

Iemporal dynamics and role of benthic habitat for the Mediterranean slipper lobster *Scyllarides latus* in a National Park

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PICTURES POSTER AREA

A WELL ESTABLISHED MPA ALLOWED US TO STUDY THIS RARE SPECIES

Populations of large decapods have **diminished** due to **intense fishing** pressure and habitat modification along densely inhabited Western Mediterranean coastlines. Fortunately, populations have increased in well established marine protected areas (**MPAs**), including that of **one of the most sought large**

WHERE WE DOVE





decapods, the slipper lobster Scyllarides latus (Latreille, 1803).



A **four year** monitoring study was conducted to assess seasonal dynamics and habitat preference of *S. latus*. We did monthly underwater visual census surveys in transects of 5' duration) at depths between 0 and 50 m (N= 1677



Different **developmental stages** of clutches. All individuals in this caption were captured in July, indicating an **extended** reproductive period of the species (see graph below).

HOW WE DO IT?

transects).

GRAPH POSTER AREA





The preferred **depth** is **less than 35** m, with clear preference for **caves** between 5-20 m. The **littoral slope** (20 – 35 m) is a **transitional habitat**.

Density of *S. latus* shows a **marked seasonality**. Late spring values are 5 to 15 times above average, matching the reproductive pattern. **No lobster were observed during winter surveys.**

Reproduction extends from mid spring to midsummer. High incidence of mating aggregations observed in May. Females reach maturity at 98 mm CL and 6 years. Gonad maturation, mating and egg incubation take place in shallow habitats, while spawning may





Size distribution indicates that females are larger.

PAY ATTENTION! THIS IS INTERESTING

Reproductive behaviour helps explain why slipper lobsters are under threat: At the time of reproduction they move to shallow water where they are extremely **vulnerable** to harvest by **recreational fishermen**. From a conservation point of view **fishing** should **not be allowed during** this period. **Settlement** and **juvenile** habitats for this species are **unknown**. Tag-recapture monitoring and monthly surveys lead us to believe that the apparent **absence** of this species in shallow areas during **winter** is due to confinement to hidden shelters and a reduction in daily activity. There is **no evidence** of **movements to deeper** water during this period.









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