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SCIENTIFIC COUNCIL MEETING -2021

A Compilation of Research Vessel Surveys on a Stock-by-stock Basis

by

NAFO Secretariat

Discussions at the Scientific Council Meeting in June 1990 resulted in the compilation of information on research vessel surveys on a stock-by-stock basis (SCS Doc. 90/22, Serial No. N1820). This inventory was judged to be very helpful for the establishment of future inventories. It was agreed that the Designated Experts for the stocks be responsible for future compilations and that Designated Experts should update the information annually for review by STACFIS (*NAFO Sci. Coun. Rep.*, 1991, p. 114). The following tabulations were received at the Secretariat from the Designated Experts during the year 2021.



Stock name: Greenland halibut in Subarea 0 +1 (offshore)

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Name of survey	Location (Div.)	Season months(s)	Years of survey from, to or since	Type of survey and gears	Target species	No. of sets	24 hr fishing	Area of coverage in relation to stock distribu- tion (%)	Depth range		stoc size estin bio- mass	k		Individual weights	Country	SCS/ SCR Doc. No
Greenland Deep Sea	1CD	Aug-Nov	1997 – 2017, 2019	Strartified Random bottom Trawl, Alfredo trawl	Greenland halibut	70	Y	?	400- 1500 m	Y	Y	N	Y	Y	Green- land	SCR 20/12
Greenland Shrimp Trawl	1A-F	Jul-Sep	Since 1988	Strartified Random bottom Trawl, Cosmos trawl	Shrimp Groundfish	198	N	?	50- 600m	Y	Y	N	Y	Y	Green- land	SCR 20/06
Canada Deep Sea	0A	Oct-Nov	1999 2001 2004 2006 2008 2010 2012 2014-	Strartified Random bottom Trawl, Alfredo trawl	Greenland halibut	72	Y	?	400- 1500 m	Y	Y	N	Y	Y	Canada	SCR 20/07
Canada Deep Sea	ОВ	Oct-Nov	2017 2019 2000 2001 2011 2013 2014- 2016	Strartified Random bottom Trawl, Alfredo trawl	Greenland halibut	81	Y	?	400- 1500 m	Y	Y	N	Y	Y	Canada	SCR 17/28



Stock name:	Cusamland	halibart in	Division	1 A inchas

Name of survey	Location (Div.)	Season months(Years of survey from, to or since	Type of survey and gears	Target species	No.of sets	24 hr fishing	Area of coverage in relation to stock distribu- tion (%)	Depth range	Researc size esti Abun dance	h data rela mates Bio- mass	ALK	k LF	Indiv- idual weight	Country	SCS/ SCR Doc. No
Disko bay Inshore	Disko Bay	Jun-Jul	1993-01 2001-21	Longline Gillnet	Greenland halibut	0 44	Y	-	200- 700m	Y	Y	Y	Y	Y	Greenland	22/008
Uummannaq Inshore	Uummanna q	Aug-Sep	1993-15 2011-21	Longline Gillnet	Greenland halibut	0 52	Y	-	200- 900m	Y	Y	Y	Y	Y	Greenland	22/010
Upernavik Inshore	Upernavik	Aug-Sep	1998-14 2012-21	Longline Gillnet	Greenland halibut	- 49	Y	-	200- 900m	Y	Y	Y	Y	Y	Greenland	22/009
Greenland Shrimp and Fish survey	Disko bay + (1A-1F)	Jul-Sep	1991-20	Stratified- random trawl	Shrimp & fish	0	N	-	50- 600m	Y	Y	Y	Y	Y	Greenland	22/008 21/014

Stock name: Redfish in Subarea 1

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			Years of survey					Area of coverage in		Researc size esti		ated to sto	ck			SCS/
Name of survey	Location (Div.)	Season months(s)	from, to or since	Type of survey and gears	Target species	No.of sets	24 hr fishing	relation to stock distribu- tion (%)	Depth range	Abun dance	Bio- mass	ALK	LF	Indiv- idual weights	Country	SCR Doc. No
West Greenland Groundfish	1B - 1F	Oct-Nov	1982 - 2019	Stratified random bottom trawl	Cod, redfish, other finfish	0	N	?	0- 400m	Y	Y	N	Y	Y	EU- Germany	21/003
Greenland – Deepsea	1C - 1D	Aug-Nov	since 1997	Stratified random bottom trawl	Greenland halibut,	0	Y	?	400- 1500m	Y	Y	N	Y	Y	Greenlan d	20/012
Greenland Shrimp and Fish survey	1A - 1F	Jul-Aug	since 1992	Stratified random bottom trawl	Shrimp & fish	0	N	?	50- 600m	Y	Y	N	Y	Y	Greenlan d	21/014
Greenland Shrimp and Fish survey - inshore	1D	May	Since 2015	Stratified random bottom trawl	Shrimp & fish	20	N	?	50- 600m	Y	Y	N	Y	Y	Greenlan d	22/011



