Disposition of Commercial Age Samples of Fourteen Species of Fish

Within SAFMC Jurisdictional Fisheries

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November 8, 2013

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The National Marine Fisheries Service (NMFS) Beaufort Laboratory receives at least a portion of all fish aging structures (otoliths, spines, etc.) from the commercial and recreational fisheries operating in the SAFMC jurisdictional fisheries. The focus of this report is on commercial samples only. NMFS and state agency port agents located from North Carolina through the east coast of Florida intercept fishing trips weekly to sample the catch for species composition, lengths of the fish and biological samples. The data associated with each intercepted trip are logged into specific agency's databases. The fish aging structures are then shipped to the NMFS Beaufort Laboratory or other locations for processing.

The NMFS Beaufort Laboratory collaborates with several laboratories in the Southeast Region to provide life history information for SEDAR stock assessments. For example, Florida's Fish and Wildlife Conservation Commission (FWC) process all Yellowtail Snapper, Mutton Snapper, Black Grouper, Hogfish, and Florida's collection of Red Snapper. NMFS Panama City Laboratory process all King Mackerel and Spanish Mackerel, as well as part of the east coast of Florida Tilefish age samples. North Carolina Division of Marine Fisheries age all commercial Black Sea Bass collected by their port agents. The South Carolina Department of Natural Resources MARMAP group process and age special collections of commercially caught snapper grouper species. Other state agencies and universities have provided age data for species of interest to them.

Two inventories of age samples received at the Beaufort Laboratory are maintained to track samples received, disposition of samples and resulting age readings. Following are tables of data for fourteen species of commercially landed fish. The tables contain the number of age samples received, number of those samples read, number processed but not read, number subsampled, and number not processed due to errors in data. Samples that have been processed but not read are those species that have recently undergone a stock assessment and we are attempting to keep up with current samples being received or going back to pick up samples previously sub-sampled. Sub-sampling has occurred due to time constraints to meet the needs of the SEDAR schedule. Errors can occur due to records for which we did not receive a sample, un-useable samples due to wrong species, broken samples or irreconcilable data.

The fourteen species include Black Sea Bass, Blueline Tilefish, Cobia, Gag, Gray Triggerfish, Greater Amberjack, Red Grouper, Red Porgy, Red Snapper, Scamp, Snowy Grouper, Tilefish, Vermilion Snapper, and White Grunt.

Black Sea Bass Commercial Age Samples- these otoliths are primarily read whole and sectioned only when annuli are not distinct enough.

Year	Total Received	Read	Not Yet Read		Unusable**
			Sub-Sampled*	missing samples	
2003	83	75	0	7	1
2004	145	79	0	63	3
2005	366	291	0	66	9
2006	1209	895	0	309	5
2007	1293	1084	0	200	9
2008	1473	1223	0	249	1
2009	1725	1501	0	218	6
2010	1559	1557	0	0	2
2011	1128	1097	0	31	0
2012	1681	1599	0	82	0
Totals	10662	9401	0	1224	36

*Not read due to sub-sampling

**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Blueline Tilefish Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	5	5			
2004	3	2			1
2005	53	51			2
2006	69	46			23
2007	117	113			4
2008	115	98			17
2009	673	656			17
2010	992	967			25
2011	610	598			12
2012	1128	1083			45
Totals	3765	3619	0	0	146

* Not read due to sub-sampling

**Not processed due to sample being broken, mislabeled, and or data received, but sample not received.

Cobia Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003					
2004					
2005					
2006					
2007					
2008	3	2			1
2009					
2010	1				1
2011					
2012	2		2		
Totals	6	2	2	0	2

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Gag Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	153	153			
2004	379	309			70
2005	594	364			230
2006	749	696			53
2007	1464	1443	7		14
2008	1162	1143	3		16
2009	773	722	41		10
2010	1125	1116	1		8
2011	1140	1126			14
2012	720	636			84
Totals	8259	7708	52	0	499

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Gray Triggerfish Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	11	11			11
2004	277	197			80
2005	519	397			122
2006	547	504			43
2007	1161	733		428	
2008	1260	796		464	
2009	1025	764		261	
2010	1450	1031		419	
2011	1453	1301			154
2012	994		994		
Totals	8697	5734	994	1572	410

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Great Amberjack Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003					
2004	33	8	25		
2005	10	7	3		
2006					
2007	3		3		
2008					
2009	47		47		
2010	73		73		
2011	65		65		
2012	144		144		
Totals	375	15	360	0	0

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Red Grouper Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	69	37			32
2004	381	261			120
2005	542	491			51
2006	1488	869		619	
2007	4058	1343		2715	
2008	3309	2190		1119	
2009	555				
2010	894				
2011	864				
2012	768				
Totals	12928	5191		4453	203

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Red Porgy Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	129	60			69
2004	251	38			213
2005	511	215	9		287
2006	1153	1110	5		38
2007	1760	1414	321		25
2008	2166	1752	410		4
2009	1358	1058	253		47
2010	1315	875	286		154
2011	1191	943	197		51
2012	809		783		26
Totals	10643	7465	2264	0	914

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Red Snapper Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	65	64			
2004	94	93			
2005	146	143	1		1
2006	236	236			
2007	303	294			
2008	426	420			
2009	2635	2632			2
2010	31	31			
2011	1	1			
2012	116	116			
Totals	4053	4030	1	0	3

* Not read due to sub-sampling

**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Scamp Commercial Age Samples. Scamp is not on the SEDAR schedule, yet.

Year	Total Received	Read	Not Yet Read		Unusable**
			Processed	Sub-Sampled*	
2003	57				
2004	294				
2005	552				
2006	1077	399			
2007	1707	400			
2008	1401	400			
2009	937				
2010	1077				
2011	1194				
2012	976		167		
Totals	9272	1199	167	0	0

* Not read due to sub-sampling

**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Snowy Grouper Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	255	160			95
2004	362	308			54
2005	564	428			136
2006	541	356			185
2007	1249	1006			243
2008	760	623			137
2009	744	520			224
2010	889	805			84
2011	632	621			11
2012	946	896			50
Totals	6942	5723	0	0	1219

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

Tilefish Commercial Age Samples. Some of the readings were done at the NMFS Panama City Laboratory as part of an age validation study.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	248	248			
2004	495	376			119
2005	392	336			56
2006	1033	1033			
2007	1394	1394			
2008	812	812			
2009	787	787			
2010	921	921			
2011***	75		75		
2012	1712		1430		
Totals	7869	5907	1505	0	175

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received
***A portion of age samples collected in 2011 (n = 569) were sent to NMFS Panama City Laboratory.

Vermilion Snapper Commercial Age Samples.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	147	144	3		
2004	346	333	10		3
2005	947	687	256		4
2006	2868	940	1928		0
2007	4150	1486	2596		68
2008	3867	3692	33		142
2009	2501	2336	88		77
2010	4004	3793	87		124
2011	4859	4297	450		42
2012	4285	798	4264		25
Totals	27974	18506	9715	0	485

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received

White Grunt Commercial Age Samples. White Grunt is not on the SEDAR schedule, yet.

Year	Total Received	Read	Not Yet Read		Not Processed**
			Processed	Sub-Sampled*	
2003	64		64		
2004	376		376		
2005	466		466		
2006	614		109		
2007	853		12		
2008	389				
2009	219				
2010	379				
2011	502				
2012	694				
Totals	4556	0	1027	0	0

* Not read due to sub-sampling
**Not processed due to sample being broken, mislabeled, and or data received, but sample not received