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FOR THE
NORTHWEST ATLANTIC FISHERIES



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PREFACE

The ICNAF Sampling Yearbook has been issued annually since 1958 and has played a fundamental role in fish stock assessments carried out by the Assessments Subcommittee of STACRES. With the recent introduction of more rigorous sampling requirements and the greatly increased coverage of species and areas, the volume of sampling data has increased steadily with time. Consequently, the publication of the traditional volume of length and age frequencies and age-length keys was discontinued after Vol. 17 for 1972 and replaced by an annual listing of commercial and research sampling data contributed by member countries.

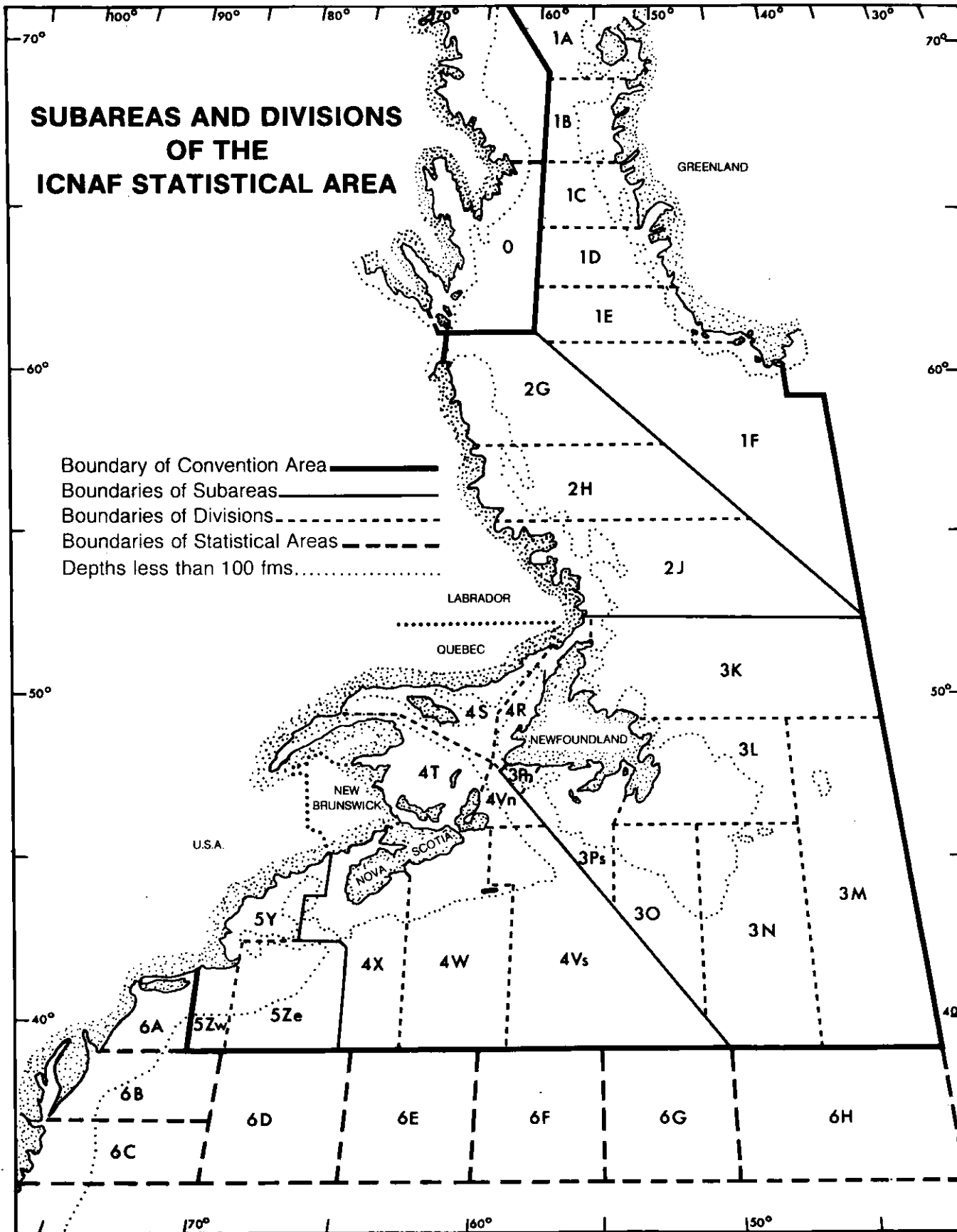
This issue of Sampling Yearbook is set out in four parts: Part 1 describes the ICNAF sampling requirements; Part 2 contains a list of countries which reported data for 1975 with notes on the data presented; Part 3 contains, in a series of tables arranged by species, lists of available 1975 sampling data pertaining to commercial fisheries; and Part 4 contains a list of research sampling data for 1975.

All available commercially-oriented sampling data for 1973 to 1975 have been computerized to provide for the rapid retrieval of data on computer printouts to meet specific requests. Copies of length frequencies, age-length keys and computed age frequencies (where applicable) will be forwarded upon request to institutions and/or individual scientists involved in the Commission's work. All requests should specify the actual sampling data required, indicating at least the species, country and division.

The Secretariat is grateful to those countries who have contributed sampling data and to those scientists who have continued to support the Commission's need for more adequate sampling of the Northwest Atlantic fisheries with a view to providing better assessments of the stocks.

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PART 1

ICNAF Sampling Program

1. Introduction

In "A Fishery Research Program for the Northwest Atlantic", adopted by the Commission at its 1953 Annual Meeting (*ICNAF Annu. Proc.*, Vol. 3, page 23), the need for catch sampling is emphasized as follows: "In order to recognize the effect of fishing, it is necessary to record the lengths of the fish in adequate samples of catches, showing fish discarded and fish retained. This is considered essential for all the fisheries for the important species by all the participating countries throughout the Convention Area. The total range of fish caught can be sampled only at sea by specially trained observers. The sea sampling of the sizes retained should be supplemented by sampling of landings ashore."

At its 1956 Annual Meeting, the Commission approved the following recommendation of the Standing Committee on Research and Statistics (STACRES): "For each species sampled, each country should report to the Secretariat the sizes, ages, weights and sexes of the fish sampled by place and time of capture. The Commission should publish these statistics" (*ICNAF Annu. Proc.*, Vol. 6, page 11). The first issue of Sampling Yearbook was published in 1958, containing sampling data for the years 1955 and 1956. This was the beginning of the ICNAF sampling program.

During the years since the inception of the program, there have been many recommendations for improvements in relation to both the quantity and quality of the required data, and the need for full participation by member countries. In Volume 19 of ICNAF Sampling Yearbook, a first attempt was made to outline the present sampling requirements. The outline, along with proposed changes, was reviewed and endorsed by the Sampling and Statistics Subcommittee of STACRES in 1976 (*ICNAF Redbook 1976*, page 130).

2. Minimum Sampling Requirements

At its 1974 Annual Meeting, STACRES reviewed several aspects of the sampling program. In reiterating the necessity for all member countries to adequately sample their commercial fisheries for length and age composition of catches, the minimum sampling requirement was revised to read as follows:

"That the ICNAF sampling requirement should be specified at one sample per 1,000 tons of fish caught for each division, quarter of year, and gear. As an approximate guideline, such samples should consist of 200 fish from the entire length range for length composition and one fish per centimeter length group for age composition."

Sampling data must be "in sufficient quantity and detail to enable the calculation of the length and age composition of the commercial catches by stock area on a monthly basis" (*ICNAF Redbook 1973*, page 54). However, it is emphasized that the sampling data must be reported by division (or subdivision, where applicable) and not by stock area, in order to achieve uniformity in reporting and subsequent data-processing. Furthermore, in cases where the data for a species are required to be reported by sex, it is necessary that twice the number of specimens be collected for length and ageing in order to produce usable age-length keys.

The reported length frequency data should reflect the length composition of the catches made in each division (or subdivision) and month. Sampling should be more frequent when catches are high, and appropriate weighting should be applied to the individual samples to ensure that the monthly length frequencies represent the monthly catches.

3. Source of Sampling Data

In the past, sampling data have usually been classified as research, exploratory or commercial, depending on the type of fishing operations being undertaken at the time when the samples were collected. There has often been some confusion over the use of the terms, particularly in regard to the applicability of the various types of sampling data for assessment work, and some clarification is necessary.

- a) Research. These samples are taken on true research vessels, operating independently of the commercial fishing fleet and using true research vessel fishing gear (e.g. otter trawl, with codend meshes considerably different from those in commercial trawls, or with codends lined or covered with small-meshed material irrespective of the mesh size of the codend). Because these

samples are not representative of commercial operations, they cannot be applied to the nominal catches, but are often of value for predicting future recruitment. Research samples are usually the outcome of survey programs to generate abundance and recruitment indices.

- b) Commercial. Samples taken from the catches of exploratory and/or commercial fishing vessels using gear normally used for commercial fishing (in accordance with ICNAF trawl regulations, where applicable) should be classified as commercial samples. Such sampling implies that the escapement from the codend is not restricted by codend liners or topside covers or chafers and that the samples are representative of the commercial catches. These samples represent the commercial removals from the stocks and are essential for stock assessments.

In cases where samples are taken from the catches of research and/or exploratory vessels using commercial-type gears (e.g. trawls in which mesh selection is in accordance with the ICNAF mesh regulations), and where the fishing was carried out in association with commercial fishing operations, the data should be reported as "research vessel" data, with a note on the sampling form indicating the applicability of the data to commercial fishing (ICNAF Redbook 1977, page 67).

4. Sampling of Catches versus Landings

Commercial samples may be taken at sea from catches before any discarding has occurred (the term "discarding", as used here, implies fish thrown overboard and not included in the nominal catches, as opposed to fish used for fishmeal and included in the nominal catch), from catches after discarding, from landed catches at the dock or processing plant prior to discarding, or from landed catches after discarding. Thus commercial samples should be designated by type as follows:

- a) Catch. The samples should be designated as catch samples, if it is fairly certain or definitely known that no discarding has occurred prior to sampling, whether the samples are taken from the catches at sea or taken from the landed catch at the dock or in the processing plant.
- b) Landing. The samples should be designated as landing samples, whether they are taken at sea or in port, if it is known that discarding of small fish has occurred prior to sampling.
- c) Discards. Every effort should be made to obtain representative samples of discarded fish, particularly in cases where the samples reported normally reflect the landings.

In some countries the only opportunity for sampling is of landings of fish that have been sorted into market categories (i.e. large, medium, and small). Samples taken in this way must be properly weighted (by the catch or landing for each category) and combined into a representative sample of the catch (or landings) prior to submission to ICNAF.

5. Length Sampling Data

Length measurements should always be taken of fish which are randomly sampled from the actual catches (or landings) and which are in the natural condition (round fresh fish). If the fish are measured in any other condition (e.g. gutted or dressed), necessitating the use of conversion factors, the appropriate conversion of the length measurements to those representative of "whole fresh" fish should be made before the length frequencies are reported to ICNAF.

