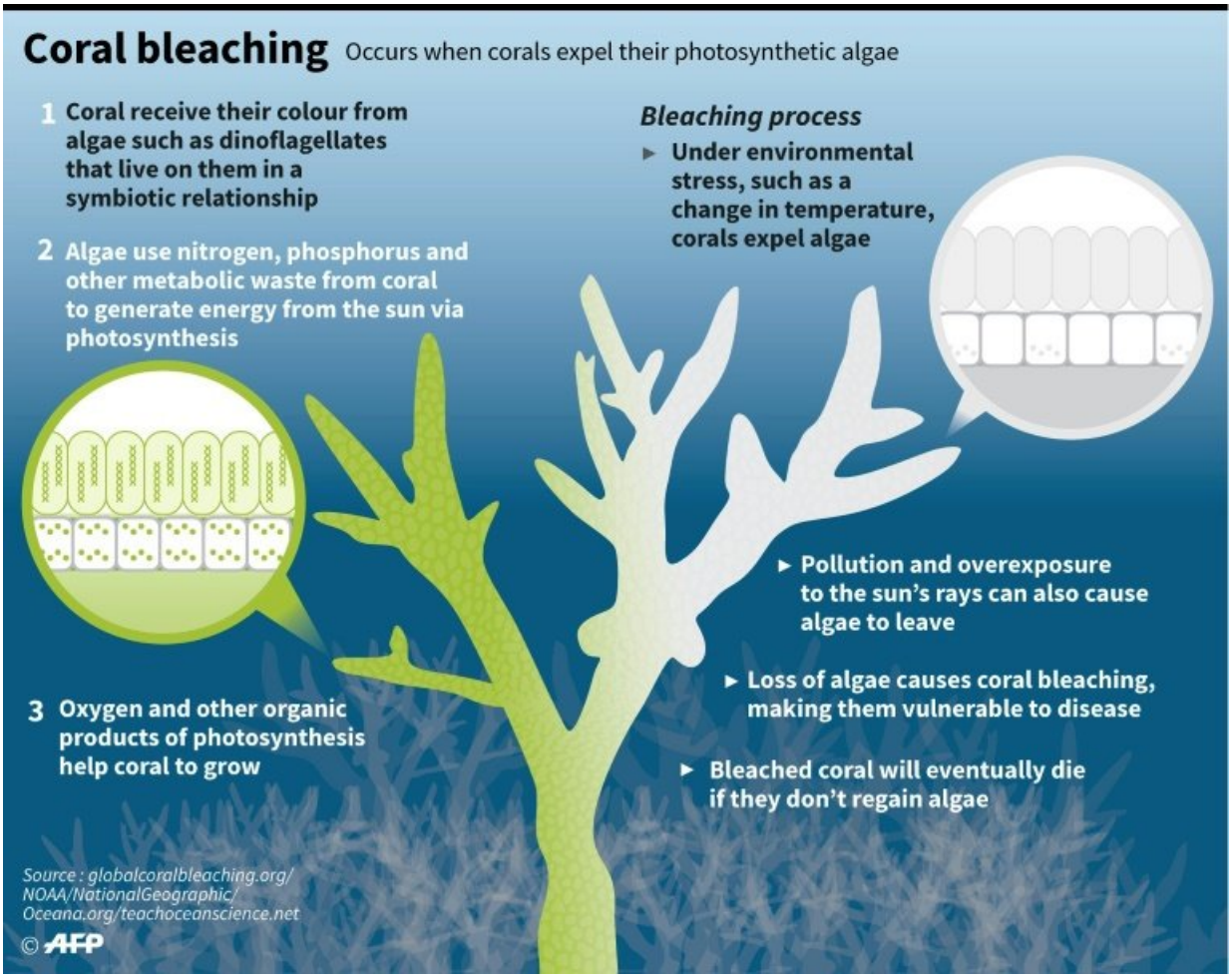
Cold water devastates coral reefs off Japan: survey

April 18 2018



Coral bleaching

Unusually cold water has devastated some of the world's most northerly coral reefs, which lie off the coast of western Japan, an environment ministry official said Wednesday.

The ministry surveyed the reefs in recent months and found widespread bleaching, with between 90 to 100 percent of each of the six spots surveyed affected.

In four of the surveyed areas, researchers have reported between 85 percent and 95 percent of the bleached areas were now dead, said Yuto Takahashi, a ranger at the regional ministry office that conducted the survey.

The devastation is thought to be the result of unusually cold water temperatures in the area this year, partly produced by the meandering of the Kuroshio current, he told AFP.

"Very strong cold fronts of the winter contributed to the low water temperature," he said.

"The meandering of the Kuroshio current is also known to have lowered water temperatures" off Wakayama and other areas along the Pacific coast, he added.

The Kuroshio is a warm current in the northwestern Pacific Ocean, and its unusual movement away from the area brought up cold water from the depths.

Little is known about exactly why the Kuroshio current changes its flows, but scientists have observed the meandering phenomenon six times since 1965, most recently last summer.

The phenomenon results in lower water temperatures, changes the

locations of fishing grounds and even affects ship navigation, according to the Japan Meteorological Agency.

Coral bleaching and death is irreversible, but differs from similar events seen in other more southerly reefs.

"This is different from coral bleaching in the Great Barrier Reef or Okinawa, which is caused by unusual warming of water temperatures," Takahashi said.

"Water in our region is cold, which makes the corals very vulnerable."

Ironically, the warming water that is bleaching corals further south could create a more stable environment for corals in northern areas.

Campaigners have warned that environmental changes including warming water and pollution are causing significant bleaching of corals around the world.

Corals make up less than one percent of Earth's marine environment, but are home to more than 25 percent of marine life.