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Governor

MICHAEL S. REGAN
Secretary

STEPHEN W. MURPHEY
Director

Memo

May 15, 2020

To: Caitlin Starks, FMP Coordinator

From: Chris Batsavage and Lee Paramore, NCDMF

RE: North Carolina Preliminary February 2020 Black Sea Bass Recreational Harvest north of Cape Hatteras

In December 2019, the Council and Board agreed to allow a February 2020 black sea bass (North of Cape Hatteras) recreational fishery for interested states in federal waters. Anglers were limited to 15 fish per day at a minimum size of 12.5". The projected harvest assuming participation of all states was 100,000 pounds. The February recreational black sea bass fishery under these measures has been in place since 2018. The two states that opted into the February 2020 fishery were Virginia and North Carolina. Based on 2013 vessel trip report (VTR) data from wave 1, the North Carolina recreational fishery north of Cape Hatteras was projected to harvest 62 pounds.

The MRIP estimate for black sea bass harvest north of Cape Hatteras in February 2020 was 28,091 fish and 50,692 pounds (Table 1). The estimated from MRIP number of fish released was 18,936 fish. MRIP staff collected 2 intercepts with black sea bass north of Cape Hatteras in February 2020. The intercepted trips harvested a total of 67 black sea bass among 8 anglers. No MRIP intercepts with black sea bass were collected in 2018 and 2019. The MRIP estimate for boat trips in the ocean during wave 1 totaled 13,259 trips with private/rental mode trips much higher than party/charter mode trips (Table 2). Trip numbers for just February 2020 north of Cape Hatteras were not available. GARFO staff received no for-hire Vessel Trip Reports (VTRs) from the NC for-hire fishery north of Cape Hatteras in February 2018-2020 (Table 3).

Table 1. Summary of estimated North Carolina (north of Cape Hatteras) private angler black sea bass catch and harvest during February 2018-2020. All values are based on MRIP estimates.

Private anglers - North Carolina February 2018-2020					
Year	MRIP intercepts	Estimated total harvest (# fish)	Estimated total harvest (lb.)	Estimated total discards (#s fish)	Estimated total catch (#s fish)
2018	0	0	0	0	0
2019	0	0	0	0	0
2020	2	28,091	50,692	18,936	47,027

Table 2. Number of trips by mode in the ocean north of Cape Hatteras during Wave 1, 2020.

Mode	Area	Trips	PSE (Trips)
Private/Rental	Ocean \leq 3 Miles	2,492	100.00
Private/Rental	Ocean $>$ 3 Miles	9,897	72.56
Party/Charter	Ocean \leq 3 Miles	72	0
Party/Charter	Ocean $>$ 3 Miles	798	0
Total Trips		13,259	

Table 3. Summary of North Carolina (north of Cape Hatteras) for-hire black sea bass catch and harvest during February 2018-2020. Values are based on MRIP, federal VTRs, and NCDMF sampling, as indicated below.

For-hire - North Carolina February 2018-2020					
Year	MRIP intercepts	Federal VTRs submitted	Trips sampled by NCDMF	Sampled fish	Estimated weight of sampled fish
2018	0	0	0	0	0
2019	0	0	1	24	55
2020	0	0	1	31	71

North Carolina Division of Marine Fisheries (NCDMF) staff worked with charter boat captains who target black sea bass north of Cape Hatteras to collect black sea bass carcasses for age and growth samples. Staff collected 31 black sea bass carcasses from a charter boat fishing in federal waters offshore of Oregon Inlet (Table 3). Lengths ranged from 371-574 mm; 68% were male and 32% were female. Additionally, otoliths were collected from the carcasses. NCDMF staff was not notified of every trip, and the lack of VTR data prevents us from estimating the proportion of for-hire trips that were sampled.

