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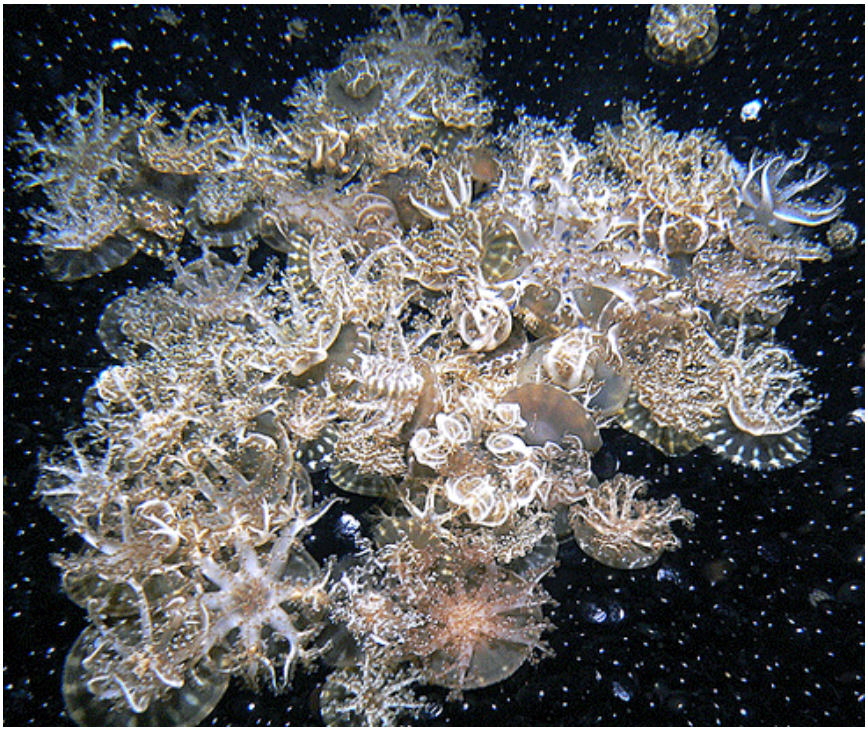
Jellyfish blooms: the Trojan horse effect

Man-made structures such as harbours, tourist facilities, oil rigs and aquaculture farms provide ideal sanctuaries for jellyfish polyps to flourish and may explain an apparent increase in jellyfish blooms in many coastal waters around the world.



A new study published in the journal *Frontiers in Ecology and the Environment* examined the tiny polyp phase of jellyfish and found they congregate in millions on the underside of man-made structures.

According to lead author, Professor Carlos Duarte of the University of Western Australia, most theories that seek to explain increased jellyfish blooms focus on jellyfish at their more mature swimming stage and on factors such as a lack of predators or competitors due to overfishing.

In contrast Professor Duarte and his co-authors examined polyps growing on a variety of man-made structures around the world – including in Japan, Britain, Spain and Slovenia – and looked under docks, piers, pontoons and artificial reefs, and on the underside of oysters attached to piers.

'We call this new proposition the "Trojan Horse" hypothesis,' says Prof. Duarte.

Jellyfish larvae typically settle on a hard surface and grow into polyps as part of a colony. The polyps are generally

inconspicuous because they are very small – usually only a millimetre or so in length.

‘Jellyfish polyps existed on the underside of such artificial structures at densities of more than 10,000 individuals per square metre, and sometimes up to 100,000 per square metre,’ adds Prof. Duarte.

Source: University of Western Australia

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