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\text { ANNUAL MEETING - JUNE } 1965
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Proposed final version of form STANA $1 W$
with draft notes for completion of forms STANA 1 W and 2

NOTES FOR THE COMPLETION OF STANA FORMS

Prepared by
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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

FAO Fisheries Ciroular (FAO Fish.Circ.)
Theso oiroulars, eiven very restriated distribition, are mostily ahort notes, 1 ists on various topios or provisional versions of doounents whioh may eventually be tasued in final form in other series. Some fisheries oinoulars, preseating statistioal tables with provisional data, are prepared as papers for conferences, oomittees, oomissions, workine parties; these tables nay overtually be issued after revision in the "Yearbook" or "Bulletin of Fishery Statistios".

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## FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

INTGRNATIONAL COMMISSION FOR THE NORTHWEST ATLANTIC FISHERIES

## NOTES FORTHE COMPLETION 0 F FORMSTANA 2 <br> ICNAF SUMMARY

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Deadine for submitting completed blue top copy of form STANA 2 to FAO and the yellow third oopy to ICNAF with calendar year data for 196
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## 1. GENERAL NOTES

1.1 USE OF FORM Stana 2
1.11 Form STANA 2, designated in box (i) in the right hand corner ICNAF SUMMARY, is uned by national offices to report annually to ICNAF and FAO nominal catohes (quantities on a live weight basis) on an annual calendar year basis for all aquatio enimals and plants (except wheles) acoording to this Statistical Area's Sub-areas and Divisions shown in the column heads of the attached drafting pages (printed in red on heavy white paper).
1.12 Form STANA 2 consists of four sheats: blue, pink, yellow and white interleaved with mono-oarbons; after completion these shests are to be distributed as desoribed in seation 1.2 below.
1.13 In addition to the STANA 2 forms, single pages (printed in red on heavy white paper) are also provided to the national offices for drafting purposes. These white pages are to be retained in the national offioes. FAO has inserted on these drafting pages, speaies lists, fishing areas, and other requirements to be transferred by the reporting office, together with the numerical data, to the STANA 2 forms.
1.14 If final annual statistios of nominal catohes by divisions are not availiable by the indioated deadline, member countries should supply their best estimates on STANA 2 forms marked "PRELIMINARY data". In suoh oases the final data should be provided on STANA 2 forms at the time the STANA $1 W$ forms are to be returned.
1.2 RATURN OF COMPLETED FORM STANA 2

Form STANA 2 must be completed in four copies for distribution as follows:
the white and pink copies are detached for retention in the national office;
the yellow copy is sent direotly by airmail to:

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The Statistician
    ICNAF
                c/o Bedford Instltute of Oceanography
                    P.O. Box }63
                    DARTMOUTH, Nova Scotia, Canada
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the blue copy is sent by airmail to:

> The Secretary, Continuing Norking Party on Fishery Statistics in the North Atlantic Area
> Fisheries Division FAO RONE, Italy

## 2. COMPLETION OF FORIM STANA :

### 2.1 QUANTITLES: NOMINAL CATCHES

2.11 Complete the form by inserting annual nominal catch data (landings converted rem landed weight to live weight) for each of the species (listed in column $C$ of the drafting pages) according to the Sub-areas and Divisions (listed in the columa headings) of the Statistical Area.
2.12 A list of the conversion faators used to convert landings to live weight should be provided. The term "live weight" is equivalent to the concepts "round, fresh weight", "whole, fresh weight" or "ex-water weight"。 Nominal catch data should be giver in metric tons expressed to the nearest metric ton.

If units other than metric units are used, give definitions. If, for sealine and otiner activities, data are given in numbers or capacity units pleass indionte also the conversion factors to calculate the weight equivalents.
2.13 Quan ${ }^{2}$ ities too small to be recorded should be shown by " $\phi$ "; nil entries, when necessary for clarity, should be made by "--".

## 3. S'TATTS'PICAL COVERAGE AND DHESMLIU:

3.1 NOTES ON STATISTICAL COVERAGE
3.11 Inclusions

The statistios should cover the quantities of the annual moninal catches of all aquatic animals and plants (except alales) made by botr. comercial and sajsistenae fishermen operating in this Statistical Area. Fishofaming and shellijoh-culoue within the Statistical Arsa should also be incluted.

