

ECOREGION Celtic Sea and west of Scotland
STOCK Skates and rays in Subareas VI and VII (Celtic Sea and west of Scotland)

ICES uses the common term “skate” to refer to members of the family Rajidae. The term ray, formerly used by ICES to refer to Rajidae too, is now only used to refer to other batoid fish, including manta rays, sting rays, and electric rays. ICES only provides routine advice for Rajidae.

About 15 species of skate are known from the shelf seas of the Celtic Seas ecoregion, including:

- (a) Important commercially exploited species (*Raja brachyura*, *Raja clavata*, *Raja microocellata*, *Raja montagui*, *Leucoraja naevus*);
- (b) Infrequent species of marketable size (*Leucoraja circularis*, *Leucoraja fullonica*, *Dipturus oxyrinchus*);
- (c) Stocks for which the main distribution is outside the ecoregion and is advised elsewhere (*Amblyraja radiata*);
- (d) Species subject to strict EC regulations that are either currently prohibited or that should not be retained on board (*Dipturus batis* complex (*Dipturus batis* and *Dipturus cf. intermedia*), *Dipturus nidarosiensis*, *Raja undulata*, *Rostroraja alba*);
- (e) small-bodied species that are discarded (*Rajella fyllae*).

Recent studies have identified that *Dipturus batis* comprises two species. As the taxonomic nomenclature is still to be officially agreed, ICES currently provides advice for the species complex, but will provide species-specific advice when both species are recognised. Given changes in the taxonomy of the genus *Dipturus*, management measures may be better implemented at genus level.

Rostroraja alba is listed as a ‘prohibited species’ and is addressed in a separate advice sheet in 2014 (Section 9.3.30).

Summary of the advice for 2015 and 2016

ICES does not provide general advice on skates for 2015 or 2016. ICES provides advice at the individual stock level (See Table 5.3.29.0).

Introduction

For the first time, in 2014, ICES gives quantitative advice for skates at a stock-specific level. Until now, landings data have been too incomplete to allow ICES to provide quantitative advice per stock.

ICES does not provide advice for the generic skate assemblage, nor does it advise on the generic skate TAC in this area. This is because ICES believes that management should be at a stock-specific level. Also, the generic skate TAC does not take into account that several stocks straddle the boundary with other management units. For instance, the skate with highest landings in the ecoregion (*Leucoraja naevus*) is a stock straddling Subareas VI and VII (excl. Division VIId) and Divisions VIIIa,b,d.

Table 5.3.29.0 Skates in the Celtic Seas ecoregion. Summary of advice by stock. These stock units do not include Division VIIId unless otherwise stated. Note: The advice in this table does not sum up to a generic advice for skates in Subareas VI and VII, because there are several stocks that straddle with Subareas IV and VIII. Therefore this table should not be interpreted as advice in relation to a generic skate TAC in Subareas VI and VII.

Section	Scientific name	Stock unit	Advice (2015 and 2016)	Advice (t)
5.3.29.15	<i>Leucoraja naevus</i>	Subareas VI ,VII, and Divisions VIIIabd	Reduce landings 34%	1998
5.3.29.2	<i>Raja brachyura</i>	Divisions VIIa, f, g	Reduce landings 20%	897
5.3.29.3	<i>Raja brachyura</i>	Division VIIe	Reduce landings 20%	310
5.3.29.4	<i>Raja clavata</i>	Subarea VI	Increase landings 20%	205
5.3.29.5	<i>Raja clavata</i>	Divisions VIIa, f, g	Increase landings 20%	1235
5.3.29.6	<i>Raja clavata</i>	Division VIIe	No increase in landings	260
5.3.29.7	<i>Raja microocellata</i>	Divisions VIIIf, g	Reduce catches 36%	188
5.3.29.8	<i>Raja microocellata</i>	Divisions VIIId, e	Reduce landings 20%	43
5.3.29.9	<i>Raja montagui</i>	Subarea VI, Divisions VIIb, j	Reduce landings 11%	53
5.3.29.10	<i>Raja montagui</i>	Divisions VIIa, e–h	Reduce landings 4%	1118
5.3.29.11	<i>Raja undulata</i>	Divisions VIIId, e	No targeted fisheries. Any possible provision for bycatch to be landed should be part of a management plan. ¹	-
5.3.29.12	<i>Raja undulata</i>	Divisions VIIb, j	No target fishery, minimize bycatch	-
5.3.29.13	<i>Leucoraja circularis</i>	Subareas VI and VII	Reduce landings 20%	39
5.3.29.14	<i>Leucoraja fullonica</i>	Subareas VI and VII	Reduce landings 20%	186
5.3.29.16	<i>Dipturus batis</i> -complex (<i>Dipturus batis</i> cf. <i>flossada</i>) (<i>Dipturus</i> cf. <i>intermedia</i>) and <i>D. nidaorsiensis</i> and <i>oxyrinchus</i>	Subareas VI and VII	No target fishery, minimize bycatch	-
5.3.29.17	Other skates	Subareas VI and VII, excluding Division VIIId	Reduce landings 20%	789

¹ Version 2, text amended to be in line with the upfront Advice sentence in 5.3.29.11.

Advice considerations

The basis for advice is survey data (mainly from international trawl surveys). Other data, e.g. life history information and estimates of mortality, are used as supplementary information when appropriate.

More than 93% of total reported skate landings in 2013 were reported to species level, although there is some concern over the accuracy of some of these data.

Scientific studies have shown a potentially high discard survival in some fisheries taking skates in this ecoregion.

The generic TAC for skates in this eco region may become restrictive in 2014.

No formal regional management plans exist. A voluntary seasonal closed area has been implemented in the Bristol Channel to protect juveniles. Given the contrasting skate assemblages in the ecoregion, skates would be a suitable candidate for more regional management. More regional management may also better address those species that are patchily distributed and locally abundant. Management measures such as closed areas/seasons or effort restrictions may better protect skate stocks than TAC management. In particular, measures to protect spawning/nursery grounds and larger, mature females would be beneficial.

Table 5.3.29.1 Rays and skates in Subareas VI and VII (Celtic Sea and west of Scotland). Summary of ICES advice and landings by area.

Year	Advice for generic skate assemblage	Total reported landings	TAC VI and VII (excl. VIId)*	TAC VIId**
2004	No advice	13.2	-	
2005	No advice	13.0	-	
2006	No advice	10.1	-	
2007	No advice	10.2	-	
2008	No advice	9.5	-	
2009	<i>Status quo</i> catch, zero catch for depleted species	9.0	15.7	1.0
2010	No new advice, same advice applies as for 2009	9.2	13.4	0.9
2011	Average landings 2006–2008, does not apply to certain depleted or vulnerable species	8.6	11.4	0.9
2012	No new advice, same advice applies as for 2011	8.2	9.9	0.9
2013	Species-specific measures	7.5	8.9	0.8
2014	No new advice, same advice applies as for 2013		8.0	0.8
2015	See individual stock advice			
2016	No new advice, same advice applies as for 2015			

Weights in thousand tonnes.

* Special condition which allows up to 5% landings to be transferred and landed against quotas in Division VIId, and *vice versa*.

** Part of the North Sea ecoregion, but included here because some skate stocks straddle Divisions VIId and VIIe (English Channel).

Mixed-fisheries advice

No specific mixed-fisheries advice is provided. The advice for *Dipturus batis* complex, *D. nidarosiensis* and *oxyrinchus*, and *Raja undulata* applies to all mixed fisheries. For these stocks, ICES advises that there be no directed fisheries and that bycatch be minimized.

Biology

Some skates are slow growing and late maturing and have a comparatively low fecundity. The large size and morphology of skates and their aggregating nature makes them vulnerable to over-exploitation. Some species are patchily distributed, thought to be due to high habitat specificity, which may make them susceptible to localized depletion. All skates lay demersal eggs, but the location of spawning grounds remains uncertain.

Environmental influence on the stock

Recruitment in skate stocks is mainly dependent on spawning stock size. It is not expected that environmental conditions influence stock dynamics to any important degree.

The distribution of skates is generally related to substrate and depth.

The fisheries

Skates are taken as a bycatch in mixed demersal fisheries and also targeted in some areas. Beam trawls generally capture smaller skates, and tanglenets capture larger skates. Skates are currently managed under a common TAC, although the skate complex consists of species that may have different vulnerabilities to exploitation. Most skates are less abundant on muddy habitats, and so may be less frequently encountered in *Nephrops* fisheries.

