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Corrigendum

ANNUAL MEETING - JUNE 1975

An assessment of American plaice in ICNAF Subdivision 3Ps

by

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Fisheries and Marine Service  
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St. John's, Newfoundland

Page 1, line 3 of "Results and Discussion": The sentence "These are just beyond the calculated.....  
.... (Fig.3)" should read:

"These are just beyond the calculated  $F_{0.1}$  level which is 0.35  
for males and 0.20 for females or about <sup>0.1</sup> 95% of the maximum  
yield per recruit (Fig. 3)."

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Introduction

ICNAF Subdivision 3Ps contains a small American plaice stock which is considered to be separate from those on the Grand Bank. Based on average catches a TAC of 10,000 tons was recommended for 1974 (Pitt 1974) and established by the Commission at 11,000 tons at the 1974 mid-year meeting and maintained at this level for 1975. This assessment is based on age and length data collected during 1974 from the Canada (N) commercial fleet.

Materials and Methods

From this stock a total of 2033 plaice were measured (659 male and 1374 female), and otoliths collected from 737 fish (280 male and 457 female). Age-length keys were applied to the frequencies and von Bertalanffy growth curves (Fig. 1) and catch curves (Fig. 2) fitted in the usual way. Ages at entry into the exploited phase ( $t_{p1}$ ) were calculated from the length frequencies. Lengths at entry  $l_c$  were 30.87 cm and 31.83 for males and females respectively.

Beverton and Holt yield per recruit model was applied to males and females separately using the following parameters (Fig. 3):

	<u>Males</u>	<u>Females</u>
M (natural mortality)	0.25	0.20
$W_{\infty}$ (asymptotic wt.)	3.86 kg	8.96 kg
K (from growth curve)	0.093	0.071
$t_0$ (from growth curve)	0.75	1.45
$t_p$ (age of entry into exploited area)	3 yrs	3 yrs
$t_{p1}$ (age of entry into exploited phase)	6.6 yrs	7.1 yrs
$t_{\lambda}$ (last age of significant contribution)	16 yrs	21 yrs

Results and Discussion

Total mortality (Z) calculated from catch curves were 0.71 and 0.42 for males and females respectively (Fig. 2) giving with M values of 0.25 and 0.20 corresponding F of 0.46 (males) and 0.22 (females). These are just beyond the calculated  $F_{0.1}$  level which is 0.20 for males and 0.35 for females or about 95% of the maximum yield per recruit (Fig. 3). Nominal catches for 1964-73 averaged approximately 8000 tons and this removal level is presumably reflected in the catch curves (Fig. 2).

St. Pierre Bank does not support an American plaice population comparable to the Grand Bank (Divisions 3LN0) and there has been very little directed fishery for plaice in this area. There is probably a by-catch by Spanish pair trawlers with the latter country having a substantial cod quota. Thus, until the rate of discard is known with some accuracy and until data are available to give more

current estimates of F, removals from this stock should be stabilized at 8000-9000 tons annually.

References

Pitt, T. K. 1974. Updated estimates of total allowable catches of several flatfish stocks for Subareas 2 and 3. Intern. Comm. Northw. Atlant. Fish. Res. Doc. 74/73, Serial No. 3306.

Table 1. Nominal catches of American plaice (tons) from ICNAF Subdivision 3Ps.

Year	Canada	France	Poland	Romania	USSR	UK	TOTAL
1964	1,362	152				28	1,542
1965	1,849	162				11	2,022
1966	2,494	667			218	27	3,406
1967	3,275	533			678	8	4,494
1968	5,523	524			8,233		14,280
1969	4,066	245			2,180		6,491
1970	11,595	397			336		12,328
1971	5,953	820			409		7,182
1972	5,922	383		13	220		6,538
1973	12,812	547	1				13,360
1974*	6,330					7	

\* Preliminary data.

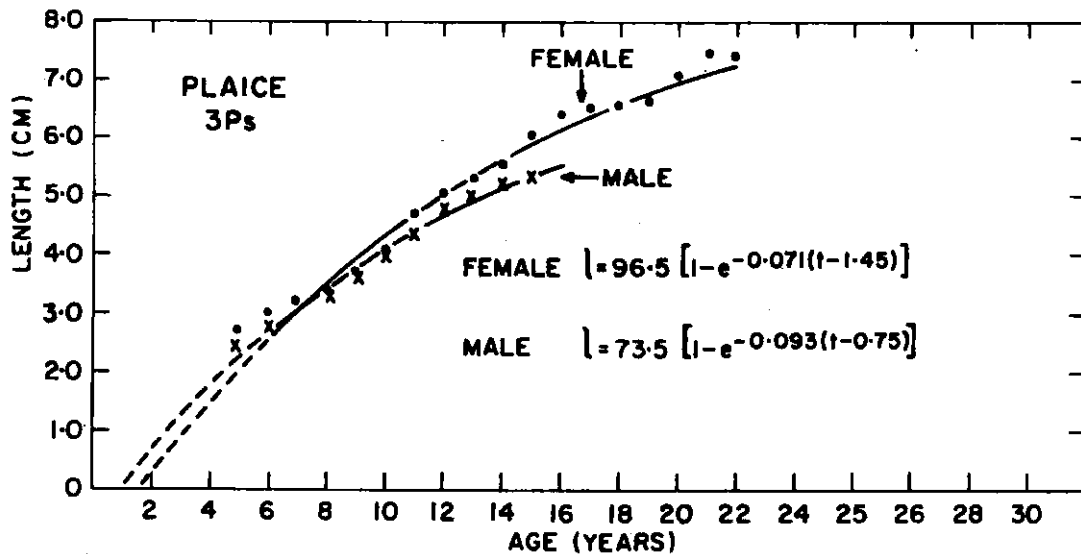


Fig. 1. Growth curves of male and female plaice for ICNAF Subdivision 3Ps.

