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Romanian Research Report for 1980

by

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INTRODUCTION

The overall nominal catch from Romanian fisheries in the NAFO Area in 1980 was 77.3 tons, a further substantial decrease from 2,663 tons in 1979 (Table 1) and previous years. Only one fishing vessel activated in Subarea 5 and Statistical Area 6 during October 1980. The bottom trawl was used and mesh of cod-end employed was 60 mm. The Romanian catch and effort statistics by divisions for 1980 are shown in Table 2, which indicate that all catch were taken from United States waters where the catch quota allocated was 2,000 tons (silver hake - 1,700 tons, and by-catch -300 tons). In regard to Romanian catches by species in 1980, the catch of <u>Illex</u> squid was overwhelmingly large, followed by mackerel, accounting for 71% and 24% of Romanian total catch, respectively.

The drop in Romanian catches was mainly due to fishery regulations in Subarca 5 and Statistical Area 6, bad weather conditions, and carrying out of the activity during un unproper period for the silver hake fishery.

SUBAREA 5

Status of the Fishery

Romanian catches in Subarea 5 in 1980 amounted 42.36 tons, a decrease of 51% from the 86.0 tons taken in 1979.

The main component which were concentrated in Subdiv. 5Ze was squid <u>Illex</u>. Butterfish, red hake and mackerel were caught as by-catch.

Squid-Illex

The samples were collected in 52e in October for length measurements. Mean length was 23.18 cm and 25.25cm for males and females respectively (Table 3). Stages of maturity (scale I-VI) were mainly I and II for both sexes (Table 4).

Red hake

Only 600 kgs of red hake were caught in two hauls, in Div. 52W. One sample for length measurements (226 specimens) and other (113 fish) for ageing were taken. The 1977 and 1976 year-classes were dominant (Table 5).

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Butterfish

No directed fishery to butterfish was performed. An amount of 1,250 kgs were caught in Subdiv. 52W.

One sample was collected for length measurements (198 specimens) and ageing (110 specimens). Taking into account the butterfish birthday July the 1st the 1979 and 1980 year-classes were predominant and constitued 49.1% and 37.3% respectively, of catches (Table 6).

STATISTICAL AREA 6

Status of the Fishery

The overall Romanian catch in SA 6 in 1980 was 34.920 tons. The fishery was conducted in Div. 6ABC, about 93% of the catches being obtained in Div. 6B (Table 2). The main components were squid-<u>Iller</u> (14.280 tons) and mackerel (18.170 tons). The silver hake and butterfish were of much less importance.

Squid-Illex

Squid-Ellex catches from SA 6 maintained to a low level being of 2,340 kgs in Div. 6A, 11,830 kgs in Div. 6B, and only 20 kgs in Div. 6C. Three samples were collected (2 in Div. 6B and one in Div. 6A) in October, for length measurements. The greatest portion of catches constitued specimens with mantle length between 17-22 cm (Table 7) and stages of maturity I, II and III (Table 8).

Mackerel

The whole Romanian mackerel catches in SA 6, 18.170 tons, were fished in Div. 6B. The catch quota was not fully utilized by about 7 tons.

Length measurements were carried out on 81 males and 61 females (1 sample.). Otolith from 80 specimens were collected for age reading. The 1977 year-class was predominant and constituted more than 85% of catches (Table 9).

Table	1.	Romanian	catches	in	NAFO	Subareas	2	to	5
		and Stati	atinal	Aras	a 6 in	1980			

1 - 2

10.1

99 99 99 99 99 99 99 99 99 99 99 99 99	b,	1980 7 sut	catch areas	197	79 с а	tch (tor	by 18)	suba	reas
Species	5	6	Total	. 2	3	4	5	6	Total
Atlantic cod				1	5			1812	6
Arctic cod		· .		146	+	4900		4003	146
Greenland cod				*	-		-	640	\$
Redfish				4530	677			5000	677
American plaice				1	600		kaate		1
Witch flounder					6	-	6 020	-	6
Silver hake		. +	+		с., соно	1	42	3	46
Offshore hake			1780 ·		840	2	-	1380	2
Red hake	l	tuo	1	4018		-			4
River herring	850	-	010		-	-	1	0000	1
Atlantic mackerel		18	18	****	, 	. 609	8	2	10
Capelin	-	NED	-	846		G 100	1010	****	846
Striped searobin	: 				-	, 6445	18	4	22
Swordfish						3	8 23	-	3
Butterfish	1	2	3				6	4	10
Spiny dogfish		-	and .				5	40.00	5
Lumpfish	-	-	680	3	-	em		a	3
Other finfish	 		800		1	+	1		2
Squid - Illex	40	14	55	exe	+	832		-	832
Squid - Loligo		-			2000		5	9	14
Pink shrimp	4000			1	-	-	-		1
TOTAL	42	35	77	9 98	689	838	86	22	2633

Table 2. Romanian catch and effort in NAFO Subarea 5 and Statistical Area 6 in October 1980

the new this sale ship the fees the site and the set the								
	Subare	a 5	Stat	tistic	<u>8] A</u>	rea 6	Total	
	5Z0	5ZW	Total	64	6B	60	Total	21
No.of vessels	1	1	1	1	1	1	1	1
Days on ground	9	3	12	3	6	1	10	22
Fishing days	7	3	10	3	5	1	9	19
No. of hauls	20	. 9	29	8	26	2	36	65
Fishing hours	42	20	62	17	47	.4	68	130
Catch (tons)	12,8	29.6	42.4	2.4	32.5	*	34.9	77.3
Butterfish	ູໝາ	1,3	1.3		2.1	4	2,1	3,3
Squid- <u>Illex</u>	12.7	27.7	40.4	2.4	11.8	4	14.2	54.7
Red hake		0.6	0.6	-		-		0 ₀ 6
Silver hake		8580	utora		0 _e 4	6000	0 _e 4	0 _e 4
Mackerel	0.1	exa	0.1	., ean	18.2		18.2	18.3

