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Abstracts

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migration pattern was different in both sexes, females were more abundant in March, May and July, whereas males were more important in May and March (see Graphic 2). Mean length of females was bigger in February, April and July whereas males was in July and May (see Graphic 3).

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ON THE DISTRIBUTION OF *Pomatias sulcatus* (Draparnaud, 1805) (PROSOBRANCHIA: POMATIASIDAE), RECENT AND FOSSIL, IN THE IBERIAN PENINSULA

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The distribution of *Pomatias sulcatus* (Draparnaud, 1805) is occidental mediterranean SE of France, Corsica, Sardinia, Sicily, Malta, and the Maghreb (Giusti & Manganelli, 1984; Fechter & Falkner, 1993). In the Iberian peninsula *Pomatias sulcatus* was found alive in two isolated localities: one in the Algarve (S of Portugal) and another in Motril (Granada province, Spain) (Ibañez & Alonso, 1978). However, the distribution of this species in Plio-quaternary deposits is larger: Palau Sacosta (Gerona province, Spain), La Pita Calataray and San Juan de Terreros (Almería province) (Ibañez & Alonso, 1978), Casas del Rincón (Albacete province) (Alberdi *et al.*, 1982) and Cañada de Murcia (Granada province) (Robles, 1989).

Recent sampling carried out by the authors allowed to find this species in other places of the peninsula: Orihuela, Cañada de la Estaca and Pilar de la Horadada, Paraje Natural de Río Seco (both in Alicante province), were was found alive and Sierra de Quibas (Abanilla, Murcia province) where was found fossil.

The true age of the deposits from the fossil material was catch is only reliable for three of them, were also mammalian fossils were present. Casas del Rincón is Late Pliocene and Cañada de Murcia and Sierra de Quibas are Lower Pleistocene. The Palau Sacosta deposit is supposed to be "Ancient Quaternary" (Gasull, 1972), and the stratigraphy for La Pita Calataray and S. Juan de Terreros was not possible to set up.

The comparison of the current distribution with the Late Pliocene and Lower Pleistocene distribution of this species allow to think the current areas are relict places. The species present distribution close to the sea if compared with the inland one in the Plio-Quaternary deposits seems to show this species was refuged in warm areas during the cold periods of the Quaternary.

CEPHALOPOD COMMUNITY ASSOCIATED WITH MESOSCALE OCEANOGRAPHIC FEATURES AT THE ANTARCTIC POLAR FRONT EXPLOITED BY SATELLITE TAGGED PREDATORS

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Satellite tags were attached to nine grey-headed albatrosses, breeding at South Georgia, to monitor foraging during January-March 1994. An area of the Antarctic Polar Frontal Zone (PFZ), north of South Georgia, was located where foraging activity was concentrated. RRS James Clark Ross undertook an acoustic survey of this area in February and a fixed station was established where acoustic targets were identified. A net survey at this station was carried out with a suite of nets. Cephalopods were simultaneously recovered from food samples fed to grey-headed albatross chicks at Bird Island. Two CTD transects, approximately normal to the major current flow, were undertaken across the area at the PFZ and remote sensed sea-surface temperature images from NOAA polar orbiting satellites were received via the British Antarctic Survey's satellite receiving station on the Antarctic Peninsula. The cephalopod community sampled by nets closely resembled that exploited by grey-headed albatrosses. The largest and most conspicuous species was the ommastrephid squid *Martialia hyadesi* which is the most important cephalopod prey species. Stomach contents of *M. hyadesi* revealed that they had been feeding on crustacea and mesopelagic fish. The cephalopod community was sampled in a meander or eddy, interpreted as a warm core ring, in an area characterised by mesoscale features associated with the bathymetry of the northern end of the Northeast Georgia Rise and near a gap in the Falklands Ridge. At the PFZ epipelagic fish are absent and the dominant top predators are cephalopods.