**A Bibliography of Suggested Readings**

**(compiled by Peter G. Wells, Dalhousie University, Halifax, NS)**

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Photo: Whale watching in the Bay of Fundy, off Brier Island, NS. A Humpback whale is starting to dive (pgwells).

**Introduction**

The ocean in all of its features (geological, physical, chemical, biological, ecological) must be studied, understood and protected with all energy and haste if humanity is going to thrive on our “blue planet”. What follows is a personal list of popular books on the ocean (i.e., those written for the general reader and student) that I have collected and read over six decades as a marine environmental scientist. I have found them to be informative, thought provoking, sometimes challenging and depressing, and best of all, inspirational. It is important that one wakes up each day hopeful that humanity can change its ways for the better and care more for the ocean.

The most recent books should be easily available in a local library or bookstore. Older ones may now be out of print, unless they proved very popular and influential (e.g., the four key books penned in mid-20th century by the marine biologist and writer Rachel Carson, and more recently, those written by the amazing deep sea explorer Sylvia Earle (USA) and our very own Harry Thurston, a NS writer and naturalist). The authors range from scientists to professional writers to journalists. Interestingly, the majority are scientists, wanting to communicate to the public (the general reader) about their work and concerns. Many scientists (e,g., Boris Worm, at Dalhousie Univ.) feel strongly about the need for ocean literacy, and the environmental group, Bay of Fundy Ecosystem Partnership, that I currently chair is focussed on communication related to the amazing Bay of Fundy (see www.bofep.org and Appendix 2 ).

Key books are bolded to identify core readings so as not to overwhelm the teacher. The collection is instructive as it shows that many writers have recognized a wide public interest in and concern about the coasts and oceans going back many decades. They have written about the main issues confronting the oceans and their biodiversity, and the fate of humanity (the people-ocean ties, and the implications of more people). The books describe the amazing organisms and ecologies of the coasts and oceans, and identify the most pressing ocean problems, e.g., climate change, pollution of coastal waters (Clark), Arctic chemical contamination (Cone), mercury in tuna (Ellis), coastal oil pollution (Girling, Gourlay), loss of biodiversity (Earle), and the impacts of the human population explosion (Dorst). Some of the most influential books are still in print and are considered classics (e.g. Berrill, Borgese, Carson, Cousteau and Dumas). Some of these books greatly influenced ocean policy and governance, especially those by Rachel Carson and Elisabeth Mann Borgese.

As you browse this Bibliography and especially the two Appendices, and read one or two of the books, ask yourself the question - Is progress to protect the ocean being made? Many of the books describe all the problems; others and more recent ones especially are more positive and offer solutions. The hope is that readers, especially students of all ages, will learn from the books and consider the challenges seriously. Finally, it is critical that the information in this genre of books, written for the interested and educated public, especially school teachers, filters through to policy and decision makers in a timely way. Only an engaged public working at all levels can protect what is now left in the ocean (Ellis 2003) and act for the future ocean, in this era of climate change.

**The Bibliography - Ocean Books for the Classroom (\*\*bolded ones are highly recommended and briefly described in Appendix 1)**

Ackerman, J. 1996. *Notes from the Shore*. Penguin Books, New York, London, Toronto. 190 p. [PB]

Anderson, D.W., Chapman, D.G., Howarth, R.W. et al. 1981. *Coast Alert. Scientists Speak* Out. Friends of the Earth, San Francisco, CA. 181 p. [PB]

Beebe, W. 1906. *The Log of the Sun*. Garden City Publishing Co., Inc, Garden City, New York. 321p. (Useful Chapter - Secrets of the Ocean).

Beebe, W. 1932. *Nonsuch: Land of Water*. New York Zoological Society and Brewer, Warren & Putnam, New York.259 p.

**[1] Berrill, M. 1997. *The Plundered Seas. Can the World’s Fish Be Saved?* Greystone Books, Douglas & McIntyre, Vancover, Toronto. 208 p. [PB]**

Berrill, M. and Berrill, D. 1981. *A Sierra Club Naturalists Guide to the North Atlantic Coast: Cape Cod to Newfoundland.* Sierra Club Books, San Francisco, CA. 464 p.

Berrill, N.J. 1952. *Journey into Wonder. The story of man’s discovery of the natural world around us.* Dodd, Mead & Company, New York. 338 p.

**[2] Berrill, N.J. 1964. *The Living Tide*. Fawcett Publications Inc., Greenwich, Conn. 191 p. [PB]**

Berrill, N.J. 2010. *Man’s Emerging Mind. Man’s progress through time – trees, ice, flood, atoms, and the universe*. Oxford University press, Oxford, UK. 308 p. [PB] [first publ. 1955]

**[3] Borgese, E.M. 1986. *The Future of the Oceans*. A Report to the Club of Rome. Harvest House, Montreal. 144 p. [PB]**

Borgese, E.M. 1998. *The Oceanic Circle. Governing the Seas as a Global Resource. United Nations University Press*, Tokyo, New York, Paris. 240 p. [PB]

**[4] Bowermaster, J. 2010. *Oceans. The Threats to Our Seas and What You Can Do to Turn the Tide.* Public Affairs, Perseus Books Group, New York, NY. 319 p. [PB]**

Boyce, T.-M. 1999. *The Living Ocean. Understanding and Protecting Marine Biodiversity*. 2nd Edition. Island Press, Washington, DC, and Covelo, CA. 214 p. [PB]

Bulloch, D.K. 1989. *The Wasted Ocean. The ominous crisis of marine pollution and how to stop it.* Lyons & Burford, Publishers, New York. 150 p. [PB]

Burdick, A. 2005. *Out of Eden. An Odyssey of Ecological Invasion*. Farrar, Straus and Giroux, New York. 324 p. [PB]

Burger, J. 1997. *Oil Spills*. Rutgers University Press, New Brunswick, New Jersey. 261 p.

