

Common skate complex (Blue skate (*Dipturus batis*) and flapper skate (*Dipturus intermedius*)) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel)

ICES advice on fishing opportunities

ICES has not been requested to provide advice on fishing opportunities for these stocks.

Stock development over time

Species-specific landings of blue skate (*Dipturus batis*) and flapper skate (*D. intermedius*) are reported; however, they are considered to be confounded with landings of Norwegian skate (*D. nidarosiensis*) and long-nosed skate (*D. oxyrinchus*).

Stock and exploitation status

ICES cannot assess these stocks and their exploitation status relative to the maximum sustainable yield (MSY) and precautionary approach (PA) reference points because the reference points are undefined.

Table 1 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). State of the stocks and fishery relative to reference points.

		Fishing pressure				Stock size				
		2015	2016	2017		2015	2016	2017		
Maximum sustainable yield	F_{MSY}	?	?	?	Unknown	$MSY B_{trigger}$?	?	?	Unknown
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Unknown	B_{pa}, B_{lim}	?	?	?	Unknown
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	?	?	Unknown	-	?	?	?	Unknown

Catch scenarios

ICES has been requested to provide information on stock status but has not been requested to provide advice on fishing opportunities for this stock.

Basis of the advice

ICES has not been requested to provide advice on fishing opportunities for this stock.

Table 2 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). The basis of the advice.

Advice basis	No advice requested.
Management plan	ICES is not aware of any agreed precautionary management plan for blue skate and flapper skate in this area.

Quality of the assessment

There is no assessment for either blue skate or flapper skate.

Issues relevant for the advice

Blue skate and flapper skate (also referred to as the common skate complex) have traditionally been important commercial species in northern European seas, taken in trawl and line fisheries. The geographical range of these species declined over the latter half of the 20th century. These species are currently a bycatch in trawl and tanglenet fisheries on some parts of the continental shelf.

In a taxonomic revision (Last *et al.*, 2016) of these species it was concluded that the smaller-bodied blue skate should retain its scientific name *Dipturus batis* while the larger-bodied flapper skate shall now be referred to as *Dipturus intermedius*. FAO has accepted the latter name, assigning it the ASFIS code DRJ. Flapper skate is reported predominantly from the northern North Sea and northwestern Scotland, and is occasionally found in the Celtic Sea. Blue skate is reported predominantly in the Celtic Sea, and its distribution extends northwards to Iceland. The southern limits of both species are uncertain.

Current EU regulations prohibit the fishing, retention on board, trans-shipping, or landing of the common skate complex (comprising blue skate and flapper skate). This prohibition applies to Union waters of ICES Division 2.a and subareas 3–4 and 6–10. The stock area covered by this advice sheet extends beyond Union waters.

Since legal obligations to declare most demersal elasmobranchs to species level were introduced in 2008, a greater proportion of data are reported to this level. However, misidentification is common with the four members of the genus in this area (blue skate, flapper skate, Norwegian skate *Dipturus nidarosiensis*, and long-nosed skate *Dipturus oxyrinchus*). Blue and flapper skates are listed as prohibited species under EU regulations and species misreporting may occur. Reported landings of long-nosed skate, which is not included in fishery regulations, have increased in this area (Table 7). Reported landings are therefore not informative of species composition or catch.

The recent increase in reported landings from the NEAFC Regulatory Area requires clarification regarding both the quantities and species identification.

There are currently no robust indicators of stock size for blue skate and flapper skate. The Spanish Porcupine Bank survey (SpPGFS-WIBTS-Q4) has seen increasing catch rates of *Dipturus* spp. (ICES, 2018). This survey may not be representative of the whole stock area. The UK southwestern beam trawl survey (UK-Q1-SWBeam) caught immature blue skate, with preliminary studies indicating an increasing trend in Division 7.e (ICES, 2018). These and other surveys in the Celtic Seas may provide a stock size indicator in the future.

Reference points

No reference points are defined for these stocks.

Basis of the assessment

Table 3 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). The basis of the assessment.

ICES stock data category	6 (ICES, 2016a).
Assessment type	No assessment (ICES, 2018).
Input data	None.
Discards and bycatch	Discarding is known to take place but has not been fully quantified.
Indicators	None.
Other information	Surveys (SpPGFS-WIBTS-Q4; UK-Q1-SWBeam).
Working group	Working Group on Elasmobranch Fishes (WGEF)

Information from stakeholders

Fishers have reported that blue skate can be locally abundant in some areas, and this has been confirmed by scientific observations reported from commercial fishing vessels (ICES, 2018).