Discard survival

Discard survival is variable. It is considered high in inshore trawl, line, and gillnet fisheries, where soak/haul times are usually of a short duration. Survival is lower in other fisheries, including offshore gillnet and beam-trawl fisheries. In trawl fisheries survival is a function of soak time and weight or composition of catch in the codend.

Effects of the fisheries on the ecosystem

It has been suggested that the historical depletion of large-bodied skates allowed populations of smaller-bodied skates to increase. If larger-bodied skate species increase, it is possible that there would be increased predatory pressure and competition on the stocks of small-bodied skates.

Quality considerations

Skate landings have historically been reported at the family level. The proportion of landings reported to species has increased since 2008, in line with regulations requiring species-specific reporting. Species identification is thought to be improving, although some inconsistencies in these data remain. Over time, data quality is expected to improve further.

Some nations were unable to provide species-specific landings data for 2013.

Scientific trawl surveys provide the best source of longer-term species-specific information, and so these are the primary source for evaluating stock status. It is recognised that such trawl surveys cannot provide informative indices for all skate species, including the larger-bodied and/or patchily distributed species. Other data sources, such as collaborative science–industry surveys, could usefully provide better data for such stocks.

Biological knowledge (age, growth, fecundity) of many skate species is limited; therefore some life-history assessment models cannot be developed at the present time.

Stock units for most species remain uncertain, and the management units nominally used here are based on observed distribution patterns from surveys. Further studies to better understand stock structure are required.

Additional considerations

Factors affecting the fisheries and the stock

High fuel prices may focus fishing effort to the inner continental shelf where the genus *Raja* predominates. Some fishers may have redirected fishing effort away from areas where there is a high local abundance of *Dipturus batis* and *Raja undulata*, due to the regulations in place.

Poor weather at the end of 2013 might explain why the TAC uptake was not complete in 2013.

Data and methods

Assessments are based on the ICES approach to data-limited stocks, where changes in survey catch rates are the main stock indicators used. When a survey index is available (Category 3 stocks), the advice is based on recent landings modified according to the average survey index in the last two years versus the average survey index in the previous five years. As done in 2012, an average of the previous five years is chosen over the default average of the previous three years. This is to allow time for changes in abundance to become visible, as generation times are longer in these species than in many bony fishes. Where no suitable survey index is available, the advice is given in accordance with stock Category 5.

Information from the fishing industry

The fishing industry considers the stocks of two of the prohibited species (*Dipturus batis* and *Raja undulata*) to be locally common in some areas.

Sources

ICES. 2012. Report of the Working Group on Elasmobranch Fishes (WGEF), 19–26 June 2012, Lisbon, Portugal. ICES CM 2012/ACOM:19.

ICES. 2014a. Advice basis. *In* Report of the ICES Advisory Committee, 2014. ICES Advice 2014, Book 1, Section 1.2.

ICES. 2014b. Report of the Working Group on Elasmobranch Fishes (WGEF), 17–26 June 2014, Lisbon, Portugal. ICES CM 2014/ACOM:19. 671 pp.

Table 5.3.29.2

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (VIa).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Belgium	13	10	3	4	.	.	.	2	1	2	.	.	2	1	3	2	3	.	2	.
Denmark	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	+	.	+	+
Faeroe Islands	107	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
France	736	907	777	918	653	839	730	583	2318	741	885	955	996	645	727	766	724	711	621	603
Germany	.	1	.	.	1	2	1	.	.	.	.	.	1	.	.	.	.	.	.	.
Ireland	281	336	458	425	342	242	268	343	474	537	806	836	574	440	367	690	630	150	200	350
Netherlands	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Norway	116	105	70	77	96	226	81	253	119	146	217	99	67	44	93	144	264	71	38	82
Poland	64	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spain	.	.	.	.	.	.	.	.	.	19	11	8	4	12	14	8	.	.	43	.
UK - (E,W&N.I.)	264	266	264	334	338	292	209	89	93	99	104	141	47	47	54	87	67	57	77	72
UK – Scotland	1302	1142	1393	1792	1724	1660	1540	1577	1496	1617	1818	2016	2034	1802	2111	2137	2499	2007	2026	1605
Total	2883	2767	2965	3551	3154	3261	2829	2847	4501	3161	3841	4055	3726	2991	3370	3834	4187	2996	3007	2712

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Belgium	1	2	7	1	2	2	4	2	4	2	8	9	4	4	0	.	.	0	0	0	0
Denmark	+	+	+	+	.	+	+	.	.	.	.	.	0	.	.	.	.	0	0	0	
Faeroe Islands	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0	.	.	.	.	.
France	606	437	553	526	384	333	NA	321	278	212	183	149	181	174	194	245	97	65	50	97	85
Germany	.	2	.	1	4	16	7	1	1	.	3	0	.	0	.	.	.	.	0		
Ireland	331	265	504	681	596	488	388	274	238	311	364	363	186	176	119	109	81	111	88	103	94
Netherlands	.	.	.	.	.	.	.	.	.	.	.	.	.	0	.	.	.	0	.	0	0
Norway	56	9	74	29	20	50	29	49	20	25	2	2	10	4	5	11	4	11	6	2	5
Poland	.	.	.	.	.	.	.	.	.	.	.	.	.	0							
Spain	.	.	.	47	58	69	34	2	.	9	27	14	14	0	0	4				8	
Spain (Basque Country)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	0	1		
UK - (E,W&N.I.)	70	101	138	101	69	157	67	108	65	114	159	66	26	18	5	1	4	1	1	0	1
UK – Scotland	1419	1429	1980	2606	1879	1460	1324	1316	1263	1136	1307	1012	623	369	426	297	240	224	194	206	185
Total	2483	2245	3256	3992	3012	2575	1853	2073	1869	1809	2053	1615	1043	744	750	667	427	412	341	416	371

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (VIb).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Estonia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Faeroe Islands	2	95	43	43	24	15	61	44	.	23	22	18	2	6	.	.	.	.	.	.
France	125	423	39	44	10	20	1	0	4	8	10	6	6	4	1	2	0	3	13	0
Germany	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.
Ireland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Norway	.	22	123	45	60	145	217	222	117	147	332	364	164	231	200	132	279	203	248	234
Portugal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Russian Federation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spain	.	.	.	.	.	.	.	.	63	.	.	12	8	48	41	36	.	.	14	.
UK - (E,W&N.I.)	11	.	.	39	62	36	56	.	4	.	8	4	18	15	12	7	4	4	11	12
UK – Scotland	562	166	307	77	160	189	152	181	152	44	9	15	58	38	59	72	70	76	67	57
Total	700	706	512	248	316	405	487	447	340	222	381	419	256	342	313	250	354	286	353	303

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Estonia	.	.	.	.	.	.	.	.	56	1	.	.	.	.	.	.	.	.	.	.	.
Faeroe Islands	.	.	.	.	.	.	.	.	.	.	.	na	na	.	.	3	.	.	.	.	.
France	4	0	0	0	0	0	0	7	5	5	2	6	15	0	17	17	12	0	0	6	2
Germany	6	25	17	49	26	36	67	76	8	1	6	22	22	6	0	.	.	3	2	.	.
Ireland	24	23	60	68	23	15	28	20	10	1	18	7	9	24	14	15	4	3	10	8	12
Norway	170	272	176	95	101	98	59	120	80	44	61	46	39	82	81	66	91	120	56	89	93
Portugal	.	.	56	.	25	26	24	29	17	31	18	na	0	0	.	.	.	.	.	.	.
Russian Federation	.	.	.	.	.	.	.	5	8	.	.	na	na	.	.	.	.	.	.	.	.
Spain	.	.	.	328	410	483	322	347	158	36	46	1	0	0	0	0	.	.	.	4	.
UK - (E,W&N.I.)	21	28	73	175	105	134	147	156	120	92	47	48	20	20	9	0	0	0	0	0	1
UK – Scotland	70	98	97	83	91	101	123	204	97	79	146	164	59	51	30	26	35	33	34	18	41
Total	295	446	479	798	781	893	770	964	559	290	344	294	164	183	151	127	143	159	102	125	149

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (VIIa).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Belgium	296	365	278	195	236	212	177	151	206	230	233	246	372	425	545	390	271	298	209	230
France	1516	426	337	491	827	967	560	593	1985	617	440	788	1194	1578	1318	1009	641	712	890	642
Ireland	822	916	838	936	858	796	813	725	851	803	781	1067	1946	1416	1644	1911	1808	1811	1400	1301
Netherlands	1	1	3	1	1	.	1	+	+	+	+	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Norway	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spain																				
UK - (E,W&N.I.)	1564	1533	1430	1163	1130	906	1045	1202	1113	1307	1133	1126	1103	976	1503	1435	1373	1378	1226	1150
UK (Scotland)	62	69	53	39	47	52	58	132	82	89	87	192	219	224	321	210	171	227	163	107
Total	4265	3310	2939	2825	3099	2933	2654	2803	4237	3046	2674	3419	4834	4619	5331	4955	4264	4426	3888	3430

