

## 4.4.2 Faroe Bank cod

### State of the stock

In the absence of defined reference points the state of the stock cannot be fully evaluated. The available information is inadequate to evaluate spawning stock or fishing mortality relative to risk; however, the exploitation rate might not be sustainable.

### Management objectives

There are no explicit management objectives for this stock.

### Reference points

No reference points have been defined for the stock

### Single-stock exploitation boundaries

ICES advises that fishing effort of the Faroe Bank should not exceed that exerted annually from 1996 to 2002 and that the current spawning closure introduced in 2005 be maintained.

### Short-term implications

The ratio of landings to the survey cpue index provides an exploitation ratio, which can be used as a proxy to relative changes in fishing mortality. The exploitation ratio has been higher than average in the last three years.

### Management considerations

The landing estimates are uncertain because since 1996 the vessels are allowed to fish both on the Faroe Plateau and on the Faroe Bank during the same trip, making it difficult to assign landings to area. Given the relative size of the two fisheries, this causes greater uncertainty regarding catches of Faroe Bank cod than for Faroe Plateau cod, but the magnitude remains unquantified for both. The ability to provide advice depends on the reliability of the input data. Because the cod landings from the Faroe Bank are not known exactly, it is very difficult to provide reliable advice on effort and/or catches. If the fishery management agency intends to manage the two fisheries to protect the productive capacity of each individual unit, then it is necessary to monitor and regulate the catch removed from each stock.

The CPUE of the spring survey was low during 1988 to 1995 varying between 73 and 95 kg per tow. Though the data is noisy, the survey suggests a higher, possibly increasing biomass during 1995–2002. The summer and the spring survey both indicate that the biomass has declined since 2003 and is low at present. Hence, the present exploitation rate may not be sustainable.

The effort has been extremely high in 2003 and was still fairly high in 2005.

### Factors affecting the fisheries and the stock

#### *Regulations and their effects*

Fishing on the bank is restricted to longliners and jiggers, which are regulated through individual vessel effort quotas. For the fishing year 1 September 2004 to 31 August 2005 the number of allocated fishing days has been reduced by 10%. However, the reduction did not materialise in a decrease of realised fishing days. In 2005 the authorities introduced a total fishing ban during the spawning period, i.e. 1 March to 1 May.

### Scientific basis

#### *Data and methods*

The assessment is based on trends in catch rates in two research surveys.

#### *Uncertainties in assessment and forecast*

The landing estimates are uncertain because since 1996 the vessels have been allowed to fish both on the Faroe Plateau and on the Faroe Bank during the same trip, making it difficult to assign landings to area. Given the relative size of the

two fisheries, this causes greater uncertainty regarding catches for Faroe Bank cod than for Faroe Plateau cod, but the magnitude remains unquantified for both.

*Comparison with previous assessment and advice*

This advice is the same as that given by ICES since 2004.

