DTU Aqua

Cruise Report

R/V Dana

Cruise 07/2015

”DK IBTS 3Q 2015”

Vessel: R/V DANA

Cruise dates (planned): 28/7 – 14/8 2015

Cruise number: 07/15

Cruise name: Danish IBTS 3Q 2015

Port of departure:	Hirtshals	**Date:**	28 July
Port of return:	Hirtshals	**Date:**	14 August
Other ports:	Esbjerg	**Date and justification:**	6 August Scheduled exchange of scientific staff and crew

Participants

Leg 1: Hirtshals – Esbjerg		
Name	**Institute and Department**	**Function and main tasks**
Kai Wieland	DTU Aqua, Monitoring and Data Hirtshals	Cruise leader, Fish lab
Maria Jarnum	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish lab
Tom Svoldgard	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish lab
Reinhardt Jensen	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish lab
Tommy Henriksen	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish lab
Hans Erik Tjelum	DTU Aqua, Monitoring and Data Hirtshals	Technician, CTD, Maintenance
Zachary Calef	DTU Aqua	Student, collection of cod and herring for micro plastic analyses
Marc Eskelund	DTU Aqua	Student, Camera project on trawl selection
Gildas Glemarec	DTU Aqua	Student, Camera project on trawl selection

Leg 2: Esbjerg – Hirtshals		
Name	**Institute and Department**	**Function and main tasks**
Helle Rasmussen	DTU Aqua, Monitoring and Data Hirtshals	Cruise leader, Fish lab
Stina S. Hansen	DTU Aqua, Monitoring and Data Charlottenlund	Technician, Fish lab
Lise Sindahl	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish Lab
Flemming Thaarup	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish lab
Jens Holm	DTU Aqua, Monitoring and Data Hirtshals	Technician, Fish lab
Hans Erik Tjelum	DTU Aqua, Monitoring and Data Hirtshals	Technician, CTD, Maintenance
Jeanette Siegumfeldt	Ministry of Enrironment and Food, The Danish AgriFish Agency	Guest

Objectives

The survey is part of the 3rd quarter International Bottom Trawl Survey (IBTS) in the North Sea, which is coordinated by the ICES International Bottom Trawl Survey Working Group and has been conducted with standard fishing gear in the 3rd quarter since 1991.

The IBTS aims to provide ICES assessment and science groups with consistent and standardised data for examining spatial and temporal changes in (a) the distribution and relative abundance of fish and fish assemblages; and (b) of the biological parameters of commercial fish species for stock assessment purposes. The main objectives in the 3rd quarter IBTS are to:

- To determine the distribution and relative abundance of pre-recruits of the main commercial species (cod, haddock, whiting, Norway pout, saithe, herring, sprat, and mackerel) with a view of deriving recruitment indices;
- To monitor changes in the stocks of commercial fish species independently of commercial fisheries data;
- To monitor the distribution and relative abundance of all fish species and selected invertebrates;
- To collect data for the determination of biological parameters for selected species;
- To collect hydrographical and environmental information.
- To collect information of the amount and distribution of marine litter

The area to be covered by Denmark with RV Dana in the 3rd quarter 2015 was allocated during the IBTS Working Group meeting in March/April 2015. Technical details are described in the current version of the survey manual (ICES 2015. Manual for the International Bottom Trawl Surveys. Series of ICES Survey Protocols. SISP 10-IBTS IX. 86 pp.).

Itinerary

R/V Dana left Hirtshals on Tuesday 28th July at 13:15 local time, and the field work started in the afternoon in the western Skagerrak (Fig. 1). The vessel stayed in the port of Esbjerg on Thursday 6th August from 7:00 to 13:00 for the scheduled exchange of scientific staff and crew. Favorable weather condition prevailed during most of survey (Fig. 2). R/V Dana returned to Hirtshals on Friday 14th August at 07:00 local time.

Achievements

The main working area consisted of 48 ICES statistical rectangles located in IBTS North Sea roundfish areas 2, 4, 5, 6 and 7 with two stations in rectangles 43F7, 42F7, 41F7 and 41F6, and 4 additional rectangles in the western part of roundfish area 8 in the Skagerrak (Fig. 1). The following activities were carried out:

61 trawl hauls with GOV 36/47 (chalut á Grande Overture Verticale) all with standard groundgear A, (see IBTS Manual for specifications), 2 of these hauls were invalid although they were carried out on clear tow positions from the previous year. In the first case the sweeps broke on the BB side (rectangle 33F3) and the station was replaced with another track in the same rectangle. In the second case (rectangle 41F0) the vertical net opening was much below the limit and the tow was repeated on the same track; From the 55 valid hauls taken in the North Sea, 29 tows were of 15 min duration, in one case tow duration was reduced from 30 min to 25 min when high fish densities were indicated by the echosounder and the remaining 24 tows were of