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Belgium	107	224	218	265	298	398	542	504	724	997	830	860	860	593	680	295	250	274	471	430	370
France	550	330	293	282	151	285	NA	163	343	349	322	183	192	114	51	14	7	9	16	5	6
Ireland	679	514	438	438	593	692	827	759	807	1032	1086	825	786	645	721	515	370	557	500	496	411
Netherlands	n.a.	n.a.	n.a.	n.a.	n.a.	4	4	6	+	+	+	+	.	0	.	.			0	0	0
Norway	.	.	.	.	.	.	.	.	.	.	.	.	0	0	0	0	0	0	0	0	0
Spain																4					
UK - (E,W&N.I.)	1003	748	606	789	824	1009	936	671	983	863	1184	533	1252	271	260	243	214	190	172	226	213
UK (Scotland)	96	86	42	55	80	52	33	86	80	68	67	38	30	65	13	1	2	9	1	2	3
Total	2435	1902	1597	1829	1946	2440	2342	2189	2937	3309	3489	2439	3120	1689	1724	1071	844	1038	1161	1160	1003

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (VIIIf).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	
Belgium	182	273	280	184	106	75	127	189	167	130	139	98	177	209	129	172	268	135	155	128	
Denmark	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
France	.	242	426	569	720	680	873	896	856	837	648	377	306	330	247	464	366	326	607	663	
Germany	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ireland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Netherlands	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Norway	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Poland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spain (b)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
UK - (E,W&N.I.)	504	401	468	437	452	436	444	494	508	529	480	558	648	697	784	761	710	666	627	705	
UK (Scotland)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	686	916	1174	1190	1278	1191	1444	1579	1531	1496	1267	1033	1131	1236	1160	1397	1344	1127	1389	1497	

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	
Belgium	96	117	108	89	116	121	103	90	91	117	134	210	208	138	206	184	193	143	175	185	149	
Denmark	0	0	.	.
France	565	468	394	432	485	464	453	538	642	526	536	478	429	305	424	399	365.6	517	297	325	304	
Germany	0	0	.	.	.
Ireland	.	.	.	.	.	1	.	.	.	1	1	15	8	6	2	4	3	2	1	1	1
Netherlands	.	.	.	.	.	.	.	.	.	.	.	.	.	0	.	.	.	0	0	0	0
Norway	.	.	.	.	.	.	.	.	.	.	.	.	.	0	0	0	.	.	0	0	.
Poland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0	.	.
Spain (b)	.	.	.	8	10	12	1	.	3	.	.	.	.	0	0	0	.	.	.	0	.
UK - (E,W&N.I.)	638	630	589	676	664	624	560	613	691	920	766	609	631	653	620	639	546	680	682	708	598	
UK (Scotland)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0	.	0	0	0	0
Total	1299	1215	1091	1205	1275	1222	1117	1241	1427	1564	1437	1312	1276	1101	1252	1226	1107	1342	1155	1219	1052	

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (VIIegh).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Belgium	259	238	209	529	308	208	206	254	318	271	182	215	211	311	224	227	355	242	97	183
Denmark	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	2	1	.	1
France	5729	4095	6901	6602	6189	6095	6519	6796	7647	6765	7323	6561	6890	7771	7693	7986	7566	7734	7077	6477
Germany	18	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Ireland	147	158	148	241	158	143	218	399	380	291	236	303	286	251	296	315	57	100	68	.
Netherlands	.	.	1	7	13	6	.	.	.	.	2	na	na	na	na	na	na	na	na	na
Norway	.	.	.	.	.	.	.	.	.	.	12	.	.	25	.	.	12	5	.	.
Poland	24	28	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spain (b)	.	.	.	.	.	45	0	0	77	30	29	24	2	62	75	49	.	.	21	.
UK - (E,W&N.I.)	432	466	572	556	566	615	564	528	606	637	700	832	936	939	1061	1307	865	1211	638	751
UK (Scotland)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Total	6609	4985	7831	7935	7234	7112	7507	7977	9028	7994	8484	7935	8325	9359	9349	9885	8857	9293	7901	7412

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Belgium	209	172	203	177	293	260	240	223	248	347	576	407	432	582	569	636	506	479	533	589	494
Denmark	+	0	+	.	.	.	.	.	.	.	.	.	.	.	.	.	0	0	.	.	.
France	5873	5836	6029	6425	7093	6114	6098	5710	5603	5273	5588	4261	4517	3740	3741	3302	3719	3428	3193	2894	2693
Germany	.	.	.	.	.	.	.	.	.	+	.	3	.	.	.	.	0	0	.	.	.
Ireland	120	106	162	349	479	446	408	203	481	729	838	844	334	315	285	214	198	174	316	315	221
Netherlands	na	na	na	na	na	9	na	7	7	11	.	.	.	1	.	.	1	2	1	1	2
Norway	.	.	.	.	.	.	.	.	11	.	.	.	.	0	0	0	.	.	0	0	.
Poland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0	.	.
Spain (b)	.	.	.	312	932	1178	2647	1706	1142	653	31	15	9	1	1	3	.	.	.	109	.
Spain (Basque Country)	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7	2	8	.	.
UK - (E,W&N.I.)	735	869	997	953	1098	1167	796	932	880	775	804	811	1024	727	730	667	650	865	771	667	753
UK (Scotland)	1	.	.	.	2	.	2	.	2	.	.	149	3	1	.	3	3	7	7	3	1
Total	6938	6983	7391	8216	9897	9173	10191	8781	8374	7788	7837	6490	6318	5366	5326	4826	5082	4957	4830	4576	4164

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (VIIbcjk).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Belgium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
France	907	725	292	480	239	219	188	340	1120	203	169	198	344	346	456	462	427	781	541	546
Germany	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ireland	266	321	314	320	265	268	239	269	336	271	325	296	220	226	419	332	633	350	400	619
Netherlands																				0
Norway																			0	0
Spain (b)	0	0	0	0	0	3	0	0	47	33	24	31	1	53	64	41	0	0	124	0
UK - (E,W&N.I.)	1	+	+	0	+	0	0	+	0	+	0	4	1	3	27	28	25	5	53	71
UK (Scotland)	0	0	0	0	0	1		1	0	0	0	1	+	1	+	1	13	14	15	10
Total	1174	1046	606	800	504	491	427	610	1503	507	518	530	566	629	966	864	1098	1150	1133	1246

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Belgium	0	0	0	0	0	0	24	5	0	5	1	na	0	0	0	.		0	0	0	0
France	298	224	297	375	599	500	NA	568	362	272	192	101	257	255	391	421	262	249	139	166	185
Germany	7	18	3	4	9	17	10	21	7	+	3	15	17	0				0	1	1	
Ireland	602	625	735	757	811	741	740	653	383	354	435	511	465	473	417	384	362	285	217	246	228
Netherlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	15	4	0			0	6	
Spain (b)	0	0	0	1341	1676	1978	2419	2573	1205	2939	1281	7	16	19	11	1		0	0	184	
UK - (E,W&N.I.)	88	201	361	469	468	376	352	597	545	373	350	364	269	176	172	83	90	94	99	72	83
UK (Scotland)	34	43	73	58	36	67	121	189	162	124	226	70	58	77	0	66	39	60	54	63	22
Total	1029	1111	1469	3004	3599	3679	3666	4606	2664	4067	2488	1068	1081	1016	995	954	753	687	510	738	518

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Spain																643	693	605	494	2	251
Spain (Basque Country)																	0.8	0.0			
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	643	693	605	494	2	251

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (total regional landings).