At the 1975 Annual Meeting, there was some discussion on the proper length to be measured for the various species, i.e. fork length and total length (ICNAF Redbook 1975, page 79). In the light of evidence brought forward that the method of measuring differs among countries for the different species, it was strongly emphasized that information on measuring methods be reported by countries in their annual sampling notes. In order to ensure that the measuring method is recorded for all samples, it was recommended that provision be made on the standard sampling forms for countries to report the type of length measurement appropriate to the sampling data reported on the form. The revised forms (for soliciting 1975 and subsequent sampling data) provide for the recording of the various types of length measurements as follows:

Fork length - from the tip of the snout to the apex of the V forming the fork of the tail, for species with forked tails.

Total length - from the tip of the snout to the tip of the longest lobe of the tail when the lobe is extended posteriorly in line with the body. This is sometimes referred to as greatest total length. For fishes with non-forked tails, only total length is appropriate.

Other (to be specified) - for example, mantle length for squids, upper valve greatest diameter for scallops, carapace length for shrimps, etc.

In addition to indicating the type of length measurement (as noted above), it is very important that countries provide the method of recording the measurements as follows:

Nearest cm (rounded) - measurements are recorded to the nearest centimeter (i.e. fish in the length range 29.5-30.4 cm are actually recorded as 30 cm).

Cm below (truncated) - measurements are recorded to the centimeter below (i.e. fish in the length range 30.0-30.9 cm are recorded as 30 cm).

Other (to be specified) - for example, capelin are to be measured in half-cm units, and should be recorded to the nearest half-cm or half-cm below.

6. Age Sampling Data

In order to assess the status of fish stocks by means of analytical models such as "Virtual Population" or "Cohort" analyses, realistic estimates of the age compositions of the catches are essential. The usual procedure is to collect substantial length composition data as being representative of the commercial catches of a species in a particular area over a given period of time. These data are supplemented by additional material for ageing, from which age-length keys are constructed. The representative length compositions are converted to age compositions by the application of the age-length keys to the length frequencies. These age composition estimates are then weighted by the catches to estimate the removals at age from the stock.

While the samples for length composition represent the basic sampling units, and these must be composed of fish randomly selected from the catches (or landings), samples taken to provide material for ageing may consist of fish which are randomly selected from the catches or which are selected by a stratified procedure:

- a) Random sampling for age means that the sample is a random subsample of the length composition or it may be a separate small random sample of the catch taken specifically for ageing, with no attempt made to select fish by length groups.
- b) Supplemented random sampling for age implies that the basic age sample was taken as in (a), but some effort is made to supplement the basic sample with fish in the upper and lower parts of the length frequency distribution in order to broaden the length spectrum of the age-length key.
- c) Stratified sampling for age implies that a certain number of fish are selected from each length group represented in the catch length composition, and that the fish are selected at random within each length group.

Random age samples are the least effective of the three types, in that the number of specimens in each sample is usually only a fraction of the number of fish in the length sample, and consequently the entire range of the length groups represented by the catch length composition will rarely be covered. Thus ages cannot be properly assigned to those length groups in the length frequency where there are no ages in the corresponding length groups of the age-length key.

In contrast, stratified age samples are the most effective in that the length groups in the length frequency sample are usually also represented in the age-length key. This type of sample is also the most efficient in that the least number of fish are required to be taken for age determination.

7. Length Conversions

If the length measurements of fish taken for ageing are collected from specimens in the "round fresh" condition, the length groups in the length composition sample and those in the age-length key are directly comparable. If, on the other hand, the length composition sample consists of fish measured in the "round fresh" condition and the length measurements of the fish in the age sample are taken after the fish have been in frozen storage for a period of time, and, assuming that some shrinkage has occurred prior to measuring the frozen specimens, then the length intervals of the actual length composition data and of the age-length key are not directly comparable. The application of such an age-length key to the length composition data results in age compositions that are biased toward the higher age-groups. A very small shrinkage factor (say 3%) can result in serious bias in the calculated age compositions. It is therefore extremely important that the length measurements of fish from frozen age samples be adjusted by appropriate conversion factors to make them representative of "round fresh" fish, if the actual length samples are measured when the fish are "round fresh".

8. Weight Conversions

As in catch statistics, the weights reported in sampling data are required to be round fresh weights. Any correction factors that may be required to convert gutted or otherwise dressed fish (including freezing) may be found in "Conversion Factors: North Atlantic Species, 1970. *FAO Bull. Fish. Stat.* No. 25".

The proper application of length frequency data to obtain the length composition of the catch requires that the average weight of fish in the sample be given. This value is readily obtained if the sample weight is recorded at the time the sample is collected. If length sampling is carried out at sea where weighing may be difficult or impossible, the average weight of the reported length frequency should be calculated by applying an appropriate length-weight relationship.

Calculating the mean weight from length-weight regressions must be done with consideration for the possible bias in incorrect application. It is not correct to obtain the mean weight by applying the mean length of fish in the sample to a length-weight regression based on measurements of individual fish. The result will be an underestimate of the mean weight and a consequent overestimate of the number of fish in the catch. The non-linearity of the length-weight regression must be taken into account and this is done by applying a vector of weights-at-length to the length frequency.

9. Sampling by Sex

Differences in growth rate and maximum length between the male and female of many species (e.g. flatfishes, hakes, redfish, capelin) require that the sex of the sampled fish be determined. Failure to discriminate sex in these species results in unrealistic age distributions. There are two ways to proceed, the first of which is recommended when feasible:

- a) Each sex should be treated as an independent sampling unit; that is, length frequency data and ageing data are collected for male and female as if they were separate species. However, the sex ratio must be reflected in the length frequency total for each sex, so that the "per mille" frequency of male and female combined total 1000. The mean length and the mean weight should always be given for each sex and not just for sexes combined.
- b) In cases where sex is difficult to recognize while collecting length frequency data, the alternative is to determine the sex when the individual fish constituting the age samples are being examined. In this case, it is important that the selection of fish at each length interval be random with respect to sex, in order to ensure that the sex ratio of fish at each length interval in the sample reflects the true sex ratio of the corresponding length in the catch. The resulting age-length keys (male and female separate) should upon application to the length frequency (male and female combined) result in age frequencies of males and females that are representative of the age compositions of the catches by sex.

10. Length Intervals and Sexing Criteria

At the 1974 Annual Meeting, the Statistics and Sampling Subcommittee reviewed the length groups to be used for the reporting of length frequencies and age-length keys, for most of the species sampled in the ICNAF Area, and specified the particular species for which it is essential that the data be provided by sex (males and females separately). The following list also includes changes agreed to at the 1975 Annual Meeting:

Species	Length Group
Atlantic cod (<i>Gadus morhua</i>)	3 cm
Pollock (=Saithe) (<i>Pollachius virens</i>)	3 cm
Cusk (<i>Brosme brosme</i>)	3 cm
White hake (<i>Urophycis tenuis</i>)	3 cm
Wolffishes (<i>Anarhichas</i> sp.)	3 cm
Roundnose grenadier (<i>Macrourus rupestris</i>)	3 cm (by sex)
Haddock (<i>Melanogrammus aeglefinus</i>)	2 cm
Greenland cod (<i>Gadus ogac</i>)	2 cm
Red hake (<i>Urophycis chuss</i>)	2 cm
American plaice (<i>Hippoglossoides platessoides</i>)	2 cm (by sex)
Witch flounder (<i>Glyptocephalus cynoglossus</i>)	2 cm (by sex)
Yellowtail flounder (SA 3-4) (<i>Limanda ferruginea</i>)	2 cm (by sex)
Greenland halibut (<i>Reinhardtius hippoglossoides</i>)	2 cm (by sex)
Winter flounder (<i>Pseudopleuronectes americanus</i>)	2 cm (by sex)
Summer flounder (<i>Paralichthys dentatus</i>)	2 cm (by sex)
Redfish (<i>Sebastes</i> sp.)	1 cm (by sex)
Silver hake (<i>Merluccius bilinearis</i>) ¹	1 cm (by sex)
Yellowtail flounder (SA 5-6) (<i>Limanda ferruginea</i>)	1 cm (by sex)
Windowpane flounder (<i>Scophthalmus Aquosus</i>)	1 cm (by sex)
Atlantic herring (<i>Clupea harengus</i>)	1 cm
Atlantic mackerel (<i>Scomber scombrus</i>) ²	1 cm
Atlantic butterflyfish (<i>Peprilus triacanthus</i>)	1 cm

Species	Length Group
Alewife (<i>Alosa pseudoharengus</i>)	1 cm
Atlantic argentine (<i>Argentina silus</i>)	1 cm
Squids (<i>Illex</i> and <i>Loligo</i>)	1 cm
Capelin (<i>Mallotus villosus</i>)	$\frac{1}{2}$ cm (by sex)
Sea scallops (<i>Placopecten magellanicus</i>)	$\frac{1}{2}$ cm
Northern deepwater prawn (<i>Pandalus borealis</i>)	1 mm (by sex)

Other species not listed above should initially be reported by 1-cm length groups.

- 1 At the 1975 Annual Meeting, it was recommended that silver hake be reported by 1-cm length groups and also by sex, instead of by 2-cm length groups as in the past. Length frequencies not reported by sex must be supported by age-length keys for males and females separately.
- 2 At the 1975 Annual Meeting, it was recommended that length frequencies and age-length keys reported for mackerel be based on measuring the fork length to the centimeter below.

11. ICNAF Sampling Forms (Rev. 01/77)

The completeness of the ICNAF data base, with regard to sampling data for the major commercial fisheries in the Northwest Atlantic, depends entirely on the extent to which member countries of ICNAF sample the catches of their fishing fleets and report these statistics to the Secretariat. As the ICNAF Sampling Program has gradually evolved over the years since its introduction in the early 1950's, various types of forms have been adopted for use by member countries in reporting their sampling data to the Secretariat. More recently, with the need for standardization to facilitate computer-processing of the data, the basic information required has been consolidated into two forms, referred to as ICNAF Sampling Form 1 and Sampling Form 2.

- a) Sampling Form 1 is designed for use in reporting sampling data for species for which both length and age data are available. For each quarter of the year and for each gear, division (or sub-division) and species, a separate sheet must be used. Three columns are provided for recording the "per mille" length frequencies by month within a quarter; it is very important that the applicable length group used be indicated. The main body of the sheet is for the age-length key for the quarter, expressed as the actual numbers of fish sampled for age (not on a "per mille" basis). The bottom section of the form is for providing the "per mille" age composition in each of the three months. The box in the lower right part of the form (number of age samples making up the age-length key) must be completed.
- b) Sampling Form 2 is designed for use in reporting length compositions when no age data are available. The layout is similar to Sampling Form 1 except that more columns are provided for recording length frequencies.