30 min duration. Towing time for the 5 stations was 30 min. Tow durations were as planned prior to the survey by the IBTS WG;

58 CTD profiles.

Results

The trawl parameters (Net opening and door spread) as monitoring with a ScanMar system were in the range or close to the suggested limits specified in the IBTS manual in most cases (Fig. 3). The remaining deviations from the theoretical values for door spread and in particular net opening are likely due to the high sensibility of the GOV to current effects. The actual facilities on DANA, however, do not allow to measure adequately current strength and direction in the near bottom layer. Sensors for wing spread were not available for this cruise.

About 80 different species of fish and selected invertebrates were found (Tab. 1). Length measurements were made for all of the listed species. Sharks, skates and rays and the listed shellfish species were measured separately by sex (length composition and weight). Two species, Atlantic bonito and sand sole, were seen the first in this survey, and the relative high amount and wide distribution of sardine, anchovy and striped red mullet indicate a continuing expansion of southern species.

Single fish data (length, weight, sex and, for a few species also maturity) and otoliths were collected for the main commercial species (cod, haddock, whiting, Norway pout, saithe, herring, sprat, mackerel and plaice) as well as for monkfish, hake, turbot, witch flounder, sole and brill (Tab. 2). For these species, a maximum of one individual per cm length group were taken from a single haul except for herring and sprat for which two individuals per semi-centimeter group per haul were collected. The collection of individual fish data for the IBTS target species commenced when the maximum number of 8 per length group and roundfish area had been achieved as specified in the IBTS manual. Collection of age samples of herring and sprat from the Skagerrak had not been requested for Denmark since this area is extensively covered by Sweden.

According to a decision of the IBTS WG, preliminary abundance indices for the main commercial species (Tab. 3) are no longer reported to the coordinator of the 3rd quarter IBTS. The indices for small cod appear to be very low but a representative estimate of cod recruitment can first be given when the information from all the other countries have been combined.

Marine litter was recorded in each GOV catch using four main categories: plastic, glass, metals and miscellaneous, which were subdivided in several minor categories as specified in the IBTS manual.

30 cod and 48 herring samples were collected for analyses of micro plastics in the stomachs were collected. For cod, the gastrointestinal tract was dissected, weighted and frozen whereas for herring entire fish where collected.

A collection of fish species for e-DNA analyses from the 1st quarter survey in 2015 was supplemented with 25 more species.

Herring (whole fish) and cod livers were collected for dioxin analyses (5 samples for each species).

Several sets of fish and shellfish species were collected for teaching purposes.

At various stations during the first leg of the survey cameras were placed at different part of the trawl. High quality video material was recorded mainly from tows at depths shallower than 30 m due to light sensitivity limitations of the cameras. The material allows studying the swimming behavior of several species, namely sprat, horse mackerel and mackerel but also plaice, sharks and squids in the trawl just in front of the cod end.

Others

A cruise summary report has been delivered online to

http://seadata.bsh.de/csr/online/V1_index.html.

Deadline for data submission to DATRAS for all IBTS target species including the corresponding age readings is 21/9-2015 whereas the corrected CTD profiles and the Marine litter data can be submitted to ICES at a later time this year.

