{rokbox title=| Monthly variation in the percentage of maturity stages (left) and the mean (± standard error) gonadosomatic index (GSI; right) of females and males of *Eledone moschata* from the Balearic Sea (western Mediterranean).> :: Image: Authors|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-life-history-fishery-quetglas-2025-thumb-et-al.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-life-history-fishery-quetglas-2025-et-al.jpg{/rokbox}

Antoni Quetglas, **Aina de Mesa**, **Beatriz Guijarro**, **Enric Massutí**, **Francesc Ordinas**, **Núria Zaragoza**
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Maria Valls
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Abstract:The musky octopus (*Eledone moschata*) is a typical inhabitant of the continental shelf, living preferentially in waters shallower than 100 m in the Mediterranean Sea and the Atlantic coast off the south Iberian Peninsula. The species is mainly caught as bycatch in bottom trawl fisheries, and its commercial interest varies with its geographical distribution. In this study, some life-history traits (e.g., population structure, reproduction, condition, and diet), bathymetric distribution, and fishery of this octopus were analysed using data collected over the last 25 years in the Western Mediterranean. The species was more frequent in waters shallower than 75 m depth, rarely occurring at depths greater than 125 m. Taken as a whole, females outnumbered males. However, monthly differences in sex-ratio were only observed in June. Reproduction occurs mainly from February to May, with a clear peak in April-May. Our fecundity estimates were lower than those reported in previous studies. Although there was a highly significant relationship between mean oocyte size and female body weight, the relationship between fecundity and body weight was very weak. The most frequent prey in the stomach contents was by-far crustaceans (86%), followed by teleosts and polychaetes (6% in both groups), and molluscs were only vestigial prey (1%). In the study area, musky octopus has low commercial importance. Fishing yields remained consistently high from October to May before declining sharply during the intervening months. The sharp decline in yields and subsequent recovery reflect post-spawning mortality and the incorporation and growth of recruits, respectively.

Keywords:Cephalopods,Bathymetric distribution,Population structure,Reproduction,Condition,Fecundity,Diet.