

**TABLE 1: AVAILABLE DATA**

<b>COMMON NAME:</b>	YELLOWTAIL FLOUNDER	<b>SPECIES:</b>	<i>Limanda ferruginea</i>
<b>AREA:</b>	NORTHWEST ATLANTIC	<b>STOCK:</b>	CAPE COD US STATISTICAL AREAS 514 AND 521
<b>CREATED BY:</b>	JAY BURNETT 2001-07-31	<b>UPDATED BY:</b>	

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	(✓)	✓							✓
1975	(✓)	✓							✓

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

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

<b>COMMON NAME:</b>	YELLOWTAIL FLOUNDER	
<b>AREA:</b>	NORTHWEST ATLANTIC	
<b>STOCK:</b>	CAPE COD US STATISTICAL AREAS 514 AND 521	
<b>REPRODUCTIVE STRATEGY:</b>	DETERMINATE BATCH SPAWNER	<b>REF. NO.:</b> [ ]
<b>TIMING OF SPAWNING:</b>	APRIL-AUGUST	<b>REF. NO.:</b> 1
<b>OPTIMAL TIME FOR MATURITY SAMPLING:</b>	APRIL-MAY	<b>REF. NO.:</b> [ ]

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>	1963-1984	L	S	Y,B	Relative abundance	2,3
	1985-1999	A,L	S,CL,CC	B,Q	VPA	2,3,4
	2000-2001	A,L	S,CL,CC	B,Q		3
<b>Stock composition</b>	1963-1977	L	S	Y,B	Fall survey only 1963-67	2,3
	1978-2001	A,L	S,CL,CC	B,Q	Sea sampling began 1989	2,3
<b>Age determination</b>	1978-2001		S,CL,CC	B,Q	NEFSC and MA DMF surveys	2,5
<b>Sex ratio</b>	1978-2001	A,L	S,CL	B,Q	Commercial samples sexed	6
<b>Maturity:</b>						
A. Ogives (E)	1985-1990 combined	A,L	S	B	Macroscopic observations	7
B. Skip of spawning						
C. Spawning probability						
D. Other						
<b>Fecundity:</b>						
A. Estimation						
B. First time vs. repeat spawners						
C. Atresia						
D. Other						
<b>Weight:</b>						
A. Commercial fisheries data	1985-1998	A,L	CL	Q	Estimated mean weights	2,3
B. Survey data	1992-2001	A,L	S	B	Individual fish weights	6
C. 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>Condition:</b>						
A. Fulton						
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						
<b>Spawning time</b>	1963-2001	L	S	Q-M	Egg and larval surveys	1,8,9 10,11
<b>Contamination</b>	1980	L	Special study		PCH and PCB levels n=8	12
<b>Environmental key factors</b>						
<b>Other factors or parameters</b>	1973-2001	A,L	S	B	Food habits data	13

**TABLE 3: STUDIES OF REPRODUCTIVE POTENTIAL**

<b>COMMON NAME:</b>	YELLOWTAIL FLOUNDER
<b>AREA:</b>	NORTHWEST ATLANTIC
<b>STOCK:</b>	CAPE COD US STATISTICAL AREAS 514 AND 521

<b>Estimation of reproductive potential</b>			
<b>Subject</b>	<b>Brief description</b>	<b>Year range</b>	<b>Ref. No.</b>
<b>Potential or realised egg production</b>			
<b>Viable egg and larvae production</b>			
<b>Critical life stages</b>			
<b>Environmental influences</b>			
<b>Stock recruitment relations</b>	Spawning stock biomass vs Age 1 recruits	1985-1996	2
<b>Other studies</b>			

**TABLE 4: DATA SOURCES**

<b>COMMON NAME:</b>	YELLOWTAIL FLOUNDER
<b>AREA:</b>	NORTHWEST ATLANTIC
<b>STOCK:</b>	CAPE COD US STATISTICAL AREAS 514 AND 521

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.	28th NORTHEAST REGIONAL STOCK ASSESSMENT WORKSHOP (28th SAW). 1999. Stock Assessment Review Committee (SARC) Consensus Summary of Assessments. <i>NEFSC Ref. Doc.</i> , 99-08, 304 p.
3.	CADRIN, S. Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543 USA (Steven.Cadrin@noaa.gov).
4.	NORTHERN DEMERSAL WORKING GROUP. 2000. Assessment of 11 Northeast groundfish stocks through 1999: a report to the New England Fishery Management Council's Multi-species Monitoring Committee. <i>NEFSC Ref. Doc.</i> , 00-05, 175 p.
5.	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</i> 72, 135 p.
6.	BURNETT, J. Northeast Fisheries Science Center, 166 Water St., Woods Hole, MA 02543, USA (Jay.Burnett@noaa.gov).
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</i> , 113: 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. Rep. Spec. Sci. Rep. Fish.</i> , 691: 68.
11.	BERRIEN, P., and J. SIBUNKA. 1999. Distribution patterns of fish eggs in the U.S. Northeast Continental Shelf Ecosystem, 1977-1987. <i>NOAA Tech. Rep., NMFS</i> , 145, 310 p.
12.	BOEHM, P.D., and P. HIRTZER. 1982. Gulf and Atlantic survey for selected organic pollutants in finfish. <i>NOAA Tech. Mem.</i> , NMFS-F/NEC-13, 111 p.
13.	LINK, J. S., and F.P. ALMEIDA. 2000. An overview and history of the Food Web Dynamics Program of the Northeast Fisheries Science Center, Woods Hole, Massachusetts. <i>NOAA Tech. Mem.</i> , NMFS-NE-159, 60 p.