

**AREA: TABLE 1: AVAILABLE DATA**

<b>COMMON NAME:</b>	POLLOCK	<b>SPECIES:</b>	<i>Pollachius virens</i>
	NORTHWEST ATLANTIC	<b>STOCK:</b>	SCOTIAN SHELF/BAY OF FUNDY/GEORGES BANK (NAFO DIV. 4VWX+5ZC)
<b>CREATED BY:</b>	ED TRIPPEL 2001-07-22	<b>UPDATED BY:</b>	ED TRIPPEL 2003-02-03

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	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1977	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1976	✓	✓	✓	(✓)	✓		✓	✓	(✓)

Data status									
Year	Stock size	Stock composition	Age	Sex ratio	Maturity	Fecundity	Weight	Condition	Additional data
1975	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1974	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1973	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1972	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1971	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1970	✓	✓	✓	(✓)	✓		✓	✓	(✓)
1969	✓	✓	✓	(✓)	✓		✓		
1968	✓	✓	✓	(✓)	✓		✓		
1967	✓	✓	✓	(✓)	✓		✓		
1966	✓	✓	✓	(✓)	✓		✓		
1965	✓	✓	✓	(✓)	✓		✓		
1964	✓	✓	✓	(✓)	✓		✓		
1963	✓	✓	✓	(✓)	✓		✓		
1962	✓	✓	✓	(✓)	✓		✓		
1961	✓	✓	✓	(✓)	✓		✓		
1960	✓	✓	✓	(✓)	✓		✓		
1959	✓	✓	✓	(✓)	✓		✓		
1958	✓	✓	✓	(✓)	✓		✓		

**TABLE 2: DATA BASIS, FORMAT AND QUALITY**

<b>COMMON NAME:</b>	POLLOCK	
<b>AREA:</b>	NORTHWEST ATLANTIC	
<b>STOCK:</b>	SCOTIAN SHELF/BAY OF FUNDY/GEORGES BANK (NAFO DIV. 4VWX+5ZC)	
<b>REPRODUCTIVE STRATEGY:</b>	DETERMINATE SPAWNER	<b>REF. NO.:</b> 9
<b>TIMING OF SPAWNING:</b>	SEPTEMBER-MARCH	<b>REF. NO.:</b> 7,8
<b>OPTIMAL TIME FOR MATURITY SAMPLING:</b>	NOVEMBER-DECEMBER	<b>REF. NO.:</b> 8

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.
<b>Stock size</b>	1970-2001	A,L,W	S	JULY	Estimated abundance for 4VWX, though survey not suitable for SPA	1,2
	1982-1997	A	CL,S	M,T	VPA Estimates	1
<b>Stock composition</b>	1970-2001	A,L,W	S	JULY	Commercial fishery data unavailable in 4VW after Sept. 1993 due to fishery closure Mobile survey in 4X	1,2
	1974-2001	A,L,W	CL	Trimester		1
	1996-2001	A,L,W	S	JULY		1,2
<b>Age determination</b>	1970-2001	A	S,CL	Trimester	No research survey aging since 1997	1,2
<b>Sex ratio</b>	1970-2001	A,L,W	S		Could be extracted from survey data bases	2
<b>Maturity:</b>						
A. Ogives (E)	1958-1979	A,L	S	JAN-SEP	Maturity ogives in 5 - year periods and percent mature by age (4Vn, 4Vs, 4W)	3
	1979-1984, 1995	A,L	S	MARCH	Proportion mature by age and length intervals by sex; including ogives (4VW, 4X). Also includes 1995 by length.	4
B. Skip of spawning						
C. Spawning probability						
D. Other						

<b>Data basis, format and quality</b>						
<b>Variables</b>	<b>Year range</b>	<b>Data basis (A/L/W)</b>	<b>Data origin</b>	<b>Sampling frequency</b>	<b>Notes on data, methods and contents</b>	<b>Ref. No.</b>
<b>Fecundity:</b>						
A. Estimation						
B. First time vs. repeat spawners						
C. Atresia						
D. Other						
<b>Weight:</b>						
A. Commercial fisheries data	1970-2001	A,L,W A,L,W	CL CL	T	4VW and (4X,5Zc) separate; primarily 4X5Zc since closure of 4VW in 1993	1,2
B. Survey data	1974-2001	A,L,W	S	JULY	Estimated means	1,2
C. Other						
<b>Condition:</b>						
A. Fulton	1988-1998	L,W	S	JULY	4X: five separate length intervals	1
B. HSI						
C. Energy						
D. Other						
<b>Egg viability:</b>						
A. Egg quality						
B. Fertilisation success						
C. Egg mortality						
D. Other						
<b>Larval viability:</b>						
A. Hatching success						
B. Larvae quality						
C. Mortality						
D. Other						

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.
<b>Spawning time</b>	1920-1997	L,W	X		Fishermen's knowledge through interviews, includes spawning areas (present and lost)	5
	pre 1963		S		Evidence of Scotian Shelf, Cape Breton and Gulf of Maine spawning	6
	1975-1997		S	Sesonal	Egg and larval surveys from Larval Herring Program, 1975-1995) (Bay of Fundy and Georges Bank); FEP (1983-1985) and SSIP (1976-1982). Spatial differences in spawning with peak from November-January	7,8
<b>Contamination</b>						
<b>Environmental key factors</b>						
<b>Other factors or parameters</b>						

**TABLE 3: STUDIES OF REPRODUCTIVE POTENTIAL**

**COMMON NAME:** POLLOCK

**AREA:** NORTHWEST ATLANTIC

**STOCK:** SCOTIAN SHELF/BAY OF FUNDY/GEORGES BANK  
(NAFO DIV. 4VWX+5ZC)

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			
Stock recruitment relations	Spawning stock biomass (age 5+) vs recruitment (age 2)	1982-1999	1
Other studies			

**TABLE 4: DATA SOURCES**

<b>COMMON NAME:</b>	POLLOCK
<b>AREA:</b>	NORTHWEST ATLANTIC
<b>STOCK:</b>	SCOTIAN SHELF/BAY OF FUNDY/GEORGES BANK (NAFO Div. 4VWX+5ZC)
<b>Data sources</b> (literature reference or contact person)	
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3. BEACHAM, T. D. 1983. Variability in size or age at sexual maturity of white hake, pollock, longfin hake, and silver hake in the Canadian Maritimes area of the Northwest Atlantic Ocean. <i>Can. Tech. Rep. Fish. Aquat. Sci.</i> , No. 1157.	
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5. BENHAM, A. A., and E. A. TRIPPEL. Mapping fishermen's knowledge of groundfish and herring spawning and nursery areas in the Bay of Fundy, Gulf of Maine and Eastern Nova Scotian Shelf. <i>Can. Tech. Rep. Fish. Aquat. Sci.</i> (submitted).	
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8. HANKE, A. R., F. H. PAGE, and J. NEILSON. 2001. Distribution of Atlantic cod ( <i>Gadus morhua</i> ) eggs and larvae on the Scotian Shelf, Eastern Gulf of Maine, Bay of Fundy and Eastern Georges Bank. <i>Can. Tech. Rep. Fish. Aquat. Sci.</i> , No. 2308.	
9. BIGELOW, H. B., and W. C. SCHROEDER. 1935. Fishes of the Gulf of Maine. <i>U.S. Fish Wildl. Serv. Fish. Bull.</i> <b>74</b> , <b>53</b> : 577.	