



Jeannie Haddaway-Riccio, Secretary

# **State of Maryland Department of Natural Resources**

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DNR

United States Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service Office of Sustainable Fisheries Highly Migratory Species Division

# **Final Report**

Grantee:	Maryland Department of Natural Resources	
Contract Number:	20-0105.5	
Project Title:	Maryland Catch Card Census Reporting	
Period Covered:	2021	
Prepared By:	Angel Willey, Coastal Fisheries Program Manager	Date
Approved By:	Mike Luisi, Acting Director, Fishing and Boating Services	Date
Approved By:	Matt Fleming, Acting Assistant Secretary, Aquatic Resources	Date

#### Introduction

Globally, tunas, billfishes and some sharks are governed by the International Commission for the Conservation of Atlantic Tunas. In the United States, the Atlantic Tunas Convention and Magnuson Stevens acts provide the Highly Migratory Species Division of the National Marine Fisheries Service the authority to implement recommendations, such as minimum sizes and quotas.

In the late 1990's, the National Marine Fisheries Service required all recreational anglers to report bluefin tuna (*Thunnus thynnus*) landings via a toll free phone number. In Maryland, that system was determined to be ineffective for accurately documenting recreational bluefin tuna landings. The Catch Card Census was implemented in 1999 as a solution to the recreational reporting problem, and the program has expanded to include billfishes (2002) and sharks (2013).

## Objectives

- Continue long-term monitoring of all recreationally landed bluefin tuna, billfishes, and sharks in Maryland and supply those data to the National Marine Fisheries Service for use in management of highly migratory species.
- Continue development of program awareness among anglers for high compliance rates.

#### **Materials and Methods**

Information pertaining to the Catch Card Census was available on the department's <u>website</u>. Letters were emailed or mailed to highly migratory species permit holders (April) reminding them of the requirements and the ability to download catch cards which can speed up the dockside tagging process. A similar letter was emailed or mailed to tournament operators.

Eight businesses signed a cooperative reporting station participation agreement to cover all species in the census (<u>Table 1</u> and <u>Appendix A</u>). Two additional tackle shops were reporting stations specifically for sharks and signed a species specific agreement (<u>Appendix B</u>). The contracts required reporting stations to distribute and collect catch cards, issue tags, and return leftover supplies to the department for inventory at the conclusion of the fishing season.

Each reporting station received catch cards and tags at the start of the season. Staff contacted reporting stations twice a week, from June 6 through September 30, to maintain adequate supplies and collect completed catch cards. After September 30, staff checked reporting stations weekly. Tags and unused catch cards were collected at the end of the season from select reporting stations. Returned tags were reconciled with what was distributed (<u>Appendix C</u>). One self-serve kiosk was also available to anglers (<u>Appendix D</u>).

Anglers were responsible for completing a catch card before removing the fish from the vessel (Appendix  $\underline{E}$  and  $\underline{F}$ ). A tag was provided from the reporting station for each completed catch card to be placed around the tail of the fish. If fishing from shore, a catch card was completed before removing a shark from the point of landing. Anglers using a self-serve kiosk were expected to complete the catch card and retain the attached receipt in place of a tag. The catch card was to be deposited into a locked box that was fastened directly to the kiosk. Trailered boats could not be pulled from the water until the tag was in place or a receipt was in hand.

Throughout the season, reporting reminders were included in the department's fishing reports, social media posts, a flyer targeted to swordfish anglers (<u>Appendix G</u>), and a shark poster for remote areas in Chincoteague Bay (<u>Appendix H</u>). Popular fishing newspapers and social media sites were monitored

for catch card compliance. Fishermen were contacted to complete a catch card if a corresponding catch card was not received.

Catch card landings were entered into a Microsoft Access database. Updates and catch card data were provided to the National Marine Fisheries Service every two weeks during the season. Microsoft Excel was utilized for proofing and descriptive statistics.

#### **Results and Discussion**

#### Bluefin Tuna

In 2021, 650 bluefin tuna were reported through the Catch Card Census which was higher than the previous two years (<u>Table 2</u> and <u>Figure 1</u>). Ninety seven percent of those landings (632 bluefin tuna) were classified as school (27 to <47 inches, <u>Figure 2</u>). In 2021, the mean curved fork length (all classes combined) was 35.9 inches. The peak landing period was mid-May to mid-June for the past three years (<u>Figure 3</u>).

Charter trips landed 56.6 percent (368 tuna) of the bluefin tuna during the 2021 season (<u>Table 3</u>). In 2021, the percentage of non-tournament bluefin tuna landings was 99.8 percent, which is higher than the previous two years. Compliance with completing the live and dead release (158 live, 17 dead) boxes was difficult to compare to 2020 due to low landings that year, however improvement was shown compared to 2019 (92 live, three dead release). Two bluefin tuna were reported using the kiosk and zero were reported from the Automated Landings Reporting System.

#### Billfishes (Blue Marlin, White Marlin, Roundscale Spearfish) and Swordfish

Ninety billfishes and swordfish were reported in 2021 through the Catch Card Census, which is lower than the previous two years (<u>Table 4</u>, <u>Figure 4</u> and <u>Appendix I</u>). No undersized fish were reported in 2021. Sailfish have not been reported since the program was implemented in 1999.

Blue marlin landings reported in 2021 (14 blue marlin) were higher than 2020 (10 blue marlin; Figures <u>4 - 6</u>). The 2021 blue marlin mean lower jaw fork length was 114.4 inches and the mean weight was 568.4 pounds (<u>Table 4</u>). Mean lower jaw fork length and mean weight were both higher than 2020. The majority of landings occurred in July and August for the past three years of which most were landed during tournaments: the HUK Big Fish Classic, the White Marlin Open, and the MidAtlantic (<u>Table 5</u>). Zero blue marlin catch cards were received in the kiosk or via the Automated Landings Reporting System.

White marlin landings reported in 2021 (19 white marlin) decreased from the previous year (70 white marlin; <u>Table 4</u> and Figures <u>4</u> <u>-</u> <u>6</u>). The 2021 mean lower jaw fork length (71 inches) and mean weight (73.5 pounds) was higher than the previous two years. The majority of landings occurred in August for the past three years, most of which were landed during tournaments (<u>Table 5</u>). Zero white marlin catch cards were received in the kiosk or via the Automated Landings Reporting System.

