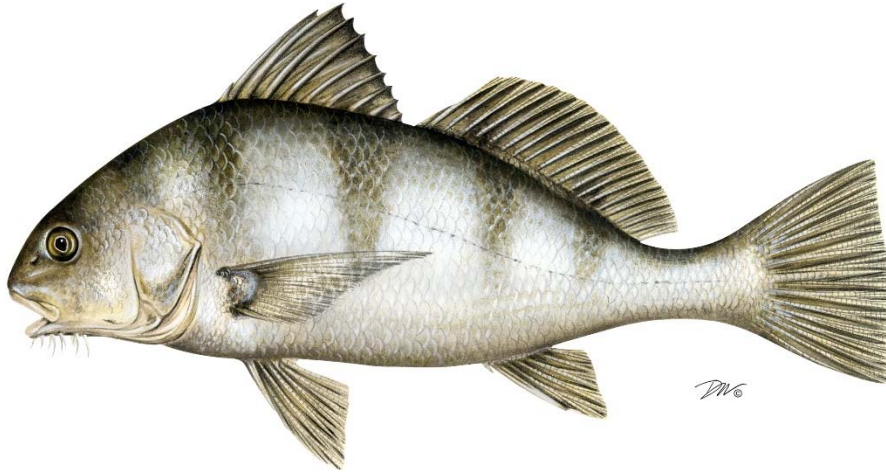


**2017 REVIEW OF THE
ATLANTIC STATES MARINE FISHERIES COMMISSION
FISHERY MANAGEMENT PLAN FOR**

**BLACK DRUM
(*Pogonias cromis*)**

2016 FISHING YEAR



The Black Drum Plan Review Team

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2017 Black Drum FMP Review

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I. Status of the Fishery Management Plan

Date of FMP Approval: Original FMP – June 2013

Management Areas: The entire Atlantic coast distribution of the resource from New Jersey through the east coast of Florida

Active Boards/Committees: South Atlantic State/Federal Fisheries Management Board; Black Drum Technical Committee, Stock Assessment Subcommittee, Plan Review Team; South Atlantic Species Advisory Panel

The Atlantic States Marine Fisheries Commission (ASMFC) adopted an interstate Fishery Management Plan (FMP) for Black Drum in 2013. Prior to the FMP, management was state-specific, from no regulations in North Carolina to various combinations of size limits, possession limits, commercial trip limits, and/or annual commercial quotas from New Jersey to Florida. The Maryland portion of the Chesapeake Bay was closed to commercial fishing in 1998.

The FMP requires all states with a declared interest in the species to have established a maximum possession limit and minimum size limit of at least 12 inches by January 1, 2014, and to have increased the minimum size limit to at least 14 inches by January 1, 2016. The FMP also includes a management framework to adaptively respond to future concerns or changes in the fishery or population.

There are four plan objectives:

- Provide a flexible management system to address future changes in resource abundance, scientific information, and fishing patterns among user groups or area.
- Promote cooperative collection of biological, economic, and sociological data required to effectively monitor and assess the status of the black drum resource and evaluate management efforts.
- Manage the black drum fishery to protect both young individuals and established breeding stock.
- Develop research priorities that will further refine the black drum management program to maximize the biological, social, and economic benefits derived from the black drum population.

The management unit for black drum under the FMP is defined as the range of the species within U.S. waters of the northwest Atlantic Ocean, from the estuaries eastward to the offshore boundaries of the Exclusive Economic Zone (EEZ).

II. Status of the Stocks

In the 2015 Black Drum Benchmark Stock Assessment, the Stock Assessment Subcommittee (SAS) selected the Depletion-Based Stock Reduction Analysis (DB-SRA; Dick and McCall 2011) as the preferred method for estimating catch reference points. The SAS considered the Depletion-

Corrected Average Catch (DCAC; McCall 2009) analysis, but ultimately rejected this method. DCAC did not incorporate removals into a population dynamics process, and uncertainty existed over how changes in the exploitation rate time series may impact the sustainable yield relative to the current stock condition.

Based on the DB-SRA results, black drum life history, indices of abundance, and history of exploitation, the black drum stock is not overfished and not experiencing overfishing (ASMFC 2015). Median biomass exhibited slow and steady decline from 135.2 million pounds in 1900 to 90.78 million pounds in 2012, though the median biomass estimate in 2012 is still well above the necessary level to produce maximum sustainable yield (B_{MSY} ; 47.26 million pounds). The median maximum sustainable yield (MSY) estimate is 2.12 million pounds and provides an annual catch target that can be used to sustainably manage the fishery. The median overfishing limit (OFL) estimate is 4.12 million pounds and provides a catch threshold that indicates overfishing when exceeded. The OFL is the maximum exploitation rate at the current biomass that does not lead to overfishing.