The statistics for aquatic animals and plants should include speoies belongine io the followins six Divisjons of the International Standard Statistical Clasairicatior. of Aquatic Animals and Plants caught in this Statistical Area:

1. Freshwater and diadromous fishes
2. Marine fishes
3. Crustaceans, molluscs and other invertebrates
.. ...
4. Seals and miscellansous aquatic mamals
5. Hisoellaneous aquatic animals and residues
6. Aquatio plants
3.12 Exolusions

The statietios should exolude the following even when oaught in this Stetistical Area!
(a) Catohes of large and small-growing whales (speoios belonging to groups 4.1 and 4.2 , ioe. Division 4 of the International Standard Statistical Classifioation of Aquatio Animals and Plants).
(b) Catches made by sport fishermen.
(c) Disoarded oatoh, i.e. whole fish (not parts of retained fieh) returned to the sea at the time of capture.

### 3.13 Incomplete coverage

Indioate if any partioular fishery is not covered by the statistios provided. For example, if subsistence fisheries, fish-farming, shellfish-oulture operations, fisheries based on certain olasses of fishing units or using certain types of fishing gear, methods or craft, or fisheries from a particular area are excluded, mention such exclusions in a footnote giving an indioation of the magnitude of the fisheries excluded. However, it is generally more useful to receive estimated approximate figures for these fisheries instead of excluding them and mentioning such omissions in a footnote.
3.14 Statiatical treatment cf direct foreign landings

The statistics on nominal catches (landings on a live weight basis) should include not only the catches landed by the araft from the reporting country in the harbours of that oountry, but also nominal catches landed in foreign ports by the reporting country's craft. Nominal oatches landed in the reporting oountry by foreign fishing craft should be exoluded.

Please indioate the extent to which the statistical procedures in your country comply with this internationally reconnended practice.

### 3.15 Unsorted and unidentified fishes

The quantity of fish reported as unsorted and unidentified should not exceed 10 percent of the total nominal oatoh or 10,000 metric tons whichever is the less. Should there be diffioulties in reporting the catohes in the required detail, please use estimates to apportion the unsorted and unidentified quantities to the species or species groups reported.
3.2 NOTES ON DEFINITIONS OF "NOMINAL CATCH"
-3.21 Basic definitions

| Term | Definition | Synonyms | Weight basis for expressing data |
| :---: | :---: | :---: | :---: |
| NOMINAL CATCH | The live waight equivalent of the landing | Landings, round fresh <br> Landinge, whole fresh <br> Landings, ex-water weight | Live weight |
| LANDINGS | The weight of fish and fish produots brought ashore | Landings, landed weight | Landed weight |
| Gross oatoh | The weight of the fish taken from sea | Real oatoh | Live weight |
| Discarded oatoh | That part of the gross atoh which, as whole fish, is returned to the sea at the time of capture | - | Live weight |
| Retained oatoh | That part of the grose oatoh which, es whole fish, 1s not disoarded |  | Live welght |

The difference between "retained oatoh" and "landings" is aooounted for by
(a) Consumption by the orew;
b Use for bait;
c) Dumping of guts, heads and other parts of retained fish;
d Dumping of fish (whole or processed) because of spoilage or for other reasons;
(e) Loss or gain of fluid content.
3.3 NOTES ON ICMAF STATISTICAL ARTA: DEFIMITIONS AND BREAKDOWN
3.31 Definition of the "ICNAF Statistical 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 $42^{\circ} 00^{\prime}$ 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 $78^{\circ} 10^{\prime}$ north latitude; thence southwerd to a point at $75^{\circ} 00^{\prime}$ north latitude and $73^{\circ} 30^{\prime}$ 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 $61^{\circ} 00$ ' north latitude; thence due west to $64 \circ 30^{\prime}$ west longitude; thence
due south to the ooast of Labrador; thence in a southerly direction 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 Isiand to Cabot Strait; thence along the coasts of Cape Breton Island, Nova Scotia, New Brunswick, Maine, New Hampshire, Massachusetts, and Rhode Island to the point of beginning.
3.32 List of ICNAF Fishing Areas (Sub-areas and Divisions)

| Sub-area |
| :---: |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |

$N K=$ Sub-area not known or Division not known.
3.33 See atteohed map of the North Atlantio for ICNAF Sub-areas and Divisions

## FOOD AND AGRICULTURE ORGAHIZATION OF THE UNITED NATIONS

 INTERIATIONAL COMAISSION FOR THE NORTHWEST ATLANTIC FISHERIES> NOTES FOR THE COMPLETION OF FORM STANA $1 W$

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Deadline for submitting completed yellow top copy of form
    SIPANA 1W to ICNAF, and the blue middle copy to FAO
            with calendar year data for }19
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## 1. GENERAL NOTES