Roundscale spearfish landings in 2021 (21 roundscale spearfish) decreased from the previous year (66 roundscale spearfish; Table 4 and Figures 4 - 6). The 2021 mean lower jaw fork length (70.4 inches) was similar to the previous two years. The mean weight (63.2 pounds) was slightly lower than 2020 and 2019. All roundscale spearfish were landed during August fishing tournaments (Table 5). Zero roundscale spearfish catch cards were received in the kiosk or via the Automated Landings Reporting System.

Roundscale spearfish were considered eligible for white marlin rewards and were targeted the same as white marlin at tournaments. The 2021 combined landings for white marlin and roundscale spearfish were 40 fish compared to 136 for both species in 2020. This substantial decrease in white marlin and roundscale spearfish can be attributed to the proactive actions taken by tournaments that increased qualifying lengths to reduce landings.

Swordfish landings for 2021 (36 swordfish) were lower than the previous year (96 swordfish; <u>Table 4</u> and Figures <u>7</u> - <u>8</u>). The 2021 swordfish mean lower jaw fork length (63.9 inches) was lower than 2020, but similar to 2019. The 2021 mean weight (154.5 pounds) was higher than the previous two years. Swordfish were landed from June into December in 2021. Peak swordfish landings were similar for the past two years (September - October; Figure 8). Two swordfish catch cards were received in the kiosk and zero were submitted via the Automated Landings Reporting System.

Species-specific discards were requested but were only reported with landed fish. In 2021, anglers reported three blue marlin, 37 white marlin, one swordfish, and two longbill spearfish released alive. Dead discard reporting remained low in 2021 as no dead discards were reported for any billfishes or swordfish.

#### Sharks

Shark landings (28 sharks) were lower than the previous two years and consisted of seven species (Table 7 and Figures 9 - 10). Shortfin mako sharks comprised 32 percent (nine sharks) of the landings which is higher than the previous two years and related to the large decrease in Atlantic sharpnose landings (Table 8). The shark landings peaked from mid-May to mid-June, ahead of the 2020 and 2019 seasons (Figure 11). The majority of sharks were landed outside of tournaments and mostly on charters (23 sharks; Table 9). Discards were only reported with landed fish. One shark catch card was deposited in the kiosk.

#### Recommendations

- Continue the Catch Card Census for bluefin tuna, billfishes, swordfish, and sharks in Maryland.
- Consider adding an electronic reporting option.

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Reporting Station	City /State	Phone Number	Species
Atlantic Tackle	Ocean City, MD	(410) 213-0421	All
Bahia Marina	Ocean City, MD	(410) 289-7438	All
Fisherman's Marina	Ocean City, MD	(410) 213-2478	All
Ocean City Fishing Center	Ocean City, MD	(410) 213-1121	All
Talbot Street Pier & Marina	Ocean City, MD	(410) 289-9125	All
White Marlin Marina	Ocean City, MD	(410) 289-6470	All
Sunset Marina	Ocean City, MD	(410) 213-9600	All
Pines Point Provisions and Seafood	Ocean Pines, MD	(410) 641-2248	All
Buck's	Berlin, MD	(443) 513-4661	Shark
Alltackle	Ocean City, MD	(410) 213-2840	All
Maryland Department of Natural Resources	Ocean City, MD	(410) 213-1531	All

#### Table 1. List of the 2021 Maryland Catch Card Census reporting stations.

#### Table 2. Maryland Catch Card Census bluefin tuna summary statistics, 2019 to 2021.

		2019				2020				2021		
Size Class (in.)	Count	Mean*	Mode*	Percent of Total	Count	Mean*	Mode*	Percent of Total	Count	Mean*	Mode*	Percent of Total
School (27 to <47)	373	37.3	34	72.1	4	37.8		40	632	35.7	40	97.2
Large School (47 to <59)	132	51.8	52	25.5	5	52.1		50	7	50.4	50	1.1
Small Medium (59 to <73)	9	62.4	60	1.7	1			10				
Unknown	3			0.6					11			1.7
Total	517				10				650			
* Curved fork length												

#### Table 3. Maryland bluefin tunas landings by trip type and tournament participation, 2019 to 2021.

Trip Type	I	Private Charter		arter	Head	lboat	Unkn	own	Tournament Landings	
Year	Count	Percent of Landings	Count	Percent of Landings	Count	Percent of Landings	Count	Percent of Landings	Tournament	Non- Tournament
2019	272	52.6	232	44.9	12	2.3	1	0.2	39	478
2020	2	20	8	80					6	4
2021	261	40.2	368	56.6	12	1.8	9	1.4		649*
* One card h	* One card had no information about tournament participation									

Year	Count	Percent of Annual	Lower	Jaw Fork Length (	(Inches)	Weight	(Pounds)			
rear	Count	Billfish Total	Mean	Mean Mode Range		Mean	Range			
	Blue Marlin									
2019	11	6.5	111.3		105.3 - 121.8	465.2	345 - 630			
2020	10	4.1	107.5		88.5 - 129.5	470	322 - 815			
2021	14	15.6	114.4	104	99.8 - 136.5	568.4	355 - 1135			
			W	hite Marlin						
2019	31	18.5	68.1	68	62 - 73	64	53 - 81			
2020	70	28.9	69.8	70	66 -77	68.3	54 - 97			
2021	19	21.1	71.0	69	66 - 79	73.5	60.5 - 89			
			Round	scale Spearfish						
2019	28	16.7	69.4	68	66.8 - 72	65.3	56 - 79			
2020	66	27.3	69.6	69	66.5 - 75.5	65.4	55.5 - 83.5			
2021	21	23.3	70.4	70	68.5 - 74	63.2	57 - 70			
			(	Swordfish						
2019	98	58.3	63.5	54	48 - 101	150.9	50 - 437			
2020	96	39.7	65.9	62	48 - 102.5	153.8	55 - 422.5			
2021	36	40	63.9	50	48.5 - 87	154.5	60 - 318.5			

 Table 4. Maryland Catch Card Census billfish and swordfish summary statistics, 2019 to 2021.