Length interval	nerene en	Females	Total
20.5 21- 21.5 22- 22.5 23.5 23.5 24. 24.5 25.5 26.5 27.2 27.5 28.5 29.5 30.5 30.5 31.5 32.5 32.5 33.5 34.5 33.5 34.5 35.5 35.5 36	6 26 58 83 205 205 167 109 51 32 13 13 13 19 13	4 16 4 16 36 65 105 129 109 97 85 48 69 73 44 20 20 8 12 4 8 8 4 - - - - 4	5 20 25 42 101 119 129 121 87 72 57 50 27 12 12 57 25 52 2 2
IVIAL	1000	2000	999 404
An I (cw)	27.18	25,25	707 24 45
Av. W (g)	231.3	301.7	274.6

Table 3. Length composition (%o) of squid-<u>Iller</u> in Subdiv. 5Ze, October 1980

Table 4. Stages of maturity of squid-<u>Illex</u> in Subdiv. 5Ze, October 1980

		Stage of	matur	ity:	(%0)
Sex	1	II	III	IV	Total
Males	212	654	135	600	1001
Females	504	363	129	4	1000

Length	Le	ngt	h -	-				A	ge		3201226		ana	nienstersterend	10000000000	
val	<u>CC</u> M	F F	e M	2 F	M	-2 _F	M	t F	M	2 F	M	° F	M	F	M	<u>o</u> F
28-29 30-31 32-33	16 51	5 16 38	(111) (111)	1	6 10 5	6 8	2 19	7				· .	•			
34-35 36-37 38-39	22 9 3	17 12 10				3	14 3 1	2 9 5	2 1 2	3		_				
40-41 42-43 44-45	5 3	83		639 639			640 9800	800 600 600	1	3 1 -	1	1 1 -		2		
46-47 48-49		1 1		6110 0720		940 ex3	-			-		1		л. сон - сон		1
TOTAL :	115	111	:	1	21	17	39	16	6	7	1	2		2		1
Av. W(g)	204	,6 233.	2	.20. 1	o l 53.	70.0 8 18	o 26 37.9	53.8	3 3 273	22 3 3	9 3 20	60 e	0	430.0	6	30.0

Table 5. Length frequency and age composition of red hake males and females, in Subdav. 5Ze, in October 1980

Table 6. Length frequency and age composition of butterfish, in Subdiv. 5ZW, in October 1980

Length interval	Len Com	gth positi	.on		and and the set of the	Age		the first field wild first first first wi		
	M	F		0		1		2	3	
10 11 12 13 14 15 16 17 18 19 20 21 22	14 11 92 11 13 8 93 1	3599516 183798823		2582941		32 15 11 931		123211	112	
TOTAL	82	116	-	41		54	•	Lo	5	
Av. W(g)8	2.8	83.7		43.1		93.4	142	•7	183.4	300 040
								ne Call these state Web His		100 1000

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Length		Divi	sii o	
interval	Ň	6 A F	M	бВ Г
17.5 18.5 19.5 20.5 21.5 22.5.5 23.5.5 24.5.5 25.5.5 26.5.5 27.5.5 28.5.5 29.5.5 30.5.5 31.5	10 10 - 10 19 77 67 144 135 115 77 87 67 58 29 10 19 29 10	11 - - - - - - - - - - - - -	6 11 28 28 34 56 119 209 237 119 209 209 237 119 209 237 119 209 237 119 209 237 119 209 237 119 209 237 119 209 237 119 209 237 119 209 207 119 209 207 119 209 209 207 119 209 209 209 209 209 209 209 200 100 100 100 100 100 100 100 100 100	12 31 25 19 31 99 11 179 68 56 49 37 43 57 25 25 12 25 6 6 6
TOLAL	1005	TOOT	T00T	LOOL
No. sample Av. L(cm) Av. W(g)	d 104 23,26 237.2	94 23.91 261.1	177 22 .32 230.9	162 23.68 272.0

Table 7. Length composition (%o) of squid-<u>Illex</u> in Statistical Area 6, in October 1980

Table 8. Stages of maturity of squid-<u>Illex</u> in Div. 6AB, October 1980

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Div.	Sex	I	11	111	IV	Total
64	M	58	625	308	10	1001
	F	755	85	149	11	1000
6B	M	102	514	373	11	1000
	F	691	185	117	6	9 99

\$ 96 F X

Length interval	Longth Compos	ition		A g e	
	M	R.	2	3	4
26	3	1	4		· · · · ·
27	14	9	2	7	
28	17	21		18	
29	18	7		16	
.30	13	12		16	
31	13	8		12	1
32	3	2			3
33		1			1
TOTAL	81	61	6	69	5
Av. L(cm)	28,92	28,93	26,33	29,12	32,00
Av. W(g)	341.2	347.8	240.0	345.5	504.0
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Table 9. Length frequency and age composition of mackerel, in Div. 6B, October 1980

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