The wave 1 black sea bass harvest estimate north of Cape Hatteras is very uncertain due to the low number of intercepts with black sea bass, the relatively high catch rates from the intercepts and the estimated number of trips during wave 1 north of Cape Hatteras. The estimate suggests that more black sea bass were harvested in February 2020 than any entire year since 2011. While anecdotal reports support that black sea bass harvest north of Cape Hatteras was higher than expected, it is unrealistic to believe over 50,000 pounds of fish were harvested given the low number of days that boats can safely fish in the ocean out of Oregon Inlet in the winter. The observation buoy offshore of Oregon Inlet was offline in February, but wind direction and velocity data at the Oregon Inlet Fishing Center’s weather station was available to characterize weather conditions when known fishing trips occurred. MRIP intercept data, carcass collection data and fishing reports identified five days when anglers harvested black sea bass north of Cape Hatteras. The wind direction on four of those days were southerly (daily average wind direction from 160° -212°) and easterly (daily average wind direction of 79°) on one day. Average daily wind speeds ranged from 2.9-8.2 miles per hour with wind gusts ranging from 4.0-9.2 miles per hour. The data from the weather station indicated that there were four additional days with similar wind

directions and velocities, but it is unknown if or how much fishing effort occurred on those days. The number of boats fishing for black sea bass during the February season is also unknown, but most of the private boats fishing out of the Oregon Inlet boat ramp are less than 30 feet long and most of the charter boats are between 30 and 60 feet long and take 6 passengers or less. No head boats operate out of Oregon Inlet in the winter. Onshore wind directions (northerly and easterly) and moderate to high wind velocities make navigating Oregon Inlet and fishing in federal waters hazardous. Therefore, it is unlikely that the recreational fishery landed over 50,000 pounds of black sea bass in only nine days.

Contributing to the large estimate was one intercept of a trip that was reported by the anglers as a private boat mode in state waters. Although the trip occurred on a charter boat with out of state anglers, it is plausible that it was not a for-hire trip because for-hire captains will take friends and family fishing. However, black sea bass fishing north of Cape Hatteras largely occurs in federal waters, and the anecdotal reports from the 2020 February fishery indicated that anglers were fishing in federal waters.

NCDMF’s MRIP staff applied the catch rates for the private boat modes in federal and state waters to the party/charter mode trips in state and federal waters and the private boat mode trips in federal waters as a relative comparison of black sea bass harvest estimates from the intercept reported as a private boat state waters trip (Table 4). The estimates from this intercept are much lower if it was reported as a party/charter mode trip with estimates approximately 30,000 pounds lower than the estimated harvest from the intercept. The estimate in pounds of fish from this estimate are also lower if it was reported as a private boat trip in federal waters with the estimate approximately 12,000 pounds lower than the estimated harvest from the intercept. It is important to note that there are no levels of precision for these estimates and the calculations are outside the MRIP harvest estimate calculations. They are provided to show how the mode and area fished could substantially influence the harvest estimate when there were only two intercepts with black sea bass.

Table 4. Comparison of harvest estimates (pounds) of the intercept reported as a private boat trip in state waters if it was reported as a different mode/area combination.

Party/Charter (P/C) Ocean > 3 Miles				
P/C Trips	Private Boat Catch Rate	P/C Harvest Est.	Original Est.	Difference
798	1.95	1,553	31,422	-29,869
Party/Charter (P/C) Ocean ≤ 3 Miles				
P/C Trips	Private Boat Catch Rate	P/C Harvest Est.	Original Est.	Difference
72	12.61	912	31,422	-30,510
Private Boat Ocean > 3 Miles				
P/C Trips	Private Boat Catch Rate	Private Harvest Est.	Original Est.	Difference
9,897	1.95	19,270	31,422	-12,152

The plan for accounting for February 2020 recreational black sea bass harvest was to reopen the season on May 17 and close the season later in the year if the harvest exceeded what was expected. The season

will reopen on May 17 with a 12.5" and a 15-fish bag limit since the public was notified in advance of the reopening date and regulations. However, we need guidance on accounting for the higher than expected harvest because the estimate far exceeds the annual harvest estimates since 2011. Therefore, we request that the Summer Flounder, Scup, and Black Sea Bass Management Board task its Technical Committee with reviewing the MRIP data that generated the harvest estimate and provide guidance on how to account for the February 2020 recreational black sea bass harvest north of Cape Hatteras.