***Ocean. Earth's Last Wilderness*. David Attenborough and Colin Butfield. 2025. John Murray Press, Hodder & Stoughton Ltd., London, UK. 384 pp. (PB). ISBN 978-1-399-81851-3.**

I picked this book to review because I suspected it would be enjoyable and therapeutic. Enjoyable? Yes! Who isn't familiar with Attenborough's wonderful voice narrating scenes of some of the most extraordinary natural environments on earth. He has truly been a champion of biodiversity and has brought many couch-bound screen watchers to the realization that nature is wonderful and that we should reduce our impacts on other living beings. It is therapeutic! His strong message about environmental protection is needed more than ever when our collective attention has been hijacked by the unhinged politics and wars pushed by strongmen. The book did not disappoint.

In the introduction, Attenborough and his co-author Colin Butfleid state that they wanted "to convey the thrill of discovery, be clear-sighted about the danger our ocean is in and, above all, share the stories we felt could inspire a new generation to look beyond the shore and beneath the waves". Beyond living up to these aims, the book provides many illustrations of how quickly biodiversity in the ocean can recover, if we let it.

The book is separated into sections, each describing different portions of the oceans, from coral keys to mangrove forests, to deep sea vents, to the thawing arctic, to the powerful southern ocean, to life under the ice. In each, personal observations and overall commentary combine to give a strong feeling as to the particularities, strengths and fragilities of these habitats. Having worked with marine biologists for most of my life (full disclosure - I'm an environmental physiologist and worked with a wide range of animals, mainly aquatic), the descriptions of habitats and ecosystems were quite familiar. In the chapter about the depths of the ocean, I enjoyed reliving the astonishment felt as I learned of the remarkable ecosystems at hydrothermal vents and the biochemistry that underpins them. While it contains some beautiful photographs, this is not a coffee table book with photos that live up to the visual quality to which viewers of our Living Planet are accustomed. This is a book to be read and considered.

The most "therapeutic" aspects of the book are the striking examples of how protected areas or other conservation measures have been effective in rescuing habitats from degradation caused by human

activities. During World War II, heavy mining in some areas of the ocean caused fishers to avoid the areas during subsequent years. And lo and behold, the pelagic and benthic life rebounded quickly. Another example concerns the kelp forests that once surrounded England's coast. Eliminated by dredging and drag fisheries, they are gradually being restored by combining personal memories of where the kelp once grew with restrictions on fishing practices. I learned of the vast protected areas in the ocean northwest of Hawaii and the Tallurutiup Imanga in the Arctic. Perhaps the most heart-warming example of restoration came in the painstaking efforts to recreate the mangrove forests that protected the Bay of Nicoya in Costa Rica. Given the need for mangroves to moderate tidal influence, mangroves could not simply be planted. Rather, careful satellite studies of the topography, combined with the efforts of local women who removed mud by hand, were needed to recreate the intertidal soil conditions in which mangroves can once again grow.

Being familiar with the magnificence of the ocean, the best part of this book was learning of the rapid recovery possible in many oceanic habitats. The great illustrations of the ocean's capacity to recover will be useful in discussions with folks who are reticent to change policy and promote marine protected areas. But how far will these messages go? Will readers of *Ocean* push their politicians, local decision makers and influencers to change practices? Hopefully, yes!

I highly recommend reading this book. It is an easy read with many enjoyable "ah so" moments.

Helga Guderley
Boutiliers Point, NS
Helga@guderley.ca