For species which are required to be reported by sex, if both length and age data are available for male and female separately, use separate sheets of Sampling Form 1 for reporting the data for each sex. However, the sex ratio must be reflected in the length frequency total for each sex, so that the "per mille" frequency of male and female combined total 1000. For example, if a length frequency consisted of 200 fish, of which 90 were male and 110 were female, then the frequencies recorded on the sampling sheets should total 450 for male and 550 for female, after applying the appropriate conversion factor.

If age-length keys are not normally available for certain species (e.g. squids), the monthly length frequencies (per mille) may be reported on Sampling Form 2. In the case of species required to be reported by sex, the frequencies for male and female should be recorded in adjacent columns of the same sheet and reflect the sex ratio as indicated in the preceding paragraph.

The details required below each length frequency on both Sampling Forms 1 and 2 must be as complete as possible. The "number of samples" (both length and age) and the "number of fish measured" must always be given, as these are used to assess the adequacy of sampling in relation to the minimum sampling requirements. While the mean length of fish in each length frequency can readily be calculated, the "mean weight of fish" in the length frequency is particularly important, as this is used as a weighting factor to estimate the length and age composition of the catch. This weight must, of course, be expressed as "round fresh" weight, as opposed to gutted or otherwise dressed weights. Information on "gear size" and "depth range" is often very useful in evaluating how applicable the sampling data reported are to commercial fishing operations.

PART 2

Notes on Sampling Data

1. Introduction

Sampling data reported to the Secretariat should be accompanied by notes on sampling procedures. These notes should contain descriptions of how the length and age samples are collected so that any limitations on the use of the data can be recognized and the correct interpretation applied. Information on the use of conversion factors (e.g. fork length to total length) and the method of determining the mean weight of fish in the samples is essential for the proper application of the data to stock assessment problems. However, in many cases, the sampling data were not accompanied by suitable descriptions of procedures used, and consequently the notes given in section 4 below are in the main derived from information given in previous issues of the Yearbook.

2. Summary of Data Relevant to Commercial Fisheries

The following is a list of species and divisions for which commercially-oriented sampling data (see Part 3) were received from various countries for 1975:

Country	Species	Divisions
Bulgaria	Silver hake	- 4W
	Mackerel	- 5Ze, 5Zw, 6A
Canada (M)	Atlantic cod	- 3K, 4R, 4T, 4Vn, 4Vs, 4W, 4X, 5Ze
	Haddock	- 4W, 4X, 5Ze
	Atlantic redfish	- 3Pn, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs, 4W
	Pollock	- 4W, 4X, 5Y, 5Ze
	American plaice	- 3O, 3Ps, 4T, 4Vs, 4X
	Witch flounder	- 3Ps, 4R, 4S, 4Vn, 4Vs, 4W
	Yellowtail flounder	- 3O, 4T, 4Vs
	Winter flounder	- 4T
	Atlantic herring	- (data not yet available)
	Atlantic mackerel	- 4T, 4Vn, 4W, 4X
Canada (N)	Atlantic cod	- 2J, 3K, 3L, 3M, 3N, 3Ps, 4R, 4S
	Haddock	- 3Ps
	Atlantic redfish	- 3L, 3M, 3Pn, 3Ps, 4R, 4S, 4T
	American plaice	- 3K, 3L, 3N, 3O, 3Ps
	Witch flounder	- 3K, 3L, 3N, 3O, 3Ps, 4R
	Yellowtail flounder	- 3L, 3N, 3O
	Greenland halibut	- 3K
	Atlantic mackerel	- 3K, 3L, 4R
	Capelin	- 2J, 3K, 3L, 3N, 3O, 3Ps
Denmark (G)	Atlantic cod	- 1C, 1D, 1E
	Greenland halibut	- 1D
	Roundnose grenadier	- 1C
France (M)	Atlantic herring	- 5Ze
Fed. Rep. Germany	Atlantic cod	- 1D, 1E, 1F, 2J, 3K
	Atlantic herring	- 4X, 5Z
German Dem. Rep.	Atlantic cod	- 2J, 3K
	Atlantic redfish	- 3K
	Greenland halibut	- 3K
	Roundnose grenadier	- 1C
	Atlantic herring	- 5Ze
	Atlantic mackerel	- 5Ze, 6A

Country	Species	Divisions
Japan	Atlantic redfish	- 3Ps, 5Ze
	Atlantic herring	- 5Ze
	Atlantic mackerel	- 6A, 6B
	Atlantic butterfish	- 4X, 5Zw, 6A, 6B, 6C
	Capelin	- 3N
	Squid - <i>Illex</i>	- 5Ze, 6A, 6B, 6C
	Squid - <i>Loligo</i>	- 5Ze, 5Zw, 6A, 6B, 6C
Norway	Capelin	- 3K, 3N
Poland	Atlantic cod	- 2J, 3K
	Atlantic redfish	- 2J, 3K
	American plaice	- 2J, 3K, 3N
	Witch flounder	- 3K
	Greenland halibut	- 2J, 3K
	Atlantic herring	- 5Ze, 5Zw, 6A
	Atlantic mackerel	- 5Ze, 5Zw, 6A, 6B, 6C
	Capelin	- 3N, 3O
	Squid - <i>Illex</i>	- 5Z
	Squid - <i>Loligo</i>	- 5Z, 6A
Portugal	Atlantic cod	- 3L, 3M
Spain	Atlantic cod	- 4Vn, 5Ze
USSR	Atlantic cod	- 2J, 3K, 4W
	Haddock	- 4W, 4X
	Atlantic redfish	- 2J, 4W
	Silver hake	- 4W, 4X, 5Ze, 5Zw+6
	Red hake	- 5Ze, 5Zw+6
	Pollock	- 4W
	American plaice	- 1C
	Yellowtail flounder	- 4W
	Greenland halibut	- 0
	White hake	- 4W
	Atlantic herring	- 4W, 5Z
	Atlantic mackerel	- 4VWX, 5Z, 6
	Alewife	- 4W, 5Z
	Atlantic argentine	- 4W, 4X
	Atlantic butterfish	- 5Z+6
	Squid - <i>Illex</i>	- 4VWX, 5Z, 6
Squid - <i>Loligo</i>	- 5Z	
UK	Atlantic cod	- 1E, 3L, 3M
USA	Atlantic cod	- 4X, 5Z, 5Ze
	Haddock	- 4W, 4X, 5Y, 5Ze
	Atlantic redfish	- 4W, 4X, 5Y, 5Ze
	Silver hake	- 5Y, 5Ze, 5Zw+6
	Red hake	- 5Zw, 6A
	Pollock	- 4X, 5Z, 5Ze
	American plaice	- 5Y, 5Ze
	Witch flounder	- 5Y, 5Ze
	Yellowtail flounder	- 5Z(E69°), 5Z(W69°)+6
	Winter flounder	- 5Ze, 5Zw, 6A
	Summer flounder	- 5Ze, 5Zw, 6A
	Windowpane flounder	- 5Ze, 5Zw
	Atlantic herring	- 5Z(north), 5Y(south), 5Zw
	Atlantic mackerel	- 5Y, 5Zw
	Squid - <i>Loligo</i>	- 5Ze, 5Zw, 6A
	Sea scallops	- 5Y, 5Ze, 6A

3. Summary of Research Vessel Data

The following is a list of species and divisions for which research vessel sampling data (see Part 4) were received from various countries for 1975:

Country	Species	Divisions
Canada (Quebec)	Atlantic cod	3Pn, 3Ps, 4R, 4S, 4T, 4Vn, 4Vs
	Atlantic redfish	3Pn, 3Ps, 4R, 4Vn, 4Vs
	Pollock	3Ps
	American plaice	4T, 4Vn, 4Vs
	Witch flounder	4Vn
	White hake	4Vn
Denmark (G)	Atlantic cod	1B, 1C, 1D, 1E
	Atlantic redfish	1A, 1B, 1C, 1D, 1E, 1F
	American plaice	1A, 1B, 1C, 1D, 1E, 1F
	Greenland halibut	1A, 1B, 1C, 1D, 1E
	Greenland cod	1D, 1E
	Polar cod	1A
	Wolffish (<i>A. lupus</i>)	1B
	Lumpfish	1D
	Arctic char	1D
Northern deepwater prawn	1B, 1C, 1D, 1E, 1F	
France (SP)	Atlantic cod	3Pn, 3Ps, 4R, 4Vn, 4Vs
	Atlantic redfish	2J, 3K, 3L, 3Pn, 3Ps, 4R, 4Vn, 4Vs, 4W, 4X, 5Z
	Atlantic herring	4R, 4S, 4T, 4Vs, 4W
	Squid - <i>Loligo</i>	5Ze, 5Zw, 6A
	Squid - <i>Illex</i>	4X, 5Ze, 5Zw, 6A
Fed. Rep. Germany	Atlantic redfish	2J, 3K
	American plaice	2J, 3K
	Witch flounder	2J, 3K
	Greenland halibut	2J, 3K
	Polar cod	2J, 3K
	Capelin	2J

4. Notes on Sampling Data

BULGARIA

Data submitted by: P. Kolarov

No notes on sampling were included with data reported for 1975. Information from other sources indicate that the fork lengths are recorded for mackerel and silver hake to the cm below.

CANADA (Maritimes)

Data submitted by: D.N. Fitzgerald, J. Hunt

Sampling data for 1975 were obtained from the commercial landings of vessels operating from various ports in the Provinces of New Brunswick, Nova Scotia and Prince Edward Island. No significant changes were indicated in the notes submitted for 1974 (see *Samp. Yearbook*, Vol. 19, page 20).

CANADA (Newfoundland)

Data submitted by: P. Beck, L. Mansfield, J. Carscadden, J.A. Moores

Sampling data for 1975 were obtained from the commercial landings of vessels operating from various ports in Newfoundland and Labrador. No significant changes were indicated in the notes submitted for 1974 (see *Samp. Yearbook*, Vol. 19, pages 20-21).

CANADA (Quebec)

Data submitted by: J.P. Lussiaa, F. Axelsen

Research (or exploratory) sampling data for 1975 were reported by the Marine Institute of the Province of Quebec. The data consist of length frequencies of catches taken in small-meshed trawls (50 mm) during exploratory fishery and are consequently listed in Part IV of this issue.

DENMARK (Faroes)

No sampling data were reported for 1975.

DENMARK (Greenland)

Data submitted by: Greenland Fisheries Investigations

Sampling data reported for 1975 consisted of commercial data for cod, Greenland halibut and round-nose grenadier and research samples for cod, redfish, American plaice, Greenland halibut, Greenland cod, Polar cod, wolffish, lumpfish, Arctic char, and northern deepwater prawn (shrimp). The measurements of all fish species are recorded as total length to the cm below. The research length data for shrimp were reported as individual samples broken down in 3 categories: (a) males and females without developed roe or eggs; (b) females with developed head roe; and (c) females berried. Shrimp length measurements are made of the carapace length to the nearest $\frac{1}{2}$ mm. Additional comments on sampling may be found in *Sampling Yearbook*, Vol. 19, pages 21-22. A listing of research samples submitted for 1975 is given in Part 4 of this issue.

