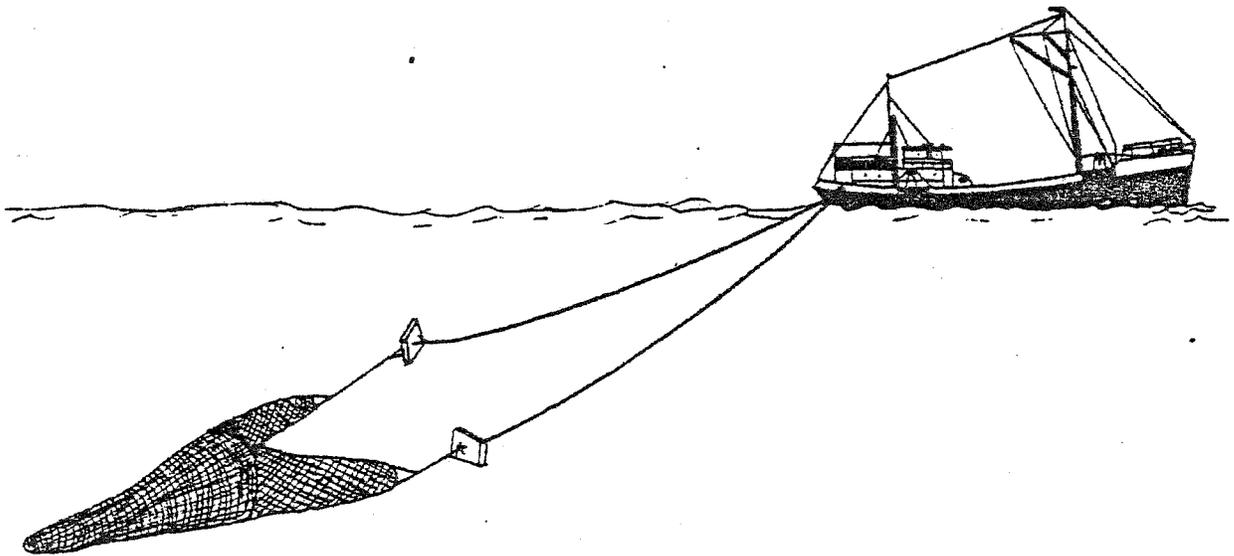


STOCK CATALOGUE
OF THE
NEW ENGLAND FISHERIES

FIRST QUARTER, 1970

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SECTION 1

1969 LANDINGS IN THE ICNAF CONVENTION AREA

Preliminary 1969 nominal catch data have been released by ICNAF. Table 1 lists landings by each country for six of the more important commercial species to the United States and by areas most commonly fished by the U.S.

Total landings of all species during 1969 in the Convention Area were 7.26 billion pounds, a decrease of approximately 17 percent compared to 1968. Total landings of groundfish and flounders in 1969 were 4.76 billion pounds, or a 20 percent decrease from 1968. Total landings of groundfish and flounder from Subarea 5 (Georges Bank and Gulf of Maine) were 804 million pounds which was an 18 percent increase over 1968. Countries other than the United States fishing red hake, yellowtail and silver hake were chiefly responsible for this increase.

Trends in fishing intensity (1961 - 1969) by Canada, USSR, United States and all countries for five species and subareas most commonly fished by U.S. vessels are presented in Figures 1 through 8.

TABLE 1

Landings (millions of lbs., live wt.) in the ICNAF Convention Area for 1969 by country and for divisions most commonly fished by the U.S.

Species Country	4RST	4VW	4X	Total 4	5Y	5Ze	5Zw	Total 5	Total Convention Area
<u>Cod</u>									
Canada	190.3	61.7	53.0	305.0	0.1	13.2		13.4	648.0
Germany		1.4		1.4	0.2	T		0.2	333.6
Iceland									0.9
Norway									109.3
Poland		0.2		0.2		0.8	0.6	1.4	169.0
Portugal	2.9	0.7		3.6					402.0
Spain	6.1	74.9	18.1	99.1	0.3	30.0		30.3	632.4
USSR		6.1		6.1		0.6	0.8	1.4	420.8
U.K.									12.1
U.S.A.			1.0	1.0	17.2	33.0	3.1	53.3	55.6
Total	199.3	145.0	72.1	416.4	17.8	77.6	4.5	100.0	2,783.7
<u>Haddock</u>									
Canada	1.0	20.4	61.9	83.3	0.1	8.8		8.9	97.8
Germany									T
Poland						1.0		1.0	1.0
Spain		3.3	1.0	4.3	0.5	2.6		3.2	11.3
USSR		0.5		.5		0.1	T	0.1	0.7
U.K.									0.1
U.S.A.			4.0	4.0	5.3	36.2	T	41.6	45.7
Total	1.0	24.2	66.9	92.1	5.9	48.7		54.8	156.6
<u>Redfish</u>									
Canada	166.7	18.9	4.8	190.4	0.1	0.5		0.6	211.1
Germany		0.2		0.2		T		T	9.3
Iceland									0.6
Norway									0.7
Poland		15.2		15.2		0.1		0.1	31.0
USSR		4.3	0.5	4.7		T		T	170.0
U.S.A.	26.7	1.7	0.9	29.2	21.2	5.3		26.5	55.9
Total	193.4	40.3	6.2	239.7	21.3	5.9		27.2	479.5
<u>Silver Hake</u>									
USSR		98.7	3.4	102.1		35.6	111.7	147.3	249.4
U.S.A.					32.2	3.6	9.0	44.8	44.8
Total		98.7	3.4	102.1	32.2	39.2	120.7	192.1	294.2
<u>Yellowtail</u>									
Canada	0.5	5.3	0.3	6.0		0.7		0.7	30.0
USSR						3.5	38.8	42.3	42.3
U.S.A.			T	T	1.9	49.6	21.3	72.8	78.8
Total	0.5	5.3	0.3	6.0	1.9	53.8	60.1	115.8	108.8
<u>Red Hake</u>									
Poland						0.6		0.6	0.6
USSR		3.0	T	3.0		9.3	90.0	99.3	102.3
U.S.A.					0.3	0.1	10.4	10.9	10.9
Total		3.0	T	3.0	0.3	10.0	10.4	110.8	151.5

Figure 1.