Ochisus tourn	chisus tour nument participation by binnish species, 2015 to 2021.								
Year	Count	Tournament	Non-Tournament						
		Blue Marlin							
2019	11	9	2						
2020	10	5	5						
2021	14	13	1						
		White Marlin							
2019	31	28	3						
2020	70	62	8						
2021	19	12	7						
		Roundscale Spearfish							
2019	28	27	1						
2020	66	66							
2021	21	21							
		Swordfish							
2019	98	8	90						
2020	96	31	65						
2021	36	13	23						

 Table 5. Maryland Catch Card Census tournament participation by billfish species, 2019 to 2021.

 Table 6. Maryland Catch Card Census billfish and swordfish landings by trip type, 2019 to 2021.

	Private			Charter	J	Unknown	Headboat		
Year	Count	Percent of Total Landings	Count	ount Percent of Total Landings		Count Percent of Total Landings		Percent of Total Landings	
2019	126	75	41	41 24.4			1	0.6	
2020	111	45.9	40	16.5	91	37.6			
2021	60	68.9	26	28.9	1	1.1	1	1.1	

Cou		Sex		Mean Length	Mode	Length Range	Weight Range
Species nt M F U		U	(Inches)	(Inches)	(Inches)	(Pounds)	
7	7			30.1	32	24 - 32	
1		1				70	100
5	3	2		81.3	81	80 - 84.5	267 - 542
1		1				96	185
9	9			79.1	*	71 - 93	120 - 314
4	2	2		18.8	15	15 - 27	
1	1					70	132.5
28 engths	are di	iffere	nt				
	nt 7 1 5 1 9 4 1 28	nt     M       7     7       1     -       5     3       1     -       9     9       4     2       1     1       28     -	M     F       7     7       1     1       5     3     2       1      1       9     9        4     2     2       1     1        28	M         F         U           7         7            1         1            5         3         2            1          1            5         3         2            1          1            9         9             4         2         2            1         1	Cou         Sex         Length (Inches)           M         F         U         Length (Inches)           7         7         U         30.1           1         1         U         30.1           9         3         2         Image: Set	Cou       Sex       Length (Inches)       Mode (Inches)         M       F       U       Length (Inches)       (Inches)         7       7       U       30.1       32         1       1       1 $$	Cou nt       Sex       Length (Inches)       Mode (Inches)       Range (Inches)         7       M       F       U       1000000000000000000000000000000000000

Table 7. Summary of the 2021 shark landings reported through the Maryland Catch Card Census n = 28.

Table 8. Maryland Catch Card Census summary of the 2019 to 2021 shortfin make landings, n =28.

				Sex		Mean	Mode	Length	Weight
Year	Species	Count	М	F	U	Length	(Inches)	Range	Range
			IVI	Г	0	(Inches)	(inclies)	(Inches)	(Pounds)
2019	Shortfin Mako	13	8	5		82	74	72 - 106	133 - 487
2020	Shortfin Mako	6	4	2		80	84	72 - 88	130 - 330
2021	Shortfin Mako	9	9			79.1	*	71 - 93	120 - 314
	Total	28	13	9					
*No m	ode as all lengths	are differe	ent.						

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Table 9. Maryland Catch Card Census shark landings by trip type and tournament participation	n,
2019 to 2021.	

Trip Type	Private		Private Charter		Un	known	Tournament Landings		
Year	Count	Percent of Landings	Count	Percent of Landings	Count	Percent of Landings	Tournament	Non- Tournament	
2019	18	18	81	82		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1	98	
2020	2	3	75	97				77	
2021	8	29	20	71			5	23	

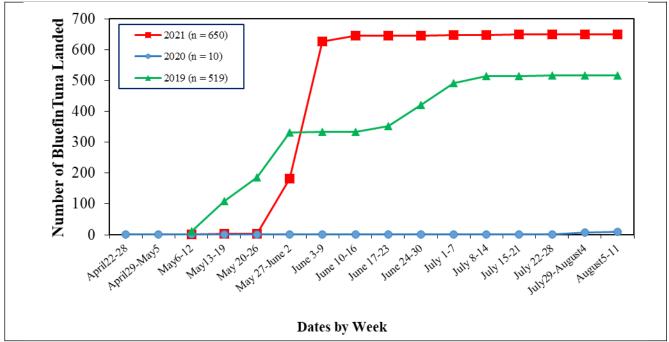


Figure 1. Maryland Catch Card Census weekly cumulative bluefin tuna landings, 2019 to 2021.

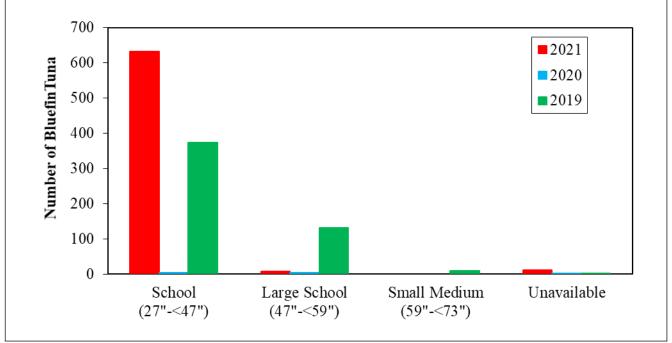


Figure 2. Maryland Catch Card Census bluefin tuna size class frequency comparison, 2019 to 2021.

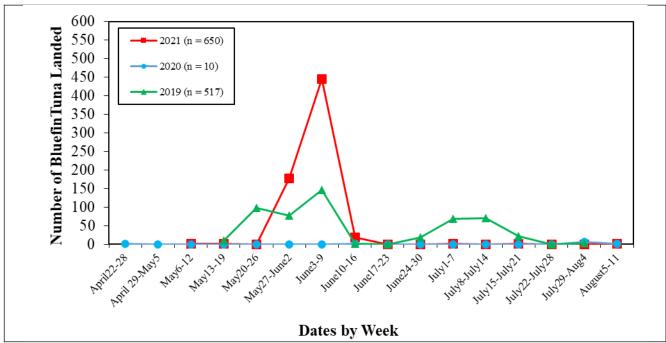


Figure 3. Maryland Catch Card Census weekly landings of bluefin tuna, 2019 to 2021.