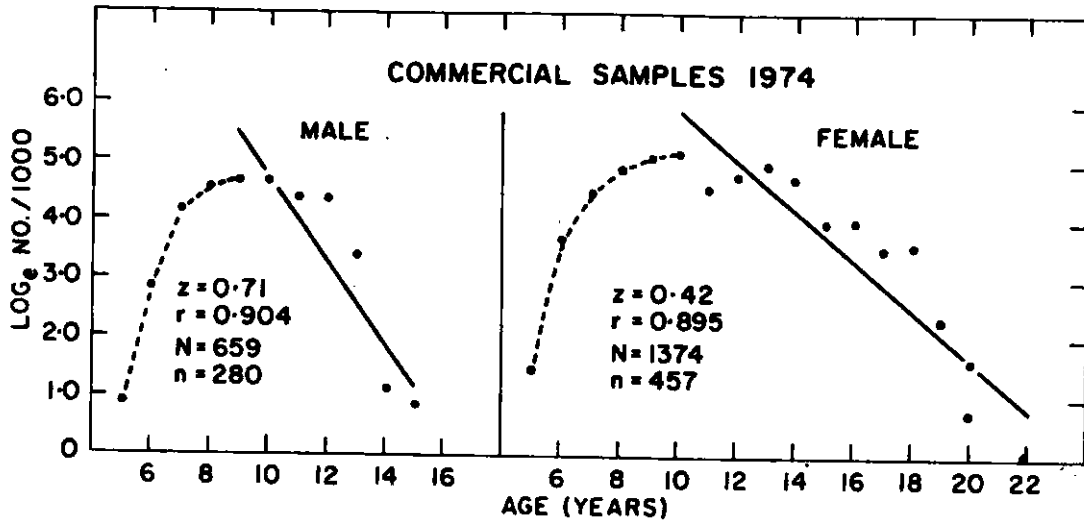


Fig. 2. Catch curves for 1974 commercial samples.

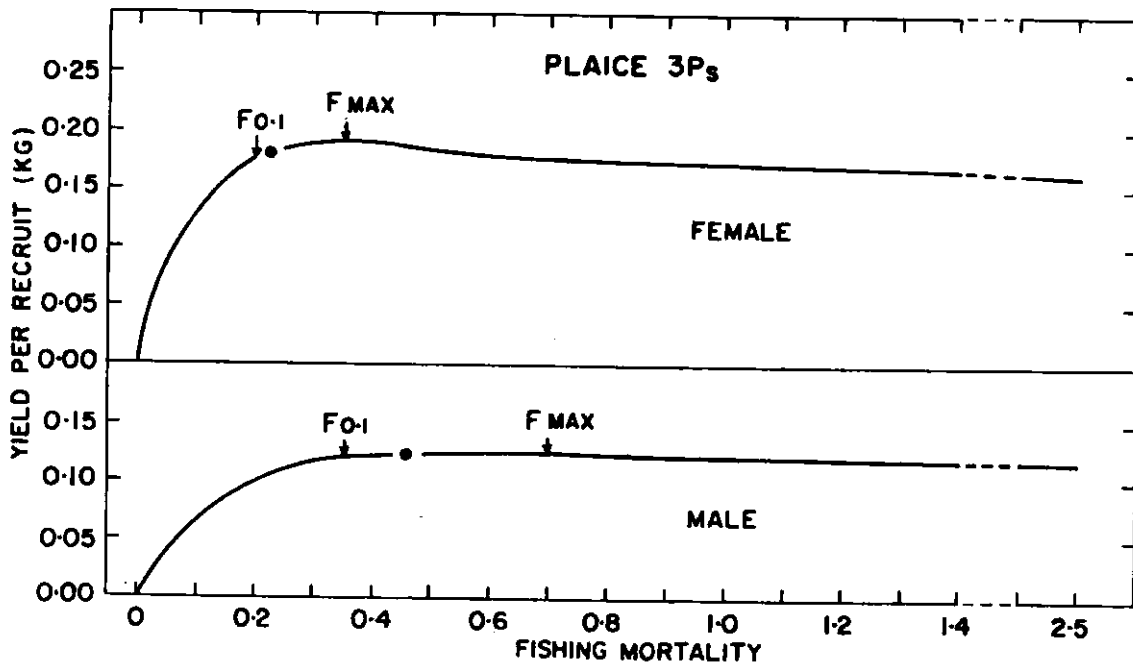


Fig. 3. Yield per recruit curves for 3Ps plaice.

