## **CRUISE SUMMARY REPORT**

FOR COLLATING CENTRE

USE

Centre:

Ref.

no:

Is data exchange

restricted?

Yes

year

In part No

SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.

Name: TRIDENS Call Sign: PBVO

Type of ship: FISHERIES RESEARCH VESSEL

(set sail)

CRUISE NO./NAME 2016 week 26-29 HERAS (North Sea Herring Acoustic Survey)

day

CRUISE PERIOD start 27 06 2016 to 22 07 2016

year

PORT OF DEPARTURE (enter name and country) SCHEVENINGEN, THE NETHERLANDS

month

## PORT OF RETURN (enter name and country) SCHEVENINGEN, THE NETHERLANDS

RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise.

Name: Wageningen Marine Research

Address: P.O. BOX 68

> 1970 AB IJMUIDEN HARINGKADE 1

> > Country: THE NETHERLANDS

day

month

CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

Dr Sascha Fässler, WAGENINGEN MARINE RESEARCH; Bram Couperus, WAGENINGEN MARINE RESEARCH

OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so as to provide the context in which the reported data were collected.

The objective was to carry out an hydro acoustic survey defining the abundance of herring and sprat in the North Sea, in co-operation with the institutes of Norway, Scotland, Denmark, and Germany. The first week of the whole 4 week survey period was used for calibration of the acoustic equipment in a sheltered location in Scapa Flow, Scotland. After the calibration at Scapa Flow The weekend was spend in Aberdeen. Departure for the survey Monday 4 July at 11:45 UTC, a bit later than planned, due to in and out going traffic in the port of Aberdeen. During the first week a lot of herring was encountered on the first five transects (58 $^{\circ}$  21'N, 58 $^{\circ}$ 06'N,  $57^{\circ}$  51'N,  $57^{\circ}$  36'N,  $57^{\circ}$  17'N; the last one is only 10 nmi). Only in the western and eastern outer ends there was no herring. On Saturday morning 10:00 Dutch time, we arrived in the port of Aberdeen. In the night from Sunday 10 to Monday 11 July Tridens suffered from some serious technical problems which caused us to stay another one and a half day in port. Technicians flew in on Sunday to solve the trouble. The damage was repaired and we leaved port at 14:00 Dutch time; 12:00 UTC. To gain back the lost time it was decided to skip the following weekend and keep on surveying. On Saturday 16 July after waypoint 20 (56° 47'N-2° 06'W) Sascha Fassler and Andre Dijkman left the vessel by means of a tender to fly to IJmuiden. After this break, we headed for the next waypoint: 56.17N-2.26W. The remaining transect were surveyed swiftly in southern direction. On these transects we recorded some sprot concentrations. No adult herring. We entered the port of Scheveningen on Thursday evening 18:00 NL time.

Since 2010, cruise leaders keep a weblog during the survey, which can be found at:

http://herringsurvey.blogspot.nl

PROJECT (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperative project (or expedition or programme), then enter the name of the project, and of the organisation responsible for coordinating the project. Project name: NHAS - NS Herring Acoustic Survey

Coordinating body: Wageningen Marine Research

PRINCIPAL INVESTIGATORS: Enter the name and address of the Principal Investigators responsible for the data collected on the cruise, and who may be contacted for further information about the data (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

Dr Sascha Fässler, WAGENINGEN MARINE RESEARCH

MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS										
PI	APPROXIMATE POSITION				DATA TYPE	DESCRIPTION				
see top	LATITUDE L		LONG	SITUDE	enter code(s) from list on	identify, as appropriate, the nature of the instrumentation, the parameters (to be) measured, the number of instruments and				
of page	deg	min N/S	deg	min E/W	cover page	their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to the site.				

MOOR	INGS, BO	TTOM MOU	NTED GEAR A	AND DRIFTING	G SYSTEMS					
PI	APPRO	OXIMATE PC	SITION		DESCRIPTION					
	Station	-id ICES-re	ectang latitude	e longitude	their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to site.					
SUMM	SUMMARY OF MEASURED AND SAMPLES TAKEN									
PI		NO	UNITS	DATA TYPE	DESCRIPTION					
		2682	kilometres	EK60 Raw	Hydro Acoustic Data					
		36	downcasts	CTD	Hydrographical data					
			500m							
		21	pelagic trawls	fish data	biological data (number, weight, length, maturity, age)					

**GENERAL OCEAN AREA(S)**: Enter the names of the oceans and/or seas in which data were collected during the cruise - please use commonly recognised names (see, for example, International, Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas')

NORTH SEA

**SPECIFIC AREAS**: If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates.

## GEOGRAPHIC COVERAGE - INSERT 'X' IN EACH SQUARE IN WHICH DATA WERE COLLECTED

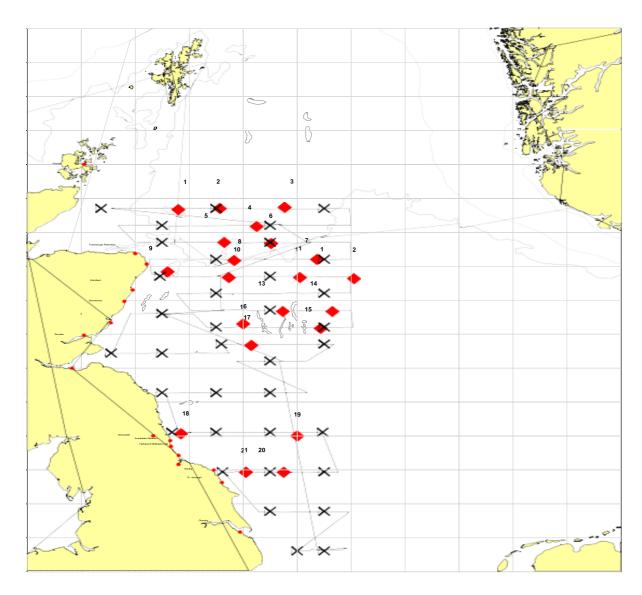


Figure 1. Map of executed cruise track (black line), positions of trawl stations (red diamonds with numbers), and hydrographical stations (black crosses) during the July 2016 North Sea herring acoustic survey on R/V Tridens.