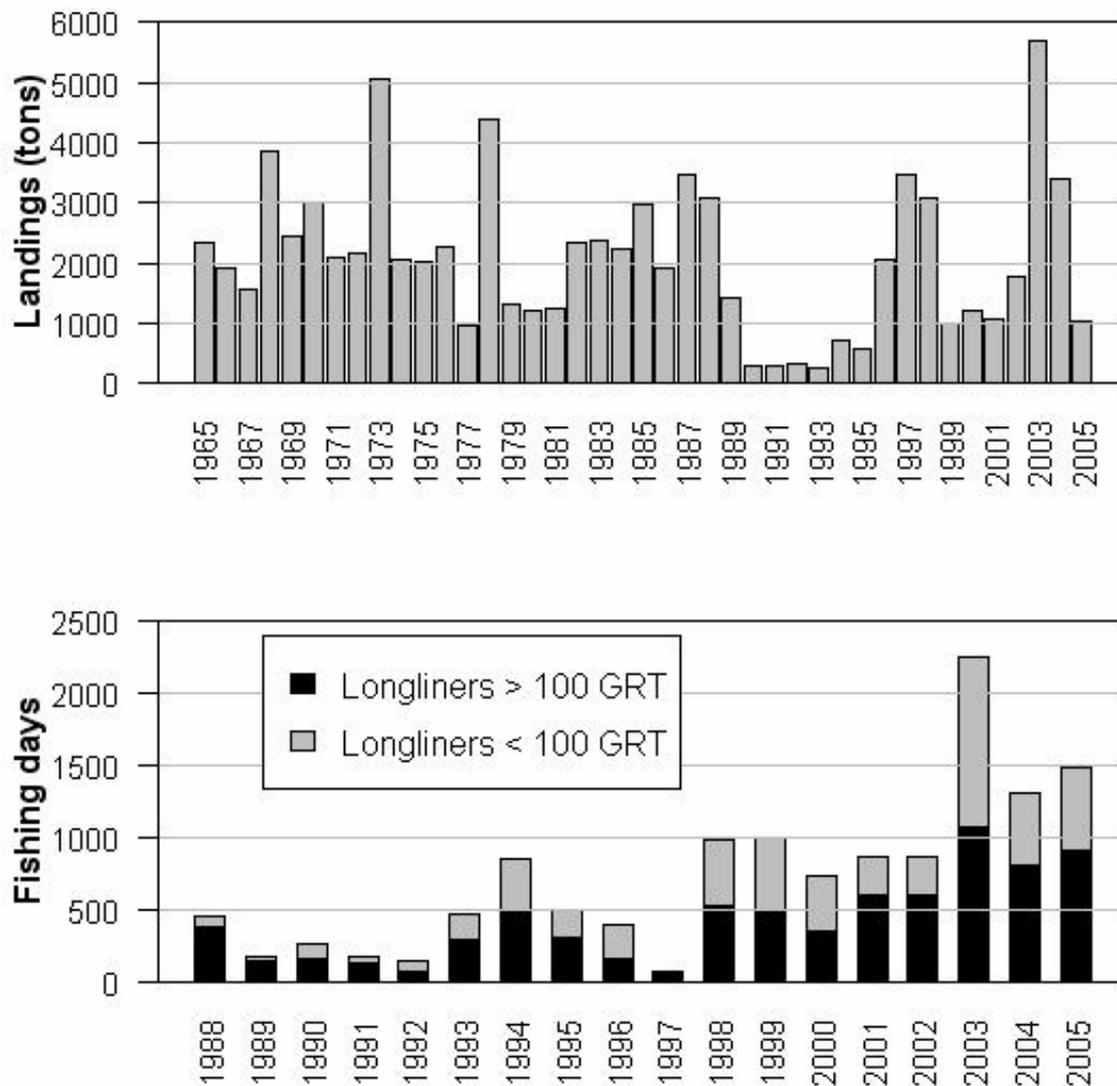
**Source of information**

Report of the North-Western Working Group, 25 April–4 May 2006 (ICES CM 2006/ACFM:26).

