

FAN MUSSEL

(pinna nobilis)



WHAT IS IT?

- The *Pinna Nobilis* (Fan Mussel or Noble Pen Shell), is the largest species of marine mollusc from the Pinnidae (pen shell) family and found only in the Mediterranean.
- It needs a stable level of salinity, and can only survive in temperatures between 7-28 degrees Centigrade.
- It feeds off plankton which it filters from approximately 6 litres of water per hour!
- It is a hermaphrodite producing and alternately releasing male and female germ cells over the summer months. After fertilisation, free-swimming larvae develop which then form a thin, calcareous shell whereup they fall and embed themselves on the seabed.
- It attaches itself vertically to rocks using long keratin fibres secreted by its byssus gland, that used to be made into cloth known as 'sea silk'.
- Growing up to 10-15 cm in its first year, fully-grown shells usually measure 30-50 cm long – although some can grow as tall as 120cm and can live for up to 20 years!

WHY IS IT ENDANGERED?

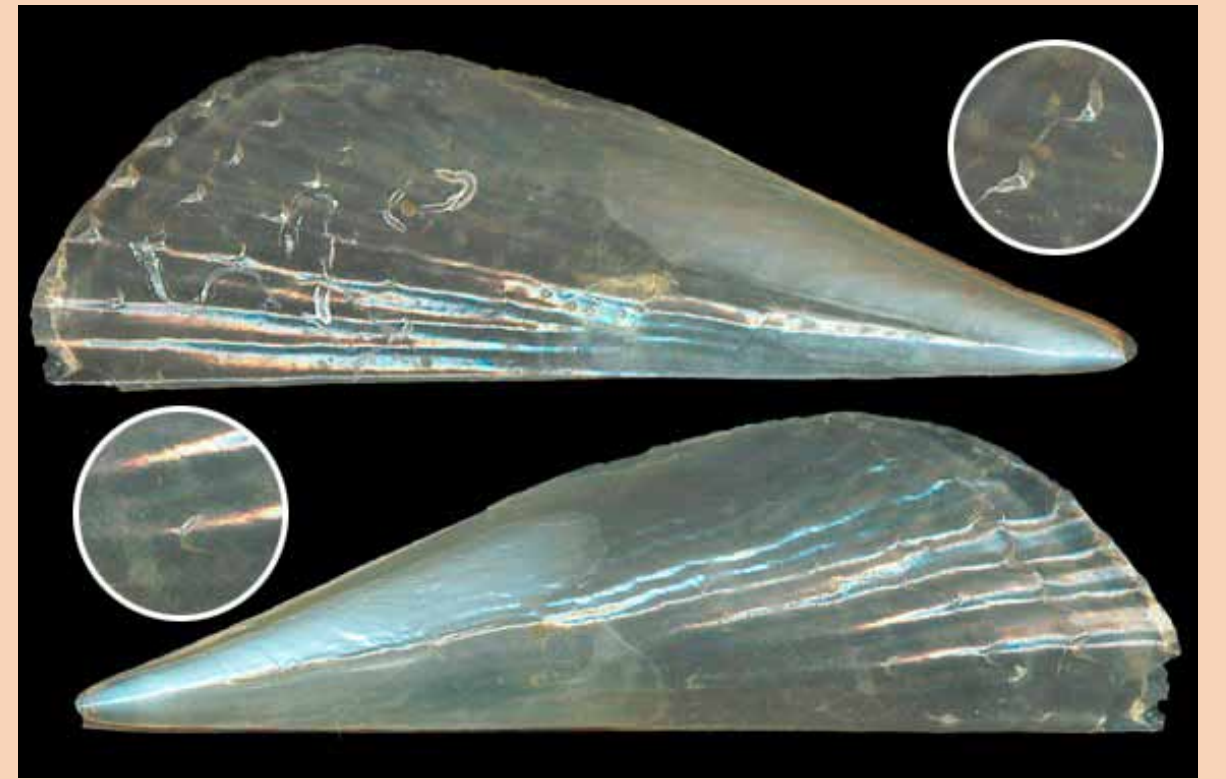
Large populations were recorded in the 18th Century – but have been rapidly declining since mid-20th Century due to human influence such as:

- fishing, trawling, anchoring
- pollution killing eggs, larvae, and adult mussels
- the overexploitation by recreational divers due to the large shells being lined with brilliant mother-of-pearl and being therefore collectable
- and the invasion of the non-native, toxic, green algae, *Caulerpa Taxifolia*.