III. Status of the Fishery

The following discussion utilizes results from direct queries of the Marine Recreational Information Program (MRIP) data through their website. Adjustments needed to make these consistent through time (convert pre-2004 MRFSS data, adjust for changes in for-hire component of survey, and deletion of 1981-1985 headboat data) have not been made here.

Total black drum landings from New Jersey through the east coast of Florida are estimated at 1.53 million pounds in 2016, a 2.8% increase from total harvest in 2015 (Tables 2 and 3, Figure 2). 2016 harvest is 30% below the previous ten-year (2006-2015) average. The commercial and recreational fisheries harvested 14.7% and 85.3% of the 2016 total, respectively.

Commercial landings of black drum span from New Jersey through Florida, excluding the Maryland portion of the Chesapeake Bay (Table 2). Coastwide commercial landings show no particular temporal trends, ranging from approximately 120,000 to 400,000 pounds annually over the last 14 years (Figure 2). Black drum commercial landings in 2016 were estimated at 225,253 pounds, a 5% decrease from those of 2015. North Carolina led commercial harvest with 40% of the landings, followed by Virginia and Delaware with 25% and 22%, respectively (Table 2). Virginia and North Carolina have historically been the major commercial harvesters, while Delaware has caught increased percentages of the commercial harvest over the last two years.

Recreational harvest of black drum peaked in 2008 at 789,216 fish (or 5.2 million pounds; Tables 3 and 4). Since 2000, the number has fluctuated without trend between 166,334 and 789,216 fish (weight has fluctuated between 744,267 and 5.2 million pounds; Figures 2 and 3). Recreational harvest increased from 166,344 fish in 2015, the lowest number since 1993, to 396,021 fish in 2016.

After a year where the coastwide recreational average weight per fish (recreational harvest in pounds divided by recreational harvest in numbers) showed a large increase (7.5 pounds per fish in

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2015), average weight declined in 2016 to 3.29 pounds per fish, which is closer to the time series average from 1981-2016 of 3.74 pounds per fish. Years that have shown large increases in coastwide average weight (i.e. increases to recreational harvest in pounds without proportional increase to recreational harvest in numbers) have typically occurred during years when Mid-Atlantic states (Virginia-New Jersey) have caught increased percentages of the coastwide recreational harvest (Tables 3 and 4).

The 2016 recreational harvest represents a 6% decrease in numbers and a 32% decrease in pounds from the previous ten year (2006-2015) average. Florida anglers landed the largest share of the coastwide recreational harvest in numbers (59%), followed by North Carolina (18%) and South Carolina (16%). Since the beginning of the recreational time series (1981) anglers have released increasing percentages of caught fish, with percentages of recreational fish released exceeding 70% in each of the past 3 years. In 2016, 73% (1.1 million fish) of the recreational catch was released (Figure 3, Table 5). It is worth noting that release rates seemingly plateaued around 50% from the late 1990s through 2013, when the FMP took effect, establishing minimum sizes in every state and requiring that undersized drum be released for the first time. Recent high release rates can be attributed to these measures, as well as encouragement of catch and release practices.

It should also be noted that depending on the state, percent standard error (PSE) of recreational harvest in numbers ranged widely in 2016, from 29.3-102.2%. Values in most previous years were greater than 50%. PSE values above 50% are regarded as uncertain and are typically attributed to a high level of variability in the harvest estimates. Since harvest estimates are expansions of field intercepts and phone surveys, these high PSE levels indicate higher levels of uncertainty in the expansion estimates for harvest as well as B2 (released alive) estimates. However, this is common for many recreational fisheries and the data trends indicated are still reliable for general management advisement.

IV. Status of Assessment Advice

Current stock status information comes from the 2015 benchmark stock assessment (ASMFC 2015) completed by the ASMFC Black Drum Stock Assessment Subcommittee and Technical Committee, peer reviewed by an independent panel of experts, and approved by the South Atlantic State-Federal Fisheries Management Board for use in management decisions.

The stock assessment could be improved by applying a more complex, data-rich assessment method such as a statistical catch-at-age model. Data limitations that need to be addressed to successfully make this transition are biological sampling (length and age) of recreational and commercial fisheries and a fishery-independent survey to track abundance and age structure of the mature stock. Additionally, information about commercial discards and movement of fish along coast and between water depths would improve the assessment.

