Florida Fish and Wildlife Conservation Commission
Wildlife Impact Management Section
Gulf & South Atlantic Regional Panel on Aquatic Invasive Species
Update: April 2014 through August 2014

MARINE AQUATIC NUISANCE SPECIES REPORT

Lionfish Update

FWC rules to prohibit the importation of lionfish earlier in 2014 became effective August 1st. The new rules will prohibit the importation of all live lionfish belonging to the genus *Pterois,* including devil firefish (*Pterois miles*) and red lionfish (*Pterois volitans*) into Florida. Only Florida wild-caught lionfish can be sold by wholesale or retail dealers. Rule changes will also allow the use of rebreathers while SCUBA diving to harvest lionfish and a permitting system has been developed to allow spearfishing for lionfish and other nonnative species during approved tournaments and other organized events in areas where spearfishing is not allowed. Additional rule changes to address the ban of breeding lionfish are going to the Commission for acceptance September 2014.

In addition, FWC is working to develop an outreach and control program with the purpose of: 1) engaging the dive community, corporations, non-profit organizations, private citizens and other groups in statewide lionfish control; 2) further educate the public about the lionfish invasion; 3) encourage the participation of those not currently participating in lionfish control efforts; and 4) organize and coordinate control efforts to improve efficiency and identify areas to target. FWC is attending lionfish derbies and events and will be preparing and holding statewide workshops demonstrating safe lionfish cleaning and handling practices. A large statewide outreach event is being planned for the Spring/Summer of 2015.

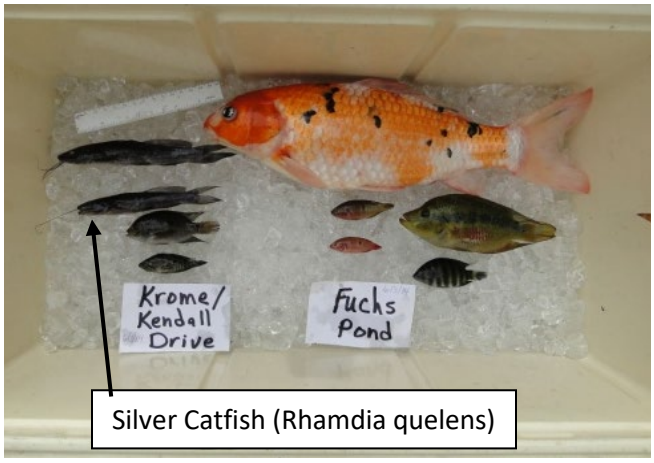
Lionfish catches and sightings can now be reported via FWC's website. In addition, a new lionfish reporting application for use on smart devices "Report Florida Lionfish" was developed and released to the public on May 28th. The app which includes educational information, a report form, and photo submission has been downloaded by more than 2,500 people. The FWC will use the data to help identify sites where targeted lionfish removal might be most beneficial. All data will be available to the public and shared with other groups and agencies collecting this kind of information. Several users have submitted ideas on how to improve the app, and the FWC is looking into implementing those changes, including allowing users to submit using a photograph that is already on their smart device and adding fields for smallest and largest catch.

FRESHWATER NONNATIVE FISH REPORT

Nonnative Fish Roundup

FWC staff assisted in the coordination and implementation of the 5th Annual ECISMA Nonnative Fish Round-Up on May 17th. The goals of this annual tournament are to increase public awareness about the potential negative impacts of releasing nonnative fish into Florida's waters and to promote the consumptive use of these unwanted but available resources. Participants register, fish for exotics in their favorite hot spots, and bring all exotic fish caught during this one-day fishing tournament to one of three weigh-in stations in Broward, Miami-Dade, or Collier counties. A total of 55 anglers registered for the event and caught 18 different species of fish. Almost 600 pounds of exotic fish were removed from south Florida waters as a result of the roundup.

One of the benefits of the Nonnative Fish Roundup is anglers fishing in waterbodies not normally sampled by biologists. This year, two new species of nonnative fish were collected. Two silver catfish were caught from a roadside ditch, and a Marbled Pim from a small, city park pond, both in Miami-Dade County. The city park has a reputation as a dumping grounds for unwanted pets and the variety of nonnative fish species collected supports this claim. The anglers were trying to catch pacu but a Marbled Pim was caught instead. FWC conducted two follow-up surveys to assess the status of these new discoveries. Two additional specimens of silver catfish were collected, but no other Marbled Pim were found.



Silver Catfish (Rhamdia quelens)

Marbled Pim (Leiarius marmoratus)

Freshwater Fish Assessments

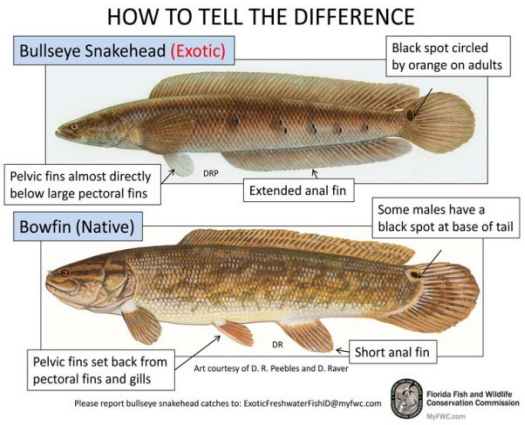
Blue Mbuna

FWC operates an online system that allows the public to communicate with subject area experts. We received an inquiry from a homeowner who was planning to go on an extended vacation and had exhausted his options for taking care of or finding a home for some blue cichlids in his artificial pond. He wanted to know if it was OK to release them in the canal behind his house! We quickly made arrangements to assist the homeowner in removing the fish from the pond. The pond was partially drained and >500 blue Mbuna cichlids were removed. A small number were given to a colleague, a few kept for identification, and the remainder were destroyed. This was a rare event and we don't have a network of fish adopters in place but may explore this possibility.

L-30 Canal

As part of a joint Everglades Cooperative Invasive Species Management Area (ECISMA) effort to assess fish communities in southeast Florida canals that have not been routinely sampled, staff conducted a one-day electrofishing survey of the L-30 Canal in Miami-Dade County. The collection of four additional exotic fish species (African jewelfish, Asian swamp eel, brown hoplo, and blue tilapia) was the primary difference from when this canal was last sampled in 1998 by FWC. The new exotic fish species are widespread and abundant in southeast Florida canals so the findings are not unexpected.

Bowfin/Bullseye Snakehead research



The results of a study on bowfin and bullseye snakehead were summarized and will be presented at the October Southeastern Association of Fish and Wildlife Agencies Conference in Destin, Florida. The morphologically similar bowfin and bullseye snakehead co-occur in several southeast Florida urban canals. A 12-month study completed in September 2013, demonstrated that there was a high dietary similarity between bowfin and bullseye snakehead with biologically significant overlap indices at all sizes of fish examined. A difference in spawning seasonality may reduce potential negative feeding associations between young-of-year of these species. In standardized electrofishing there were no significant negative correlations in catch rates. These data suggest that despite their ecomorphological similarities, bullseye snakehead do not appear to be having a measureable negative impact on bowfin.