Stock name: Wolffish in SA1 and American plaice in SA1 Area of coverage in Years of Research data related to stock size survey relation to SCS/ estimates Type of stock SCR from, to Indiv-Location Season survey Target No.of 24 hr distribution Depth Abun-Bioidual Doc. or and gears Name of survey Species (%) dance ALK LF weights Country No (Div.) months(s) since fishing sets range mass West Greenland 1B - 1F Oct-Nov Stratified Cod, 0 N 0-Y Y N Y Y EU-SCR since groundfish 1982 random redfish 400m Germany 21/003 finfish bottom trawl Greenland 1A - 1F Jul-Aug Stratified Shrimp, 0 N 50-Y Y N Y N Green-SCR since Shrimp and Fish 1992 random finfish 600m land 21/014 survey bottom trawl



Stock name:	Cod in Divi	ision 3M														
Name of	Location	Season	Years of surbvey from, to or	Type of survbey and	Target	No.of	24 hr	Area of coverage in relaction to stock disribution	Depth	Research dat estimates	a related to s	stock size	e	Individual		SCS/SCR
survey	(Div.)	months(s)	since	gears	species	sets	fishing	(%)	range	Abundance	Biomass	ALK	LF	weights	Country	Doc. No
EU- bottom trawl sruvey	3M	Jun-Jul	since 1988	Stratified random	All	180	N	100%	<750 m (88-03) <1400m (04-19)	Y	Y	Y	Y	Y	EU	SCR 20/11
Canadian Flemish Cap survey	3M	Jan-Feb	1978- 1995	Stratified random	All	132	Y	100%	<730 m	Y	Y	Y	Y	Y	Canada Newfoundland	SCR 92/76
Russian trawl survey	3M	May-June	1983- 1993 1995- 1196 2001- 2002	Stratified Random (and acoustic survey 1987-93)	All	94	Y	100%	<1280 m	Y	Y	N	N	N	Russia	SCS 03/9
Canadian groundfish survey	3M	Sept-Oct	1996	Stratified random	All	68	Y	100%	<730 m	Y	Y	N	N	N	Canada Newfoundland	SCR 97/42



Stock name: Golde	en redfish in	Division 3M														
Name of survey	Location (Div.)	Season months(s)	Years of survey since	Type of survey and gears	Target Species	No. of Sets	24 hr fishing	Area of coverage in relation to stock distribution (%)	Depth range		- bio-	related to stimates		Indiv- idual weights	Country	SCS/ SCR Doc. No.
EU – bottom Trawl	3M	Summer Jun/Jul	1988	Stratified-random bottom trawl	Groundfish and shrimp	181	N	100	127- 1460m	Y	Y	Y	Y	Y	EU- Spain EU- Portugal	21/05

Stock name: Beake	ed redfish in	Division 3M														
Name of survey	Location (Div.)	Season months(s)	Years of survey since	Type of survey and gears	Target Species	No. of Sets	24 hr fishing	Area of coverage in relation to stock distribu- tion (%)	Depth range	Reso	size es	related to stimates		Indiv- idual weights	Country	SCS/ SCR Doc. No.
EU – bottom Trawl	3M	Summer Jun/Jul	1988	Stratified-random bottom trawl	Groundfish and shrimp	181	N	100	127- 1460m	Y	Y	Y	Y	Y	EU- Spain EU- Portugal	21/05



Stock name: Amer	ican plaice in	Division 3M														
Name of survey	Location (Div.)	Season months(s)	Years of survey since	Type of survey and gears	Target Species	No. of Sets	24 hr fishing	Area of coverage in relation to stock distribu- tion (%)	Depth range		- bio-	related to stimates		Indiv- idual weights	Country	SCS/ SCR Doc. No.
EU – bottom Trawl	3M	Summer Jun/Jul	1988	Stratified-random bottom trawl	Groundfish and shrimp	181	N	100	127- 1460m	Y	Y	Y	Y	Y	EU- Spain EU- Portugal	21/05