FRANCE (Metropolitan)

Data submitted by: R.H. Letaconnoux

No sampling notes were included with the herring samples reported for 1975.

FRANCE (St. Pierre et Miquelon)

Data submitted by: J.P. Minet, B. Mesnil
R. Chevalier

Research length composition data were reported for cod, redfish, herring and squids (see Part 4 of this issue) but no notes on sampling were included with the 1975 data.

FEDERAL REPUBLIC OF GERMANY

Data submitted by: J. Messtorff, A. Meyer,
K. Kosswig, H. Dornheim

Data submitted include commercial samples for cod and herring and research samples for redfish, American plaice, witch, Greenland halibut, Polar cod and capelin. No notes were included with the 1975 data but information from other sources indicate that length measurements are made of total length to the cm below.

GERMAN DEMOCRATIC REPUBLIC

Data submitted by: L. Danke, N. Schultz,
H. Koch, U. Berth,
H. Ritzhaupt

No detailed sampling notes were submitted with the 1975 sampling data, but it is indicated that herring are measured as total length and mackerel as fork length starting in 1974. Samples are usually measured at sea, but samples are sometimes collected by the ship's crews and frozen for later examination at the laboratory.

ICELAND

No sampling data were reported for 1975.

ITALY

No sampling data were reported for 1975.

JAPAN

Data submitted by: T. Sato

Samples were collected at sea from the catches of commercial trawlers and measured on deck by the crew or inspectors. The length measurements for the fish species concerned (capelin, redfish, butterfish, herring and mackerel) were made of the fork length to the nearest mm. For squids the mantle length was measured to the nearest mm.

NORWAY

Data submitted by: Ø. Ulltang

Capelin samples were reported for 1975, but no notes on sampling were given. Notes submitted with 1974 data indicated that length measurements of capelin are made of total length to the $\frac{1}{2}$ cm below.

POLAND

Data submitted by: E. Stanek, A. Kosior,
M. Giedz, M. Lipinski,
S. Ucinski

No notes on sampling were included with the data reported for 1975. Information from other sources indicates that (a) total length to the nearest cm is recorded for cod, redfish, flatfishes and herring; (b) total length to the nearest $\frac{1}{2}$ cm for capelin; (c) fork length to the nearest cm for mackerel; and (d) mantle length to nearest cm for squids. Due to the limited time available and the shortage of labour on board the vessels, the length measurements of redfish, American plaice, witch flounder and Greenland halibut were made without determining the sex of the specimens sampled.

PORTUGAL

Data submitted by: Mateus

No notes on sampling were included with the data on cod reported for 1975. Information from other sources indicate that the total length is recorded to the cm below.

ROMANIA

No sampling data were reported for 1975.

SPAIN

Data submitted by: Ins. Inves. Pesqueras

No notes on sampling were included with the data on cod reported for 1975. Information from other sources indicate that the total length of cod, haddock and pollock are recorded to the nearest cm.

UNION OF SOVIET SOCIALIST REPUBLICS

Data submitted by: A.S. Noskov, A.P. Senina,
K.G. Konstantinov

No notes on sampling were included with the data of various species reported for 1975.

UNITED KINGDOM

Data submitted by: B.W. Jones

No notes on sampling were included with the cod data reported for 1975.

UNITED STATES OF AMERICA

Data submitted by: P. Wood, R.K. Mayo,
J. Palmer, A.M. Tibbitts,
F. Almeida, T. Burns,
G. Waring

No detailed sampling notes were included with the data reported for 1975. Information from other sources indicate that (a) total length to nearest cm is recorded for red hake and flatfishes; (b) total length to cm below for herring; (c) fork length to nearest cm for cod, haddock, redfish, silver hake, pollock and mackerel; (d) mantle length to nearest cm for squids; and (e) shell diameter to $\frac{1}{2}$ cm below.

PART 3

List of Sampling Data for Commercial Fisheries, 1975

1. Introduction

The publication of detailed sampling data in the *Sampling Yearbook* was discontinued following the issue of Vol. 19 for the year 1972. Instead, as recommended by STACRES at the 1974 Annual Meeting (ICNAF *Redbook* 1974, page 70), the Yearbook now contains a list of available data, the details of which will be made available upon request to scientists and/or research institutes involved in the Commission's work.

Tables 1 to 24 contain lists of available length and age sampling data by species, each of which is arranged by country, division, gear and month. Nearly all of these data were reported as commercial samples. However, some samples reported as "research" have been included, where the type of gear used or the gear size reported indicated that they were relevant to commercial fishing operations. Sampling data relevant to pure research vessel operations (survey data not connected with commercial fisheries) are listed in Part 4 of this issue. Where sampling data have been reported by sex, the table entries under "Number measured" and "Number aged" indicate the numbers of males and females sampled.

2. Abbreviations Used

The following abbreviations are used to designate the "gear" and "type of sample" in Tables 1 to 24 and also in the listing of research samples in Part 4:

GEAR

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)
SN	-	Seine net (Danish and Scottish seines)
SB	-	Beach seines
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
NS	-	Gear not specified

TYPE OF SAMPLE

CC	-	Commercial catch
CL	-	Commercial landing
RC	-	Research catch
RL	-	Research landing

Table 1. Atlantic cod length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples				
					No.	No. meas.	No.	No. aged			
Canada (M)	3K	OTB	Feb	CL	1	263	1	47			
	4R	OTB	Feb	CL	3	906	}	3	165		
			Jul	CL	1	200		}	2	87	
			Aug	CL	1	200					
	4T	OTB	May	CL	5	1000	}	}	8	303	
			Jun	CL	3	500					
			Jul	CL	2	355					
			Dec	CL	5	1659					
		SDN		Jul	CL	1	138	}	}	3	88
				Aug	CL	1	200				
				Sep	CL	1	200				
		GN		Jul	CL	3	556	}	}	7	255
				Aug	CL	4	757				
		LHP		Jun	CL	1	200	}	}	1	48
	Jul			CL	1	200					
	4Vn	OTB	Jan	CL	3	895	}	}	10	529	
			Feb	CL	2	745					
			Mar	CL	5	1598					
			Apr	CL	3	953					
			Jun	CL	1	324					
			LL		Jun	CL					1
	Sep	CL	3		879						
	4Vs	OTB	Jan	CL	1	273	}	}	3	169	
			Feb	CL	1	325					
			Mar	CL	1	279					
			Apr	CL	1	355					
	4W	OTB	Jan	CL	1	276	}	}	4	212	
			Mar	CL	3	854					
			Apr	CL	4	1259					
			Jul	CL	1	264					
	4X	LL		Oct	CL	1	300	}	}	1	34
				OTB	Mar	CL	1				
				Apr	CL	1	337	}	}	2	97
				Jun	CL	1	100				
				Aug	CL	2	575				
				Oct	CL	1	345				
		GN		Nov	CL	1	167	}	}	2	89
				Dec	CL	1	171				
		LL		Jan	CL	1	221	}	}	1	57
				Apr	CL	2	505				
Jun	CL			1	60						
Sep	CL			1	189						
Oct	CL			1	151						
5Ze	OTB	Aug	CL	1	308	}	}	2	113		
		Sep	CL	1	329						
Canada (N)	2J	OTB	Feb	CL	21	2821	}	}	-	393	
			GN	Aug	CL	14					2809
			LHP	Aug	CL	4					934
	3K	OTB		Jul	CL	1	836	}	}	-	907 ¹
				Aug	CL	3	617				
				Feb	CL	6	643			-	-

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada (N) (cont'd)	3K	GN	Jul	CL	21	2971	}	-	733 ²	
			Aug	CL	11	1708		-	733 ²	
		LHP	Aug	CL	9	1100	}	-	733 ²	
			Jul	CL	2	794		-	733 ²	
	3L	FPN	Aug	CL	12	4179	}	-	733 ²	
			OTB	May	CL	1		235	-	85
		PTB	Nov	CL	1	981	}	-	216	
			LHP	Jun	CL	6		1174	-	751 ³
		FPN	Jul	CL	13	1446	}	-	751 ³	
			Jun	CL	5	2781		-	751 ³	
		3M	PTB	Jul	CL	11	5632	}	-	751 ³
				Jun	CL	2	2250		-	488
	3N	OTB	May	CL	1	133	}	-	131	
			Jul	CL	1	1258		-	202	
	3Ps	OTB	May	CL	1	359	}	-	119	
			GN	Jun	CL	5		1663	-	537 ⁴
		LL	Jul	CL	8	1974	}	-	537 ⁴	
			Jun	CL	3	556		-	537 ⁴	
		4R	OTB	Jul	CL	3	820	}	-	427
				Sep	CL	7	3250		-	427
4S	GN	Apr	CL	1	315	}	-	643		
		May	CL	4	1792		-	643		
		Jun	CL	8	2063		-	643		
Denmark (G)	1C	OTB	Jun	CL	22	3731	}	-	350	
			Jul	CL	1	218		-	350	
			Apr	CL	1	305		-	87	
			Jan	CC	1	1368		}	2	479
			Feb	CC	2	1525				
	1CDE	OTB	Mar	CC	1	999	}	2	901	
			May	CC	1	932				
	1D	OTB	Jun	CC	1	1218	}	1	68	
			Aug	CC	1	370				
			Jul	CC	1	1065				
Fed. Rep. Germany	1E	OTB	Sep	CC	2	848	}	1	417	
			Dec	CC	1	1028				
	2J	OTB	May	CC	1	2353	}	3	493	
			Jun	CC	2	1957				
German Dem. Rep.	1F	OTB	Apr	CC	1	139	}	1	127	
			May	CC	1	207				
	3K	OTB	Feb	CL	1	191	}	1	186	
			Nov	CL	1	135				
	2J	OTB	Feb	CC	10	3876	}	6	879	
			Mar	CC	1	336				
3K	OTB	Feb	CC	16	4486	}	5	561		
		Jan	CC	4	792					
3K	OTB	Feb	RC	30	19204	}	8	2277		

Table 1. Atlantic cod (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Poland	2J	OTB	Jan	CC	10	4550	}	4	412
			Feb	CC	4	2080			
	3K	OTB	Feb	CC	6	2684	1	105	
Portugal	3L	OTB	Nov	CC	4	201	}	7	133
			Dec	CC	6	518			
	3M	OTB	Nov	CC	6	609	}	3	116
			Dec	CC	4	400			
Spain	4Vn	PTB	Jan	CC	5	1610	-	204	
	5Ze	PTB	Feb	CC	4	572	-	214	
USSR	2J	OTB	Jan	CC	10	4274	}	2	598
			Feb	CC	20	16167			
			Mar	CC	3	1514			
	3K	OTB	Feb	CC	16	9930	2	506	
	4W	OTB	Mar	CC	1	200	-	-	
UK	1E	OTB	May	CL	1	364	-	-	
	3L	OTB	Dec	CL	1	227	-	-	
	3M	OTB	Nov	CL	1	105	-	-	
USA	4X	OTB	Jan	CL	1	109	-	-	
	5Y	OTB	Dec	CL	1	62	-	-	
	5Ze	OTB	Feb	CL	6	782	}	-	-
			Mar	CL	9	1104			
			Apr	CL	6	595			
			May	CL	5	631			
			Jun	CL	6	892			
			Jul	CL	7	925			
			Aug	CL	3	345			
			Sep	CL	3	444			
			Oct	CL	5	772			
			Nov	CL	3	441			
Dec	CL	3	417						

¹ Same age-length key used for GN, LHP and FPN in Div. 2J.

