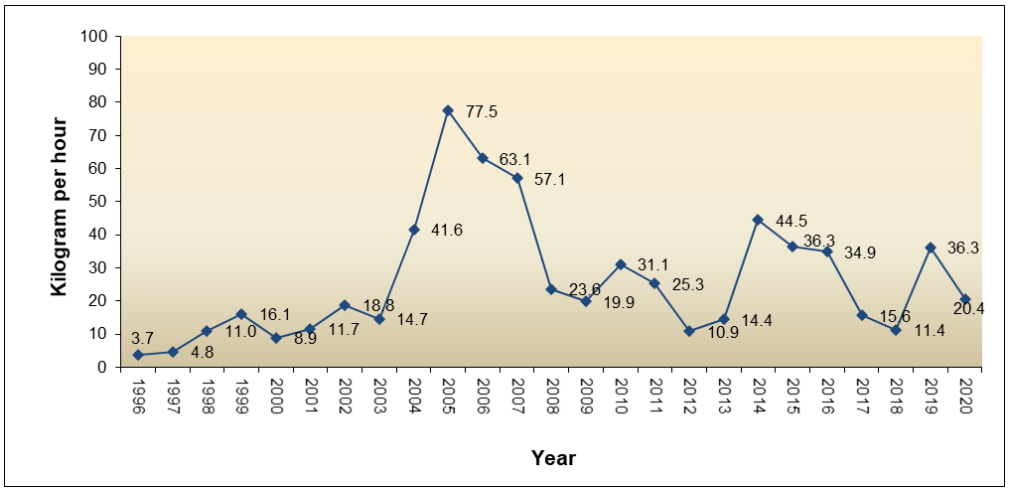
FISH

Flathead Catfish *(Pylodictis olivaris):*

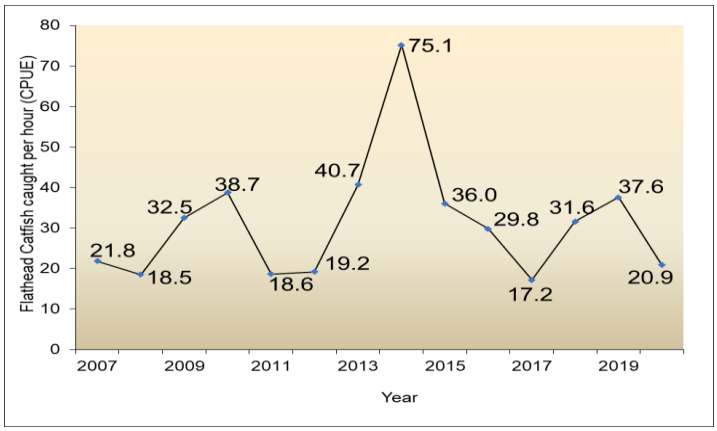
The Satilla River is one of the premier sunfish fisheries in the state of Georgia and redbreast sunfish (*Lepomis auritus*) are a highly sought-after species. Flathead catfish were likely introduced through unauthorized stocking and first observed in the Satilla River in 1996. During the mid-2000's, standardized sampling and creel surveys revealed declines in abundances of redbreast sunfish and bullhead catfishes (*Ameirus* spp.) coincided with significant increases in the abundance of flathead catfish. In 1996, the Wildlife Resources Division (WRD) – Fisheries Management Section (FM) began removing flathead catfish from the Satilla River as time permitted and in 2006, instituted the Flathead Catfish Removal Project to control the population.

During the 2020 sampling season (May-October) 3,355 (7,197 pounds) flathead catfish were removed. Since 2007, more than 82,000 (163,000 pounds) of the flathead catfish have been removed. The size structure of the populations has declined with the average size fish removed progressively dropping from 5.8 pounds / 512 mm TL in 2007 to 2.1 pounds / 365 mm TL in 2020. Despite the pandemic, staff were able to log 160.3 hours of removal effort, which is only slightly down from 2019 (168 hrs).

Biomass per effort also has declined from a high of 77.5 kg/hr in 2005 to 20.4 kg/hr in 2020.



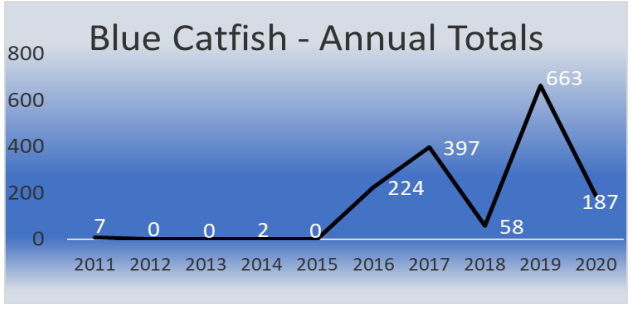
Catch per unit effort (CPUE) has fluctuated between 17 and 75 fish per hour since 2007.