**[5] Cameron, S.D. 1998. *The Living Beach*. Macmillan Canada, Toronto, ON. 246 p. [PB]**

Carlisle, N. 1967. *Riches of the Sea. The New Science of Oceanography*. Bantam Books, Sterling Publishers Co., Inc., New York. 215 p. [PB]

**[6] Carson, R. 1951. *The Sea Around Us*. Oxford University Press, Oxford, UK. 230 p.**

**[7] Carson, R. 1955. *The Edge of the Sea*. Houghton Mifflin Co., Boston, MA. 276 p. (Also publ. in 1998, First Mariners Book Edition, Houghton Mifflin Co., New York. 276 p. [PB])**

**[8] Carson, R. 1962. *Silent Spring*. Houghton Mifflin Co., Boston, NY. 378 p. [40th Anniversary Ed. PB]**

Casey, S. 2023. *The Underworld. Journeys to the Depths of the Ocean*. Doubleday, New York. 330 p.

**[9] Clark, R.B. 1992. *Marine Pollution*. Clarendon Press, Oxford, UK. 172 p. (Third Edition)**

Clover, C. 2006. *The End of the Line. How Overfishing is Changing the World and What We Eat.* The New Press, New York, London. 386 p.

Coker, R.E. 1968. *Streams Lakes Ponds*. Harper Torchbooks, Harper & Row, Publishers, New York and Evanston. 327 p. [PB] [first publ. 1954]

Cone, M. 2005. *Silent Snow. The Slow Poisoning of the Arctic*. Grove Press, New York. 246 p. [PB]

**[10] Conkling, P.W. 1995. *From Cape Cod to the Bay of Fundy. An Environmental Atlas of the Gulf of Maine*. The MIT Press, Cambridge, MA. and London, England. 258 p. [pb]**

Coombe, T. 1996. *The Shoresaver’s Handbook. A Citizen’s Guide*. An American Littoral Society Book. Lyons & Burford, Publishers, New York. 138 p. [PB]

**[11] Cousteau, J.Y. and Dumas, F. 1965. *The Silent World*. Perennial Library, Harper & Row, Publishers, New York. 152 p. [PB].**

Cramer, D. 2001. *Great Waters. An Atlantic Passage*. W.W.Norton & Company, New York, London. 442 p. [PB]

Culliney, J.L. 1979. *The Forests of the Sea. Life and Death on the Continental Shelf*. Anchor Books, Anchor Press/Doubleday, Garden City, New York. 433 p. [PB]

Dorst, J. 1970. *Before Nature Dies*. Houghton Mifflin Company, Boston. 352 p.

Earle, S.A. 1995. *Sea Change. A Message of the Oceans*. G.P. Putnam’s Sons, New York. 361 p.

**[12] Earle, S.A. 2010. *The World is Blue. How our Fate and the Ocean’s are One*. National Geographic, Wash., D.C. 319 p. [PB]**

Ebbesmeyer, C. and Scigliano, E. 2010. *Flotsametrics and the Floating World. How One man’s Obsession with Runaway Sneakers and Rubber Ducks Revolutionized Ocean Science*. Harper, New York, London. 286 p. [PB]

Eldredge, N. 1998. *Life in the Balance. Humanity and the Biodiversity Crisis*. A Peter N. Nevraumont Book, Princeton University Press, Princeton, New Jersey. 224 p. [PB]

**[13] Ellis, R. 2003. *The Empty Ocean. Plundering the World’s Marine Life*. Island Press and Shearwater Books, Washington, Covelo, London. 367 p.**

Ellis, R. 2009. *Tuna. Love, Death and Mercury*. Vintage Books, A Division of Random House, Inc. New York. 346 p. [PB]

**[14] Fujita, R. 2003. *Heal the Ocean. Solutions For Saving Our Seas*. New Society Publishers, Gabriola Island, Canada. 227 p. [PB]**

**[15] Gershwin, L. 2013. *Stung! On Jellyfish Blooms and the Future of the Ocean*. The University of Chicago Press, Chicago, London. 424 p.**

Gibson, M. 2003. *Seashores of the Maritimes*. Nimbus Publishing Limited, Halifax, NS. 346 p. [PB]

Girling, R. 2008. *Sea Change. Britain’s Coastal Catastrophe*. Eden Project Books, Transworld Publishers, A Random House Group Company. London, UK.353 p. [PB]

**[16] Gosner, K.L. 1979. *A Field Guide to the Atlantic Seashore: Invertebrates and Seaweeds of the Atlantic Coast from the Bay of Fundy to Cape Hatteras*. (The Peterson Field Guide Series No. 24). Houghton Mifflin Co., Boston, MA. 329 p.**

**[17] Gourlay, K.A. 1988. *Poisoners of the Seas*. Zen Books Ltd., London, New Jersey. 256 p. [PB]**

Gremillet, D. 2021. *The Ocean’s Whistleblower. The Remarkable Life and Work of Daniel Pauly.*  David Suzuki Institute, Greystone Books, Vancouver, BC and Berkeley, CA. 349 p..

Griggs, B. 2001. *Reinventing Eden. The past, the present and the future of our fragile earth*. Quadrille Publishing Limited, London, UK. 303 p. [PB]

Hamilton-Paterson, J. 2009. *Seven Tenths. The Sea and its Thresholds*. Europa Editions, New York. 406 p. [PB]. A blend of literature and science. Essays.

Hardt, M.J. 2016. *Sex in the Sea. Our Intimate Connection with Sex-Changing Fish, Romantic Lobsters, Kinky Squid, and Other Salty Erotica of the Deep*. St. Martin’s Press, New York. 278 p. [PB]

Hardy, A. 1965. *The Open Sea: Its Natural History. Part 1: the World of Plankton. Part 2: Fish and Fisheries.* Houghton Mifflin Company, Boston, MA. and Riverside Press, Cambridge, UK. 335 p. and 322 p.