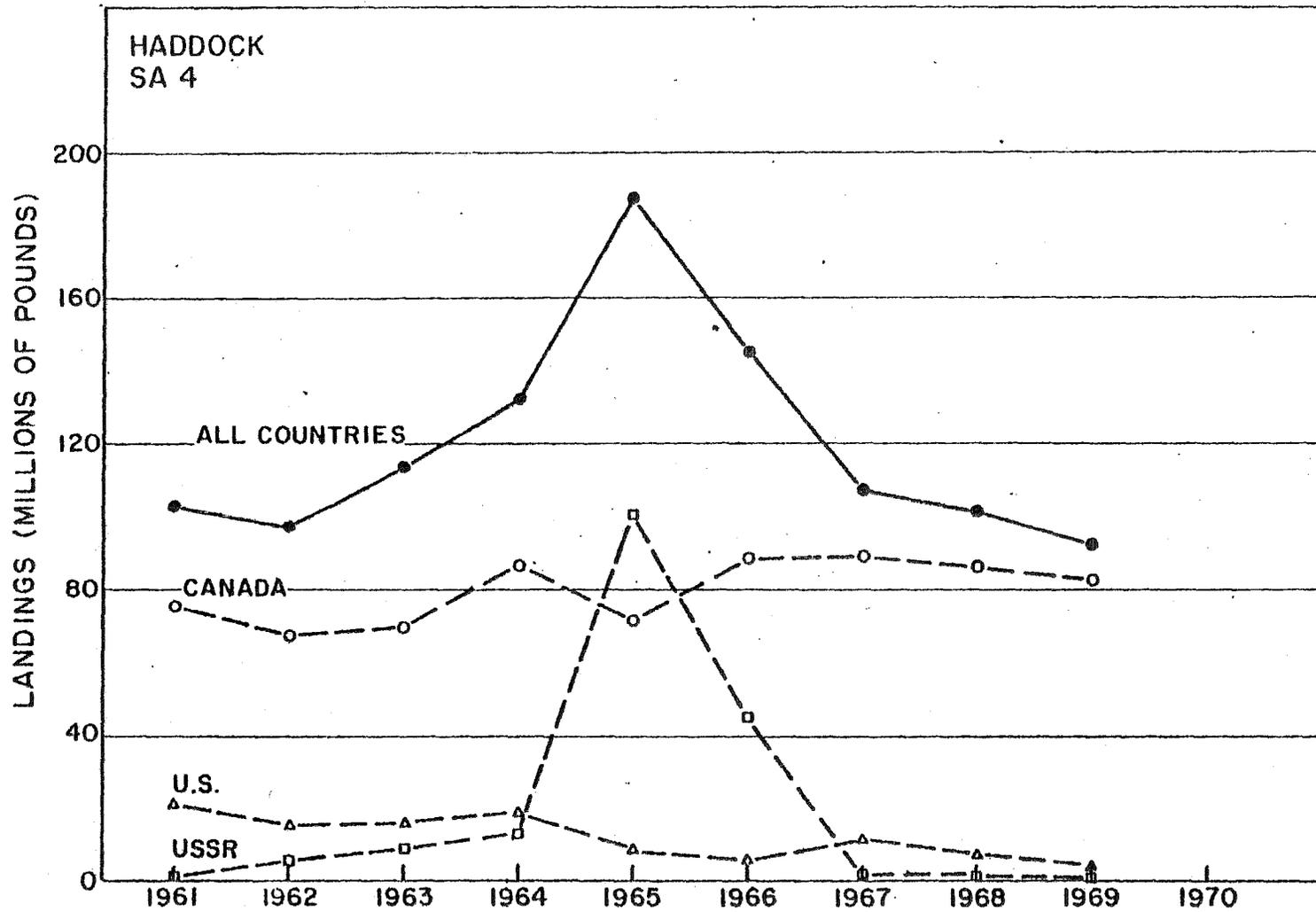


Figure 2.