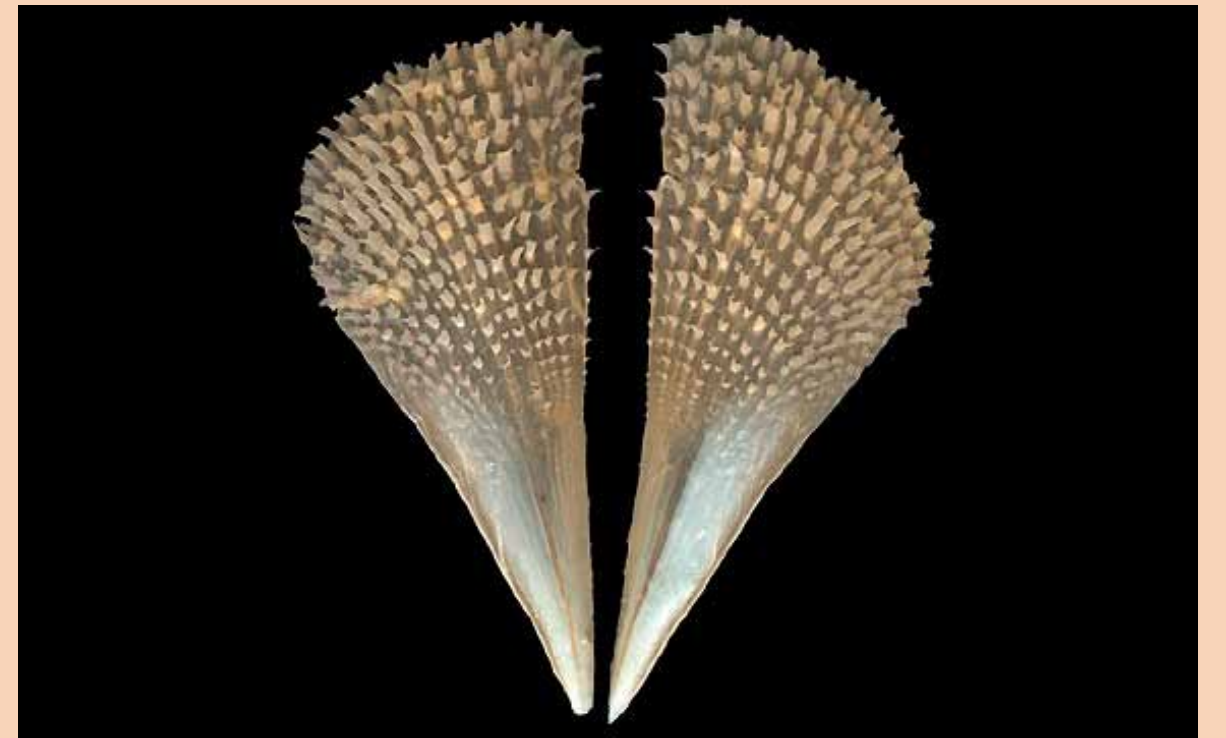
WHAT IS BEING DONE?

Pinna Nobilis has been a protected species in the European Union since 1992. All forms of deliberate capture or killing of fan mussel specimens are prohibited by law – although many populations continue to be under threat, as the protection of the shell is not implemented or is often simply ignored.

PINNA NOBILIS LINNÆUS
1758 protected



Mediterranean.
Juvenile: Catania, Sicilia, 50mm.



Young: 4m deep, in sand, gravel and mud,
Ostriconi bay, sola Rossa, Corsica. 94mm.



A bit older: Evia island, Greece. 152mm.



Adult: 650mm. No more scales on this old
timer. Ex coll. Annie Bombeke (FR).



8m deep, found dead in situ amongst other
living Pens, buried in mud and gravel,
east of Chania, Crete. 295mm.