

## AREA V1 & V11 SKATES , RAY

Whilst I am not qualified to give a detailed report on the fishery for the whole area, I can comment with some authority on the Celtic Sea and Bristol Channel, Areas V11 f & g. The majority of fishing vessels in the Bristol Channel fish from the north Devon ports of Bideford, Ilfracombe and Appledore, whilst a few still operate from Milford Haven and Swansea in South Wales. The vast majority are members of the North Devon Fishermen's Association, and a number of the over 10 metre vessels receive their quota allocation from the Cornish FPO. The main landing port is Appledore, the largest single port in the country for landing ray.

### Port Facilities



The new purpose built fish quay, with its own fuel and ice delivery services, cold storage and fish processing plant, was opened by the Fisheries Minister in February 2009 at a cost of 4.2M Euros, partly funded by the EU. The main buyer, and on site processor, is Bideford Fisheries Ltd whose average throughput of ray is 500 tonnes live weight per annum. Not only does BFL supply major UK markets, but also has a large client list of European markets.

### Catching and Processing

The majority of ray is caught by demersal trawling, although some is landed from offshore netting. The once profitable longline fishery has been closed due to the inevitable capture of spur dog for which there is no quota. White fish landings to BFL is estimated at 2.85M Euros, of which ray make up 70% of the total. Welsh member vessels would account for a further 0.5M Euros in ray landings. Although other ports have whole gutted ray landed, that does not make for a majority of the catch composition, so therefore does not pose a problem. However, for the Bristol Channel / Celtic Sea, there is a huge problem for the carriage, landing and processing of whole ray. The majority of inshore fishing vessels do not have fish rooms large enough to accommodate the boxing and icing of whole ray, especially if they were to be segregated. The requirement under Commission Regulation (EC) 2847/93 Article 6 is a recording of species if above 50kg liveweight. Once recorded, the ray wing can then be boxed usually by size. There will always be a problem of ray species identification by fishermen at sea, especially during times of bad light and rough sea conditions .

There is a knock on effect if ray were to be landed whole. The onshore processor would have not only the storage problem, but also the task of disposing of the considerable amounts of offal ( at a cost ) with its associated health and hygiene issues. Additional staff would be required for processing to maintain the high reputation enjoyed at having fish with the customer within twenty four hours from being landed. The salaries of the additional staff would be reflected in the downward prices paid to the vessel operators.

### Market demand

The data shown below is from a major South West buyer who supply fish nationwide, and shows that not only the market trend has increased, but the supply can match the demand.

Falfish purchases of ray wings from Bideford are:

01/01/2007 – 31/12/2007      9,600 kilos

01/01/2008 – 31/12/2008	41,266 kilos
01/01/2009 – 31/12/2009	53,887 kilos
01/01/2010 – 31/12/2010	79,734 kilos
01/01/2011 – 12/08/2011	56,898 kilos

### **Sustainability and management measures**

Skates and Ray for which there is no TAC; these are common, white and black skates and undulate ray are not caught in the Bristol Channel. The following species are landed.

<u>SPECIES BY % LANDED</u>		LARGE	LG. MED	MEDIUM	SMALL
BLONDE	11%	20	22	38	20
THORNBACK	40%	5	45	38	12
SPOTTED	12%			20	80
SMALL EYED	30%	15	45	28	12
SANDY	5%			20	30
CUCKOO	2%	10	40	20	80

According to the ICES assessments, based on time series of catches from research vessels, abundance is stable or increasing in ICES VII a-c, e-k for thornback, spotted and small eyed rays and that catches should be maintained at their current levels; these species are 72% of our catch. There is more uncertainty about blond, spotted and sandy rays and ICES was unable to advise on these species, - for cuckoo ray ICES recommended a decrease in catch.

For 2011 the advisory and agreed Total Allowable Catch for all skates and rays for all species combined; effectively rays since common skate is a zero TAC were as follows:

	Advisory TAC (tonnes)	Agreed TAC (tonnes)
ICES VIa, VIb, VIIa-c and VII e-k	<9,900	11,379; although this TAC is higher than the advised TAC it is a reduction on last year, the rate of reduction is in line with the EU policy in catches on data poor stocks

### **Uptake of quota**

Below is shown the current uptake of skates and rays quota for ICES V1 and VII showing that the UK had used 37.7% of its quota for this year up until the end of August.

