Kuroshio Current

High mountains and the warm moist air brought by the Kuroshio Current from the south combine to bestow ample rainfall and lush forests on Yakushima. The fast flow of the current's surface water also has an influence on both marine and land ecosystems. The fertile sea and the island's subtropical climate make Yakushima the northernmost frontier for coral reefs in Japan.

About the Kuroshio

The Kuroshio (literally, "Black Current") is 600 to 700 meters deep and about 200 kilometers wide at its broadest point. The fast-flow area of the current is narrower, at around 40 kilometers. The current originates off the eastern coast of the Philippines and typically travels to the east of Taiwan into the East China Sea, proceeds northward to the west of Okinawa and the Amami Islands, passes back into the Pacific through the Tokara Strait, then flows northeastward to the east of Yakushima and Tanegashima. The water is warm, salty, and clear. The temperature of the current, like its direction and speed, varies with location, season, and wind, but generally ranges from 15 to 30°C. Even in midwinter, the average temperature of the water is 19.2°C.

The Kuroshio brings nutrients and minerals that help sustain a diversity of marine life, and corals and tropical fish flourish in the warm water. Sea turtles also migrate along the current and go ashore on Yakushima for nesting.

Diving and Snorkeling

Yakushima offers ample opportunities for diving and snorkeling at such beaches as Kurio and Isso, both ideal locations for viewing subtropical and tropical fish in an extratropical region, against a backdrop of granite formations in the water.

Kurio Beach

The warm water of the Kuroshio flows just off Kurio Beach, providing an optimal habitat there for many tropical fish. Leading species include the Indo-Pacific sergeant and oriental butterflyfish. According to a 2010 study published by the Ministry of the Environment, 91 fish species and 34 coral species have been found in the region's waters. At low tide, the Tzukazaki Tidal Pools at Kurio turn into a natural aquarium of juvenile fish, sea anemones, corals, sea urchins, and starfish.

<u>Getting there</u>: By car, about 42 minutes from Anbo Port, 68 minutes from Miyanoura Port, or 51 minutes from Yakushima Airport

Isso Beach

Isso is known for its large catches of blue mackerel, which are attracted to the rich feeding ground created by the Kuroshio. Corals in the waters at Isso include *lobophyllia* lobed brain, *poritidae* stony coral, and *merulina* ridged, or ruffled, stony coral. The favorable conditions of Isso Beach, including wind, tide, and shallow seabed, make it a popular diving spot, especially from July to October when the Kuroshio approaches Yakushima, raising the water temperature and increasing the water clarity. Diving with an instructor is recommended.

<u>Getting there</u>: By car, about 40 minutes from Anbo Port, 14 minutes from Miyanoura Port, or 29 minutes from Yakushima Airport

Fisheries Industry

The waters surrounding Yakushima are home to the greatest number of fish species in Japan. This is due in part to the Kuroshio, which brings fish from south of the island as well as plankton and other nutrients that the fish feed on. Flying fish and mackerel are the main catches; other local specialties are Japanese bluefish, Japanese butterfish, greater amberjack, skipjack, spanner crab, spiny lobster, abalone, and prawn.