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International Commission for



the Northwest Atlantic Fisheries

Serial No. 5440

ICNAF Sum. Doc. 79/VI/23

ANNUAL MEETING - JUNE 1979

Standardization of New Reporting Procedures for Sampling Data

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Assistant Executive Secretary

At the 1978 Annual Meeting, STACRES noted that the coastal states' requirement for collecting and reporting sampling data would, for 1978 and future years, significantly modify the standards used up to 1977 (Sum. Doc. 79/VI/22), and that these modifications would have implications on the work of the Secretariat as well as on member countries. Consequently, an *ad hoc* working group was established to meet as soon as possible in 1978 to review current procedures and propose new standards for the reporting of length and age sampling in the light of the requirements for more detailed information on the commercial fisheries of the Northwest Atlantic.

The Working Group on Standardization of Reporting Procedures for Sampling Data met at Bergen, Norway, during 13-16 November 1978 and its report as adopted by STACRES is given in Appendix III to Sum. Doc. 79/VI/1. At that meeting it was agreed that standardized reporting of sampling data was desirable throughout the ICNAF (NAFO) Area and that individual length samples of commercial catches and the corresponding age-length keys be made available to the ICNAF (NAFO) Secretariat for incorporation into its sampling data base. A suitable form was designed for the reporting of length frequency samples and it was recommended "that the form be used for the reporting of length samples to the ICNAF (NAFO) Secretariat from 1 January 1979".

Time at the November Meeting did not permit the development of a form for the reporting of age-length keys, but a list of contents was proposed with the request that the Secretariat design a draft form for circulation to members of STACRES for comment prior to its consideration by STACRES at its Special Meeting in February 1979. In any case, STACRES recognized the practical difficulties of obtaining suitable age-length keys corresponding to the individual length samples, and agreed that data from samples taken for ageing should not be combined for periods exceeding one calendar month or for areas greater than one ICNAF (NAFO) division (or subdivision, where applicable).

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Due to inadequate representation of experts at the February 1978 Meeting of STACRES, consideration of the draft form for reporting age-length keys was deferred to the 1979 Annual Meeting. Meanwhile, the Assessments Subcommittee at its April 1979 Meeting considered it opportune to review the draft form for age samples. Minor modifications were recommended and the Secretariat was requested to prepare a revised version for review by the Subcommittee on Statistics and Sampling at the 1979 Annual Meeting. Minor modifications have also been made to the form for reporting length samples, the revised versions of both forms, together with notes for their completion, are appended.

<u>Commercial Fishery Length Samples (CFS-1)</u>. Following the initial design of this form and its distribution with Circular Letter 78/74 in November 1978, three changes have been incorporated: the inclusion of space in the second row of the heading to record whether the samples were taken at sea or in port; the change from "local" to "GMT" for the starting time of the set; and the addition of a row to record the ICNAF division (or subdivision, where applicable).

<u>Commercial Fishery Age-Length Key (CFS-2)</u>. Following the distribution of a draft of this form with Circular Letter 78/77 in December 1978, the following revisions have been incorporated: a space for "port" or "sea" sampling has been provided in the second row of the heading; "starting time of set" has been deleted as not being relevant; space for "ICNAF division" has been provided in the third row; and "Weight of age sample" has been deleted from the row near the bottom of the form and the space used to indicate the necessity to record the "number of subsamples" used as the basis for the age-length key.

Notes for Completion of Forms. These notes, although listed on separate pages in this paper, will appear on the reverse side of the relevant forms for subsequent distribution.

INTERNATIONAL COMMISSION FOR THE NORTHWEST ATLANTIC FISHERIES

COMMERCIAL FISHERY LENGTH SAMPLES, 19____

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		sea									
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set (GMT)											
ICNAF Division											
Start of set Lat. position Long.											
Fishing Depth (m)	· · · · · · · · · · · · · · · · · · ·										
SPECIES SAMPLED											
Catch or Landing											
Method of measuring											
Recorded meas.											
Length interval											
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Form CFS-1 (5/79)

(See overleaf for Notes)



NOTES FOR COMPLETION OF FORM CFS-1

This form is designed to facilitate the reporting of length frequencies for (a) several species from the same haul, or (b) the same species from different hauls, or (c) for species sampled at the port of landing. In the last case, it will not be possible to provide all of the detailed information required for sampling at sea. However, in order to facilitate data-processing, it is essential that all of the information required for each sample be entered in the appropriate spaces on the form.

