

Dolphin Wahoo Advisory Panel Fishery Performance Report for Wahoo Updated November 6, 2023

On November 6, 2023, the Dolphin Wahoo Advisory Panel (AP) of the South Atlantic Fishery Management Council (Council) reviewed fishery information for wahoo and updated this fishery performance report (FPR) that was last reviewed by the AP in October 2020. The purpose of the FPR is to assemble information from AP members' experience and observations on the water and in the marketplace to complement scientific and landings data. The FPRs for wahoo will be provided to the Council to help inform future management.

Advisory Panel Members present:

Chris Burrows, Chair (NC) Chip Berry (SC) Robert Frevert (FL) Richard Harris (NC) Timothy Scalise (SC) Richard DeLizza (FL) Jonathon Reynolds, Vice Chair (FL) Jay Kavanaugh (NC) Dan Owsley (FL) Rom Whitaker III (NC) Paul Pancake (SC) Bill Richardson (VA)

Fishery Overview

Summary information on the wahoo fishery was presented in a fishery information application (<u>https://safmc-shinyapps.shinyapps.io/FPRAll/</u>) intended to provide an overview of several aspects of the fishery including life history of the species, trends in landings, and fishery economics for both the commercial and recreational (for-hire and private) sectors. The information was provided as background to elicit the discussion presented in this FPR. The fishery information application presents data from 2000 through 2022.

Observations on Stock Abundance and Catch Levels

AP members generally agreed that the timing of runs and general location of wahoo has not notably changed beyond typical season variations. There seems to be a general increase in wahoo abundance and availability to the fishery across the South Atlantic Region and it does not appear that increased effort to harvest them has affected their abundance in a negative fashion. Wahoo have become a popular target species and fishing has been typically good and consistent. It was noted that wahoo presence can be sporadic in the Outer Banks area of North Carolina. Off of Virginia, wahoo are occasionally encountered in the summer but available in larger numbers in the early fall.

Observations on Fish Size

AP members generally agreed that the average size of wahoo landed has been steady or has increased in recent years. While there is variation in the size of wahoo landed, no AP members felt that the average fish size was decreasing over time.

Observations on Effort Shifts and Discards

There has been shift in effort towards wahoo and new entrants have come into the fishery as shown in increased presence of the species on social media and sharing of methods to target wahoo. It has become relatively easy to learn how to high speed troll from articles online or in fishing magazines, which is an effective method to target wahoo. New offshore boat owners are targeting wahoo very early in their learning process. In Mid and Southeast coastal North Carolina, it was noted that there has been a shift to wahoo with the decline of the yellowfin tuna fishery in the area. In the Outer Banks, tuna fishing has been slow at times in September and October so wahoo have become a main target species at that time of year.

AP members in South Florida and the Florida Keys stated that there is concern over increased fishing pressure, particularly from divers using spearfishing gear. It was noted that some divers seem to be targeting spawning aggregations around wrecks and that divers are responsible for notable removals of wahoo, either through direct harvest or through delayed mortality when a speared fish escapes. These were referred to as "lost fish" that do not show up as harvest. It was also noted that there are many new recreational participants in the rod and reel component of the fishery that are catching and keeping very small fish, often while vertical jigging or fishing along weed lines. This increased effort and harvest of small wahoo was noted as a cause for concern.

Technology and tactics have made it easier to target wahoo. The species can be targeted when traveling between fishing spots or on the way to and from fishing for other species such as dolphin (mahi), billfish, and reef fish species. If not high speed trolling, a planer is often used when targeting wahoo. In the Outer Banks it was noted that slowing down early before reaching a fishing spot and high speed trolling for wahoo for the remaining few miles can reduce fuel consumption, leading to lower trip costs for some vessels. For other vessels, high speed trolling increases fuel consumption, leading to increased trip costs. In South Florida it was noted that targeted effort towards wahoo is often based on the lunar cycle.

Observations on Price and Demand

There is strong demand from customers on charter trips that want to target wahoo. In some areas, particularly North Carolina, wahoo has become one of the most sought after species on charter trips. There is also a strong and increasing general recreational demand (both charter and private) for wahoo, in both the South and Mid-Atlantic regions as well as the Caribbean. This has been shown through an increase in trips using high speed trolling methods to target wahoo and the increasing number of wahoo-specific tournaments. One AP member previously noted that the wahoo tournament records could be a potential data source to assess trends in regional wahoo landings, size, and popularity.

