

11.2 Answers to Requests

11.2.1 European Union (European Commission, DG MARE, Unit C2)

11.2.1.1 Opinion on modification to the list of deep-sea sharks

Background

ICES received this request from the European Commission:

“During the last negotiations for fixing the fishing opportunities for EU vessels for certain deep-sea fish stocks for 2013 and 2014, some Member States’ delegates asked for a revision to the list of species of deep-sea sharks (Annex of Council Regulation (EU) No 1262/2012). In particular the request referred that black-mouth catshark (*Galeus melastomus*) be excluded from the list and low fin gulper shark (*Centrophorus lusitanicus*) be included in the list. The rationale behind the former case responds to consider the species as only demersal and not illustrative of deep-sea habitats. The latter regards to landings in ICES area IX, where the landings of other morphologically very similar species such as gulper shark (*Centrophorus squamosus*) may have been underreported due to misidentification among both species.

Concerning deep-sea sharks, the main commercial species are considered depleted and no directed fishing should take place. The Council agreed to fix TAC equal to zero since 2012, and, therefore, the content of the list of species of deep-sea sharks is deemed to be essential.”

Request

“On the basis of the explained above, and taking into account the general principle of the vulnerability to fishing of most deep sea species, ICES is asked to provide advice on the appropriateness to amend the list of deep-sea sharks, considering:

- To exclude blackmouth catshark (*Galeus melastomus*);
- To include lowfin gulper shark (*Centrophorus lusitanicus*).”

Methodology

ICES arranged for this request to be discussed and answered during the WGEF 2013 annual meeting in Lisbon, Portugal.

Response

ICES’ opinion is that there is sufficient scientific information to warrant:

- Exclusion of the blackmouth catshark (*Galeus melastomus*) from the list of deep-sea sharks;
- Inclusion of all species belonging to the genus *Centrophorus* (including the lowfin gulper shark, *Centrophorus lusitanicus*) on the list of deep-sea sharks, by listing gulper sharks *Centrophorus* spp.

This is for the following reasons, respectively in each case:

Galeus melastomus:

G. melastomus is biologically different from other species on the deep-water sharks list. The species is oviparous and hence has a higher reproductive potential than the mainly viviparous deep-water species. It is also relatively fast growing, early maturing and is not thought to live longer than 10 years (Moore *et al.*, 2013). It is thus less vulnerable to exploitation than the other deep-water sharks on the list. Furthermore, although the species is found in deep water (to depths of 1000 metres), its core depth distribution is less than 600 metres and in many areas it is abundant in waters that are not considered to be deep-water habitat (< 400 metres). It is a species that straddles the continental shelf and upper continental slope ecosystem and there is evidence that its breeding areas extend to shelf habitats at depths of 150–250 metres (Henry *et al.* 2013). Together these factors lead ICES to the conclusion that *G. melastomus* is not biologically or ecologically comparable to the other deep-water sharks on the list and hence its removal can be scientifically justified. Hence, *G. melastomus* should be removed from the list of deep-water sharks.

Centrophorus

The genus *Centrophorus* (thirteen species worldwide) are all deep-water continental slope, mid-oceanic ridge and seamount species. There is uncertainty around the status of *C. lusitanicus* as a species, with what appears to be two distinct species with the same scientific name -- one in the Atlantic and one in the Pacific and Indian oceans (White & Darmadi, 2010; White *et al.* 2006). While there is taxonomic uncertainty regarding the species within the genus *Centrophorus*, all species within the genus are thought to be long-lived (>25 years) and ages of up to 70 years were estimated for *C. squamosus* (Clarke *et al.* 2002). All species in the genus are believed to have slow growth rates and very low fecundity (Girard and Du Buit, 1999; Guallart *et al.* 2006) and complete their life-cycle in deep-water environments. The core range of the *Centrophorus* species in the North Atlantic is at more than 400 metres of depth. In these respects all species of the family Centrophoridae that occur in EU waters should be included on the list of deep-water sharks. Therefore *C. lusitanicus* and any other species of the genus *Centrophorus* should be included on the list of deep-water sharks.

Concluding remarks

G. melastomus should be removed from the list of deep-water sharks, and *C. lusitanicus* and any other species of the genus *Centrophorus* should be included on the list of deep-water sharks.

References

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