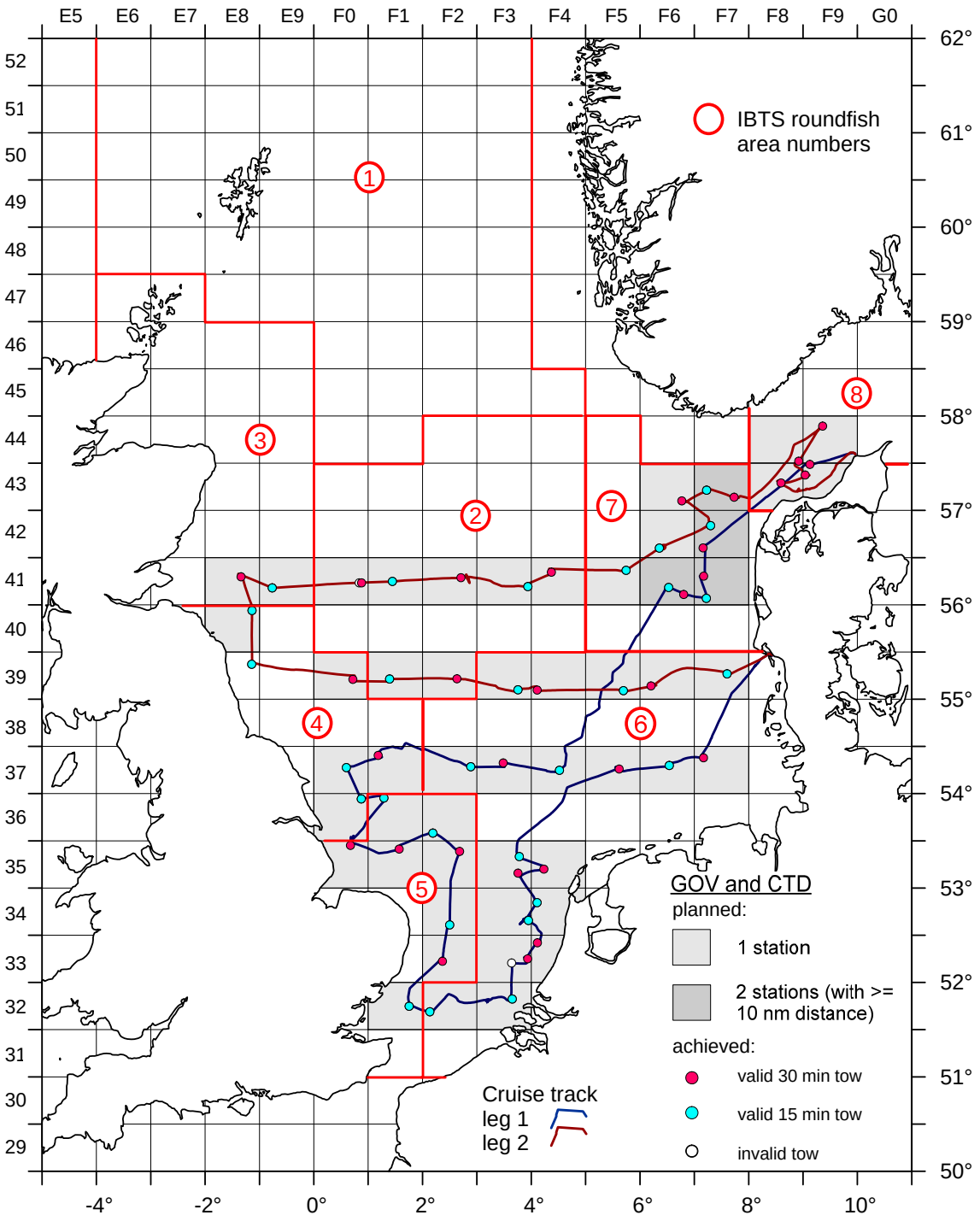

Fig. 1: Survey map with cruise track and sampling locations, Dana 3Q IBTS 2015 (no CTD at invalid GOV stations, no CTD at 15 min tow GOV station in rectangle 41F7).