² Same age-length key used for GN, LHP and FPN in Div. 3K.

³ Same age-length key used for LHP and FPN in Div. 3L.

⁴ Same age-length key used for GN and FPN in Div. 3Ps.

Table 2. Haddock length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	4W	OTB	Jan	CL	1	211	}	1	34
			Apr	CL	1	248			
			May	CL	1	337			
			Oct	CL	1	252			
			Oct	CL	1	200			

Table 2. Haddock (continued).

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada (M) (cont'd)	4X	OTB	Jan	CL	1	302	}	6	207	
			Feb	CL	1	201				
			Mar	CL	5	1524				
			Apr	CL	1	377	}	14	469	
			May	CL	1	263				
			Jun	CL	13	2669				
			Jul	CL	8	1950	}	16	495	
			Aug	CL	5	1396				
			Sep	CL	3	706				
			Oct	CL	5	1381	}	9	314	
			Nov	CL	3	991				
			Dec	CL	1	336				
			LL	Jan	CL	1	199	}	1	40
				Apr	CL	2	449			
				Jun	CL	2	374			
		Aug		CL	1	195				
		Sep		CL	1	198				
		Oct	CL	1	134	}	2	69		
		LHP	Aug	CL	1	187	}	1	35	
	5Ze	OTB	Nov	CL	1	271	}	1	33	
Canada (N)	3Ps	OTB	Apr	CL	2	797	}	-	280	
USSR	4W	OTB	Apr	CC	5	943	}	-	-	
			May	CC	5	1003				
			Jun	CC	9	1794				
			Jul	CC	15	2998				
			Aug	CC	1	200				
		4X	OTB	Jul	CC	3	584	}	-	-
	Aug			CC	14	2811				
USA	4W	OTB	Mar	CL	2	170	}	2	39	
	4X	OTB	Jan	CL	7	530				}
			Feb	CL	6	480				
			Mar	CL	5	379				
			Apr	CL	3	211				
			May	CL	8	717				
	5Y	OTB	Jan	CL	1	64	}	1	15	
			May	CL	1	100				
	5Ze	OTB	Jan	CL	5	470	}	22	423	
			Feb	CL	9	691				
			Mar	CL	7	433				
			Apr	CL	10	778				
			May	CL	3	163				
			Jun	CL	6	487				
			Jul	CL	7	716				
Aug			CL	3	162					

Table 3. Atlantic redfish length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples							
					No.	No. meas.	No.	No. aged						
Canada (M)	3Pn	OTB	Aug	CL	1	113/87	}	-	-					
			Sep	CL	3	284/316								
		OTM		Feb	CL	1	100/100	}	-	-				
				Sep	CL	2	199/201							
	3Ps	OTB		Oct	CL	1	94/106	}	-	-				
				Nov	CL	2	177/233							
	4R	OTB		Feb	CL	1	118/82	}	-	-				
				May	CL	1	85/115							
				Jul	CL	1	170/30							
				Aug	CL	1	122/78							
				Sep	CL	1	56/149							
				Oct	CL	2	206/193							
				OTM	Jan	CL	2				279/437	}	-	-
					Feb	CL	1				117/83			
	May	CL	2		254/195									
	4S	OTB		Apr	CL	1	164/35	}	-	-				
				May	CL	1	69/131							
				Jun	CL	1	135/98							
				Jul	CL	2	143/255							
				Aug	CL	3	323/277							
				Oct	CL	2	203/197							
				OTM	May	CL	1				98/102	}	-	-
					Jun	CL	1				64/151			
	Jul	CL	2		156/244									
	Oct	CL	1		81/119									
	4T	OTB		Jun	CL	2	302/98	}	-	-				
				OTM	May	CL	1				54/102			
4Vn	OTB		Mar	CL	1	97/103	}	-	-					
			Apr	CL	1	65/135								
			Aug	CL	1	93/107								
			Sep	CL	2	213/187								
	OTM	May	CL	1	88/115	}	-	-						
4Vs	OTB		Mar	CL	1				79/121	}	-	-		
			Jun	CL	2	191/209								
			Oct	CL	1	105/97								
4W	OTB		Mar	CL	1	197/152	}	-	-					
			Apr	CL	1	205/168								
			Jul	CL	1	145/55								
			Oct	CL	1	75/129								
Canada (N)	3L	OTM	Oct	CL	7	1870/1525	}	-	-					
	3M	OTB	Apr	CL	1	146/319								
			Dec	CL	1	211/162								
		OTM	Dec	CL	1	239/174								
		PTB	Jun	CL	1	238/457								
	3Pn	OTM		Apr	CL	2				308/569				
				Sep	CL	1				245/136				
	3Ps	OTB		Jun	CL	1				279/329	}	-	-	
				Jul	CL	3				980/791				
				Aug	CL	1				213/169				
	OTM			Jul	CL	2				694/424	}	-	-	
				Aug	CL	4				715/654				
Sep				CL	1	238/166								

Table 3. Atlantic redfish (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples					
					No.	No. meas.	No.	No. aged				
Canada (N) (cont'd)	4R	OTB	Jul	CL	2	559/644	-	-				
			Apr	CL	3	736/647	}	-				
		May	CL	2	411/467							
		Jun	CL	2	469/389							
		Jul	CL	1	241/199							
		Sep	CL	2	576/201							
		Nov	CL	2	509/432							
		Dec	CL	2	360/327							
	4S	OTB	Jul	CL	3	806/967			-	-		
			Oct	CL	1	520/497	-	-				
		OTM	Apr	CL	1	359/100	}	-				
			May	CL	3	406/741						
			Jun	CL	3	771/672						
			Oct	CL	3	651/631						
			Nov	CL	2	489/381						
Dec			CL	1	107/105							
4T	OTM	May	CL	2	320/554	-	-					
German Dem. Rep.	3K	OTB	Feb	RC	1	227/165	-	-				
Japan	3Ps	OTB	Oct	CC	2	200	-	-				
	5Ze	OTB	Sep	CC	2	200	-	-				
Poland	2J	OTB	Jan	CC	2	874	}	-				
			Feb	CC	1	324						
	3K	OTB	Feb	CC	2	799						
			Mar	CC	1	389						
USSR	2J	OTB	Feb	CC	3	586/559	-	-				
	4W	OTB	Apr	CC	8	1599	}	-				
			May	CC	9	1842						
USA	4W	OTB	Jan	CL	2	96/104			}	-		
			Feb	CL	2	96/104						
			Mar	CL	1	45/55						
			May	CL	1	66/34						
			Jul	CL	1	65/35						
			Aug	CL	2	135/65						
			Sep	CL	3	200/100						
			Oct	CL	3	185/115						
			Nov	CL	2	109/91						
			Dec	CL	2	110/90						
			4X	OTB	Jan	CL	1	52/48			}	-
					Apr	CL	1	39/61				
	Jul	CL			4	248/152						
	Aug	CL			2	77/123						
	Oct	CL			1	83/17						
	Dec	CL			1	59/41						
	5Y	OTB	Jan	CL	5	230/260	}	-				
			Feb	CL	7	367/341						
			Mar	CL	10	537/474						
			Apr	CL	7	288/411						
			May	CL	5	237/269						
			Jun	CL	9	399/499						

Table 3. Atlantic redfish (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
USA (cont'd)	5Y	OTB	Jul	CL	3	138/160	}	-	-
			Aug	CL	5	203/297			
			Sep	CL	1	39/61			
			Oct	CL	1	52/48			
			Nov	CL	1	49/51			
			Dec	CL	1	61/39			
	5Ze	OTB	Feb	CL	1	50/39	}	-	-
			Mar	CL	3	135/136			
			Apr	CL	2	99/107			
			May	CL	6	272/322			
			Jun	CL	2	104/90			
			Jul	CL	1	32/68			
			Aug	CL	1	71/33			

Table 4. Silver hake length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples							
					No.	No. meas.	No.	No. aged						
Bulgaria	4W	OTM	Aug	CL	1	61/60	-	-						
USSR	4W	OTB	Apr	CC	53	10652	}	-	79/269					
			May	CC	213	42681								
			Jun	CC	217	43397								
			Jul	CC	256	51267								
			Aug	CC	40	8070								
			Sep	CC	131	26209								
			Oct	CC	-	-								
			Nov	CC	-	-								
			Dec	CC	-	-								
				OTM	Sep	CC				13	2600	-	-	
			4X	OTB	May	CC				4	806	}	-	56/98
					Jun	CC				67	13397			
	Jul	CC			19	3727								
	Aug	CC			62	12367								
	5Ze	OTB	Jan	CC	9	1800	}	-	77/172					
			Feb	CC	24	4817								
			Mar	CC	68	13625								
			Apr	CC	38	7699								
			May	CC	71	14260								
			Jun	CC	30	6000								
Aug			CC	143	28529									
Sep			CC	12	2391									
Oct			CC	39	7800									
Nov			CC	4	800									
			OTM	Mar	CC	14				2800	-	-		
5Zw+6	OTB	Jan	CC	13	2600	}	-	72/143						
		Mar	CC	13	2600									
		Apr	CC	16	3188									
			OTM	Mar	CC				5	1000	-	-		

Table 4. Silver hake (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
USA	5Y	OTB	Feb	CL	1	16/64	}	-	85/155	
			May	CL	5	206/303		-	95/165	
			Jun	CL	1	57/50				
	5Ze	OTB	Jun	CL	1	52/51	}	-	141/228	
			Jul	CL	4	244/163		-	-	
			Oct	CL	5	138/310		-	120/131	
	5Zw+6	OTB	Jan	CL	7	1269	}	}	-	-
			Feb	CL	2	154				
			Mar	CL	5	852				
			Apr	CL	2	225				
			May	CL	4	297				
			Aug	CL	1	51				
			Sep	CL	5	389				
			Oct	CL	2	115				
			Nov	CL	7	426				
			Dec	CL	13	711				

