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**SCIENTIFIC COUNCIL MEETING – September 2016****Available Data from the Commercial Fisheries Related to Stock Assessment (2015) and Inventory of Biological Surveys Conducted in the NAFO Area in 2015 and Biological Surveys Planned for 2016 and Early-2017**

At its meetings in June 2002 and 2003, the Scientific Council (STACREC) agreed that three Tables which are usually compiled and presented as Tables 3, 4 and 5 in the STACREC report are important and need to be complete with information from all Scientific Council sources. Accordingly, STACREC in June 2002 **recommended** that *in future years the Secretariat compile the reports of research activities as a working document for the June Meeting, and that it then be presented to STACREC as a SCS document at its September Meeting.*

The attached Tables were drafted as Scientific Council Working Papers during the June 2016 Scientific Council Meeting and have been updated/corrected through correspondence.



Available data from the commercial fisheries related to stock assessment (2015). (+ means data available).

Biological Sampling								
Stock	Country <sup>1</sup>	Catch	CPUE	Sex	Length	Age	Individual Wt.	Maturity
<b>3M Cod</b>	EU/PRT	+			+	+	+	
	EU/ESP	+		+	+	+	+	+
	EU/EST	+		+	+		+	+
	FRO	+			+		+	
	NOR	+						
	RUS	+			+			
	USA	+						
<b>3NO Cod</b>	CAN	+	+	+	+	+	+	+
	EU/ESP	+	+	+	+	+	+	
	EU/PRT	+	+		+		+	
	EU/EST	+	+					
	USA	+						
	RUS	+			+			
<b>SA 1 Redfish</b>	GRL	+						
<b>3M Redfish</b>	CUB	+						
	RUS	+		+	+			
	EU/ESP	+		+	+			
	EU/EST	+		+	+			
	EU/PRT	+	+	+	+		+	
	FRO	+						
<b>3LN Redfish</b>	EU/PRT	+	+	+	+		+	
	EU/ESP	+		+	+			
	RUS	+		+	+	+		
	EU/EST	+		+	+			
	FRO	+						
	CAN	+						
	CUB	+						
	FRA-SP	+						
	USA	+						
<b>3O Redfish</b>	CAN	+	+	+	+	+	+	
	EU/PRT	+	+	+	+			
	EU/ESP	+	+	+	+			
	RUS	+	+	+	+			
	EST	+	+					
<b>3M American plaice</b>	EU/PRT	+			+			
	EU/EST	+						
	EU/ESP	+						
	RUS	+						
<b>3LNO American plaice</b>	CAN	+		+	+	+	+	+
	EU/ESP	+		+	+			
	EU/EST	+						
	EU/PRT	+			+			
	FRA (SPM)	+						
	RUS	+				+		
	USA	+			+			

Stock	Country <sup>1</sup>	Catch	CPUE	Sex	Length	Age	Individual Wt.	Maturity
<b>3NO Witch flounder</b>	CAN	+	+	+	+		+	
	EU/PRT	+		+	+		+	
	EU/ESP	+		+	+		+	
	EU/EST	+			+			
	RUS	+			+			
	US	+						
<b>2J3KL Witch flounder</b>	CAN	+			+			
	EU/PRT	+						
	EU/ESP	+						
	EU/EST	+						
	RUS	+			+			
<b>3LNO Yellowtail flounder</b>	CAN	+			+			
	EU/PRT	+						
	EU/ESP	+			+		+	
	RUS	+						
	EU/EST	+			+			
<b>SA 0 + 1B-F Greenland halibut</b>	USA	+						
	RUS	+	+	+	+			
	GRL	+	+		+			
	EU/GER	+						
	NOR	+			+			
<b>SA 1A Greenland halibut</b>	CAN	+	+		+			
	GRL	+	+	+	+			
<b>SA 2+3 Greenland halibut</b>	CAN	+	+					
	EU/PRT	+	+		+		+	
	EU/ESP	+	+	+	+	+		
	EU/EST	+		+	+	+	+	
	RUS	+	+	+	+	+		
	EU/FRA	+						
	USA	+						
	FRO	+						
<b>SA 0+1 Roundnose Grenadier</b>	EU/GER	+						
	RUS	+						
	GRL	+						
	NOR	+						
<b>SA 2+3 Roundnose grenadier</b>	EU/ESP	+						
	EU/PRT	+						
	RUS	+			+			
<b>SA 2+3 Roughhead grenadier</b>	EU/ESP	+		+	+	+	+	
	EU/EST	+						
	EU/PRT	+		+	+			
	RUS	+		+	+			
	USA	+						
<b>3NO Capelin</b>	NO AVAILABLE DATA							
<b>SA 3+4 Squid</b>	CAN	+						

Stock	Country <sup>1</sup>	Catch	CPUE	Sex	Length	Age	Individual Wt.	Maturity
<b>SA 1 Other finfish</b>	GRL	+						
<b>3NOPs White Hake</b>	CAN	+						
	EU/PRT	+						
	EU/ESP	+		+	+			
<b>3LNOPs Thorny skate</b>	RUS	+			+			
	CAN	+						
	EU/PRT	+			+			
	EU/ESP	+		+	+			
<b>3LNO Shrimp</b>	RUS	+			+			
	CAN-N	+	+	+	+			+
	EU/ESP	+	+	+	+			+
	EU/EST	+	+		+			
	FRO	+	+					
<b>Denmark Strait Shrimp</b>	GRL	+	+					
	GRL	+	+					
	EST	+	+					
	DNK	+	+					
<b>SA 0+1 Shrimp</b>	CAN	+	+					
	GRL	+	+					
	DNK	+	+					

<sup>1</sup> Country abbreviations NAFO 3-Alpha.