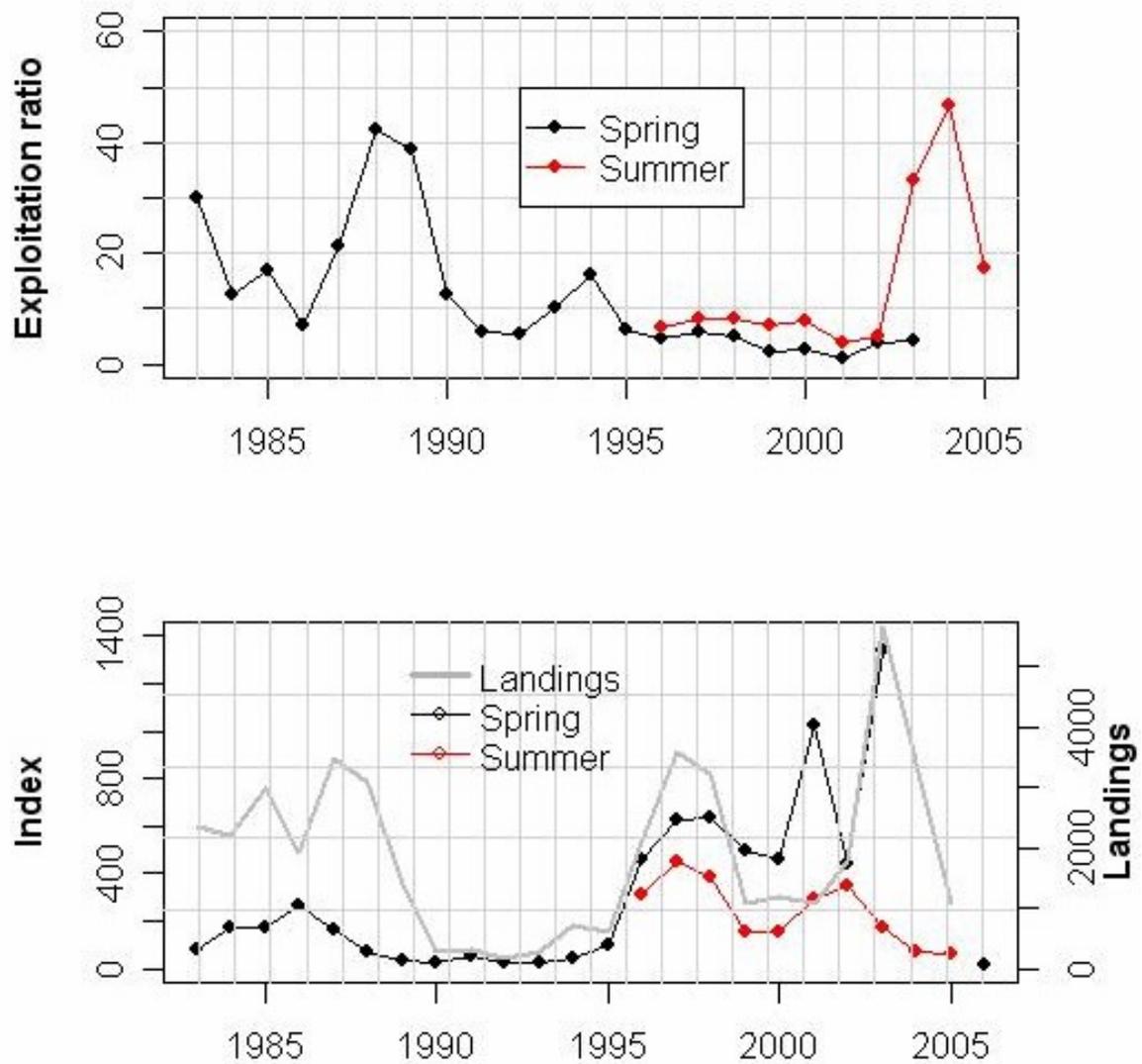
Year	ICES Advice	Predicted catch corresp. to advice	Agreed TAC	Official Landings
1987	No assessment	-		3.5
1988	No assessment	-		3.1
1989	Addition to Faroe Plateau TAC	~2.0		1.4
1990	Access limitation may be required	-		0.6
1991	Access limitation may be required	-		0.4
1992	No fishing	0.3		0.3
1993	TAC	0.5		0.4
1994	TAC	0.5		1.0
1995	Precautionary TAC	0.5		1.2
1996	Precautionary TAC	0.5	1.0	2.5
1997	Effort at present levels	0.7	Not applicable	3.9
1998	Effort at present levels	-		3.5
1999	Effort not to exceed that exerted in 1996–1997	-		1.3
2000	Effort not to exceed that of 1996–1998	-		1.2 <sup>1</sup>
2001	Effort not to exceed that of 1996–1999	-		1.1 <sup>1</sup>
2002	Effort not to exceed that of 1996–2000	-		1.8 <sup>1</sup>
2003	Effort not to exceed that of 1996–2001	-		5.7 <sup>1</sup>
2004	Effort not to exceed that of 1996–2002	-		3.4 <sup>1</sup>
2005	Effort not to exceed that of 1996–2002	-		1.1 <sup>1</sup>
2006	Effort not to exceed that of 1996–2002	-		
2007	Effort not to exceed that of 1996–2002	-		

Weights in '000 t.

