

# The Coral Reef of Kikaijima, One of the Amami Islands, and the Problem of its Conservation

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## Abstract

Kikaijima is a small coral island of about 60 sq.km., situated at about 28°20'N and 130°E. The main portion of the island is composed of raised limestone, fringed by raised reefs and recent reefs.

The raised reef is well developed and surrounds the island almost completely, leaving several small inlets. It slopes gradually toward the submerged zone with a serrated margin. The recent reefs are found mainly in the submerged portion, in the inlets, and along the serrated edges.

Environmental conditions, especially in winter, are too severe for corals to grow luxuriantly at or near the low tidal line. This is nearly the northern limits of vigorous reef formation. Some of the common corals of the tropical seas are not found here, but some others show interesting adaptations.

In the inlets where fresh water runs in, there are indications of the destruction of reefs. This fact is more pronounced in the inlets near a village and also in the harbors, for corals have been used for construction of roads and for palisades around houses for protection against strong winds. Moreover, cultivation of land accelerates the speed of the outflow of fresh rain water, resulting in a decrease in the salinity of the water in the inlets. Waste water from villages and from boats also often contains harmful chemicals.

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Since this paper was prepared, the Technical Meeting decided that all conservation issues affecting Japan and its offshore islands (other than the Bonin and Volcano groups) should be held over for discussion in connection with a later comprehensive review.

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