

New Perspectives for Oyster Culture As a Biofilter and Biohabitat

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Abstract

Filtering of particulate material by oyster in northern Hiroshima Bay is estimated to be 41 ton C/day which amounts to about 25 % of net primary production. The removal of C, N and P from northern Hiroshima Bay by oyster harvesting is estimated to be 2.9, 1.3 and 0.19 ton/day, respectively. Algal biomass associated with oyster culture raft is estimated to be significantly larger than that of natural algal bed in Hiroshima Bay. Thus, oyster culture proved to play significant roles on the water purification, recycling of nutrient, and providing habitat for living resources. We propose new concept of oyster culture as an integrated functional role player which can be obtained only when appropriate management is carried out.