Species Composition of Family Rajidae in the Spanish landings (ICES Divisions VIIIc y IXa)

CEBRIAN J.L.[1]. JUAREZ A. [2] , AMEZ M.A.[3] , VELASCO E. [4], RODRIGUEZ-GUTIERREZ J.[3] ,QUINZAN M.[1]
[1] IEO Vigo. SPAIN.[2] IEO Cádiz. SPAIN.[3] IEO Santander. SPAIN.[4] IEO Gijón. SPAIN. E-mail: jose.cebrian@vi.ieo.es

Introduction

The Spanish demersal fishery along the Atlantic waters of the Iberian continental shelf takes many species of rays and skates with a wide variety of gears, but most of the landings come from the bycatch of fisheries targeting other demersal species. Unfortunately, they are usually recorded under general taxonomic groups in the Spanish fishery statistics, being identified only to family (Rajidae) or genus (Raja spp.). This fact makes it difficult a better knowledge of the stock of the species in commercial landings of rays and skates.

Family Rajidae are managed under a Total Allowable Catch (TAC) system in EU waters. Between 1999 and 2005 the 6,060t TAC was reduced by 47% and by a further ~50% from 2005 to 2008 (ICES, 2008). Originally the TAC applied only to areas IIa and IV, however in January 2009 the TAC was extended to include ICES divisions IIa, IIIa, IV, VIa-b, VIIa-k, VIII and IX.

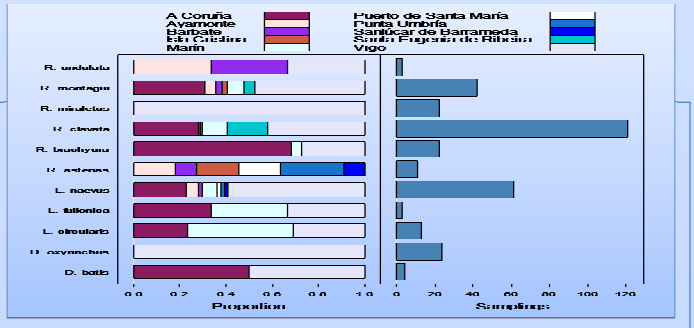
Since 2008, EU Member States have been required to provide specific landings data for the main species of skates and rays (Dec. 2008/949/EC). Council Regulation (EC) No. 43/2009 extended this reporting requirement to ICES Areas VIII and IX for two species: *Raja clavata* and *Leucoraja naveus.* The results from this sampling programme taken from September 2009 to February 2012 are used to estimate the skates' species composition in the Spanish landings from ICES Divisions VIIIc y IXa. Furthermore, their respective length frequency distributions for each Division it´s shown.

Methods

Since 2009, as is required in the Data Collection Framework (DCF) regarding the Common Fisheries Policy, the Spanish skates landings have been sampled by the Instituto Español de Oceanografia(IEO) in order to obtain monthly length compositions by species. Data was collected from market samplings in the harbours of the VIIIc-IXa ICES divisions where a concurrent sampling has been carried out on vessels operating bottom trawl targeting demersal species.

The central part of the IXa ICES division (on the Portuguese coast) and the western part of the VIIIc were the areas where most material was sampled from September 2009 to February 2012. There were performed 326 samplings during 27 months and 42 vessels were sampled. In each sampling operation were sampled all the species of rays and skates landed by the vessel.

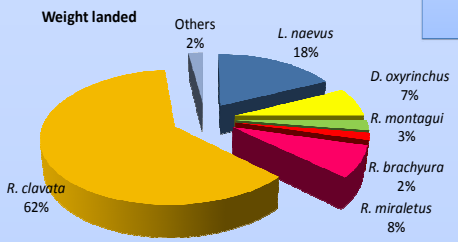
The different ports where the rays were sampled it´s shown on figure below; In the followed figure we represent the ratio of weight landed of the main species sampled.



Results

Up to eleven species have been sampled. Although no landings by specie data are available, market sampling indicates that *R. clavata* is the most frecuently landed skate, followed by *L. naveus,* though *R. miraletus* or *D. oxyrrinchus* may dominate in specific ports.

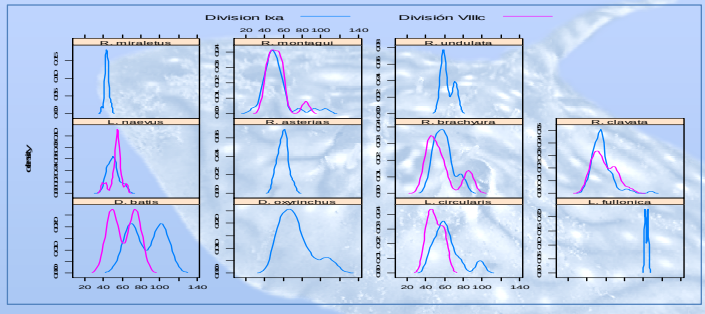
- Blue skate (***Dipturus batis***),
- Longnosed skate (***D. oxyrinchus***),
- Sandy ray (***L. circularis***),
- Cuckoo ray (***L. naevus***),
- Blonde ray (***Raja brachyura***)
- Thornback ray (***R. clavata***),
- Smalleyed ray (***R. microocellata***),
- Brown ray (***R. miraletus***),
- Spotted ray (***R. montagui***),
- Undulate ray (***R. undulata***)
- Shagreen ray (***L. fullonica***).

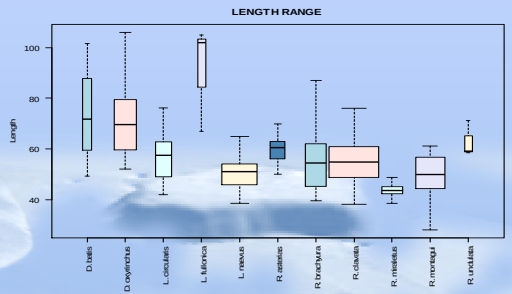




Study Area

The species reaching larger sizes are D. oxyrrinchus , D. batis and L. circularis, however the number of samples of the three o is not very high to get conclusions.





Length distributions of species by Division it´s shown in figure above. We can see by one side, there´s more species sampled in the ports of the IXa. By the other side, length distribution seems to be similar in that species sampled in both Divisions.

Discussion

Although the regulation 43/2009 only required to declare separately landings of Leucoraja naveus and Raja clavata , the number of species is much greater. To achieve a better regulation of the family Rajidae it would be desirable to include another species that are also present in these waters, such as Raja montagui, Raja miraletus or Dipturus oxyrrinchus.

REFERENCES:
-ICES WGEF. 2008. Report of the Working Group on Elasmobranch Fishes (WGEF). 3–6 March 2008,
-ICES, Copenhagen, Denmark. ICES CM 2008/ACOM:16.
-OSPAR Commission 2006. Case Report for Dipturus (Raja) montagui Spotted Ray.
-Shark Trust; 2008
-A. Fernández, C. Rodriguez-Cabello, I. Olaso, F. Sánchez and A. Serrano: ICES CM (2001)
-Edward Fahy: The south eastern ray Raja spp. fishery (1991)
ANOWLEGDMENTS:
Thanks to J. Castro & C. Fariña

ISOBAY
XIII International Symposium on Oceanography of the Bay of Biscay.