BEYOND THE EDGE OF THE SEA: AN ARTIST'S VIEW OF EXTREME ENVIRONMENTS ON EARTH. K. Jacobsen[1] and C. L. Van Dover[2], [1]*In Situ* Science Illustration, Post Office Box 3403, Ketchum ID 83340, issikj@aol.com, [2]Marine Laboratory, Nicholas School of the Environment, Duke University, 135 Duke Marine Lab Road, Beaufort NC 28516, clv3@duke.edu.

Beyond the edge of the sea—therein lies the realm that covers most of our planet and yet is not thought of by many of us from one day to the next. In this alien world there live creatures that are achingly beautiful, that have lived in the abyss for untold eons. These animals colonize environments with extreme gradients of temperature and chemistry, environments studied by astrobiologists as Earth analogues for habitats on other planets. *Beyond the Edge of the Sea* is an exhibition of watercolor illustrations by artist Karen Jacobsen, whose métier is deep-ocean landscapes and portraits of the exquisitely adapted animals that live in this unearthly word.

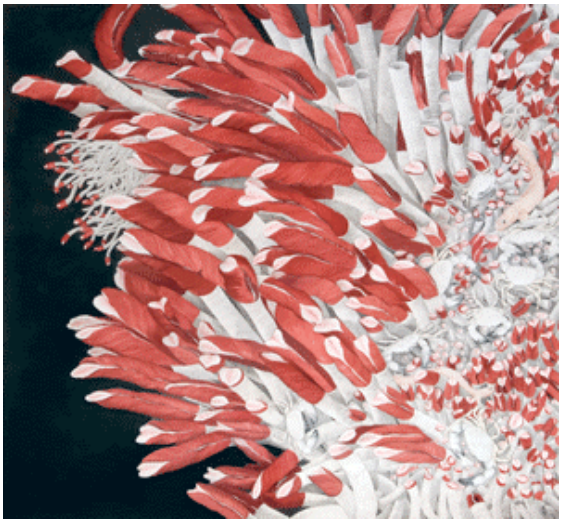
Artists have always sought and found inspiration in nature. Plant and animal specimens, landscapes and seascapes, all feature in our catalogs of illustrated natural history. But paintings of deep-sea animals and environments are very rare—they are as difficult to find as the deep-sea is to visit. Even now that thousands of individuals have dived in submersibles to the seafloor, it is only a handful who have been artists. Only one is an artist who has visited the seafloor multiple times, in the Atlantic, the Pacific, the Gulf of Mexico, who has spent months at sea studying specimens recovered from deep-sea hot springs and cold seeps as they arrive fresh on deck, recording their colors and textures, their poise.

Karen Jacobsen's deep-sea work fills many sketchbooks, hundreds of pages. It is a body of work that communicates concepts about the deep ocean using art as the lure, as a framework for exploring the natural history of the deep sea, as a medium with inherent merit as a means of communicating information about the world around us.

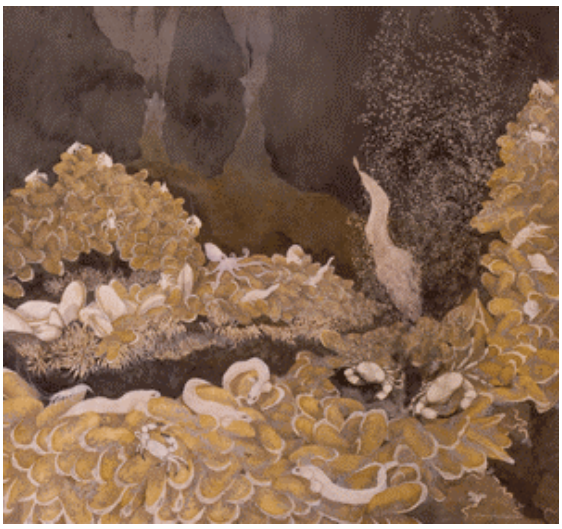
In illustrating the diversity of life and ecosystems in the deep sea, *Beyond the Edge of the Sea* teaches us that the ocean supports a great diversity of life, with emphasis on diversity of taxa, form, size, habitat, sources of energy. It also reminds us that, like space, the ocean is an unexplored wilderness, a frontier for the next generation of explorers and researchers. People love ocean and space exploration, but the general public has little understanding of or appreciation for the complexity and diversity of deep-ocean ecosystems on Earth and the strange organisms that live in the deep sea, nor how discoveries in the deep sea influence the way we think about the origin of life on Earth and the exploration for life on other planets. *Beyond the Edge of the Sea* challenges us to cherish the strange world of the abyss and reminds us that an ecosystem unimaginable just a few decades ago is a beautiful living library for astrobiological research.

***Gallery of focal pieces from* "Beyond the Edge of the Sea".** The exhibition is comprised of seventy 8.5 x 11" illustrations plus five commissioned large-format paintings that serve as focal pieces, reproduced here:

A Chorus of Tubeworms! 48" x 48" watercolor.



Pacific Mussel Bed Community.
34 ½" x 38 ½" watercolor.



Moose Vent, Snake Pit, Atlantic Ocean.
42” x 72” watercolor.

Tu’i Malila Vents, Lau Basin. 32” x 40”
watercolor, gouache, acrylic on black paper.

Black Smoker with Shrimp. 32” x 80” Diptych;
water color, gouache, acrylic on black paper.

Additional Information: Web pages, including contact information for the traveling expedition, are at http://web.wm.edu/muscarelle/exhibitions/traveling/beyond/index.html (google search words: Beyond the Edge of the Sea).

Supplemental materials include an exhibition catalog with extensive front material, a natural history brochure, an activity book for children, and guides for docents and educators.

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