

# **Richard C. Murphy, Ph.D.**

## **Curriculum Vitae**

### **EDUCATION**

Ph.D. in Marine/Systems Ecology (University of Southern California, 1982) - Focus on benthic community metabolism and population ecology of infauna  
M.A. in Marine Biology (California State University at Long Beach, 1969) - Focus on the neuroanatomy (pineal organ) of bluefin tuna  
B.A. in Zoology (University of California at Los Angeles, 1966)

### **PROFESSIONAL EXPERIENCE**

**Presently Director of Education and Science for Ocean Futures Society and involved in:**

#### **Environmental Education**

Creating and implementing "Jean-Michel Cousteau's Ambassadors of the Environment Program," an environmental education program for school children and teachers to promote marine awareness, understanding of fundamental ecological principles and personal action to protect the environment. Presently being implemented on Catalina Island, Pt. Bonita and El Capitan Canyon in California; Kona, Hawaii; French Polynesia; Cayman Islands; British Virgin Islands; and St Raphael, France; with a number of programs under development in such places as Brazil, Italy, Greece and Fiji.

Creating and implementing the Sustainable Reefs program – designed to help people around the world sustainably manage their coral reefs. This program includes a video and a cartoon book, each presented in the local languages, as well as a variety of other educational resources. The video is introduced by a hero native to each country and someone with whom young people respect and can identify. The program is being implemented in conjunction with the United Nations, Association of Small Island States unit as well as in-country Government agencies and regional NGOs.

Created educational content and resources for an internet educational program for schools on Keiko, the killer whale of Free Willy fame, for and with Classroom Connect a web based educational program.

Created educational programs and content for the Jean-Michel Cousteau Fiji Islands Resort.

Created storylines and edited scripts for a 52 part TV film series for children entitled, "Sea Scope".

Written a book entitled, Coral Reefs – Cities Under the Sea, and created educational resources to help students understand how nature works and what the reef has to teach us about living more sustainably.

Authored over 60 articles in scientific and popular publications.

Teaching a courses, with The International Ecotourism Society and other organizations, sustainable management of coastal resources.

#### **Environmental design / management**

Fiji - Creating and implementing the environmental master plan for the Cousteau Fiji Islands Resort. This involves developing energy- and water-efficient systems, reducing/reusing waste, creating "edible landscaping" for sustainable food production and implementing integrated pest management programs.

Green buildings and sustainable living infrastructure - Creating and participating in the implementation of master plans for field-study programs (Ambassadors of the Environment) on Catalina Island, California; British Virgin Islands and Grand Cayman Island; involving energy- and water-efficient systems, reducing/reusing waste, "edible landscaping" for sustainable food production, and integrating this infrastructure with an educational program to demonstrate sustainable living.

### **Underwater photography and videography**

His photographic images are the basis for a series of lectures to a variety of audiences on marine biology, ecology, the relationships between humanity and nature, environmental economics, indigenous knowledge, sustainable resource management, environmental design, environmental education.

### **Science**

Implementing long-term monitoring programs in the Fiji Islands to address coral reef health and vitality, natural change and human influence.

Collaborating on a project with the University of Waterloo and the University of California Santa Cruz on the ground truthing of high-altitude and satellite imagery to determine coral reef health and vitality.

Published and presented at scientific conferences over 30 papers

### **Work Experience primarily with The Cousteau Society and other Cousteau Organizations (1969 to 1994)**

As Director and Vice President for Science and Education with The Cousteau Society, Richard's responsibilities included the following:

To help formulate and communicate environmental policy and information to an international public, policy makers, scientists and children through films, books, magazines, scientific reports and papers, conferences, educational curricula, multi-media materials, and public lectures.

To insure scientific accuracy in all Cousteau projects and to determine and direct scientific research on Cousteau expeditions. Richard organized research aboard Calypso, Alcyone and land-based expeditions that focused a wide variety of subjects including:

- Assessing the contribution of major river nutrients to ocean productivity (Mississippi, Amazon, Sepik, Mekong)

- Determining the effectiveness of new techniques to measure ocean productivity through natural fluorescence

- Measuring coral reef productivity, nutrient dynamics and bioturbation

- Studying echolocating swiftlets which roost in caves

- Assessing the sustainability of various development strategies and landscape management programs in the Amazon and Mississippi basins, Papua New Guinea, Mekong River basin, coastline of Nayarit Mexico

- Measuring deep sea hydrothermal vent precipitates in New Zealand

- Studying water pollution in the Mississippi River

- Determining the sustainability of the upper Sea of Cortez shrimp fishery

## Studying the behavior of great white sharks

To research and coordinate filming expeditions in the Amazon, Sea of Cortez, Cocos Island, Channel Islands, Papua New Guinea, Australia, Mekong River, and Socorro Island, Mexico.

To organize and direct scientific research conducted on the following expeditions: Amazon, Mississippi, Sea of Cortez, Thailand, New Zealand, Tahiti, Papua New Guinea, Philippines, Alaska/Valdez, South Australia, Socorro Islands, British Virgin Islands, Fiji, and Nauru.

To write for and edit various media, including the 21-volume Ocean World Of Jacques Cousteau series, Cousteau magazines (Calypso and Dolphin Logs), filmstrips ("Island Earth - Lessons in Human Ecology, Four Biomes, Silent Wars in the Sea, The Life of Fishes and Undersea Exploration." Educational films scripts I wrote include "Sharks - Some Truth," "Within the Coral Lace," "Fiji: A Touch of Paradise.")

To serve as photographer on Cousteau expeditions in the Amazon, Mississippi, Haiti, Cuba, Alcyone's (Cousteau wind-ship) trans-Atlantic maiden voyage, Cape Horn, New Zealand, Papua New Guinea, Cocos Island (Costa Rica), Channel Islands (California), Australia, Indonesia, and Mekong River (Thailand, Vietnam).