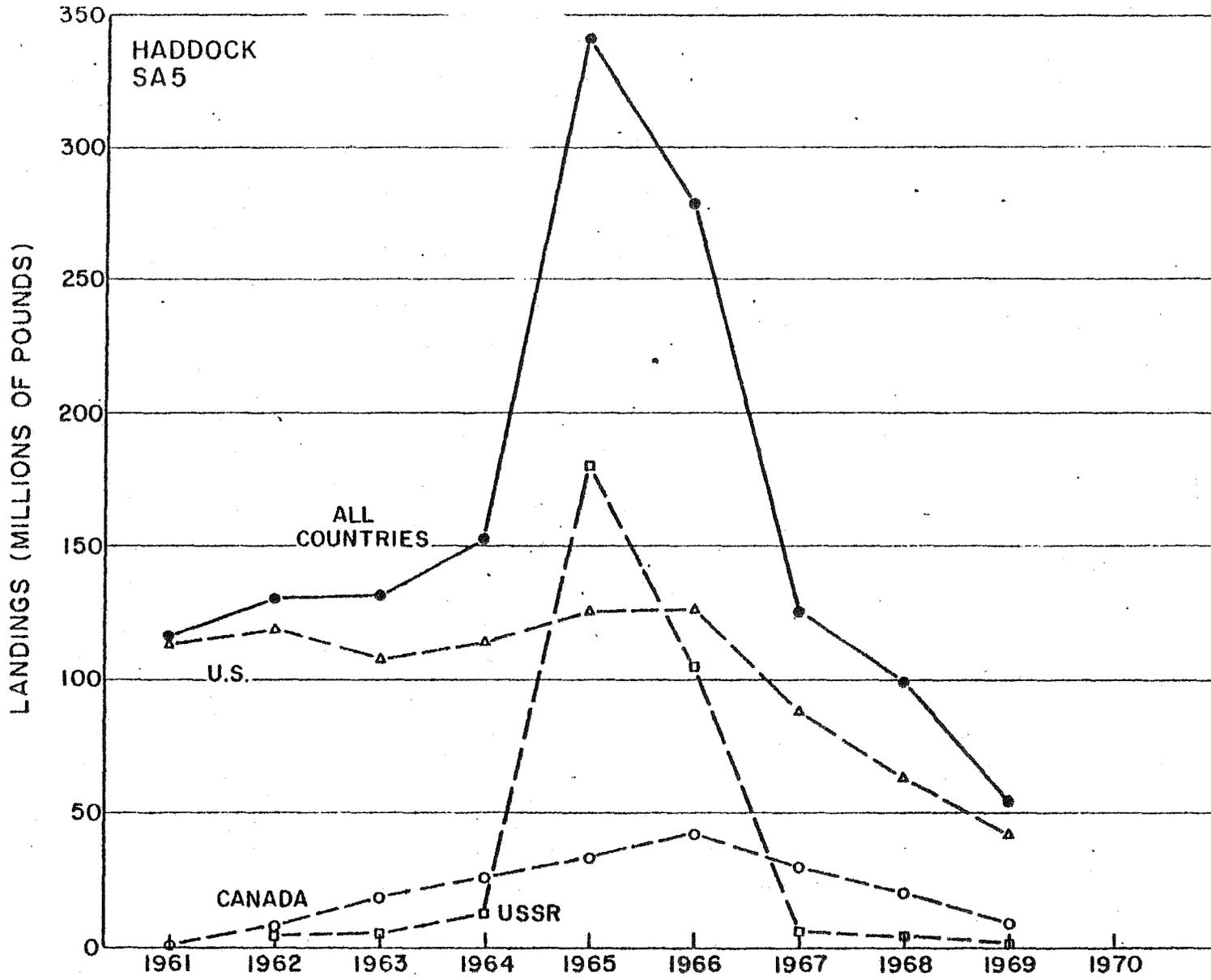


Figure 3.

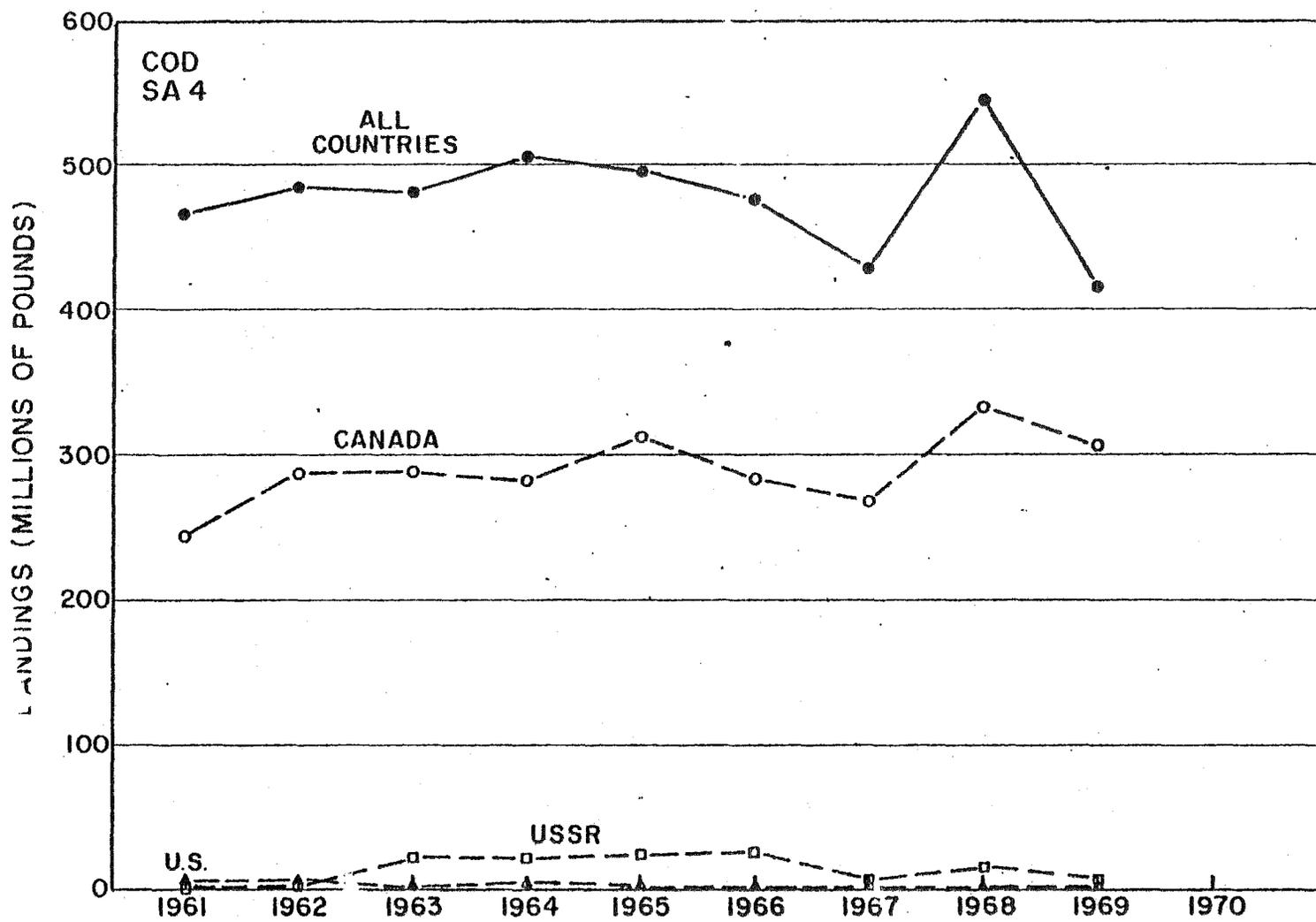


Figure 4.

