OCEANS

Smithsonian Swims in New Direction

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Sant Ocean Hall

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National Museum of Natural History, Smithsonian Institution, Washington, DC.
http://ocean.si.edu/ocean_hall/

Although many factors led me to become a marine scientist, one was definitely the Smithsonian Institution's National Museum of Natural History (NMNH). I fondly remember childhood class trips to the aging marine hall. The exhibition was dim and musty, but the sheer wealth of knowledge held there made each visit a fresh and educational experience (even as an adult). I wondered whether the Sant Ocean Hall has the depth of knowledge to inspire a new generation of scientists as the earlier displays had inspired me.

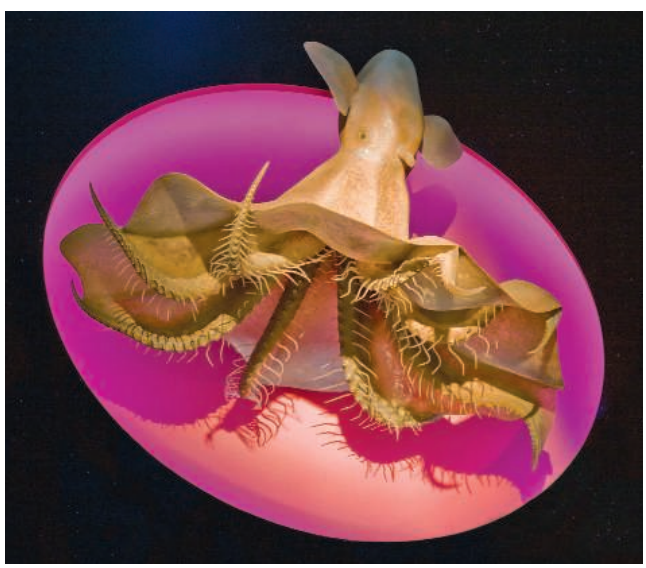
Rare and wondrous but smaller than life serves as a good description of not only the giant squid highlighted in the new hall but also the exhibit itself. Although the display of two giant squid specimens is indeed worth seeing, the preserved quality of these fascinating and elusive creatures is disappointing. A plaque above the slightly decayed carcass of the larger, 7.3-m-long specimen explains that it has shrunk as a result of preservation and is substantially smaller than its original size.

Likewise, the heralded ocean-themed hall—a first for the Smithsonian—does not quite meet heightened expectations. The Smithsonian raised $80 million for the ambitious project, including $22 million from the National Oceanic and Atmospheric Administration (NOAA), the exhibit's cosponsor. At over 2100 m^2, the Ocean Hall is the NMNH's largest permanent exhibition. Nonetheless, it can display only a small portion of the Smithsonian's 30 million specimens of ocean organisms (the largest marine collection in the world). The material is organized around the themes of how the ocean has changed over time and how marine ecosystems vary across habitat types. Using 30 "human connections" stories (which are linked to critical ocean issues), the exhibit also attempts to show visitors that "the ocean is a global system essential to all life—including yours." However, because there is no clear path through the exhibit and the pithy signage is disparate and often poorly placed, the themes break down and the displays are incongruous.

The Ocean Hall incorporates a number of interactive video components that curators can update through the expected 30-year lifetime of the exhibit. For instance, one interactive kiosk simulates ocean management, allowing visitors to manipulate parameters such as fishing controls, aquaculture controls, and monitoring and then see the effects of their decisions on the ecosystem and stakeholders. The most frequently updated part of the hall will be the two Ocean Today Kiosks, video displays that offer visitors captivating two-minute summaries on a variety of contemporary ocean topics. These well-conceived kiosks, maintained by NOAA, will be regularly refreshed with new videos (30 story lines are currently in production), and they will soon feature a ticker-type crawl with the latest ocean news. But because they have poorly functioning directional speakers and are situated in an obstructed corner, the kiosks probably will not be able to shoulder the duty of keeping the entire Ocean Hall timely and relevant.

Visitors will be entertained by some impressive marvels, such as a living coral reef and a 14-m-long replica of Phoenix, a particular North Atlantic right whale, *Eubalaena glacialis*. The 1500-gallon coral aquarium houses fish, live coral, anemones, and other organisms that were all grown in captivity or collected in a sustainable manner. Visitors also cluster in engaging areas such as the Global Ocean Systems gallery. In this room, an animated six-foot sphere aptly tutors viewers on complex oceanic processes, such as the formation of the continents.

But these attractions are small islands of excitement in a sea of last-century displays of fossils, corpselike models, and pale dead fish in jars that museum-goers quickly pass. These attempts to incorporate the museum's extensive collection into the hall are disharmonious anachronisms, given the technological scaffold of the exhibit. A video or interactive program could help visitors place the specimens within the larger conceptual context of the display and understand the value of preserved specimens to science. By presenting more actively posed models (such as the exquisite model of a dumbo octopus, *Cirrothauma magna*,with tentacles coiled in midpropulsion), the exhibit could have worked in aspects of the biomechanics of marine organisms. Also, the designers might have borrowed from one of the best aspects of the museum's Mammal Hall, the use of specimens in lifelike assemblages to communicate ecological information. For example, grouping of models or specimens could have provided insight into food webs. The implicit as well as explicit imparting of information would have added depth to the exhibit, making it more appealing to a wider audience.



Model display. The dumbo octopus *Cirrothauma magna*.

By far the highlight of the entire hall is the Ocean Explorer Theater. Here, in a video with vivid cinematography, a diverse cast of scientists describes with sincere awe their experience of discovery as they descend to the sea floor in a deep-sea submersible. The video moved me on an emotional level, reaffirming both why I love being a marine scientist and the powerful draw of the deep blue as our last natural frontier. I have no doubt that the theater and other effective parts of the exhibit will help inspire the next generation of marine researchers. The Sant Ocean Hall, although not all that I had anticipated, is still rare and wondrous.

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