

### 9.4.1 EU request to review the advice for blackspot (= red) seabream (*Pagellus bogaraveo*) in Subarea 10 (Azores grounds)

#### Advice summary

**Please note: The present advice replaces the advice given for this stock in June 2016.**

ICES advises that when the precautionary approach is applied, catches should be no more than 480 tonnes in each of the years 2017 and 2018. All catches are assumed to be landed.

#### Request

The present advice is in response to the seabream component of the following request from the European Commission:

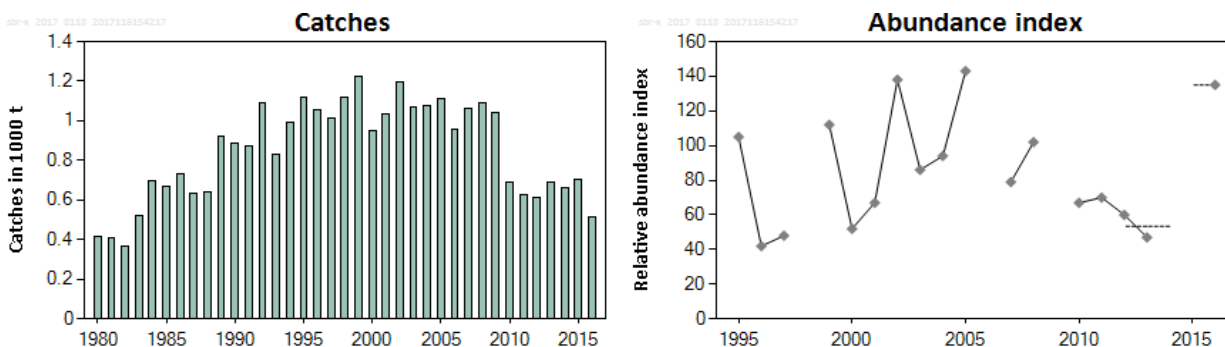
*On the basis of the results of the ARQDAÇO survey carried out in 2016, ICES is requested to review its advice for seabream in Subarea X and alfonsinos in the Northeast Atlantic.*

**Background:** On 3 June ICES provided its advice on the state of the red seabream\* (*Pagellus bogaraveo*) stock in Subarea X (Azores ground) and alfonsinos in the Northeast Atlantic. In its advice ICES indicates that survey data available from the Azores (1995-2013) was the only source of information on stock trends. However, the last survey has been conducted in 2013 and ICES pointed out that resuming these surveys would provide information that could be used in delivering advice on fishing opportunities. In October 2016 the Azores authorities transmitted the results of the survey ARQDAÇO on deep-sea species, including red seabream and alfonsinos, carried out from 26 April to 15 July 2016.

\* Starting in 2017, the common name used by ICES for this species is the blackspot seabream.

#### Stock development over time

The survey abundance index indicates an increase in 2016, after a period of low levels since 2010.



**Figure 9.4.1.1** Blackspot (= red) seabream in Subarea 10. Left: Catches. Right: Bottom longline survey abundance index from Subdivision 10.a.2 (Azores). The dotted horizontal lines indicate the average abundance index indicator of the respective year range (last two and preceding three years) used to calculate the advised catch.

**Stock and exploitation status**

**Table 9.4.1.1** Blackspot (= red) seabream in Subarea 10. State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size				
		2014	2015	2016		2014	2015	2016		
Maximum sustainable yield	$F_{MSY}$	?	?	?	Undefined	$MSY$	?	?	?	Undefined
Precautionary approach	$F_{PA}$ , $F_{lim}$	?	?	?	Undefined	$B_{trigger}$ , $B_{PA}$ , $B_{lim}$	?	?	?	Undefined
Management plan	$F_{MGT}$	-	-	-	Not applicable	$SSB_{MGT}$	-	-	-	Not applicable
Qualitative evaluation	-	?	?	?	Unknown		?	?	?	Unknown

**Elaboration on advice**

ICES provided advice on this stock in June 2016. The ARCDAÇO survey was not conducted in 2014 and 2015, and the 2016 survey was not completed in time for data to be used in the advice. The advice was based on the ICES framework for category 5 stocks. After the survey was conducted in 2016, ICES was asked to review the advice provided for 2017 and 2018.

Because the ARCDAÇO survey was conducted in 2016 and was previously used to provide an overall indicator of stock biomass, the updated advice is provided using the ICES framework for category 3 stocks.

**Catch options**

The ICES framework for category 3 stocks (ICES, 2012) is based on a comparison of the average of the index values for the last two years (index A) with the average of the three preceding values (index B), including missing values.

The relative abundance index from the bottom longline survey (ARQDAÇO) was used to provide an overall indicator of stock biomass.

The index is estimated to have increased by more than 20% and thus the uncertainty cap was applied. The precautionary buffer was last applied in 2012. The index ratio has increased by more than 50%; therefore, no additional precautionary buffer was applied.

**Table 9.4.1.2** Blackspot (= red) seabream in Subarea 10. For stocks in ICES data category 3, one catch option is provided.

Index A (2015–2016; 2015 missing)		135
Index B (2012–2014; 2014 missing)		53.5
Index ratio (A/B)		2.52
Uncertainty cap	Applied	1.2
Recent advised landings for the years 2016–2017		400 t
Discard rate		Negligible
Precautionary buffer	Not applied	
Landings advice *		480 t

\*(Recent advised landings) × (uncertainty cap).