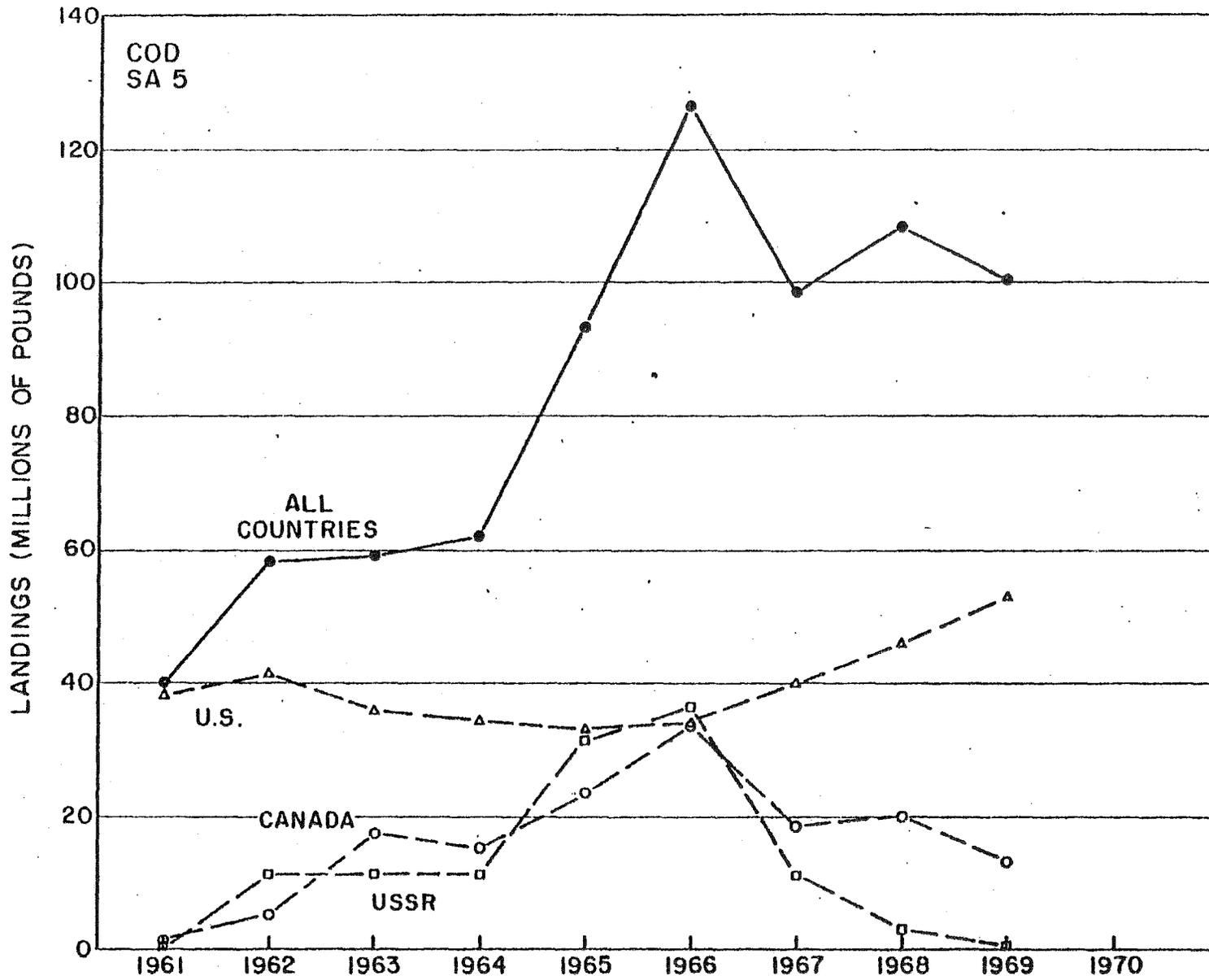


Figure 5.