V. Status of Research and Monitoring

There are no monitoring or research programs required annually of the states except for the submission of a compliance report. The following fishery-dependent (other than catch and effort data) and fishery-independent monitoring programs were reported in the 2016 reports.

Fishery Dependent Monitoring

- New Jersey DEP – Sampled from commercial fishery. Total length and sex were recorded and otoliths collected (n=53).
- Delaware DFW – Black Drum were not sampled in 2016 due to the unavailability of commercially and recreationally caught fish. Black drum sampling is being conducted in 2017.
- Maryland DNR – Conducted commercial pound net survey from late spring through summer. (2016: 4 fish, mean total length: 952 mm).
- Virginia MRC –
 - Conducted a biological monitoring program to sample commercial and recreational harvest (2016 – commercial: 447 samples for length and weight, 434 for sex, and 393 for age; recreational: 88 samples for length, 21 for weight, 80 for sex, and 87 for age).
 - Conducted Virginia Game Fish Tagging Program with volunteer anglers (2016: 96 fish tagged and 5 recaptured).
- North Carolina DMF – Conducted commercial sampling of black drum bycatch (2016: n=811; mean total length=17 in).
- South Carolina DNR – Terminated the state finfish survey and took over MRIP intercept sampling in 2013 (information reported through MRIP). Commercially reported black drum are captured through commercial monitoring program.
- Georgia CRD – Collected age, length, and sex data through the Marine Sportfish Carcass Recovery Project (2016: 115 black drum, mean length 402.3 mm centerline length).
- Florida FWC – Conducted Florida trip ticket program monitoring commercial catch and effort. Numbers of fish per trip in 2016 decreased from 2015, but were above the long-term average of the time series (1986-2016).
- NMFS – Collected recreational catch, harvest, release, and effort data, as well as length measurements via MRIP.

Fishery Independent Monitoring

- New Jersey DEP –
 - Ocean Trawl Survey: 28-year time series average is 0.16 (2016: 0.07).
 - Delaware Bay Trawl: 26-year time series average is 0.15 (2016: 0.04)
 - Delaware River Seine: 37-year time series average is 0.06 (2016: 0.04).
- Delaware DFW – Conducted two finfish trawl surveys (16ft for juveniles; 30ft for adults). Older than young-of-year (YOY) black drum are rarely captured, and no long term trend is evident.
- Maryland DNR – Conducted the Coastal Bays Fisheries Seine Survey in Maryland’s coastal bay and generally catches juvenile fish. Annual mean catch per haul exhibits no trend and

high variation. Annual mean catch per haul in 2016 was near the time series mean and increased from 2015.

- North Carolina DMF – Conducted a gill net survey in Pamlico Sound to characterize size and age distribution, and to produce an abundance index (2016: CPUE=1.33, above the time series average of 1.00).
- South Carolina DNR – Conducted an estuarine trammel net survey for subadult abundance (2016: CPUE=0.458, increase from 2015).
- Georgia CRD –
 - Conducted an estuarine trammel net survey for subadult biological data and abundance index (2016 – Altamaha: n=29, CPUE=0.23; Wassaw: n=10, CPUE=0.08).
 - Conducted an estuarine gill net survey for YOY biological data and abundance index (2016 – Altamaha: n=23, CPUE=0.13; Wassaw: n=7, CPUE=0.05).
- Florida FWC-FWRI – Conducted two seine surveys monthly in northeast and central southeast Florida to develop annual estimates of adult relative abundance. Declining trend is seen in the northeast, while the southeast exhibits an increasing trend.

VI. Status of Management Measures and Issues

Fishery Management Plan

The Black Drum FMP requires all states with a declared interest in the species to have established a maximum possession limit and minimum size limit of at least 12 inches by January 1, 2014, and to have increased the minimum size limit to no less than 14 inches by January 1, 2016.

De Minimis

The black drum FMP allows states to request *de minimis* status if, for the preceding three years for which data are available, their average combined commercial and recreational landings (by weight) constitute less than 1% of the average coastwide commercial and recreational landings for the same three-year period. A state that qualifies for *de minimis* will qualify for exemption in both their commercial and recreational fisheries.

De Minimis Requests

No state requested *de minimis* status through the annual reporting process.

VII. Implementation of FMP Compliance Requirements for 2014 and 2015

The PRT finds that all states have implemented the requirements of the Fishery Management Plan.