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Belgium	750	886	770	912	650	495	510	596	692	633	554	559	762	946	901	791	897	675	463	541
Denmark	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	2	1	.	2
Estonia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Faeroe Islands	109	95	43	43	24	15	61	44	.	23	22	18	3	6	.	.	.	.	.	.
France	9013	6818	8772	9104	8638	8820	8871	9208	13930	9171	9475	8885	9736	10674	10442	10689	9724	10267	9749	8931
Germany	18	1	.	.	1	2	1	.	.	.	.	.	1	.	.	1	1	0	0	0
Ireland	1516	1731	1758	1922	1623	1449	1538	1736	2041	1902	2148	2502	3026	2333	2726	3248	3128	2411	2068	2270
Netherlands	1	1	4	9	14	6	1	+	+	+	2	na	na	na	na	na	na	na	na	na
Norway	120	127	193	122	156	371	298	475	236	293	561	463	231	300	293	276	555	279	286	316
Poland	88	28	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Portugal	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Russian Federation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spain	.	.	.	.	.	48	0	0	187	82	64	75	15	175	194	134	0	0	202	0
UK - (E,W&N.I.)	2776	2666	2734	2529	2548	2285	2318	2313	2324	2572	2425	2665	2753	2677	3441	3625	3044	3321	2632	2761
UK - Scotland	1926	1377	1753	1908	1931	1902	1750	1891	1730	1750	1914	2224	2311	2065	2491	2420	2753	2324	2271	1779
Total	16317	13730	16027	16549	15585	15393	15348	16263	21140	16426	17165	17391	18838	19176	20489	21185	20104	19278	17671	16600

Table 5.3.29.2 (continued)

Skates and rays in the Celtic Seas. Total preliminary ICES WGEF landings of skates (Rajidae) in the Celtic Seas ecoregion (total regional landings).

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Belgium	413	515	536	532	709	781	913	824	1067	1467	1549	1485	1503	1316	1455	1115	949	896	1179	1204	1013
Denmark	+	.	+	.	.	.	.	.	.	.	.	.	0	.	.	.	.	.	.	.	.
Estonia	.	.	.	.	.	.	.	.	56	1	.	.	.	.	.	.	.	0	0	0	0
Faeroe Islands	.	.	.	.	.	.	.	.	.	.	.	.	na	.	.	4	.	.	.	.	.
France	7896	7295	7566	8040	8712	7696	6551	7307	7233	6637	6823	5178	5591	4587	4818	4398	4463	4267	3695	3493	3275
Germany	13	45	20	54	39	69	84	98	16	2	12	40	39	7	.	.	.	4	3	1	0
Ireland	1756	1533	1898	2294	2502	2382	2390	1909	1919	2428	2742	2565	1787	1640	1557.940	1240.360	1018	1132	1133	1169	966
Netherlands	na	na	na	na	na	13	4	13	7	11	na	na	0	1	.	.	1	2	1	1	2
Norway	226	281	250	124	121	148	88	169	111	69	63	48	49	101	90	77	95	131	62	97	98
Poland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Portugal	.	.	56	.	25	26	24	29	17	31	18	na	0	.	.	.	.	.	.	.	.
Russian Federation	.	.	.	.	.	.	.	5	8	.	.	na	na	.	.	.	.	.	.	.	.
Spain	0	0	0	2036	3086	3720	5423	4628	2508	3637	1385	37	39	20	12	655	700	608	503	307	251
UK - (E,W&N.I.)	2555	2577	2764	3163	3228	3467	2858	3077	3283	3137	3310	2431	3222	1865	1796	1633	1504	1830	1725	1674	1650
UK – Scotland	1620	1656	2192	2802	2088	1680	1603	1795	1604	1407	1746	1433	773	562	469	393	319	332	290	292	252
Total	14479	13902	15282	19044	20510	19981	19938	19854	17830	18828	17648	13217	13004	10099	10198	9514	9047	9201	8591	8237	7507

Table 5.3.29.3

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of 'sandy ray' are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	FRANCE			IRELAND			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIa	<i>Amblyraja radiata</i>			3.7		0.0							0.0	0.0	
	<i>Dipturus batis</i>	0.1								0.6	1.2	0.1			
	<i>Amblyraja hyperborea</i>			0.4											
	<i>Dipturus oxyrinchus</i>	3.1	13.9	7.4	0.9					2.8	4.5				
	<i>Leucoraja circularis</i>	1.1	0.7	0.8							0.4	0.1			0.0
	<i>Leucoraja fullonica</i>	1.6	2.6	2.2											
	<i>Leucoraja naevus</i>	27.7	34.5	23.1	12.0	7.4	5.4		0.5	62.8	51.7	22.1	0.1	0.0	
	<i>Raja brachyura</i>				0.4	0.7	11.8			7.3	1.9		0.3	0.1	0.4
	<i>Raja clavata</i>	15.9	36.9	28.3	43.4	64.6	68.2		7.4	45.9	62.8	104.7	0.3	0.1	0.5
	<i>Raja microocellata</i>														0.1
	<i>Raja montagui</i>	1.1	2.6	16.1	1.9	2.0	2.5			30.5	26.2	26.1			0.0
	<i>Rostroraja alba</i>									4.6	8.5	4.0			
	VIa Total Speciated	50.4	91.3	82.0	58.6	74.7	87.9		7.9	154.4	157.2	157.2	0.7	0.3	1.1
	VIa Total landings	50.4	97.5	85.3	88.5	102.9	94.0		7.9	194.3	205.9	185.2	0.8	0.5	1.1
VIb	<i>Dipturus batis</i>										1.7				
	<i>Dipturus oxyrinchus</i>		2.1						1.7	15.2	4.0				
	<i>Leucoraja circularis</i>	0.1	2.3	1.8	4.1						0.3	23.4			
	<i>Leucoraja fullonica</i>		1.1		0.6	3.0	4.4		1.5		0.7				
	<i>Leucoraja naevus</i>				0.2	0.3	0.1			1.4	5.0	4.2			
	<i>Raja brachyura</i>									0.3			0.1	0.3	
	<i>Raja clavata</i>		0.5		4.2	5.0	3.2			10.8	4.5	12.4			1.3
	<i>Raja microocellata</i>														
	<i>Raja montagui</i>	0.0					4.0			0.6	0.7	0.4			
	<i>Rostroraja alba</i>									1.9	0.2				
	VIb Total Speciated	0.1	6.0	1.8	9.1	8.3	11.8		3.2	30.2	17.1	40.5	0.1	0.3	1.3
	VIb Total landings	0.1	6.0	1.8	9.6	8.3	11.8		3.6	33.6	18.0	41.3	0.1	0.3	1.3

Table 5.3.29.3 (continued) Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIa	<i>Amblyraja radiata</i>							0.9		0.1						0.7	1.2	
	<i>Dipturus batis</i>							4.8								0.1	0.2	0.1
	<i>Dipturus oxyrinchus</i>																	
	<i>Leucoraja circularis</i>		5.1	1.3														0.0
	<i>Leucoraja fullonica</i>				0.0	0.0	0.0			0.1								
	<i>Leucoraja naevus</i>	36.8	35.9	35.1	1.5	0.3	0.4	9.5	12.9	4.3						5.1	7.4	1.3
	<i>Raja brachyura</i>	182.3	142.9	152.7	0.0	0.1	0.0	362.3	388.6	318.9						23.6	23.8	8.8
	<i>Raja clavata</i>	132.6	214.9	179.8	0.6	1.3	0.4	35.4	36.8	54.7			0.2		2.4	129.3	176.8	186.7
	<i>Raja microocellata</i>	2.2			0.0	0.0	0.0	0.1	0.0								0.0	0.2
	<i>Raja montagui</i>	50.0	15.3		13.5	3.7	5.0	49.3	35.0	24.1			0.0		0.0	8.1	10.7	1.2
	<i>Rostroraja alba</i>													0.2				0.0
	VIIa Total Speciated	403.9	414.0	369.0	15.6	5.3	5.8	462.3	473.4	402.2			0.3	0.2	2.4	166.8	220.1	198.3
	VIIa Total landings	471.3	430.3	370.2	15.8	5.3	5.8	500.5	496.1	410.7			1.1	1.7	3.2	171.9	226.2	213.0
VIIb	<i>Amblyraja radiata</i>							0.2	0.6	0.1								
	<i>Dipturus oxyrinchus</i>					0.1		11.6				2.5						
	<i>Leucoraja circularis</i>				0.0	0.0	0.0					2.5		1.3				
	<i>Leucoraja fullonica</i>				0.0	0.0	0.0					0.1				2.1	4.5	2.3
	<i>Leucoraja naevus</i>				34.4	36.0	24.8	9.1	12.5	9.3		7.0	1.4			6.5	11.6	4.9
	<i>Raja brachyura</i>					0.0	1.7	36.1	32.9	38.6							0.0	
	<i>Raja clavata</i>				18.4	30.7	39.3	39.4	60.2	51.6			2.6	2.4	0.9	5.5	8.8	4.3
	<i>Raja microocellata</i>						0.0											
	<i>Raja montagui</i>				0.1	0.2	0.1	2.2	5.6	5.1								0.9
	<i>Dipturus nidarosiensis</i>																	0.0
	VIIb Total Speciated				52.9	67.1	65.9	98.5	111.8	104.6		12.2	4.0	2.4	2.2	14.1	25.9	11.5
	VIIb Total landings				53.0	67.6	66.1	118.8	122.4	106.8		12.2	4.0	2.4	2.2	14.1	25.9	11.5