The total UK allocation for Areas V1 & V11 exc d is 2941 tonnes

Total landings by UK vessels 1101 tonnes

Percentage uptake at 31<sup>st</sup> August 2011 37.7%

The cumulative catches for the UK in ICES VIIf&g are shown below;

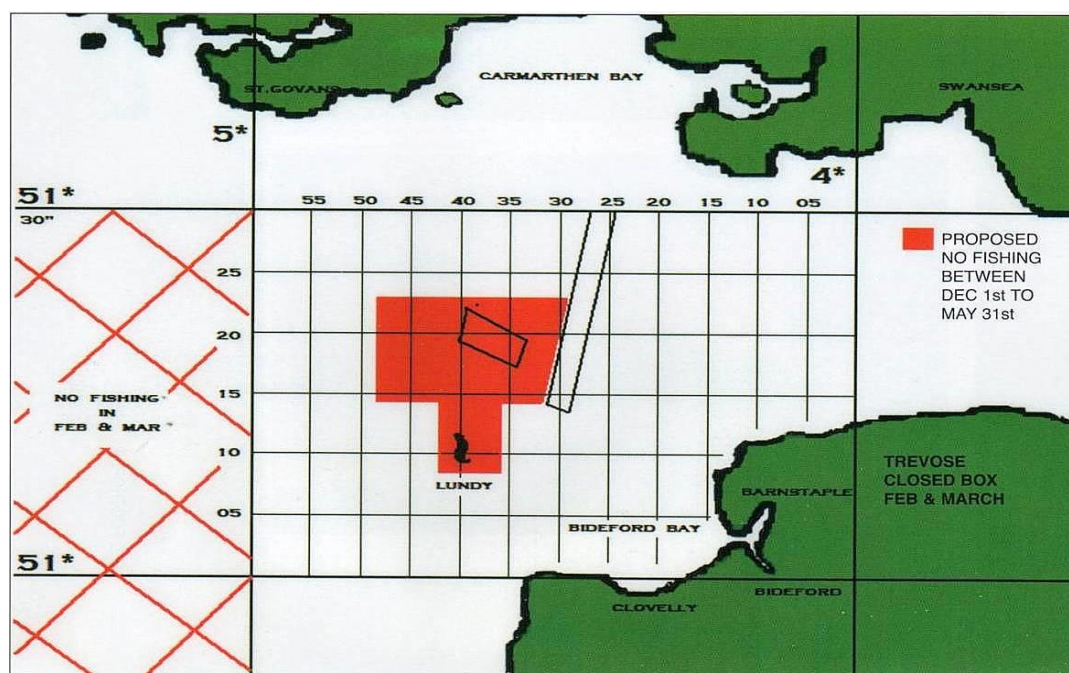
## Skates and rays uptake by UK vessels in area VII/f/g in 2011

Month	Quantity (tonnes)
1	37.6931
2	26.9028
3	70.4361
4	63.2927
5	49.3932
6	49.6624
7	48.5389
8	6.2646