Stock name: Cod in Divisions 3NO Area of Years of coverage in Research data related to stock size relation to SCS/ survey estimates stock Indiv-SCR from, to Type of Location Season survey Target No.of 24 hr distribution Depth Abun-Bioidual Doc. Name of survey species ALK LF (Div.) months(s) since and gears fishing (%) range dance weights Country No mass Canadian 3NO Apr-Jun 1972-Stratified-Multi-134 Y 100 38-666 Y Y Y Y Y Canada SCR Spring Bottom 2019 random species 21/04 m Trawl Survey (except Bottom 1983, trawl 2006) Juvenile flatfish 3NO Sep 1989-94 Stratified-Groundfish Y 100 30-150 Y Y Y Y Y Canada SCR random 96/80 Bottom trawl 1990-2020 Y Y Canadian 3NO Oct-Dec Stratified-Multi-121 Y 100 39-641 Y Y Y Canada SCR Autumn Bottom random species 21/04 (except m 2014) Trawl Survey Bottom trawl EU-Spain 3NO -Jun 1995-Stratified-Multi-122 N 20 44-1450 Y Y Y Y Y Spain SCR Regulator 2019 random species 20/08 y Area Bottom trawl



Stock name: Redfi	sh in Divisions	s 3LN	1	1		•			1	1						
Name of survey	Location (Div.)	Season months(s)	Years of survey from, to or since	Type of survey and gears	Target species	No. of sets	24 hr fishing	Area of coverage in relation to stock distri-bution (%)	Depth range	abun-		related to timates	stock LF	Indiv- idual weights	Country	SC SC Do
USSR groundfish	3L, 3N	Apr-Jul (mostly)	1972-82	Fixed station Bottom trawl	Multi-species Groundfish	50-60 per Div.	Y	Unknown	1972-76: to 367m 1977-82: to 732 m	Y Y	Y Y	Y Y	Y Y	Some- times	USSR	86/
USSR ground-	3L, 3N	Apr-Jun	1983-91, 1993,	Stratified- random	Multi-species	approx. 48-3L	Y	Unknown	to 732 m	Y	Y	Y	Y	Some-	USSR	86/
fish	3L, 3N	(mostly)	1993,	Bottom trawl	Groundfish	approx. 42-3N	Y	Unknown	to 732 m	Y	Y	Y	Y	times	USSK	80/
USSR acoustic	3LN	Apr-Jun	1987-91, 1993	Acoustic	Multi-species	unknown midwater sampl.	Y	Unknown	to 732 m	Y	Y			Some- times	USSR	88
Canadian groundfish (covering deep- water strata)	3L	various	1978-86	Stratified- random Bottom Trawl	Multi-species Groundfish	min. of 40 in depths >183m	Y	Unknown	to 732 m	Y	Y	Y	Y	Some- times	Canada	NA Stu No
Canada redfish	3L	Jan	1990	Stratified- random Bottom trawl	Redfish	55	Y	Unknown	183-732 m	Y	Y	Y	Y	N	Canada	NA Stu No
Canada ground- fish	3LN	Apr-Jun	1990-93	Stratified- random Bottom trawl	Multi-species Groundfish	90 in redfish depths	Y	Unknown	to 732 m	Y	Y	Y	Y	Y	Canada	Nz Stu N
Canada redfish	3L, 3N (since 1990)	Aug	1990-91, 1993	Stratified- random Bottom trawl	Redfish	59-3L 47-3N	Y	Unknown	183-732 m	Y	Y	Y	Y	Y	Canada	N. Sti N
Canadian Groundfish (Autumn)	3LN	Autumn (Oct-Dec)	1991-20	Stratified- random Bottom trawl	Multi-species Groundfish	142 in 3L 39-3N	Y	Unknown	61-703 in 3L 39-72 in 3N	Y	Y	N	Y	Y	Canada	21 pers.
Canadian Groundfish (Spring)	3LN	Spring (May-Jun)	1991-19	Stratified- random Bottom trawl	Multi-species Groundfish	56 in 3L 72 in 3N	Y	Unknown	65-685 in 3L 39-674 in 3N	Y	Y	N	Y	Y	Canada	20 a pers.
Spanish Groundfish (Spring)	3N	Spring (Jun)	1995-19	Stratified- random Bottom trawl	Multi-species Groundfish	122	N	Unknown	44-1450	Y	Y	N	Y	Y	Spain	20 a pers.
Spanish Groundfish (Summer)	3L	Summer (July- August)	2006-15	Stratified- random Bottom trawl	Multi-species Groundfish	97	N	Unknown	122-1458	Y	Y	N	Y	Y	Spain	20 pers.



