

Amami-Oshima's White Sand: The Handiwork of Waves and Fish

Amami-Oshima is well known for its transparent blue waters, as well as for white-sand beaches that stand out in dramatic contrast to the dark-green forests that cover the island. Sand gets its color from the materials of its origins, and the striking whiteness of Amami-Oshima's sand derives from a number of sources. One is the reef offshore, where the stark white skeletons of the coral are broken and worn down by thousands—sometimes millions—of years of wave action as they are carried to shore. A close look at the sand also reveals bits of shell, which is made of the same calcium carbonate as coral. Fish also contribute to the buildup of beaches: parrotfish and other species eat bits of coral skeleton along with the algae they scrape off the reefs, then grind up and excrete the indigestible coral as grains of sand. One fish is capable of producing more than 100 kilograms of sand in a year.