Table 5. Red hake length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
USSR	5Ze	OTB	Feb	CC	8	1610	}	}	-	280
			Mar	CC	16	3224				
			Apr	CC	31	6223				
			May	CC	13	2589				
			Jul	CC	3	600				
			Aug	CC	13	2663				
			Sep	CC	99	19791				
			Oct	CC	28	5623				
			5Zw+6	OTB	Jan	CC				
	USA	5Zw	OTB	Jan	CL	5	423	}	}	-
Mar				CL	6	36				
Apr				CL	2	25				
May				CL	5	124				
Sep				CL	3	118				
Oct				CL	2	115				
Nov				CL	3	90				
Dec				CL	5	373				
6A		OTB	Jan	CL	2	174	}	}	-	-
			Feb	CL	1	70				
			Jun	CL	1	37				

Table 6. Pollock length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples								
					No.	No. meas.	No.	No. aged							
Canada (M)	4W	OTB	Jan	CL	1	209	}	1	34						
			Apr	CL	3	715		}	4	166					
			May	CL	1	311									
			Nov	CL	1	249									
			Dec	CL	1	247		}	2	67					
	4X	OTB	Jan	CL	2	518	}				2	66			
			Apr	CL	3	572							}	11	404
			May	CL	3	599									
			Jun	CL	5	864									
			Jul	CL	1	200							}	4	147
			Aug	CL	2	363									
			Sep	CL	1	201									
			Oct	CL	2	568									
			Dec	CL	1	325							}	3	125
			5Y	OTB	Sep	GN									
	Apr	OTB			CL	1	115	1	32						
	5Ze	OTB		Jul	CL	1	229	}	3	105					
				Aug	CL	2	691								
				Oct	CL	3	704								
Nov				CL	1	323									
Dec				CL	1	225									
USSR	4W	OTB	Apr	CC	5	1000	-	-							
USA	4X	OTB	Jan	CL	1	102	-	-							
			Feb	CL	1	103	-	-							
	5Ze	OTB	Apr	CL	1	101	-	-							
			Mar	CL	1	75	-	-							
			May	CL	1	98	-	-							
			Jul	CL	1	101	-	-							

Table 7. American plaice length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada (M)	30	OTB	Aug	CL	1	82/118	1	22/24		
	3Ps	OTB	Feb	CL	1	84/135	1	31/42		
			Apr	CL	1	36/164	1	15/28		
	4T	OTB	May	CL	2	231/169	2	28/38		
			PS	Jun	CL	1	40/160	}	1	10/26
				Jul	CL	1	34/166			
	4Vs	OTB	Aug	CL	1	53/148	}	2	20/65	
			Jan	CL	3	280/320				
			Feb	CL	1	91/109				
			Mar	CL	1	102/101				
4X	OTB	Jul	CL	1	86/114	}	1	27/37		
		Oct	CL	1	40/122				1	22/53

Table 7. American plaice (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples							
					No.	No. meas.	No.	No. aged						
Canada (N)	3K	GN	Jul	CL	2	135/390	}	-	113/218					
			Aug	CL	7	293/1553								
	3L	OTB	Jun	CL	5	472/694	}	-	140/225					
			Jul	CL	2	478/740								
			Aug	CL	2	194/433								
			Sep	CL	1	119/228								
			Oct	CL	2	275/688								
			Nov	CL	5	812/1120								
	3N	OTB	Apr	CL	1	127/267	}	-	183/315					
			May	CL	2	158/388								
			Jun	CL	2	135/200								
			Jul	CL	2	288/506								
			Aug	CL	3	401/605								
			Sep	CL	2	268/363								
			Oct	CL	2	514/724								
			Nov	CL	3	364/508								
			30	PTB	Jul	CL				1	196/163	}	-	52/65
					OTB	May				CL	3			
	Jun	CL				1	100/158							
	Jul	CL				1	169/297							
Aug	CL	1				133/165								
Sep	CL	3	432/642											
3Ps	OTB	Apr	CL	2	189/1019	}	-	92/179						
		Nov	CL	1	236/265									
Poland	2J	OTB	Jan	CC	1	848	1	105						
	3K	OTB	Mar	CC	1	703	1	110						
	3N	OTB	Feb	CC	1	580	1	104						
USSR	1C	OTB	Mar	RC	23	2197/4942	-	-						
USA	5Y	OTB	Jun	CL	5	313	}	-	-					
			Jul	CL	2	120								
			Aug	CL	2	133								
			Oct	CL	3	184								
	5Ze	OTB	Apr	CL	1	91	}	-	-					
			May	CL	4	273								
			Jun	CL	3	216								
			Jul	CL	2	142								
			Dec	CL	2	153								

Table 8. Witch flounder length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (M)	3Ps	OTB	Apr	CL	1	104/96	1	26/32
	4R	OTB	May	CL	1	110/90	1	36/36
	4S	OTB	Feb	CL	1	95/105	1	18/21
	4Vn	OTB	Mar	CL	2	177/224	2	34/55
			Apr	CL	2	163/237	2	30/43
			May	SN	CL	1	91/109	1

Table 8. Witch flounder (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M) (cont'd)	4Vs	OTB	Jan	CL	2	154/246	}	3	38/54
			Feb	CL	1	63/137			
			Jul	CL	1	40/160			
	4W	OTB	Apr	CL	1	79/121	}	1	30/32
			Oct	CL	1	71/129			
Canada (N)	3K	GN	Jul	CL	3	104/285	}	-	-
			Aug	CL	10	518/1591			
	3L	OTB	Sep	CL	1	54/254	}	-	37/51
			Nov	CL	1	327/167			
	3N	OTB	Apr	CL	1	152/193	}	-	40/56
	3O	OTB	Apr	CL	2	395/481			
	3Ps	OTB	Apr	CL	2	823/419	}	-	212/256
May			CL	2	415/345				
4R	OTB	May	CL	1	236/149	}	-	41/54	
Poland	3K	OTB	Mar	CC	1				950
USA	5Y	OTB	Apr	CL	1	67	}	-	-
			Jun	CL	2	117			
			Jul	CL	6	402			
			Aug	CL	2	122			
			Sep	CL	4	272			
			Oct	CL	2	110			
	5Ze	OTB	Jan	CL	2	135	}	-	-
			Feb	CL	1	50			
			Mar	CL	1	57			
			Jun	CL	1	80			
			Jul	CL	2	159			
			Oct	CL	1	50			
			Dec	CL	1	50			

Table 9. Yellowtail flounder length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	3O	OTB	Aug	CL	1	93/107	1	18/21	
	4T	OTB	Aug	CL	1	57/143	1	16/24	
	4Vs	OTB	Apr	CL	1	48/152	1	23/36	
Canada (N)	3L	OTB	May	CL	1	150/202	}	-	107/145
			Jun	CL	3	700/652			
			Aug	CL	1	70/189			
	3N	OTB	Apr	CL	1	243/289	}	-	175/242
			May	CL	2	275/369			
			Jun	CL	2	337/358			
			Jul	CL	1	146/398			
			Aug	CL	2	351/494			
			Sep	CL	3	565/447			
			Oct	CL	2	401/626			
			Nov	CL	2	417/448			

Table 9. Yellowtail flounder (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (N) (cont'd)	30	OTB	Apr	CL	3	864/928	}	-	109/132
			Jul	CL	1	330/518		-	50/56
			Aug	CL	1	281/285		-	
			Nov	CL	1	148/259		-	66/94
USSR	4W	OTB	Jul	CC	2	400	-	-	
USA	5Z(E69°)	OTB	Jan	CL	10	526/574	}	15	367/378
			Feb	CL	7	496/395			
			Mar	CL	3	148/142			
			Apr	CL	9	685/421		17	493/478
			May	CL	1	38/57			
			Jun	CL	7	357/617			
			Jul	CL	14	761/979		27	564/673
			Aug	CL	16	698/1205			
			Sep	CL	8	444/520			
			Oct	CL	17	989/1098		24	574/601
			Nov	CL	7	555/377			
			Dec	CL	5	278/279			
	5Z(W69°)+6	OTB	Jan	CL	3	86/181	}	16	401/402
			Feb	CL	6	464/417			
			Mar	CL	5	340/263			
			Apr	CL	2	145/120		6	249/249
			May	CL	2	99/116			
			Jun	CL	2	151/132			
			Jul	CL	1	93/66		18	442/437
			Sep	CL	2	75/113			
			Oct	CL	1	87/75			
			Nov	CL	1	49/44		19	440/459
			Dec	CL	1	116/133			

Table 10. Greenland halibut length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age Samples		
					No.	No. meas.	No.	No. aged	
Canada (N)	3K	GN	Jul	CL	2	210/306	}	-	148/193
			Aug	CL	8	836/1288			
Denmark (G)	1D	LL	Mar	CL	2	1833	}	-	-
			May	CL	1	840			
			Jun	CL	1	1112			
German Dem. Rep.	3K	OTB	Feb	RC	1	93/107	1	95/109	
Poland	2J+3K	OTB	Jan	CC	2	1230	-	-	
			Feb	CC	1	516	-	-	
			Mar	CC	2	1441	-	-	
USSR	0	OTB	Jan	RC	5	456/726	-	-	

Table 11. Winter flounder length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Canada (M)	4T	OTB	Jun	CL	2	157/193	2	61/76	
			Jul	CL	1	51/149	1	19/28	
USA	5Ze	OTB	Jan	CL	7	396	}	-	-
			Feb	CL	8	483			
			Mar	CL	2	142			
			Apr	CL	12	734			
			May	CL	9	527			
			Jun	CL	2	194			
			Jul	CL	10	501			
			Aug	CL	10	556			
			Sep	CL	16	985			
			Oct	CL	15	951			
			Nov	CL	16	899			
			Dec	CL	9	555			
	5Zw	OTB	Mar	CL	3	309	-	-	
			May	CL	2	190	-	-	
			Nov	CL	1	57	-	-	
	6A	OTB	May	CL	1	104	}	-	-
Jun			CL	3	374				
Jul			CL	2	270				
Dec			CL	1	147				

Table 12. Summer flounder length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
USA	5Ze	OTB	Aug	CL	2	136	}	-	-
	5Zw	OTB	May	CL	1	63			
			Jun	CL	2	99			
			Oct	CL	6	261			
	6A	OTB	Feb	CL	4	270			

Table 13. Windowpane flounder length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
USA	5Ze	OTB	Feb	CL	5	35/502	}	-	-
			Mar	CL	2	32/245			
			Apr	CL	7	121/761			
			Dec	CL	2	95/182			
	5Zw	OTB	Feb	CL	2	57/214			
			Mar	CL	2	12/252			
			May	CL	2	40/270			

Table 14. Roundnose grenadier length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Denmark (G)	1C	OTB	Nov	CL	1	141	-	-
German Dem. Rep.	1C	OTB	Dec	CC	1	94/53	1	38/36

Table 15. White hake length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
USSR	4W	OTB	Mar	CC	1	300	-	-

