

Effects of artificial reefs for the nursery ground on fishery resources in the shallow waters

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Summary

There are a large number of researches concerning about artificial reefs in Japan, and many Japanese companies have developed and specialized in the coastal engineering in recent years. Various shape, size and material of artificial reefs are constructed, however, concrete and steel structures are popular material in Japan.

Five kinds of artificial reefs were put down on gravel bottoms 5-10 m deep in February 1999, which is located 100 m off Ikata, Shikoku, southern part of Japan. Fishery resources around the artificial reefs were investigated monthly or bimonthly for 1 year.

Seaweed beds were constructed on the artificial reefs after 3 months of placement. Useful shell fishes such as turban shell and abalone were appeared on the artificial reefs after one month of placement. A large number of fishes (over 30 species, including horse mackerel) were appeared on the artificial reefs during the study period. In conclusion, these artificial reefs promoted the development of seaweeds and were highly suitable habitats for nursery ground of fishery resources.