#### . INTERNATIONAL COMMISSION FOR

#### THE NORTHWEST ATLANTIC FISHERIES

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ANNUAL MEETING - JUNE, 1964

### Standard Graphical Presentation Of Pertinent Data For Use By The Assessment Group

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During its work of the past two years members of the Assessment Group have spent appreciable time in compiling landings and effort statistics into a form which would permit appraisal of recent trends. Realizing that development of a standard graphical presentation of pertinent data would be of general interest the group recommended to the Research and Statistics Committee that the Secretariat be asked to draw up and maintain a series of such charts for use at the Annual Meetings. These might well take the form of charts of total landings by species for subdivisions and for principle gears, associated with a chart giving a particular measure of catch per unit effort. These charts could be presented in two forms:

(1) Several line graphs on a chart showing:

Total landings by years for a particular species in a particular division for each gear by all countries, with possibly a further line showing totals for all gears.

(2) Several charts showing:

Landings Per Day and Total Effort Estimated from a Standard Fleet. (To combine a particular gear for several countries may not be too competent.)

It was the intention of the Assessment Group's recommendation regarding standard charts that the scientists mainly responsible for compiling subarea sections of the past reports should signify what subarea divisions, and measures of catch, effort and catch per unit effort should be used by the Secretariat to draw up a series which would give the best overall appreciation of fishery and stock changes.

The format used in the first assessment report should be suitable but, that as far as possible, the effort and catch per unit effort indicés used should be derived from the standard statistical series submitted to ICNAF rather than special research data which would hold up independent action by the Secretariat.

In the initial stages of the preparation of these charts the following points should be taken into consideration:

- (1) Area, gear and seasonal breakdowns should be kept to the absolute minimum required to show major trends. The series is intended to give appreciation of the changes in major fisheries rather than a set of source data for research purposes.
- (2) Where possible the series should begin with at least about 1945.
- (3) Although the ultimate aim is to enable the Secretariat to compile the charts on the basis of its most up-to-date information, the scientists concerned might well provide draft charts from records up to 1961 or 1962 in addition to indicating the desirable degree of breakdown and the required catch and effort statistics to be used.

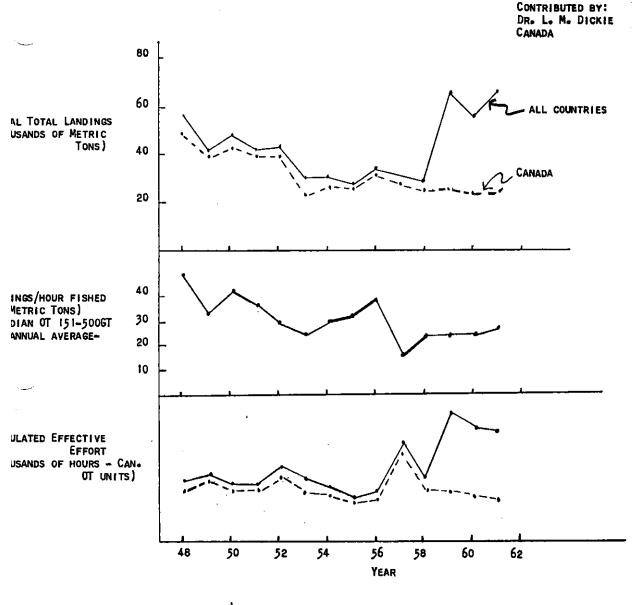
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### Standard Graphical Presentation Of Pertinent Data For Use By The Assessment Group (cont'd)

Earlier in the year the committee members were assigned divisions of responsibility. It was not the intention of the Group to complete all important stocks this year, but it did have in mind the possibility of having available for this meeting data and charts sufficient to determine procedure and policy essential to getting the program in motion.