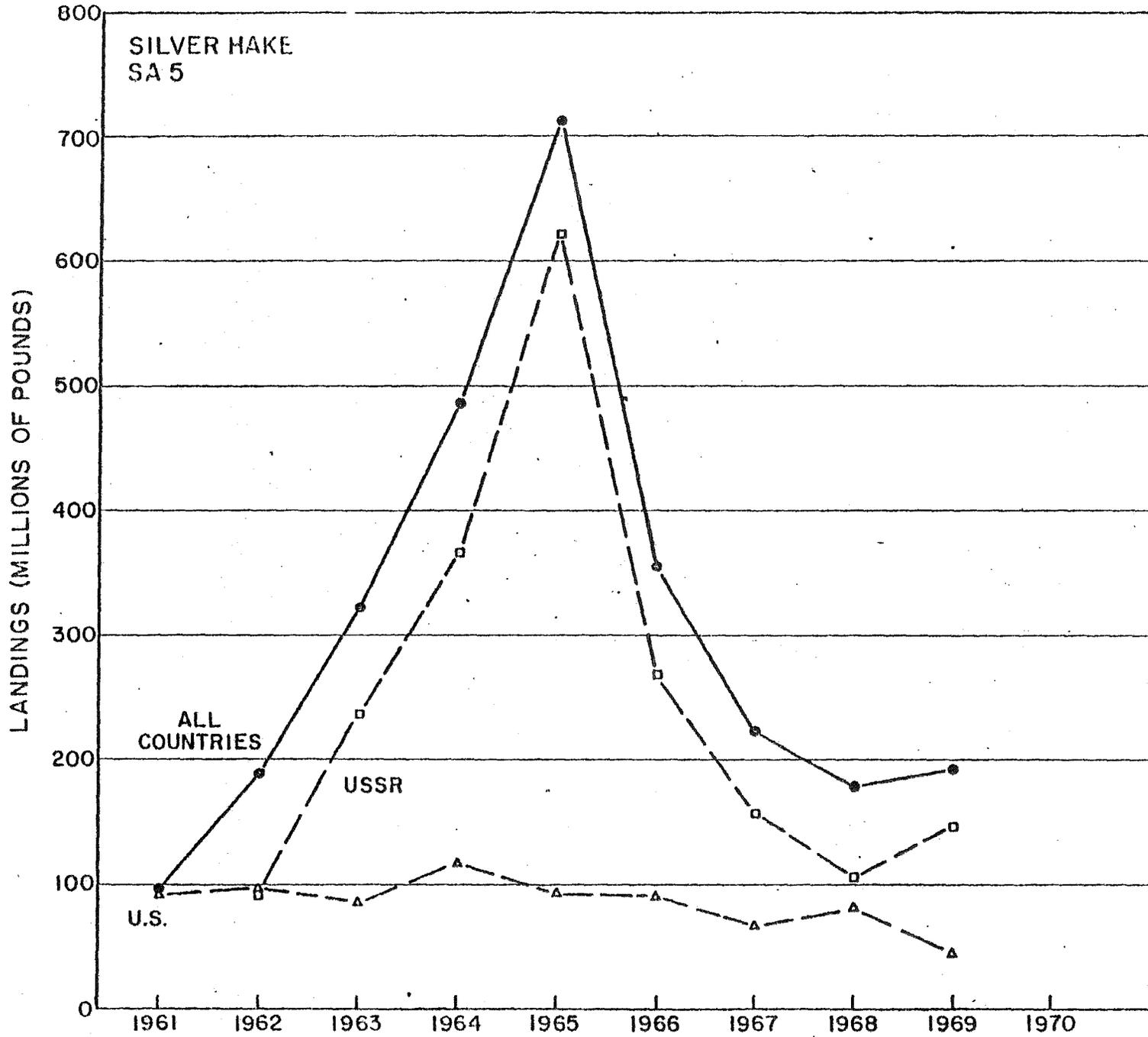


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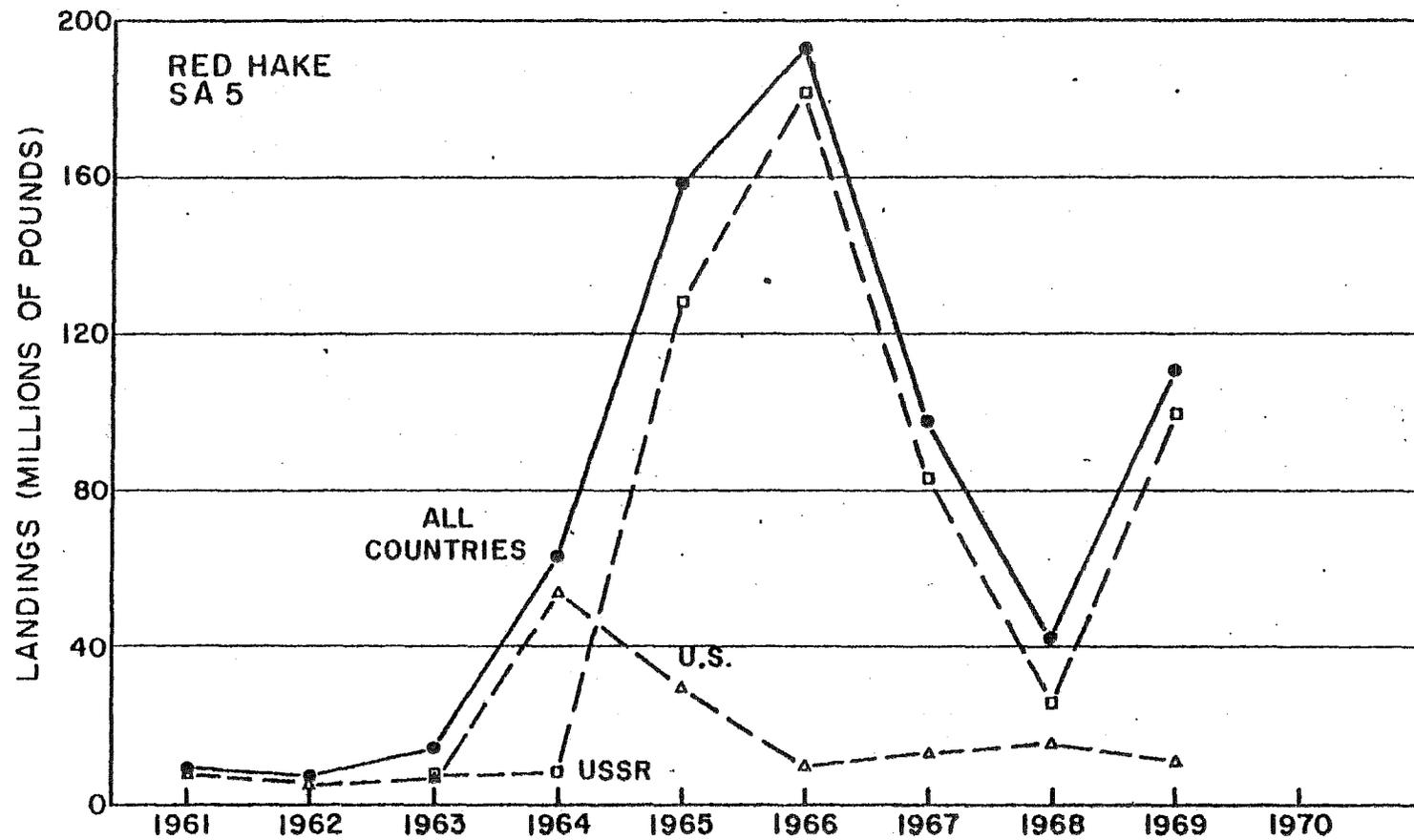


Figure 7.

