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Pinna Nobilis: An Endangered Species of Mediterranean Sea

Editorial

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Abstract

The fan mussel *Pinna nobilis* is the largest endemic Mediterranean bivalve that occurs in coastal and estuarine zones, living partially buried in the substrate, preferentially associated with *Posidonia oceanica* and *Cymodocea nodosa* meadows. The species in all over the world is heavily threatened and is listed and protected as an endangered species in the Mediterranean Sea. To date studies and experiments have been carried out and several are currently carrying out with the purpose to save this species, through acts of protection and through the reintroduction of the species also. In my opinion its important planning a sustainable management strategy that include an increasing of knowledge on the factors and the processes that are involved in the distribution of the species and also to trying avoid all the factors that contribute to the decrease of the population. Moreover in order to motivate and increase the consciousness and the respect for the nature it's important to spread the research and info about the environmental protection.

Keywords: *Pinna Nobilis*; Endangered Species; Mediterranean Sea.

Introduction

The fan mussel *Pinna nobilis* (L. 1758) is one of the largest bivalve mollusc in the world and is the largest endemic Mediterranean bivalve, reaching a size of up to 120 cm [1]. Fan mussels have a triangular shape [2] and live partially buried in the substrate [3]. They occur in coastal and estuarine zones between 0.5 and 60 m depth [4] preferentially associated with *Posidonia oceanica* and *Cymodocea nodosa* meadows [5]. *P. nobilis* is a long-lived hermaphrodite species (about 30 years).

P. nobilis population in all over the world has suffered a decline because of the heavily exploitation and for this reason the fan mussel has been listed as an endangered species (European Council Directive 92/43/EEC) in the Mediterranean Sea and has been declared a protected species (EEC 1992). To date more scientist are trying to set up a protocol for the reintroduction of the species in some habitats and the protection of the pre-existent populations, i.e. transplant could be also one of the methods useful to protect endangered species as *P. nobilis* for which first attempts of transplantation have been tried in Corsica by De Gaulejac and Vicente [6] and successively in Sicily by Bottari et al. [7]. The last research showed the feasibility and efficiency of transplanting as method to contrast *P. nobilis* population decline.

To ensure the development of sustainable management strategies it is necessary:

1. To increase the environmental conditions and population processes determine the abundance and distribution of species is a central problem of ecology and biogeography [8];
2. Try to know all the factors involved in the variation in population density and distribution;
3. To develop a common strategy to protect the environment;
4. To develop specific strategies to protect this species.

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