



This white-topped coral crab lives in Australia's reefs.

Sea Search

Scientists find surprises in the Great Barrier Reef.

The Great Barrier Reef is home to colorful fish and eye-catching coral. What else is hiding in the world's largest coral reef? Scientists recently dived in to find out.

A team of scientists explored the Great Barrier Reef. That reef is northeast of Australia. The team also studied the Ningaloo Reef. That reef is west of Australia.

The scientists found hundreds of animal species, including some that may be new to science. Scientists saw worms shaped like trees. They also spotted strange shrimp and stingless jellyfish.

"It is awe-inspiring to know that so much of what we see has not yet been described," says Patricia Hendriks. She took part in the **expedition**. That is a trip

with a specific goal. "[The reef] is truly a beautiful place with so many mysteries."

Collecting Coral

Scientists wanted to get a closer look at soft coral. Using netted bags and their hands, the scientists

scoured, or searched, the reefs. They found about 130 types of soft coral that may be new species.

A lot is known about hard coral (see "What Is Coral?"). But soft coral is more of a mystery. The creatures are very **diverse**, or varied. Some are shaped like

bushes or fans. Others are whips that twist in the water. They grow in a rainbow of colors.

Despite the variety, some types of soft coral look alike. "[This makes] them a challenge to study, and so very little is known [about them]," Hendriks told *WR News*. She and other researchers took samples of the soft coral. They hope to identify the new species.

The scientists also studied the creatures living in and around the coral. They looked through pieces of coral in buckets. The search turned up small **crustaceans**, including a shrimp with a giant claw. A crustacean is an animal that has a firm shell and usually lives in water.

The reef research isn't done yet. The scientists plan to return to the same spots every year for the next six years. They left 36 plastic "houses" on the ocean floor. The scientists hope the coral reefs' creatures will move into the houses. That will make it easier for scientists to study them.

Ocean Resources

The scientists' findings could help humans. Some sea plants

What Is Coral?

Coral may look like plants, but they are actually made up of little sea animals called polyps.

There are two types of coral, soft and hard. Soft coral grow in a variety of shapes and sizes. Hard coral build coral reefs. When the polyps die, they leave behind hard shells. Young polyps attach themselves to the old shells. In time, the polyps form a coral reef.



A close-up look at hard coral polyps

and animals are used in medicine. Researchers can also study how the creatures handle pollution and climate change. That might give scientists ideas on how people could better **adapt**, or change.

The discoveries will be part of the Census of Marine Life. That will be a report listing all ocean life. It will be released in 2009. More than 80 countries, including Australia, are working on the report.

Knowing what creatures live in oceans is important, scientists say. That's especially true, they explain, because one-third of the world's coral reefs are in trouble. "If we don't know what is present in the first place, how are we ever going to protect it properly?" asks Hendriks. "Learning about new species is an important step." **WR**

THINK CRITICALLY: What might be some threats to coral reefs?

Far-Out Finds

What sort of species did scientists spy in Australia's reefs? Here are a few that made a splash.



A **Christmas tree worm** nestles into a coral reef. The small, brightly colored worm uses "branches" to breathe and eat.



This **green-banded snapping shrimp** has a supersized claw on one side. The tiny lobster lookalike was found in dead coral on a reef.



This bright **gorgonian fan** quickly won the hearts of researchers. The soft coral fan stretches more than 3 feet tall.



These **fan worms** catch food with their feathery arms. Scientists say the orange creatures are related to leeches and earthworms.