## Inventory of biological surveys conducted in the NAFO Area in 2015.

<b>Stratified Random Surveys</b>				No. of
Subarea/Division	Country	Month(s)	Type of survey	sets
1A	GRL	7	Disko Bay gill net survey	37
1A	GRL	7-8	Uummannaq long line survey	23
1A	GRL	7-8	Uummannaq gill net survey	4
1A	GRL	8	Upernavik long line survey	16
1A	GRL	8	Upernavik gill net survey	13
1A-F	GRL	6-8	Greenland shrimp fish survey	216
1CD	GRL	9	Greenland deep sea survey	58
2+3HJ+KLMNO	CAN-N	10-12-1/2016	Multi-species trawl survey	605
3L	EU-ESP	7	Groundfish	16
3L	EU-ESP	8	Groundfish	88
3LNO	CAN-N	5-6	Multi-species trawl survey	202
3M	EU-ESP+PRT	6	Groundfish	42
3M	EU-ESP+PRT	7	Groundfish	140
3NO	EU-ESP	5	Groundfish	6
3NO	EU-ESP	6	Groundfish	120
3P	CAN-N	4-5	Multi-species trawl survey	175
4X, 4Y	USA	4-5	Spring Bottom Trawl Survey	7
4X	USA	5	Spring Bottom Trawl Survey	13
4X, 4Y	USA	5, 10	Ecosystems Monitoring Survey	9
4X	USA	10, 11	Autumn Bottom Trawl Survey	21
4X, 4Y	USA	10	Autumn Bottom Trawl Survey	3
4X	USA	1	Line transect surveys from NOAA Twin Otter	0
4X	USA	6	Line transect and turtle tagging survey	0
5Y,Ze, Zw,	USA	6	Line transect and turtle tagging survey	0
5Y,Ze, Zw,	USA	1	Line transect surveys from NOAA Twin Otter	0
5Y,Ze,Zw	USA	4,5	Spring Bottom Trawl Survey	56
5Y,Ze,Zw	USA	5,6,10	Ecosystems Monitoring Survey	137
5Y,Ze,Zw	USA	9,10,11	Autumn Bottom Trawl Survey	62
5Y	USA	5	Spring Bottom Trawl Survey	74
5Y	USA	10, 11	Autumn Bottom Trawl Survey	61
5Ze	USA	4,5	Spring Bottom Trawl Survey	102
5Ze	USA	10, 11	Autumn Bottom Trawl Survey	159
5Zw	USA	4	Spring Bottom Trawl Survey	35
5Zw	USA	9, 10	Autumn Bottom Trawl Survey	37
5Y	USA	4, 5, 10, 11	Gulf of Maine Cooperative Bottom Longline Survey	77
5Z	USA	4, 5, 10, 11	Gulf of Maine Cooperative Bottom Longline Survey	13
5Z	USA	5,6	Sea Scallop Dredge Survey	194
5Zw	USA	8	Surfclam & Ocean Quahog Dredge Survey	12
6A	USA	1	Line transect surveys from NOAA Twin Otter	0
6A	USA	4	Spring Bottom Trawl Survey	52
6A	USA	9,10	Autumn Bottom Trawl Survey	59
6B	USA	3,4	Spring Bottom Trawl Survey	34
6B	USA	9	Autumn Bottom Trawl Survey	53
6C	USA	9	Autumn Bottom Trawl Survey	37
6A, 6B, 6C	USA	6	Sea Scallop Dredge Survey	2
6A, 6B, 6C	USA	8	Surfclam and Ocean Quahog Dredge Survey	177
6A, 6B, 6C	USA	3, 4	Spring Bottom Trawl Survey	38
6A, 6B, 6C	USA	5, 10	Ecosystems Monitoring Survey	75
6A, 6B, 6C	USA	9	Autumn Bottom Trawl Survey	43

