Loligo forbesi in the north-western Mediterranean (Mollusca : Cephalopoda)

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The squid Loligo forbesi is common in the eastern North Atlantic. Holme (1974) reviewed the biology of the species in the Plymouth area and compared it with the data collected on the less common species L. vulgaris. More recently Martins (1982) studied the exploited stock of L. forbesi in the Azores, the westernmost location where the species is known to occur.

In the Mediterranean, L. forbesi has been recorded in various locations at depths beyond 150 m (see Mangold-Wirz, 1963). Naef (1923) noted that the species is by far not as common as L. vulgaris in the Mediterranean. In the area of Banyuls-sur-Mer (Catalan Sea, north-western Mediterranean), the only specimens of L. forbesi recorded by Mangold-Wirz (1963) were caught at depths beyond 200 m. Very recently (September 1984), a single adult male of L. forbesi was captured SE of Banyuls at slightly lesser depth (120-170 m) in the vicinity of one of the canyons ("rechs") that cut into the continental shelf. This is the first specimen of L. forbesi recorded in the Banyuls area in recent years.

If these observations suggest that L. forbesi occurs only occasionally, in fairly deep water, in the northern part of the western Mediterranean, there is now evidence of its year-round occurrence at a depth of only 100 m in the area of Toulon, i. e. on a coast with a particularly narrow continental shelf (Fig. 1).

The first indication of this hitherto unknown occurrence was the presence of considerable numbers of L. forbesi in a trawl catch taken on 30 October 1982 by the newly commissioned R/V "Côte du Lion" (now "Pr. Georges Petit"), during a trial run of fishing gear SW of the Isle of Embiez (Fig. 1, A-A'). This area is not apparently used as fishing ground by commercial trawlers, probably because of poor bottom quality (two of our net tows have indeed been cut down by obstacles fouling the gear after 30 and 50 min., respectively, as indicated below).

A 1 hour trawl sample taken on 23 November 1982 (Fig. 1, B-B') at similar depths (105-95 m) W of the Isle of Embiez again contained large numbers of L. forbesi of various sizes and a few egg masses of L. vulgaris, along with specimens of Alloteuthis media and Illex coindetii.

The following sample (30 min.) was taken 8½ months later (10 July 1983) along a course parallel to A-A', at depths varying between 84 and 97 m (C-C'). In addition to large numbers of L. forbesi of various sizes, it contained two adult L. vulgaris.

Exactly 8 months later (8 March 1984), a 50 min. tow at depths varying from 115 to 93 m (D-D') provided five rather small specimens of L. forbesi along with Alloteuthis media, various ommastrephids, one large Sepia officinalis and two S. elegans.

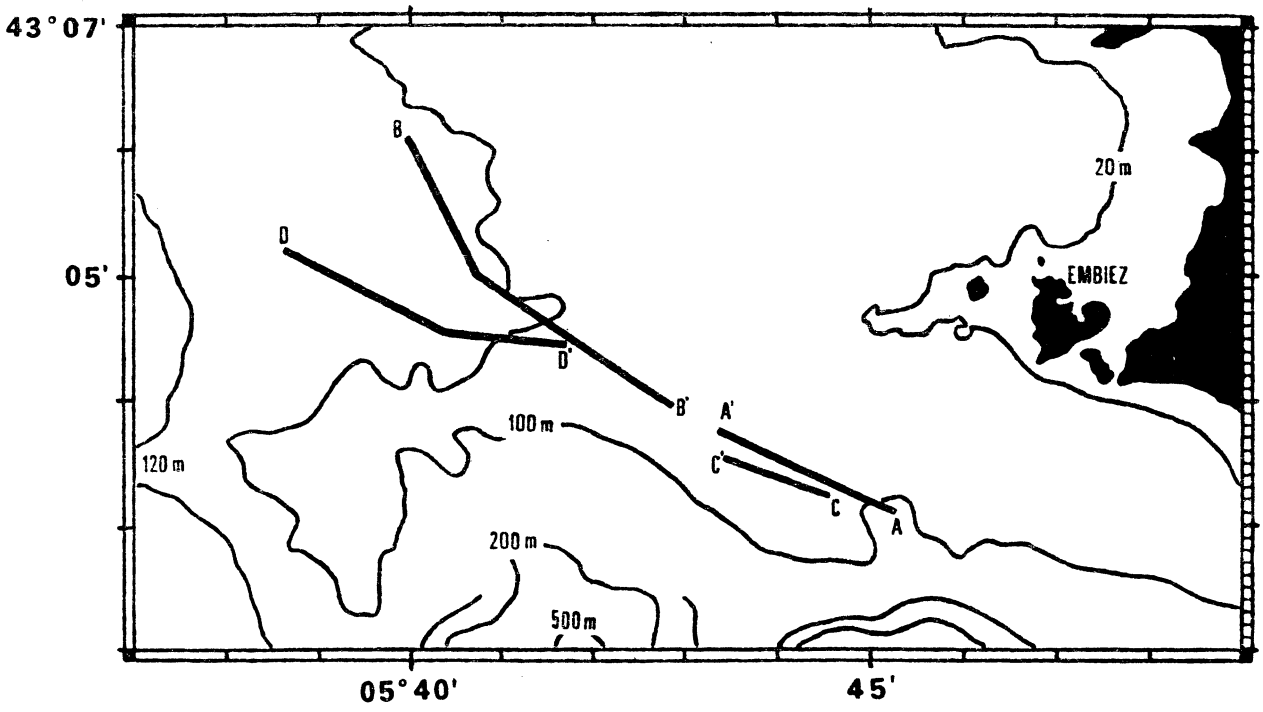

Fig. 1. - The sampling area W and SW of the Isle of Embiez (Var, France). A-A': 30 October 1982, B-B': 23 November 1982, C-C': 10 July 1983, D-D': 8 March 1984.

References

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Acknowledgments. Our sincere thanks to the captain and crew of R/V "Pr. Georges Petit" for excellent collaboration throughout this program ("Céphalopodes -Embiez"). Thanks are also due to the directors of PIROcéan and CIRMED for making ship time available.