### 1.1 USE OF FORM STANA 1 T

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 data according to classes of fishing units 2/:
(a) FISHING EFFORT MEASURES, on a monthly basis, concerning fishing operations in each of these ICNAF Divisions;
(b) NOMINAL CATCHES (quantities on a live weight besis) broken down by species on a monthly basis with a calendar year total in each of the Divisions of the ICNAF Statistical Area.
1.12 For each of the Divisions of the ICNAF Statistical Area as many separate forms STANA 1W must be completed as there are classes of fishing units operating there during the calendar years and according to main species sought.
1.13 Form STANA 1 W consists of three shests yellow, blue and white interleaved with monocarbons; after completion these sheets are to be distributed as described in Section 1.2 below.
1.14 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 to be retained in the national offices.
1.2 RETURN OF COMPLRTED FORM STANA $1 W$

Form SIANA 1 W 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 Workiny Party on Fishery Statistics in the North Atlantic Area
> Fisherles Division
> FAO
> RONE, Italy
the yellow copy is sent directly by airmail to:
The Statistician
ICNAF'
c/o Bedford Institute of Oceanography
P.O. Box 638

DARTMOUTH, Nova Scotia, Canada

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## 2. CLASSES OF FISHING UNITS

2.1 COMPLETION BY REPORTING NATIONAL OFFICE OF BOXES (a), (b), (c), AND (d) OF FORM STANA 1 w
2.11 In box (a) insert whichever of the following categories of fishing gear (method) is pertinent:

1. Otter trawls
2. Pair trawls
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, etc.)
10. Long-lines
11. Hand-lines
12. Dory-type gear
13. Other lines
14. Dredges
15. Harpoons
16. Other gear
17. Gear that cannot 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 Register Tonnago)
1.
2.
3.
4。
5.
6.

50 GRT and less
51-150 GRT
151-500 GRT
501-900 GRT
901-1800 GRT
over 1800 GRT
2.14 In box (d) insert particulars of the main species 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.


3.11 In box (e) insert the designation (number and alphabetic letter) of the respective Division of the ICNAF Statistical Area where the catches were made; note these designations as follows:

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Subarea 1 - Divisions 1A, 1B, 1C, 1D, 1E, 1F
Subarea 2 - Divisions 2G, 2H, 2J
Subarea 3-Diviaicns 3K, 3L, 3M, 3N, 30, 3Pn, 3Ps
Subarea 4 - Divisions 4R, 4S, 4T, 4Vn, 4Vs, 4W, 4X
Subarea 5 - Divisions 5Y, 5Z
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$1 \mathrm{NK}, 2 \mathrm{NK}, 3 \mathrm{NK}, 4 \mathrm{NK}, 5 \mathrm{NK}-$ Subarea known, but divisional
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 eaoh Division.
3.15 Leave blank box (i).

### 3.2 SUPPLEMENTARY NOTES ON STATISTICAL AREA

3.21 Definition of the "ICNAF Statistical 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 lonsitude, thence due south to $39^{\circ} 000^{\prime}$ 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 $78^{\circ} 1^{\prime}$ ' north latitude; thence southward to a point at $75^{\circ} 00^{\prime}$ north latitude and $73^{\circ} 30^{\prime}$ 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 $64^{\circ} 30^{\prime}$ west longitude; thence due south to the coast of Labrador, thence in a southerly direction 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, Nove Scotia, and Cape Breton Island to Cabot Strait; thence along the coasts of Cape Breton Island, Nova Scotia, New Brunswick, Maine, New Hampshire, Massachusetts, and Rhode Island to the point of beginning.
3.22 See attached map of the North Atlantic for the ICNAF Statistical Area by "Divisions".

## 4. FISHING EFFORT MEASURES

4. 1 COMPLETION BY REPORTING NATIONAL OFFICE OF LINES $1,2,3,4$ AND 7 OF FORM STANA $1 W$
4.11 Effort data on a monthly 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.
4.12 In giving data on fighing 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 available;
line 4 ("No. of days on ground") should be completed only when information on "number of days fished" (line 3) is not available.
4. 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.
4.2 SUPPLEMENTARY NOTES: DEFINITIONS OF FISHING EFFORT MEASURES (LINES 1, 2, 3 AND 4)

Line 1 - No. of hours or 1000 hooks fished
No. of hourg 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 give 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 uaed in each set times the number of sets". This figure should be calculated to the nearest thousand hooks.