**[18] Hardy, A. 1967. *Great Waters. A Voyage of Natural History to Study Whales, Plankton and the Waters of the Southern Ocean*. Harper & Row, Publishers, New York and Evanston. 542 p.**

**[19] Harris, M. 1998. *Lament for an Ocean. The Collapse of the Atlantic Cod Fishery. A True Crime Story.* McClelland & Stewart Inc., The Canadian Publishers, Toronto. 342 p.**

Helvarg, D. 2001. *Blue Frontier. Saving America’s Living Seas*. W.H. Freeman and Company, New York. 299 p.

Hilborn, R. and Hilborn, U. 2019. *Ocean Recovery. A Sustainable Future for Global Fisheries?* Oxford University Press, Oxford, UK. 196 p.

Hogan, H. 2023. *Message in a Bottle. Ocean Dispatches from a Seabird Biolo*gist. Alfred A. Knopf Canada, Penguin Random House Canada Limited, Toronto. 283 p.

Hume, S., Morton, A., Keller, B.C. et al. 2004. *A Stain Upon the Sea. West Coast Salmon Farming.* Harbour Publishing, Co. Ltd., Madeira Park, BC. 288 p. [PB]

Ince, M. 1990. *The Rising Seas*. Earthscan Publications Ltd., London, with cooperation of the Commonwealth Secretariat, London, UK. 152 p. [PB]

Jones, S. 2007. *Coral. A Pessimist in Paradise*. Abacus, Little, Brown Book Group, London, UK. 242 p. [PB]

**[20] Kraus, S.D. and Rolland, R.M. 2007. *The Urban Whale. North Atlantic Right Whales at the Crossroads.* Harvard University Press, Cambridge, MA. and London, England. 543 p.**

Kunzig, R. 2000. *Mapping the Deep. The Extraordinary Story of Ocean Science*. W.W. Norton & Company, New York, London. 345 p. [PB]

Kurlansky, M. 2008. *The Last Fish Tale. The Fate of the Atlantic and Survival in Gloucester, America’s Oldest Fishing Port and Most Original Town*. Riverhead Books, Penguin Group (USA) Inc, New York.269 p. [PB]

**[21] Lear, L. 1997. *Rachel Carson. Witness for Nature. The Life of the Author of Silent Spring*. Henry Holt and Company, New York. 634 p.**

Levin, P.S. and Poe, M.R. 2017. *Conservation for the Anthropocene Ocean. Interdisciplinary Science in Support of Nature and People*. Academic Press, Elsevier, London, UK. 500 p.

Lockley, R. 1969. *The Island*. Andre Deutsch Limited, London. 192 p.

Loftas, T. 1972. *The Last Resource. Man’s Exploitation of the Oceans*. Penguin Books Ltd., Harmondsworth, England. 317 p. [PB]

Marr, M. and McElman, J. nd. *Exploring the Beaches of Passamaquoddy Bay*. Pamphlet, Huntsman Marine Science Centre, Aquarium/Museum, Saint Andrews, NB. 32 p. [PB]

**[22] Marx, W. 1999. *The Frail Ocean. A Blueprint for Change in the New Millennium*. Updated Edition. Hartley & Marks Publishers Inc., Vancouver, BC, and Point Roberts, WA. [ PB, 5th edition]. 272 p.**

**[23] Mitchell, A. 2009. *Sea Sick. The Global Ocean in Crisis*. McClelland & Stewart Ltd., Toronto. 238 p.**

Molyneaux, P. 2007. *Swimming in Circles. Aquaculture and the End of Wild Oceans*. Thunder’s Mouth Press, New York. 344 p. [PB]

**[24] Moorcraft, C. 1972. *Must The Seas Die?* Temple Smith, London, and Griffin House, Toronto. 219 p. [PB]**

Morton, J., Roff, J.C. and Beverley-Burton, M. 1991. *Shore Life Between Fundy Tides*. Pamphlet, Canadian Scholars Press, Toronto, ON. 138 p. [PB].

**[25] Mowat, F. 1984. *Sea of Slaughter*. McClelland & Stewart Ltd., Toronto. 438 p.**

Norton, T. 2004. *Underwater to Get Out of the Rain. A love affair with the sea*. Da Capo Press, Perseus Books Group, Random House, London. 385 p.

Ogburn, C. Jr. 1966. *The Winter Beach*. William Morrow & Company, Inc., New York. 321 p.

Palumbi, A.R. and Palumbi, S.R. 2021. *The Extreme Life of the Sea*. Princeton University Press, Princeton, New Jersey. 264 p.

Pannozzo, L. 2013. *The Devil & the Deep Blue Sea. An Investigation into the Scapegoating of Canada’s Grey Seal.* Fernwood Publishing, Halifax and Winnipeg. 175 p. [PB].

**[26] Pauly, D. 2019. *Vanishing Fish. Shifting Baselines and the Future of Global Fisheries*. David Suzuki Institute, Greystone Books, Vancouver, BC and Berkeley, CA. 288 p.**

Reiger, G. 1983. *Wanderer on My Native Shore. A Personal Guide & Tribute to the Ecology of the Atlantic Coast.* Simon and Schuster, New York. 286 p. [PB]

Roberts, C. 2007. *The Unnatural History of the Sea*. Island Press, Shearwater Books, Washington, Covelo, London. 435 p. [PB]

**[27] Roberts, C. 2012. *The Ocean of Life. The Fate of Man and the Sea*. Penguin Group (USA) Inc., New York. 405 p.**

Rozwadowski, H.M. 2005. *Fathoming the Ocean. The Discovery and Exploration of the Deep Sea.* The Belknap Press of Harvard University press, Cambridge, MA. and London, England. 276 p. [PB]

Russel, F. 1970. *The Illustrated Natural History of Canada: The Atlantic Coast*. N.S.L. Natural Science of Canada Ltd., Toronto, ON. 160 p.

