

ANNUAL MEETING - JUNE 1966

Notes for the Cornpletion of Form STANA $1 W$
(also FAO Fisheries Circular No.63)

# NOTES FOR THE COMPLETION OF FORM•STANA $1 W$ 

Prepared by
The Secretary,
Continuine workine Party on F'ishery Statistics
in the North Atlantic Area
Fishery Economics and Products Division
FAO Lepartment of Fisheries

WI/29124/1/E

FAO Fisheries Circular (FAO Fish. Circ.)
These doouments, given very restrioted distribution, are nostly ahort notes, instruations for the oampletion of statisiioal forms and questiomasires, lists on various topios or provisional versions of doounents which may eventually be issuad in finil form in othar serios.

Some oiroulara, presenting statistioal tables with provisiomal data, are prapared as papers for oonforences, ocmmittees, ocmmissions, working parties; these tebles may oventually be issuad after rovisian in the "fearbook" or "Bulletin of Fishery Statistiog".

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIORS INTERNATIONAL COMOSSION FOR THE NORTHWEST ATLANTIC FISEETYIE

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NOTESTORTHESOMPLETION
    OF FORM STANA 1W
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Deadline for submitting completed yellow top copy of form STANA $1 W$ to ICNAF, and the blue middle copy to FAO with calendar year data for 196


## 1. GENERAL NOTES

### 1.1 USE OF FORM STANA 1W

1.11 Form STANA $1 W$ is used by national offices to report annually to ICNAF and FAO, for each of the Divisions 1/ comprising the ICNAF Statistical Area 1/ the following date according to classes of rishine units 2/:
(a) FISHING EFFORT MEASURES, on a monthly basis, concerning fishing operetions in each of these ICNAF Divisions;
(b) NORLINAL CATCHES (quantities on a live weight basis) broken down by species on a monthly basis with a calendar year total in each of the Divisions of the ICliAF Stetistical Area.
1.12 The nominal catoh data ahould refer to the "calendar year of capture" and to the "month of capture", i.e., the year and month during which the quantities of fish reported were cauEht.
1.13 For each of the Divisions of the ICNAF Statistical Area as many separate forms STANA $1 \%$ must be completed as there are classes of fishing units operating there durirg the calendar years and according to main species sought.
1.14 Form STANA $1 W$ consists of three sheets yellow, blue and white interleaved with monocarbons; after completion these sheets ere to be distributed as described in Section 1.2 below.
1.15 In addition to the STANA $1 W$ forms, single pages (printed in red on heavy white paper) are also provided to the national offices for drafting purposes. These white drafting pages are tc be retained in the naticnal officea.
1.2 EBTURN OF COMPLTMED FORLI STANA 1 K

Form. STANA 1 m must be completed in three copies for distribution as follows:
the white copy is detached for retention in the national office;
the blue copy is sent by airmail to:
The Secretary, Continuing Working Party on Fishery Statistics
In the North Atlantic Area
Fishery Economics and Products Division
Department of Fisheries FAO

ROMA, Italy

The Statistician
ICNAF
c/o Bedford Institute of Oceanography
P.O. Box 638

DARTMCUTH, Nova Ścotia, Canada

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## 2. CLASSES OF FISHING UNITS

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2.1 CONPLETION BY REPORTING NATIONAL OFFICE OF BOXES (a), (b), (c), AND (d) OF FORM STANA 1W
    2.11 In box (a) insert whichever of the following categories of fishing_gear (method) is
    pertinent:
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        1. Otter trawls
        2. Pair trawle
        3. Beam trawls
        4. Danish seines
        5. Purse seines, ring nets, etc.
        6. Beach seines
        7. Drift gill nets
        8. Set gill nets (bottom nets)
        9. Fixed gear (weirs, traps, pots, eto.)
        10. Long-lines
        11. Hand-lines
        12. Dory-type gear
        13. Other lines
        14. Dredges
        15. Harpoons
        16. Other gear
        17. Gear that cennot be specified
    2.12 Leave blank box (b).
    2.13 In box (c) insert whichever of the following categories of size category (tonnage class)
        of the fishing craft is pertinent:
    Size category no. Description (Gross Regieter Tonnage)
            1.
                            50 GRT and less
    2. 