Wahoo are a highly prized fish recreationally and catching a wahoo on a recreational trip can be a "day maker", particularly if the fishing is slow. It was noted that in South Carolina and North Florida, trips targeting wahoo also help fill in during times that are typically the "slow season" such as late winter or early spring, and in particular the month of March. In areas where dolphin catches have been less reliable, especially South Florida, wahoo fishing has provided at least some relief for those in the for-hire sector. Several years ago, the selection of wahoo tackle and lures was fairly sparse in tackle shops but now shops have entire sections dedicated to wahoo. Wahoo are often a desirable incidental catch on commercial trips since it can be difficult to harvest quantities that would make it a profitable target species. The commercial price for wahoo has increased in recent years. Wahoo tend to have a relatively short "shelf life" and thus prices are greatly affected by the demand from restaurants and retail outlets that utilize the fish. In the Wilmington, North Carolina, area demand from restaurants has been very high and wahoo typically sells out very quickly when available.

Observations on Management Measures

There was general agreement that existing retention limits are sufficient in the hook and line fishery across the region. There was concern over increasing targeted spearfishing effort and landings of wahoo in South Florida and the Florida Keys from both recreational and commercial participants. AP members noted that more restrictive retention limits on spear-caught wahoo could be a regional management item to consider to mitigate potential outsized future negative impacts to wahoo stocks, particularly since this effort appears to be directed towards spawning fish.

Additionally, there was concern over an increase in recreational landings of very small wahoo in South Florida and the Florida Keys since these fish are likely sexually immature and have little food value/yield due to their size. AP members recommended the consideration of a minimum size limit for wahoo to reduce landings and targeted effort directed towards small wahoo. All AP members present indicated supporting such a measure. It was noted that a size limit should be small since larger wahoo can be potentially dangerous to measure and release, and it would be helpful if this size limit were tied in with other commonly caught species to make it easy for anglers to remember. Small fish are relatively easy to handle and release alive. Potential size limit options mentioned were a 24 inch fork length to match the minimum size limit for king mackerel or a 27 inch fork length to match the minimum size limit for yellowfin, bigeye, and bluefin tuna.

Environmental and Habitat Observations

Wahoo often prefer specific habitats based on their size. Larger specimens are typically found closer to shore around the shelf break and over structure. Smaller specimens are typically found further offshore and in deeper water. These smaller fish often orient themselves around floating structure such as *Sargassum* mats and marine debris such as logs or branches. AP members previously mentioned occasionally catching very small specimens (a.k.a "weehoos") on sabiki rigs around *Sargassum* mats when targeting baitfish. In the Outer Banks, it was noted that there was an exception general habitat preference and larger fish are often found in deep water over 100 fathoms.

While wahoo are often found in warm, clear water, they are also encountered in colder "green water" if there is sufficient forage in the area. It was noted that wahoo seem to have a better tolerance for both colder and hotter water than dolphin. Fishermen in Northern Florida have been experiencing warmer water earlier in the year and this typically brings wahoo early in the year as well. In South Florida wahoo are caught in some very warm water. In recent years, dolphin prevalence has also notably decreased in the area but wahoo numbers have increased. It was speculated that there may be an inverse linkage between the two species.

In the Outer Banks of North Carolina, it was previously noted that small specimens

sporadically migrate through the area all at once and in large numbers but then may not appear again for a long period of time. There does not seem to be an apparent pattern to this regional migration of small fish. AP members from North Carolina also speculated whether there are some resident fish in the region, since there are still fish available in the winter or even year round.

Other observations

There has been an increase in the population of many shark species and this is having an impact on the wahoo fishery as well as many other fisheries in the South Atlantic. This is causing increased mortality on wahoo and other prized species such as sailfish through changing fishing behavior that concentrates fishermen in certain areas and directing effort towards species that can be feasibly landed without the likelihood of extreme shark predation. Shark predation is also a significant additional source of mortality for the fish species that are often eaten by sharks while hooked. While previously uncommon, wahoo are now being eaten while being reeled in with some regularity and this occurrence is increasing. Even when high speed trolling, wahoo are being taken off of the line by sharks.

An AP member noted that there are multiple dive operations feeding sharks off Jupiter, Florida, and that fishing spots in this area and others have become unfishable due to shark predation. It was also noted that increased use of apps, such as E-Trips, could be used to help quantify the shark problem. Previously, an AP member from South Florida noted that there appeared to be a temporary decrease in localized shark predation after a commercial shark fishing vessel was active in the area. It was speculated that this occurrence could have been due to a decrease in localized shark abundance and/or a change in shark behavior in reaction to the fishing pressure that caused sharks to generally avoid fishing vessels for a period of time.