Russell, F.S. and Yonge, C.M. 1963. *The Seas. An introduction to the study of life in the sea*. Frederick Warne & Co. Ltd., London, UK. 283 p.

**[28] Safina, C. 1997. *Song for the Blue Ocean. Encounters Along the Worlds Coasts and Beneath the Seas.* A John Macrae/Owl Book, Henry Holt and Company, New York. 458 p. [PB]**

Safina, C. 2011. *A Sea in Flames. The Deepwater Horizon Oil Blowout*. Crown Publishers, New York. 352 p.

Sapp, J. 1999. *What Is Natural? Coral Reef Crisis*. Oxford University press, New York, Oxford. 275 p.

Simon, A.W. 1979. *The Thin Edge: Coast and Man in Crisis*. Avon Books, New York. 191 p. [PB]

Simon, A.W. 1985. *Neptune’s Revenge: The Ocean of Tomorrow*. Bantam Books, Toronto. 188 p. [PB]

**[29] Snelgrove, P.V.R. 2010. *Discoveries of the Census of Marine Life. Making Ocean Life Count.* Cambridge University Press, Cambridge, UK. 270 p. [PB].**

Stow, D. 2017. *Oceans. A Very Short Introduction*. Oxford University Press, Oxford, UK. 184 p.

Struzik, E. 2009. *The Big Thaw. Travels in the Melting North*. John Wiley & Sons Canada, Ltd., Mississauga, ON. 278 p.

Tamm, E.E. 2004. *Beyond The Outer Shores. The Untold Story of Ed Ricketts, the Pioneering Ecologist who Inspired John Steinbeck and Joseph Campbell*. Raincoast books, Vancouver, BC. 365 p.

Teal, J. and Teal, M. 1969. *Life and Death of the Salt Marsh*. An Audubon/Ballantine Book, An Intext Publisher, New York. 274 p. [PB]

Thorson, G. 1971. *Life in the Sea*. World University Library, McGraw-Hill Book Company, New York, Toronto. 256 p. [PB]

**[30] Thurston, H. 1990. *Tidal Life. A Natural History of the Bay of Fundy*. Camden House Publishing, Camden East, ON. 167 p. [PB]**

Thurston, H. 2005. *The Sea’s Voice. An Anthology of Atlantic Canadian Nature Writing*. Nimbus Publishing Limited, Halifax, NS. 286 p. [PB]

Trethewey, L. 2020. *The Imperilled Ocean. Human Stories from a Changing Sea*. Goose Lane Editions, Fredericton, NB. 234 p. [PB]

Ward, N. 1995. *Stellwagen Bank. A Guide to the Whales, Sea Birds, and Marine Life of the Stellwagen Bank National Marine Sanctuary*. Down East Books, Camden, Maine. 232 p. [pb].

Weber, M.L. and Gradwohl, J.A. 1995. *The Wealth of Oceans. Environment and Development on our Ocean Planet.* W.W. Norton & Company, new York, London. 256 p.

Whitehouse, B. 2011. *A Sense of the Sea. Our View of the Sea and How We Got It*. Booklocker.com, Inc., Port Charlotte, FL. 228 p. [PB]

**[31] Woodard, C. 2000. *Ocean’s End. Travels Through Endangered Seas*. Basic Books, the Perseus Books Group, New York. 300 p.**

**[32] Wright, D.R. 2020. *Future Sea. How to Rescue and Protect the World’s Oceans*. The University of Chicago Press, Chicago, London. 192 p. [PB]**

**Afterword**

Many books about the ocean have been written in recent decades, covering the biodiversity, ecology, the many problems the ocean faces, and future changes in the ocean. An educated and interested public, one determined to see ocean science and information translated into action, is critical to protecting its health for the future.

Feedback from the Nova Scotia teachers on the use and value of this compilation of ocean-related books would be greatly appreciated – were they able to access/acquire the books that attracted their interest? Did the books help in their classroom talks and exercises? Did the students show interest and a passion for the topics? Feedback will help in our joint quest to promote ocean literacy, including climate literacy, in Nova Scotia and beyond.

**Acknowledgements**

Many dedicated writers have produced informative and inspiring works about the ocean. It is hoped that their books will continue to inspire the next generation of teachers (at all levels), their students, writers, scientists and activists to ensure that the already much changed ocean and its biodiversity is given the due care, conservation and protection with the urgency that is needed.

This document is dedicated to the late Ms. Tracy Dean of the Huntsman Marine Science Centre, Saint Andrews, NB. Tracy dedicated herself to public education, working closely with teachers and children in their classrooms over many years, in the Passamaquoddy Bay region of Charlotte County. I had the great privilege of knowing her as a colleague. Her knowledge, infectious enthusiasm for her work with young people, and dedicated service to her community will be greatly missed but not forgotten – an example to us all.

**Appendices**

**1. Brief notes on the recommended books (a personal selection)**

**[1] Berrill, M. 1997. *The Plundered Seas. Can the World’s Fish Be Saved?* Greystone Books, Douglas & McIntyre, Vancover, Toronto. 208 p. [PB]**

With a focus of fisheries, local and global, this book’s theme is that the oceans are in crisis due to overexploitation and mis-management. The book covers the law of the sea, effects of fishing (extraction, gear damage), habitat destruction, efforts on co-management, and fisheries politics. Sections on tuna, salmon, and the cod moratorium in Canada are especially interesting.