For other fishing gear: the number of hours the nets, seines, traps, pots, dredges, 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, drags or sets made
The number of times the fishing gear has been hauled or dragged or set, whichever description is appropriate to the fishing gear or teohndque used.

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

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 grounde, intent on catching fish (not counting the time spent steaming to or from port and between grounds) minua the number of fishing days lost through delays from weather, breakdown or other factors".
4.2 (concluded)

Line 4 - No. of days on grounds
This is defined as the number of days (24-hours periods, reckoned from midnight to midnight) in which the craft was on the fishing ground, and includes in addition to the days fishing and searching also all the other days while the craft was on the ground.

## 5. NOMINAL CATCHES

5.1 COMPLETION BY REPORTING NATIONAL OFFICE OF LINES 8 THROUGH 77 OF FORM STANA 1 W
5.11 Complete the form by inserting annual 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 W (bee the Lists of Northwest Atlantic speoies under seotions 6 and 7 below).
5.12 A list of the conversion factors used to convert landings to live weight should be provided. 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.
5. 13 Quantities too small to be recorded should be shown by " $\emptyset$ "; nil entries, when necessary for clarity, should be made by "--".
5.14 Countries should in the first instance complete lines 8, 18, 19, 28, 29, 38, 53, 74, 75,76 and 77. The grand total shown on line 8 is the aggregate of the data on the above lines. These lines represent the quantities required by ICNAF.
5.15 Lines $12,13,15,16,30$ 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 insert 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 flatfishes" is available.
5.16. Aggregates of species to be included in the four special sub-totals given in lines 74, 75,76 and 77 are as follows:

Other Groundfigh (line 74) is to cover ALL groundfish species ("OG" species), EXCEPT Halibut, Other flatfishes, Cod, Haddock, Redfish.

Pelagic Fish (line 75) is to cover ALL pelagic fish ("PF" species) EXCEPT Herring.
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 groups appearing on lines 71, 72 and 73; that is "Crustaceans", "Molluscs" and "Sea-cucumbers, sea-urchins, ascidians, etc.".

### 5.2 SUPPLEMENTARY NOTES: STATISTICAL COVERAGE

### 5.21 Inclusions

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

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

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

### 5.22 Exclusions

The statistics should exclude:
(a) Any diadromous and freshwater teleost fishes caught in freshwater fishing areas, i.e. rivers and lakes, ponds, etc. within the inland areas adjacent to the IClMAF Statistical Area.
(b) The following marine aquatic organdsms even when they are caught within the ICNAF Statistioal Area:

Whales
Seals and misoellaneous aquatio mammale
Miscellaneous aquatic animals and residues
Aquatio 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 Inoomplete ooverage

Indioate if any partioular fish speaies is not covered by the atatistios provided on the various forms.

### 5.24 Statistical treatment of diroot foredgn landings

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

Please indicate the extent to whioh the statistioal prooedures in your country comply with this internationally reoommended praotioe.

| Term | Definition | Synonyms | Weight basis for expressing data |
| :---: | :---: | :---: | :---: |
| NOMINAL CATCH | The live weight equivalent of the landings | Landings, round fresh <br> Landings, whole fresh <br> Landings, ex-water weight | Live weight |
| LANDINGS | The weight of fish and fish products brought ashore | Landinge, landed weight | Landed weight |
| Gross catch | The weight of the fish taken from sea | Real catch | Live weight |
| Discarded catch | That part of the gross catch which, as whole fish, is returned to the sea at the time of capture | -•* | Live weight |
| Retained catch | That part of the gross catch which, as whole fish, is not discarded | $\bullet \cdot *$ | Live weight |

5.32 The difference between "retained catch" and "landings" is accounted for by:
(a) Consumption by the crew;
(b) Use for bait;
(c) Dumping of guts; heads and other parts of retained fish;
(d) Dumping of fish (whole or processed) because of spoilage or for other reasons;
(e) Loss or gain of fluid content.
5.33 The term "landings" should not be used synonymously with "number if arsitals" or "trips".
6. LIST OF NORTRWEST ATLANTIC SPECIES ARRANGED ACCORDING TO THE ICNAF GROUPS
$\frac{\text { STANA 1W }}{\text { Line No. }}$ GSSCAAP $\quad \frac{\text { GROUPS and names used in }}{\text { Group }}$ ICNAF Statistioal Bullotin $\frac{\text { ICNAF }}{\text { No }}$ Group $\quad$ Scientific name