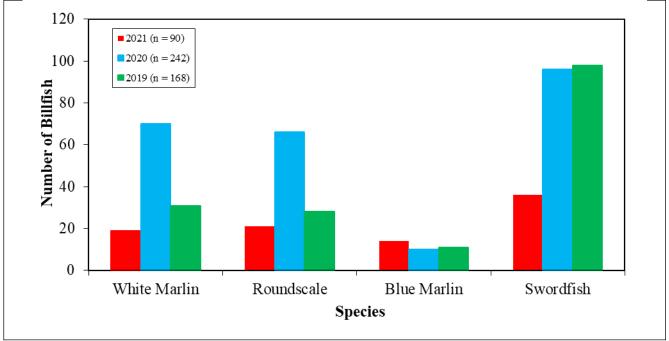


Figure 4. Comparison of the frequency of billfishes and swordfish from the Maryland Catch Card Census, 2019 to 2021.

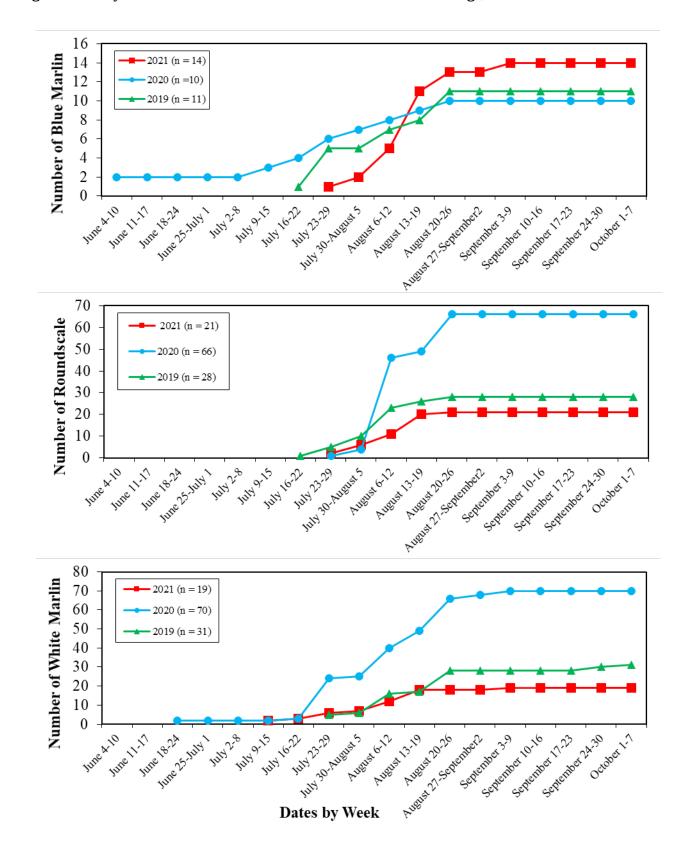
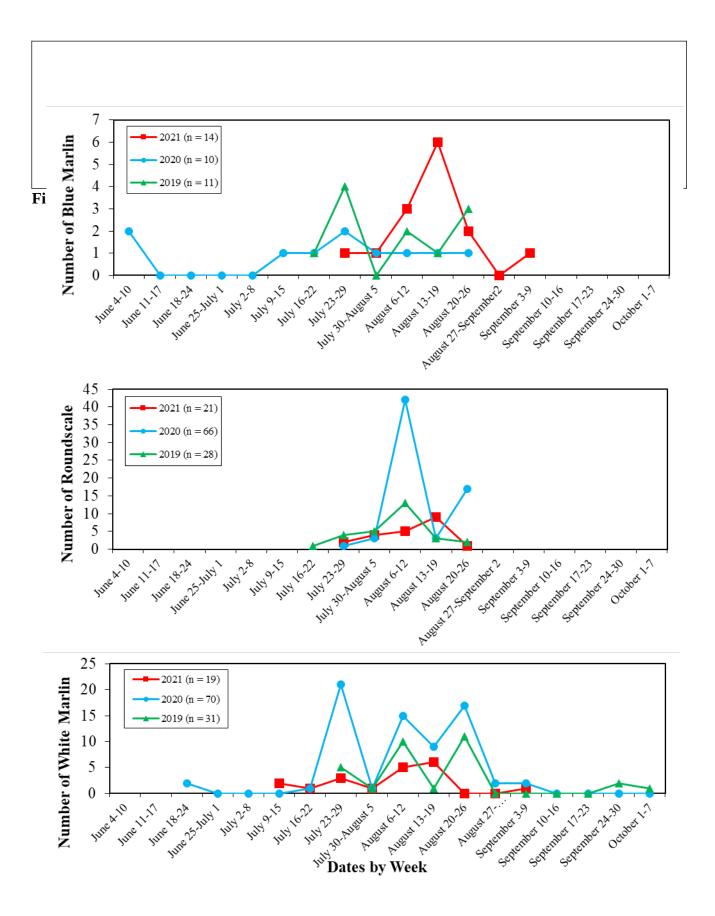


Figure 5. Maryland Catch Card Census cumulative billfish landings, 2019 to 2021.



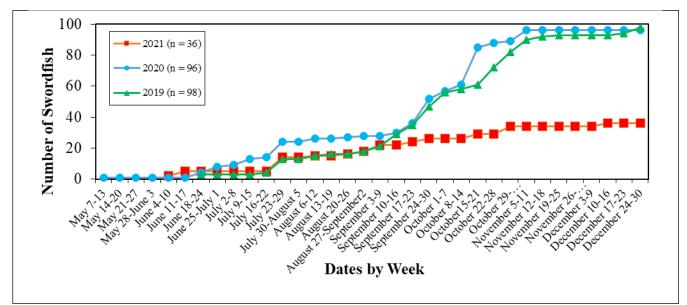


Figure 7. Maryland Catch Card Census cumulative swordfish landings, 2019 to 2021.

