

{rokbox title=|Feeding ecology of two squid species from the western Mediterranean :: Foto: Miguel Cabanellas-Reboredo|
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M. Valls, M. Cabanellas-Reboredo, I. Uranga, A. Quetglas, 2015. [Feeding ecology of two squid species from the western Mediterranean.](#)
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Abstract: The squid *Loligo vulgaris* (LV) and *L. forbesii* (LF) are 2 cephalopod species occurring in the Atlantic Ocean and the Mediterranean Sea. Bathymetric segregation allows the coexistence of both species, with LV preferentially inhabiting the shallow shelf and LF living on the shelf-break and upper slope grounds. In this paper, the feeding habits of LV and LF were studied for the first time in the Mediterranean, by means of stomach content analysis (1452 and 900 individuals of LV and LF, respectively). The main objective was to determine the diet of both species, analysing temporal and ontogenetic diet changes and inferring predator-prey interactions. Fish were by far the most important prey in both squid, followed by crustaceans and cephalopods. Prey composition revealed the bathymetric segregation of both species in the Mediterranean. Whereas LV preferentially consumed typical coastal species of sparids and gobiids, LF preyed on slope inhabitants such as myctophids and euphausiids. Ontogenetic shifts of diet occurred in both squid, but took place at contrasting sizes, suggesting that the factors triggering them might be species-specific. The diet of small-sized LV individuals was more dependent on bottom-living organisms than in large individuals, which preyed mainly on benthopelagic fish. During the main reproductive period in spring, LV increased the consumption of highly nutritive prey such as polychaetes (nereidids). Size-related differences in LF diet during the second half of the year indicated a deeper distribution of large individuals, preferentially preying on mesopelagic species and being thus involved in benthic-pelagic coupling.

Keywords: Diet analysis, Stomach contents, *Loligo* spp., Ontogenesis, Seasonal variation, Predator–prey interactions, Bathymetric segregation