History of the advice, catch, and management

Table 4 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). History of ICES advice*, reported landings of the common skate complex and ICES estimates of combined landings of *Dipturus batis*, *D. intermedius*, *D. oxyrinchus*, and *D. nidarosiensis* (see also Table 7). All weights are in tonnes.

Year	ICES advice	Landings corresp. to advice	Reported landings **	ICES landings ***
2009	No target fishery	0	37	97
2010	No new advice, same as 2009	0	5	35
2011	No target fishery. Retain on Prohibited Species List	0	8	52
2012	No new advice, same as 2011	0	4	42
2013	No target fishery, mitigate bycatch	0	1	45
2014	No target fishery, mitigate bycatch	0	1	175
2015	No target fishery, mitigate bycatch	0	235	609
2016	No target fishery, mitigate bycatch	0	143	516
2017	Precautionary approach	0	117	506
2018	Precautionary approach (same value as advised catches for 2017)	0		
2019	No catch advice requested.	-		
2020	No catch advice requested.	-		

* There is no specific TAC for this stock. Fishing opportunities are managed through an overall TAC by management unit, which includes all species of skates and rays.

** Reported landings of the common skate complex (*Dipturus batis* and *D. intermedius*).

*** These data combine landings for all four members of the genus *Dipturus* occurring in the region, as data are confounded because of species misidentification and misreporting.

History of the catch and landings

Table 5 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). Catch distribution (for combined landings of *Dipturus batis*, *D. intermedius*, *D. oxyrinchus*, and *D. nidarosiensis*) by fleet in 2017 as estimated by ICES.

Catches (2017, tonnes)	Landings		Discards
Unknown	trawl fisheries	other fisheries	Unquantified
	>99%	< 1%	
	506 t		

Table 6 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). ICES estimates of landings by country (in tonnes). Data revised in 2016 (ICES, 2016b). These data combine reported landings of *Dipturus batis*, *D. intermedius*, *D. oxyrinchus*, and *D. nidarosiensis*.

Year	Belgium	Spain	UK	Ireland	France	Total
2005		24			351	375
2006		6			295	301
2007		11		0	308	319
2008	0	28	96		414	538
2009	0	5	22	2	68	97
2010	0	0	1	4	30	35
2011		1	19	17	15	52
2012		5	12	1	23	42
2013	0	23	1	0	21	45
2014	0	80	63	0	32	175
2015		448	118	9	33	609
2016		375	116	7	17	516
2017		372	106	9	19	506

Table 7 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). Reported landings by species (in tonnes). ICES consider that data for all four species are confounded.

Year	<i>D. batis</i> and <i>D. intermedius</i>	<i>D. nidarosiensis</i>	<i>D. oxyrinchus</i>	Total
2005	320		56	375
2006	253		48	301
2007	248		70	319
2008	343	52	144	538
2009	37	5	55	97
2010	5	0	30	35
2011	8	0	44	52
2012	4	0	38	42
2013	1		44	45
2014	1		173	175
2015	235	0	375	609
2016	143		373	516
2017	117		389	506

Table 8 Blue skate (*Dipturus batis*, RJB) and flapper skate (*Dipturus intermedius*, DRJ) in Subarea 6 and divisions 7.a–c and 7.e–k (Celtic Seas and western English Channel). Combined landings of *Dipturus batis*, *D. intermedius*, *D. oxyrinchus*, and *D. nidarosiensis* from ICES divisions that straddle Union waters and the NEAFC Regulatory Area (RA) as estimated by ICES.

Year	Outside the NEAFC RA	Divisions 6.b, 7.c, and 7.j–k	Total
2015	147	462	609
2016	141	370	516
2017	118	388	506

Summary of the assessment

There is no assessment for either blue skate or flapper skate.

Sources and references

Last, P., Naylor, G., Séret, B., White, W., de Carvalho, M., and Stehmann, M. (Eds.) 2016. Rays of the World. CSIRO Publishing.

ICES. 2016a. Advice basis. In Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.

ICES. 2016b. Report of the Workshop to compile and refine catch and landings of elasmobranchs (WKSHARK2), 19–22 January 2016, Lisbon, Portugal. ICES CM 2016/ACOM:40. 69 pp.

ICES. 2018. Report of the Working Group on Elasmobranch Fishes (WGEF), 19–28 June 2018, Lisbon, Portugal. ICES CM 2018/ACOM:16.