			Years of					Area of coverage in								
			survey from, to	Type of				relation to stock	Depth	Research d estimates	ata related t	o stock s	ize			SCS/
Name of survey	Location (Div.)	Season months(s)	or since	survey and gears	Target species	No.of sets	24 hr fishing	distribution (%)	Range (m)	Abun- dance	Bio- mass	AL K	LF	Individual weights	Country	SCR Doc. No
Canadian Groundfish autumn	3LNO	Aug- Oct.	Since 1990	Stratified Random Campelen Trawl	Groundfish & shellfish	217	Y	100	45-672	Y	Y	N	Y	Y	Canada	21/019

Stock name: Witch flounder in Divisions 31	1s 3NO)
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			Years of survey from, to	Type of				Area of coverage in relation to stock	Depth	Research d	ata related t	o stock s	ize			SCS/
Name of survey	Location (Div.)	Season months(s)	or since	survey and gears	Target species	No.of sets	24 hr fishing	distribution (%)	Range (m)	Abun- dance	Bio- mass	AL K	LF	Individual weights	Country	SCR Doc. No
Canadian Groundfish autumn	3NO	Aug- Sept.	Since 1990	Stratified Random Campelen Trawl	Groundfish & shellfish	112	Y	100	45-672	Y	Y	N	Y	Y	Canada	21/019

Stock name:	Capelin	in	Divisions 3	NO

			Years of survey from, to	Type of				Area of coverage in relation to stock		Research estimates		d to stock si	ze	Indiv-		SCS/ SCR
Name of survey	Location (Div.)	Season months(s)	or since	survey and gears	Target species	No.of sets	24 hr fishing	distribution (%)	Depth range	Abun- dance	Bio- mass	ALK	LF	idual weights	Countr y	Doc. No
Multi-species bottom rawl survey	3NO	6	1977- 2006	Stratified- random, Campelen 1800	Demersal fishes	54	+	50	45-105 m	Y	Y	N	Y	Y	Canada	07/12



Stock name: Redfi	sh in Divisions	s 3O														
Name of survey	Location (Div.)	Season months(s)	Years of survey from, to or since	Type of survey and gears	Target species	No. of sets	24 hr fishing	Area of coverage in relation to stock distri -bution (%)	Depth range		size es bio-	related to timates	stock LF	Indiv- idual weights	Country	SCS/ SCR Doc. No.
USSR ground- fish	30	Apr-Jun (mostly)	1983-91, 1993, 1994	Stratified- random Bottom trawl	Multi- species Groundfish	75-100	Y	Unknown	to 732 m	Y	Y	Y	Y	Some- times	Russia	86/66
Canada ground- fish	30	Apr-Jun	1971-90	Stratified- random Bottom trawl	Multi- species Groundfish	30-36 in redfish depths	Y	Unknown	to 367m	Y	Y	Y	Y	N	Canada	NAFO Studies No. 2
EU-Spain	30	Jun	1995- 2019	Stratified- random Bottom trawl	Multi- species Groundfish	6-23	N	Unknown	93 - 1410 m	Y	Y	N	Y	Some Surveys	Spain	SCR 20/009
Canada ground- fish	30	Sep-Dec series + Apr-May series	1991- 2013, 2015-20 1991- 2015-19	Stratified- random Bottom trawl	Multi- species Groundfish	24-40 + 35-51 in redfish depths	Y	Unknown	To 1464 m To 732 m	Y	Y	N N	Y	Y	Canada	SCR 21/004



