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The American Plaice Stock on the Flemish Cap (NAFO Division 3M)

by

Javier Zamarro

by

Instituto de Investigaciones Marinas
Eduardo Cabello 6, Vigo, Spain

INTRODUCTION

This stock has been regulated from 1974 when a TAC of 2,000 tons was agreed, from then with the exception of 1978 this TAC has been maintained.

Until 1985 the catches were lower than 2000 tons, which were taken as by-catch of the Cod fishery, which have wide depth overlap with the American plaice, distributed in depths lower than 400 metres. In 1986 Spain and Portugal began to develop a frozen fishery in this area increasing the catches to 5,600 tons in 1987. Total catches were bigger than the TAC from 1986 to 1989 and in 1990 decrease to 453 Tm, the lowest value in the last ten years.

From 1988 STACFIS is indicating the low quality of the information about the exploitation levels in this fishery.

The reported catch in the last ten year are the next

YEAR	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
TAC (000)	2	2	2	2	2	2	2	2	2	2
CATCH (000)	0.6	1.1	1.9	1.3	1.7	3.8	5.6	2.8	3.5	0.8

a) Sampling of the catches.

Length and age compositions for the Spanish catches are available for five months in 1990, two months in 1989 and length composition for four months in 1988. Modal length distributions were 39 cm in 1988, 35-37 in 1989 and 32-35 in 1990 corresponding the last to four years old.

b) Research vessels survey data

The USSR has been conducting regular groundfish surveys in this Division from 1972, during the spring-summer period. From 1984 they are stratified random surveys and the total biomass obtained during them are in table 1.

The EEC has made three surveys with total biomass are also in table 1

Table 1. Biomass (000) obtained for the USSR and EEC surveys.

YEAR	1984	1985	1986	1987	1988	1989	1990
USSR	6.7	10.2	19.1	9.1	6.3	4.8	1.2
EEC					11.8	10.5	9.1

The total biomass estimated during the USSR surveys show big decreases not explained by commercial catch. Without taking in to account the maximum value obtained in 1986, from 1987 to 1990 there was a reduction of 87% in the total biomass, obtaining in 1990 the lowest value from the beginning of these surveys.

The biomass in the EEC surveys show a 23% of reduction from 1988 to 1990, this decrease correspond mainly to the reproductive stock.

	1988	1989	1990
Mature female biomass EEC survey	6,140	5,259	4,486

The stock age composition in the EEC surveys confirms the strength of the 1986 year class, that support most the commercial catch in 1990, and it is expected to make a significant contribution to the spawning biomass in 1992.

Year	1988	1989	1990
Age 2	2284	454	343
3	625	6847	767
4	3034	1500	7027
5	1975	3238	865
6	3020	3006	2386
7	4154	2868	1640
8	4258	1691	1586
9	1492	587	992
10	207	261	462
11	109	34	83
12	61	14	12
13			30
14			17

The biomass estimations during the EEC survey show values higher and more stable than USSR estimations, and fits better with the reported catches. The EEC biomass estimations near to 10,000 tons, can be considered more approximated to the real size of the population, this biomass have been considered for STACFIS the stabilised biomass of this stock in the last years.