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			NETHERLANDS			SPAIN		SCOTLAND			UK (E,W&NI)			
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013	
VIIc	<i>Dipturus batis</i>				0.3																	
	<i>Dipturus oxyrinchus</i>							0.0	0.0													
	<i>Leucoraja circularis</i>				0.0	0.0	0.1							1.7		0.1						
	<i>Leucoraja fullonica</i>				0.0	0.1	0.2							0.9		0.1		0.7			0.1	
	<i>Leucoraja naevus</i>				9.6	6.8	5.6	1.6	1.5	0.3				16.0				2.7	0.5		0.5	
	<i>Raja brachyura</i>							0.2	0.1								9.0				0.3	
	<i>Raja clavata</i>				2.3	3.2	5.6	0.8	4.1					0.3	13.5	5.0	4.9				0.3	0.0
	<i>Raja microocellata</i>																					
	<i>Raja montagui</i>				0.2	0.2	0.8															0.1
	VIIc Total Speciated				12.5	10.3	12.2	2.6	5.6	0.3				0.0	18.8	13.5	14.1	4.9	3.3	1.2	0.6	
	VIIc Total landings				12.5	10.3	12.2	2.6	5.6	0.3				18.8	13.5	14.1	4.9	3.3	1.2	0.6		
VIIe	<i>Amblyraja radiata</i>		0.0		0.0															0.2	0.5	0.8
	<i>Dipturus batis</i>				0.7		0.5													0.1	0.3	0.6
	<i>Dipturus oxyrinchus</i>				0.0	0.2	0.1														0.0	0.1
	<i>Leucoraja circularis</i>		0.4	1.1		1.2	1.7													0.4	0.3	0.3
	<i>Leucoraja fullonica</i>				2.1	2.5	1.7													3.4	1.3	1.9
	<i>Leucoraja naevus</i>	0.9	0.7	0.7	275.3	184.5	184.8						0.0	0.1						79.8	75.8	75.4
	<i>Raja brachyura</i>	3.5	4.3	5.0	210.9	144.2	192.1	0.4			0.2	0.1								204.6	175.4	222.3
	<i>Raja clavata</i>	3.3	4.4	4.5	96.9	107.3	186.6			0.2	0.5	0.4	1.5							98.0	127.4	151.2
	<i>Raja microocellata</i>	0.4			15.3	15.1	19.2													24.9	30.6	29.0
	<i>Raja montagui</i>	1.3	1.2	0.0	278.4	284.9	339.8			0.2		0.1		0.0						46.8	44.7	63.1
	<i>Raja undulata</i>				1.7		1.2														0.0	
	<i>Rostroraja alba</i>				12.3		3.5														0.0	0.0
	<i>Rajella fyllae</i>					0.0																
	<i>Amblyraja hyperborea</i>																					0.0
	VIIe Total Speciated	9.3	11.1	11.4	893.7	739.7	931.3	0.0	0.4	0.2	0.7	0.5	1.7	0.0	0.1				0.0	458.2	456.2	544.7
	VIIe Total landings	13.8	12.6	11.6	930.9	778.1	959.8		0.4	0.2	0.8	0.6	1.8		0.1				0.0	465.2	463.3	550.6

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			SPAIN		SCOTLAND			UK (E,W&NI)			
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013	
VIIf	<i>Amblyraja radiata</i>		0.2													2.8	12.9		
	<i>Dipturus batis</i>			0.2	0.2														
	<i>Dipturus oxyrinchus</i>				0.0	0.0	0.3											0.0	0.0
	<i>Leucoraja circularis</i>		36.1	28.5		0.9	0.6										0.1	0.5	
	<i>Leucoraja fullonica</i>				4.3	4.8	1.2										2.7	2.7	3.7
	<i>Leucoraja naevus</i>	19.7	16.8	17.5	71.3	71.2	62.6	0.8	0.1	0.8							19.3	22.7	26.8
	<i>Raja brachyura</i>	32.1	53.9	62.3	94.0	70.6	46.4	0.0	0.2					0.0			227.8	218.2	240.5
	<i>Raja clavata</i>	40.1	42.3	37.2	8.7	7.2	9.9	0.0	0.0								215.5	255.0	200.8
	<i>Raja microocellata</i>	30.7		1.1	10.1	13.3	12.9										164.2	175.4	106.8
	<i>Raja montagui</i>	13.2	19.2		98.3	150.9	167.5	0.1	0.0								23.1	19.3	17.7
	<i>Rostroraja alba</i>				0.1														
	VIIf Total Speciated	135.9	168.5	146.9	286.9	319.1	301.3	1.0	0.4	0.8			0.0			655.6	706.7	596.3	
	VIIf Total landings	174.6	185.1	148.6	296.7	325.3	303.8	1.5	0.6	0.8			0.1			681.9	708.0	597.9	
VIIg	<i>Amblyraja radiata</i>							0.6	1.2	0.2									
	<i>Dipturus batis</i>				0.0				0.1										
	<i>Dipturus oxyrinchus</i>				0.0	0.2	0.2		0.7			0.1				0.2	0.0	0.3	
	<i>Leucoraja circularis</i>		79.5	70.6		11.1	13.0	0.0								0.2	0.0	0.7	
	<i>Leucoraja fullonica</i>				16.2	13.5	10.4	1.5	0.6	0.3		0.8	0.2			8.6	10.2	12.8	
	<i>Leucoraja naevus</i>	41.3	33.3	40.6	80.2	90.9	65.5	23.4	35.9	23.6		3.7	0.1	0.0		21.1	18.5	7.8	
	<i>Raja brachyura</i>	101.3	208.2	191.6	43.7	13.2	6.4	20.0	32.6	47.2			0.3	0.5		19.1	17.4	11.6	
	<i>Raja clavata</i>	128.5	183.3	173.8	92.4	85.9	79.4	84.4	101.2	102.8			0.0	0.1	0.2	30.0	33.9	21.8	
	<i>Raja microocellata</i>	73.0			7.7	2.1	3.8	0.0								21.6	28.8	8.6	
	<i>Raja montagui</i>	55.3	34.0	1.5	451.8	573.0	327.0	12.5	17.0	16.1						2.8	6.4	2.9	
	<i>Rostroraja alba</i>				8.1														
<i>Rajella fyllae</i>								0.1											
	VIIg Total Speciated	399.5	538.2	478.1	700.2	789.9	505.6	142.4	189.4	190.2	0.0	4.6	0.6	0.8	0.0	103.6	115.2	66.5	
	VIIg Total landings	519.2	576.0	482.8	704.1	794.6	507.7	283.9	303.4	206.8		4.6	1.8	2.8	0.5	115.2	115.2	66.6	

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			NETHERLANDS			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIh	<i>Amblyraja radiata</i>					0.8															
	<i>Dipturus batis</i>				0.1																
	<i>Dipturus oxyrinchus</i>				0.1	3.5	2.3							1.1					0.1	0.0	0.0
	<i>Leucoraja circularis</i>		0.0			14.1	13.1							1.6					0.0	0.1	0.4
	<i>Leucoraja fullonica</i>				114.7	112.7	107.3	3.6	3.1	1.4				12.2	0.1	0.0			57.3	20.1	42.9
	<i>Leucoraja naevus</i>	0.0	0.1		1318.4	1089.4	995.6	27.1	7.2	11.7				88.8	4.5	0.2			117.4	62.0	85.3
	<i>Raja brachyura</i>		0.0		7.4	20.3	27.9	0.0	0.1										3.8	1.3	0.9
	<i>Raja clavata</i>		0.0		16.7	8.8	6.9	0.4		1.2									2.8	1.6	1.5
	<i>Raja microocellata</i>				10.3	0.1	0.7												3.8	1.5	1.6
	<i>Raja montagui</i>				63.1	66.5	68.3	0.0						0.0					5.5	1.4	3.0
	<i>Rostroraja alba</i>				0.6		0.1														0.0
	VIIh Total Speciated	0.0	0.2		1531.4	1316.1	1222.2	31.1	10.4	14.3				0.0	103.8	4.6	0.2		190.6	88.1	135.6
	VIIh Total landings	0.0	0.2		1534.6	1321.2	1225.2	32.5	11.0	14.3				103.8	4.6	0.2		190.6	88.1	135.6	
VIIj	<i>Amblyraja radiata</i>								0.0												
	<i>Dipturus batis</i>				0.2		0.0														
	<i>Dipturus oxyrinchus</i>				3.3	2.5	10.0		0.4	0.0				1.1							
	<i>Leucoraja circularis</i>				6.3	8.9	10.3	0.1	0.1					3.3		0.9				0.3	0.2
	<i>Leucoraja fullonica</i>				3.1	5.1	4.0	2.1	2.1	1.0				14.2	3.5	3.8			11.6	15.3	18.0
	<i>Leucoraja naevus</i>				43.0	56.8	72.0	29.8	32.8	42.2				126.5	13.5	11.3			52.5	21.1	35.8
	<i>Raja brachyura</i>				0.0	1.4		8.5	11.2	14.0				0.1					0.0		0.0
	<i>Raja clavata</i>				10.7	6.7	9.7	38.6	48.2	46.8	0.1			2.3	18.0	28.4	13.4		14.2	6.3	
	<i>Raja microocellata</i>					0.0								1.9					0.1		7.9
	<i>Raja montagui</i>				1.6	2.0	0.4	10.7	17.4					3.9		0.1			2.9	2.1	8.9
	VIIj Total Speciated				68.3	83.3	106.3	89.7	112.2	104.0	0.1			0.0	153.3	35.0	44.6	13.4	81.3	45.0	70.8
	VIIj Total landings				72.1	85.0	106.4	94.4	117.8	119.6	0.1			155.1	35.0	44.6	13.4	81.3	45.0	70.8	

