The Kuroshio Current and Its Effect on Amami-Oshima

The Kuroshio current is one of the world's major ocean currents. Originating off the eastern coast of the Philippines, it flows northward along the east side of Taiwan and the Ryukyu Islands, including Amami-Oshima. It then passes the eastern coast of Japan, forming the western side of the clockwise current that circles the northern Pacific. The Kuroshio current is warm and fast-flowing, traveling at a speed of 4 kilometers per hour. It has a huge effect on the climate and weather patterns of the islands along its route, and on the makeup of the coastal seas. The heat of its waters helps to induce the cloud formations that bring Amami-Oshima its plentiful rainfall, and contributes to the island's warm, humid subtropical climate, lush broadleaf forests, and diverse marine life.

The "Black Current"

Kuroshio means "black current" in Japanese. The current gets its name from its dark appearance in contrast to the lighter blue of surrounding waters. The dark color comes from the ocean depths; the current itself is almost transparent thanks to the lack of marine organisms in the nutrient-poor waters at its upper levels. Still, many fish species use the speedy current for migrating and spawning. Ocean scientists looking for the reason why rich fish stocks are found in these nutrient-poor waters call this phenomenon the "Kuroshio Paradox." Some recent studies suggest that there is another layer containing a nutrient stream far below the surface.