51-150 GRT
$\begin{array}{ll}\text { 3. } & 51-150 \text { GRT } \\ 4 . & 151-500 \mathrm{GRT}\end{array}$
4.
501-900 GRT
901-1800 GRT
over 1800 GRT
2.14 In box (d) insert particulars of the main spectes sought. This is defined as the species towards which the fishing effort was mainly directed, as determined by the manner or method of fishing. In many cases this is one species, e.g. cod or redfish. The word "mixed" should be inserted when two or more species are sought. The word "unknown" should be inserted when the main species cannot be determined.

## 3. COUNTRY, FISHING AREA, ETC.

3.1 CONPLETION BY REPORTING NATIONAL OFFICE OF BOXES ( $\theta$ ), ( $f$ ), ( $g$ ), ( $h$ ) AND ( $i$ ) OF FORM STANA 1 W
> 3.11 In box (e) insert the designation (number and alphabetic letter) of the respective Division of the ICNAF Statistical Area where the catohes were made; note these designations as follows:

$$
\begin{aligned}
& \text { Subarea } 1 \text { - Divisions 1A, 1B, 1C, 1D, 1E, 1F } \\
& \text { Subarea } 2 \text { - Divisions 2G, 2H, 2J } \\
& \text { Subarea } 3 \text { - Divisions 3K, 3L, 3M, 3N, 30, 3Pn, 3Ps } \\
& \text { Subarea } 4 \text { - Divisions 4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X } \\
& \text { Subarea } 5 \text { - Divisions 5Y, 5Z }
\end{aligned}
$$

$1 \mathrm{NK}, 2 \mathrm{NK}, 3 \mathrm{NK}, 4 \mathrm{NK}, 5 \mathrm{NK}$ - Subarea known, but divisionel breakdown thereof not known.
3.12 In box (f) insert the name of the reporting country.
3.13 In box (g) insert the calendar year (twelve-months period, 1 January to 31 December).
3.14 In box (h) insert the numbering of the form as part of a series of forms completed in respect of each Division.
3.15 Leave blank box (i).

### 3.2 SUPPLELENTARY NOTES ON STATISTICAL AREA

### 3.21 Definition of the "ICNAF Statiatioal Area"

The waters of the Northwest Atlantic bounded by a line beginning at a point on the coast of Rhode Island in $71^{\circ} 40^{\prime}$ west longitude, thence due south to $39^{\circ} 00^{\prime}$ north latitude, thence due east to $42000^{\prime}$ west longitude; thence due north to $59^{\circ} 00^{\prime}$ north latitude; thence due west to $44^{\circ} 00^{\prime}$ west longitude; thence due north to the coast of Greenland; thence along the west coast of Greenland to 78010' north latitude; thence southward to a point at $75^{\circ} 00^{\prime \prime}$ north latitude and $73^{\circ} 3^{\prime}$ ' west longitude; thence along a rhumb line to a point at $69^{\circ} 00^{\prime}$ north latitude and $59^{\circ} 00^{\prime}$ west longitude; thence due south to $61^{\circ} 00^{\prime}$ north latitude; thence due west to $64^{\circ} 30^{\prime \prime}$ west longitude; thence due south to the coast of Labrador, thence in a southerly direotion along the coast of Labrador to the southern terminus of its boundary with Quebec; thence in a westerly direction along the coast of Quebec, and in an easterly and southerly direction along the coasts of New Brunswick, Nova Scotia, and Cape Breton Island to Cabot Strait; thence along the coasts of Cape Breton Irland, Nova Scotia, New Brunswick, Maine, New Hampshire, Messachusetts, and Rhode Island to the point of beginning.
3.22 See attached map of the North Atlantic for the ICNAF Stetistical Area by "Subareas" and "Divisions".

## 4. FISHING FFFORT MRASUKES

4. 1 COAILETION BY REPORTING NATIONAL OFFICE OF LINES 1, 2, 3, 4 AND 7 OF FORM STANA TW
4.11 Effort data on a morthly basis are to be inserted, according to priorities specified in Section 4.12 below. Detailed definitions of the effort measures to be reported on lines 1 to 4 are given in Section 4.2 below.
$\therefore \cdot 12$ In giving data on fishing effort the following priorities are to be followed:
First priority: both lines 1 and 3
Second priority: line 2 ("No. of hauls, drags or sets made") should be completed only when information on "No. of hours or 1000 hooks fished" (line 1) is not availabla;
line 4 ("No. of days on Grounds") should be completed only when information on "number of days fished" (line 3) is not available.
5. 13 Line 7 should show the extent to which effort data inserted on line 1 (or line 2) and line 3 (or line 4) were not recorded but were obtained by sampling or estimated; insert "none" if the data were $100 \%$ recorded.
A.: SUPI LEWENTARY NOTES: DFFINITIONS OF FISHING EFFORT MEASURES (LINES 1, 2, 3 AND 4)

Line 1 - No. of hours or 1000 hooks fished
No. of hours fished: for otter trawls this is defined as "the total number of hours during which the trawl was on the bottom and fishing"; if countries are unable to report so precisely they should eive the nearest approximation, with the precise definition of the approximation used.