**[2] Berrill, N.J. 1964. *The Living Tide*. Fawcett Publications Inc., Greenwich, Conn. 191 p. [PB]**

This is a very readable classic on marine biology, covering many animals and plants (seaweeds), with an emphasis on shorelines – what a naturalist will find on rocky shores and in rockpools. An introduction to the lives of turtles, worms, lobsters, seaweeds, scallops, squid and seals.

**[3] Borgese, E.M. 1986. *The Future of the Oceans*. A Report to the Club of Rome. Harvest House, Montreal. 144 p. [PB]**

The international Club of Rome’s first book on the ocean, it covers in a broad way the various ocean interests, economic, military and oceanographic, and the reasons why there is a Law of the Sea, under the United Nations. The author, a prominent Canadian and authors of many books, was involved in UNCLOS as well as in a series of ocean conferences in the latter part of the 20th century. This book covers science, economics, politics and philosophy – a broad framework for the sea’s future and a detailed look at the very important UNCLOS.

**[4] Bowermaster, J. 2010. *Oceans. The Threats to Our Seas and What You Can Do to Turn the Tide.* Public Affairs, Perseus Books Group, New York, NY. 319 p. [PB]**

This is an anthology of 31 short readable essays by notable scientists, environmentalists and journalists on a full range of ocean topics. These include biodiversity, various stresses (over fishing, pollutants, plastics, acidification, etc.) and approaches required for saving the ocean. The book ends with a section on “what you can do” which is very useful, and a bibliography. This is a an excellent guide to the current state (early 21st century) of the ocean.

**[5] Cameron, S.D. 1998. *The Living Beach*. Macmillan Canada, Toronto, ON. 246 p. [PB]**

Nature writing by a noted Canadian author, it is an exploration of the coastal beach as a place and a set of ecological processes. Coastal erosion is especially discussed as “shorelines are eroding everywhere”. The chapters are very readable. Also covered is beach ownership – the politics of the coastline.

**[6] Carson, R. 1951. *The Sea Around Us*. Oxford University Press, Oxford, UK. 230 p.**

Rachel Carson’s second book on the marine environment, it is a classic of writing about the natural world. It was a global best seller. Many topics are covered, from geology to ecology, with highly readable prose. As an introduction to the ocean, it is a classic not to be missed.

**[7] Carson, R. 1955. *The Edge of the Sea*. Houghton Mifflin Co., Boston, MA. 276 p. (Also publ. in 1998, First Mariners Book Edition, Houghton Mifflin Co., New York. 276 p. [PB])**

Carson’s third book, it is an exploration of the coast – the rocky shore, the sandy shore, and subtidal corals. Beautifully illustrated, it is another one of Carson’s classics. An excellent introduction to marine biology, experienced from the shoreline.

**[8] Carson, R. 1962. *Silent Spring*. Houghton Mifflin Co., Boston, NY. 378 p. [40th Anniversary Ed. PB]**

Carson’s most famous and highly influential book, published globally in many languages, it is an environmental classic. Well worth re-reading. It is focussed on the effects of persistent chemicals on wildlife, especially pesticides and birds. Though not a book about the ocean, it influenced the development of the new science of marine ecotoxicology and programs on ocean health.

**[9] Clark, R.B. 1992. *Marine Pollution*. Clarendon Press, Oxford, UK. 172 p. (Third Edition)**

Dr. Robert (Bob) Clark, the original editor of the long-standing journal Marine Pollution Bulletin, wrote this book in support of his introductory course on marine pollution at the University of Newcastle upon Tyne. It comprehensively covers the various types of pollution, the state of some parts of the ocean, and methods for assessing the effects of marine pollution. The chapters are short and accessible, a great book to use as the basis for classes on the topic. I had the great pleasure of first meeting Bob at a conference in London in May 1978 and then served on the journal’s editorial board for many years.

**[10] Conkling, P.W. 1995. *From Cape Cod to the Bay of Fundy. An Environmental Atlas of the Gulf of Maine*. The MIT Press, Cambridge, MA. and London, England. 258 p. [pb]**

This book focusses on the Gulf of Maine and Bay of Fundy. Its eleven chapters are written by a range of scientists and naturalists, including several notable Canadians (Mann, Harvey, Thurston). The chapters cover the geology, oceanography, marine biology and ecology, and human impacts. The book is very well illustrated. It makes a wonderful companion for discussions about this important, biologically diverse and highly productive coastal ecosystem.

**[11] Cousteau, J.Y. and Dumas, F. 1965. *The Silent World*. Perennial Library, Harper & Row, Publishers, New York. 152 p. [PB].**

This is an early book about undersea exploration (the first book about the sea that I read as a youngster) by the famous explorer and scuba diver, Jacques Cousteau. It puts the reader into the sea at depth, diving into caves, meeting octopuses and sharks, and exploring sunken ships. A classic that is well worth the time to read or re-read.

**[12] Earle, S.A. 2010. *The World is Blue. How our Fate and the Ocean’s are One*. National Geographic, Wash., D.C. 319 p. [PB]**

As the cover states, “legendary marine scientist Sylvia Earle portrays a global ecosystem on the brink of irreversible environmental crisis unless we act immediately”. The oceans biodiversity, stresses imposed on it, and opportunities for action are discussed, supported by maps, an extensive bibliography, and web links. If there is only time to read one book, this one should be considered. Earle is an ocean ambassador par none. (My marine pollution class at the Bermuda Biological Station had the great privilege of meeting Dr. Earle in 2002 and were enthralled by her stories, deep ocean knowledge, and enthusiasm, an example to us all of commitment to the ocean’s future.)

**[13] Ellis, R. 2003. *The Empty Ocean. Plundering the World’s Marine Life*. Island Press and Shearwater Books, Washington, Covelo, London. 367 p.**

As a noted author of marine related books, Ellis has penned a testament to humanities mistreatment of ocean life – corals, fish, turtles, birds and mammals. It is meant to shock the reader and make him/her think seriously about the urgent need for ocean conservation. A depressing read but necessary and highly informative. It is an alarm call for action, much like Farley Mowat’s 1984 book (in this bibliography).