Suppression of the flathead catfish population in the Satilla River has been demonstrated through measured changes in biomass, size and age-structure. However, higher recruitment and earlier maturation is being witnessed. Ongoing intensive harvest will be required to control the flathead population.

Blue Catfish (*Ictalurus furcatus*)

In addition to removing flathead catfish in the Satilla River, GADNR staff continue to remove blue catfish from the river. This second non-native species was first recorded in the river when 2 individuals were observed during a creel survey. In 2016, significantly increased numbers of blue catfish were observed and removed from the river (n=224), including a gravid female (840mm TL; approx. 15lb). In 2017, 397 individuals were removed. High water levels in 2018 likely contributed to few numbers (n=58) seen that year. In 2019, 663 blue catfish were removed, while 187 were removed in 2020. Increased numbers of blue catfish concerns resource managers, and thus continued monitoring / removal of this species will occur in concert with flathead removal efforts.



Other Freshwater ANS Fish Species

GADNR staff continue to receive reports of ANS species being captured in our state. Below are captures reported during this reporting period.

Asian Swamp Eel (*Monopterus albus)*

- Capture Location: Olley Creek - Cobb County
- Caught during backpack electrofishing sampling on 09/23/2020
- Positive ID of photo verified by Fisheries Biologist Jim Page
- Fish was euthanized

Oscar (*Astronotus ocellatus)*

- Capture Location: Lake Allatoona - Bartow County
- Caught by angler on 8/4/2020 and reported to DNR
- Positive ID of photo verified by Fisheries Biologist Jim Hakala
- Fish was euthanized

Flathead Catfish (*Ictalurus furcatus)*

- Capture Location: Savannah River - Effingham County
- Caught by angler on 9/13/2020 and reported to DNR
- No photo but fish have been observed by DNR in this area
- Fish was euthanized

Paddlefish (*Polyodon spathula*)

- Capture Location: Private pond near Roswell, GA
- Caught by angler in January and released; found dead in March
- Follow-up sampling by DNR found no other specimens

Longear Sunfish (*Lepomis megalotis*)

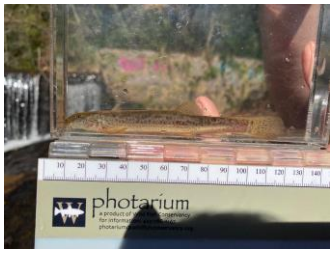
- Capture Location: Flint River
- Caught by DNR during sampling event on 10/5/2020
- Positive ID by DNR Fisheries Biologist Rob Weller
- Fish was euthanized

Brown Hoplo (*Hoplosternum littorale*)

- Capture Location: St. Marys River – Charlton County
- Caught by angler on 10/27/20 and reported to DNR
- Positive ID by DNR Fisheries Biologist Jackson Sibley
- Fish was euthanized

Oriental Weatherfish (*Misgurnus anguillicaudatus*)

- Capture Location: McNutt Creek– Clarke County
- Several individuals caught by UGA students conducting field work on 11/5/20
- Positive ID by UGA Fisheries Professor Jay Shelton
- Appears to be first of this species in GA
- All captured fish were euthanized



PLANTS

Giant Salvinia *(Salvinia molesta*)

- No reports of Giant Salvinia were received during this report period.

Water hyacinth *(Eichhornia crassipes)*

- GADNR staff previously manually removed water hyacinth in the Altamaha River until 2016, when a biocontrol was first released. The biocontrol, a leaf hopper (*Megamelus scuttelaris*), had a second release in winter 2019.
- GADNR staff conducted removal efforts in a neighborhood pond in Camden County.

MARINE SPECIES

SHRIMP

Asian Tiger Shrimp *(Penaeus monodon)*

Commercial fishermen continue to periodically report catches of Asian tiger shrimp in Georgia waters, though such incidences remain low. Two reports of tiger shrimp were provided in October 2020 through the new reporting tool on the GADNR-WRD website. One report indicated a single tiger shrimp was captured during 1 day of fishing (picture below), while a second report listed 40 tiger shrimp as being caught during 14 days of fishing. GADNR will continue to monitor tiger shrimp occurrence.

In addition to potential catches of tiger shrimp by commercial fishermen, GADNR staff may potentially intercept tiger shrimp during fishery-independent standardized sampling (a.k.a. Ecological Monitoring Trawl Survey) conducted monthly at 36+ sites coastwide by the GADNR, Coastal Resources Division. These monthly monitoring events utilize a 40’ trawl net and are designed to assess Penaeid shrimp and blue crab populations but can capture tiger shrimp as well. No tiger shrimp were captured in these surveys during the reporting period. Results of these surveys also suggest abundance of tiger shrimp in Georgia’s sampled waters are low.