VIII. Recommendations of the Plan Review Team

Management and Regulatory Recommendations (H) =High, (M) =Medium, (L) =Low

- Develop management mechanism (e.g., traffic light analysis) to evaluate annual fishery independent and dependent indices to assess stock status and recommend management action if needed. (H)

Prioritized Research and Monitoring Recommendations (H) =High, (M) =Medium, (L) =Low

Stock Assessment and Population Dynamics

- Age otoliths that have been collected and archived. (H)
- Collect information to characterize the size composition of fish discarded in recreational fisheries. (H)
- Collect information on the magnitude and sizes of commercial discards. Obtain better estimates of black drum bycatch in other fisheries, especially juvenile fish in south Atlantic states. (H)
- Increase biological sampling in commercial fisheries to better characterize the size and age composition of commercial fisheries by state and gear. (H)
- Increase biological sampling in recreational fisheries to better characterize the size and age composition by state and wave. (H)
- Obtain estimates of selectivity-at-age for commercial fisheries by gear, recreational harvest, and recreational discards. (H)
- Continue all current fishery-independent surveys and collect biological samples for black drum on all surveys. (H)
- Develop fishery-independent adult surveys. Consider long line and purse seine surveys. (H)
- Collect age samples, especially in states where maximum size regulations preclude the collection of adequate adult ages. (H)
- Conduct reproductive studies, including: age and size-specific fecundity, spawning frequency, spawning behaviors by region, and movement and site fidelity of spawning adults. (M)
- Conduct a high reward tagging program to obtain improved return rate estimates. Continue and expand current tagging programs to obtain mortality and growth information and movement at size data. (H)
- Conduct tagging studies using implanted radio tracking tags that are compatible with coastal tracking arrays along the Atlantic coast in order to track movement and migration of adults. (H)
- Improve sampling of night time fisheries. (M)
- Conduct studies to estimate catch and release mortality rates in recreational fisheries. (H)
- Collect genetic material (i.e., create “genetic tags”) over a long time span to obtain information on movement and population structure, and potentially estimate population size. (M)
- Obtain better estimates of harvest from the black drum recreational fishery, especially in states with short seasons. (M)

IX. References

ASMFC. 2013. Interstate Fishery Management Plan for Black Drum. Arlington, VA.

ASMFC. 2015. Black Drum Stock Assessment for Peer Review. Atlantic States Marine Fisheries Commission, Stock Assessment Report. 352 p.

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MacCall, A.D. 2009. Depletion-Corrected Average Catch: a simple formula for estimating sustainable yields in data-poor situations. *ICES Journal of Marine Science*, 66: 2267-2271.

X. Figures

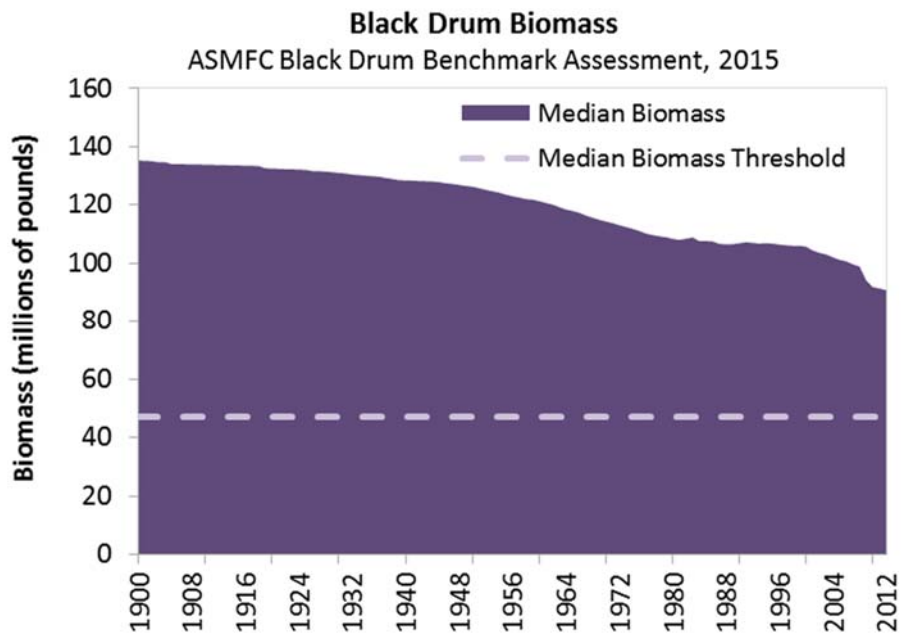


Figure 1. DB-SRA estimates of Median biomass and threshold 1900-2012 (Source: ASMFC 2015).

