Sunday, June 12, 2005
Daytona Beach News Journal

Dumping, overfishing, 'bleaching' among threats

For a natural Florida reef to thrive, be it the extensive shallow structure off Key West or the deep Oculina ridge off Daytona Beach, living coral must cover 30 to 40 percent of its expanse. But the state's coral reefs and most others around the world are losing that cover too fast to sustain these ecosystems critical to marine life, great and small. Coral cover remains on less than 7 percent of many of the reefs in the Florida Keys. Some studies estimate that at the present pace 70 percent of the world's coral will die in this century.

Pollution and sedimentation from development, dredging, trash dumping, septic drainage, farming, overfishing, and "bleaching" from global warming are contributing to the extinction of reefs. Without coral, without the reefs these tiny animals build, vast marine nurseries will disappear and with them the ecosystems that sustain commercial and sport fisheries, tourism (Florida's shallow reefs yield $1.5 billion in tourism a year) and buffer coastlines against destructive wind and waves.

In spite of the benefits of coral reefs, the state and national governments are slow to protect and rehabilitate them. Research is too often underfunded. The deep-water reef near the Gulf Stream between Daytona Beach and Fort Pierce is formed by a single species, the ivory tree coral, unique to this reef. It wasn't discovered until 1975. But even after researchers reported its importance -- some 350 species of fish, mollusks and crustaceans depend on it for habitat -- the nets and cables of shrimp and fishing trawlers continued bulldozing the reef, and bottom fishermen proliferated, damaging the coral and taking too many of the marine species critical to sustaining the ecological balance. Studies show that grouper, a seriously depleted food and sport fish, is recovering on the healthy portion of the reef but few are found where the ivory tree coral has died.

The Oculina reef is federally protected now between Cape Canaveral and Fort Pierce, but a patrol boat had to be put into service last year to curb incursions of poaching trawlers and fishing vessels that were continuing the destruction. A fishery management council last year extended indefinitely a ban on bottom fishing and trawling on parts of the reef and will meet this week to review a rule to address overfishing in other areas. The reef needs more protection.

Establishing the 2,800-square nautical mile Florida Keys Marine Sanctuary in 1997 remains the most significant commitment to date toward protecting this nation's shallow tropical reefs. It required the state to improve water quality protection, vital to the coral polyps that filter calcium substance from sea water to form the skeletal structure that becomes a reef. It also reduced fishing pressure in part of the preserve. The National Marine Fisheries Service now proposes to add two coral species, elkhorn and staghorn, to federal endangered species lists. They lay the physical foundation for most of Florida's tropical reef system. They belong on the state and federal lists. That would also afford protection to other corals growing near them.

Only through concerted efforts at all levels of government and with international cooperation can life-sustaining corals be saved. A healthy coral polyp grows its skeletal structure at no more than 1 percent per day; a colony may need a dozen years to raise a coral head a foot off the sea floor. They need our help to do their amazing work.