MAIN SPRCIES

| 28 | 22 | Cod | 39 | G | Gadus morhur |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 22 | Haddook | 41 | G | Melanogrammus aeglefinus |
| 38 | 23 | Redfish | 32 | G | Sebastes marinus |
| 18 | 21 | Halibut | 48 | G | Hippoglossus htppoglossus |
| 19 |  | Other flatfishes |  |  |  |
| 20-26 | 21 | Amerioan plaice | 52 | F | Hippoglossoldes platessoldes |
| 20-25 | 21 | Greenland halibut | 49 | F | Relnhardtius hippoglossoldes |
| 20-26 | 21 | Summer flounder | 54 | $F$ | Parallchthys dentatus |
| 20-26 | 21 | Winter flounder | 53 | F | Pseudopleuronectes amer |
| 20-26 | 21 | Witoh | 50 | F | Glyptocephalus cynoglossus |
| 20-26 | 21 | Yellowtail flounder | 51 | F | Limanda ferruginea |
| 53 | 25 | Herring | 7 | PF | Clupsa harengus |
| OTHER GROUNDFISH |  |  |  |  |  |
| 39-47 | 23 | Angler | 56 | OG | Lophius americanus |
| 39-47 | 23 | Cunner | 29 | ${ }^{\text {OG }}$ | Tautogolabrus adspersus |
| 30-36 | 22 | Cusk | 47 | OG | Brosme brosme |
| 39-47 | 23 | King whiting | 28 | OG | Menticirrhus saxatilis |
| 30-36 | 22 | Ling | 43 | OG | Mo |
| 39-47 | 23 | Lunplish | 33 | OG | Cyclopterus lumpus |
| 39-47 | 23 | Northern puffer | 31 | $\bigcirc \mathrm{OG}$ | Sphoeroldes maculatus |
| 39-47 | 23 | Ocean pout | 38 | $\bigcirc$ | Pollachius virens |
| 30-36 | 22 | Pollook (saithe) | 42 | ${ }^{\circ} \mathrm{OG}$ | Urophycis chuss |
| 30-36 | 22 | Red hake | 46 | ${ }^{\text {OG }}$ | Ammodytes spp. |
| 39-47 | 23 | Sand esls (launces) | 55 | $\bigcirc$ |  |
| 39-47 | 23 | Scup | 26 | ${ }^{\text {OG }}$ | Srionotomus chrysops |
| 39-47 | 23 | Sea robins | 34 | $\bigcirc$ | Merluccius bilinearis |
| 30-36 | 22 | Silver hake | 44 30 | $\bigcirc$ | Tautoga onitis |
| 39-47 | 23 | Tautog | 30 | ${ }^{\text {OG }}$ | Lopholatilus chamaeleonttceps |
| 39-47 | 23 | Til efish | 45 | ${ }^{\text {OG }}$ | Microgadus tomcod |
| 30-36 | 22 | Tomcod | 40 | OG 0 O | Urophycis tenuls |
| 30-36 | 22 | White hake | 45 36 | OG | Anarhichas spp. |
| 39-47 | 23 | Wolffishes | 36 | OG |  |
| PELAGIC FISH |  |  |  |  |  |
| 49-51 | 24 | Atlantio saury (billfiah) | 37 | PF | Scomberssox saurus |
| 54,55 | 25 | Bay anohovy | 8 | PF | Anchoa mitchillt |
| 49-51 | 24 | Bluefish | 21 | PF | Pomatomus saltatrix |
| 57-59 | 26 | Bonito | 18 | PF | Sarda sarda |
| 49-51 | 24 | Butterfish | 22 | PF | Poronotus triaconthus |
| 49-51 | 24 | Orevalle | 20 | PF | Caranx hippos |
| 61-63 | 27 | Ma okerel | 16 | PF | Scomber scombrus |
| 54,55 | 25 | Menhaden | 11 | PF | Brevoortla tyrannus |
| 61-63 | 27 | Swordfish | 19 | PF | Xiphias gladius |
| Tunas 17 (a) PF Thunnus thynnus |  |  |  |  |  |
| 57-59 | 26 | Bluef in tuna | $17(\mathrm{a})$ | PF PF | Thunnus alalunga |
| 57-59 | 26 | Albacore | 17 ( b ${ }^{\text {a }}$ | PF | Thunnus obesus |
| 57-59 | 26 | Bigeye tuna | 177 c ${ }^{\text {d }}$ | PF | Thunnus albacares |
| 57-59 | 26 | Yellowfin tuna | 17 17 $\left(\begin{array}{l}\text { d }\end{array}\right.$ | PF | Authynnus pelamys |
| 57-59 | 26 | Skipjaok | $17($ e) | Pr | suthynnus pelomys |