No. of hours fished: for dory vessels this is defined as "the number of hours the dory fleet is absent from the mother vessel times the number of dories".

Thousand of hooks fished: this is defined as "the number of hooks used in each set times the number of sets". This figure should be calculated to the nearest thousand hooks.

For other fishiny gear: the number of hours the nets, seines, traps, pots, dredses, harpoons, etc., were used in the fishing operations. This is the product of the number of hours per unit times the number of units.

Line 2 - No. of hauls, draes or sets made
The number of times the fishing gear has been hauled or dragged or set, whi chever description is appropriate to the fishing gear or technique used.

Line 3 - No. of days fished
The number of days (24-hours periods, reckoned from midnight to midnight) on which any fishing took place.

For those fisheries in which searching is a substantial part of the fishing operation, days "on grounds" in which searching but not fishing took place, should be included in the days fished data.

Taking into account the inclusion of "searching time" the definition of "number of days fished" could be further refined at the national level if possible as follows: "The number of days (24-hours periods, reckoned from midnight to midnight) on which the fishing craft was on the fishing grounds, intent on catching fish (not counting the time spent steaming to or from port and between grounds) minus the number of fishing days lost through delays from weather, breakdown or other factors".
$\therefore$ (concluded)
Line 4 - No. of days on erounds
This is derined as the number of days (24-hours periods, reckoneu from midnicht to midnight) in which the craft was on the fishing eround, and incluces in addition to the days fishing and searching also all the other days while the craft was on the ground.

## 5. NOMINAL CATCHES


5. 11 Complete the form by inserting anrual and monthly nominal catch data (landings converted from landed weight to live weight) for each of the categories listed in Column (c) on lines 8 through 77 of form STANA 1 iW (see the Lists of Northest Atlantic species under sections 6 and 7 below).

2012 A list on the conversion factors used to convert 1965 landings (landed weight) to nominal catch (live weight) should be provided; for subsequent years only ohanges in these conversion factors should be reported. The term "live weight" is equivalent to the concepts "round, fresh weight", "whole, fresh weight" or "ex-water weight"。 Nominal catch data should be given in metric tons expressed to the nearest metric ton.

If units other than metric units are used, give definitions. If data are given in numbers or capacity units please indicate also tile conversion factors to cal culate tire reiont equivalents.
E.13 wantities too small to be recorded should be shown by "申"; nil entries, when necessary for clarity, should be made by "-".
E. 14 Countries shouldi in the first instance complete lines 18, 19, 28, 29, 30, 33, 53, 71, 75, 76 and 77. The grand total shown on line 8 is the aggregate of the data or the above lines. These lines represent the quantities required by ICKi $F$.
5. 15 Lines $12,13,15,16,31$ through 36,39 through 47,49 through 51,54 and 55,57 through 59, 61 through 63, 65,66 are left blank for use by the national office to -nsert the names of the species included in the sub-totals of lines 74, 75, 76 and 77 . Lines 20 through 26 are to be used when breakdown for "Other flounders" is avallable.
E.:ú recregates of species to be included in the four special sub-totals given in lines 74, 75, 76 and 77 are as follows:

Other Groundfish (line 74) is to cover ALL groundfish species ("OG" speciec), EXCEPT Halibut, Other flounderg, Cod, Haddock, Silver hake, Rodfish.

Other Pelagic Fish (line 75) is to cover All pelagic fish ("FF" species) aXCHFT Ferrjne.
Other Fish (line 76) is to cover ALL species not classified as pelagic or demersal, i.e. ALL "OF" species.

Shellfish, etc. (line 77) is to cover all species included under the wroups appearing on lines 71, 7 ' and 73; that is "Crustaceans", "Lolluscs" and "Sea-cucunbers, sea-urchins, ascidians, etc.".

1. $\therefore$ SUPPLDMENTARY NOTES: STATISTICAL COVLRAGE

## 5.:1 Inclusions

The statistics should cover the quantities of the annual nominal catches of teleost and cartilaginous fish speoies, crustaceans, mollusos and other invertebrates, made by both commercial and subsistence fishermen operating in the ICNAF Statistical Area. Fish-farming and shellfish oulture in this area should also be included.