Table 16. Atlantic herring length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
France (M)	5Ze	OTM	Sep	CC	8	1608	-	-	
Fed. Rep. Germany	4X	OTB	Mar	RC	3	424	2	192	
		OTB	Mar	RC	30	6158	11	814	
	OTM	Aug Sep	CC CC	6 4	612 404	} 10	988		
German Dem. Rep.	5Ze	OTB	Mar	RC	30	4734	7	698	
		OTM	Aug Sep	CC CC	4 32	1011 10275	} 27	2462	
Japan	5Ze	OTB	Aug	CC	3	300	}	-	
			Sep	CC	34	3733			
			Oct	CC	8	1009			
Poland	5Ze	OTB	Apr	RC	7	1874	2	206	
		OTM	Sep	CC	26	8304	}	11	699
			Oct	CC	18	5819			
		Nov	CC	2	634	9	509		
	5Zw	OTB	Mar	RC	5	1467	1	109	
	6A	OTB	Mar	RC	3	714	1	106	
	OTM	May	CC	4	1291	3	301		
USSR	4W	OTB	Sep	CC	2	327	-	-	
		OTM	Sep	CC	1	200	-	-	
	5Z	OTB	Mar	CC	22	4472	-	138	
		OTM	Apr	CC	11	2194	}	-	270
			May	CC	12	2409			
	Sep	CC	40	8000	-	126			
		Oct	CC	66	13200	-	143		

Table 16. Atlantic herring (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples				
					No.	No. meas.	No.	No. aged			
USA	5Y(North)	(NS)	Jan	CC	2	200	}	2	200		
			May	CC	1	100		16	433		
			Jun	CC	20	1846		}	75	1544	
			Jul	CC	30	2725					
			Aug	CC	36	3408					
			Sep	CC	28	2743					
			Oct	CC	26	3094					
			Nov	CC	7	682					
			Dec	CC	1	149	}	33	657		
			Jan	CC	3	155					
			5Y(South)	(NS)	Mar	CC	13	730	}	11	276
					Apr	CC	6	392			
	May	CC			3	250					
	Jun	CC			2	80	}	12	395		
	Jul	CC			4	268					
	Aug	CC			10	593					
	Sep	CC			3	58					
	Oct	CC			8	901					
	Nov	CC			2	123					
	Dec	CC			8	582	}	10	217		
Jan	CC	8			582						
5Zw	(NS)	Jan			CC	15	1450	}	22	555	
		Feb	CC	10	572						
		Mar	CC	7	438						
		Apr	CC	1	53	1	54				

Table 17. Atlantic mackerel length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Bulgaria	5Ze	OTM	Jan	CC	4	1275	}	26	1259
			Feb	CC	10	3906			
			Mar	CC	12	4603			
	5Zw	OTM	Jan	CC	10	3551	}	26	1259
			Feb	CC	2	713			
			Mar	CC	5	1600			
	6A	OTM	Jan	CC	6	1973	}	26	1261
			Feb	CC	4	1493			
			Mar	CC	2	959			
Canada (M)	4T	PS	Jul	CC	2	200	}	-	46
			Oct	CC	1	100		-	50
	4Vn	GN	Jun	CC	10	1000	}	-	296
			Jul	CC	4	400		-	160
			Aug	CC	1	100		-	-
			Aug	LHP	CC	4		400	-
	4W	GN	Oct	CC	8	800	}	-	278
			Jul	CC	1	100		-	53
	4W	GN	May	CC	4	400	}	-	140
			Jun	CC	1	100		-	-
			Nov	CC	1	100		-	25
May			FPN	CC	1	100		-	23

Table 17. Atlantic mackerel (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
Canada (M) (cont't)	4X	GN	May	CC	4	400	}	-	207	
			Jun	CC	2	200				
			Jul	CC	1	100				
			Aug	CC	1	100				
			Sep	CC	3	300				
		FPN	May	CC	2	200	}	-	301	
			Jun	CC	5	500				
			Jul	CC	2	200				
			Aug	CC	1	100				
			Sep	CC	2	200				
			Oct	CC	1	100				
FWR	Oct	CC	1	100	-	33				
Canada (N)	3K	SB	Nov	CL	2	100	}	2	101	
			PS	Aug	CL	2				100
		FPN	Aug	CL	4	195	}	6	260	
	Sep		CL	2	65					
	Oct		CL	1	20					
	3L	SB	Sep	CL	2	75	}	2	75	
			Oct	CL	1	50				
		PS	Jul	CL	2	100	}	9	397	
			Aug	CL	2	100				
			Sep	CL	5	197				
			Oct	CL	4	150				
			Nov	CL	2	75				
		GN	Jun	CL	2	75	}	6	225	
			Aug	CL	2	100				
	Sep		CL	4	200					
FPN	Aug	CL	2	75	}	2	75			
		CL	2	100						
4R	FPN	Jul	CL	8	375	8	375			
German Dem. Rep.	5Ze	OTM	Oct	CC	4	603	}	1	193	
			Nov	CC	19	5435				
	6A	OTM	Jan	CC	3	807	}	9	398	
			Feb	CC	12	3479				
			Mar	CC	23	7838				
			Apr	CC	22	3392				
			May	CC	5	860				
Japan	6A	OTB	Feb	CC	2	264	}	-	-	
			Mar	CC	3	307				
	6B	OTB	Mar	CC	1	177	}	-	-	
			May	CC	2	96				
	Poland	5Ze	OTB	Mar	RC	4	1958	}	-	-
				Apr	RC	1	1630			
5Zw		OTB	Apr	RC	2	386	}	-	-	
			OTM	Oct	CC	1				508
6A		OTB	Mar	CC	5	1702	}	8	400	
			Mar	CC	3	628				
			May	CC	3	1390				
			Jun	CC	2	585				
			Oct	CC	1	365				
6A		OTB	Mar	RC	3	157	-	-		

Table 17. Atlantic mackerel (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples						
					No.	No. meas.	No.	No. aged					
Poland (cont'd)	6A	OTM	Jan	CC	3	1113	}	3	302				
			Apr	CC	6	1936		7	574				
			May	CC	7	2344							
	6B	OTM	Jan	CC	4	1100	}	5	403				
			Feb	CC	1	292							
			Apr	CC	2	804		14	1198				
			May	CC	6	1942							
	6C	OTM	Jan	CC	2	537	}	6	496				
			Feb	CC	2	455							
			Mar	CC	2	480							
	USSR	4VWX	OTB	Apr	CC	2	482	}	-	-			
				May	CC	4	800						
Jul				CC	10	2002							
Aug				CC	1	200							
Sep				CC	13	2600							
Nov				CC	3	600							
5Z		OTB	Feb	CC	2	406	}	-	-				
			Mar	CC	98	19578							
			Apr	CC	40	7900							
			May	CC	35	7021				-	360		
			Jun	CC	3	600							
			Jul	CC	3	600							
			Aug	CC	1	200							
			Sep	CC	2	400							
			OTM	Jan	CC	29				5756	}	-	282
				Feb	CC	9				1775			
Mar		CC		111	22300								
Apr		CC		5	1000								
6NK		OTB	Jan	CC	1	200	}	-	-				
			Apr	CC	12	2481							
			OTM	Jan	CC	6				1198			
USA	5Y	FPN	Jun	CL	1	65	}	1	46				
			Jul	CL	1	100		1	32				
	5Zw	OTB	Apr	CL	1	49	}	-	-				
			May	CL	1	54							

Table 18. Alewife length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
USSR	4W	OTB	Apr	CC	13	2600	}	-	-
			May	CC	62	12358			
	5Z	OTB	Mar	CC	1	200	}	-	-
			Apr	CC	5	1000			
			May	CC	1	200			
			Jul	CC	1	180			

Table 19 Atlantic argentine length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
USSR	4W	OTB	Apr	CC	6	1233	}	-	356
			May	CC	76	15136			
			Jun	CC	7	1400			
	4X	OTB	Jul	CC	2	300	}	-	266
			Aug	CC	6	1210			

Table 20. Atlantic butterflyfish length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Japan	4X	OTB	Feb	CC	1	198	}	-	-
	5Zw	OTB	Jan	CC	1	120	}	-	-
			Feb	CC	5	893			
			Mar	CC	2	214			
	6A	OTB	Mar	CC	12	1270	}	-	-
			May	CC	2	61			
	6B	OTB	Mar	CC	21	2239	}	-	-
			Apr	CC	40	2966			
			May	CC	1	81			
	6C	OTB	Apr	CC	12	832	}	-	-
			May	CC	3	340			
			Oct	CC	4	546			
USSR	5Z+6	OTB	Jan	CC	1	200	}	-	-
			Mar	CC	1	200			
			Apr	CC	6	789			
			May	CC	11	2213			
			Jun	CC	2	400			
			Jul	CC	3	635			
			Aug	CC	2	434			

Table 21. Capelin length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Canada (N)	2J	OTM	Nov	RC	3	77/73	3	77/73
	3K	OTM	Nov	RC	12	272/327	3	272/327
	3L	OTM	Jul	RC	3	10/140	3	10/140
			Jun	CC	5	243/3	5	243/3
			Jul	CC	5	199/47	5	199/47
		MIS	Jun	CC	1	50/0	1	50/0
	3N	OTM	Jun	RC	19	277/673	19	277/673
	3O	OTM	Jun	RC	1	10/40	1	10/40
			Jul	RC	1	4/46	1	4/46
	3Ps	SB	Jun	CC	15	563/187	15	563/187
			Jul	CC	1	46/4	1	46/4

Table 21. Capelin (continued)

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
Japan	3N	OTB	Jun	CC	1	200	-	-
Norway	3K	OTM	Jul	RC	1	25/25	1	25/25
	3N	OTM	Jun	RC	10	306/509	10	295/482
			Jul	RC	5	243/157	5	243/157
Poland	3N	OTM	Jun	CC	2	1127/3272	2	298/302
	3O	OTM	Jun	CC	1	191/5322	1	187/305

Table 22. Short-finned squid (Illex) length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Japan	5Ze	OTB	Aug	CC	1	203	-	-	
	6A	OTB	Jul	CC	1	88	}	-	-
			Aug	CC	2	200			
			Sep	CC	1	205			
			Nov	CC	2	202			
	6B	OTB	Apr	CC	20	2251	}	-	-
			May	CC	8	1772			
			Jun	CC	2	354			
			Jul	CC	9	925			
			Aug	CC	4	494			
			Sep	CC	4	582			
			Dec	CC	3	404			
	6C	OTB	Apr	CC	4	419	}	-	-
May			CC	7	705				
Poland	5Z	OTB	May	CC	13	4533	}	-	-
			Jun	CC	3	1259			
USSR	4VWX	OTB	Apr	CC	2	390	}	-	-
			May	CC	3	606			
			Jun	CC	37	7444			
			Jul	CC	27	5432			
			Aug	CC	6	1202			
	5Z	OTB	Jan	CC	10	1942	}	-	-
			Feb	CC	20	3905			
			Mar	CC	7	1390			
			May	CC	12	2317			
			Jun	CC	8	1600			
			Jul	CC	13	2610			
	6NK	OTB	Aug	CC	8	1600	}	-	-
			Jun	CC	36	7265			
			Jul	CC	82	16434			
			Aug	CC	22	4429			