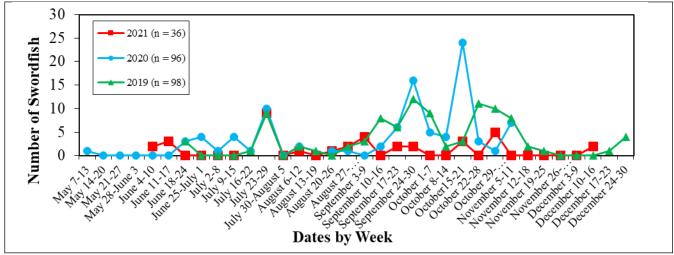


Figure 8. Maryland Catch Card Census weekly swordfish landings, 2019 to 2021.

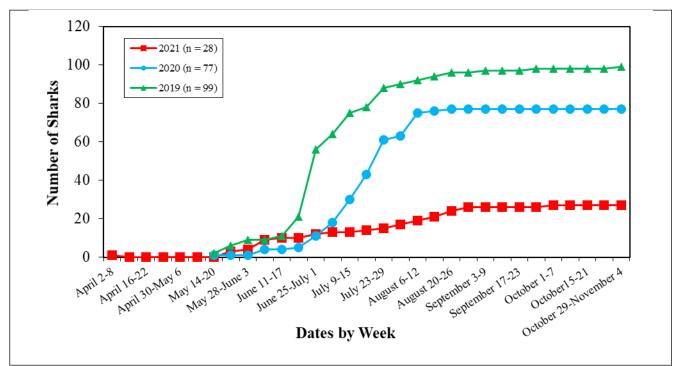


Figure 9. Maryland Catch Card Census cumulative shark landings, 2019 to 2021.

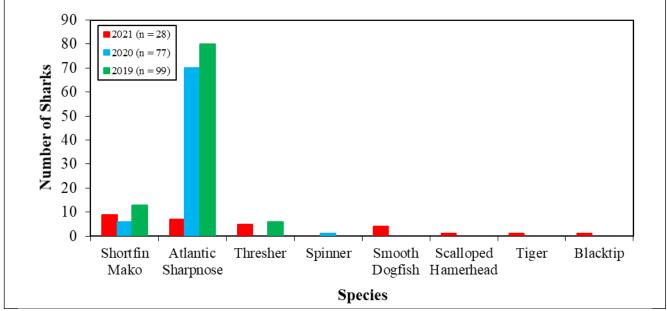


Figure 10. Sharks reported to the Maryland Catch Card Census, 2019 to 2021.

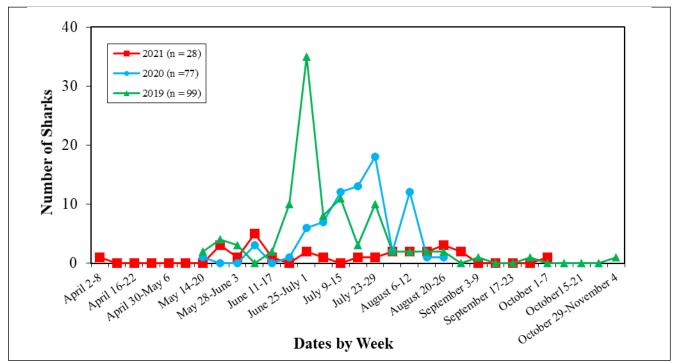


Figure 11. Maryland Catch Card Census weekly shark landings, 2019 to 2021.

#### Appendix A. Example of the 2021 Catch Card Census Reporting Station Agreement.

2021 Cooperative Agreement to Act as a

#### Recreational Atlantic Bluefin Tuna, Billfish/Swordfish and Shark Reporting Station

Between

#### The Maryland Department of Natural Resources &

The signatory operates this facility as a place of business open to the public with regular posted operating hours and will act as a reporting station for recreationally harvested Atlantic bluefin tuna and billfish (white marlin, blue marlin, sailfish), swordfish, and sharks landed in the State of Maryland in accordance with the following conditions. **\*** 

#### On a Daily Basis:

- From bluefin tuna anglers, collect <u>COMPLETED</u> Maryland bluefin tuna catch cards and issue a uniquely numbered bluefin tuna tag to the angler. Tags issued only upon receipt of the <u>COMPLETED</u> catch card. Bluefin tuna cannot be removed from a vessel before the angler attaches the tag to the appropriate tuna.
- 2. From billfish/swordfish anglers, collect <u>COMPLETED</u> Maryland billfish catch cards and issue a uniquely numbered billfish/swordfish tag to the angler. Tags are issued only upon receipt of the <u>COMPLETED</u> catch card. The billfish/swordfish cannot be removed from a vessel before the angler attaches the tag to the appropriate billfish/swordfish.
- 3. From shark anglers, collect <u>COMPLETED</u> Maryland shark catch cards and issue a uniquely numbered shark tag to the angler. Tags are issued only upon receipt of the <u>COMPLETED</u> catch card. The shark cannot be removed from a vessel before the angler attaches the tag to the appropriate shark.
- 4. The signatory, representing the reporting station, must account for all tags.
- 5. The reporting station will allow personnel from the Maryland Department of Natural Resources to collect completed catch cards and inventory remaining tuna, billfish/swordfish and shark tags. All tags must be kept in a secure location.

