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The Canadian 1975-76 herring fishery in Division 4Wa

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The Div. 4Wa fishery has continued to be managed as a unit with the Div. 4V fishery even though STACRES has previously recommended (Redbook 1975, pg 38) that Div. 4Wa be managed as a unit with Div. 4XWb. Since a strong stock relationship has been established between Div. 4Wa and 4XWb from tagging experiments, the more recent assessments have combined the two fisheries. This has posed some logistic problems since the Canadian fishery in Div. 4Wa normally commences in November and continues through February while neither the Div. 4XWb fishery nor that of other countries in Div. 4Wa are continuous through adjacent years.

At the Eighth Special Meeting in January, 1976, certain assumptions had to be made regarding the catch level and age composition of the Div. 4Wa Canadian fishery (being conducted at that time) in order to recommend a TAC level for 1976 for Div. 4WX. That Div. 4Wa fishery is now completed and these data are included in the revised assessment (Miller and Stobo, this meeting). This paper presents monthly catch, catch-per-effort, and removals at age from this 1975/76 Canadian Div. 4Wa fishery.

Table 1. Canadian catches and catch/effort in ICNAF Div. 4Wa during the 1975-76 winter fishery. Effort figures (purse seiners >70 ft in length) given in parentheses.

	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>	<u>Total</u>
4Wa	45.3	11718.1	19802.2	5631.4	37197.0
C/E	-	112.7 (104)	124.5 (159)	98.8 (57)	116.1 (320)

The monthly catch and catch per effort figures are given in Table 1. Although the catch increased by 38%, this increase is related to the distribution of effort during the winter fishery between Div. 4V and 4Wa under the present management regime and is not necessarily indicative of changes in abundance or availability. The catch-per-effort of 116.1 t however declined by 20% from the 1974/75 level of 146.5 t. Weather certainly adversely affected the fishery in both Div. 4V and 4Wa in 1975/76 and may have accounted for much of the decline. Further, the 1975/76 catch-per-effort is still above the average (107 t) of the last four years (only years for which effort data are available).

The removals at age are given in Table 2. The 1970 year class was again the most abundant year class comprising 33% of the catch in numbers. The 1972 and 1973 year classes however were also prominent in the catch comprising 21% and 22% respectively. In the 1974/75 fishery over 45.0 x 10<sup>6</sup> of the 1972 year class were taken and the sustained catch in 1975/76 suggests that the year class is not a poor one.

Table 2 . Canadian removals at age (thousands) of herring from ICNAF Div. 4Wa during the 1975-76 winter fishery.

Month	A G E											Total
	1	2	3	4	5	6	7	8	9	10	10+	
Nov.	-	-	5	32	120	14	8	7	5	3	2	197
Dec.	-	1091	7271	12453	31583	3120	970	709	222	180	279	57877
<u>1975</u> <u>Total</u>	-	1091	7276	12485	31703	3134	978	716	227	183	281	58074
Jan.	-	65	31394	26135	15647	33707	7057	1436	1589	654	1793	119477
Feb.	-	39	15036	12750	4571	7259	1141	416	215	167	378	41970
<u>1976</u> <u>Total</u>	-	104	46430	38885	20218	40966	8198	1852	1804	821	2170	161448

1975-76 season removals (thousands) by year class

	YEAR CLASS										Total
	1974	1973	1972	1971	1970	1969	1968	1967	1966	196-	
Seasonal Removals	104	47521	46161	32703	72669	11332	2830	2520	1048	2634	219522