



Great Barracuda

Draft Rule

June 23, 2016

Florida Fish and Wildlife Conservation Commission

Division of Marine Fisheries Management

Version 2

This document summarizes a draft rule to amend the Florida Fish and Wildlife Conservation Commission's (FWC) barracuda regulations, 68B-60, Florida Administrative Code (FAC). The proposed draft rule would establish a recreational and commercial size limit for barracuda harvested from south Florida to address population concerns for this species in the region.

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Barracuda Issue – Review

- Important to anglers as sport, food, and bait
- Also important to the recreational diving industry
- Concerns in recent years about sustainability of barracuda population in south Florida
- Complex life history makes them difficult to study
- Consensus among recreational fishermen, fishing clubs, divers, and academic institutions about declines in south Florida
- No stock assessments have been conducted for barracuda, however some available data support concerns heard in south Florida



The great barracuda is a large fast-growing, predatory fish that is important to many anglers for sport, food, and bait at various sizes. Barracuda is also an important species for Florida's recreational diving industry because encounters with these large, impressive fish are exciting.

In recent years, there have been concerns about the sustainability of the barracuda population in south Florida. Generally, there is consensus among recreational fishermen, fishing clubs, divers, and representatives of academic institutions that there has been a decline in the size and abundance of barracuda.

Barracuda have a complex life history, making them difficult to study. They use inshore areas, such as estuaries and bays, as nursery grounds, and shift toward nearshore and offshore reefs as they mature. Adult fish exhibit a variety of behaviors, with some fish returning to inshore areas when following food or looking for suitable habitat, while others remain on the reefs. Some adult fish congregate in large schools, while others appear to exhibit a solitary, territorial lifestyle.

There is relatively little research to date on this species, and therefore there is not enough information available to conduct a stock assessment. However, the limited available data from research conducted by the Fish and Wildlife Research Institute (FWRI) and its partners support the concerns heard regarding a population decline in south Florida.

Management Timeline

2013 - 2014: Stakeholders approached staff with concerns

2014: Review and discussion at Nov. Commission meeting

2015

- Public workshops on potential management options in Feb. and March
- Statewide marine fisheries workshops held in summer
- Commission created recreational and commercial bag limits at Sept. Commission meeting
 - Directed staff to gather more public feedback on potential size limits

2016

- Additional public workshops held in south Florida
- **Today**: Draft rule hearing on potential size limits



This topic was brought to the Commission's attention by concerned stakeholders. In recent years, recreational anglers, fishing guides, and divers have expressed concern about observed declines in barracuda populations in south Florida, particularly in the Florida Keys and southeast Florida. In November 2014, staff presented a review and discussion to the Commission regarding the issue and potential causes. Anecdotal reports of increased commercial spearfishing and harvest for use as chum were suggested by stakeholders as potential causes of the observed declines.

In February and March of 2015, staff conducted three in-person public workshops in the Florida Keys and southeast Florida, as well as an online webinar available to anglers statewide. Barracuda comments were also collected at the open-agenda, statewide marine fisheries workshops held in July 2015. At the September 2015 meeting, the Commission approved recreational and commercial bag and vessel limits for barracuda for Collier, Monroe, Miami-Dade, Broward, Palm Beach, and Martin counties, and directed staff to gather more public input on potential size limits before further rulemaking. In early 2016, staff conducted additional public

workshops in south Florida, and are proposing a draft rule to create size limits for barracuda today.

Current Regulations

Recreational: 2 fish per person, 6 fish vessel limit

- Expected to reduce total harvest by approximately 32%

Commercial: 2 fish per person, 6 fish vessel limit

- Expected to reduce total harvest by approximately 6-8%

Applies only to south Florida

- Collier through Martin counties
- State and federal waters

These rules became effective Nov. 1, 2015



The current regulations include a bag limit of two fish per person, and six fish per vessel, which applies to both the recreational and commercial fisheries. These bag and vessel limits apply in the state and federal waters off the south Florida counties of Collier, Monroe, Miami-Dade, Broward, Palm Beach, and Martin. This regional approach addresses the area of concern, while not impacting stakeholders outside of south Florida. These bag and vessel limits went into effect on Nov. 1, 2015.

Consideration of a Size Limit

- At the time the bag limit was approved (Sept. 2015), stakeholders voiced mixed opinions about the then-proposed slot limit
- Commission felt more public input on size limits was needed
 - Directed staff to conduct further public outreach

New public input

- 3 additional public workshops
- Letters from stakeholders who could not attend workshops
- Direct communication with stakeholders



At the time the new barracuda size limit was approved last September, stakeholders voiced mixed opinions about the then-proposed slot limit. Many stakeholders supported the slot limit as proposed, while others felt it was too restrictive, and would unnecessarily limit their ability to harvest large fish. Therefore, the Commission felt that more public input was needed before moving forward with a size limit, and directed staff to gather more feedback and return at a later date.