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

DIV	SCIENTIFIC NAME	BELGIUM			FRANCE			IRELAND			NETHERLANDS			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIh	<i>Amblyraja radiata</i>					0.8															
	<i>Dipturus batis</i>				0.1																
	<i>Dipturus oxyrinchus</i>				0.1	3.5	2.3							1.1					0.1	0.0	0.0
	<i>Leucoraja circularis</i>		0.0			14.1	13.1							1.6					0.0	0.1	0.4
	<i>Leucoraja fullonica</i>				114.7	112.7	107.3	3.6	3.1	1.4				12.2	0.1	0.0			57.3	20.1	42.9
	<i>Leucoraja naevus</i>	0.0	0.1		1318.4	1089.4	995.6	27.1	7.2	11.7				88.8	4.5	0.2			117.4	62.0	85.3
	<i>Raja brachyura</i>		0.0		7.4	20.3	27.9	0.0	0.1										3.8	1.3	0.9
	<i>Raja clavata</i>		0.0		16.7	8.8	6.9	0.4		1.2									2.8	1.6	1.5
	<i>Raja microocellata</i>				10.3	0.1	0.7												3.8	1.5	1.6
	<i>Raja montagui</i>				63.1	66.5	68.3	0.0						0.0					5.5	1.4	3.0
	<i>Rostroraja alba</i>				0.6		0.1														0.0
	VIIh Total Speciated	0.0	0.2		1531.4	1316.1	1222.2	31.1	10.4	14.3				0.0	103.8	4.6	0.2		190.6	88.1	135.6
	VIIh Total landings	0.0	0.2		1534.6	1321.2	1225.2	32.5	11.0	14.3				103.8	4.6	0.2		190.6	88.1	135.6	
VIIj	<i>Amblyraja radiata</i>									0.0											
	<i>Dipturus batis</i>				0.2		0.0														
	<i>Dipturus oxyrinchus</i>				3.3	2.5	10.0		0.4	0.0				1.1							
	<i>Leucoraja circularis</i>				6.3	8.9	10.3	0.1	0.1					3.3		0.9				0.3	0.2
	<i>Leucoraja fullonica</i>				3.1	5.1	4.0	2.1	2.1	1.0				14.2	3.5	3.8			11.6	15.3	18.0
	<i>Leucoraja naevus</i>				43.0	56.8	72.0	29.8	32.8	42.2				126.5	13.5	11.3			52.5	21.1	35.8
	<i>Raja brachyura</i>				0.0	1.4		8.5	11.2	14.0				0.1					0.0		0.0
	<i>Raja clavata</i>				10.7	6.7	9.7	38.6	48.2	46.8	0.1			2.3	18.0	28.4	13.4		14.2	6.3	
	<i>Raja microocellata</i>					0.0								1.9					0.1		7.9
	<i>Raja montagui</i>				1.6	2.0	0.4	10.7	17.4					3.9		0.1			2.9	2.1	8.9
	VIIj Total Speciated				68.3	83.3	106.3	89.7	112.2	104.0	0.1			0.0	153.3	35.0	44.6	13.4	81.3	45.0	70.8
	VIIj Total landings				72.1	85.0	106.4	94.4	117.8	119.6	0.1			155.1	35.0	44.6	13.4	81.3	45.0	70.8	

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

DIV	SCIENTIFIC NAME	BELGIUM			FRANCE			IRELAND			NETHERLANDS			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIk	<i>Dipturus batis</i>				0.0																
	<i>Dipturus oxyrinchus</i>				0.2	0.0	0.0														
	<i>Leucoraja circularis</i>				0.0	0.0	0.1										0.8				
	<i>Leucoraja fullonica</i>				0.6	0.1	0.0														0.1
	<i>Leucoraja naevus</i>				0.3	1.9	0.1	0.3	0.3					0.1							
	<i>Raja brachyura</i>					0.2			0.3	0.2											
	<i>Raja clavata</i>				0.1	0.3	0.1	0.4	0.0								1.5	1.3	1.0		0.2
	<i>Raja microocellata</i>					0.0															
	<i>Raja montagui</i>				0.1	0.0	0.0														
	VIIk Total Speciated				1.3	2.5	0.3	0.6	0.6	0.2				0.0	0.1	1.5	2.1	1.0		0.1	0.2
	VIIk Total landings				1.3	2.8	0.3	0.7	0.6	0.2					0.1	1.5	2.1	1.0		0.1	0.2