6. LIST OF NORTHWEST ATLANTIC SPECIES ARRANGED ACCORDING TO THE ICIAF GROUPS (concluded)

| $\begin{aligned} & \text { STANA 1N } \\ & \text { Line No } \end{aligned}$ | $\frac{\text { ISSCAAP }}{\text { Group No. }}$ | GROUPS and names used in ICNAF Statistical Bulletin | $\frac{\text { ICNAF }}{\text { No. }}$ | $\frac{\text { ICNAF }}{\text { Groun }}$ | Scientific name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OTHER FISH |  |  |  |  |  |
| 15,16 | 15 | Al ewife | 9 | OF | Alosa pseudoharengus |
| 12,13 | 14 | Capolin | 15 | OF | Mallotus villosus |
| $30-47$ | 23 | Conger | 6 | OF | Conger oceanicus |
| 65,66 | 28 | Dogfishes | 2 | OF | Squalus and Mustelus spy. |
| 10 | 13 | Eel | 5 | $\mathrm{O}^{\mathrm{O}}$ | Anguilla rostrata |
| 65,66 | 28 | Porbeagle 1/ | 1 | OF | Lamna nasus |
| 12,13 | 14 | Salmon | 12 | OF | Salmo salar |
| 39-47 | 23 | Sea bass | 25 | OF | Centropristes striatus |
| 15,16 | 15 | Shad | 10 | OF | Alosa sapldissima |
| 65,66 | 28 | Skates | 3 | OF | Raja spp. |
| 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 | Acipenser spp. |
| 12,13 | 14 | Trouts (chars) | 13 | OF | Salvelinus spp. |
| 39-47 | 23 | White perch | 24 | OF | Roccus americanus |
| SHELLFISH |  |  |  |  |  |
| 72 | 32 | Bay soallop | 66 | SF | Pecten Irradiens |
| 72 | 32 | Conchs | 67 | SF | Strombus and Busycon spp. |
| 71 | 31 | Crabs | 70 | SF | Collinectes and Cancer spp. |
| 71 | 31 | Lobster | 69 | SF | Homarus americanus |
| 72 | 32 | Mussels | 63 | SF | Nytilus 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 borealis |
| 72 | 32 | Quahog | 58 | SF | Mercenaria mercenaria |
| 72 | 32 | Razor olam | 59 | SF | Ensis directus |
| 72 | 32 | Sea scallop | 65 | SF | Placopecten magellanicus |
| 73 | 33 | Sea urchins | 73 | -- | Strongylocentrotus epp. |
| 72 | 32 | Soft clam | 60 | SF | Mya arenaria |
| 72 | 32 | Squids | 57 | SF | Lollgo and Illex spw. |
| 72 | 32 | Surf olam | 61 | SF | Splisula solidisstima |
| 73 | 33 | Worms | 72 | - | Glycera and Neanthes (Nereis) spp. |

1/ The inclusive term "Sharks" is used in the ICNAF Statistical Bulletin for all species
of sharks, except Dogfishes. V. 65.11 W
7. LIST OF NORTHWEST ATLANILC SPECIES ARRANGED ACCORDING TO THE GROUPS OF THE IHPBRHATIONAL STANDARD STATISTICAL CLASSIFICATION OF AQUATIC ANTMALS AND PLANDS

