

Sylvia Earle

2009 TED PRIZE

National Geographic Society, USA



Mark Thiessen

The urgency of exploring the deep frontier

More has been learned about the nature of the ocean in the past century than during all preceding human history, but at the same time, more has been lost owing to the growing impact that people are having on the sea through what is being put into it, and what is being taken out. Less than 5% of the ocean floor has been explored or mapped with the degree of accuracy known for Mars, but enough is known to realize that in the past fifty years, nearly half of the coral reefs have been lost or have seriously declined, 90% of many commercially-fished species are gone and more than 400 dead zones have appeared in coastal zones globally. Rapid global warming, sea level rise, ocean acidification and other troubling trends require urgent attention. This presentation will consider new technologies and a new era of ocean exploration vital to understand these phenomena, as well as the changes in ocean chemistry, biodiversity and the composition and structure of marine ecosystems, with special reference to the present and future consequences to humankind.

Sylvia Earle was born in Gibbytown, New Jersey (USA). She earned her BSc degree from St. Petersburg College and Florida State University. She holds a MSc and PhD from Duke University and 19 honorary doctorates. Prof. Earle is an oceanographer, explorer, author, and lecturer, Explorer in Residence of the National Geographic Society (NGS), Leader of the NGS Sustainable Seas Expeditions, Council Chair for the Harte Research Institute, Founder of the Deep Search Foundation, and formerly the Chief Scientist of National Oceanic and Atmospheric Administration (NOAA). Founder of three companies, she serves on various corporate and non-profit boards. Her research concerns marine ecosystems with special reference to exploration and the development and use of new technologies for access and effective operations in the deep sea and other remote environments. Named as Time Magazine's first Hero for the Planet and a Living Legend by the Library of Congress, she has more than 100 national and international awards. Honors include the Netherlands Order of the Golden Ark, inclusion in the National Women's Hall of Fame and the American Academy of Achievement, and medals from the Explorers Club, the Philadelphia Academy of Sciences, the Lindbergh Foundation, the National Wildlife Federation, Sigma Xi, Barnard College, the New England Aquarium, the Seattle Aquarium, the Society of Women Geographers, and the National Parks Conservation Association.

BIO