Stock name: Thorny skate in Divisions 3L, 3N, 3O, and 3Ps Research data related to stock Area of Years of coverage in size estimates relation to SCS/ survey Indiv-SCR from, to Type of stock Season Target No. of 24 hr distribubioidual Name of Location Depth abun-Doc. or survey months(s) survey (Div.) and gears Species Sets fishing tion (%) range dance mass ALK LF weights Country No. since (2020)Canadian Div. 1971-Stratified Groundfish Y 100 39 to Y Y N Y Y Canada SCR Spring Groundfish 3LNOPs (March-2019 random -& shellfish 694 m 20/02 (Spring) June) bottom trawl Y Y Y N Y Y Canadian Div. 3LNO 1990-Stratified-Groundfish 80 46 to Canada SCR Groundfish 2020 & shellfish 21/004 Autumn random -670m (Autumn) (Sept-Nov) bottom trawl Y N Y Y EU-Spain Div. 3NO 1997-Stratified-N Y EU-SCR Groundfish 44 to Groundfish Regulatory 2019 random -15 20/10 Spring 1 450m Spain Area (May-June) bottom trawl EU-Spain 2003-N Y Y N Y Y Div. 3L Stratified-120 to SCR Groundfish Regulatory Summer 2019 random -Groundfish 10 1 359m EU-20/14



Area

(July-

August)

bottom trawl

Spain

Stock name: White hake in Divisions 3N, 3O, and 3Ps

Name of survey	Location (Div.)	Season months(s)	Years of survey from, to or since	Type of survey and gears	Target Species	No. of Sets (2020)	24 hr fishing	Area of coverage in relation to stock distribu- tion (%)	Depth range		ch data relati size estima bio- mass			Indiv- idual weights	Country	SCS/ SCR Doc. No.
Canadian Groundfish (Spring)	Div.3NOPs	Spring (March- May)	1971- 2019	Stratified random - bottom trawl	Groundfish & shellfish	0	Y	100	39 to 685m	Y	Y	N	Y	Y	Canada	SCR 20/15
Canadian Groundfish (Autumn)	Div. 3NO	Autumn (Sept-Oct)	1990- 2020	Stratified- random - bottom trawl	Groundfish & shellfish	112	Y	65	46-634 44 to	Y	Y	N	Y	Y	Canada	SCR 21/004
EU-Spain Groundfish (Spring)	Div. 3NO Regulatory Area	Spring (May-June)	1997- 2019	Stratified- random - bottom trawl	Groundfish	114	N	25	1 450m	Y	Y	N	Y	Y	EU- Spain	SCR 20/020



Stock name: Roughl	head Grenadi	er in Subareas	2 and 3				1		1	1				_	ı	ī
Name of survey	Location (Div.)	Season Months(s)	Years of Survey since	Type of survey and gears	Target Species	No. of Sets	24 hr fishing	Area of coverage in relation to stock distribution (%)	Depth Range	Resonation abundance	earch data r size est bio- mass		tock LF	Indiv- idual weights	Country	SCR Doc. No.
Canadian Autumn Survey	2GHJ 3MLNO	Oct-Dec	1978	Stratified random <= 1994 Engel >=1995 Campelen	Groundfish Shellfish	472 in 2020	Yes	(,,,,	<1500	+	+		+	No	CAN	SCR 21/04
Canadian Spring Survey	3LNO	Spring May-July	1978	Stratified random <=1995 Engel >= 1996 Campelen	Groundfish Shellfish	451 in 2019	Yes		<730 m		+			No	CAN	21/004 REV
Canadian deepwater	3MLN	August February Spring	1991 1994 1995	Bottom trawl	Groundfish				<1500	+	+		+	No	CAN	SCR 95/51
Spanish Surveys in Div. 3NO	3NO	June	1995	Stratified Random <=2001 Pedreira >=2001 Campelen	Groundfish	115 in 2019	No	Low	<1500	+	+		+	+	EU-ESP	SCR 20/10
Spanish Surveys in Div. 3L	3L	August	2003	Stratified Random Campelen	Groundfish	96 in 2019	No	Low	<1500	+	+		+	+	EU-ESP	SCR 20/14
EU Flemish Cap Surveys	3M	July	1988	Stratified Random (Lofoten)	Groundfish Shrimp	181 in 2020	No	Flemish Cap	<1500	+	+	+	+	+	EU-ESP EU-PRT	SCR 21/05
Russian	3M	May/June	2001 and 2002	Stratified random bottom trawl	Groundfish	94	Yes	Flemish Cap	120- 1280 m	+	+		+		RUS	SCR 03/09 SCR 07/10
EU Deepwater	3LMN	April-May	1996	Longline	Groundfish	64	Yes		700- 3100m				+	+	EU-ESP EU-PRT	SCR 96/34, 97/19, 97/20