The statistics should include teleost and cartilaginous fish species, crustaceans, molluscs and other invertebrates, belonging to the folloving:

| $\begin{aligned} & \text { ISSCAAP } \\ & \text { Eroup no. } \end{aligned}$ | ISSCAAP groups |
| :---: | :---: |
| 12 | Sturgeons |
| 13 | River eels |
| 14 | Salmons, trouts, smelts, etc. |
| 15 | Shads |
| 21 | Plounders, halibuts, soles, etc. |
| 22 | Cods, hakes, haddocks, etc. |
| 23 | Rodfishes, basses, congers, otc. |
| 24 | Jacks, mullets, etc. |
| 25 | Herrings, sardines, anchovies, etc. |
| 26 | Tunas, boni tos, skipjacks |
| 27 | Siackerels, billfishes, cutlassfishes, etc. |
| 28 | Sharks, rays, chimaeras |
| 29 | Unsorted and unidentified fishes |
| 31 | Crustaceans |
| 32 | Liolluses |
| 33 | Sea-cucumbers, sea-urchins, ascidians, etc. |

## 5.č2 Exclusions

The statistics should exclude:
(a) Any diadromous and freshwater teleost fishes caught in freshwater fishing areas, i.e. rivers and lakes, ponds, etc. wi thin the inlend areas adjacent to the IClidF Statistical Area.
(0) The following marine aquatic organisms even when they are caught within the ICHAr Statistical Area:

Whales
Seals and miscellaneous aquatic manmals
iliscellaneous aquatic animals and residues
Aquatic plants
(c) Catches made by sport fishermen.
(d) Discarded catch, i.e. whole fish returned to the sea at the time of capture.
5.23 Incomplete ooverage

Indioate if any particular fish species is not oovered by the statistios provided on the various forms.

### 5.24 Statistioal treatment of diroot foroign landings

The atatistios on nominal oatohes (landings on a live weight basis) should inolude not only the catches landed by the craft from the reporting country in the harbours of that country, but also the nominal oatches landed in foreign ports by the reporting country's craft. Nominal catches landed in the reporting country by foreign fishing craft should be excluded and treated as importe.

Flease indiaate the extent to which the statistioal prooedures in your country comply with this internationally reoommended praotioe.

### 5.3 BASIC DEFINITIONS

5.31 Definitions of "nominal oatohes" and "landings"

| Term | Definition | Synonyms | Weight basis for expressing data |
| :---: | :---: | :---: | :---: |
| CATCH | The term "catch", unless otherwise specified, refers to the "nominal catch", i.e., tho live weight equivalent of the landings | Landings, round fresh Landings, whole fresh Landings, ex-water weight | Li.ve weight |
| HONTAL CATCH | The live weight equivalent of the landings | Landings, round fresh Landings, whole fresh Landings, ex-sater weight | Live weight |
| LADINGS | The weight of fish and fish products brought ashore, i.e., the actual weight of the quantities landed. This weight represents the net weight of the çutted, eviscerated, filleted, frozen, oured, canned fish and fish products, fish meals, oils, eto. at tile time of landine | Landings, landed weight | Landed weisht |
| ircss cstcy | The :feist of the fisll taken from soa | Real catch | Live weight |
| Discarded catch | That part of the gross oatch which, as whole fish, is returned to the sea at the time of oapture | - * | Live weicht |
| Retained catch | That part of the gross catch which, as whole fish, is not discarded | -•• | Live weight |

5.32 Notes on "retained catch" "nominal oatches" and "landincs"
5.32.1 The difference between "retained catch" and "landings" is accounted for by:
(a) Consumption by the crew
(b) Use for bait
c) Dumping of whole fish because of spoilage or for other reasons
(d) Dumping of guts, heads and other parts of the fish beoause of prooessing
(e) Loss or gain of fluid content