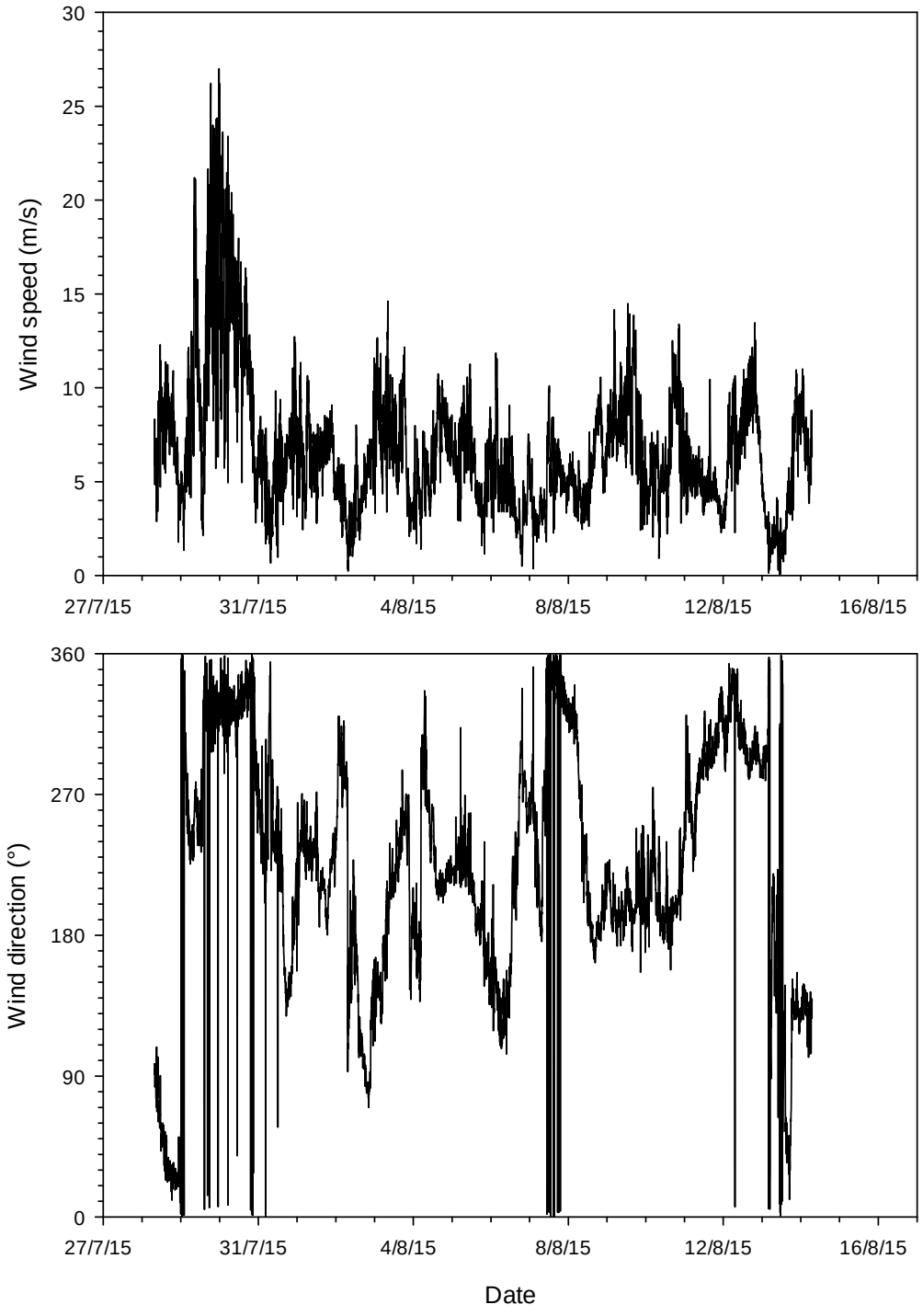

Fig. 2: Wind speed (m/s) and direction recorded along the cruise track, Dana 3Q IBTS 2015.