Stock name: Greenland halibut in Subareas 2+3KLMNO

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			Years of survey from, to	Type of				Area of coverage in relation to stock		Researc	h data rela estima		k size	Indiv-		SCS/ SCR
Name of survey	Location (Div.)	Season months(s)	or since	survey and gears	Target species	No.of sets	24 hr fishing	distribution (%)	Depth range	Abun- dance	Bio- mass	ALK	LF	idual weights	Country	Doc. No
Canadian groundfish spring	3LNO	Apr-June	Since 1995 (2006, 2015, 2020 incomplete)	Stratified-random Campelen trawl	Multi- species survey	300	Y	(70)	42-725 m	Y	Y	Y	Y	Y	Canada	21/004
Canadian groundfish autumn	2J3K 3LNO	Autumn	2J3K since 1978 (2008 incomplete) 3L since 1981 (2014 incomplete)	Stratified-random Engel trawl 1978- 94 2J3K Yankee trawl 1981-82 3L Engel trawl 1984-94 3LNO Campelen Trawl all areas since 1995	Multi- species survey	2J3K: 149	Y	This column not appropriate for this species given differences in depth coverage and areas covered in the surveys	2J 129-1325 m 3K 139-658 m 3L 62-668 m	Y	Y	Y	Y	Y	Canada	21/004
EU bottom trawl	3M	Jun-Jul	1988-2020	Stratified-random Lofoten trawl	Groundfish & shrimp	181	N		128-1460 m	Y	Y	Y	Y	Y	EU	21/005
EU-Spain bottom trawl	Reg. Area 3LNO	Apr-May	3NO since 3L since 2003 (2000, 2008, 2020 incomplete)	Stratified-random Bottom trawl	Groundfish	3NO: 114	N		3NO 44- 1450m 3L 126-1447 m	Y	Y	N	Y	Y	Spain	20/013
Canadian groundfish autumn	2GH	Sep-Oct	2G no longer covered; 2H since 1978	Stratified-random Campelen in 1996-2018	Multi- species survey	2H: 52	Y		98-1399 m 2H	Y	Y	Y	Y	Y	Canada	21/004
Canadian groundfish autumn	3MNO	Sep-Dec	3NO since 1990 3M 1996-2003, 2006-2007	Stratified-random Campelen	Multi- species survey				3N 40- 634 m 3O 64- 7665 m						Canada	21/004
Russian	3M	May	1987-96	Stratified-random Bottom trawl	Groundfish	90	Y	Flemish Cap	914 m in 1996	Y	Y	Y	Y	N	Russia	98/13
Russian	3LM Flemish Pass	Feb Apr-May	1995-96 2000	Stratified-random Bottom trawl	Groundfish	84	Y		732-1280 m	Y	Y	Y	Y	N	Russia	01/10
Russian	3M	May-Jun	2001-02	Stratified-random Bottom trawl	Groundfish		Y		127- 1280m	Y	Y	Y	Y	N	Russia	03/09



			Years					Area of coverage		Research estimates		ed to stock	size			
Name of survey July multispecies bottom trawl	Location (Div.) SA 4	Season months(s) July	of survey from, to or since Since 1970	Type of survey and gears Stratified random bottom trawl	Target species Multi- species	No. of sets	24 hr fishing Y	in relation to stock distributi on (%) Unknown	Depth range 20-366 m	Abundance Y	Bio- mass Y	ALK N	LF Y	Indiv. weights	Country Canada	SCS/SCR Doc.No SCR 19/42REV
CA Autumn multispecies bottom trawl	4T	Sep	Since 1971	Stratified random bottom trawl	Multi- species	63-202; increased over the years	Y, after 1986	Unknown , likely < 20%		Y	Y	N	Un- known	N	Canada	SCR 19/42REV
EU Flemish Cap multispecies bottom trawl	3M	July	Since 1988	Stratified random bottom trawl	Multi- species	101-121	N, 0600- 2200	Unknown , likely < 5%	127-730 m, up to 1,400 m in 2005	Y	Y	N	Y	N	EU (Spain)	SCR 16/21 SCR19/42RE
CA Spring multispecies bottom trawl	3LNOP	April- June	Since 1996	Stratified random bottom trawl	Multi- species	470-597	Y	Unknown	20- 870 m, but inconsis- tent inshore	Y	Y	N	Y	N	Canada	SCR 19/42REV
CA Autumn multispecies bottom trawl	3KLNO	Mainly Sept-Dec, but also Jan in some years	Since 1995	Stratified random bottom trawl	Multi- species	608-840	Y	Unknown	30-1 500 m, va riable inshore and > 730 m	Y	Y	N	Y	N	Canada	SCR 19/42REV