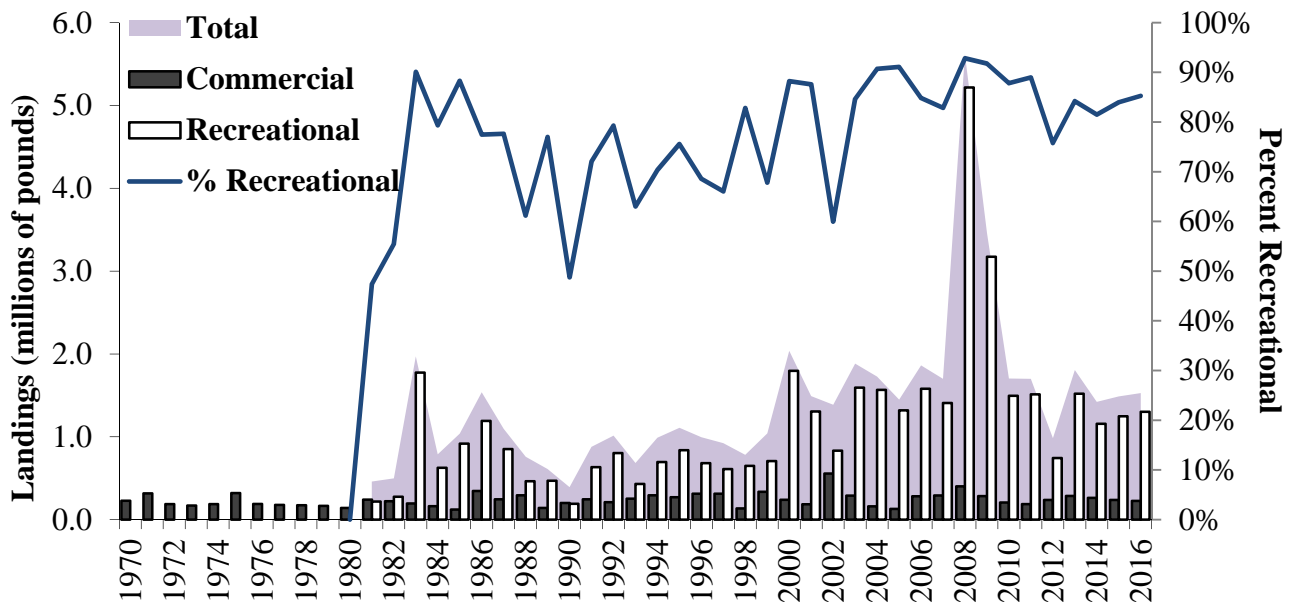


Figure 2. Commercial and recreational landings (pounds) of black drum. Recreational data not available prior to 1981. See Tables 2 and 3 for values and data sources.

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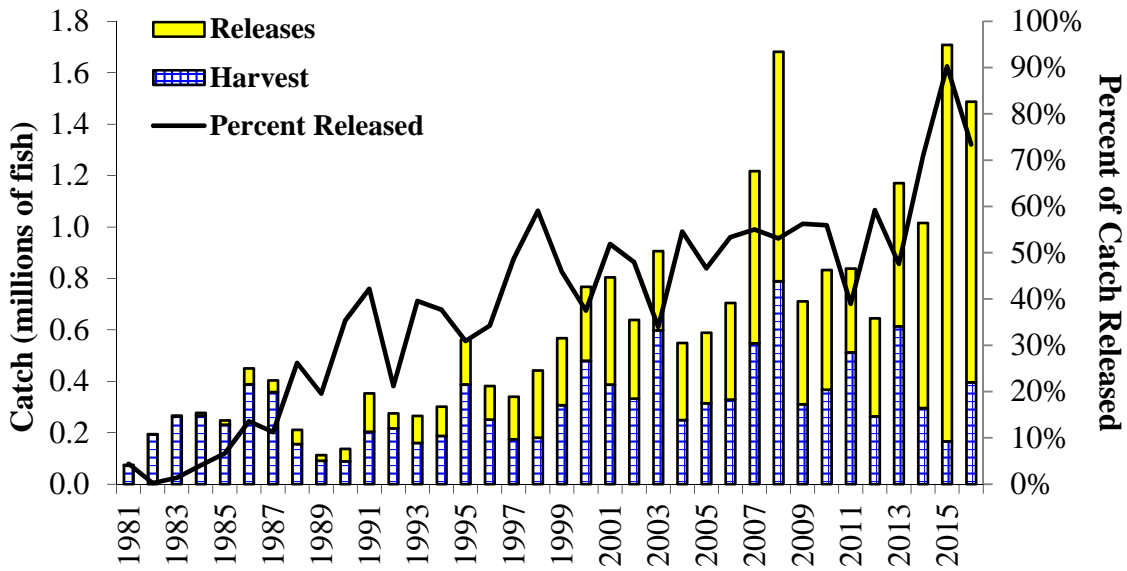


