

TABLE 1: AVAILABLE DATA

COMMON NAME:	ATLANTIC COD	SPECIES:	<i>Gadus morhua</i>
AREA:	NORTHWEST ATLANTIC	STOCK:	NAFO SUBDIV. 3Ps
CREATED BY:	JOANNE MORGAN	UPDATED BY:	JOANNE MORGAN 2002-03-19

Data status									
Year	Stock size	Stock composition	Age	Sex ratio	Maturity	Fecundity	Weight	Condition	Additional data
2001									
2000	√	√	√	(√)	√		√	√	
1999	√	√	√	(√)	√	(√)	√	√	
1998	√	√	√	(√)	√	(√)	√	√	
1997	√	√	√	(√)	√		√	√	
1996	√	√	√	(√)	√		√	√	
1995	√	√	√	(√)	√	(√)	√	√	
1994	√	√	√	(√)	√	(√)	√	√	
1993	√	√	√	(√)	√	(√)	√	√	
1992	√	√	√	(√)	√		√	√	
1991	√	√	√	(√)	√		√	√	
1990	√	√	√	(√)	√		√	√	
1989	√	√	√	(√)	√		√	√	
1988	√	√	√	(√)	√		√	√	
1987	√	√	√	(√)	√		√	√	
1986	√	√	√	(√)	√		√	√	
1985	√	√	√	(√)	√		√	√	
1984	√	√	√	(√)	√		√	√	
1983	√	√	√	(√)	√		√	√	
1982	√	√	√	(√)	√		√	√	
1981	√	√	√	(√)	√		√	√	
1980	√	√	√	(√)	√		√	√	
1979	√	√	√	(√)	√		√	√	
1978	√	√	√	(√)	√		√	√	

[illegible]

COMMON NAME:	ATLANTIC COD		REF. NO.:	
AREA:	NORTHWEST ATLANTIC		REF. NO.:	
STOCK:	NAFO SUBDIV. 3Ps		REF. NO.:	
REPRODUCTIVE STRATEGY:	DETERMINATE BATCH SPAWNER		REF. NO.:	11,12
TIMING OF SPAWNING:	FEB-JUL		REF. NO.:	8,9,10
OPTIMAL TIME FOR MATURITY SAMPLING:	JAN-APRIL		REF. NO.:	

[illegible]

Data basis, format and quality						
Variables	Year range	Data basis (A/L/W)	Data origin	Sampling frequency	Notes on data, methods and contents	Ref. No.
A. Hatching success						
B. Larvae quality						
C. Mortality						
D. Other						
Spawning time	1947-1992	A,L	S	VARIOUS	Data from all years combined	8,9
	1998	A,L	CC	M	indicates spawning occurs past July inshore	10
Contamination						
Environmental key factors						
Other factors or parameters						

TABLE 3: STUDIES OF REPRODUCTIVE POTENTIAL

COMMON NAME:	ATLANTIC COD
AREA:	NORTHWEST ATLANTIC
STOCK:	NAFO SUBDIV. 3Ps

Estimation of reproductive potential			
Subject	Brief description	Year range	Ref. No.
Potential or realised egg production			
Viable egg and larvae production			
Critical life stages			
Environmental influences	Effect of salinity on recruitment	1959-1986	13
Stock recruitment relations	Exploration of relationship of sex ratio, weighted mean age of SSB, and proportion of first time spawners to residuals from Beverton-Holt stock recruit relationship	1959-1995	5
Other studies			

TABLE 4: DATA SOURCES

COMMON NAME:	ATLANTIC COD
AREA:	NORTHWEST ATLANTIC
STOCK:	NAFO SUBDIV. 3Ps

Data sources (literature reference or contact person)	
1.	BRATTEY, J., N. G. CADIGAN, G. R. LILLY, E. F. MURPHY, P. A. SHELTON, and D.E. STANSBURY. MS 2000. An assessment of the cod stock in NAFO Subdiv. 3Ps in October 2000. <i>Can. Stock Ass. Sec. Res. Doc.</i> , No. 134.
2.	McCLINTOCK, J. MS 2000. Cod catch results from fall 1999 survey in NAFO Division 3Ps. <i>Can. Stock Ass. Res. Doc.</i> , No. 24.
3.	CADIGAN, N. and J. BRATTEY. MS 2000. Lower bounds on the exploitation of cod (<i>Gadus morhua</i>) in NAFO Subdivision 3Ps and Divs. 3KL in 1997-1999 from tagging experiments. <i>Can. Stock Ass. Sec. Res. Doc.</i> , No. 74.
4.	UNPUBL. DATA: J. Bratney, DFO, PO Box 5667, St. John's, NF, A1C 5X1, Canada (bratneyj@dfo-mpo.gc.ca).
5.	MORGAN, M. J., P. A. SHELTON, D. P. STANSBURY, J. BRATTEY, and G.R. LILLY. MS 2000. An examination of the possible effect of spawning stock characteristics on recruitment in 4 Newfoundland groundfish stocks. <i>Can. Stock Ass. Sec. Res. Doc.</i> , No. 28.
6.	MAHE, J. C. MS 1994. Median length at 50% maturity of Atlantic cod in Subdivision 3Ps: year to year variation and comparison of samples from Burgeo Bank, St. Pierre Bank and south slope. <i>NAFO SCR Doc.</i> , No. 11, 12 p.
7.	PINHORN, A.T. 1984. Temporal and spatial variation in fecundity of Atlantic cod (<i>Gadus morhua</i>) in Newfoundland waters. <i>J. Northw. Atl. Fish. Sci.</i> , 5: 161-170.
8.	MYERS, R. A., G. MERTZ, and C. A. BISHOP. 1993. Cod spawning in relation to physical and biological cycles of the northern north-west Atlantic. <i>Fish. Oceanogr.</i> , 2: 154-165.
9.	HUTCHINGS, J. A. and R. A. MYERS. 1994. Timing of cod reproduction: interannual variability and the influence of temperature. <i>Mar. Ecol. Prog. Ser.</i> , 108: 21-31.
10.	BOLON, A. D. and D. C. SCHNEIDER. MS 1999. Temporal trends in condition, gonado somatic index and maturity stages of Atlantic cod (<i>Gadus morhua</i>) from northern Placentia Bay (Subdivision 3Ps), Newfoundland, during 1998. <i>Can. Stock Ass. Sec. Res. Doc.</i> , No. 45.
11.	KJESBU, O. S. 1989. The spawning activity of cod, <i>Gadus morhua</i> L. <i>J. Fish. Biol.</i> , 34: 195-206.
12.	KJESBU, O. S., P. R. WHITTHAMES, P. SOLEMDAL, and M. GREER WALKER. 1990. Ovulatory rhythm and a method to determine the stage of spawning in Atlantic cod (<i>Gadus morhua</i>). <i>Can. J. Fish. Aquat. Sci.</i> , 47: 1185-1193.
13.	MYERS, R. A., K. F. DRINKWATER, N. J. BARROWMAN, and J. W. BAIRD. 1993. Salinity and recruitment of Atlantic cod (<i>Gadus morhua</i>) in the Newfoundland region. <i>Can. J. Fish. Aquat. Sci.</i> , 50: 1599-1609.