DL		
Physical IC	ocation address:	
		-

Title:	
* The Department reserves the right to terminate reporting station status for any reason incl limited to failure to maintain inventory of bluefin tuna, billfish/swordfish and shark tags and completed catch cards and/or failure to cooperate with Department personnel in retrieval of Authorized signature: Date:	collect
Person(s) responsible for checking catch cards & issuing tags:	
Contact person:	
Owner/Manager name:	
Hours of operation:	
Telephone number:	
Business mailing address:	

Appendix B. Example of the 2021 Catch Card Census Shark Reporting Station Agreement.
2021 Cooperative Agreement to Act as a
Recreational Shark Reporting Station
Between
The Maryland Department of Natural Resources
&
The signatory operates this facility as a place of business open to the public with regular posted operating hours and will act as a reporting station for recreationally harvested sharks landed in the State of Maryland in accordance with the following conditions. *
On a Daily Basis:
1. From shark anglers, collect <u>COMPLETED</u> Maryland Shark Landing Cards and issue a uniquely numbered shark tag to the angler. Tags are issued only upon receipt of the <u>COMPLETED</u> landing card. The shark cannot be removed from the point of landing before the angler attaches the tag to the appropriate shark.
2. The signatory, representing the reporting station, must account for all tags.
3. The reporting station will allow personnel from the Maryland Department of Natural Resources to collect completed landing cards and inventory remaining shark tags. All tags must be kept in a secure location.
Physical location address:
Business mailing address:
Telephone number:
Hours of operation:
Owner/Manager name:
Contact person:
Person(s) responsible for checking catch cards & issuing tags:
* The Department reserves the right to terminate reporting station status for any reason including but not limited to failure to maintain inventory of shark tags and collect completed catch cards and/or failure to cooperate with Department personnel in retrieval of said items. Authorized signature: Date:
Title:

			Bluefin		<b>F</b>	- 8-		Billfish					Sharks		
Station	Issued	Used	Returned	No Tag Numbe r	Unsettled	Issued	Used	Returned	No Tag Number	Unsettled	Issued	Used	Returned	No Tag Number	Unsettled
Atlantic Tackle	172	59	95	18		10		10			10		10		
Bahia Marina	50	16	33	1		10	1	9			10	3	7		
Fisherman's Marina	111	39	70	2		10	6	4			10	2	8		
O.C. Fishing Center	366	199	144	23		19	6	13			30	18	12		
Talbot Street Pier & Marina	87	51	36			27	17	10			20		20		
Sunset Marina a	359	187	159	13		56	20	36			18	0	18		
Pines Point Provisions and Seafood	21	7	14			8		8			10		10		
White Marlin Marina	53	28	25			6	1	5			11	2	9		
Buck's	N/A	N/A	N/A			N/A	N/A	N/A			10		10		
Alltackle	19		19			11	1	10			10		10		
Huk Big Fish Classic	10		10			40	1 <sub>b</sub>	39			10		10		
White Marlin Open	10		10			64	17 <sub>d</sub>	47			10	2	8		
MidAtlantic	10		10			47	18	29			N/A	N/A	N/A		
O.C. Marlin Club	N/A	N/A	N/A			25		25			N/A	N/A	N/A		
Kiosk (receipt)	N/A	N/A	N/A	2					2					1	
Unreported <sub>c</sub>	N/A	N/A	N/A	5											
Totals	1268	586	625	64		333	88	245	2		159	27	132		

#### Appendix C. Maryland Catch Card Census 2021 Reporting Station Tag Summary.

One bluefin tag used for billfich. The marine did not have the UMS normit helder's number. Could not find uses a contact information in permit list.

ermit holders were comtacted for these fish.

Appendix D. Photograph of the Maryland Catch Card Census Kiosk Located in Ocean City.



Appendix E. Examples of the 5 x 7 Maryland Bluefin Tuna and Billfish Catch Cards and Tags.

TODAY'S	Maryland Bluefin Tur Catch Card	Write the F of BFT released alive in in the Dead Release Box.		AND THE Preference Creat YLAND ITMENT OF RESOURCES
	Today's Date:       MM       DD       MM         Vessel Name:		Transformer Description Fork Length ment Description of the upper J ctoral fin to th Do not record ded in Marylan afore removal fi nil BLUEFIN TU a LANDING TA LANDING TA	ne fork of estimated d must have rom the ves- NA REPORT- G, captains t complete
1	*Curved Fork Length:**Weight (lbs)	This information collecte Control # 0648-0328 and		
ਣਾ <b>ਤ</b> ੇ	MARYLAND BFT	000608 d	Marylai	ND
	Today's Date:       M       D       YYYY         Species (circle one):       White Marlin / Roundscale Spearfish / Blue Marlin / Swordfish / Sailfish         Vessel Name:	Lower Jaw Lower Jaw F Measureme NOTE: All BILLFISH (White Marlin, Spearfish, Swordfish and Sallfish)	ork Length nt Description Blue Marlin, Rou anded in Marylar	Fork ndscale d must have
HMS PERMIT #:	Trip Type:         Charter / Private / Headboat           (Circle One)         Charter / Private / Headboat	a LANDING TAG affixed before rer varilable at all BILLFISH REPORT LANDING TAG, captains or operatic complete and submit a catch card i only need to fill in one discard table Information about Refe	ING STATIONS. ors of the permitte for every billfish la e per species per	To obtain a ed vessel must anded. Anglers trip.
	Reporting Station:	SPECIES	Alive	Dead
	Billfish Tag #:			
	Billfish Tag #:	Blue Marlin White Marlin		
	*Lower Jaw Fork			
	*Lower Jaw Fork Length (inches): **Weight (lbs)	White Marlin		

#### Appendix F. Example of the 5 x 7 Maryland Shark Catch Card and Tag.

, z ĭ	Maryland Shark Catch Car	'd 🤍 🇶	MARYLAN DEPARTMENT OF VATURAL RESOURC				
	Today's Date: MM DD YYYY	NOTE: Most sharks landed in Maryland must have a LANDING TAG affixed before removal from the vessel. Tags are available at all SHARK REPORTING STATIONS. To obtain a LANDING TAG, captains or operators of the permitted vessel, or licensed angler if fishing from shore, must complete and submit a catch card for every shark					
AY'S D	Species (see reverse for list):						
ĂTE:	Tournament Name: Reporting Station:	landed. For a complete list of sha please see the reverse side of th fill in one discard table per specie	arks that you mu is card. Anglers	ust report,			
sh HN	Shark Tag #:	Information about Relea		3 Trip.			
HMS PERMIT #	(Obtain at Reporting Station) Sex (circle one): M / F *Fork Length (inches):**Weight (ibs)	SPECIES	#Released Alive	#Released Dead			
AG #	Complete this section if fishing from a vessel:						
	Vessel Name:						
	Registration # (State ID): Permit Holders Name:						
	Atlantic HMS						
	(Circle One) Charter / Private / Headboat Measure in a straight line from the tip of the snout						
	to the fork of the tail. * Scale weight ONLY. Do not record estimated weight.						
	This information collected is approved under OMB Control # 0648-0328 and expires on 12/31/2022						
Shark Spec	ies to Report:   Prohibited Shark Sp	ecies:					