Figure 3. Recreational catch (harvest and alive releases) of black drum (numbers) and the proportion of catch that is released. See Tables 4 and 5 for values and data sources.

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XI. Tables

Table 1. Black drum regulations for 2015. The states of New Jersey through Florida are required to meet the requirements in the FMP. All size limits are total length.

State	Recreational		Commercial			Notes
	Size limit	Bag limit	Size limit	Trip Limit	Annual Quota	
ME - NY	-	-	-	-	-	
NJ	16" min	3/person/day	16" min	10,000 lbs	65,000 lbs	
DE	16" min	3/person/day	16" min	10,000 lbs	65,000 lbs	
MD	16" min	1/person/day 6/vessel (Bay)	16" min		1,500 lbs Atlantic Coast	Chesapeake Bay closed to commercial harvest
VA	16" min	1/person/ day	16" min	1/person/ day*	120,000 lbs	*without Black Drum Harvesting and Selling Permit
NC	14" min - 25" max; 1 fish > 25" may be retained	10/person/ day	14" min - 25" max	500 lbs		
SC	14" min - 27" max	5/person/day	14" min - 27" max	5/person/day		Commercial fishery primarily bycatch
GA	14" min	15/person/ day	14" min	15/person/ day		
FL	14" min - 24" max; 1 fish >24" may be retained	5/person/day	14" min - 24" max	500 lbs/day		

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Table 2. Commercial landings (pounds) of black drum by state, 2003-2015. (Source: personal communication with NMFS Fisheries Statistics Division, Silver Spring, MD and ACCSP, Arlington, VA, except where noted below)

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
2003			631	111,554	90,525		*	9505	289,312
2004	15,202	4,092	1,039	64,823	62,445		*	12,653	160,254
2005	1,970	10,059	165	66,660	44,989		*	5,249	129,092
2006	16,454	70,097	552	65,973	125,214		*	3,975	282,265
2007	1,218	37,704	172	91,385	148,231		*	12,770	291,480
2008	1,487	9,563	*	69,825	301,998	*	*	19,348	402,221
2009	6,408	30,551	*	82,437	148,995	*	*	15,671	284,062
2010	3,079	49,535	*	69,659	69,195	*	*	15,677	207,145
2011	3,130	49,514	*	56,747	56,084	*	*	22,333	187,808
2012	19,017	10,828	*	98,789	94,353	*	*	14,302	237,847
2013	16,251	24,507	*	87,730	127,170	*	*	28,450	284,632
2014	14,731	18,498	*	86,711	51,216	*	*	91,585	262,741
2015	3,865	39,282	*	93,552	51,089	*	*	50,447	238,235
2016	2,210	49,109	270	56,832	90,012	*	0	26,820	225,253

*indicates confidential landings because less than three dealers reported.

Table 3. Recreational landings (pounds) of black drum by state, 1981-2015. (Source: personal communication with NMFS Fisheries Statistics Division, Silver Spring, MD)