**[14] Fujita, R. 2003. *Heal the Ocean. Solutions For Saving Our Seas*. New Society Publishers, Gabriola Island, Canada. 227 p. [PB]**

Written by an engaged expert in marine conservation, this book is focussed on “solutions for saving our seas”. It covers various ocean areas – the coastal zone, nearshore waters, coral reefs, the continental shelf, the open ocean, and the deep sea - with descriptions of the various threats and solutions for conservation and protection - marine protected areas, marine reserves, networks of protected areas, and reformed fisheries management. The role of professional environmental advocates and ocean literacy is also discussed in the context of promoting and forming policies to protect and heal the ocean. It is a fresh look at solutions and worthy of reading and debate, followed by action.

**[15] Gershwin, L. 2013. *Stung! On Jellyfish Blooms and the Future of the Ocean*. The University of Chicago Press, Chicago, London. 424 p.**

This book is a treatise on jellyfish, both coelenterates and ctenophores. It describes their biology and ecology, and the perturbations they cause via massive outbreaks called blooms, and introductions as invasives. The important role of jellyfish in ocean ecology and its current condition and future state is the main theme of the book. Its important take-home messages – pollution destabilizes ecosystems and climate change impacts of the whole ocean.

**[16] Gosner, K.L. 1979. *A Field Guide to the Atlantic Seashore: Invertebrates and Seaweeds of the Atlantic Coast from the Bay of Fundy to Cape Hatteras*. (The Peterson Field Guide Series No. 24). Houghton Mifflin Co., Boston, MA. 329 p.**

This is a classic and well-known field guide, essential for identifying plants and animals along our Atlantic seashores. It should be part of the tool-kit for every teacher taking their students to the coast.

**[17] Gourlay, K.A. 1988. *Poisoners of the Seas*. Zen Books Ltd., London, New Jersey. 256 p. [PB]**

As the books introduction states, “this book is about poisoning the seas” or in other words, marine pollution as defined by the United Nations Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP). Though dated for content, it covers oceans and their functioning, the uses of the seas, oil pollution, sewage (still the number one ocean pollution problem globally), hazardous chemicals, heavy metals, radioactivity, and ocean law. It attempts to end on a positive note, although recognizing our lack of knowledge on the fate and effects of many chemicals. This is true, despite much research and many new approaches in the past four decades. It is a good, perhaps historic, reading of the problems of marine pollution and related concerns (e.g., too few effective regulations). As the foreword states, “mankind must learn a new approach and learn it quickly” (the theme of an essay that I wrote recently for the Can. Soc. Environ. Bull. Vol. 78(3), 2021, http://www.cseb-scbe.org ).

**[18] Hardy, A. 1967. *Great Waters. A Voyage of Natural History to Study Whales, Plankton and the Waters of the Southern Ocean*. Harper & Row, Publishers, New York and Evanston. 542 p.**

A wonderful story based on the diary of a distinguished marine UK scientist while on the research voyages of the Royal Research Ship *Discovery* in the southern Atlantic Ocean to study its marine life. Beautifully illustrated by the author, also a noted painter! It is a classic work in marine science, a non-technical account of what lives in the sea. Now a rare book but quite worth the hunt for a copy!

**[19] Harris, M. 1998. *Lament for an Ocean. The Collapse of the Atlantic Cod Fishery. A True Crime Story.* McClelland & Stewart Inc., The Canadian Publishers, Toronto. 342 p.**

This is a full, highly detailed description of the collapse of the cod fishery in Canadian offshore waters. It is well worth reading in the context of continued perceived mismanagement of our ocean fisheries – glass eels (elvers), redfish, lobsters, etc., in the Atlantic region. As the cover states, it is “the true-crime story of an ecological disaster and a political scandal” focussed around a once highly abundant fish.

**[20] Kraus, S.D. and Rolland, R.M. 2007. *The Urban Whale. North Atlantic Right Whales at the Crossroads.* Harvard University Press, Cambridge, MA. and London, England. 543 p.**

A key information resource on the Atlantic Right Whale, this is a multi-authored book written by experts on the 25th anniversary of the New England Aquarium’s Right Whale research project. This book is a must read for anyone concern about this whale and the future of the ocean. It covers whaling, surveying population sizes, diets, health, communication, threats from fisheries, vessel strikes and climate change, and population modelling. Several Canadian scientists are acknowledged for their seminal contributions. This book is written in an accessible style for interested general readers. (Browsing it again, it reminded me of many sailing trips I was on in the 1970s with friends where we observed and photographed this whale, in the outer parts of Passamaquoddy Bay in the outer Bay of Fundy; one whale, a female, photographed in 1979 was identified as still living and being monitored in the bay in the early 2000s, by the noted whale specialist Dr. Moira Brown of the New England Aquarium).

**[21] Lear, L. 1997. *Rachel Carson. Witness for Nature. The Life of the Author of Silent Spring*. Henry Holt and Company, New York. 634 p.**

This is the definitive biography of Rachel Carson. It is well worth reading for the context of Carson’s major works on the ocean, for inspiration and for noting that each of us can make a difference on behalf of the natural world with a little effort, time and focus. Carson was both a brilliant marine scientist and writer, a rare blend much needed in todays’ complicated and over-populated world. This book is a bible for every Carson fan!

