| CRUISE SUMMARY REPORT | FOR COLLATING CENTRE USE | | | | | | | |
|---|---|--|--|--|--|--|--|--|
| | Centre: Ref. no: Is data exchange restricted? | | | | | | | |
| Yes 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 Cal | l Sign: PBVO | | | | | | | |
| Type of ship: RESEARCH VESSEL | | | | | | | | |
| CRUISE NO./NAME International Bottom Trawl Survey | CRUISE NO./NAME International Bottom Trawl Survey 2003-1 enter the unique number, name or acronym assigned to the cruise (or cruise let, if appropriate). | | | | | | | |
| CRUISE PERIOD start 27 01 2003 to (set sail) day month year | 28 02 2003 end day month year (return to port) | | | | | | | |
| PORT OF DEPARTURE (enter name and country) IJMUIDEN, The Netherlands PORT OF RETURN (enter name and country) IJMUIDEN, The Netherlands RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise. | | | | | | | | |
| Address: P.O. BOX 68 1970 AB IJMUIDEN HARINGKADE 1 | 1970 AB IJMUIDEN | | | | | | | |
| | untry: THE NETHERLANDS person(s) in charge of the scientific work | | | | | | | |
| CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise. Dr. H.J.L. Heessen | | | | | | | | |
| 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 cruise was part of the ICES coordinated International Bottom Trawl Survey, which is carried out annually in February since 1965. The survey covers the entire North Sea, the Skagerrak and the Kattegat. In each ICES rectangle (see cruise track) one 30 min. haul is made with a standard bottom trawl (GOV-trawl) to provide indices of recruitment of the most important commercial fish species (cod, haddock, whiting, Norway pout, saithe, herring, sprat and mackerel). At the same time information is collected on changes in distribution of all fish species caught. During the night herring larvae are sampled with a fine meshed MIK plankton net. At each GOV trawling station also a CTD profile is made. All fish data are stored in the ICES IBTS database which is kept at the ICES Secretariat in Copenhagen. | | | | | | | | |
| 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: International Bottom Trawl Survey | | | | | | | | |
| Coordinating body: ICES, Copenhagen | | | | | | | | |

| 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) |
| A Dr. H.J.L. Heessen, Neth. Inst. for Fish. Res., P.O. Box 68, 1970 AB IJmuiden, The Netherlands |
| B. |
| C. |
| D. |
| E. |
| F |

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

SUMMARY OF MEASURED AND SAMPLES TAKEN

Except for the data already described on page 2 under "Moorings, Bottom Mounted Gear and Drifting Systems", this section should include a summary of all data collected on the cruise, whether they be measurements (e.g. temperature, salinity values) or samples (e.g. cores, net hauls).

Separate entries should be made for each distinct and coherent set of measurements of samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurement/sampling techniques that imply distinctly different accuracy's or spatial/temporal resolutions. Thus, for example, separate entries would be created for i) BT drops, ii) water bottle stations, iii) CTD casts, iv) towed CTD, v) towed undulating CTD profiler, vi) surface water intake measurements, etc.

Each data set entry should start on a new line - it's description may extend over several lines if necessary.

NO, UNITS: for each data set, enter the estimated amount of data collected expressed in terms of the number of: 'stations'; 'miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under NO and the counting unit should be identified in plain text under 'UNITS'.

| PI | NO | UNITS | DATA | DESCRIPTION |
|----|----|-------|------|-------------|
| | | | TYPE | |

| | see page 2 | see above | see above | enter code(s) from list on cover page | identify, as appropriate, the nature of the data and of the instrumentation/sampling gear and list the parameters measured. Include the supplementary information that may be appropriate, e.g. vertical or horizontal profiles, depth horizons, continuous recording or discrete samples, etc. For samples taken for later analysis on shore, an indication should be given of the type of analysis planned, i.e. the purpose for which the samples were taken. |
|---|---------------|------------------|--|---|--|
| - | A A | 69 2511 68 | trawl hauls otoliths stations | | GOV bottom trawl stations pelagic and demersal fish species to determine the age composition of the major fish species CTD profiles |
| | | | | | |

| TRACK CHART: | You are strongly encouraged to submit | | V |
|--------------|---|----------------------------------|---|
| | with the completed report, an annotated | Insert a tick ($$) in this box | |
| | track chart illustrating the route | if a track chart is supplied. | |
| | followed and the points where | | |
| | measurements were taken. | | |

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.

between 51 and 58 ° N

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

THANK YOU FOR YOUR COOPERATION

Please send your completed report without delay to the collating centre indicated on the cover page.

Cruise track: Tridens IBTS 2003

Page 4