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
1981	0	0	0	95,051	0	3,495	7,614	111,369	217,529
1982	0	0	0	0	2,720	13,222	6,278	253,705	275,925
1983	69,193	0	603,101	706,113	0	61,594	6,765	328,922	1,775,688
1984	0	0	0	38,672	0	5,452	31,848	549,047	625,019
1985	0	50	43,946	301,264	3,838	63,206	37,646	467,715	917,665
1986	103,942	3,220	219,916	395,311	62,146	24,503	52,558	330,239	1,191,835
1987	0	623	0	462,348	51,463	61,011	45,848	230,085	851,378
1988	0	0	0	36,203	79,484	60,861	28,804	258,667	464,019
1989	0	0	192,996	54,086	2,170	44,234	44,715	131,163	469,364
1990	0	2,378	0	8,147	3,767	22,270	51,723	103,101	191,386
1991	0	1,399	0	83,090	10,558	13,878	96,295	428,316	633,536
1992	0	0	0	237,596	20,082	30,276	30,037	485,267	803,258
1993	0	1,153	0	1,087	31,474	43,092	26,842	326,596	430,244
1994	0	0	0	2,807	92,749	15,801	99,814	484,657	695,828
1995	0	0	149,158	20,685	227,582	66,787	53,721	319,812	837,745
1996	0	4,027	0	97,782	172,959	68,865	8,635	330,368	682,636
1997	0	11,372	0	36,130	156,981	190,835	28,366	186,417	610,101
1998	0	15,499	0	91,296	102,534	51,655	19,004	368,574	648,562
1999	0	2,203	8,498	0	170,793	81,777	12,058	430,690	706,019
2000	0	6,381	17,207	12,097	259,623	276,622	188,957	1,036,211	1,797,098
2001	165,041	356	0	331	188,201	16,813	32,496	903,239	1,306,477
2002	9,492	5,930	10,246	14,554	474,619	58,679	24,880	233,136	831,536
2003	214,250	0	12,282	96,730	355,717	243,887	135,127	535,717	1,593,710
2004	809,306	2,592	20,891	11,880	221,925	30,190	57,953	411,968	1,566,705
2005	519,635	25,945	0	83,349	63,161	58,997	46,485	520,948	1,318,520
2006	792,896	23,607	25,212	26,834	162,932	63,057	33,147	452,507	1,580,192
2007	202,375	14,830	0	238,718	220,454	71,471	84,495	576,048	1,408,391
2008	2,998,236	19,795	0	497,913	524,138	115,043	244,350	817,806	5,217,281
2009	1,435,892	43,001	0	1,036,270	121,038	42,903	30,203	464,661	3,173,968
2010	251,577	76,316	48,166	8,203	305,517	120,224	169,331	516,412	1,495,746
2011	126,647	15,844	0	284,264	151,407	46,847	19,504	867,708	1,512,221
2012	13,718	2,869	0	5,508	243,965	103,088	59,278	315,841	744,267
2013	36,406	6,832	0	30,749	713,047	102,429	59,219	571,489	1,520,171
2014	3,567	9,144	20,822	26,213	60,406	79,185	66,955	891,379	1,157,671
2015	184,862	12,169	11,157	17,538	115,609	35,668	15,761	855,328	1,248,092
2016	74,936	772	7,442	22,772	238,012	154,870	51,946	751,782	1,302,532

Table 4. Recreational landings (numbers) of black drum by state, 1981-2015. (Source: personal communication with NMFS Fisheries Statistics Division, Silver Spring, MD)

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
1981	0	1,502	0	2,874	0	8,642	3,665	54,969	71,652
1982	0	0	0	0	1,682	11,028	8,464	172,414	193,588
1983	2360	0	13,308	30,797	0	27,161	9,867	179,691	263,184
1984	0	0	1,915	1,886	0	7,575	14,239	240,470	266,085
1985	0	114	937	5,630	5,196	16,810	38,835	163,720	231,242
1986	2,798	14,605	5,668	11,767	18,697	21,108	55,040	259,168	388,851
1987	0	943	3,019	11,760	41,644	27,347	40,390	233,092	358,195
1988	0	0	0	1,225	10,553	15,568	21,525	107,293	156,164
1989	0	0	4,284	1,188	394	9,125	39,162	36,922	91,075
1990	0	1,704	0	840	2,112	15,048	16,227	52,741	88,672
1991	0	2,240	0	1,153	8,712	5,121	32,697	154,133	204,056
1992	0	0	0	5,330	7,877	13,600	19,021	171,190	217,018
1993	0	3,786	0	1,827	32,184	16,136	20,736	85,739	160,408
1994	0	0	0	1,411	53,345	8,635	18,254	106,267	187,912
1995	0	0	4,064	3,505	272,426	26,774	25,056	56,086	387,911
1996	0	206	0	3,993	134,926	28,033	6,718	77,295	251,171
1997	0	411	0	643	53,107	43,432	9,997	66,691	174,281
1998	0	412	649	3,271	44,822	14,073	5,378	112,404	181,009
1999	0	714	528	10,403	116,407	50,997	5,572	122,718	307,339
2000	0	1,194	964	2,708	113,205	63,284	62,637	235,869	479,861
2001	7,983	1,385	0	1,200	144,088	11,570	13,360	207,575	387,161
2002	5,496	3,314	3,358	4,547	197,211	28,376	23,074	67,024	332,400
2003	15,828	0	2,158	11,431	273,024	114,905	43,902	137,191	598,439
2004	15,152	320	2,351	2,485	97,262	18,384	18,568	94,967	249,489
2005	19,998	1,303	0	9,439	75,924	83,874	20,355	103,462	314,355
2006	42,070	11,462	701	1,556	92,956	93,384	20,080	66,415	328,624
2007	21,095	4,152	0	21,697	209,372	96,494	50,670	144,434	547,914
2008	74,982	6,973		26,097	359,702	54,490	91,777	175,195	789,216
2009	35,782	1,151		21,535	92,058	18,613	15,610	126,384	311,133
2010	8,593	1,450	2,731	730	122,709	34,383	69,547	127,214	367,357
2011	8,590	918	0	30,386	211,396	13,660	10,590	236,625	512,165
2012	526	111	0	1,577	139,363	28,006	19,134	74,596	263,313
2013	4,207	1,111	0	1,944	363,466	35,994	18,290	188,578	613,590
2014	150	506	1,881	3,071	24,058	30,238	15,304	220,565	295,773
2015	4,917	320	733	824	35,529	16,017	8,287	99,717	166,344
2016	2,997	54	190	2,187	71,708	61,642	24,126	233,117	396,021

