



Abstract

# Historical Evolution of the Reconstructed Catches of Four Species of the *Pagellus* Genus for Two Large Marine Ecosystems <sup>†</sup>

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**Abstract:** *Pagellus acarne*, *Pagellus bellottii*, *Pagellus bogaraveo* and *Pagellus erythrinus* are sparids distributed throughout Large Marine Ecosystems (LMEs), the Iberian Coastal region (25) and Canary Current region (27). They are target species due to their important commercial value to local and international fleets from three different continents: Africa, Asia and Europe. Given the high exploitation interest of these species, sustainable management of the resource is essential. For this reason, a key element for its implementation is the knowledge of the historical behaviour of catches by geolocalised areas. To this end, marine catches reconstructed in total wet-weight tonnes from 1950 to 2014 from the Sea Around Us database were analysed. A total of 2,058,172.60 tn of species of the *Pagellus* genus were caught for the entire region, of which 83.20% (1,712,552.21 tn) corresponded to the Canary Current area and the remaining 16.79% (345,620.38 tn) to the Coastal Iberian area. The dominant area was Canary Current; its catches were higher than those of the Coastal Iberian area, with an annual average percentage of 78.21%. Overall, the fishery showed a negative trend of −511.37 tn/year. In terms of species, 61.52% of the catches were of *Pagellus bellottii* (1,266,219.36 tn), 20.04% of *Pagellus* sp (not identified at species level, only to genus) (412,482.53 tn), 8.91% of *Pagellus erythrinus* (183,434.67 tn), 6.74% of *Pagellus bogaraveo* (138,717.29 tn) and the remaining 2.78% of *Pagellus acarne* (57,318.74 tn). Our results suggest the existence of important variations in the reconstructed catches of the four species analysed in two large marine ecosystems, showing an overall decreasing behaviour. Canary Current was undoubtedly the region with the highest fishing pressure during the 65 years analysed and *Pagellus bellottii* was the dominant species in the Current Canary region and in the whole region. This multispecies analysis presented could help the development of sustainable management protocols by providing insight into the historical evolution and status of the reconstructed catches for large marine ecosystems.

**Keywords:** demersal species; LMEs; Iberian Coastal; Canary Current; time series



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