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	FRANCE			IRELAND			SPAIN		SCOTLAND			UK (E,W&NI)			
		2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013	
VIa	<i>Amblyraja radiata</i>	0.0	0.0	4.4	0.0	0.0	0.0		0.0	0.0	0.0	0.0	6.4	3.1	0.0	
	<i>Dipturus batis</i>	0.1	0.0	0.0	0.0	0.0	0.0		0.0	0.3	0.6	0.1	0.0	0.0	0.0	
	<i>Amblyraja hyperborea</i>															
	<i>Dipturus oxyrinchus</i>	6.2	14.3	8.6	1.0	0.0	0.0		0.0	1.4	2.2	0.0	0.0	0.0	0.0	
	<i>Leucoraja circularis</i>	2.1	0.7	0.9	0.0	0.0	0.0		0.0	0.0	0.2	0.0	0.0	0.0	0.8	
	<i>Leucoraja fullonica</i>	3.1	2.6	2.6	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Leucoraja naevus</i>	54.9	35.4	27.1	13.6	7.2	5.7		6.3	32.3	25.1	11.9	11.1	0.4	0.0	
	<i>Raja brachyura</i>	0.0	0.0	0.0	0.4	0.7	12.5		0.0	3.8	0.9	0.0	33.1	25.3	40.1	
	<i>Raja clavata</i>	31.4	37.9	33.1	49.0	62.7	72.5		94.1	23.6	30.5	56.5	45.1	25.8	44.7	
	<i>Raja microocellata</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	7.2	
	<i>Raja montagui</i>	2.1	2.6	18.8	2.2	1.9	2.7		0.0	15.7	12.7	14.1	0.0	0.0	4.4	
	<i>Rostroraja alba</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	2.4	4.1	2.2	0.0	0.0	0.0	
		VIa Total Speciated	100.0	93.6	96.1	66.2	72.6	93.5		100.0	79.5	76.4	84.9	95.7	54.6	97.2
	VIa Total landings	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	
VIb	<i>Dipturus batis</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	9.7	0.0	0.0	0.0	0.0	
	<i>Dipturus oxyrinchus</i>	0.0	34.5	0.0	0.0	0.0	0.0		48.3	45.1	22.2	0.0	0.0	0.0	0.0	
	<i>Leucoraja circularis</i>	94.0	38.1	100.0	43.1	0.0	0.0		0.0	0.0	1.5	56.6	0.0	0.0	0.0	
	<i>Leucoraja fullonica</i>	0.0	18.5	0.0	6.3	36.5	37.6		42.8	0.0	3.7	0.0	0.0	0.0	0.0	
	<i>Leucoraja naevus</i>	0.0	0.0	0.0	1.7	3.8	0.7		0.0	4.0	28.1	10.3	0.0	0.0	0.0	
	<i>Raja brachyura</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	1.0	0.0	0.0	100.0	100.0	0.0	
	<i>Raja clavata</i>	0.0	9.0	0.0	43.9	59.7	27.5		0.0	32.0	25.2	30.1	0.0	0.0	100.0	
	<i>Raja microocellata</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Raja montagui</i>	5.6	0.0	0.0	0.0	0.0	34.3		0.0	1.9	3.8	1.0	0.0	0.0	0.0	
	<i>Rostroraja alba</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	5.7	0.9	0.0	0.0	0.0	0.0	
		VIb Total Speciated	99.6	100.0	100.0	94.9	100.0	100.0		91.1	89.6	95.1	97.9	100.0	100.0	100.0
		VIb Total landings	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIa	<i>Amblyraja radiata</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0			0.0	0.0	0.0	0.4	0.5	0.0
	<i>Dipturus batis</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0			0.0	0.0	0.0	0.0	0.1	0.0
	<i>Dipturus oxyrinchus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
	<i>Leucoraja circularis</i>	0.0	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
	<i>Leucoraja fullonica</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0
	<i>Leucoraja naevus</i>	7.8	8.3	9.5	9.8	5.9	7.4	1.9	2.6	1.1			0.0	0.0	0.0	2.9	3.3	0.6
	<i>Raja brachyura</i>	38.7	33.2	41.3	0.1	1.3	0.0	72.4	78.3	77.7			0.0	0.0	0.0	13.7	10.5	4.1
	<i>Raja clavata</i>	28.1	49.9	48.6	3.6	23.9	6.6	7.1	7.4	13.3			21.6	0.0	72.9	75.2	78.2	87.7
	<i>Raja microocellata</i>	0.5	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.1
	<i>Raja montagui</i>	10.6	3.5	0.0	85.8	68.7	85.5	9.8	7.1	5.9			2.6	0.0	1.4	4.7	4.7	0.6
	<i>Rostroraja alba</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	11.8	0.0	0.0	0.0	0.0
	VIIa Total Speciated	85.7	96.2	99.7	99.3	99.9	100.0	92.4	95.4	98.0			24.3	11.8	74.3	97.1	97.3	93.1
	VIIa Total landings	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0
VIIb	<i>Amblyraja radiata</i>				0.0	0.0	0.0	0.1	0.5	0.1		0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Dipturus oxyrinchus</i>				0.0	0.2	0.0	9.7	0.0	0.0		20.8	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Leucoraja circularis</i>				0.1	0.1	0.0	0.0	0.0	0.0		20.8	0.0	0.0	59.6	0.0	0.0	0.0
	<i>Leucoraja fullonica</i>				0.0	0.0	0.0	0.0	0.0	0.0		1.1	0.0	0.0	0.0	15.1	17.3	19.6
	<i>Leucoraja naevus</i>				64.8	53.3	37.5	7.7	10.2	8.7		57.0	34.0	0.0	0.0	45.8	44.8	42.9
	<i>Raja brachyura</i>				0.0	0.0	2.5	30.4	26.9	36.1		0.0	0.0	0.0	0.0	0.0	0.2	0.0
	<i>Raja clavata</i>				34.8	45.4	59.4	33.2	49.2	48.3		0.0	66.0	100.0	40.4	39.1	33.9	37.4
	<i>Raja microocellata</i>				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Raja montagui</i>				0.1	0.2	0.1	1.8	4.5	4.8		0.0	0.0	0.0	0.0	0.0	3.6	0.0
	<i>Dipturus nidarosiensis</i>				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.2	0.0
	VIIb Total Speciated				99.8	99.2	99.7	82.9	91.3	97.9		99.7	100.0	100.0	100.0	100.0	100.0	99.9
	VIIb Total landings				100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			NETHERLANDS			SPAIN		SCOTLAND			UK (E,W&NI)			
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013	
VIIc	<i>Dipturus batis</i>				2.4	0.0	0.0	0.0	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Dipturus oxyrinchus</i>				0.0	0.0	0.0	1.5	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Leucoraja circularis</i>				0.3	0.4	0.8	0.0	0.0	0.0						9.0	0.0	0.6	0.0	0.0	0.0	
	<i>Leucoraja fullonica</i>				0.4	0.6	1.3	0.0	0.0	0.0						4.6	0.0	0.5	0.0	19.6	0.0	11.4
	<i>Leucoraja naevus</i>				77.0	66.2	45.7	60.7	26.0	100.0						85.1	0.0	0.0	0.0	80.4	37.5	87.6
	<i>Raja brachyura</i>				0.0	0.0	0.0	6.1	1.3	0.0						0.0	0.0	63.7	0.0	0.0	27.0	0.0
	<i>Raja clavata</i>				18.3	30.7	45.6	30.3	72.7	0.0						1.5	100.0	35.2	100.0	0.0	25.1	1.0
	<i>Raja microocellata</i>				0.0	0.0	0.0	0.0	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0
	<i>Raja montagui</i>				1.7	1.7	6.4	0.0	0.0	0.0						0.0	0.0	0.0	0.0	0.0	10.5	0.0
	<i>Amblyraja radiata</i>				0.0	0.2	0.0	0.0	0.0	0.0						0.0	0.0	0.0	0.0	0.0	0.0	0.0
	VIIc Total Speciated				100.0	99.8	99.8	98.7	100.0	100.0						100.1	100.0	100.0	100.0	100.0	100.0	100.0
	VIIc Total landings				100.0	100.0	100.0	100.0	100.0	100.0						100.0	100.0	100.0	100.0	100.0	100.0	100.0
VIIe	<i>Amblyraja radiata</i>	0.0	0.1	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			0.0				0.1	0.1	0.2	
	<i>Dipturus batis</i>	0.0	0.0	0.0	0.1	0.0	0.1		0.0	0.0	0.0	0.0			0.0				0.0	0.1	0.1	
	<i>Dipturus oxyrinchus</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0			0.0				0.0	0.0	0.0	
	<i>Leucoraja circularis</i>	0.0	3.5	9.9	0.0	0.1	0.2		0.0	0.0	0.0	0.0			0.0				0.1	0.1	0.1	
	<i>Leucoraja fullonica</i>	0.0	0.0	0.0	0.2	0.3	0.2		0.0	0.0	0.0	0.0			0.0				0.7	0.3	0.4	
	<i>Leucoraja naevus</i>	6.4	5.4	6.3	29.6	23.7	19.3		0.0	0.0	0.0	2.7			78.0				17.2	16.4	13.7	
	<i>Raja brachyura</i>	25.2	34.6	43.2	22.7	18.5	20.0		100.0	0.0	0.0	25.0	3.8			0.0				44.0	37.9	40.4
	<i>Raja clavata</i>	23.7	34.9	38.7	10.4	13.8	19.4		0.0	100.0	65.5	57.8	87.5			0.0				21.1	27.5	27.5
	<i>Raja microocellata</i>	3.1	0.0	0.0	1.6	1.9	2.0		0.0	0.0	0.0	0.0	0.0			0.0				5.3	6.6	5.3
	<i>Raja montagui</i>	9.1	9.7	0.1	29.9	36.6	35.4		0.0	0.0	24.4	0.0	4.7			22.0				10.1	9.6	11.5
	<i>Raja undulata</i>	0.0	0.0	0.0	0.2	0.0	0.1		0.0	0.0	0.0	0.0	0.0			0.0				0.0	0.0	0.0
	<i>Rostroraja alba</i>	0.0	0.0	0.0	1.3	0.0	0.4		0.0	0.0	0.0	0.0	0.0			0.0				0.0	0.0	0.0
	<i>Rajella fyllae</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0				0.0	0.0	0.0
	<i>Amblyraja hyperborea</i>	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0				0.0	0.0	0.0
	VIIe Total Speciated	67.4	88.2	98.1	96.0	95.1	97.0		100.0	100.0	89.9	82.8	98.7			100.0				98.5	98.5	98.9
	VIIe Total landings	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0			100.0				100.0	100.0	100.0