Table 5. Recreational alive releases and dead discards (numbers) of black drum by state, 1981-2015.
 (Source: personal communication with NMFS Fisheries Statistics Division, Silver Spring, MD.)

Year	NJ	DE	MD	VA	NC	SC	GA	FL	Total
1981		0		0		0	1,008	2,300	3,308
1982					0	417	0	0	417
1983	0		0	0		0	852	2,832	3,684
1984			646	0		1,360	0	9,296	11,302
1985		0	564	0	0	0	3,250	12,677	16,491
1986	0	0	138	0	7,659	1,091	8,988	43,219	61,095
1987		452	0	0	473	485	6,519	37,558	45,487
1988				0	6,186	892	2,975	45,339	55,392
1989			0	0	213	1,575	8,892	11,455	22,135
1990		752		0	3,291	824	2,002	41,648	48,517
1991	996	273		0	1,931	0	11,664	134,080	148,944
1992				0	731	0	5,998	51,623	58,352
1993		2,270		4,214	6,053	2,375	2,487	87,653	105,052
1994				2,601	4,969	5,655	2,241	98,061	113,527
1995			1,250	19,077	101,866	2,829	1,114	47,413	173,549
1996		0	2,534	14,945	55,227	2,214	363	55,446	130,729
1997		0	1,106	6,671	35,537	6,380	213	115,821	165,728
1998		2,893	0	17,432	50,208	1,548	6,312	182,776	261,169
1999		0	0	1,859	75,409	14,086	2,504	166,416	260,274
2000		0	0	886	56,741	47,605	20,643	162,054	287,929
2001	6,319	21,271	1,173	28,902	139,525	7,219	13,820	198,900	417,129
2002	20,246	3,332	7,998	44,056	82,297	11,697	18,851	117,831	306,308
2003	1,003	3,132	0	20,588	128,873	4,051	27,804	122,288	307,739
2004	0	524	0	16,093	98,385	19,076	42,326	123,266	299,670
2005	21,172	12,960	2,525	19,620	95,255	17,847	10,458	94,682	274,519
2006	29,024	1,031	0	81,509	93,229	27,296	29,285	114,635	376,009
2007	27,550	3,980	470	27,351	226,463	37,763	34,869	311,372	669,818
2008	223,332	5,961	0	9,327	188,680	124,748	65,881	274,681	892,610
2009	105,053	1,111	0	10,594	69,484	35,395	22,622	155,665	399,924
2010	25,592	1,575	1,744	19,637	102,348	25,677	39,981	249,265	465,819
2011	1,775	5	7,971	60,724	104,286	20,483	4,671	126,563	326,478
2012	10,498	356	19,351	7,182	91,895	67,242	19,765	165,569	381,858
2013	0	27,135	6,414	22,192	121,306	78,262	10,066	291,543	556,918
2014	10,669	4,886	0	63,623	361,514	66,209	8,248	204,889	720,038
2015	172,650	2,439	4,969	69,560	559,251	483,046	13,087	237,077	1,542,079
2016	5,388	211	107	13,524	566,785	217,342	15,686	272,681	1,091,724