**Basis of the advice**

**Table 9.4.1.3** Blackspot (= red) seabream in Subarea 10. The basis of the advice.

Advice basis	Precautionary approach
Management plan	There is no management plan for blackspot seabream in this area.

### Quality of the assessment

Survey results show an increase in the relative abundance, the 2016 value being the third highest value recorded since the start of the time-series in 1995. The survey covers all island shelves and most of the seamounts where blackspot seabream is known to occur in Subdivision 10.a.2. The index for 2016 shows the same increase in all survey strata.

Although the stock unit considered covers all of Subarea 10, the proportion of the stock abundance occurring outside of Subdivision 10.a.2 is minor, if not non-existent.

### Issues relevant for the advice

Catches have been stable since 2010, at a lower level than in the 2000s. Prior to 2015 landings were not constrained by the TAC.

### Reference points

There are no reference points for this stock.

### Basis of the assessment

**Table 9.4.1.4** Blackspot (= red) seabream in Subarea 10. The basis of the assessment.

ICES stock data category	3 ( <a href="#">ICES, 2016a</a> )
Assessment type	Survey trends-based assessment (ICES, 2016b)
Input data	Survey relative abundance index (longlining survey ARQDAÇO)
Discards and bycatch	Discarding is considered negligible.
Indicators	None
Other information	Last benchmarked in 2010 (WKDEEP; <a href="#">ICES, 2010</a> ).
Working group	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources ( <a href="#">WGDEEP</a> )

### Information from stakeholders

There is no available information.

### History of the advice, catch, and management

**Table 9.4.1.5** Blackspot (= red) seabream in Subarea 10. ICES advice, the agreed TAC, and landings. Weights are in thousand tonnes.

Year	ICES advice	Predicted catch corresp. to advice	EU TAC Subarea 10	ICES landings Subarea 10
2003	*	-	1.136	1.1
2004	*	-	1.136	1.1
2005	*	-	1.136	1.1
2006	*	-	1.136	1.0
2007	*	-	1.136	1.1
2008	*	-	1.136	1.0
2009	Constrain catches to average catches 2003–2007	1.05	1.136	1.0
2010	Biennial	1.05	1.136	0.68
2011	Less than 1050 t and a reduction in catches should be considered	1.05	1.136	0.62
2012	No new advice, same as 2011	1.05	1.136	0.61
2013	Reduce catches by 40%	0.4	1.022	0.69
2014	No new advice, same as 2013	0.4	0.922	0.66
2015	Same catch advice as 2013	0.4	0.678	0.70
2016	No new advice, same as 2013	0.4	0.507	0.52**
2017	Precautionary approach	≤ 0.48		
2018	Precautionary approach (same advised catch value as provided for 2017)	≤ 0.48		

\* Previous to 2008, the advice was for the entire ICES area.

\*\* Preliminary.

**History of catch and landings**

**Table 9.4.1.6** Blackspot (= red) seabream in Subarea 10. Catch distribution by fleet in 2016 as estimated by ICES.

Total catch (2016)	Landings	Discards
515 t	100% longliners and handline	No discards
	515 t	

**Table 9.4.1.7** Blackspot (= red) seabream in Subarea 10. Catches inside and outside the NEAFC Regulatory Area (RA) as estimated by ICES. Weights are in tonnes.

Year	Inside the NEAFC RA	Outside the NEAFC RA	Total catch
1988			637
1989			924
1990			889
1991			874
1992			1090
1993			830
1994			989
1995			1115
1996			1052
1997			1012
1998			1119
1999			1222
2000			947
2001			1034
2002			1193
2003			1068
2004			1075
2005			1113
2006			958
2007			1063
2008			1089
2009			1042
2010			687
2011			624
2012			613
2013			692
2014	0	663	663
2015	0	701	701
2016	0	515*	515*

\* Preliminary.

## Summary of the assessment

**Table 9.4.1.8** Blackspot (= red) seabream in Subarea 10. Bottom longline survey abundance index (ARQDAÇO) of *Pagellus bogaraveo* from Subdivision 10.a.2 (Azores) used for the advice.

Year	Lower	Index	Upper
1995	88	105	125
1996	33	42	49
1997	33	48	58
1998	na	na	na
1999	80	112	143
2000	38	52	67
2001	58	67	78
2002	126	138	150
2003	66	86	103
2004	69	94	120
2005	118	143	166
2006	na	na	na
2007	54	79	106
2008	84	102	119
2009	na	na	na
2010	53	67	83
2011	52	70	87
2012	49	60	69
2013	38	47	55
2014	na	na	na
2015	na	na	na
2016	114	135	158

na = Not available.

## Sources and references

ICES. 2010. Report of the Benchmark Workshop on Deep-water Species (WKDEEP), 17–24 February 2010, Copenhagen, Denmark. ICES CM 2010/ACOM:38. 247 pp.

ICES. 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM:68. 42 pp.

ICES. 2016a. General context of ICES advice. *In* Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.

ICES. 2016b. Report of the Working Group on Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP), 20–27 April 2016, ICES HQ, Copenhagen, Denmark. ICES CM 2016/ACOM:18. 648 pp.