

TABLE 1: AVAILABLE DATA

COMMON NAME:	GOLDEN REDFISH	SPECIES:	<i>Sebastes marinus</i>
AREA:	NORTHWEST ATLANTIC	STOCK:	FLEMISH CAP (NAFO DIV. 3M)
CREATED BY:	FRAN SABORIDO 2001-05-30	UPDATED BY:	DON POWER 2001-09-25

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	(√)								

Data status									
Year	Stock size	Stock composition	Age	Sex ratio	Maturity	Fecundity	Weight	Condition	Additional data
1978	(√)								
1977									
1976									
1975									
1974									
1973									
1972									
1971									
1970									
1969				(√)	(√)				
1968				(√)	(√)				
1967				(√)	(√)				
1966				(√)	(√)				
1965				(√)	(√)				
1964				(√)	(√)				
1963				(√)	(√)				
1962				(√)	(√)				
1961				(√)	(√)				
1960				(√)	(√)				
1959				(√)	(√)				
1958				(√)	(√)				
1957				(√)	(√)				

COMMON NAME:	GOLDEN REDFISH		
AREA:	NORTHWEST ATLANTIC		
STOCK:	FLEMISH CAP (NAFO DIV. 3M)		
REPRODUCTIVE STRATEGY:	DETERMINATE SPAWNER	REF. NO.:	
TIMING OF SPAWNING:	APRIL-JUNE	REF. NO.:	1,2
OPTIMAL TIME FOR MATURITY SAMPLING:	FEBRUARY-APRIL	REF. NO.:	1,2

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	1978-1985	W	S	Y	Relative abundance, VPA	8
	1988-2000	A	S	Y		2,3,4
Stock composition	1988-2000	A,L,W	S	Y		2,3,4
Age determination	1988-2000		S	Y		2,5,6
Sex ratio	1957-1969	L	S	Y	For various NAFO areas	9,10
	1988-2000	A,L	S	Y		2,3,4
Maturity:						
A. Ogives (E)	1957-1969	L	S	Y	ogives for a number of NAFO areas	9,10
	1992-2000	A,L	S	Y		1,2
B. Skip of spawning					Microscopic observations	
C. Spawning probability	1992-2000	A,L	S	Y	Microscopic observations	1,2
D. Other						
Fecundity:						
A. Estimation						
B. First time vs. repeat spawners						
C. Atresia						
D. Other						
Weight:						

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. Commercial fisheries data						
B. Survey data	1988-2000	A,L	S	Y	Individual fish weights	3
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						
Contamination						
Environmental key factors	Temperature		S	Y	Summer values	2,7
Other factors or parameters						

TABLE 3: STUDIES OF REPRODUCTIVE POTENTIAL

COMMON NAME:	GOLDEN REDFISH
AREA:	NORTHWEST ATLANTIC
STOCK:	FLEMISH CAP (NAFO DIV. 3M)

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 5 recruits	1992-2000	2
Other studies			

TABLE 4: DATA SOURCES

COMMON NAME:	GOLDEN REDFISH
AREA:	NORTHWEST ATLANTIC
STOCK:	FLEMISH CAP (NAFO DIV. 3M)

Data sources (literature reference or contact person)	
1.	SABORIDO-REY, F. 1994. Genus <i>Sebastes</i> Cuvier, 1829 (Pisces, Scorpaenidae) in the North Atlantic: Identification of species and populations using morphometric methods; Growth and reproduction of the Flemish Cap populations. Ph. D Thesis. Autonomous University of Madrid.
2.	SABORIDO-REY, F. Institute of Marine Research. C/ Eduardo Cabello, 6. 36208, Vigo, Spain. (fran@iim.csic.es).
3.	SABORIDO-REY, F. and A. VÁZQUEZ. MS 2001. Results from Bottom Trawl Survey on Flemish Cap of July 2000. <i>NAFO SCR Doc.</i> , No. 22, 56 p.
4.	ÁVILA DE MELO, A., R. ALPOIM, and F. SABORIDO-REY. MS 2001. A Comparative Assessment and Medium Term Projections of Redfish (<i>S. mentella</i> and <i>S. fasciatus</i>) in NAFO Division 3M. <i>NAFO SCR Doc.</i> , No. 45.
5.	SABORIDO REY, F. MS 1995. Age and growth of redfish in Flemish Cap (Div. 3M). 1995. <i>NAFO SCR Doc.</i> , No. 31, 16 p.
6.	ICES. 1996. Report of the workshop on age reading of <i>Sebastes</i> spp. <i>ICES C.M. Doc.</i> , No. G:1
7.	CERVINO, S. MS 2001. Hydrographic Conditions on Flemish Cap in July 2000 and Comparison with those Observed in 1999. <i>NAFO SCR Doc.</i> , No. 24.
8.	POWER, D. Redfish Assessment Biologist. Aquatic Resources Division. Department of Fisheries and Oceans, P. O. Box 5667, St. John's, NF, Canada, A1C 5X1 (PowerD@dfo-mpo.gc.ca).
9.	NI, I-H., and E. J. SANDEMAN. 1984. Size at maturity for Northwest Atlantic redfishes (<i>Sebastes</i>). <i>Can. J. Fish. Aquat. Sci.</i> , 41: 1753-1762.
10.	NI, I-H., and W. TEMPLEMAN. 1985. Reproductive cycles of redfishes (<i>Sebastes</i>) in southern Newfoundland waters. <i>J. Northw. Atl. Fish. Sci.</i> , 6: 57-63.