### Closed areas and minimum landing sizes

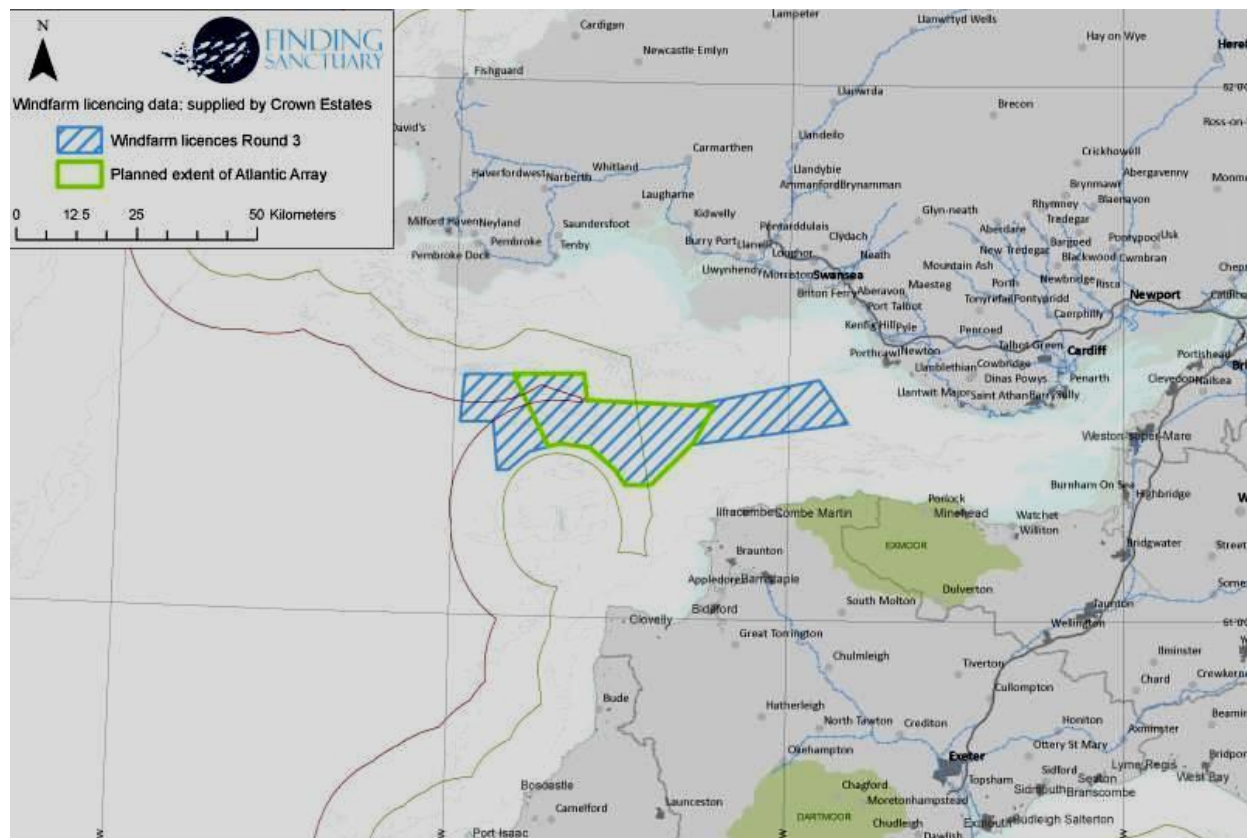
The NDFA are very aware of the consequences of depleted fish stocks with the inevitable reduction in quota and fishing opportunity. For many years, landing data has been recorded which show that ray sourced from the Celtic Sea / Bristol Channel has not only been sustainable, but in some areas has shown an increase. In order to maintain the level of landings, and supply to the markets, seven years ago, the fishermen introduced a very large voluntary no fishing area in excess of over 300 sq km which is situated in the mid Bristol Channel north of Lundy Island. This area is closed to all mobile fishing gear for six months of the year between the 1<sup>st</sup> December and the 31<sup>st</sup> May. This is not only to protect juvenile ray, but also a wide variety of breeding fish species. In addition, the NDFA have introduced their own minimum landing size of 38 cm across the wing tips for ray. Although such a measure may be adopted by the regional Inshore Fishery Conservation Authorities ( IFCA's ), we understand that we are the only fisherman's association to introduce self imposed conservation measures.

We have in the Bristol Channel a number of large Belgian fishing vessels which are entitled to fish up to the UK six mile limit. Following talks with the Belgian Fishing Industry, we are glad to report that our Seasonally Closed area, and MLS measures adopted, are complied with by the Belgian fishermen.



The hatched area is the eastern boundary of the Trevoise Box, closed to all EU vessels during February and March. The solid red box is the voluntarily agreed six month closure.

### **Site of the proposed wind farm and Crown Estate licensing area.**



The blue outline is the Crown Estates licensing area, and the green section is the proposed site for the Atlantic Array offshore wind farm.

It should be very clear that there are limited fishing areas available to commercial trawlermen, a fact that would be compounded should the Welsh Assembly Government implement control of their waters out to twelve miles. With the advent of further offshore renewable energy installations, including current turbines and wave hubs, the reduction in available fishing opportunity is fish conservation in itself.

### **Research and development**

As part of our commitment to conservation and sustainable fishing, two NDFA trawlers have taken part in Cefas studies on 'Survival of Discarded Ray' and 'Bristol Channel Selectivity Trials'. The reports which show positive outcomes for using larger mesh panels and cod ends in a ray fishery can be viewed or obtained from Cefas. In a mixed demersal fishery where Ray is not a target species, there would be the inevitable loss of high value fish such a red mullet and Dover Sole.

### **Conclusion**

The North Devon fisheries have a high dependency on ray catches which they land as wings, for which there is good demand. The stocks are not fully assessed, and better knowledge of their stock dynamics and biology would greatly aid management of these stocks. However, the indicative assessments suggest that catches for most species can be maintained at their current levels at present. North Devon fishermen have been proactive in their approach to management

of these species, using voluntary closures, minimum landing sizes, and also liaison with other fishermen's associations to improve conservation of these species. They have participated in the Seafish skates and rays group (see Appendix) to enhance communication through the supply chain.

