

TABLE 1: AVAILABLE DATA

COMMON NAME:	YELLOWTAIL FLOUNDER	SPECIES:	<i>Limanda ferruginea</i>
AREA:	NORTHWEST ATLANTIC	STOCK:	GEORGES BANK NAFO DIV. 5ZE
CREATED BY:	JAY BURNETT	UPDATED BY:	

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	(√)	√	√						√

TABLE 2: DATA BASIS, FORMAT AND QUALITY

COMMON NAME:	YELLOWTAIL FLOUNDER	
AREA:	NORTHWEST ATLANTIC	
STOCK:	GEORGES BANK NAFO DIV. 5ZE	
REPRODUCTIVE STRATEGY:	DETERMINE BATCH SPAWNER	REF. NO.:
TIMING OF SPAWNING:	APRIL-AUGUST	REF. NO.: 1
OPTIMAL TIME FOR MATURITY SAMPLING:	MARCH-APRIL	REF. NO.:

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.
Stock size	1963-1972 1973-1993 1994-2001	A,L A,L,W A,L,W	S S,CL S,CL,CC	B B,Q B,Q,M	Relative abundance VPA VPA	2
Stock composition	1963-1964 1965-1991 1992-2001	A,L A,L A,L,W	S S,CL S,CL	Y B,Q B,Q		2,3 2,3 2,3
Age determination	1963-1964 1965-1988 1989-2001		S S,CL S,CL,CC	Y B,Q B,Q,M		2,4
Sex ratio	1977-2001	A,L	S	B		5
Maturity:						
A. Ogives (E)	1973-1991 1985-1990 1992-2001	A,L A,L A,L	S S S	B B B	Macroscopic observations	6 7 2,3
B. Skip of spawning						
C. Spawning probability						
D. Other						
Fecundity:						
A. Estimation						
B. First time vs. repeat spawners						
C. Atresia						
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.
Weight:						
A. Commercial fisheries data	1973-2001	A,L	CL	Q	Estimated mean weights at age	2,3
B. Survey data	1992-2001	A,L	S	B	Individual weights	5
C. Other						
Condition:						
A. Fulton						
B. HSI						
C. Energy						
D. Other						
Egg viability:						
A. Egg quality						
B. Fertilisation success						
C. Egg mortality						
D. Other						
Larval viability:						
A. Hatching success						
B. Larvae quality						
C. Mortality						
D. Other						
Spawning time	1963-2001	L	S	M-Q	Egg and larval surveys	1,8,9,10
Contamination						
Environmental key factors						
Other factors or parameters						

TABLE 3: STUDIES OF REPRODUCTIVE POTENTIAL

COMMON NAME:	YELLOWTAIL FLOUNDER
AREA:	NORTHWEST ATLANTIC
STOCK:	GEORGES BANK NAFO DIV. 5ZE

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 vs Age 1 recruits	1973-1999	2
Other studies			

TABLE 4: DATA SOURCES

COMMON NAME:	YELLOWTAIL FLOUNDER
AREA:	NORTHWEST ATLANTIC
STOCK:	GEORGES BANK NAFO DIV. 5ZE

Data sources (literature reference or contact person)	
1. SMITH, W. G. 1985. Temporal and spatial spawning patterns of the principal species of fish and invertebrates in the Georges Bank region. <i>NMFS Sandy Hook Lab. Rep.</i> , No. SHL 85-04, 35 p.	
2. CADRIN, S. X., J. D. NEILSON, S. GAVARIS, and P. PERLEY. 2000. Assessment of the Georges Bank yellowtail flounder stock for 2000. <i>NEFSC Ref. Doc.</i> , 00-10, 71 p.	
3. CADRIN, S. Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543, USA (Steven.Cadrin@noaa.gov).	
4. PENTTILA, J. 1988. Yellowtail flounder <i>Limanda ferruginea</i> . (Chapter 19). In: Age determination methods for Northwest Atlantic species. J. Penttila, and L.M. Dery (eds.). <i>NOAA Tech. Rep., NMFS 72</i> , 135 p.	
5. J. BURNETT, Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543 USA (Jay.Burnett@noaa.gov)	
6. ALMEIDA, F., and J. BURNETT. 1997. Changes in growth and maturation of yellowtail flounder, <i>Pleuronectes ferrugineus</i> , from the southern New England and Georges Bank stocks during periods of high and low abundance. <i>SAW-24 Working Paper D2</i> .	
7. O'BRIEN, L., J. BURNETT, and R. K. MAYO. 1993. Maturation of nineteen species of finfish off the northeast coast of the United States, 1985-1990. <i>NOAA Tech. Rep., NMFS 113</i> , 66 p.	
8. COLTON, J., and J. ST. ONGE. 1974. Distribution of fish eggs and larvae in continental shelf waters, Nova Scotia to Long Island. <i>Ser. Atlas Mar. Environ., Am. Geogr. Soc. Folio</i> , 23.	
9. COLTON, J. B., Jr., W. G. SMITH, A. W. KENDALL, Jr., P. L. BERRIEN, and M. P. FAHAY. 1979. Principal spawning areas and times of marine fishes, Cape Sable to Cape Hatteras. <i>Fish. Bull.</i> , 76(4): 5.	
10. SMITH, W. G., J. D. SIBUNKA, and A. WELLS. 1975. Seasonal distributions of larval flatfish (Pleuronectiformes) on the continental shelf between Cape Cod and Cape Lookout, N.C., 1965-66. <i>NOAA Tech. Rpt., Spec. Sci. Rep. Fish.</i> , 691, 68 p.	