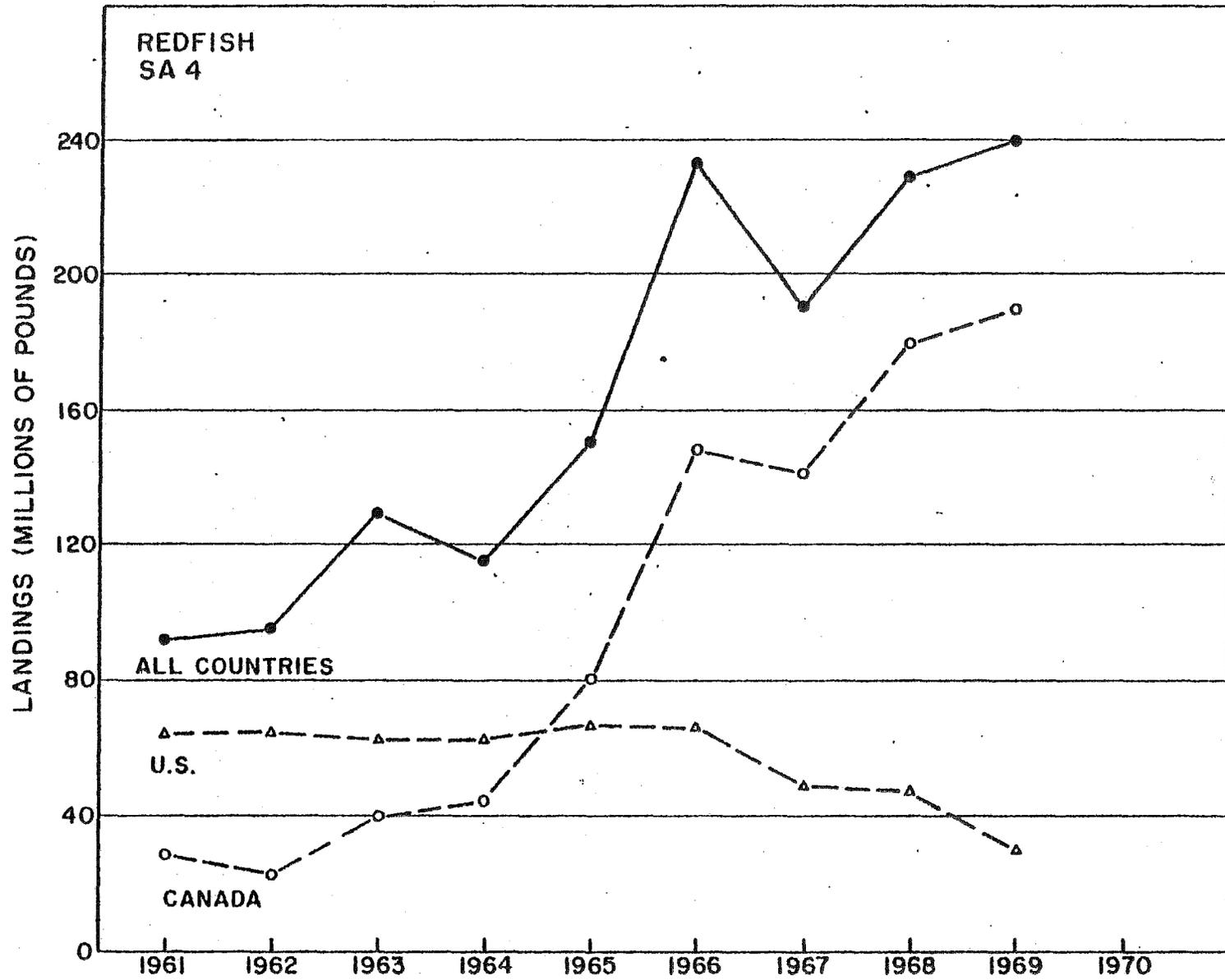
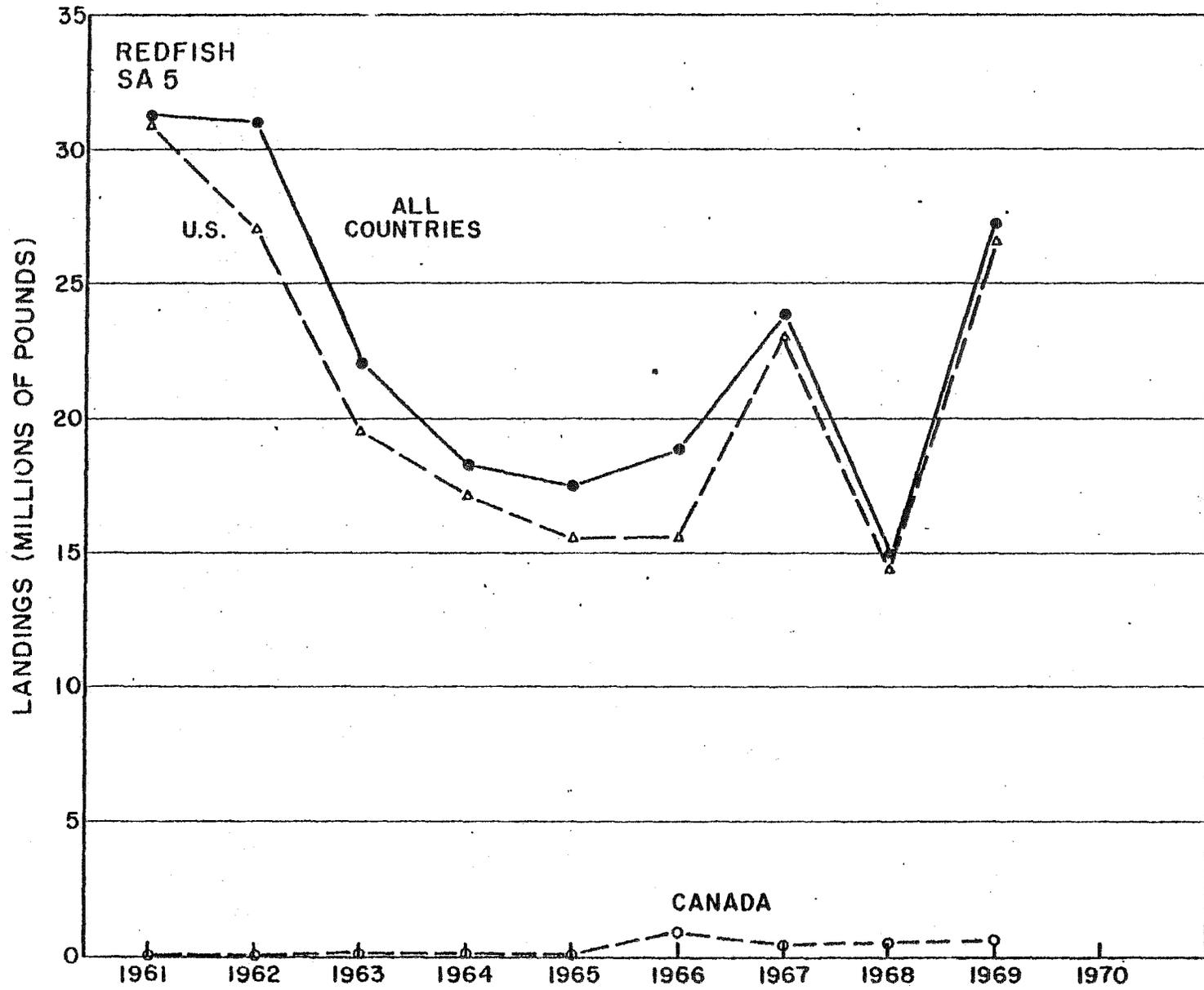


