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Development of Elasmobranch Assessments (DELASS) (Elasmobranch Fisheries – Poster)

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Abstract

The poster briefly describes the DELASS project. DELASS (Development of Elasmobranch Assessments) is initiated by the ICES Elasmobranch Study Group and aims to improve the scientific basis for the management of fisheries taking elasmobranch species. DELASS is in part funded by the European Commission (CFP 99/055). Its duration is 3 years (2000-2002) and there are 17 partners from countries bordering the NE Atlantic, extending from Norway to the Azores. The main aims of DELASS are, to collate existing data and start the collection of new data on elasmobranchs, and to develop assessment methods for 9 case study species.

Introduction

Sharks, rays and skates (elasmobranchs) receive rapidly growing attention world-wide in targeted fisheries, and also as a by-catch in other fisheries. Sharks and rays are known to be more vulnerable to fishing than most teleosts, due to their low reproduction and high age at maturity. International and regional bodies are concerned about the sustainability of these fisheries. Although sharks and rays should be incorporated into regular fishery management procedures, this is, with very few exceptions, not yet the case.

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The main aims of DELASS

- to collate existing data and start the collection of new data on elasmobranchs, and
- to develop assessment methods for 9 case study species.

Species selected

9 Case study species were selected, based on ecological and practical criteria.

Skates and rays	Deepsea sharks
Raja clavata (thornback ray)	Centroscymnus coelolepis (Portuguese dogfish)
Raja naevus (cuckoo ray)	Centrophorus squamosus (leaf-scale gulper shark)
	Dalatias licha (kitefin shark)
	Galeus melastomus (blackmouth catshark)
Coastal dogfish and catsharks	Pelagic sharks
Squalus acanthias (spurdog)	Prionace glauca (blue shark)
Scyliorhinus canicula (lesser spotted dogfish)	

Tasks identified

In the project 4 main tasks were identified (names of co-ordinators between brackets):

- species identification and biological sampling (Matthias Stehmann)
- stock discrimination / separation (Mike Pawson)
- data compilation and exchange (Andrew Newton)
- stock assessment (Martin Pastoors)

Part of the project, on data collection and assessment of the blue shark, will consist of co-operation with ICCAT because of the importance of this species as a by-catch species in tuna fisheries.

What will be achieved by the end of the project?

- a compilation of appropriate biological data
- a dedicated database on data available in the partner institutes
- selection and development of appropriate assessment methods
- preliminary assessments of the case study species.

Some examples of available data

Data on elasmobranchs are sparse. Most of the time series data are only available for surveys. Landings statistics usually are not enough detailed to be used, because it is common practice to land rays and sharks unsorted. Data by species, simply do not exist. In the DELASS project some small-scale market sampling is carried out.

According to the data from the International Bottom Trawl Survey numbers of the lesser spotted dogfish (*Scyliorhinus canicula*) in the North Sea are increasing (Fig. 1). DELASS will focus on this species, not in the North Sea, but in Atlantic waters off Spain and Portugal.

Untill recently it was believed that the landings of North Sea rays by the Dutch fleet mainly consisted of thornback ray (*Raja clavata*), but the spotted ray (*R. montagui*) appears to be the most common species and also the blonde ray (*R. brachyura*) is frequently caught (Fig. 2).

The proportion, by weight, of different *Raja* species landed by the Basque trawler fleet, mainly from Div. VIIIa,b,d, shows that in this area the cuckoo ray (*R. naevus*) is by far the most common species, followed by thornbacks (*R. clavata*)

Partners/contact-persons in DELASS:

Henk Heessen, RIVO, the Netherlands, co-ordinator Lucília Carvalho, FFCUL, Portugal Maurice Clarke, MI, Ireland Wim Demaré, CLO-DvZ, Belgium Marie-Henriette DuBuit, MNHN, France Ivone Figueiredo, IPIMAR, Portugal Didier Gascuel, ENSAR, France John Gordon, SAMS, UK Scotland Nils-Roar Hareide, Hareide Consultants, Norway Paulino Lucio, AZTI, Basque Country Spain Andrew Newton, Marine Lab, UK Scotland Ignaçio Olaso, IEO, Spain Mike Pawson, CEFAS, UK England Mário Rui Pinho, DOP-UAÇ, Azores Portugal Matthias Stehmann, ISH, Germany Morten Vinther, DIFRES, Denmark Paddy Walker, RIKZ, the Netherlands International Bottom Trawl Survey in the North Sea.

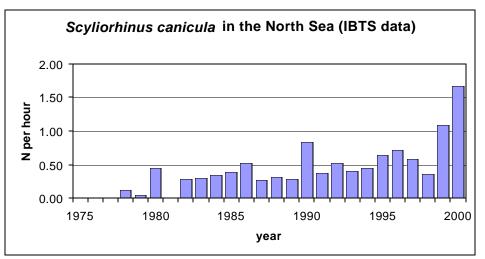


Fig. 1. Catches of lesser spotted dogfish (Scyliorhinus canicula) in the ICES coordinated.

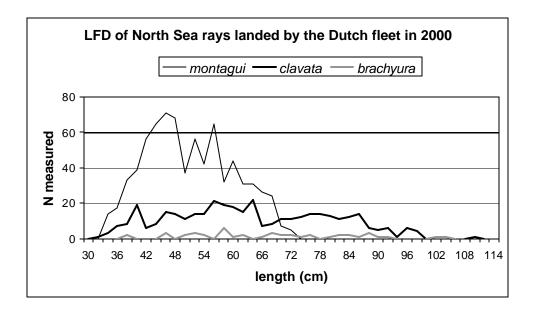


Fig. 2. Preliminary length distribution data from market sampling of landings of rays in the Netherlands.

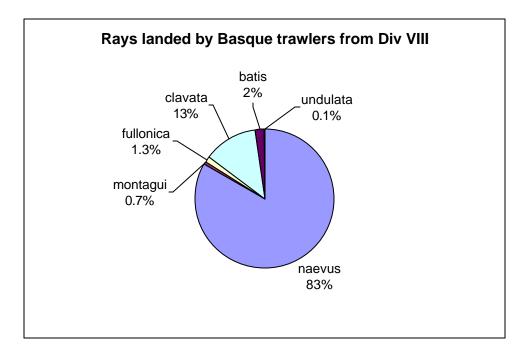


Fig. 3 Preliminary results from market sampling of rays in Basque Country.