

CRUISING CLUB OF AMERICA
ENVIRONMENT OF THE SEA NOTES

APRIL, 2008

1. Sailors For The Sea's "Around The Americas Project". Sailors For The Sea, a non-profit organization dedicated to providing education, programs and resources to motivate sailors to preserve and protect the oceans, has launched the "Around The Americas Project", a circumnavigation by sailboat, skippered by CCA member Mark Schrader, of North and South America via the Northwest Passage and Cape Horn, intended to build awareness throughout the Americas of the precipitous changes which are occurring at the poles and along our coasts. The program will feature educational feeds to classrooms, media events at each stop and, ultimately, a film and a book about the expedition. An effort will be made to keep the voyage as environmentally neutral as possible. Among the founders of Sailors For The Sea, were CCA members David Rockefeller, Jr., Ned Cabot and Rick Burnes. For more information about this project and Sailors For The Sea generally, including its Clean Regattas Program, go to www.sailorsforthesea.org.

2. Bonnell Cove Foundation Supports S.E.A.s "Green Vessels" Program. The Bonnell Cove Foundation has given a seed grant to the Sea Education Association to launch an initiative to develop a voluntary certification program, to be known as Certified Sea Friendly (CSF) which will seek to encourage the sea friendly construction, operation and maintenance of sail training and recreational vessels through green product review and evaluation, vessel certification and public education. S.E.A expects to work with a number of partners, including the CCA, on this project. An organizational meeting will be held in June at the Wood's Hole campus of S.E.A. John Bullard, President of S.E.A., is a member of the CCA and of its Environment of the Sea Committee. For updates on the progress of CSF and information about getting involved in the program, contact Chris Havard, the project director, at crhavard@hotmail.com, using the subject line "CSF News".

3. Carbon Neutral Fishing Tournament. In its March, 2008 issue, Time Magazine reported that corporate sponsors of the Miami Beach Sailfish Tournament purchased carbon credits to offset the carbon dioxide created by boat engines and travel to the tournament.

4. A Boat That Runs On Wave Power. On March 11, the New York Times reported that the Suntory Mermaid II, a catamaran powered entirely by wave swells was about to depart from Hawaii on a voyage of some 3,780 miles to Japan. It is expected that the boat will average three knots per hour. The propulsion system, which is mounted under the bow, is designed to pull the boat by transferring wave

energy into propulsion power. There is a backup motor and sail aboard the boat. Progress of the voyage can be tracked at www.suntory-mermaid2.com.

5. More On Waves, Tides and Energy. The Pacific Gas & Electric Company has announced its support for plans to build the country's first commercial wave power plant off Northern California according to an article in the December 18, 2007 issue of the San Francisco Chronicle. PG&E will buy power generated by a "wave park". Peter Darby, the Chairman and CEO of PG&E is a member of the San Francisco Station of the CCA.

Further north, researchers at Oregon State University have begun testing several technologies off the coast of Oregon to capture wave energy. There is concern on the part of some that not enough is known about the possible effects of wave farms on migrating fish and whales. Plans are to keep the parks out of sensitive areas.

The March 17, 2008 issue of Fortune reported on various efforts off Scotland to tap tidal and wave energy to generate electric power. According to the magazine, Scotland is poised to become the world leader in this renewable energy source.

The technology of using wave energy to generate electric power is in its infancy and its commercial feasibility has yet to be proven.

6. New Books On The Deep Ocean. Two books published by the University of Chicago Press in 2007 provide a fascinating look into the deep oceans – the abyss – about which relatively little is known. The Silent Deep – The Discovery, Ecology and Conservation of the Deep Sea, by Tony Koslow, Director of the California Cooperative Oceanic Fisheries Investigation program at the Scripps Institution of Oceanography, traces the history of the discovery of the deep sea, describes the ecology of its ecosystems, details the impact of human activity on the deep sea and argues for the importance of conservation efforts. The Deep, a magnificent book edited by journalist Clair Nouvian, contains many breathtaking photographs of the extraordinary creatures which inhabit the deep ocean. She notes that only about 5% of the seafloor has been mapped in any detail and that estimates of the number of specimens yet to be discovered in the deep ocean vary between 10 and 30 million, making it the largest reservoir of life on earth.

