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Redfish Depth Zones

Collation of Abstracts on Redfish Depth Zones from Various Sources

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This is a collection of comments concerning redfish depth zones, which have been made by those countries who have not submitted a formal document on this subject but yet have made mention in some form or another in a letter, annual report or research paper.

1. United Kingdom - reported in a letter from J.A.Gulland:

"At present there is no U.K. fishery for redfish. The position is being under review, and if such a fishery does develop, arrangements will be made to collect at least sample depth data."

2. Spain - reported in Research Report by J. Arambarri (vide Document No.39):

"It was (as in previous years) reported that redfish often appear mixed with cod in large quantities on the eastern edges of the banks from Belle Isle to Hamilton Bank. It was also reported that both species move between depth zones from day to day and even from one trawl haul to another. Thus it happens that at the same depth one two hours' haul yields a catch of 100 kentals cod (split and salted) and about 10 kentals of round fresh redfish, and that another haul following backwards on the same track (same depth) yields completely reverse proportions of the two species. There is little doubt about the similarity of the hauls, as these were checked by electronic navigational aids. Cases like these are reported mainly from late spring and early summer."

3. Poland - reported in Research Report by Jan Elwertowski (vide Document No.15):

"Fishing ground and depth - The area of operation was on the NE Slope of the Grand Bank (Subarea 3L) at 230-400m. Most often trawling was made at the depth of 270-300m.

"The samples which were investigated consisted of redfish of mentella type (98.7% of all investigated fish) and of marinus type (1.3%).

"Thorough investigations were carried out in the chosen areas on the catch composition and the yield per unit of fishing effort. The data are given in Table 1:

TABLE I

Catch composition and yield from the various depth zones on the NE slope of Grand Bank in Aug.-Sept., 1961

Fishing areas	Fishing date	Central geogr. position		Depth m	The catch per one hour trawling in kg								Total
		Latitude N	Longitude W		Sesates sp.	Cod	Anarhichas sp.	Hippoglossoides platessoides	Gray sole	Rheinhardt-tius hippoglossoides	Hippoglossus	Other fish	
A	15-23 Aug.	48°10'	49°10'	250-270	824	310	49	326	.	13	1	37	1,560
B	24-30 Aug.	48°00'	48°40'	290-300	1300	219	43	75	.	21	2	53	1,713
C	1-14 Sep.	47°55'	48°05'	310-320	952	101	14	9	.	12	4	12	1,104
D	15-19 Sep.	47°55'	47°35'	330-350	1236	92	10	3	.	14	1	6	1,362
E	20-21 Sep.	47°35'	47°10'	310-350	1012	232	8	2	14	6	4	34	1,312
Average for total trip from 1 Aug. to 30 Sep. 1961					929	164	37	124	.	17	5	96	1,372

4. France - reported in Research Report by J. Ancellin and  
and Ch. Allain (vide Document No.28):

"Cruise by the oceanographic vessel 'Thalassa', July-  
August, 1961.

a. Subarea 3, the slopes southwest of the Grand  
Bank, St. Pierre Bank and St. Pierre and Miquelon.

On the slopes south and southwest of Grand Bank and  
south of Green Bank, 12 trawlings were made. The general  
depths fished are between 150 and 600 metres.

Good catches of Sebastes (5 to 6 tons per hour)  
were made at depths of 300 to 400 metres in water with a  
temperature of 4 to 5°C in the region south of 43°50' N.  
Lat., in the following locations: 43°04' N. Lat. - 50°53' W.  
Long. and 43°43' N. Lat. - 52°20' W. Long.

The Sebastes still predominated north of 53°50' N.  
Lat. on the slopes of the Grand Bank and the Green Bank,  
but there were not in this region, as in the preceding,  
caught more than one ton per hour.

The further catches, from the slopes west of St.  
Pierre Bank in water of 3 to 6°C., and on the Bank itself  
in water of 3 to 4°C. (a total of 6 hauls), consisted in  
the main of haddock, silver hake, Sebastes and cod. It  
can be noted inter alia, that one haul of 1 hour and 30  
minutes made on the slopes (45°35' N. Lat. - 56°34' W. Long.,  
220 metres depth) yielded 926 kg of fish, of which 518 kg  
were Merluccius bilinearis, and that another haul of one  
hour on the Bank (45°38' N. Lat., - 55°53' W. Long., 46  
metres depth) provided 563 kg of fish of which 418 kg  
were cod.

b. Subarea 4, Banquereau

A total of 11 trawl hauls were made in depths be-  
tween 150 and 350 metres in the following regions: a) the  
slopes northeast of Banquereau, b) the slopes towards the  
south until the longitude of Sable Island.

Satisfactory catches of Sebastes (the species was  
found in waters of 3 to 7°C.) were made on the two follow-  
ing locations: 45°22' N. Lat. - 57°51' W. Long. on the  
slopes of Mimia Bank (north of Banquereau, 170 to 220 m)  
where 2,500 kg of this species were taken in a haul of 20  
minutes; and on 44°12' N. Lat. - 58°09' W. Long. (slopes  
south of Banquereau), where 1,100 kg were caught in a haul  
of 50 minutes.

Further to be mentioned is a haul of 40 minutes at  
44°31' N. Lat. (the southeast point of Banquereau - 180 m)  
where 2,000 kg of fish were caught, 1,300 kg being cod.

Finally, the Great Silver Smelt (Argentina silus),  
which is not marketed at St. Pierre, was caught in abundance  
in water of 7 to 8°C. in the two following locations:  
43°39' N. Lat. - 59°10' W. Long. (southeast of Sable Island,  
220 m; 3,700 kg in one hour) and 43°37' N. Lat. - 59°40' E.  
Long. (south of Sable Island; 170 m, 2,800 kg in one hour).