Table 23. Long-finned squid (*Loligo*) length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
Japan	5Ze	OTB	Jan	CC	3	504	}	-	-
			Feb	CC	2	151		-	-
			Dec	CC	2	393		-	-
	5Zw	OTB	Mar	CC	1	108	-	-	
			6A	OTB	Jan	CC	1	200	}
	Mar	CC			8	876	-	-	
	Apr	CC			1	159	-	-	
	May	CC			1	53	-	-	
	Nov	CC			2	292	-	-	
	6B	OTB	Mar	CC	14	1325	}	-	-
			Apr	CC	37	3958		-	-
			May	CC	1	91		-	-
			Nov	CC	2	384		-	-
			Dec	CC	2	391		-	-
	6C	OTB	Mar	CC	4	381	}	-	-
			Apr	CC	13	1177		-	-
			May	CC	6	548		-	-
Oct			CC	2	300	-		-	
Nov			CC	2	300	-		-	
Poland	5Z	OTB	Mar	RC	4	1207	-	-	
			Apr	RC	8	2142	-	-	
			May	CC	12	488	-	-	
	6A	OTB	Mar	RC	15	3330	-	-	
USSR	5Z	OTB	Jan	CC	69	13829	}	-	-
			Feb	CC	122	24472		-	-
			Mar	CC	45	8941		-	-
			Apr	CC	3	600		-	-
			May	CC	15	2999		-	-
USA	5Ze	OTB	Nov	CL	1	94	-	-	
	5Zw	OTB	Feb	CL	1	90	}	-	-
			Apr	CL	2	166		-	-
			May	CL	2	217		-	-
			Jul	CL	1	100		-	-
			Aug	CL	1	103		-	-
			Sep	CL	4	403		-	-
			Oct	CL	2	126		-	-
	Nov	CL	4	209	-	-			
	6A	OTB	Nov	CL	2	183	-	-	

Table 24. Sea scallops length and age sampling data for 1975.

Country	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
USA	5Y	DRB	Sep	CL	1	335	-	-
			5Ze	DRB	Jan	CL	3	976
	Feb	CL			2	333		
	Mar	CL			5	1750		
	Oct	CL			1	206		
	Nov	CL			3	779		
	Dec	CL			1	104		
	6A	DRB	Feb	CL	1	508	}	-
			Apr	CL	4	1475		
			May	CL	5	1662		
			Jun	CL	4	1546		
			Jul	CL	4	1288		
			Aug	CL	4	1293		
			Sep	CL	4	1666		
			Oct	CL	4	1372		
Nov			CL	2	981			

PART 4

Sampling Data from Research Vessel Surveys, 1975

The following table contains a list of available sampling data from research vessel surveys conducted in the ICNAF Area by certain countries in 1975. All of these data were reported as research vessel samples as indicated by the abbreviation "RC" under the heading "Type of Sample". Abbreviations for gears are defined on page 21. In the case of otter trawls, the samples were reported as taken from catches retained in small-meshed codends or codends with small-meshed liners.

Species	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
<u>CANADA (Q)</u>									
Atlantic cod	3Pn	OTB	Apr	RC	3	317			
	3Ps	OTB	Mar	RC	2	370			
			Apr	RC	1	188			
	4R	OTB	Apr	RC	3	694			
	4S	OTB	Apr	RC	1	232			
	4T	OTB	Apr	RC	1	107			
	4Vn	OTB	Mar	RC	15	2263			
	4Vs	OTB	Mar	RC	12	655			
Atlantic redfish	3Pn	OTB	Apr	RC	4	1203	Some of these redfish samples were sexed and some not sexed.		
	3Ps	OTB	Apr	RC	4	1296			
	4R	OTB	Apr	RC	1	125			
	4Vn	OTB	Mar	RC	9	2157			
	4Vs	OTB	Mar	RC	6	1434			
Pollock	3Ps	OTB	Mar	RC	3	278			
American plaice	4T	OTB	Apr	RC	1	202			
	4Vn	OTB	Mar	RC	7	860			
	4Vs	OTB	Mar	RC	13	1677			
Witch flounder	4Vn	OTB	Mar	RC	7	215			
White hake	4Vn	OTB	Mar	RC	3	446			
<u>DENMARK (G)</u>									
Atlantic cod	1B	FPN	Aug	RC	1	216	1	91	
	1C	LHP	Aug	RC	2	54	-	-	
	1D	OTB	May	RC	1	232	-	-	
	1E	OTB	Apr	RC	1	2431	}	2	338
			May	RC	1	1302			
			Jun	RC	1	335			
			Aug	RC	1	514			
			Nov	RC	1	773			
	Atlantic redfish	1A	OTB	Jul	RC	7	1452		
Aug				RC	4	3544			
Sep				RC	7	619			
Oct				RC	9	2143			

Species	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples			
					No.	No. meas.	No.	No. aged		
DENMARK (G) (Cont'd)										
Atlantic redfish	1B	OTB	Ju1	RC	2	1292				
			Aug	RC	3	991				
			Sep	RC	1	119				
			Oct	RC	1	190				
	1C	OTB	Apr	RC	1	147				
			Ju1	RC	1	780				
	1D	OTB	Jan	RC	1	3077				
			Apr	RC	2	1643				
			Jun	RC	2	704				
			Aug	RC	1	743				
			Oct	RC	1	696				
	1E	OTB	Nov	RC	2	1284				
			Apr	RC	1	440				
			May	RC	1	295				
Aug			RC	1	1329					
1F	OTB	Nov	RC	1	272					
		Oct	RC	2	1444					

American plaice	1A	OTB	Ju1	RC	7	307				
			Sep	RC	7	671				
			Oct	RC	8	165				
	1B	OTB	Ju1	RC	2	320				
	1C	OTB	Apr	RC	1	402				
			Jun	RC	1	1380				
			Ju1	RC	1	484				
			Aug	RC	1	400				
	1D	OTB	Jan	RC	3	1074				
			Apr	RC	2	3337	}	1		
			May	RC	1	674				
			Jun	RC	2	1300				
			Aug	RC	1	204				
			Oct	RC	1	324				
			Nov	RC	2	612				
			1E	OTB	Apr	RC			3	1205
	May	RC	1		856					
Jun	RC	1	150							
Aug	RC	1	829							
1F	OTB	Nov	RC	1	267					
		Oct	RC	2	206					

Greenland halibut	1A	OTB	Ju1	RC	7	6418				
			Aug	RC	4	460				
			Sep	RC	7	1813				
			Oct	RC	9	2784				
	1B	LLS	Sep	RC	2	58				
			OTB	Ju1	RC	1	293			
		OTB	Aug	RC	2	240				
			Sep	RC	1	231				
			Oct	RC	1	833				
	1C	OTB	Jun	RC	1	225				
	1D	OTB	Jan	RC	1	230				
			Apr	RC	2	934				
			Jun	RC	2	705				
			Nov	RC	3	220				
	1E	OTB	Apr	RC	1	156				
Aug			RC	1	111					

Species	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples	
					No.	No. meas.	No.	No. aged
<u>DENMARK (G) (Cont'd)</u>								
Greenland cod (G. ogac)	1D	OTB	Jun	RC	3	249		
			Nov	RC	1	70		
		LHP	Jun	RC	1	68		
	1E	OTB	Apr	RC	2	102		
Polar cod (G. saida)	1A	OTB	Jul	RC	7	551		
Wolffish (A. lupus)	1B	OTB	Jul	RC	1	29/89		
Lumpfish	1D	GNS	May	RC	3	68/115		
Arctic Char	1D	SB	Jun	RC	1	736		
Shrimp (P. borealis)	1B	OTB	Jul	RC	4	3577		
			Jun	RC	1	478		
	1C	OTB	Jul	RC	1	1142		
			Apr	RC	1	549		
			Jun	RC	1	804		
			Aug	RC	1	406		
	1D	OTB	OCT	RC	1	578		
			Apr	RC	1	391		
			Jun	RC	1	1245		
	1F	OTB	Oct	RC	2	1379		
<u>FRANCE (SP)</u>								
Atlantic cod	3Pn	OTB	Feb	RC	11	876		
	3Ps	OTB	Feb	RC	13	612		
	4R	OTB	Jan	RC	31	5484		
	4Vn	OTB	Feb	RC	7	2628		
	4Vs	OTB	Feb	RC	10	1902		
Atlantic redfish	2J	OTB	Jul	RC	6	1108		
	3K	OTB	Jul	RC	13	3974		
	3L	OTB	Jul	RC	4	464		
	3Pn	OTB	Feb	RC	9	2417		
	3Ps	OTB	Feb	RC	8	1295		
	4R	OTB	Jan	RC	9	2418		
			Feb	RC	3	744		
			Jul	RC	8	1850		
	4Vn	OTB	Feb	RC	3	346		
	4Vs	OTB	Feb	RC	5	803		
			May	RC	1	166		
	4W	OTB	May	RC	1	152		
	4X	OTB	May	RC	3	268		
	5Z	OTB	May	RC	3	532		
Atlantic herring	4R	OTB	Jan	RC	10	1152		
			Apr	RC	3	901		
	4S	OTB	Apr	RC	3	377		

Species	ICNAF Div.	Gear	Month	Type of sample	Length samples		Age samples		
					No.	No. meas.	No.	No. aged	
<u>FRANCE (SP) (Cont'd)</u>									
Atlantic herring	4T	OTB	Apr	RC	7	893			
	4Vs	OTB	Feb	RC	1	118			
			Apr	RC	5	725			
	4W	OTB	Apr	RC	1	405			
Squid - <i>Loligo</i>	5Ze	OTB	May	RC	23	1044			
			Nov	RC	15	1804			
	5Zw	OTB	May	RC	2	1697			
			Dec	RC	12	2617			
	6A	OTB	Dec	RC	8	1817			
Squid - <i>Illex</i>	4X	OTB	May	RC	11	1083			
			Nov	RC	5	500			
	5Ze	OTB	May	RC	23	1904			
			Nov	RC	15	1422			
	5Zw	OTB	Dec	RC	12	596			
6A	OTB	Dec	RC	8	995				
<u>FED. REP. GERMANY</u>									
Atlantic redfish	2J	OTB	Nov/Dec	RC	13	1990/1121	}	12	165/114
	3K	OTB	Nov/Dec	RC	7	531/503			
American plaice	2J	OTB	Nov/Dec	RC	45	2755/1648			
	3K	OTB	Nov	RC	19	1252/934			
Witch flounder	2J	OTB	Nov/Dec	RC	11	13/16			
	3K	OTB	Nov	RC	12	73/131			
Greenland halibut	2J	OTB	Nov/Dec	RC	48	1549/1861			
	3K	OTB	Nov	RC	22	1116/1255			
Polar cod (<i>G. saida</i>)	2J	OTB	Nov/Dec	RC	26	759			
	3K	OTB	Nov	RC	5	838			
Capelin	2J	OTB	Nov/Dec	RC	24	1091			