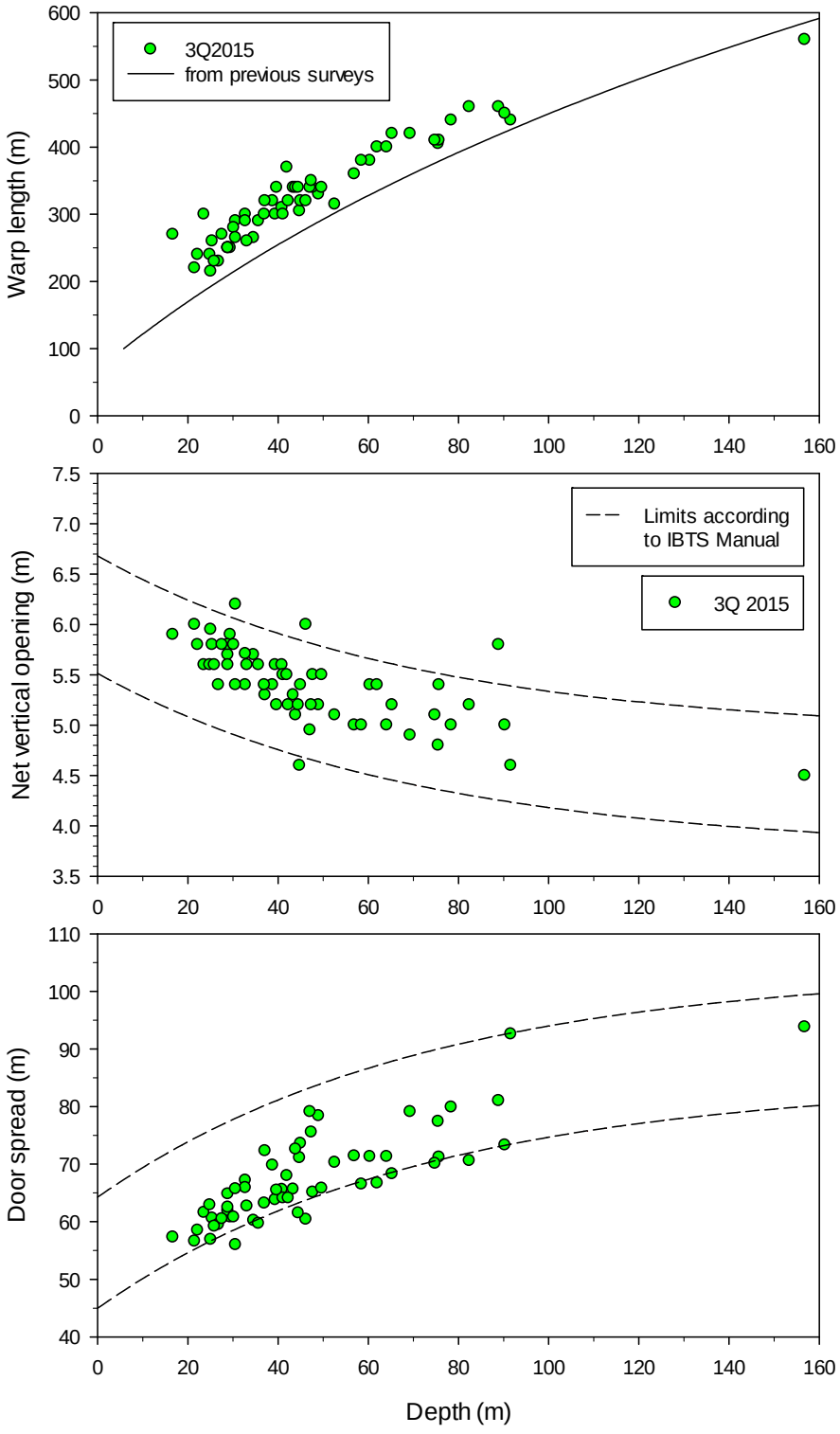

Fig. 3: Warp length, net opening and door spread in relation to depth, Dana 3Q IBTS 2015.

Tab. 1: Species list with total number and weight in the catch, Dana 3Q 2015.