Figure 8.



Along with a ban on fishing in Areas A, B, and C (Figure 9) during March and April, ICNAF has set a yearly quota of 12,000 metric tons (approx. 26.5 million lbs.) from Subarea 5 (Georges Bank) and 18,000 metric tons (approx. 40 million lbs.) from Division 4X (Browns Bank). When 80 percent of the quota is reached, fishing for haddock will cease and only incidental landings (not more than 10% of trip) will be permitted.

At the close of the first quarter the following landings were reported (in millions of pounds, live weight):

	<u>SA 5</u>			<u>DN 4X</u>		
	<u>U.S.</u>	<u>Other nations</u>	<u>Total</u>	<u>U.S.</u>	<u>Other nations</u>	<u>Total</u>
Jan-Mar	4.0	0.6	4.6	0.4	4.4	4.9

SECTION 2

U. S. STATISTICS, FIRST QUARTER, 1970

HADDOCK

Haddock landings for the first quarter were about 4.5 million pounds (Table 2). This is not directly comparable with 1969 data since most of Georges Bank and Browns Bank was closed to fishing during the month of March (as well as April in the second quarter) as a haddock management regulation of ICNAF (Figure 9).

As predicted, landings were much reduced for 1970, and indices of abundance dropped over all fishing grounds during the quarter (Table 2).

Relative abundance, expressed as landings per days fished, has been obtained over the years from a section of the Boston haddock fleet called "study vessels". These vessels, for the most part, are no longer in the haddock fleet thereby making it necessary to use other methods to measure abundance. Estimates on Table 2 were derived from all large otter trawlers (151 - 630 gross tons).

An analysis of variance model utilizing the entire Boston haddock fleet of otter trawlers has been used to generate a new abundance index. Below is listed first quarter results of this analysis for total haddock, Georges Bank. Only January and February data are used in order to make other years comparable with 1970.

Standardized landings/day fished (lbs x 10⁻³)

	<u>Years</u>								
<u>QTR</u>	62	63	64	65	66	67	68	69	70
1	12.2	10.4	8.9	8.3	10.0	10.7	5.6	5.8	0.5

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

GROUNDFISH FISHERIES MANAGEMENT AREAS

INTERNATIONAL COMMISSION FOR THE NORTHWEST ATLANTIC
FISHERIES - SUBAREAS 4 AND 5.