- Year. Record the last two digits of the calendar year in the space provided at the top of the form. 1.
- 2. Country, Vessel name, Side number, and National registration number should always be recorded to ensure proper identification of the samples.
- 3. Gear. Record the appropriate abbreviation for the gear type used, based on the ICNAF Gear Classification for reporting sampling data. In the case of otter trawls used in certain fisheries (e.g. squid), special modifications to the gear (e.g. off-bottom chain, off-bottom bobbin, etc.) should be indicated in a note at the bottom of the form. The primary abbreviations are as follows:
 - OTB Bottom otter trawl (side and stern)
 - OTM Midwater otter trawl (side and stern)
 - PTB Bottom pair trawl (2 boats)
 - PTM Midwater pair trawl (2 boats)
 - Seine net (Danish and Scottish seines) SN
 - Beach seines SB
 - PS - Purse seines
 - GN - Gillnets (set and drift)

- LL Longlines (set) LHP - Handlines and pole-lines FPN - Uncovered pound nets FWR - Weirs, barriers, fences, etc. DRB - Boat dredges HAR - Harpoons MISC - Miscellaneous (e.g. cast-nets and dip-nets)
- 4. Mesh size. In the case of trawls, seine nets, gillnets and poundnets, record the effective mesh size; for line gears record the hook size; and for dredges record the ring size.
- 5. Port or Sea. Indicate whether the samples were taken from the catch at sea or from the landing in port.
- Date. Record the month and day for each sample taken by observers at sea. In the case of port samp-6. ling on a trip basis, record the month and day of landing.
- 7. Starting time of set. Use Greenwich Mean Time in the case of samples taken at sea; leave blank for port samples.
- 8 ICNAF Division. Record the appropriate division (or subdivision, where applicable) for both sea and port samples.
- 9 Start of set position. Applicable only to samples taken at sea.
- 10. Fishing depth (m). Indicate the mean fishing depth for sea samples and a range of fishing depth for port samples.
- 11. Species sampled. Record the name of the species sampled, supplemented by the ICNAF 3-digit code. If the 3-alpha species identifier is used, it should always be associated with the 3-digit code (e.g. HAD-102 could be used to designate haddock).
- 12. Catch or Landing. Insertion of "Catch" implies that the sample was taken at sea before any discarding, if any, had occurred, or in port with the knowledge that no fish were discarded during the trip; insertion of "Landing" implies that the sample was taken with the knowledge that some discarding of the smaller sizes of fish had occurred prior to sampling.
- 13. Method of measuring. Record one of the following length measurements as appropriate: total, fork, mantle for squid, carapace for shrimp, shell diameter for scallops. If other methods of length measuring are used, please specify in a note at the bottom of the form.
- 14. Recorded measurement. Record one of the following as appropriate: nearest cm, cm below, nearest half-cm, half-cm below.
- 15. Length interval. Record the appropriate length group used (i.e. 1 cm, 2 cm, 3 cm, 5 mm, etc.) especially if the sheet is used to report data for more than one species. For the "1 cm" and "5 mm" intervals, ensure that the appropriate length groups are given in the relevant columns.



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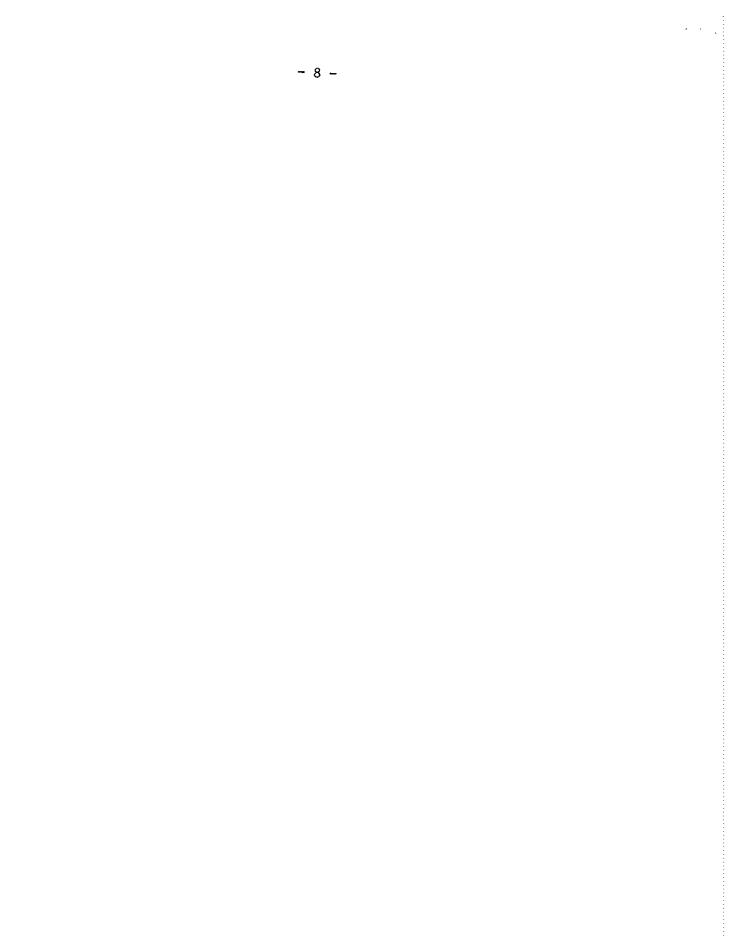
INTERNATIONAL COMMISSION FOR THE NORTHWEST ATLANTIC FISHERIES