**[22] Marx, W. 1999. *The Frail Ocean. A Blueprint for Change in the New Millennium*. Updated Edition. Hartley & Marks Publishers Inc., Vancouver, BC, and Point Roberts, WA. [ PB, 5th edition]. 272 p.**

Four editions of this book (1967-1999) attest to its importance and public interest and concern about our impact on the ocean. It covers our use and misuse of marine living resources, i.e. fisheries, and coastal ecosystems such as salt marshes and mangroves. Pollution is extensively covered, especially sewage. It ends with suggestions for change as countries wake up to the realization that ocean protection and conservation is critical for their future, especially in this era of climate change and huge populations living in cities along the coast. An excellent read and resource – the “Silent Spring” for the ocean. (My first copy purchased while a graduate student in zoology was a small paperback that cost 75 cents!).

**[23] Mitchell, A. 2009. *Sea Sick. The Global Ocean in Crisis*. McClelland & Stewart Ltd., Toronto. 238 p.**

A noted Canadian journalist has written an overview of the crises facing the ocean, covering topics such as climate change and the biology and fate of coral reefs. It is a good introduction to ongoing changes in the ocean, despite having a number of irritating errors of interpretation. The book’s main messages were summarized in a recent Canadian Geographic magazine.

**[24] Moorcraft, C. 1972. *Must The Seas Die?* Temple Smith, London, and Griffin House, Toronto. 219 p. [PB]**

An early book on marine pollution, it covers some of the major pollutants – nutrients, chlorinated hydrocarbons, heavy metals, oil (petroleum hydrocarbons), radioactive wastes – and evaluates issues in various oceans. It ends with suggestions for immediate action (e.g., monitoring, strengthened legislation) and long-term action (e.g., population control, more effective limits on fishing). A good read for a 1970’s perspective on the topic and perhaps a benchmark for measuring our progress in environmental marine science and action over the past 50 years – has significant progress been made, given the backdrop of more than a doubling of the population and increased demand for food and other resources? (It was an early book for me to read while conducting research in the nascent field of marine ecotoxicology).

**[25] Mowat, F. 1984. *Sea of Slaughter*. McClelland & Stewart Ltd., Toronto. 438 p.**

This is one of Farley’s classics, a well-researched polemic on the history and current (1980s) status of terrestrial and marine wildlife in Canadian waters – fish, birds, mammals. It also describes the wonder that Farley feels for unspoiled nature and the importance of effective modern “resource management”. I recall reading it shortly after its publication and being infuriated by the stories of so many animals being doomed and of “mans” greed that is detrimental to all of us in the long run. The book documents the decline in numbers of so many species (the whales) and the extinction of some (birds) by excessive hunting. The book was fuel for the fire for this young environmental scientist.

**[26] Pauly, D. 2019. *Vanishing Fish. Shifting Baselines and the Future of Global Fisheries*. David Suzuki Institute, Greystone Books, Vancouver, BC and Berkeley, CA. 288 p.**

This is a series of essays on global fisheries and fisheries science by a now famous marine scientist from UBC. The theme is that both are in crisis, that ocean health is in decline, and that the big fisheries must evolve to small scale ones if the species populations are to avoid collapse, as what happened to the northern cod. Pauly advocates for a conservation ethic for the sea, and the need to apply the precautionary principle in practice. Though a book more aimed at scientists and policy makers than the general public, it is easy reading and recommended.

**[27] Roberts, C. 2012. *The Ocean of Life. The Fate of Man and the Sea*. Penguin Group (USA) Inc., New York. 405 p.**

This is a general, well-illustrated, and readable overview of how the seas are changing, the primary causes being fishing (biomass removal), climate change, pollution, plastics, noise, invasive species, and natural toxins augmented by nutrients. It offers hope if humanity responds and changes course in time, recognizes our dependence on a vibrant ocean “biosphere”, and puts conservation and protection into effective practice. Overfishing simply must stop and marine turtles, seabirds and mammals should be protected at all stages of their life cycles. As the cover states, the book is “passionate and persuasive” about the ocean.

**[28] Safina, C. 1997. *Song for the Blue Ocean. Encounters Along the Worlds Coasts and Beneath the Seas.* A John Macrae/Owl Book, Henry Holt and Company, New York. 458 p. [PB]**

This is a natural history of the ocean from the perspective of an award-winning, environmentally focussed, and prolific author. It is “a global journey of discovery along the world’s coasts, islands, reefs and deep ocean” taken in person as a way of exploring the ocean and its many ongoing changes. The comparison to wildlife losses on land is particularly poignant. It was highly recommended by other prominent authors. Sadly, there are no illustrations or maps supporting the engrossing text.

**[29] Snelgrove, P.V.R. 2010. *Discoveries of the Census of Marine Life. Making Ocean Life Count.* Cambridge University Press, Cambridge, UK. 270 p. [PB].**

Paul Snelgrove is a highly respected scientist at Memorial University, St. John’s, NL. His book is a description of a major 10 year Global Census Program to study marine life in all parts of the ocean - their diversity, distribution and abundance - and discover new species wherever possible. The book is beautifully illustrated. Scientists from eighty countries contributed to the program, coordinated from Washington, DC, by the late eminent Dr. Ron O’Dor of Dalhousie University. This is a wonderful reference work of what is known and most likely still unknown in the world’s oceans – Arctic, Atlantic, Pacific, Indian, and Southern. Hundreds of new species were discovered and described.

**[30] Thurston, H. 1990. *Tidal Life. A Natural History of the Bay of Fundy*. Camden House Publishing, Camden East, ON. 167 p. [PB]**

This was a best-selling book by a well-known Nova Scotian author and naturalist. It describes one of the world’s wondrous marine ecosystems, it is well illustrated, and it emphasizes the impacts of the world’s highest tides on the bay’s geology, marine life and ecology. It is an essential guide to the shorelines and beaches of Fundy. It should be in every school in the Province.