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## **Appendix;**

### **Status of skates and rays and the Seafish skates and rays group**

5<sup>th</sup> Sept 2011

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In 2006 the larger buyers of skates and rays expressed concern about the sustainability of these species and a number of the supermarkets de-listed them. It was recognised by Seafish that there was a need to bring interested parties together, from all parts of the supply chain, from government, nature conservation, science and NGOs. Seafish therefore formed the Seafish skates and rays group with the main role to improve communication concerning sustainability issues for these species. At the same time there was recognition at the European level that there should be improved assessment and management of these species. Since Seafish's original skates and rays meeting in April 2006 the following improvements in skate and ray fisheries management have been implemented:

1. ICES advice has been given (biennial 2008 and 2010) by sea area for many species using assessments predominantly based on Research Vessel catch per unit effort time series.
2. Legislation has been introduced to ensure landings of skates and rays are recorded by species rather than under a generic code, and UK authorities are working towards its implementation; this is now routine in most ports.
3. Retention of common, white and black (Norwegian) skates and undulate rays is now illegal in most European waters. Fishermen are required to return individuals of these species to the sea alive.



4. Total allowable catches have been introduced for skates and rays in most European waters putting a cap on the total quantity of skates and rays to be landed (TACs had already been implemented in the North Sea).

A summary of information on stock status is given in the Seafish Responsible Sourcing Guide

[http://www.seafish.org/media/publications/SeafishResponsibleSourcingGuide\\_SkatesRays\\_201105.pdf](http://www.seafish.org/media/publications/SeafishResponsibleSourcingGuide_SkatesRays_201105.pdf)

Further information on the ICES website at

<http://www.ices.dk/committe/acom/comwork/report/2010/2010/Demersal%20elsesmobranchs%20North%20Sea.pdf>

<http://www.ices.dk/committe/acom/comwork/report/2010/2010/Demersal%20elsesmobranchs%20Celtic.pdf>

### Summary (based on Responsible Sourcing Guide)

Areas and species and areas	Summary of advice 2010
N.Sea and Eastern English Channel; thornback, spotted, cuckoo, and starry rays	Abundance described as stable or increasing except northern North Sea thornbacks. Catches maintained at current levels except northern North Sea thornbacks where catches should be reduced
Western English Channel, Celtic Sea (ICES VII a-c, e-k) and W of Scotland, thornback, spotted and small eyed rays	Abundance stable or increasing in divisions VII a, f and g and uncertain in VIIe for thornback and spotted, small eyed stable or increasing. Recommended that catches be maintained at their current levels
West English Channel, Celtic Sea (ICES VII a-c, e-k) and West of Scotland, cuckoo, spotted, blond and sandy rays	More uncertainty; recommended decrease in catches for cuckoo ray, or unable to advise on catches for blond, spotted and sandy rays
Norwegian, common, long-nosed skate and white skates, undulate ray	No retention in most EU waters. Indications are that survival post discard is feasible

For 2011 the advisory and agreed Total Allowable Catch for all skates and rays for all species combined; effectively rays since common skate is a zero TAC were as follows

	Advisory TAC	Agreed TAC
North Sea Skagerrak and E. English Channel	<2,700	2,342
Irish Sea, Bristol Channel, Western English Channel and West of Scotland	<9,900	11,379; although this TAC is higher than the advised TAC it is a reduction on last year, the rate of reduction is in line with the EU policy in catches on data poor stocks

## **Conclusion**

Considerable strides have been made in improving assessment and management of skates and rays in European waters. Whilst the assessments are relatively basic, using time series of Research Vessel catch per unit effort, they are much better than no indicators at all. The main sustainability problem is perceived to be with those species that grow to a large size such as common skate, which is intended to be mitigated by the zero catch and discarding with the view that survival is quite good.

However, there remain aspects which we do not know about and could be improved. Clearly, longer time series and improved landings data for assessments will be useful, together with better information on biology, ecology and habitat. All these species have low fecundity compared with teleosts such as cod, haddock. There is a view that an approach to managing these species could be to use measures that would conserve the large specimens possibly via a maximum landing size or other measures to protect the larger breeding fish, such as spatial or temporal closures, as well as a minimum landing size. Such an approach would be closer to the measures taken to conserve mammal populations; look after the breeding females since they are not very fecund.

The improved communication through the supply chain, which occurred as a result of the formation of the Seafish skates and rays group had a significant effect on improving the market prospects for skates and rays captured under the improving management regime.

*Grateful Thanks expressed to Bill Lart for his report*