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Estimates of Age at Maturity for Cod in Subdivison 3Ps

by

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INTRODUCTION

Information relative to the maturity stages of cod from Subdivision 3Ps has been collected during research vessel surveys to this area. This paper presents some results of maturity observations obtained during the period 1980 to 1984. Data analyzed were obtained from spring (March to June) surveys and maturity observations were made as described by Templeman, et al. (1978) for haddock.

RESULTS

Maturity at age estimates for both sexes combined are shown in Table 1 along with an average for the period 1980-84 (Fig. 1). The percent mature at age showed some consistency over the period considered with the exception of fluctuations at ages 5 and 6. The age at 50% maturity as calculated by probit analysis is also shown in Table 1. The A_{50} for males was consistently below that for females, and they apparently mature approximately one year of age earlier than do females.

REFERENCES

Templeman, W., V.M. Hodder, and R. Wells. 1978. Age, growth, year class strength, and mortality of the haddock melanogrammus aeglifinus, on the southern Grand Bank and their relation to the haddock fishery of this area. ICNAF Res. Bull. No. 13: 31-52.

Table 1. Cod maturity at age (%) (sexes combined) from research vessel surveys in Subdivision 3Ps.

Age	1980	1981	1982	1983	1984	Ave.
3	0	0	0	0	0	0
4	4	3	1	4	2	3
5	29	21	10	34	48	28
6	42	70	58	70	73	63
7	94	86	84	88	88	88
8	100	97	96	97	97	97
9	100	100	97	100	100	99
10	100	100	100	100	100	100
Sample Size	619	592	726	804	581	
Month	Mar.-Apr.	Mar.	May-June	Apr.-May	April	
			Age at 50% maturity			
Males	5.4	5.3	5.6	5.2	5.1	5.3
Females	6.3	6.2	6.5	6.0	5.8	6.2
Males & females	5.9	5.8	6.1	5.6	5.4	5.8

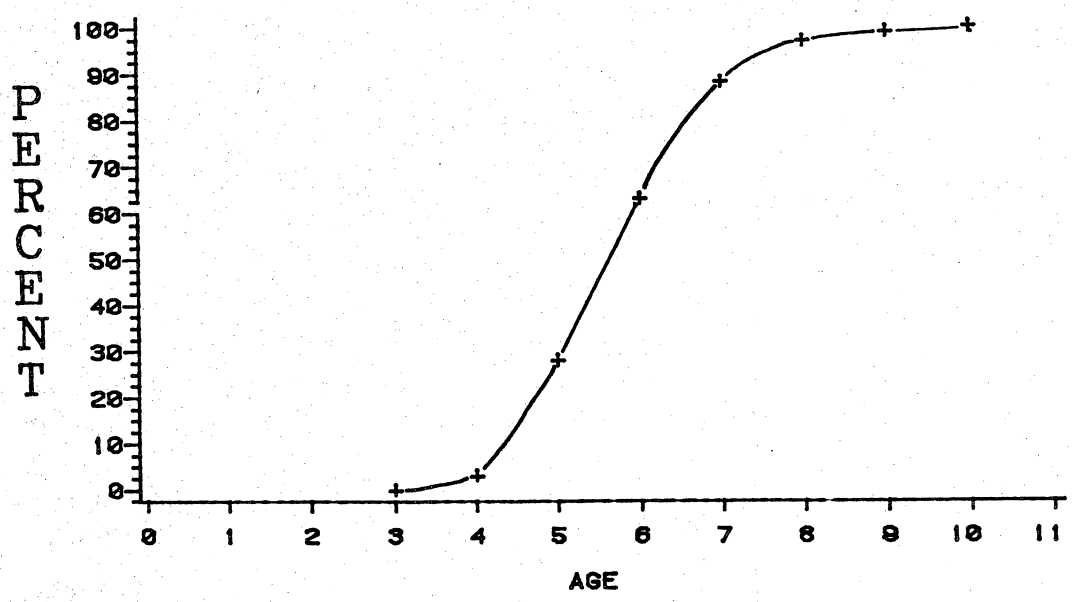

Fig. 1. Percent maturity at age for cod from Subdivision 3Ps.