| $\frac{\text { STANA } 1 \mathrm{~W}}{\operatorname{Ling} \text { No }}$ | $\frac{\text { ISSCAAP }}{\text { Group No }}$ | ISSCAAP Group, <br> ICNAF speojes-item | $\frac{\text { ICNAF }}{\text { No }}$ | $\frac{\text { ICNAF }}{\text { Group }}$ | Soientific name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 12 | $\frac{\text { Sturgeons, paddlefishos }}{\text { Sturgeons }}$ | 4 | OF | Aclpenser spp. |
| 10 | 13 | $\frac{\text { River oels }}{\text { Eel }}$ | 5 | OF | Angullla rostrata |
| $\begin{aligned} & 12,13 \\ & 12,13 \\ & 12,13 \\ & 12,13 \end{aligned}$ | 14 | $\frac{\text { Salmons, trouts, smelts, otc. }}{\text { Capelin }}$. | $\begin{aligned} & 15 \\ & 12 \\ & 14 \\ & 13 \end{aligned}$ | OF OF OF OF | Nallotus villosus <br> Salmo salar <br> Osmerus mordax <br> Salvelinus spp. |
| $\begin{aligned} & 15,16 \\ & 15,16 \end{aligned}$ | 15 | $\begin{aligned} & \frac{\text { Shads, milkfishes, etc. }}{\text { Alevife }} \\ & \text { Shad } \end{aligned}$ | $\begin{array}{r} 9 \\ 10 \end{array}$ | $\begin{aligned} & \mathrm{OF} \\ & \mathrm{OF} \end{aligned}$ | Alosa pseudoharengus Alosa sapldissimı |
| 20-26 | 21 |  | - 52 |  | Hippoglossoldes platessoides |
| 20-26 |  | Greenland halibut | 49 | F | Reinhardtius hippoglossotues |
| 20-26 |  | Halibut | 48 | $\stackrel{\text { c }}{ }$ | Hippoglossus hippoglossus <br> Paralichthys dentatus |
| 20-26 |  | Summer flounder | 54 | F | Pseudopleuronectes americanus |
| 20-26 |  | Winter flounder | 50 | F | Glyptocephalus cynoglosaus |
| $20-26$ $20-26$ |  | Wellowtail flounder | 51 | F | Limanda ferruginca |
|  | 22 | Cods, hakes, haddooks, etc. |  |  |  |
| 28 |  | Cod | $\begin{aligned} & 39 \\ & 47 \end{aligned}$ | $\bigcirc$ | Brosme brosme |
| 30-36 |  | Cusk | 41 | G | Melanogrammus a $\epsilon_{\text {jiefinus }}$ |
| 29 |  | Haddook | 43 | OG | Nolva molva |
| 30-36 |  | Ling Pollook (saithe) | 42 | OG | Pollachius virens |
| 30-36 |  | Red hake | 46 | OG | Orophycts chuss |
| 30-36 |  | Silver hake | 44 | OG | Merluccius bilinearis |
| 30-36 |  | Tomood | 40 | OG | Microgadus tomcod |
| 30-36 |  | White hake | 45 | OG | Urophycis tenuls |
|  | 23 | Redfishes, basaeg, oongers, atc |  |  |  |
| 39-47 |  | Angler | 56 | $\begin{aligned} & O G \\ & O F \end{aligned}$ | Conger oceantcus |
| 39-47 |  | Conger | 29 | 0 O | Tautogolabrus adspersus |
| 39-47 |  | King whiting | 28 | 0 O | Menticirrhus saxatilis |
| 39-47 |  | King whiting | 33 | OG | Cyclopterus lumpus |
| 39-47 |  | Lumpfish Northern puffer | 31 | OG | Sphoeroides maculatus |
| $39-47$ $39-47$ |  | Northern puffer Ooean pout | 38 | OG | Nacrozoarces americanus |
| $39-47$ 38 |  | Redfish | 32 | ${ }_{-6}$ | Sebastes marinus |
| 39-47 |  | Sand eels (launces) | 55 | ${ }_{0} \mathrm{OG}$ | Ammodytes spp. |
| 39-47 |  | Soup | 25 | OF | Centropristes striatus |
| 39-47 |  | Sea bass | 34 | OG | Prionotus spp. |
| 39-47 |  | Sea robins | 27 | OF | Cymoscion regalis |
| 39-47 |  | Squeteague | 23 | OF | Roccus saxatilis |
| 39-47 |  | Striped bass | 30 | OG | Tautoga onitis |
| 39-47 |  | Tautog | 35 | OG | Lopholatilus chamseleorttceps |
| $39-47$ $39-47$ |  | White peroh | 24 | OF | Roccus americanus |
| $39-47$ $39-47$ |  | Wolffishes | 36 | 0 O | Anarhichas spp. |