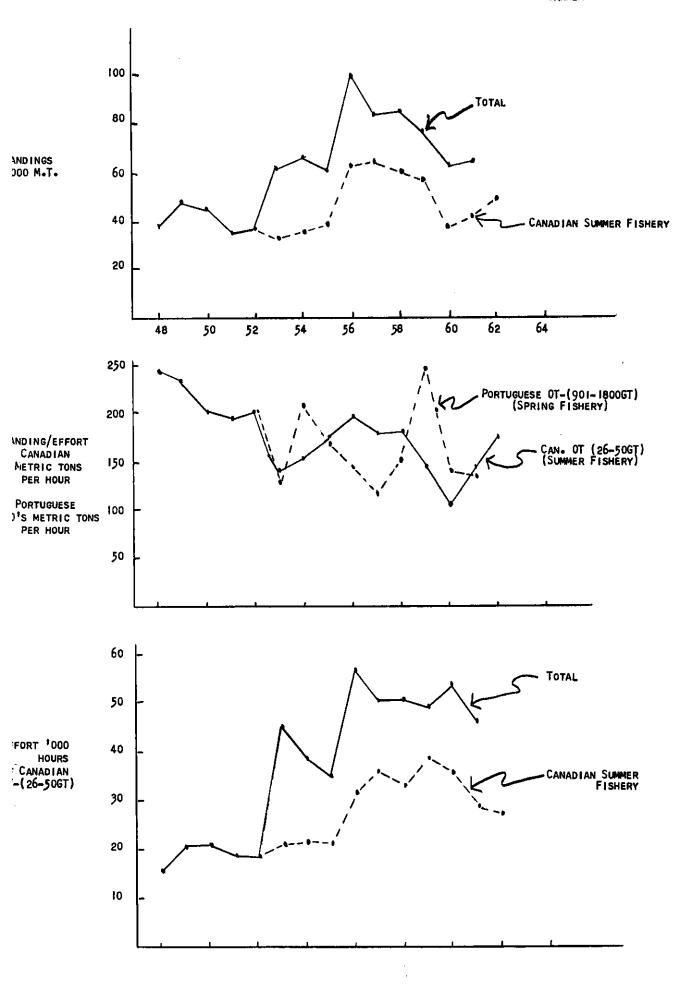
Draft and working data which has been submitted to the Secretariat by the committee members has been reproduced and is appended for committee review. For this meeting the main purpose should be the preparation of charts for cod, haddock and redfish, plus silver hake for Subarea 5. Others may be found desirable later.



YEAR	C/F - FOR CAN. 0.T. 151-500 GT (ANNUAL TOTAL)	TOTAL Landing 1000 M.T.	CALC.2 EFFORT 1000 HRS. CAN.
1948	•49	56∙8	116
1949	•33	42.8	1 <del>3</del> 0
1950	•33 •43	48.8	114
1951	•37	42-2	114
1952	•37 •29	43•6	150
1952 1953	•24	30.4	127
1954 1955 1956 1957	•30	32.1	107
1955	• 99 • 99 • 16	28.6	67
1956	•39	35∙1	9 <b>0</b> -
1957	•16	32•3	202
1958	•24	30•7	128
1959	•25	67•4	270
1960	•25		238
1959 1960 1961	•28	56•9 66•9	298 2 <b>3</b> 9

- CALCULATED AS TOTAL ANNUAL COD CATCH M.T. BY CAN. OT 151-500 GT/TOTAL HOURS FISHED (THOUSANDS), GIVEN IN UNITS OF TONS PER HOUR FISHED.
- 2. EFFORT UNITS EQUIVALENT TO THOSE EXPENDED BY THE CANADIAN OT 151-500 GT.

CONTRIBUTED BY: DR. L. M. DICKIE CANADA



COD - 4T & 4Vn (February, March, April)

CALCULATED EFFORT IN TERMS OF CANADIAN 0-10-16-50 GT THOUSANDS OF HOURS
CANADIAN EUROPEAN
C/F <sup>2</sup>
EFFORT HOURS FISHED
LANDINGS - 0T 901-1800GT
C/F <sup>2</sup>
EFFORT - 1000

I. LANDINGS ARE IN THOUSANDS OF M. T. ROUND FRESH WEIGHT.

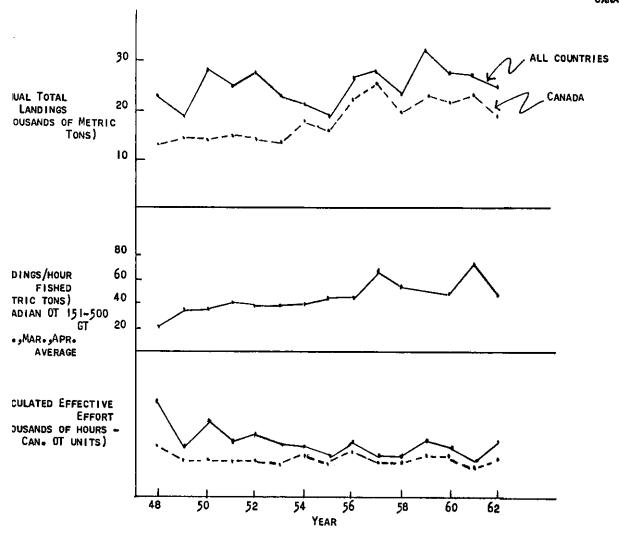
2. CATCH IN TONS PER HOUR FISHED.