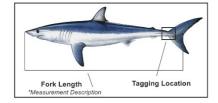
# Atlantic Sharpnose

- Blacknose
- Blacktip
- Blue
- Bonnethead
- Bull
- Common thresher
- Finetooth
- Great hammerhead
- Lemon
- Nurse
- · Oceanic whitetip
- · Porbeagle
- · Scalloped hammerhead
- · Shortfin mako
- · Smooth Dogfish
- Smooth hammerhead
- Spinner
- Tiger

- Atlantic angel
- Basking
- Bigeye sandtiger
- Bigeye sixgill
- Bigeye thresher
- Bignose
- Caribbean sharpnose
- Caribbean reef
- Dusky
- Galapagos
- Longfin mako
- Narrowtooth
- Night
- Sandbar
- Sandtiger
- Sevengill
- Silky
- Sixgill
- Smalltail
- Whale

0001020

· White sharks

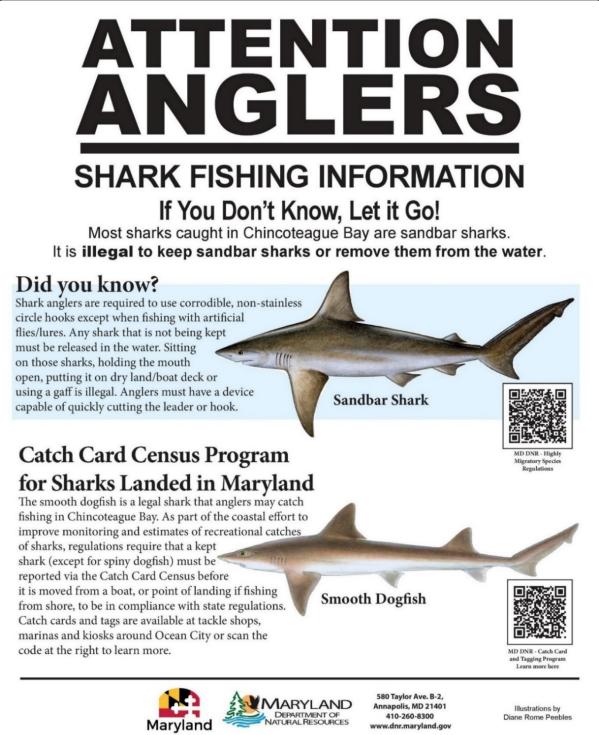


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MARYLAND SHARK

## Appendix G. Maryland Catch Card Census Swordfish Flyer.

NATU	PARTMENT OF JRAL RESOURCES
Jean	nnie Haddaway-Riccio Secretary
Attention Swordfish Anglers	B Illustration by Diane Rome Peebles
Swordfish MUST have a catch card completed ANE the vessel. Catch cards are available from reporting tackle shops and online.	
Exchange completed cards for a billfish tag (white) sure to write the tag number on the card and place	
If reporting stations are closed, obtain a billfish cato 1) printing a catch card PDF from <u>dnr.maryland.gov/fisheries/Pages/coastal/tr</u> 2) using the card provided below, or 3) visiting the after-hours kiosk at the Color	agging aspx:
Complete both the card AND the receipt on the side deposit the completed catch card into the Bluefin To kiosk located on the outside of the Natural Resourc Colonel Jack Taylor Boat House, 12917 Harbor Ro	una, Billfish and Shark es Police office in the
Maryland Billfish Catch Today's Date: MM DD M Species (circle one): White Martin / Roundscale Sp / Blue Martin / Roundscale Sp / Blue Martin / Swordfish / S Vessel Name: Registration # (State ID):	Decafish
Permit Holders Name: H Atlantic HMS Permit Holders Name: H Atlantic HMS Permit Holders Name: Permit Holde	NOTE: All BILLFISH (While Marlin. Blue Marlin, Roundscale Speartish, Swordtish and Saltilish) landed in Maryland must have a ANDING TAG affixed before removal from the vessel. Tags are available at all BILLFISH REPORTING STATIONS. To obtain a LANDING TAG, captains or operators of the permitted vessel must complete and submit a catch card for every billish landed. Anglers
Reporting Station:	SPECIES #Released Alive Dead
Billfish Tag #:	Blue Marlin
(Otatin at Reporting Station) ^Lower Jaw Fork Length (inches):	White Marlin
Length (inches): **Weight (lbs) * Measure from the tip of the lower jaw to the fork of the ta	
** Scale weight ONLY. Do not record estimated weight.	Sailfish
This information collected is approved under ON Control # 0648-0328 and expires on 12/31/202	MB Susselfish
10/2020 Le	ave a message at 410-213-1531 with questions.