Items (a), (b) and (c) above account for the difference between "retained catch" and "nominal catch"; items (d) and (e) account for the difference between "nominal oatch" and "landings".
5.32.2 The term "landinge" is not used synonymously with "number of arrivels" or "trips"。
5.32.3 It is atressed that the live equivalente (nominal oatches) of landines of ALh products, for example meals and oils, from whole so-oalled "industrial" insin are to be inoluded ir the data to be reported. Reporting offices should ensure that such meal, oil and other "industrial" products, when manufactireo from visoera, livers, etc. of fish for human food, should not be inoluded in these calculations -- these raw materials would already be covered by the live equivalent (nominal oatches) of the food fish landings.
6. LIST OF NORTHWEST ATLANTIC SPECIES ARRANGED ACCORDING TO THE ICNAF GROUPS

| $\begin{aligned} & \text { STANA } 1 \mathrm{~W} \\ & \text { Line No. } \end{aligned}$ | $\frac{\text { ISSCAAP }}{\text { Group }}$ | GROUPS and names used in ICNAF Statistioal Bulletin | $\frac{\text { ICNAF }}{\text { No: }}$ | $\frac{\text { ICNAF }}{\text { Group }}$ | Scientific name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| GROUNDFISH |  |  |  |  |  |
| 28 | 22 | Cod | 39 | $a$ | Gadus morhux |
| 29 | 22 | Haddook | 41 | G | Nelanogramms aeglefinus |
| 30 | 22 | Silver hake | 44 | 0 | Nerluccius bilinearis |
| 38 | 23 | Redfish | 32 | G | Sebastes marinus |
| 18 | 21 | Halibut | 48 | $G$ | Hippoglossus hippoglossus |
| FLOUNDERS, OTHER THAN HALIBUT |  |  |  |  |  |
| 20-26 | 21 | American plaioe | 52 | $F$ | Hippoglossoides platessoldes |
| 20-26 | 21 | Greenland halibut | 49 | $F$ | Reinhardtius hippoglossoldes |
| 20-26 | 21 | Sunmer flounder | 54 | F | Paralichthys dentatus |
| 20-26 | 21 | Wintar flounder | 53 | $F$ | Pseudopleuronectes americanus |
| 20-26 | 21 | Witoh | 50 | F | Glyptocephalus cynoglossus |
| 20-26 | 21 | Yellowtail flounder | 51 | $F$ | Limanda ferruginea |
| HERRING |  |  |  |  |  |
| 53 | 25 | Herring | 7 | PF | Clupea harengus |
| OTHER GROUNDFISH |  |  |  |  |  |
| 35-47 | 23 | Angler | 56 | $\mathrm{O}_{0}$ | Lophius americanus |
| 39-47 | 23 | Cunner | 29 | OG | Tautogolabrus adspersus |
| 31-36 | 22 | Cusik | 47 | OG | Brosme brosme |
| $39-17$ | 23 | King whiting | 28 | OG | Nenticirrhus saxatilis |
| 39-47 | 23 | Lumpfish | 33 | OG | Cycloptsrus lumpus |
| 3)-47 | 23 | Northern puffer | 31 | OG | Sphosroides maculatus |
| 39-47 | 23 | Ocean pout | 38 | OG | Nacrozoarces americanus |
| 31-36 | 22 | Pollook (asithe) | 42 | $\mathrm{O}_{0}$ | Pollachius virens |
| 31-30́ | 22 | Red hake | 46 | OG | Urophycts chuss |
| 39-47 | 23 | Sand eels (launoes) | 55 | OG | Annodytes spp. |
| 30-47 | 23 | Soup | 26 | 0 O | Stenotomus chrysops |
| 3-47 | 23 | Sea robins | 34 | OG | Prionotus spp. |
| $30-47$ | 23 | Tautog | 30 | OG | Tautoga onitis |
| $30-47$ | 23 | Tilefish | 35 | OG | Lopholatilus chamaeleonticeps |
| $31-35$ | 22 | Tomcod | 40 | OG | Microgadus tomcod |
| 31-35 | 22 | White hake | 45 | OG | Urophycis tenuls |
| 30-47 | 23 | Wolffishes | 36 | 0 O | Anarhichas spp. |
| OTHER PGLAOIC FISH |  |  |  |  |  |
| 49-51 | 24 | Atlantic saury (billfish) | 37 | PF | Scomberesox saurus |
| 54,55 | 25 | Bay anchovy | 8 | PF | Anchoa mitchillt |
| 49-51 | 24 | Bluefigh | 21 | PF | Pomatomus saltotrix |
| 57-59 | 26 | Bonito | 18 | PF | Sarda sarda |
| 49-51 | 24 | Butterfish | 22 | PF | Poronotus triacanthus |
| 43-51 | 24 | Crevalle | 20 | PF | Caranx hippos |
| 51-53 | 27 | Mackerel | 16 | PF | Scomber acombrus |
| 54,55 | 25 | Menhaden | 11 | PF | Brevoortia tyrannus |
| 61-63 | 27 | Swordfish | 19 | PF' | Xiphias gladius |
| 5759 Tunas 26 |  |  |  |  |  |
| 57-59 | 26 | Bluefin tuna | 17 (a) | PF | Thunnus thynnus |
| 57-59 | 26 | Albacore | 17 (b) | PF | Thunnus alalunga |
| 57-59 | 26 | Bigeye tuna | 17 (c) | PF | Thunnus obesus |
| 57-59 | 26 | Yellowfin tuna | 17 (d) | PF | Thunnus albacares |
| 57-59 | 26 | Skipjaok | 17(e) | PF | Euthynnus pelamys |

