ABSTRACTS

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Direct hydro-acoustic observations of chokka squid *Loligo Vulgaris Reynaudii* spawning activity in deep water

S.Afr. J. mar Sci. 24: 387 – 393

Unusual and distinct hydro-acoustic targets were observed in November 1996, May 199 and November 1998 during routine pelagic biomass surveys off the south coast of South Africa. During the November 1996 survey, seven such targets were observed near the bottom at depths of 1158-125m, directly south of the traditional inshore spawning grounds of chokka squid *Loligo Vulgaris Reynaudii* at Cape S t Francis. The targets were close to prominent seabed ridges and extended 30-40m off the bottom. In May 1998, three similar targets were observed at depths 55-80 m of Plettenberg Bay, another well-known squid spawning site. The shallowest target was identified, by means of midwater trawl, as a mixture of mature male and female chokka. During the November 1998 survey, nine similar targets were again observed on the squid spawning grounds at Cape St Francis, also adjacent to seabed ridges. Drawing on fisheries hydro-acoustic experience and knowledge of chokka squid spawning behavior, the targets are believed to be aggregations of spawning squid