COMMERCIAL FISHERY AGE-LENGTH KEY, 19____

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Form CFS-2 (5/79)

(See overleaf for Notes)



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NOTES FOR COMPLETION OF FORM CFS-2

The form is designed to facilitate the reporting of individual age-length samples but may also be used for the reporting of age-length keys based on port sampling or grouped sea samples. With reference to the grouping of samples, STACRES, at its Special Meeting in November 1978, recognized the practical difficulties of obtaining suitable age-length keys corresponding to individual length samples and recommended "that data from samples taken for ageing not be combined for periods exceeding one calendar month or for areas greater than one ICNAF division (or subdivision, where applicable)". In order to facilitate data-processing, it is essential that all of the information required for each sample be entered in the appropriate spaces on the form.

- 1. Year. Record the last two digits of the calendar year in the space provided at the top of the form.
- <u>Country</u>, <u>Vessel name</u>, <u>Side number</u>, and <u>National registration number</u> should always be recorded to ensure proper identification of the samples.
- 3. <u>Gear</u>. Record the appropriate abbreviation for the gear type used based on the ICNAF Gear Classification for reporting sampling data. The primary abbreviations are as follows:
 - OTB Bottom otter trawl (side and stern)
 - OTM Midwater otter trawl (side and stern)
 - PTB Bottom pair trawl (2 boats)
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 - SN Seine net (Danish and Scottish seines)
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 - PS Purse seines
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- LL Longlines (set) LHP - Handlines and pole-lines FPN - Uncovered pound nets FWR - Weirs, barriers, fences, etc. DRB - Boat dredges HAR - Harpoons MISC - Miscellaneous (e.g. cast-nets and dip-nets)
- 4. <u>Mesh size</u>. In the case of trawls, seine nets, gillnets and poundnets, record the effective mesh size; for line gears record the hook size; and for dredges record the ring size.
- 5. Port or Sea. Indicate whether the sample was taken from catches at sea or from the landing in port.
- 6. <u>Date</u>. Record the month and day if the age-length key pertains to an individual haul; indicate the most representative date of the catch if the age-length key pertains to an individual trip or landing; indicate the month if the age-length key is composed of several subsamples, but in no case must the subsamples be grouped over more than a calendar month.
- 7. <u>ICNAF Division</u>. Record the appropriate division (or subdivision, where applicable) for both sea and port samples. In no case must an age-length key consist of subsamples from more than one division or subdivision.
- 8. Start of set position. Applicable only if the age-length key is based on a sample from a single haul.
- 9. <u>Fishing depth (m)</u>. Indicate the mean fishing depth for individual sea samples, and a range of fishing depth for grouped and port samples.
- Species. Record the name of the species sampled, supplemented by the ICNAF 3-digit code. If the 3-alpha species identifier is used, it should always be associated with the 3-digit code (e. g. HAD-102 could be used to designate haddock).
- 11. <u>Sex</u>. Leave blank if data are not required to be reported by sex. However, separate keys (on separate sheets) are necessary where data are required by sex, using the designation "M" for male and "F" for female.
- 12. <u>Method of measuring</u>. Record one of the following length measurements as appropriate: total, fork, <u>mantle</u> for squid, <u>carapace</u> for shrimp, <u>shell diameter</u> for scallops. If other methods of length measuring are used, please specify in a note at the bottom of the form.
- 13. <u>Recorded measurement</u>. Record one of the following as appropriate: <u>nearest cm</u>, <u>cm below</u>, <u>nearest</u> <u>half-cm</u>, <u>half-cm below</u>, etc.
- 14. <u>Sampling method</u>. Indicate whether the age-length key is based on <u>Random</u> sampling, <u>Supplemented</u> <u>random</u> sampling, or <u>Stratified</u> sampling.
- 15. <u>Catch or Landing</u>. Insertion of "Catch" implies that the sample was taken at sea before any discarding, if any, had occurred, or in port with the knowledge that no fish were discarded during the trip; insertion of "Landing" implies that the sample was taken with the knowledge that some discarding of the smaller sizes of fish had occurred prior to sampling.
- 16. <u>Structures for ageing</u>. The usual entry will be either <u>scales</u> or <u>otoliths</u>, but, if any other structures or a combination of two or more structures are used, this should be indicated.