6. LIST OF NORTHHEST ATLANTIC SPECIES ARRANGED ACCORDING TO THE ICNAF GROUSS (conoluded)

STANA IN ISSCAAP GROUPS and names used in ICNAF ICNAF Line No. Group No. ICNAF Statistical Bulletin No. Group

OTHER FISH

| 15,16 | 15 | Aleutife | 9 | OF | Alosa pseudoharengus |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12,13 | 14 | Argentines |  | OF | Argentina app. |
| 12,13 | 14 | Capelin | 15 | OF | Nallotus villosus |
| 39-47 | 23 | Conger | 6 | OF' | Conger oceantcus |
| 05,66 | 28 | Dogfishes | 2 | Or | Squalus and Mustelus spp. |
| 10 | 13 | Fel | 5 | OF | Anguilla rostrata |
| -5,66 | 28 | Porbeagle 1/ | 1 | OF | Lamna nasus |
| 12,13 | 14 | Salmon | 12 | OF | Salmo salar |
| 30-47 | 23 | Sea bass | 25 | OF | Centropristes striatus |
| 15,16 | 15 | Shad | 10 | OF | Alosa sapldisstma |
| 05,00 | 28 | Skates | 3 | OF | Raja app. |
| 12,13 | 14 | Smelt | 14 | OF | Osmerus mordax |
| 39-47 | 23 | Squeteague | 27 | OF | Cynoscion regalis |
| 39-47 | 23 | Striped bass | 23 | OF | Roccus saxatilis |
| 9 | 12 | Sturgeons | 4 | OF | Actpenser spp. |
| 12,13 | 14 | Trouts (chars) | 13 | OF | Salvelinus spp. |
| 39-47 | 23 | White perch | 24 | OF | Roccus americanus |
| SHELLFISE, ETC. |  |  |  |  |  |
| 72 | 32 | Bay soallop | 66 | SF | Aequipecten trradians |
| 72 | 32 | Conohs | 67 | SF | Strombus and Busycon spp. |
| 71 | 31 | Crabs | 70 | SF | Callinectes and Cancer spp. |
| 71 | 31 | Lobster | 69 | SF | Homarus americanus |
| 72 | 32 | Whesels | 63 | SF | Mytlus and Volsella spp. |
| 72 | 32 | Ocean quahog | 62 | SF | Arctica islandica |
| 72 | 32 | Oyster | 64 | SF | Crassostrea virginica |
| 72 | 32 | Periwinkles | 68 | SF | Littorina spp. |
| 71 | 31 | Prawn (shrimp) | 71 | SF | Pandalus borsalis |
| 72 | 32 | Quahog | 58 | SF | Mercenaria mercenaria |
| 72 | 32 | Razor clam | 59 | SF | Ensis directus |
| 72 | 32 | Sea scallop | 65 | SF | Placopecten magellanicus |
| 73 | 33 | Sea urchins | 73 | -- | Strongylocentrotus spp. |
| 72 | 32 | Soft clam | 60 | SF | Mya arenaria |
| 72 | 32 | Squids | 57 | SF | Loligo and Illex spp. |
| 72 | 32 | Surf clam | 61 | SF | Splisula solidisstma |
| 73 | 33 | Worms | 72 | - | Glycera and Neanthes (Nereis) spp. |

[^1]7. LIST OF MORTHNEST ATLANIIC SPECLES ARRANGED ACCORDING TO THE GROUPS OF THE INTERNATIONAL STANDARD STATTSTICAL CLASSIFICATION OF AQUATIC ANIMALS AND PLANTS

