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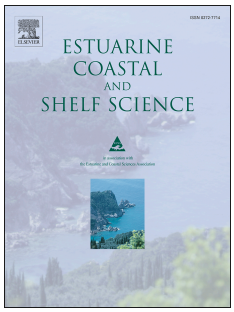

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Sabellaria spinulosa (Polychaeta, Annelida) reefs in the Mediterranean Sea: habitat mapping, dynamics and associated fauna for conservation management

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ABSTRACT

Bio-constructions by *Sabellaria* worms play a key functional role in the coastal ecosystems being an engineer organism and for this reason are the object of protection. The most widespread reef building species along Atlantic and Mediterranean coasts is *S. alveolata* (L.), while the aggregations of *S. spinulosa* are typically limited to the North Sea coasts. This paper constitutes the first detailed description of unusual large *S. spinulosa* reefs in the Mediterranean Sea. Defining current health status and evaluating the most important threats and impacts is essential to address conservation needs and design management plans for these large biogenic structures. Present knowledge on Mediterranean reefs of *S. alveolata* is fragmentary compared to Northeast Atlantic reefs, and concerning *S. spinulosa*, this paper represents a focal point in the knowledge on Mediterranean reefs of this species. A one-year study on temporal changes in reef structure and associated fauna is reported. The annual cycle of *S. spinulosa* reef shows a spawning event in winter-early spring, a