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	BELGIUM			FRANCE			IRELAND			SPAIN		SCOTLAND			UK (E,W&NI)			
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013	
VIIf	<i>Amblyraja radiata</i>	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.4	1.8	0.0	
	<i>Dipturus batis</i>	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0			0.0			0.0	0.0	0.0	
	<i>Dipturus oxyrinchus</i>	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0			0.0			0.0	0.0	0.0	
	<i>Leucoraja circularis</i>	0.0	19.5	19.2	0.0	0.3	0.2	0.0	0.0	0.0			0.0			0.0	0.1	0.0	
	<i>Leucoraja fullonica</i>	0.0	0.0	0.0	1.4	1.5	0.4	0.0	0.0	0.0			0.0			0.4	0.4	0.6	
	<i>Leucoraja naevus</i>	11.3	9.1	11.8	24.0	21.9	20.6	54.5	16.5	100.0			0.0			2.8	3.2	4.5	
	<i>Raja brachyura</i>	18.4	29.1	41.9	31.7	21.7	15.3	2.7	32.9	0.0			38.6			33.4	30.8	40.2	
	<i>Raja clavata</i>	23.0	22.9	25.0	2.9	2.2	3.3	2.7	8.3	0.0			0.0			31.6	36.0	33.6	
	<i>Raja microocellata</i>	17.6	0.0	0.7	3.4	4.1	4.2	0.0	0.0	0.0			0.0			24.1	24.8	17.9	
	<i>Raja montagui</i>	7.6	10.4	0.0	33.1	46.4	55.1	5.4	8.6	0.0			0.0			3.4	2.7	3.0	
	<i>Rostroraja alba</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0	0.0	0.0	
	VIIf Total Speciated	77.8	91.0	98.8	96.7	98.1	99.2	65.4	66.3	100.0			38.6			96.1	99.8	99.7	
	VIIf Total landings	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0			100.0	100.0	100.0	
VIIg	<i>Amblyraja radiata</i>																		
	<i>Dipturus batis</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Dipturus oxyrinchus</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0		1.2	0.0	0.0	0.0	0.1	0.0	0.5	
	<i>Leucoraja circularis</i>	0.0	13.8	14.6	0.0	1.4	2.6	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.2	0.0	1.0	
	<i>Leucoraja fullonica</i>	0.0	0.0	0.0	2.3	1.7	2.0	0.5	0.2	0.2		17.9	10.0	0.0	0.0	7.5	8.9	19.2	
	<i>Leucoraja naevus</i>	8.0	5.8	8.4	11.4	11.4	12.9	8.2	11.8	11.4		80.1	5.9	1.0	0.0	18.3	16.0	11.8	
	<i>Raja brachyura</i>	19.5	36.1	39.7	6.2	1.7	1.3	7.0	10.8	22.8		0.0	14.4	16.9	0.0	16.6	15.1	17.4	
	<i>Raja clavata</i>	24.8	31.8	36.0	13.1	10.8	15.6	29.7	33.3	49.7		0.8	4.9	8.8	0.0	26.1	29.4	32.7	
	<i>Raja microocellata</i>	14.1	0.0	0.0	1.1	0.3	0.7	0.0	0.0	0.0		0.0	0.0	0.0	0.0	18.8	25.0	13.0	
	<i>Raja montagui</i>	10.7	5.9	0.3	64.2	72.1	64.4	4.4	5.6	7.8		0.0	0.0	0.0	0.0	2.4	5.6	4.4	
	<i>Rostroraja alba</i>	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Rajella fyllae</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		VIIg Total Speciated	76.9	93.4	99.0	99.4	99.4	99.6	50.2	62.4	92.0		100.0	35.2	26.7	0.0	89.9	100.0	99.9
		VIIg Total landings	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

DIV	SCIENTIFIC NAME	BELGIUM			FRANCE			IRELAND			NETHERLANDS			SPAIN		SCOTLAND			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIh	<i>Amblyraja radiata</i>	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0		0.0	0.0	0.0	
	<i>Dipturus batis</i>	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0		0.0	0.0	0.0	
	<i>Dipturus oxyrinchus</i>	0.0	0.0		0.0	0.3	0.2	0.0	0.0	0.0				1.1	0.0	0.0		0.0	0.0	0.0	
	<i>Leucoraja circularis</i>	0.0	10.4		0.0	1.1	1.1	0.0	0.0	0.0				1.5	0.0	0.0		0.0	0.1	0.3	
	<i>Leucoraja fullonica</i>	0.0	0.0		7.5	8.5	8.8	11.2	27.8	9.8				11.8	2.1	19.5		30.0	22.8	31.6	
	<i>Leucoraja naevus</i>	100.0	45.4		85.9	82.5	81.3	83.2	65.7	81.4				85.6	97.9	80.5		61.6	70.5	62.9	
	<i>Raja brachyura</i>	0.0	17.5		0.5	1.5	2.3	0.1	0.8	0.0				0.0	0.0	0.0		2.0	1.5	0.6	
	<i>Raja clavata</i>	0.0	20.2		1.1	0.7	0.6	1.1	0.0	8.5				0.0	0.0	0.0		1.5	1.8	1.1	
	<i>Raja microocellata</i>	0.0	0.0		0.7	0.0	0.1	0.0	0.0	0.0				0.0	0.0	0.0		2.0	1.7	1.2	
	<i>Raja montagui</i>	0.0	0.0		4.1	5.0	5.6	0.1	0.0	0.0				0.0	0.0	0.0		2.9	1.6	2.2	
	<i>Rostroraja alba</i>	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0		0.0	0.0	0.0	
	VIIh Total Speciated	100.0	93.4		99.8	99.6	99.8	95.7	94.3	99.7				99.9	100.0	100.0		100.0	100.0	100.0	
	VIIh Total landings	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0				100.0	100.0	100.0		100.0	100.0	100.0	
VIIj	<i>Amblyraja radiata</i>				0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Dipturus batis</i>				0.3	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Dipturus oxyrinchus</i>				4.6	2.9	9.4	0.0	0.3	0.0				0.7	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Leucoraja circularis</i>				8.8	10.4	9.6	0.1	0.1	0.0				2.1	0.0	2.1	0.0	0.0	0.8	0.3	
	<i>Leucoraja fullonica</i>				4.3	6.0	3.7	2.2	1.8	0.8				9.1	9.9	8.6	0.0	14.3	34.0	25.4	
	<i>Leucoraja naevus</i>				59.6	66.8	67.6	31.5	27.9	35.3				81.6	38.5	25.4	0.0	64.6	46.7	50.5	
	<i>Raja brachyura</i>				0.0	1.6	0.0	9.0	9.5	11.7				0.1	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Raja clavata</i>				14.8	7.9	9.1	40.9	40.9	39.1	100.0			1.5	51.5	63.6	100.0	17.5	13.9	0.0	
	<i>Raja microocellata</i>				0.0	0.0	0.0	0.0	0.0	0.0				1.2	0.0	0.0	0.0	0.1	0.0	11.2	
	<i>Raja montagui</i>				2.2	2.3	0.4	11.3	14.8	0.0	0.0			2.5	0.0	0.3	0.0	3.5	4.6	12.6	
	VIIj Total Speciated				94.7	97.9	99.9	95.0	95.3	87.0	100.0			98.9	100.0	100.0	100.0	99.9	100.0	100.0	
	VIIj Total landings				100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Table 5.3.29.3 (continued)

Skates and rays in the Celtic Seas. Species composition of skates (Rajidae), as reported in national landing statistics. Note: Belgian records of ‘sandy ray’ are assumed to refer to small-eyed ray; Scottish records of *Rostroraja alba* may refer to *Leucoraja fullonica*.

Div	Scientific name	Belgium			France			Ireland			Netherlands			Spain		Scotland			UK (E,W&NI)		
		2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2011	2012	2013	2011	2012	2013
VIIk	<i>Dipturus batis</i>				0.1	0	0	0	0	0					0	0	0	0		0	0
	<i>Dipturus oxyrinchus</i>				17.4	0.3	2.7	0	0	0					0	0	0	0		0	0
	<i>Leucoraja circularis</i>				0.1	0.2	16.3	0	0	0					0	0	39.3	0		0	0
	<i>Leucoraja fullonica</i>				45.7	3.9	8.9	0	0	0					0	0	0	0		100	0
	<i>Leucoraja naevus</i>				20.4	67.6	37.3	37.8	44.2	0					100	0	0	0		0	0
	<i>Raja brachyura</i>				0	5.4	0	0	49.8	100					0	0	0	0		0	0
	<i>Raja clavata</i>				5.2	10.9	34	51	6	0					0	100	60.7	100		0	100
	<i>Raja microocellata</i>				0	0	0	0	0	0					0	0	0	0		0	0
	<i>Raja montagui</i>				11.1	0	0.8	0	0	0					0	0	0	0		0	0
	VIIk Total Speciated				100	88.4	100	88.8	100.1	100					100	100	100	100		100	100
	VIIk Total landings				100	100	100	100	100	100					100	100	100	100		100	100