3. CALCULATED FROM SPECIAL CANADIAN RECORDS - UNPUBLISHED.

CONTRIBUTED BY: DR. L. M. DICKIE
CANADA

# HADDOCK - Divisions 4V & W

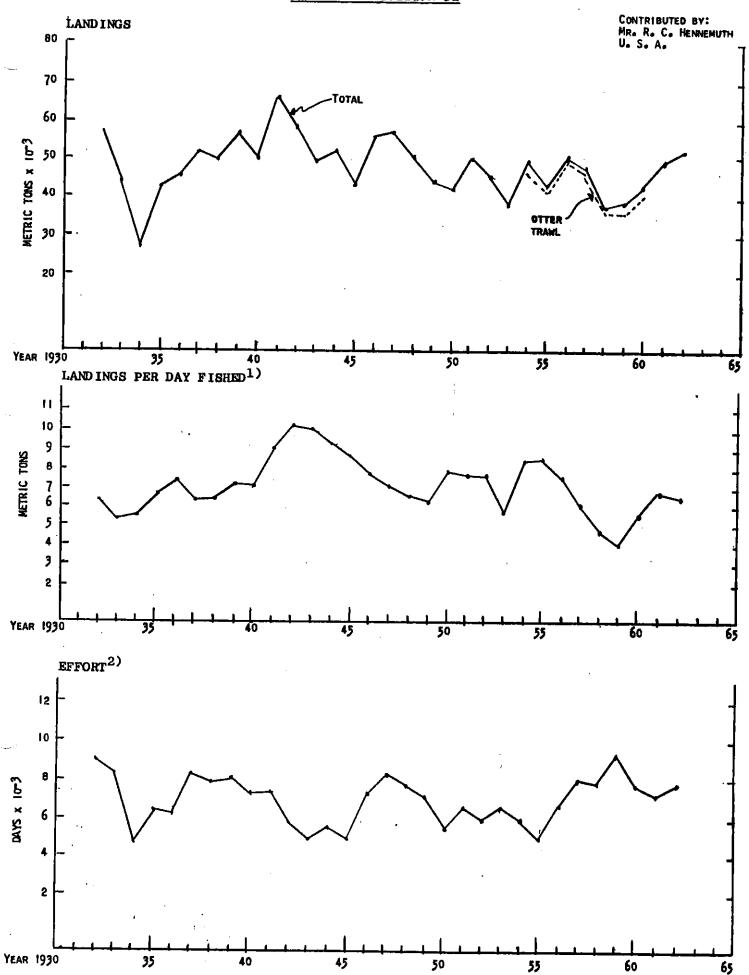
CONTRIBUTED BY: DR. L. M. DICKIE CANADA



YEAR	C/F FOR CAN. 0.T. 1 151-500 GT - Feb. Mar. Apr. Only	TOTAL LANDING	CALC. EFFORTS 1000 HOURS CAN.
1948	•23	23•0	100
1949	•35	18.8	54
1950	•35 •36	28.6	80
1951	•42	25+3	60
1952	•39	28.2	72
1953	• 39	22.9	50
1954	•40	21.5	59 54
1955	•45	19.0	42
1956	•46	26∙5	58
1957	•66	28.3	43
1958	•56	22•9	41
1959	•53	32•4	6i
1960	•49	27• I	56
1960 1961 1962	•72	27•4	38
1962	•43	24.8	56 38 58

- CALCULATED AS HADDOCK CATCH BY CAN. OT 151-500 GT DURING FEBRUARY, MARCH AND APRIL ONLY (IN 1000 M.T.)/THOUSANDS OF HOURS FISHED BY SAME VESSELS IN SAME PERIOD GIVEN IN UNITS OF TONS PER HOUR FISHED.
- 2. EFFORT UNITS EQUIVALENT TO THOSE EXPENDED BY THE CANADIAN OT 151-500 GT.

# HADDOCK - DIVISION 52



- 1. Source U. S. Otter Trawlers, 151-500 gross tons, special records.
- 2. OBTAINED BY DIVIDING TOTAL LANDINGS BY LANDINGS PER DAY FISHED.