7. Seafood In The News.

- (a) On April 10, 2008, the Pacific Fishery Management Council voted to cancel the chinook fishing season off the coast of California and most of Oregon this year. In January the Council had reported that California's Central Valley fall run of Chinook salmon plummeted to record lows. According to an article appearing in the March 24 edition of the San Francisco Chronicle, scientists are saying that the most likely explanation for this development was a combination of the pumping of record amounts of water from the Sacramento-San Joaquin River Delta to Southern California, which degraded the habitat of the salmon, and the absence of

sufficient food for the fish to survive when they reached the ocean. The Council's vote is subject to approval by the National Marine Fisheries Service by May 1. The governor of California declared a state of emergency. The closing of the season is seen as a threat to the survival of the fishing community and a development which will have a huge impact on the economy of the State.

- (b) The Washington Post reported on November 23, 2007, that according to federal and state scientists the Chesapeake Bay's blue crab population has declined to levels which are the second lowest in 17 years, notwithstanding an effort started in 2001 to save the crabs. A professor at the U.S. Naval Academy believes that this species of crab may be reaching a breaking point. The decline is attributed to a combination of climate change, which has made the water too warm for a species of grass in which the crabs seek shelter, run-off which washes manure, treated sewage and fertilizer into the Bay, causing algae bloom which removes oxygen, and overfishing by the Bay's watermen.
- (c) On a positive note, scientists at M.I.T. believe that they have successfully designed a dredge which uses water jets to dislodge scallops without touching the seafloor and which takes less effort to float than a conventional dredge and is therefore more fuel efficient to use. In tests carried out off the Isle of Mann by the University of Wales, using both the new and a traditional dredge, both dredges caught the same number of scallops, but the new dredge caused much less damage. (The Economist, December 8, 2007)
- (d) The first of a two-part series of articles in the New York Times entitled "Empty Seas" appearing in the January 14, 2008, issue reported that a large flotilla of industrial trawlers from Europe, China, Russia and elsewhere, together with local boats, have thoroughly scoured Northwest Africa's ocean floor, causing the collapse of major fish populations.
- (e) The second of the New York Times articles in this series, published the following day, detailed how overfishing has resulted in \$1.6 billion worth of illegal seafood entering Europe each year. Prices for such fish have increased dramatically in response to surging demand for seafood.
- (f) On January 23, 2008, the New York Times reported that high levels of mercury were found in tuna sushi sold in 20 Manhattan stores and restaurants. Experts believe that similar results would be found elsewhere. Levels were such that a diet of six pieces of sushi per week would exceed levels considered safe by the EPA.

8. A Luxury Trawler Using No Fossil Fuel and Producing Zero Emissions? The March, 2008 issue of Passagemaker carried an article entitled “A Green Silver Bullet – The Quest For Sustainable Alternatives”, which described plans to design and build a “totally green” 60’ trawler whose systems would be completely sustainable using renewable energy based on existing technology. The boat has been designed by Ladd Yacht Design. The idea is to create a cruising boat that uses no fossil fuel and produces no emissions at a cost comparable to a traditional trawler of that size. The search for a builder and financing are under way. .

9. New Ocean Map Shows Impact of Human Activity. A map published in the February issue of Science dramatically shows how 17 different human generated “stressors”, such as coastal runoff and pollution, climate change, fishing and oil drilling, overlapped with various maps of ecosystems, data for shipping, satellite imagery and scientific buoys to produce impairment scores onto square kilometer-sized parcels of the oceans world-wide. The exercise demonstrated that virtually no part of the world’s oceans have been unaffected by human activity, that just 4% of the oceans are “pristine” and that over 40% have been severely compromised.

10. Biological Deserts in the Oceans Growing. According to an article appearing in the January 25, 2008 edition of Science Now Daily News, an on-line publication, the oceans’ biological deserts are expanding. Evidence for this conclusion came from the Sea-Viewing Wide Field-of-View Sensor aboard the orbiting SeaStar spacecraft, which maps ocean color around the world. The dead zones in the North and South Pacific and North and South Atlantic appear to have expanded by about 15%. Only the dead zone in the south Indian Ocean did not expand. Scientists suspect that the growth of the dead zones is attributable to global warming.

An article published in the February 20, 2008 edition of the Los Angeles Times reported the expansion of dead zones in the waters off Washington State, Oregon and California based on research by marine ecologists at Oregon State University using video images scanned from the seabed. The scientists blame climate change as the likely culprit.

11. Japan Suspends Hunt of Humpback Whales. On December 21, 2007, NOAA announced that Japan had agreed to suspend its hunt of humpback whales following negotiations with the International Whaling Commission. The suspension will last at least until the end of the next annual meeting of the Commission, scheduled for June, 2008.

12. Increase In Beluga Whales. In late December, 2007 the NOAA Fisheries Service reported, with caution, an apparent increase in the beluga whale population in Cook Inlet, near Anchorage, Alaska.