

al comienzo del verano (8.46 y 5.38 mm en hembras y machos, respectivamente) que progresivamente aumentan hasta alcanzar las máximas tallas al comienzo del invierno (12 y 7 mm para las hembras y machos, respectivamente).

Patches structure of juvenile and adult *Nephrops* on the Porcupine Bank, W Ireland

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The density, size composition and patch distribution of Norway lobster *Nephrops norvegicus* (Decapoda, Nephropidae) were examined at the Porcupine Bank, W Ireland. Data were obtained from three bottom trawl surveys carried out in September 2001, 2002 and 2003. Number of individuals per tow were used to map the species density. The adults (≥ 26 mm carapace length) male and female *Nephrops* distribution showed spatial structure. Three main patches of high density, which relative size and definition varying among surveys, were detected, but different sex-related distribution was not found. Spatial patterns of juvenile distribution were mainly restricted to the patch located in the eastern side of the Bank. Separate concentration areas between juvenile and adult *Nephrops* were not detected at mesoscale, and the eastern patch may perform as nursery ground.

Demographic structure of the long-spined sea-urchin *Diadema antillarum* Philippi in the MPA of Alegranza Islet (Lanzarote, northern Canary Islands): Temporal changes

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The density and size structure of the long-spined sea-urchin *Diadema antillarum* was studied along the coast of the Alegranza Islet Marine Protected Area by means of 50 m² transects to compare the current situation with those reported in 1994 and 1996 by other authors. Mean sea-urchin density ranged between 2.12 and 8.14 ind m⁻² (mean \pm SD = 5.26 \pm 1.88 ind m⁻²), while mean size fluctuated between 4.01 and 5.74 cm (mean \pm SD = 4.44 \pm 0.43 cm), with a dominance of the intermediate size

class (67.67%) with regard to other size classes. We have observed an increase about 25 % in the mean density of this echinoid species in comparison with 1994 and 1996, which is attributable to a lack of vigilance and control of coastal fisheries inside this protected area.

Distribución geográfica de las capturas de Pulpo común (*Octopus vulgaris*) en aguas de Gran Canaria

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Octopus vulgaris presenta una mayor abundancia en zonas geográficamente caracterizadas por fondos rocosos y muestra un comportamiento migratorio estacional. Este comportamiento migratorio estacional y las importantes agregaciones que se producen como consecuencia de la reproducción originan un aumento de la accesibilidad y la capturabilidad.

The faunal role on the degradation of the common intertidal salt-marsh plant *Scirpus maritimus*

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The aim of this work was to evaluate the role of different fauna levels during the different steps of *Scirpus maritimus* decomposition/mineralisation under controlled laboratory conditions. The results showed that, although the bacterial activity was responsible for the *S. maritimus* degradation during the leaching phase, the presence of macrofauna enhanced the leaves litter C:N ratio. Moreover, the presence of macrofauna affected significantly the decomposition of the leaves structural parts, by increasing the mineralisation of plant carbon.

The present study reinforces the link between fauna levels on the nutrient dynamics between sediment, water column and vegetation detritus in salt marshes ecosystems.