Earlier this year, staff gathered additional public input as directed through three in-person workshops. Staff also received feedback through formal letters of opinion from stakeholders who could not attend the workshops and other direct communications with stakeholders.

2016 Public Workshop Summary



- Workshops: Key West, Islamorada, and Jupiter

Stakeholder feedback

- Broad support for bag limit implemented in 2015
 - Limited negative feedback from commercial fishers
- Most participants prefer to catch or see large fish
- Majority supported a slot limit
 - Some support for an allowance of one oversized fish
- Some support for minimum size
 - Some charter and commercial
- Concerns regarding ciguatera



In February 2016, staff conducted public workshops in Key West, Islamorada, and Jupiter to gather public input on the preferred size limit strategy for barracuda. Feedback was gathered by public comment, and an in-person survey given at the end of each workshop. In general, staff heard a great deal of support for the bag and vessel limits implemented in 2015. However there were a few commercial fishers that felt applying the two-fish limit to commercial harvest was overly strict.

Most workshop participants felt that, in addition to the newly implemented bag limit, a size limit was still needed to conserve large fish and help speed the recovery of the local population. Survey results showed that most participants who fish for or view barracuda in prefer to target or see large fish (those over 30 inches). As a size limit strategy, the majority of respondents supported a slot limit as the strategy of choice. However, some charter and commercial harvesters supported either a minimum size limit only, while some guides and recreational anglers supported a catch-and-release only strategy. For those who supported a slot limit, there was also support for an allowance of one fish over the slot to accommodate the charter industry or others who wish to keep a large fish for a trophy. One general concern from many participants at the workshops was the risk of ciguatera associated with eating large barracuda.

Proposed Recreational and Commercial Slot Limit

Recommend lower limit: 15 inches

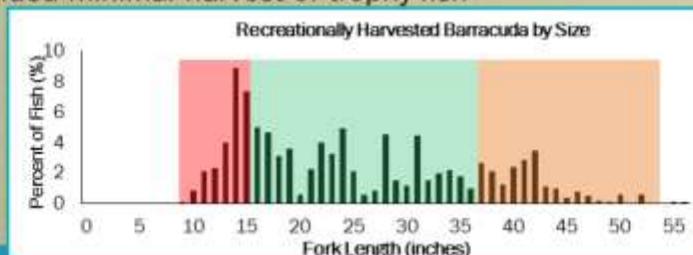
- Protect a large portion of juvenile fish from harvest
- Allow food fishery to continue

Recommend upper limit: 36 inches

- Fish that survive through the slot and mature would face little harvest pressure
- Conserve large fish for sport fishermen and dive industry

Recommend over-the-slot allowance: 1 per vessel per day

- Allow continued minimal harvest of trophy fish



Considering all the feedback received, staff are recommending the Commission create a slot limit for the recreational and commercial harvest of barracuda. The proposed slot limit would include a lower limit of 15 inches fork length and an upper limit of 36 inches fork length, allowing for harvest of fish in between the lower and upper limits (15-36 inches fork length). Because recreational food fishermen reportedly target barracuda between 12 and 24 inches, a lower size limit of 15 inches would allow the barracuda food fishery to persist while protecting the smallest juvenile fish (those under one year old) that are currently being harvested by some fishermen. This would reduce fishing mortality for the smallest fish and is expected to increase a juvenile fish's chances of surviving to maturity.

An upper size limit of 36 inches corresponds with the size when females mature (28-39 inches) and would reduce harvest pressure for the majority of mature females as well as many mature males, thus conserving large spawners that make it through the harvest slot. This is a similar concept to the red drum slot limit, where almost all of the fish inside the harvestable range of the slot limit are immature fish, but large spawners that make it through the slot are protected. The proposed slot limit would also conserve the largest fish, which provide an exciting catch-and-release experience for anglers and are highly valued by south Florida's recreational dive industry.

Based on input received at the marine fisheries statewide workshops in July of 2015, and additional input from 2016 barracuda workshops, staff are also recommending to allow the harvest of one fish over the slot per person or per vessel per day, whichever is less. Potential benefits of this recommendation are discussed on the next slide.