| $\frac{\text { SPANA } 1 H}{\text { Line No. }}$ | $\frac{\text { ISSCAAP }}{\text { Group No. }}$ | ISSCAAP Group, <br> ICNAF speaies-item | $\frac{\text { ICNAF }}{\text { No. }}$ | $\frac{\text { ICNAF }}{\text { Oroup }}$ | Soientific name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $?$ | 12 | $\frac{\text { Sturgeons, padilefishes }}{\text { Sturgeons }}$ | 4 | OF | Actpenser spp. |
| 10 | 13 | $\frac{\text { River eels }}{\text { Eel }}$ | 5 | OF | Anguilla rostrata |
|  | 14 | Salmons, trouts, gmelts, oto. |  |  |  |
| 12,13 |  | Argentines |  | OF | Argentina spp. |
| 12,13 |  | Capelin | 15 | OF | Nallotus villosus |
| 12,13 |  | Salmon | 12 | OF' | Salmo salar |
| 12,13 |  | Smelt | 14 | OF | Osmerus mordax |
| 12,13 |  | Trouts (chars) | 13 | OF | Salvaltnus spp. |
|  | 15 | Shads, milkfishes, eto. |  |  |  |
| 15.16 |  | Al evif e | 9 | OF | Alosa pseudoharengus |
| 15,15 |  | Shad | 10 | Or | Alosa sapldissims |
|  | 21 | Flounders, halibuts, soles, eto. |  |  |  |
| 20-25 |  | American plajoe | 52 | $F$ | Hippoglossoides platessoides |
| 20-26 |  | Greenland halibut | 49 | F | Reinhardtius hippoglossoides |
| 13 |  | Halibut | 48 | G | Hippoglossus hippoglossus |
| 20-26 |  | Summer flounder | 54 | F | Parallchthys dentatus |
| 20-26 |  | Winter flounder | 53 | F | Pseudopleuronectes americanus |
| 20-26 |  | Witch | 50 | F | Glyptocephzius cynoglossus |
| $20-26$ |  | Yellostail flounder | 51 | $F$ | Limandx ferruginea |
|  | 22 | Cods, hakes, haddocks, etc. |  |  |  |
| 23 |  | Cod | 39 | G | Gadus morhua |
| 31-36 |  | Cusi | 47 | 0 O | Brosme brosme |
| 29 |  | Haddock | 41 | $a$ | Melanogramnus aeglefinus |
| 31-30 |  | Pollock (saithe) | 42 | OG | Pollachlus virens |
| 31-36 |  | Red hake | 46 | OG | Urophycts chuss |
| 30 |  | Silver hake | 44 | G | Merluccius bilinearis |
| 31-36 |  | Tomcod | 40 | OG | vicrogadus tomcod |
| 31-36 |  | White hake | 45 | OG | Urophycis tenuis |
|  | 23 | Redfishes, basses, conzars, otc. |  |  |  |
| 5-47 |  | Angler | 56 | OG | Lophius americanus |
| 3-47 |  | Conger | 6 | OF | Conger oceanicus |
| $3-7$ |  | Cunner | 29 | OG | Tautogolabrus adspersus |
| $35-4$ |  | King rhiting | 28 | OG | Menticlrrhus saxatilis |
| 3-47 |  | Lumpfish | 33 | OG | Cyclopterus lumpus |
| 39-47 |  | Northern puffer | 31 | ${ }^{\text {OG }}$ | Sphoeroldes maculatus |
| 33-47 |  | Ocean pout | 38 | OG | Macrozoarces americanus |
| 38 |  | Redfish | 32 | G | Sebastes marinus |
| j $5-47$ |  | Sand eels (launces) | 55 | OG | Amnodytes spp. |
| 3-47 |  | Scup | 26 | $\mathrm{O}^{\mathrm{O}}$ | Stenotomus chrysops |
| 39-47 |  | Sea bass | 25 | OF | Centropristes striatus |
| 39-47 |  | Sea robins | 34 | $\mathrm{O}^{\mathrm{O}}$ | Prionotus spp. |
| 39-47 |  | Squeteague | 27 | OF' | Cynoscion regalis |
| 33-47 |  | Striped bass | 23 | OF | Roccus suxatilis |
| 39-47 |  | Tautog | 30 | OG | Tautoga onitis |
| 39-47 |  | Tilefish | 35 | OG | Lopholatilus chamaeleonticeps |
| 39-47 |  | White peroh | 24 | OF | Roccus americanus |
| 39-47 |  | Wolffishes | 36 | OG | Anarhichas spp. |