Latin name	English name	Danish name	Number	Weight (kg)	Type of registration		
Aequipecten opercularis	Queen scallop	Jomfruøsters	14	0.9	-	-:	not measured
Agonus cataphractus	Pogge	Ulk-panserulk	20	0.2	*	*:	length
Alloteuthis subulata	European common squid	Dværgblæksprutte	1271	6.8	*	**:	length by sex
Alosa alosa	Allis shad	Majsild	3	0.4	*	***:	single fish data
Alosa fallax	Twaite shad	Stavsild	55	4.8	*		(length, weigth, sex, age)
Amblyraja radiata	Starry ray	Tærbe	29	14.9	*	***+:	also maturity
Ammodytes marinus	Sandeel	Tobis-hav	1749	15.6	*		
Argentina sphyraena	Lesser silver smelt	Strømsild	2	0.1	*		
Arnoglossus laterna	Scaldfish	Tungehvarre	19	0.2	*		
Buglossidium luteum	Solenette	Glastunge	137	1.2	*		
Callionymus lyra	Common dragonet	Fløjfisk (str)	118	3.9	*		
Callionymus maculatus	Spotted dragonet	Fløjfisk (pl)	5	< 0.1	*		
Cancer pagurus	Edible crab	Taskekrabbe	64	37.1	*		
Chelidonichthys cuculus	Tub gurnard	Knurhane (tvst)	4	0.6	*		
Chelidonichthys lucerna	Red gurnard	Knurhane (rød)	53	21	*		
Clupea harengus	Herring	Sild	125831	10379.7	***		
Echiichthys vipera	Lesser weever	Fjæsing lille	1761	41.1	*		
Enchelyopus cimbrius	Four-bearded rockling	Havkvabbe (4tr)	39	2.1	*		
Engraulis encrasicolus	Anchovy	Ansjos	333	10.6	*		
Eutrigla gurnardus	Grey gurnard	Knurhane (grå)	9603	752.9	*		
Gadiculus argenteus	Silvery pout	Sølvtorsk	3	< 0.1	*		
Gadus morhua	Cod	Torsk	172	259.1	***		
Galeorhinus galeus	Tope	Gråhaj	1	0.6	**		
Glyptocephalus cynoglossus	Witch	Skærising	20	6.4	***+		
Gymnammodytes semisquamatus	Smoothed sandeel	Tobis-nøgen	360	3.2	*		
Hippoglossoides platessoides	American plaice	Håising	2270	103.4	*		
Hippoglossus hippoglossus	Atlantic halibut	Helleflynder	1	2.5	*		
Homarus gammarus	Lobster	Hummer (alm.)	2	3.5	**		
Hyperoplus lanceolatus	Greater sandeel	Tobiskonge	8664	302.7	*		
Illex coindetii	Southern shortfin squid	Illex coindetii	4	0.4	*		
Lampetra fluviatilis	River lamprey	Flodlampret	2	0.3	*		
Limanda limanda	Common dab	Ising	41533	2644.4	*		
Lithodes maja	Norway king crab	Troldkrabbe	7	2.5	**		
Loligo forbesii	Northern squid	Loligo forbesii	398	29.6	*		
Loligo vulgaris	European squid	Loligo vulgaris	56	15.6	*		
Lophius piscatorius	Monk	Havtaske	8	11.5	***+		
Lumpenus lumpretaeformis	Snake blenny	Langebarn sph.	7	0.3	*		
Lycodes vahlii	Vahls eelpout	Ålebrosme	17	0.4	*		
Melanogrammus aeglefinus	Haddock	Kuller	4324	705.6	***		
Merlangius merlangus	Whiting	Hvilling	62040	3393.5	***		
Merluccius merluccius	Hake	Kulmule	31	30.8	***+		
Micromesistius poutassou	Blue whiting	Blåhvilling	519	60.8	*		
Microstomus kitt	Lemon sole	Rødtunge	1442	169.1	*		
Molva molva	Ling	Lange	2	6.8	*		
Mullus surmuletus	Striped red mullet	Stribet (rød) Mulle	135	11.4	*		
Mustelus asterias	Starry smooth hound	Stjernehaj	18	27.4	**		
Mustelus mustelus	Smooth hound	Glathaj	10	31.2	**		
Myoxocephalus scorpius	Sculpin	Ulk	22	2.6	*		
Myxine glutinosa	Hagfish	Slimål	1	0.1	-		
Nephrops norvegicus	Norway lobster	Jomfruhummer	188	6.8	**		
Pandalus borealis	Northern pink shrimp	Dybvandsreje	-	0.2	-		
Pecten maximus	King scallop	Stor kammusling	1	0.1	-		
Pegusa lascaris	Sand sole	Sandtunge	1	0.3	*		
Pholis gunnellus	Butter fish	Tangspræl	2	0.3	*		
Platichthys flesus	Flounder	Skrubbe	7	2.3	*		
Pleuronectes platessa	Plaice	Rødspætte	4101	856	***		
Pollachius virens	Saithe	Sej	6	11.4	***		
Pomatoschistus spp.	Sand gobies	Sand kutling	348	0.4	*		
Raja clavata	Thornback ray(roker)	Sømrokke	82	66.6	**		
Raja montagui	Spotted Ray	Storplettet Rokke	2	2.3	**		
Rossia macrosoma	Stout bobtail squid		3	< 0.1	-		
Salmo trutta	Sea trout	Havørred	1	2.2	*		
Sarda sarda	Atlantic bonito	rygstribet Pelamide	1	1.4	*		
Sardina pilchardus	Pilchard	Sardin	841	48.3	*		
Scomber scombrus	Mackerel	Makrel	23899	3298	***		
Scophthalmus maximus	Turbot	Pighvarre	14	16.3	***+		
Scophthalmus rhombus	Brill	Slethvarre	4	3.4	***+		
Scyliorhinus canicula	Lesser spotted dogfish	Rødhaj (smpl)	308	131.5	**		
Sepia officinalis	Common cuttlefish	Sepiablæksprutte	2	0.4	*		
Sepiola atlantica	Atlantic bobtail squid		1	< 0.1	-		
Solea solea	Sole	Tunge	56	8.8	***		
Sprattus sprattus	Sprat	Brisling	988604	10813.5	***		
Squalus acanthias	Picked dogfish	Pighaj	13	14.7	**		
Todaropsis eblanae	Lesser flying squid	Todaropsis eblanae	2	0.2	*		
Trachinus draco	Greater weever fish	Fjæsing	196	46.4	*		
Trachurus trachurus	Horsemackerel	Hestemakrel	22218	1233.7	*		
Trisopterus esmarkii	Norway pout	Sperling	10441	226.1	***		
Trisopterus luscus	Whiting pout	Skægtorsk	70	4.8	*		
Trisopterus minutus	Poor-cod	Glyse	134	6.3	*		
Zeus faber	John dory	Sct. peter fisk	2	0.5	*		

Tab. 2: List of species for which single fish data (length, weight and sex; maturity for selected species only see, Tab. 1) were recorded and number of samples collected for ageing (-: not caught or below size limit above which sampling is required according to the IBTS manual), Dana 3Q 2015.

	IBTS roundfish area							
Species	2	3	4	5	6	7	8	Total
Herring (Clupea harengus)	225	94	96	104	141	131	not	791
Sprat (Sprattus sprattus)	80	-	50	112	201	45	requested	488
Cod (Gadus morhua)	10	-	14	5	7	27	57	120
Haddock (Melanogrammus aeglefinus)	43	19	7	-	-	12	18	99
Whiting (Merlangius merlangus)	89	20	89	74	110	52	2	436
Norway pout (Trisopterus ermarkii)	13	-	11	-	1	-	5	30
Mackerel (Scomber scombrus)	19	25	45	43	88	76	37	333
Saithe (Pollachius virens)	-	-	-	-	-	-	6	6
Plaice (Pleuronectes platessa)	99	34	56	93	185	156	65	688
Monkfish (Lophius piscatorius)	not stratified by roundfish area							7
Hake (Merluccius merluccius)								29
Turbot (Psetta maxima)								14
Brill (Scophthalmus rhombus								4
Witch flounder (Glyptocephalus cynoglossus)								20
Sole (Solea solea)								32
							Sum:	3097

Tab. 3: Preliminary abundance indices (number per hour trawling) for commercial IBTS target species, Dana 3Q 2015.