Census.		Length	Weight		
Date	Common Name	(Inches)	(Pounds)	Trip Type	Tournament
7/23/2021	Blue Marlin	104.5	436	Private	Huk Big Fish Classic
8/2/2021	Blue Marlin	116.5	559.5	Private	White Marlin Open
8/6/2021	Blue Marlin	128	775	Private	White Marlin Open
8/6/2021	Blue Marlin	115.5	511.8	Private	White Marlin Open
8/6/2021	Blue Marlin	109	450	Charter	White Marlin Open
8/16/2021	Blue Marlin	122	681	Private	MidAtlantic
8/16/2021	Blue Marlin	112.5	487	Private	MidAtlantic
8/18/2021	Blue Marlin	135	958	Private	MidAtlantic
8/18/2021	Blue Marlin	104	383	Private	MidAtlantic
8/18/2021	Blue Marlin	104	355	Private	MidAtlantic
8/18/2021	Blue Marlin	108	382	Private	MidAtlantic
8/20/2021	Blue Marlin	107	472	Charter	MidAtlantic
8/21/2021	Blue Marlin	136.5	1135	Private	MidAtlantic
9/7/2021	Blue Marlin	99.75	372	Private	N/A
7/24/2021	Roundscale Spearfish	71.5	59.5	Charter	Huk Big Fish Classic
7/24/2021	Roundscale Spearfish	70	59	Private	Huk Big Fish Classic
8/2/2021	Roundscale Spearfish	72.5	66	Private	White Marlin Open
8/3/2021	Roundscale Spearfish	70.5	68	Charter	White Marlin Open
8/3/2021	Roundscale Spearfish	70	59	Charter	White Marlin Open
8/3/2021	Roundscale Spearfish	69.5	Unknown	Unknown	White Marlin Open
8/6/2021	Roundscale Spearfish	69	Unknown	Private	White Marlin Open
8/6/2021	Roundscale Spearfish	71	65	Private	White Marlin Open
8/6/2021	Roundscale Spearfish	73	66	Private	White Marlin Open
8/6/2021	Roundscale Spearfish	74	70	Private	White Marlin Open
8/6/2021	Roundscale Spearfish	71	57	Private	White Marlin Open
8/16/2021	Roundscale Spearfish	68.75	Unknown	Private	MidAtlantic
8/16/2021	Roundscale Spearfish	71.25	68	Private	MidAtlantic
8/16/2021	Roundscale Spearfish	68.5	Unknown	Private	MidAtlantic
8/16/2021	Roundscale Spearfish	69.5	59	Private	MidAtlantic
8/16/2021	Roundscale Spearfish	70.5	66	Private	MidAtlantic
8/16/2021	Roundscale Spearfish	70.75	68	Private	MidAtlantic
8/17/2021	Roundscale Spearfish	69	60	Private	MidAtlantic
8/18/2021	Roundscale Spearfish	68.5	Unknown	Private	MidAtlantic
8/18/2021	Roundscale Spearfish	69.25	58	Private	MidAtlantic
8/20/2021	Roundscale Spearfish	70.25	63	Private	MidAtlantic
6/7/2021	Swordfish	60	176	Charter	N/A
6/10/2021	Swordfish	54	Unknown	Charter	N/A
6/14/2021	Swordfish	86	291	Private	N/A
6/14/2021	Swordfish	0	195	Private	N/A
6/17/2021	Swordfish	72	141	Headboat	N/A
7/23/2021	Swordfish	68.5	159	Private	Huk Big Fish Classic
7/23/2021	Swordfish	69	184	Charter	Huk Big Fish Classic
7/24/2021	Swordfish	64	123.5	Charter	Huk Big Fish Classic
7/24/2021	Swordfish	59	90.5	Private	Huk Big Fish Classic
		68	159.5	Private	Huk Big Fish Classic
7/24/2021	L SWOFGLISD				
7/24/2021 7/24/2021	Swordfish Swordfish	71	167.5	Private	Huk Big Fish Classic

Appendix I. List of the 2021 Billfishes and Swordfish Reported to the Maryland Catch Card Census.

Date	Common Name	Length (Inches)	Weight (Pounds)	Trip Type	Tournament
7/24/2021	Swordfish	85.5	239.5	Private	Huk Big Fish Classic
7/24/2021	Swordfish	83	301	Private	Huk Big Fish Classic
8/6/2021	Swordfish	87	318.5	Charter	White Marlin Open
8/25/2021	Swordfish	0	150	Private	N/A
8/27/2021	Swordfish	51	Unknown	Charter	N/A
8/29/2021	Swordfish	48.5	Unknown	Private	N/A
9/4/2021	Swordfish	57	90	Private	N/A
9/4/2021	Swordfish	50	Unknown	Private	N/A
9/5/2021	Swordfish	80	250	Private	N/A
9/7/2021	Swordfish	50	Unknown	Private	N/A
9/19/2021	Swordfish	80	Unknown	Charter	N/A
9/20/2021	Swordfish	50	62	Charter	N/A
9/27/2021	Swordfish	53	66	Charter	N/A
9/27/2021	Swordfish	68	Unknown	Private	N/A
10/15/2021	Swordfish	59	102	Charter	Bishop Broadbill Bash
10/15/2021	Swordfish	78	218	Charter	Bishop Broadbill Bash
10/15/2021	Swordfish	58	102	Charter	Bishop Broadbill Bash
11/2/2021	Swordfish	52	60	Private	N/A
11/2/2021	Swordfish	55	70	Private	N/A
11/2/2021	Swordfish	70	Unknown	Charter	N/A
11/3/2021	Swordfish	51.5	67	Private	N/A
11/3/2021	Swordfish	61	91	Private	N/A
12/14/2021	Swordfish	50	Unknown	Private	N/A
12/14/2021	Swordfish	56	Unknown	Private	N/A
7/12/2021	White Marlin	67	65	Charter	N/A
7/14/2021	White Marlin	66	Unknown	Charter	N/A
7/19/2021	White Marlin	76	75	Charter	N/A
7/23/2021	White Marlin	69	63	Private	Huk Big Fish Classic
7/24/2021	White Marlin	68	72	Charter	Huk Big Fish Classic
7/24/2021	White Marlin	69	62	Private	Huk Big Fish Classic
8/2/2021	White Marlin	72.5	82.5	Private	White Marlin Open
8/6/2021	White Marlin	76	85.5	Charter	White Marlin Open
8/6/2021	White Marlin	75	77	Private	White Marlin Open
8/6/2021	White Marlin	70	60.5	Private	White Marlin Open
8/6/2021	White Marlin	71	78.5	Private	White Marlin Open
8/11/2021	White Marlin	67	65	Private	N/A
8/15/2021	White Marlin	79	89	Private	N/A
8/15/2021	White Marlin	69	68	Private	N/A
8/16/2021	White Marlin	69.5	69	Private	MidAtlantic
8/16/2021	White Marlin	74	80	Private	MidAtlantic
8/17/2021	White Marlin	69	75	Charter	MidAtlantic
8/17/2021	White Marlin	71	82	Private	MidAtlantic
9/7/2021	White Marlin	71	Unknown	Charter	N/A