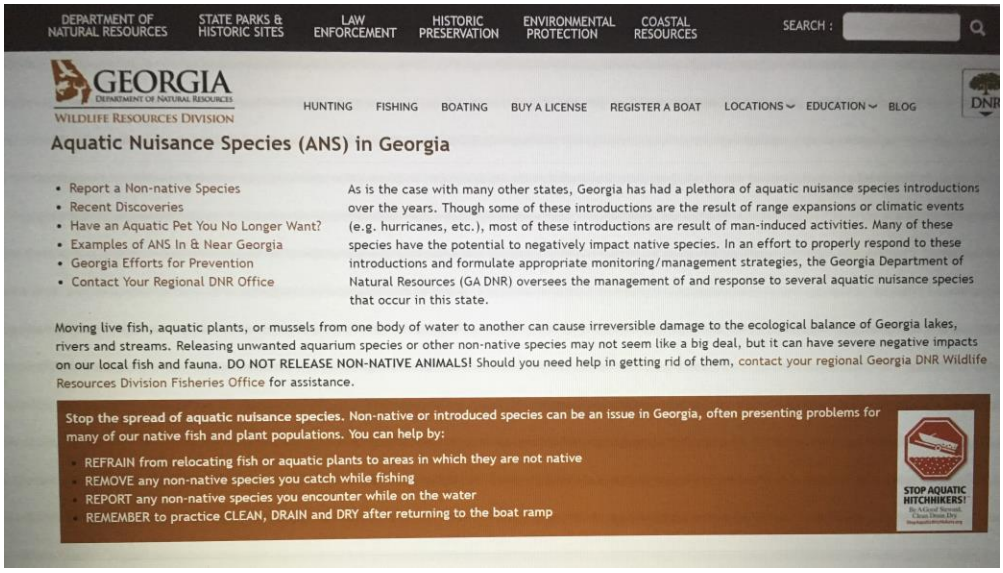
Standardized Sampling Results – R/V *Anna*

1976 – 2012: No Tiger Shrimp observed
2013: 3 tiger shrimp
2014: 1 tiger shrimp
2015 - 2018: 0 tiger shrimp
2019: 1 tiger shrimp
2020: 0 tiger shrimp

Education and Outreach Efforts

General

- **Staff have continued to make additional updates to the GADNR Aquatic Nuisance Species (ANS) web page on our website. This updated site provides much more detailed information on species found in or near Georgia, educates readers on how they can help prevent ANS releases, and allows members of the public to report certain ANS species online. The new website can be accessed at:** https://georgiawildlife.com/ans



Speaking Presentations

Conducting visits to schools and other educational outlets continues to be one of our utmost priorities, as we feel our best opportunity to impact future changes for ANS introductions is to invest our time in helping inform and guide today's youth. The COVID-19 pandemic certainly impacted our ability to conduct education events in the manner by which we were used to. However, our interest in doing this critical work and the outpouring of requests by teachers for us to visit their schools encouraged us to think "outside the box" and pursue developing safe ways to continue such efforts. In working with teachers in our area, we developed a means by which we have been able to visit schools and provide educational events outside in a safe manner. These involve us exclusively presenting in an <u>outdoors</u> environment and distancing ourselves from the students, showing them critters from a safe distance, often in an elevated position in the back of our trucks. This approach has allowed us to maximize our safety and that of the students, yet allows education efforts to continue. Using this approach, we spoke to over 1200 students during the following events that were held in this reporting period:

Westside Elementary School – grades K-5 - October 1, 2020

- Presented to 600 students in grades K – 5, along with 4 teachers
- Talked about various invasive species, including Asian Carp, flathead catfish, apple snails, blue catfish, tiger shrimp, etc.



Mamie Lou Gross Elementary School – grades K-5 - October 16, 2020

- Presented to 298 students in grades K – 5, along with 10 adults
- Talked about various invasive species, including Asian Carp, flathead catfish, apple snails, Northern Snakehead, blue catfish, tiger shrimp, etc.

Blackshear Elementary School – grades 3 & 4 – October 23, 2020

- Presented to 135 students in grades 3 & 4, along with 12 adults
- Talked about various invasive species, including blue catfish, flathead catfish, apple snails, tiger shrimp, feral hog, northern snakehead, etc.

Nahunta Primary School – grades 2 & 3 – October 29, 2020

- Presented to 218 students in grades PreK – 1st, along with 27 adults
- Talked about various invasive species, including Asian carp, flathead catfish, apple snails, Burmese pythons, etc. using the GSARP travelling trunk, which continues to be a valuable teaching tool!!!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