		COD			HADDOCK			WHITING			NORWAY POUT			HERRING			SPRAT		MACKEREL			SAITHE			PLAICE		
	Age:	0	1	2+	0	1	2+	0	1	2+	0	1	2+	0	1	2+	1	2+	0	1	2+	0	1	2+	0	1	2+
	Length:	<18	18-37	≥38	<17	17-29	≥30	<17	17-23	≥24	<13	13-15	≥16	<15.5	15.5-22.5	≥23	<13	≥13	<17	17-29	≥30	<22	22-32	≥33	<10	10-18	≥19
St No	Rect																										
1	43F9	0	0	6	0	0	0	2	0	2	0	0	0	0	2	0	0	0	0	588	7	0	0	0	0	0	175
4	42F7	0	0	2	0	0	0	1426	0	0	0	0	0	6	54	4	1180	54	0	1618	8	0	0	0	0	0	317
5	41F7	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	8	0	0	1765	0	0	0	0	0	12	333
7	41F7	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8	0	0	103	4	0	0	0	0	4	306
8	41F6	0	0	0	0	0	0	203	24	4	0	0	0	0	721	0	2	0	0	2	8	0	0	0	0	0	358
10	41F6	0	0	0	0	0	0	103	8	0	0	0	0	40	415	0	0	0	0	20	0	0	0	0	0	16	574
13	37F4	0	0	0	0	0	0	3577	274	28	0	0	0	12	349	0	5021	191	0	0	0	0	0	0	0	8	32
14	37F3	0	0	0	4	0	0	1401	191	12	0	4	0	8	0	0	20298	1964	0	0	0	0	0	0	0	12	103
16	37F2	0	0	0	0	0	0	406	184	18	0	0	0	2	0	0	615	12	0	0	0	0	0	0	0	2	218
19	37F1	0	0	2	2	0	0	0	3233	1200	0	0	0	0	2	0	0	0	0	2	14	0	0	0	0	2	129
20	37F0	0	4	0	0	40	0	31	4347	2209	0	0	0	0	4	48	79	32	0	0	0	0	0	0	0	0	99
22	36F0	0	0	0	0	0	0	856	60	4	0	0	4	0	16	8	12915	17177	0	163	190	0	0	0	0	8	91
24	36F1	0	0	0	0	0	0	1736	12	8	0	0	0	0	0	0	16435	980	0	8	8	0	0	0	0	24	321
27	35F0	0	4	2	0	0	0	28	520	4199	0	0	0	0	8	2	4671	86	0	4	148	0	0	0	0	0	2
28	35F1	0	0	0	0	0	0	6	16	6	0	0	0	0	0	8	1563	70	0	150	2	0	0	0	0	28	155
30	36F2	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	24	4	0	0	0	0	0	0	0	0	115
32	35F2	0	0	0	0	0	0	68	8	0	0	0	0	761	0	0	60615	0	0	0	0	0	0	0	0	8	76
35	34F2	0	0	4	0	0	0	8	16615	5201	0	0	0	8	221	60	2046	0	0	16	52	0	0	0	0	8	113
36	33F2	0	0	0	0	0	0	0	4672	5803	0	0	0	2	281	1222	1864	981	0	502	433	0	0	0	0	2	35
38	32F1	0	0	4	0	0	0	242	83	52	0	0	0	0	0	4	107	16	0	0	0	0	0	0	0	8	20
40	32F2	0	4	24	0	0	0	23	319	1239	0	0	0	0	0	8	0	0	0	4	24	0	0	0	0	0	44
43	32F3	0	0	0	0	0	0	5007	132	33	0	0	0	1390	0	0	187	11	0	0	0	0	0	0	0	52	20
45	33F3	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	2	0	0	12	2	0	0	0	0	44	76
47	33F4	0	0	0	0	0	0	5	24	0	0	0	0	3479	12	0	1008767	0	0	3055	85	0	0	0	0	31	57
49	34F3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13013	31181	0	32	0	0	0	0	0	16	8
52	34F4	0	0	0	0	0	0	4	12	0	0	0	0	1106	0	0	103165	15614	0	60	20	0	0	0	0	8	16
53	35F3	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	233	14	0	176	4	0	0	0	0	24	56
55	35F4	0	0	0	0	0	0	12	18	2	0	0	0	2	0	0	26	2	0	3683	307	0	0	0	0	28	89
