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CM 132: Vulnerable Marine Ecosystems found in a bathyal zone off the SE Iberian Peninsula (Western Mediterranean)

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The Spanish Intemares LIFE IP project contemplates the creation of Special Areas of Conservation within the Natura 2000 Network. During its August 2019 cruise, a series of towed sledge transects were conducted on two seamounts("Planazo" and "Plis Plas") and a muddy field of pockmarks, both located in areas off the SE Iberian Peninsula (Western Mediterranean), between 220 and 694m depth. The prospected area has a significant pressure from bottom trawl (directed towards Aristeus antennatus, Nephrops norvegicus, Plesionika spp.) and, to a smaller extent, of bottom longline fisheries (focused on Merluccius merluccius, Pagellus bogaraveo). Some of the observed bathyal habitats fall into the category of Vulnerable Marine Ecosystems (VME), according to FAO (2009, 2016), since they present at least one of the following characteristics: i) uniqueness or rarity; ii) functional significance of habitat; iii) fragility; iv) life history traits of component species that make recovery difficult; and/or v) structural complexity. Among them, "gorgonian gardens" (Paramuricea hirsuta, Callogorgia verticillata, Bebryce mollis, Swiftia pallida, Ellisella flagellum) and the yellow tree coral (Dendrophyllia cornigera) highlight rocky bottoms; while on muddy substrates, sea-pen fields (Funiculina quadrangularis and Kophobelemnon stelliferum) and "bamboo coral gardens" (Isidella elongata) do so. These habitats, along with fields of the crinoid Leptometra phalangium, are also considered Essential Habitats for target species of fishing interest. The location, mapping and characterization of these habitats are necessary to establish "no-take" zones within the future management plan for the area studied.

Keywords: vulnerable marine ecosystems, bathyal zone, underwater towed sledge, mega benthos.

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