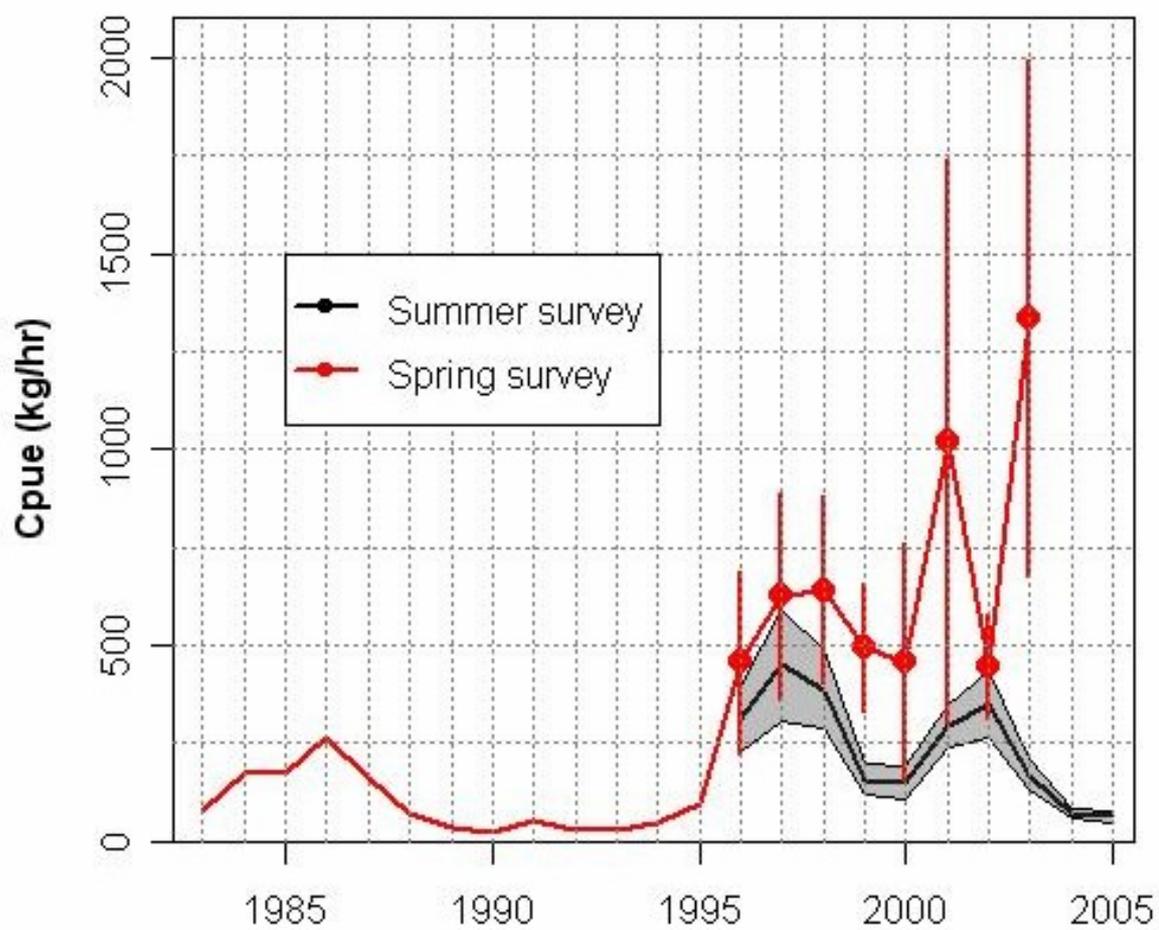
<sup>1)</sup> Working group estimates.



**Figure 4.4.2.1.** Upper plot: Reported landings 1965–2005. Since 1992 only catches from Faroese and Norwegian vessels are considered to be taken on the Faroe Bank. Lower plot: fishing days 1988–2005 for longline gear type on the Faroe Bank.



**Figure 4.4.2.2.** Faroe Bank (Subdivision Vb<sub>2</sub>) cod. Exploitation ratio (ratio of landings to survey interpreted as an index of exploitation rate). Lower plot: Landings and cpue (kg/hr) in spring and summer survey.



**Figure 4.4.2.3** Faroe Bank (Subdivision Vb2) cod. Catch per unit of effort in the spring groundfish survey and summer survey. Vertical bars and shaded areas show the standard error in the estimation of indexes.

**Table 4.4.2.1** Faroe Bank (Subdivision Vb2) cod. Nominal catches (tonnes) by countries 1986–2005 as officially reported to ICES. From 1992 the catches by Faroe Islands and Norway are used in the assessment.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Faroe Islands	1836	3409	2960	1270	289	297	122	264	717	561
Norway	6	23	94	128	72	38	32	2	8	40
UK (E/W/NI)	-	-	-	-	-	-	+	1	1	- <sup>2</sup>
UK (Scotland)	<sup>1</sup> 63	47	37	14	205	90	176	118	227	551 <sup>3</sup>
United Kingdom										
Total	1905	3479	3091	1412	566	425	330	385	953	1152
Used in assessment					289	297	154	266	725	601

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005 <sup>*</sup>
Faroe Islands	2051	3459	3092	1001		1094	1840	5957	3607	1106
Norway	55	135	147	88	49	51	25	72	18	37 <sup>*</sup>
UK (E/W/NI)	- <sup>2</sup>	- <sup>2</sup>	- <sup>2</sup>	-	-	-	-	-	-	-
UK (Scotland)	382	277	265	210	245	288	218	254	-	-
United Kingdom				-	-	-	-	-	259 <sup>3</sup>	329 <sup>3</sup>
Total	2488	3871	3504	1299	294	1433	2083	6283	3884	1472
Correction of Faroese catches in Vb2						-65	-109	-353	-214	-66
Used in assessment	2106	3594	3239	1089	1194	1080	1756	5676	3411	1077

<sup>\*</sup> Preliminary

<sup>1)</sup> Includes Vb1

<sup>2)</sup> Included in Vb1

<sup>3)</sup> Reported as Vb