

Evolution process of the oyster reef and the ecology in Sanzanze, northeast Tokyo bay

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Living oyster reefs were first found about early 2000s at Sanbanze, a sandy and muddy tidal flat in Funabashi City at the northeast end of Tokyo Bay. Large reefs of *Crassostrea gigas* emerged only at the lowest point of spring tide, attracting public attention. After the peak of the development of the oyster reefs in 2008, the activity started to decline in 2009 and the ecosystem have been changed. The evolution process of the ecosystem, and its response to environmental conditions around the reefs, are key to understanding the present ecosystem, and also the environmental changes.

Oyster reefs, and also size and shape of individual oyster shells must be influenced by such environmental factors as nutrient salt, water temperature and habitat density in addition to weather condition, salinity, turbidity and so on (Chinzei, 1982, etc.).

In this study we investigate the relationship among changes in morphology through the growth of oyster reefs and individual shells, evolution process of the reefs and environmental factors in and around the reefs.

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