

The Monaco Times

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The Med's red resource

Careful harvesting keeps jewellers happy and ensures survival

Corallium rubrum or Mediterranean red coral is an enigma - as mysterious as it is stunning. Historians know that it once served as currency: the Phoenicians, Egyptians and Romans traded red coral for amber from the Baltic, while pre-Christians, believing it to be the blood of the gorgon Perseus, credited it with a host of magical powers that kept evil at bay, guaranteed crops and cured everything from sniffles to the plague.

For Christians, it was venerated as a symbol of the blood of Christ, and Renaissance artists draped their models with an abundance of coral jewellery.

Gaps in scientific CV

Despite its historic and cultural familiarity, there are still gaps in red coral's scientific CV. Only relatively recently did scientists conclude that the flower-like creature belonged in the animal rather than the plant kingdom. Those who first suggested it might be an insect, like a tiny octopus, were greeted with the same disbelief as Galileo when he suggested the earth moved.

Many more questions still chase solutions. They aren't sure what attracts male to female; what the biochemistry of the red pigmentation is; or what red coral's vulnerabilities are. A mass mortality among populations in the Provence region in 1999 - 874 colonies out of some 2,375

observed - has not been fully explained.

Unlike the workaholic reef coral, which plays an important role in the ecosystem and is used in medicine, red coral appears to be just a pretty face, employed mainly in jewellery.

To find out more about this illusive, skeletal beauty, we

particular to the Mediterranean, found mainly in the central and western areas, with some overflow into the Atlantic. Only around 15 kinds of red coral exist, in contrast to over a 1,000 of reef coral. Moreover, it grows very slowly, as little as one millimetre a year.

Does that mean it is an

plankton, through the mouth and epidermally - that is coral digests inside and outside (an asset for a fixed predator), but ingestion of sedimentary micro particles strangles it. Sponges like to take up residence in coral. To burrow into it, they secrete an acid which destroys it.'

Over-exploitation or not

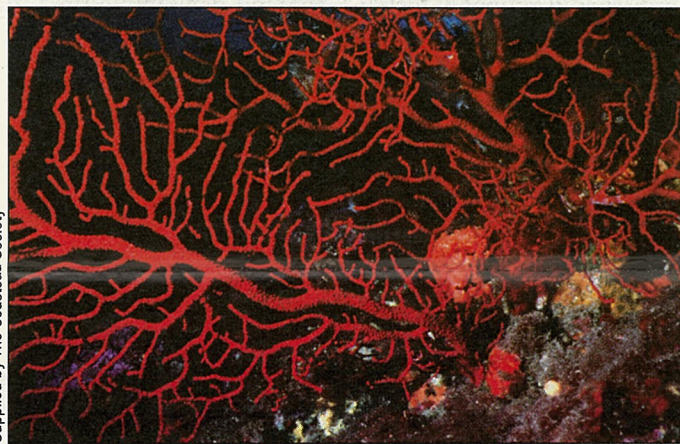
What about overfishing? 'Today, in the Mediterranean, it is limited to around 40 tonnes. Divers are careful in cutting coral. If the base rests, the animal grows again.'

Isn't coral a bit of a wallflower gem, limited to beads and cameos? The response, an emphatic 'no', comes from Monaco-based Pierpaola Bernasconi.

The Italian-born designer launched red coral into the Principality this summer with a special exhibition and was surprised on opening day to find 250 people spilling out of the showroom. What has changed coral's dowdy image is the creativity of young designers like her. She works pieces brought from Torre del Greco, the southern Italian town clenched between Vesuvius and the sea, where a Frenchman opened the first coral workshop in 1805 and turned the area into the Med's reference point for coral.

Today, a coral necklace can cost as much or more than pearls, but unlike pearls it can be carved. It seems *Corallium rubrum* has come a long way from its cameo days.

Lois Bolton



Supplied by The Cousteau Society

The biochemistry of the brilliant red pigment still baffles scientists

spoke with Denis Allemand, Professor of Biology at the University of Nice and Director of the *Centre Scientifique de Monaco* (CSM). Prof. Allemand and his colleague Dr. Sylvie Tambutte are responsible at the CSM for a study into the biochemical characteristics of coral's colour, a research project sponsored by Van Cleef & Arpels.

We began by asking why red coral is so coveted by jewellers. The answer is its availability. 'Red coral is

endangered species? 'Coral is light shy. Near the coast, it lives in grottos, like those we've created in Monaco to study coral, otherwise it clings to the depths. Coral in shallow areas (above 30-metres) has mostly disappeared because of the curiosity of divers, but the colonies below 60 metres don't appear to be in danger. Coral has a long life, several hundred years.'

Any natural enemies? 'Sedimentation and sponges. Red Coral takes food - mainly