Figure 9

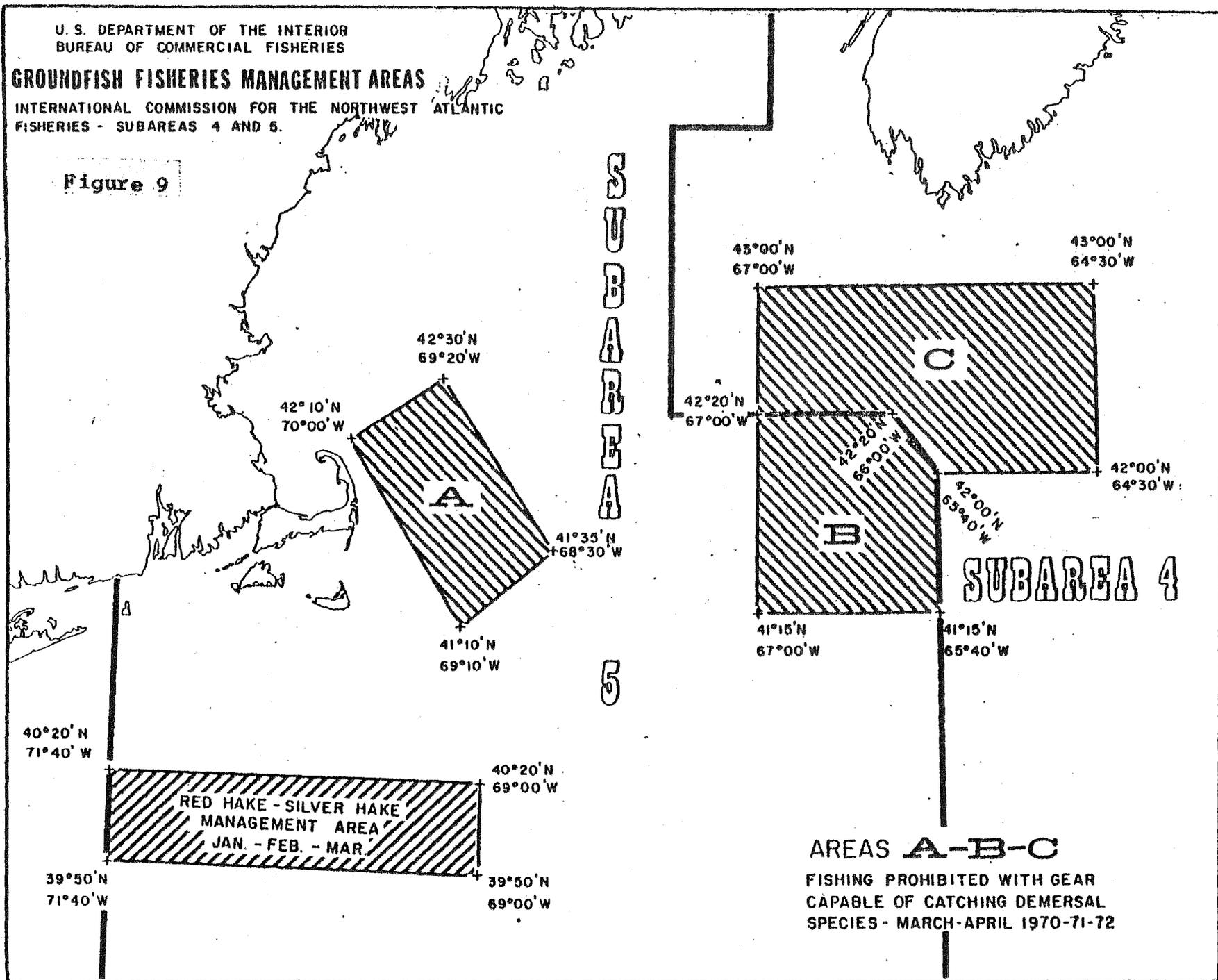


TABLE 2

HADDOCK FIRST QUARTER STATISTICS ^{1/}
(Landings in thousands of pounds, live weight)

Areas	M. Cat.	First Quarter			
		Landings		Landings/Day	
		1970	1969	1970	1969
Georges Bank	Scrod	399	2,827	723	3,246
	Large	2,484	4,928	2,589	4,308
	Total	2,883	7,755	3,312 ^{1/}	7,554 ^{1/}
Crows Bank	Scrod	218	650	3,812	4,666
	Large	185	340	3,164	2,525
	Total	403	990	6,976	7,191
Gulf of Maine	Scrod	197	466	-	-
	Large	755	685	-	-
	Total	952	1,151	-	-
Bay of Fundy	Scrod	3	343	933	3,834
	Large	11	202	3,213	2,380
	Total	14	545	4,146	6,214
Total ^{2/}	Scrod	883	4,286	1,810	3,540
	Large	3,642	6,155	2,631	4,126
	Total	4,525	10,441	4,441	7,666

^{1/} based on all Boston OTL's

^{2/} Total for 1970 includes 272,000 lbs. landed from LaHave Bank Area (ICNAF Div 4W) during March.

YELLOWTAIL

Total yellowtail landings for food were up two million pounds from the first quarter of 1969 (Table 3). This is about the same gain in total landings as was exhibited during the first quarter last year.

The largest increase in landings was from Georges Bank (2.3 million pounds), while Southern New England Grounds showed a 0.3 million pound increase. Cape Cod and Mid-Atlantic grounds registered lower landings than in 1969.

Abundance decreased on all grounds in 1970 when compared with the first quarter of 1969 (Table 3). For instance, on Georges Bank it required 21 percent more effort in 1970 to land the same number of pounds than it would have during the period in 1969.

Current yellowtail stock assessment indicates exploitation rates higher than that which will result in a maximum sustainable yield. The continued additional effort placed on the yellowtail fishery for the two major fishing grounds during the first quarter of 1970 will do nothing to alleviate this situation.

In addition to food landings, small yellowtail are discarded at sea and others are taken in the Industrial fishery. The sum of these represents the total catch. Below are listed these statistics for the first quarter, 1970 for the two major grounds (in thousand of pounds, live weight):

Grounds	Food landings	% Discards are of food landings	Est. Discards	Est. Catch	Ind. landings	Total Yellowtail catch
So. New England	8,660	21.0	1,819	10,479	1,003	11,482
Georges Bank	7,211	15.9	1,147	8,358	-	8,358

TABLE 3

YELLOWTAIL* FIRST QUARTER STATISTICS
(Landings in thousands of pounds, live weight)

Areas	First Quarter			
	Landings		Landings/Day	
	1970	1969	1970	1969
So. New England	8,660	8,380	5,727	6,532
Georges Bank	7,211	4,943	5,266	6,693
Mid-Atlantic	339	646	5,906	8,276
Cape Cod Grounds	887	1,106	4,898	7,190
Total	17,097	15,075	5,493	6,708

* Food landings only

OTHER SPECIES

Statistics for other major New England fisheries are presented in Tables 4 through 6.

TABLE 4

COD FIRST QUARTER STATISTICS
(Landings in thousands of pounds, live weight)

Area	First Quarter			
	Landings		Landings/Day	
	1970	1969	1970	1969
Georges Bank	4,798	5,846	4,861	3,380

TABLE 5

REDFISH FIRST QUARTER STATISTICS
(Landings in thousands of pounds, live weight)

Areas	First Quarter			
	Landings		Landings/Day	
	1970	1969	1970	1969
Gulf of Maine	9,152	6,358	25,931	29,339
Nova Scotia	321	19	37,625	-
Gulf of St. Lawrence	1,181	9,753	40,728	31,061
Total	10,654	16,130	27,924	30,382

TABLE 6

INDUSTRIAL RED AND SILVER HAKE FIRST QUARTER STATISTICS
(Landings in thousands of pounds, live weight)

Species	First Quarter			
	Landings		Landings/Day	
	1970	1969	1970	1969
<u>So. New England</u>				
Red Hake	12	32	75	195
Silver Hake	12	64	75	390
Total	24	96	150	585
<u>Mid-Atlantic</u>				
Red Hake	47	-	262	-
Silver Hake	12	5	66	309
Total	59	5	328	309
Total Red Hake	59	32	224	195
Total Silver Hake	24	69	71	384
Total Industrial (All spp.)	11,778	18,684	74,529	105,194