7. LIST OF NORTHNEST ATLANTIC SPECIES ARRANGED ACCORDING TO THE GROUPS OF THE INTHNATIONAL STANDAAD STATISTICAL CLASSIFICATION OF AQUATIC ANIMALS AND PLANTS (concluded)

| $\frac{\text { STANA } 1 W}{\text { Lina No }}$ | $\frac{\text { ISSCAAP }}{\text { OROMD No }}$ | $\frac{\text { ISSCAAP Group }}{\text { ICNAF }}$ | $\frac{\text { ICNAF }}{\text { No. }}$ | $\frac{\text { ICNAF }}{\text { Groun }}$ | Soientific name |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Line No. | Group No. | ICNAF speaies-item |  | Group | Soientilic nalue |
|  | 24 | Jacks, mullatg, eto. |  |  |  |
| 49-51 |  | Atlantio saury (billfish) | 37 | PF | Scomberosox saurus |
| 49-51 |  | Bluefish | 21 | PF | Pomatomus saltatrix |
| 49-51 |  | Butterfish | 22 | PF | Poronotus triacanthus |
| 49-51 |  | Crevalle | 20 | PF' | Caranx hippos |
|  | 25 | Herrings, sardines, anchovies, |  |  |  |
|  |  | otc. |  |  |  |
| 54,55 |  | Bay anchovy | 8 | PF | Anchoa mitchilli |
|  |  | Herring | 7 | PF | Clupea harengus |
| 54,55 |  | Menhaden | 11 | PF | Brevoortia tyrannus |
|  | 26 | Tunas, bonitos, skipjacks |  |  |  |
| 57-59 |  | Albacore | 17 (b) | PF | Thunnus alalunga |
| 57-59 |  | Bigeye tuna | 17 (c) | PF | Thunnus obesus |
| 57-59 |  | Bluefin tuna | 17 (a) | PF | Thunnus thynnus |
| 57-59 |  | Boni to | 18 | PF | Surda sardz |
| 57-59 |  | Skipjack | 17(e) | Pr | Euthynnus pelamys |
| 57-59 |  | Yellowfin tuna | 17(d) | PF | Thunnus albacares |
|  | 27 | Mackerels, billfishes, |  |  |  |
|  |  | cutlassfishes, etc. |  |  |  |
| $\begin{aligned} & 61-63 \\ & 61-63 \end{aligned}$ |  | Maokerel | 16 | PF | Scomber scombrus |
|  |  | Swordfish | 19 | PF | Xiphias gladius |
|  | 28 | Sharks, rays, ohimaoras |  |  |  |
| 65,66 |  | Dogfishes | 2 | OF | Squalus and dustelus spp. |
| 65,66 |  | Porbeagle 1/ | 1 | OF | Lamna nasus |
| 65,66 |  | Skates | 3 | OF | Raja spp. |
|  | 29 | Unsorted and unidentified fishes |  |  |  |
|  |  | Groundfish species |  |  |  |
|  |  | Pelagic species |  |  |  |
|  | 31 | Crustaoeans |  |  |  |
| 71 |  | Crabs | 70 | SF' | Callinectes and Cancer spp. |
| 71 |  | Lobster | 69 | SF' | Homarus amertcanus |
| 71 |  | Prawn (shrimp) | 71 | SF | Pandalus borealis |
|  | 32 | Molluses |  |  |  |
| 72 |  | Bay soallop | 66 | SF | Pecten irradiens |
| 72 |  | Conchs | 67 | SF | Strombus and busycon spp. |
| 72 |  | Museele | 63 | SF | Nytilus and Volsella spp. |
| 72 |  | Ocean quahog | 62 | SF | Arctica islandica |
| 72 |  | Oyster | 64 | SF | Crassostrea virginica |
| 72 |  | Periwinkles | 68 | SF | Littorina spp. |
| 72 |  | Quahog | 58 | SF | Mercenaria mercenaria |
| 72 |  | Razor clam | 59 | SF | Ensis directus |
| 72 |  | Sea scallop | 65 | SF | Placopecten magellanicus |
| 72 |  | Soft olam | 60 | SF | Mya arenaria |
| 72 |  | Squide | 57 | SF | Loligo and Illex spp. |
| 72 |  | Surf olam | 61 | SF | Splsula solidissima |
|  | 33 | Sea-ououmbers, sea-urohins |  |  |  |
|  |  | asoidiang, eto. |  |  |  |
|  |  | Sea-ur chins Worms | $\begin{aligned} & 73 \\ & 72 \end{aligned}$ | -- | Strongylocentrotus app. Glycera and Neanthes (Nersis) spp. |
| $73$ |  | Worms | $72$ | -- | Glycera and Neanthes (Nersis) spp. |




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