^{*}The data in this table is only updated every three years (e.g., 2016 and 2019) when a full assessment is conducted

			Years of					Area of coverage in		Research estimates		ted to stock s	ize			
urvey	Location (Div.)	Season months(s)	survey from, to or since	Type of survey and gears	Target species	No. of sets	24 hr fishing	relation to stock distribution (%)	Depth range	Abun-dance	Bio- mass	ALK	LF	Indiv- idual weights	Country	SCS/ SCR Doc. No
Multi-species Spring Survey	3LNO 3Ps	May to June	1999 to present	Stratified- random bottom trawl	Groundfish Shellfish (crab, shrimp)/ capelin	~300 sets in 3LNO	Yes	100% of area covered	30-732 m	Y	Y	N	Y	N	Canada	SCR 16/58
Multi-species Autumn Survey	2HJ 3KLNO	October to December	1995 to present	Stratified- random bottom trawl	Groundfish Shellfish (crab, shrimp)/ capelin	~300 sets in 3LNO	Yes	100% of area covered	30-1500 m	Y	Y	N	Y	N	Canada	CSAS 2017/ 12
EU Bottom Trawl Survey	3NO	May June	1995 - present	Stratified- random bottom trawl	Groundfish Shellfish (crab, shrimp)/ capelin	95	No		60-1500	Y	Y				EU- Spain	SCR 16/51
EU Bottom Trawl Survey	3L	August	2003 - present	Stratified- random bottom trawl	Groundfish Shellfish (crab, shrimp)/ capelin	97	No		60-1500	Y	Y		Y	Y	Spain	SCR 16/51

Stock name: North	nern Shrimp in	Division 3M														
			Years of survey from, to	Type of				Area of coverage in relation to stock		Research estimates	data relate	d to stock s	ize	Indiv-		SCS/ SCR
	Location	Season	or	survey	Target	No.of	24 hr	distribution	Depth	Abun-	Bio-			idual		Doc.
Name of survey	(Div.)	months(s)	since	and gears	species	sets	fishing	(%)	range	dance	mass	ALK	LF	weights	Country	No
EU-Flemish Cap Survey	3M	Jul	1988 to present	Stratified- random bottom trawl	All	181	N	100%	<750m (88-02) <1400m (03-20)	Y	Y	Y	Y	Y	EU	SCR 21/038 SCR 21/047



Stock name: : No	orthern Shrimp	in Subareas ()+1													
			Years of survey from, to	Type of				Area of coverage in relation to stock		Research estimates		d to stock s	size	Indiv-		SCS/ SCR
N. C	Location	Season	or	survey	Target	No.of	24 hr	distribution	Depth	Abun-	Bio-	AT 172		idual	G .	Doc.
Name of survey	(Div.)	months(s)	since	and gears	species	Sets ¹	fishing	(%)	range	dance	mass	ALK ²	LF	weights	Country	No
West Greenland Trawl Survey (West Greenland Shelf)	SA 0+1	Jun-Jul	Since 1988	Stratified semi- systematic; trawl; Cosmos 2000 w/rockhopper	Northern shrimp and groundfish	187	N	95	150- 600m	N/A	N/A	N/A	N/A	N/A	GRL	

¹ First number is number of stations trawled at depths between 150 and 600 m targeting shrimp; second number is number of stations in water shallower than 150 m targeting principally Atlantic cod; Third number is number of stations in water deeper than 600 m targeting principally Greenland halibut.

² Lack of satisfactory method of ageing shrimp precludes generating age-length keys.

Stock name: : No	orthern Shrimp	in Denmark S	Strait*													
			Years of survey from, to	Type of				Area of coverage in relation to stock		Research estimates	ı data relate	d to stock s	size	Indiv-		SCS/ SCR
Name of survey	Location (Div.)	Season months(s)	or since	survey and gears	Target species	No.of sets	24 hr fishing	distribution (%)	Depth range	Abun- dance	Bio- mass	ALK	LF	idual weights	Country	Doc. No
East Greenland Trawl Survey	ICES XIV	July- Aug	Since 2008 No surveys in 2017, 2018, and 2019 and 2021	Stratified semi- systematic; trawl; Cosmos 2000 w/rockhopper	Northern shrimp Groundfish	98	N	unknown	0-600m	N/A	N/A	N/A	N/A	N/A	Greenland	N/A