**[31] Woodard, C. 2000. *Ocean’s End. Travels Through Endangered Seas*. Basic Books, the Perseus Books Group, New York. 300 p.**

This is a personal account of the state of the world’s oceans, based on observations during a trip criss-crossing the ocean, from the Black Sea to the Grand Banks, Gulf of Mexico, the Pacific, and the Antarctic. The theme is humanities dependence on the ocean and the need to care for it. The book is a good general read and is well notated and indexed. There are many observations of coastal pollution.

**[32] Wright, D.R. 2020. *Future Sea. How to Rescue and Protect the World’s Oceans*. The University of Chicago Press, Chicago, London. 192 p. [PB]**

This book brings good news about the coasts and oceans and lays out solutions such as marine protected areas, marine reserves, community based marine conservation, and “many small changes’ such as population control, renewable energy and strengthening international laws. It is a very, perhaps overly, optimistic overview of how to improve our care of the ocean. Let’s hope that the policy and decision makers, and even some enlightened politicians, will read it. The book is a nice change from those that simply describe the problems, when solutions are badly needed now and quickly. A good book for a discussion!

**2. Bay of Fundy Fact Sheets (from the Bay of Fundy Ecosystem Partnership)**

The following Fundy Issues fact sheets, written by Dr. Jon Percy of BoFEP and SEAPEN, are available online at www.bofep.ca. They are short, readable, authoritative pieces on Fundy topics of interest and concern. They are grouped into themes. The issue number and date of the publication are in parentheses. A few hard copies are available upon request.

**A. The Bay of Fundy Ecosystem Partnership**

* ***Heeding the Bay’s Cry: The Bay of Fundy Ecosystem Project –*** Fundy Issues #1 [Autumn 1996]
* **Working Together Within an Ecosystem: The Bay of Fundy Ecosystem Partnership –** Fundy Issues #1a [Spring 1999]

**B. Ecology of the Bay**

* **Keystone Corophium: Master of the mudflats –**Fundy Issues #13 [Spring 1999]
* **Salt Marsh Saga: Conserving Fundy’s Marine Meadows** – Fundy Issues #16 [Spring 2000]
* **Alien Invasions: Introduced Species in the Bay of Fundy and Environs** – Fundy Issues #23 [Spring 2003]

**C. Changes in the Bay**

* **Tides of Change: Natural Processes in the Bay of Fundy** – Fundy Issues #2[Autumn 1996]
* **Whither the Waters: Tidal and Riverine Restrictions in the Bay of Fundy** – Fundy Issues #11 [Spring 1999]
* **Fundy in Flux: The Challenge of Understanding Change in the Sea** – Fundy Issues #15 [Spring 2000]
* **Whither the Weather: Climate Change and the Bay of Fundy** – Fundy Issues #18 [Spring 2001]
* **Fundy’s Fascinating Fossils: The Unique Palaeontology of the Bay of Fundy** – Fundy Issues 31 [Autumns 2010]

**D. Wildlife of Fundy**

* **Sandpipers and Sediments: Shorebirds in the Bay of Fundy** – Fundy Issues #3 [Autumn 1996]
* **Right Whales-Wrong Places? Right Whales in the Bay of Fundy** – Fundy Issues #6y [Autumn 1996]

**E. Fisheries and Aquaculture**

* **The Seaweed Forest: Rockweed Harvesting in the Bay of Fundy** – Fundy Issues #4 [Autumn 1996]
* **Farming Fundy’s Fishes: Aquaculture in the Bay of Fundy** – Fundy Issues #7 [Autumn 1996]
* **Expanding Fundy’s Harvest: Targeting Untapped Treasures** – Fundy Issues #10 [Autumn 1996]
* **Fishing in Fundy: Harming Seafloor Habitats?** – Fundy Issues #14 [Spring 2000]
* **Fundy’s Wild Atlantic Salmon: Doomed or Simply Down?** – Fundy Issues #17 [Spring 2001]
* **Managing Fundy’s Fisheries: Who Should Write the Rules?** – Fundy Issues #20 [Spring 2001]

**F. Pollution and Monitoring the Health of the Bay**

* **Dredging Fundy’s Depths: Seabed Mining in the Bay of Fundy** – Fundy Issues #5 [Autumn 1996]
* **Fundy’s Watery Wastes? Pollution in the Bay of Fundy** – Fundy Issues #8[Autumn 1996]
* **Dykes, Dams and Dynamos: The Impacts of Coastal Structures** – Fundy Issues #9[Autumn 1996]
* **Gulfwatch: Putting a Little Mussel into Gulf of Maine Marine Monitoring** – Fundy Issues #12 [Spring 1999]
* **Taking Fundy’s Pulse: Monitoring the Health of the Bay of Fundy** – Fundy Issues #22 [Autumn 2002]
* **Contaminant Concerns: Heavy Metals and the Bay of Fundy** – Fundy Issues #25 [FI #25 Spring 2004]
* **Parlous POPs: Persistent Organic Pollutants in the Bay of Fundy*–****Fundy Issues #27* [Spring 2006]
* **Flushed with Tide: Municipal Effluents in the Bay of Fundy** – Fundy Issues 29 [Autumn 2008]

**G. Managing Fundy’s Coastal waters**

* **Fundy’s Minas Basin: Multiplying the Pluses of Minas** – Fundy Issues #19 [Spring 2001]
* **Putting the Fun in Fundy: Possibilities and pitfalls of Ecotourism** – Fundy Issues #21 [Spring 2002]
* **Living Lightly on Land and Water: Native People and the Bay of Fundy** – Fundy Issues #24[Autumn 2003]
* **Saving Special Places: Protected Areas and the Bay of Fundy** – Fundy Issues #26 [Summer 2005]
* **The “Cause” in Causeway: Crossing the Avon River at Windsor** – Fundy Issues 25. [Winter 2008]
* **Tweaking Tidal Technology: Harnessing Fundy’s Phenomenal Tides?** – Fundy Issues 30 [Autumn 2009]