## Other Surveys

Subarea/Division	Country	Month(s)	Type of Survey	No. of sets
2 HJ +3+PsKLMNO	CAN-N	4,5,7	Physical and biological oceanographic survey	n/a
3KL	CAN-N	5	Capelin acoustic/trawl survey	n/a
3Ps	CAN-N	5-6	Fortune Bay Snow crab trawl/trap survey	37
3PsKLP	CAN-N	5,6, 7, 10	Cod tagging/telemetry	n/a
3LMNO	CAN-N	7	Physical and biological oceanographic survey	n/a
3L	CAN-N	8	Bonavista/Trinity Bay snow crab trap survey	40
3L	CAN-N	6	St. Mary's Bay crab trap survey	26
3Ps	CAN-N	9	Scallop survey	119
3Ps	CAN-N	5-6	Fortune Bay Snow crab trawl/trap survey	26
3K	CAN-N	9	White/ Notre Dame Bay Snow Crab Survey	48
3L	CAN-N	9-10	Conception Bay snow crab trawl/trap survey	33 (27 trap, 6 trawl)
3L	CAN-N	8-9	Trinity Bay Ecosystem Survey	n/a
4X, 4Y	USA	6	AMAPPS - Cetacean and turtle biology	2
5Y,Ze,Zw	USA	6, 7	AMAPPS - Cetacean and turtle biology	22
5Z	USA	5, 6	Sea Scallop Stereo-Optic Camera Transect Survey	2,422km
6A, 6B, 6C	USA	5	Sea Scallop Stereo-Optic Camera Transect Survey	2,212km
5Z, W, E	USA	5, 6	Marine Mammal: photo ID, biopsy and tagging right and sei whales	0
5Z,5Y,4X,4W,4VN, 4T, 5zW, 5zE	USA	1 -12	Right whale aerial surveys: Marine mammal distribution	0
6B, C	USA	8	Benthic habitat: mapping & assessment of benthic habitats	56
4X	USA	6	Atlantic Marine Assessment Program for Protected Species (AMAPPS): Line transect and turtle tagging survey from NOAA ship Henry B. Bigelow	
5Ze, Zw, Y	USA	6	Atlantic Marine Assessment Program for Protected Species (AMAPPS): Line transect and turtle tagging survey from NOAA ship Henry B. Bigelow	

## Biological surveys planned for the NAFO Area in 2016 and early-2017.

Subarea/Division	Country	Type of Survey	Dates
<b>Stratified-Random Surveys</b>			
1A	GRL	Disko Bay gill net survey	Jul
1A	GRL	Uummannaq gill net survey	Jul- Aug
1A	GRL	Upernavik gill net survey	Aug
1A-F	GRL	Greenland shrimp fish survey	Jun- Aug
1CD	GRL	Greenland deep sea survey	Sep
2HJ +3KLMNO	CAN-N	Multi-species trawl survey	Oct 4- Dec 20
3KLNO	CAN-N	Multi-species trawl survey	Sep 14-Dec 2
3LNOPs	CAN-N	Multi-species trawl survey	Apr 1-Jun 21
3LNO	EU-ESP	Groundfish	May-Aug
3M	EU-ESP+PRT	Groundfish	Jun-Jul
3Ps	CAN-N	Multi-species trawl survey	Mar 31,2017
4X +5YZ+6AB	USA	Spring bottom trawl	Apr 6- Jun 6
4X+ 5YZ+ 6ABC	USA	Ecosystems monitoring	May 21- Jun 3
5Z+6ABC	USA	Sea scallop	May 18- Jun 26
5YZ	USA	Northern shrimp	Jul 17- Aug 12
5Z+6AB	USA	Surfclam & ocean quahog	Aug 3- 21
4X+5YZ+6ABC	USA	Autumn bottom trawl	Sep 6 – Nov 13
4X+5YZ+6ABC	USA	Ecosystems monitoring & Sm. Pelagics Acoustic Survey	Oct 18 – Nov 8
<b>Other Surveys</b>			
3K	CAN-N	Snow crab trap survey	Aug 26- Sep 16
3KL	CAN-N	Capelin survey	May 3- 21
3KLMNO	CAN-N	Physical and biological oceanographic survey	Apr 5- 26
3KLPS	CAN-N	Cod tagging	Apr 26- May 5
3L	CAN-N	Snow crab survey	Jun 10- 16
3L	CAN-N	Bonavista Snow crab survey	Jul 27 – Aug 15
3L	CAN-N	Conception Bay snow crab survey	Sept 26- Oct 7
3L	CAN-N	Trinity Bay ecosystem survey	Aug 16-23
3LMNO	CAN-N	Physical and biological oceanographic survey	Jul 8- 28
3Ps	CAN-N	Snow crab survey	May 30-Jun 7
3Ps	CAN-N	Shellfish survey	Sep 1- 13
4VS+4W+4X+6E	CAN-M	Oceanographic and benthic survey	Jul14- Aug 16
5YZ	USA	Cetacean & Turtle biology	Jun 6 – 20
4X+5YZ+6A	USA	AMAPPS	Jun 27-Aug 25
4X+ 5YZ+ 6ABC	USA	Deepwater Coral Habitat	Aug 23- Sep 7
5YZ	USA	N. right whale	Apr 20 – May 17
5Z+6A	USA	Habitat mapping	Jun 20- Jul 1
5Z+6A	USA	Benthic Habitat Hab Cam	Sep 21 – 30