Proposed Allowance – One Fish Over the Slot

- Some charter businesses rely on their customers' ability to keep a trophy-sized barracuda
- Some stakeholders expressed concerns that the 36-inch upper size limit was unnecessarily restrictive

Why staff are proposing allowing one fish over the slot per vessel

- Allow harvest for those pursuing potential IGFA records
- Allow trophy harvest to persist
- Minimize potential economic impacts to charter businesses
- Provide a mechanism for spearfishers to retain a fish that may be oversized



Some charter captains expressed concerns that the proposed upper end of the proposed slot limit was too restrictive for a species that many like to keep as a trophy. These charter captains explained that their businesses rely on their customers' ability to keep trophy-sized fish, and felt their businesses would be negatively effected unnecessarily by the upper limit of the proposed slot limit. In order to mitigate negative impacts on these small business, several of the captains in attendance requested an allowance to harvest one fish over the slot limit.

Based on the concerns expressed by members of the charter industry and stakeholder interest in being able to pursue large barracuda for the purpose of an International Game Fish Association (IGFA) world record, staff recommend allowing the harvest of one fish over the proposed slot limit per person or per vessel per day, whichever is less. This allowance would minimize economic impacts to the charter industry by allowing a trophy fishery to persist and would also provide a mechanism for spearfishers to retain a fish that may be oversized while still conserving the majority of large barracuda.

Benefits of Slot Limit Proposal

Biological benefits

- Conservation of large fish and spawning stock
- Slot limits have led to rapid increases in large, spawning fish in other fisheries
 - Including fisheries with allowance for 1-fish over the slot
- Particularly appealing for barracuda because release mortality is negligible



Social benefits

- Most widely supported size limit strategy at public workshops
- Allows harvest within a range of sizes
 - Juvenile fish desired by food fishery
 - Minimal trophy-sized fish
- Limits harvest of large fish expected to carry a higher risk of ciguatera
- Increases abundance of large fish important for
 - Sport and trophy fishing
 - Ecotourism-based dive industry



The recommended slot limit strategy would provide many benefits for barracuda. Biologically, this management approach prevents the largest fish in the population from being harvested and can be a very effective management tool if coupled with an appropriate bag limit to ensure that some fish survive to grow out of the slot. It also sustains future recruitment, since those large fish are the most important contributors to the next generation, given that egg production increases exponentially with the size of a female fish. The Commission has successfully used slot limits to manage several marine species, including red drum, spotted seatrout, and snook. Slot limit for barracuda, slot limits have led to rapid increases in large spawning fish even in those fisheries such which allow for one fish over the slot to be harvested as spotted seatrout . A slot limit is also particularly well-suited for barracuda because the release mortality of barracuda is negligible, so larger fish that are caught are very likely to survive if they are released.

There are also many social benefits that may result from utilizing a slot limit strategy for the barracuda fishery. Based on the feedback staff have received, most stakeholders value large fish. A slot limit was the most widely supported strategy of all the size limit strategies considered. Allowing for the harvest of moderate-sized fish would also allow the food fishery to persist, while accommodating some of the concerns that stakeholders have regarding the larger fish carrying a higher risk of ciguatera. The increased abundance of large fish would also be beneficial for both the trophy fishing and ecotourism-based dive industries that depend on large fish.

Proposed Draft Rule

68B-60.003 Size Limits (NEW)

- *Establish a slot limit for recreational and commercial harvest of barracuda from state and federal waters off Collier, Monroe, Miami-Dade, Broward, Palm Beach, and Martin counties*
 - *Lower size limit of 15 inches fork length*
 - *Upper size limit of 36 inches fork length*
- *Allow harvest of one fish larger than 36 inches per person or per vessel per day, whichever is less*



The proposed draft rule would modify 68B-60, FAC, to establish a slot limit with a lower 15 inches fork length and an upper limit of 36 inches fork length, and allow for the harvest of one barracuda over the slot limit per day per person or per vessel, whichever is less, for recreational and commercial harvest from state and federal waters off Collier, Monroe, Miami-Dade, Broward, Palm Beach, and Martin counties.

Staff Recommendation

Approve the proposed draft rule that, along with the regulations implemented in Nov. 2015, would conserve large spawning-size and socially valuable barracuda in south Florida

- Create a slot limit effective in state and federal waters off Collier, Monroe, Miami-Dade, Broward, Palm Beach and Martin counties only
 - Lower size limit of 15 inches fork length
 - Upper size limit of 36 inches fork length
- Allow harvest of one fish greater than 36 inches per day per person or per vessel, whichever is less

If approved and directed, return for a final public hearing at the November Commission meeting in St. Petersburg



Staff recommend, along with the regulations already implemented in November 2015, approving the proposed draft rule establishing a slot limit for barracuda with a lower limit of 15 inches and an upper limit of 36 inches fork length for both recreational and commercial harvesters in Florida's southern most counties and allowing for one fish over the upper size limit per day per person or per vessel, whichever is less in that region.

If approved and directed, staff will return for a final public hearing at the November Commission meeting in St. Petersburg.