

{rokbox title=| Monthly distribution of the surface temperatures (°C) in the LZP (July-December 2000–2020) :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-reproductive-ecology-loligo-cabanellas-2025-thumb-et-al.jpg|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-reproductive-ecology-loligo-cabanellas-2025-et-al.jpg{/rokbox}

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[The reproductive ecology of *Loligo* squids \(Cephalopoda: Myopsida\) in Lusitanian zoogeographical province](#)

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Abstract: Analysis of the temporal and spatial distribution of 686 records of egg masses and egg mass groups from (i) recreational divers and posted in the various public media, (ii) scientific survey data collected during research programs and (iii) publications in peer-reviewed literature plus published and unpublished information on the seasonality of the occurrence of mature females, demonstrated that the reproduction of *Loligo* squids occurs throughout the Lusitanian zoogeographical province all year round with varying seasonal peaks. This may be due to high phenotypic plasticity, with the life cycle adapting to local conditions, or the existence of small discrete stock units related to individual water features. In warmer and relatively productive waters the spawning peak is more extended, and percentage of mature females in catches is lower. In the Mediterranean the peak of occurrence of both mature females and spawned eggs gradually shifts to earlier dates from the west to the east, which is consistent with respective changes of the earlier peak of productivity. There is little or no gap between peak of occurrence of mature females and peak of the egg mass records. Spawning grounds of

L. vulgaris

extend in the Mediterranean area much deeper than thought before and they extend from 300 m to 550 m. Egg masses were reported by recreational scuba divers from deeper locations in the central Mediterranean than in other areas.

Loligo forbesii

egg masses were found between 170 and 720 m.

Keywords: *Loligo vulgaris*, *Loligo forbesii*, Climate, Reproduction, Citizen science.