

# COVER PHOTOGRAPH AND FRONT MATTER: SOUTH AFRICAN KELP FOREST

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## **COVER PHOTOGRAPH**





**South African Kelp Forest.** Protected by small rocky promontories south of the harbor of Simon's Town, South Africa, this kelp forest occurs in a cove located on the shores of False Bay on the eastern side of the Cape Peninsula. Simon's Town (also referred to as Simonstown) was originally named Simon's Vlek after Simon van der Stel, the Dutch governor of the Cape Colony between 1677 and 1699, who surveyed the bay east of Cape Town in 1687. This section of coast, characteristic of much of the shore in the vicinity of Cape Town, contains small coves with white sandy beaches and calm shallow waters that are interspersed between boulders of Cape Granite. Kelps common to the Cape Peninsula and the west coast of South Africa include Sea Bamboo (*Ecklonia maxima*), Split Fan Kelp (*Laminaria pallida*), and Bladder Kelp (*Macrocystis angustifolia*). The kelp canopy provides a complex, three-dimensional habitat for thousands of species of fish, invertebrates, and other seaweeds. Because kelp beds, sometimes referred to as forests of the sea, support high primary production levels, they are among the most productive ecosystems on earth. This high productivity forms the base of many coastal food webs in cool water environments worldwide. (Photograph taken in April 2014 by Charles W. Finkl, Coastal Education and Research Foundation */CERF/*, Fletcher, North Carolina, U.S.A.)

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5130 NW 54th Street

Coconut Creek, FL 33073, U.S.A.

cmakowski@cerf-jcr.com

EDITORIAL ASSISTANT

Barbara Russell Coastal Education and Research Foundation, Inc. [CERF] 5130 NW 54th Street Coconut Creek, FL 33073, U.S.A. barbara@cerf-jcr.com

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Chicago, IL 60602, U.S.A.

jon@mediamine.net

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Media Mine

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#### **RÉDACTEUR-EN-CHEF**

e-mail: cfinkl@cerf-jcr.com

111 W Washington, Suite 1100

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The Coastal Education and Research Foundation [CERF] is a nonprofit society dedicated to the advancement of the coastal sciences. The Foundation is devoted to the multi-disciplinary study of the complex problems of the coastal zone. The purpose of CERF is to help translate and interpret coastal issues for the public and to assist professional research and public information programs. The Foundation specifically supports and encourages field and laboratory studies on a local, national, and international basis. Through the medium of scientific publications, television, and radio CERF brings accurate information to the public and coastal specialists on all aspects of coastal issues in an effort to maintain or improve the quality of shoreline resources.

Because CERF is concerned with broad environmental issues, our efforts concentrate on significant problems such as maintenance of good quality (potable) water with adequate supply, and hazards associated with potential beach erosion, flooding, and susceptibility of developed shorelines to storm surge and wave attack. By focusing attention on these potential man-made and natural hazards, it is hoped that our research efforts will help others improve the quality of life in diverse coastal areas. CERF thus aims to stimulate awareness of coastal (marine and freshwater shorelines) land and water problems; initiate and foster research and innovation to promote long-term coastal productivity; establish an educational forum for the debate of contentious coastal issues; and develop new principles and approaches for enlightened coastal management, and encourage their adoption and use.



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Dr. Charles W. Finkl is President and Executive Director of the Coastal Education & Research Foundation [CERF], publisher of the JCR. Charlie, a founding editor of the Journal of Coastal Research, has served as Editor-in-Chief for the past 30 years. He is a Research Professor in the Department of Geosciences at Florida Atlantic University in Boca Raton, Florida. He received his Bachelor and Master of Science degrees from Oregon State University and the Ph.D. from the University of Western Australia. He is a member of more than 20 professional societies and has published more than 200 professional papers, books, and reports. He is a Chartered Marine Scientist (CMarSci) [Institute of Marine Engineering, Science and Technology], Certified Professional Geological Scientist (CPGS) [American Institute of Professional Geologists (AIPG),], Certified Professional Soil Scientist (CPSSc) [American Registry of Certified Professionals in Agronomy, Crops, and Soils], and a Professional Wetland Scientist (PWS) [Society of Wetland Scientists]. Charlie has field experience in parts of the USA, Caribbean area, Brazil, Honduras, Russia, South Africa, Western Europe, Australasia, and South Pacific islands. He is also the Series Editor of the Encyclopedia of Earth Sciences Series that is published by Springer (Germany). There are more than twentyeight volumes in the Series and about twenty-five are available online. Charlie also serves on the Editorial Board of the International Journal of Environmental Studies (Routledge) and is an occasional peer reviewer for many other professional journals.

Charlie has interests and expertise in the general areas of surficial geology, coastal and marine geomorphology (including coastal classification), coastal/marine biophysical environments, exploration geochemistry, soils and weathering (regolith geology), coastal zone management and engineering applications or impacts on natural systems (including erosion control and shore protection), coastal hydrology including submarine freshwater and mineralized seeps, subaerial and marine structural geology, natural hazard mitigation in coastal zones, marine environments and coastal wetland protection and restoration, and remote sensing (e.g. land cover classification in coastal wetlands, advection-diffusion turbidity plumes in coastal waters, delineation of bottom types and sand resources), effluent disposal and pollution of wetlands and estuaries, water resources mapping and conservation, time series studies of wetland hydroperiod and soil moisture.

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The International Coastal Symposium (ICS) was originally set up by Per Bruun (deceased) and Charlie Finkl as the official meeting of the Coastal Education & Research Foundation (CERF), with one of the first meetings being held in Hilton Head, South Carolina, in 1993. After the repeated success of these meetings, CERF moved the ICS to the international scene holding these conferences in conjunction with local sponsors in Australia, Brazil, Iceland, New Zealand, Northern Ireland, Poland, and Portugal. The ICS brings together delegates from all over the world to collaborate and discuss the most current coastal research studies and projects. During the ICS 2014, which was held in Durban, South Africa, a grand celebration took place to mark the 30th Anniversary of CERF and the JCR. Our next ICS meeting is scheduled for the spring of 2016 in Sydney, New South Wales, Australia. For more information, please visit www.cerf-jcr.org.

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*Journal of Coastal Research*, an International Forum for the Littoral Sciences, is dedicated to all aspects of coastal research. These include geology, biology, geomorphology (physical geography), climate, littoral oceanography, hydrography, coastal hydraulics, environmental (resource) management, engineering, and remote sensing. Although each field functions effectivelywithin itsownpurview, the cross-disciplinarynature of coastal studies requires familiarity with other fields as well. Hence, the scope of topics is necessarily broad in order to address the complexity of coastal biophysical and socio-economic interactions. Because of the wide range of interrelated topics, the journal invites original contributions and manuscripts dealing with theory, methodology, techniques, and field or applied topic studies on interdisciplinary coastal issues.

The journal encourages the dissemination of knowledge and understanding of the coastal zone by promoting cooperation and communication between specialists in different disciplines. Natural scientists, for example, are encouraged to collaborate with professionals in other fields to prepare contributions relating to the coastal zone that foster increased appreciation of coastal environments and processes. By means of this journal, with its scholarly and professional papers, systematic review articles, book and symposia reviews, communications and news, and special topical issues, an international forum for the development of integrated coastal research is provided.

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