7. LIS'T Oi' NORTHWEST ATLANTIC SPECIES ARRANGED ACCORDING TO THE GROUPS OF THE INTERNATIONAL STANDARD STATISTICAL CLASSIFICATION OF AQUATIC ANIMALS AND PLANTS (concluded)

| $\begin{aligned} & \text { SLANA } 1 \text { in } \\ & \text { Line Io } \end{aligned}$ | $\frac{\text { ISSCAAP }}{\text { Group No. }}$ | ISSCAAP Group, <br> ICNAF BDACios-item | $\frac{\text { ICNAF }}{\text { No }}$ | $\begin{aligned} & \text { ICNAF } \\ & \text { Group } \end{aligned}$ | Scientific mame |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 24 | Jacks, mullats, otc. |  |  |  |
| 40-11 |  | Atlantio saury (billfish) | 37 | PF | Scomberesox saurus |
| 49-51 |  | Bluefish | 21 | PF | Pomatomus saltatrix |
| 43-51 |  | Butterfiah | 22 | PF | Poronotus triacanthus |
| 49-51 |  | Crevalle | 20 | PF | Caranx hippos |
|  | 25 | Herrings, eardines, anchovies, |  |  |  |
|  |  | etc. |  |  |  |
| 54,55 |  | Bay anohovy | 8 | PF | Anchoa mitchilli |
| 33 |  | Herring | 7 | PF | Clupea harengus |
| 54,35 |  | Menhaden | 11 | PF | Brevoortia tyrannus |
|  | 26 | Tunas, bonitos, skipjacks |  |  |  |
| 57-59 |  | Albacore | 17(b) | PF | Thunnus alalunga |
| 57-59 |  | Bigeye tuna | 17 (0) | PF | Thunnus obesus |
| -7-59 |  | Bluefin tuna | 17(a) | PF | Thunnus thynnus |
| 57-59 |  | Bonito | 18 | PF | Sarda sarda |
| 57-59 |  | Skipjack | 17(0) | PF | Euthynnus pelamys |
| 57-59 |  | Yellowfin tuna | 17(d) | PF | Thunnus albacares |
|  | 27 | Mackersls, billfishes, |  |  |  |
|  |  | outlassfishos, etc. |  |  |  |
| 61-63 |  | Mackerel | 16 | PF | Scomber scombrus |
| 61-53 |  | Swordfish | 19 | PF | Xiphlas gladius |
|  | 28 | Sharks, rays, chimaeras |  |  |  |
| $\begin{aligned} & 65,55 \\ & 65,55 \\ & 65,56 \end{aligned}$ |  | Dogfishes |  |  | Squalus and Mustelus spp. |
|  |  | Porbeagle 1/ | 1 |  | Lamna nasus |
|  |  | Skates | 3 | OF | Raja spp. |
|  | 29 | Unsorted and unidentified fishos |  |  |  |
|  |  | Groundfish epeoies <br> Pelagic species <br> Other speaies |  | . |  |
|  | 31 | Crustaceans |  |  |  |
| 71 |  | Crabs | 70 | SF | Callinectes and Cancer spp. |
| 71 |  | Lobster | 69 | SF | Homarus americanus |
| 71 |  | Prawn (shrimp) | 71 | SF | Pandalus borealts |
|  | 32 | Molluscs |  |  |  |
| 72 |  | Bay scallop | 66 | SF | Aequipecten irradians |
| 72 |  | Conchs | 67 | SF | Strombus and Busycon spp. |
| 72 |  | Mussels | 63 | SF | Nytilus and Volsella spp. |
| 72 |  | Ooean quahog | 62 | SF | Arctica islandica |
| 72 |  | Oyster | 64 | SF | Crassostrea virginica |
| 72 |  | Periwinkles | 68 | SF | Littorina spp. |
| 72 |  | Quahog | 58 | SF | Nercenaria mercenaria |
| 72 |  | Razor clam | 59 | SF | Ensis directus |
| 72 |  | Sea scallop | 65 | SF | Placopecten magellanicus |
| 72 |  | Soft clam | 60 | SF | Mya arenarta |
| 72 |  | Squids | 57 | SF | Lollgo and Illex spp. |
| 72 |  | Surf clam | 61 | SF | Spisula solidisslmz |
|  | 33 | Sea-cucumbers, sea-urohins |  |  |  |
|  |  | ascidians, eto. |  |  |  |
| 7373 |  | Sea-urohins | 73 | -- | Strongylocentrotus spp. |
|  |  | Wormb | 72 | -- | Glycera and Neanthes (Nersis) spp. |


[^0]:    1/ See Sections 3.11 and 3.21 below.
    2/ See Sections 2.11 and 2.13 below.

[^1]:    1/ The inclusive term "Sharks" is used in the ICNAF Statistioal Bulletin for all species of sharks, except Dogfishes.