57	35F3	0	0	0	0	0	0	4	24	8	0	0	0	0	0	0	126348	1330	0	169	35	0	0	0	0	16	146
60	37F5	0	0	0	0	0	0	6048	22	4	0	0	0	2151	0	0	134889	0	0	18	2	0	0	0	0	10	46
61	37F6	4	0	0	0	0	0	163	12	0	0	0	0	0	4	0	195	4	0	2848	23	0	0	0	0	28	148
63	37F7	0	0	0	0	0	0	8	8	8	0	0	0	0	0	0	4	0	0	1223	0	0	0	0	0	16	38
65	39F7	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	5228	0	0	0	0	0	61	8
68	39F6	0	0	0	0	0	0	55108	1146	13	0	0	0	1484	394	16	572189	11677	0	32	130	0	0	0	0	0	190
70	39F5	4	0	0	0	0	0	1397	24	20	0	0	0	0	0	12	17289	1351	0	396	4	0	0	0	0	28	713
71	39F4	0	0	0	0	0	0	66	82	18	0	0	0	2	8	0	4050	460	0	20	0	0	0	0	0	2	106
73	39F3	0	0	0	16	0	0	24	151	8	0	0	0	101	6519	0	60780	9052	0	40	4	0	0	0	0	0	291
76	39F2	0	0	0	0	0	0	6	106	8	0	0	0	0	35858	126	30779	33479	0	30	2	0	0	0	0	2	171
77	39F1	0	0	0	0	0	0	127	24	4	0	0	0	0	0	0	0	0	0	13321	0	0	0	0	0	0	127
79	39F0	0	8	10	0	4222	0	0	867	1338	0	0	6	0	10740	6916	64	53	0	28	8	0	0	0	0	0	117
82	39E8	0	8	8	341	0	0	472	2244	8397	0	770	770	0	28	147	440	234	0	0	0	0	0	0	0	0	12
83	40E8	0	0	0	150	0	0	20	242	16	0	16	0	0	8	12	0	0	0	8	0	0	0	0	0	4	20
85	41E8	0	0	0	111	119	4	64	64	0	0	0	0	0	425	2776	0	0	0	58	85	0	0	0	0	32	143
87	41E9	0	0	0	29	1149	23	0	785	325	0	0	0	0	17818	120197	0	0	0	221	43	0	0	0	0	12	221
91	41F0	0	8	6	348	1428	379	181	342	1167	0	4891	1319	0	5977	11847	6225	8140	0	4	2	0	0	0	0	0	20
92	41F1	0	8	0	12	899	417	16	475	833	0	0	0	0	581	2821	3784	4404	0	4	8	0	0	0	0	0	44
94	41F2	0	0	0	113	4	0	28	172	119	0	36	4	139	44573	0	323	193	0	0	2	0	0	0	0	0	55
97	41F3	0	0	4	32	0	0	1298	226	52	0	48	8	325	68811	0	12942	3508	0	0	4	0	0	0	0	0	99
99	41F4	0	0	0	0	0	0	1502	10	8	0	0	0	39	2890	13	1280	115	0	0	0	0	0	0	0	0	112
100	41F5	0	0	4	0	0	0	2038	372	44	0	0	0	33	2991	10	13111	1626	0	8	44	0	0	0	0	0	176
102	42F6	0	0	4	0	0	0	115	4	0	0	0	0	0	0	0	0	0	0	968	108	0	0	0	0	0	127
105	42F7	0	0	12	0	0	0	505	0	0	0	0	0	0	4	0	0	0	0	1357	131	0	0	0	0	0	289
106	43F6	0	0	0	133	0	2	122	0	2	0	0	0	0	4495	0	0	4	0	0	2	0	0	0	0	0	64
108	43F7	8	24	39	12	39	149	275	94	180	3885	0	0	0	1231	4	0	0	0	161	8	0	0	0	0	0	98
110	43F7	0	0	10	0	0	2	346	0	0	0	0	0	0	0	0	0	0	0	2909	0	0	0	0	0	0	26
113	44F9	0	50	138	0	18	52	26	0	2	0	11047	789	0	2	8	0	0	0	0	0	0	0	12	0	0	0
114	44F8	0	0	8	0	0	0	4	2	0	0	0	0	0	2	0	0	0	0	6074	214	0	0	0	0	0	103
116	43F9	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10526	67	0	0	0	0	0	2237
118	43F8	0	0	2	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	1129	33	0	0	0	0	0	84