

BY GERRY BISHOP; PHOTOS BY TOM AND THERISA STACK

In warm, shallow seas around the world, tiny creatures called corals are hard at work. They're growing stony "skeletons" around their bodies. Year after year, these skeletons pile up upon themselves, forming underwater wonderlands known as coral reefs.

Corals have been creating reefs for millions of years. But today, corals are having trouble surviving. And as the corals die, the reefs they build begin to disappear. That has happened in many parts of

the Florida Keys (see map on page 33).

The good news is that people are trying to bring the corals back to health. Dive into the next few pages to find out how some teens are helping one kind of coral in particular: *staghorn*.

Operation Coral

Some kids in Florida go to great depths to help endangered corals!



CAN WE SAVE THE STAGS?

Not long ago, the coral reefs in the Florida Keys were healthy and growing. They provided homes for thousands of species of fish and other underwater creatures. And people came from all over the country to snorkel and deep-sea dive here.

Among the most common corals were the staghorns. Staghorns look a little like deer antlers. (Male deer are called “stags.”) Their branching shape makes them one of the most interesting of all corals.

But now, most of the staghorns are gone. Many were wiped out by a hurricane back in 1960, and others were killed by disease and pollution. Rising sea temperatures due to global warming have affected them,

too. Without the staghorns, the reefs of the Florida Keys just aren't the same.

And that's where scientist Ken Nedimyer comes in. He's in charge of the Coral Restoration Project. His goal is to do everything possible to restore, or bring back, the Florida reefs to the way they once were.

A SMALL BEGINNING

For Ken, reef restoration starts small—with tiny pieces of healthy staghorn coral. Ken and his team of helpers keep the pieces of coral in aquariums, glued to concrete bases, until they grow larger. Then they take them to an underwater “nursery” on a patch of sand at a place called Molasses Reef. Here, the staghorns are “planted” and left to grow.



FIRST STEPS: Teen volunteers glue tiny pieces of staghorn coral to concrete bases and leave them to grow in a “nursery” on a

sandy sea bottom (photo 1). After the corals become larger, the teens dive back down, remove the corals (2), and clean the bases (3).



MAP: The underwater nursery is on Molasses Reef in the Florida Keys.

MOVING UP: Teens haul the cleaned corals to a boat waiting at the surface (1). The corals will be moved to reefs that no longer have staghorns. For now, it's time to show off a job well done! (2) From left are Becca, Julia, Joanna, Elliot, Jenna, and Jonathan.



After the staghorns get a good start, Ken and his team transplant them to nearby coral reefs that no longer have staghorns.

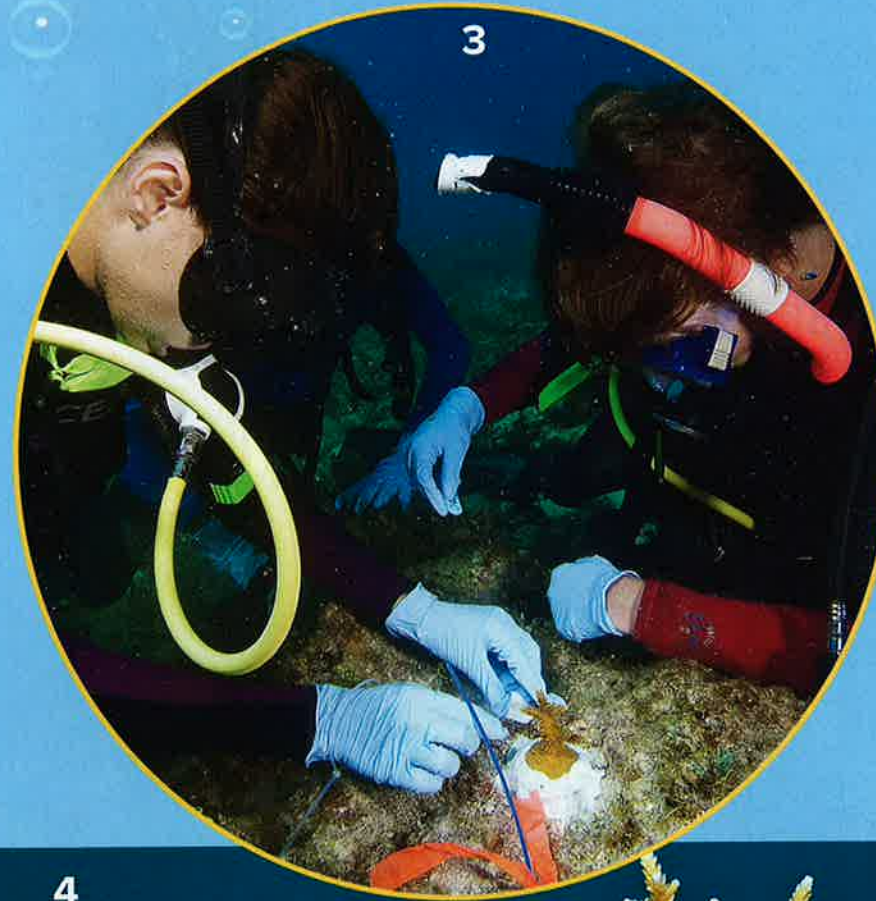
TEENS KEEN TO HELP

Ken couldn't do this job without lots of help from volunteers—including students at nearby Upper Keys High School. "These kids are the greatest," Ken says. "If the project is successful, it will be mostly because of them."

Teens from Upper Keys began helping Ken in 2006 and are still helping him today. Kids also come from other parts of Florida to pitch in and to learn about coral reef biology.

Last summer, 21 students from Tampa, Florida, were part of a huge good-news story. They discovered that the corals transplanted to Molasses Reef were releasing eggs and sperm! These combine in the seawater to produce coral larvae. And the larvae go on to become full-grown corals. In other words, the corals were making babies!

To Ken, this discovery was



HAPPY ENDING: The teens take the young corals to a reef where staghorns once lived. Here, they "plant" them with strong glue (3). They hope these corals will grow to be strong and healthy, like this one (4).

really exciting. "We think that getting healthy corals to reproduce on their own is key to rebuilding the reef," he explains. This won't solve the problems with disease, pollution, and global warming, but it's one step closer to saving staghorn corals.

"We've made it possible," Ken says, "for staghorns to help themselves make a comeback!"

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Rangers: We thank Ken Nedimyer, president of the Coral Restoration Project, for his help with this article. —R.R.