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Nota di contenuto	Chapter 1. Harvesting for A Lifetime – Celebrating 25 Years of Seaweed Educating -- Chapter 2. Phyconomy Applied to Global Environment Solutions Through Enterprise Ecology -- Chapter 3. A Framework for Understanding The Diversity of The Seaweed Industry -- Chapter 4. Trends in Supply and Demand for Temperate Seaweeds -- Chapter 5. Temperate Rhodophyta in the Tropics: Cultivated and Wild Cold-Water Red Genera in Hawai'i -- Chapter 6. The development and Spread of Land-Based Aquaculture of Ulva Prolifera in Japan -- Chapter 7. Microalgal Cultivation In Temperate Regions: State-of-The-Art, Challenges, and Future Perspectives -- Chapter 8. Integrating

Traditional Knowledge Into Phyconomy of the Temperate Regions -- Chapter 9. Seaweed Wildcrafting and Mariculture: An integrated Maine phyconomy -- Chapter 10. The *Ascophyllum Nodosum* (L.) Le Jolis Industry of the Canadian Maritimes: Economic, Technological and Regulatory Drivers -- Chapter 11. Current Global Status of Kelp Farming In Wave Exposed Environments: Species, Sites, Methods And Technology -- Chapter 12. Temperate Seaweed Farms May Be Better At Reducing Emissions than removing carbon -- Chapter 13. The African Seaforest: A Socio-Cultural And Ecological Tapestry -- Chapter 14. Phyconomy in Europe -- Chapter 15. Harvesting, Growing and Cooking with Seaweeds in the Bay of Cádiz (Spain) -- Chapter 16. Portuguese Examples of Temperate Seaweed Use -- Chapter 17. The Sustainability Of *Saccharina Japonica* Cultivation in China -- Chapter 18. Learning Valuable Insights From Past Experiences In Wakame Aquaculture in Japan to Advance Phyconomy -- Chapter 19. Sustaining Kelp Resources: The Challenges of Harvesting *Laminaria Digitata* -- Chapter 20. Planning for an Expanding Industry: Opportunities for a Successful Kelp Economy in British Columbia, Canada -- Chapter 21. Starting From Scratch: Evaluating Research Investment To Underpin Seaweed Aquaculture In Aotearoa New Zealand (A-NZ) -- Chapter 22. Integrating Breath Hold Diving Techniques Into A Low-Cost Community-Based Methodology For Kelp Restoration in Te Whanganui a Tara, Aotearoa New Zealand -- Chapter 23. Seeding Technologies for Seaweed Species – New Insights -- Chapter 24. Conserving Marine Biodiversity in the North American Pacific: Biobanking macroalgae and Their Associated Microbiome -- Chapter 25. Opportunities, Challenges And Future Directions for Restoring Kelp Forests Using Green Gravel -- Chapter 26. Navigating legal waters: Seaweed Product Regulations in the US and Canada -- Chapter 27. ASC-MSC Seaweed Standard: A review -- Chapter 28. Algae in the Final Frontier: A review Of the Potential Applications of Macroalgae In Space.

Sommario/riassunto

Phyconomy encompasses the science and arts of both wild harvesting and cultivation of seaweeds. Some of these practices are as ancient as the very earliest uses of selected seaweeds, going back millennia. Other phyconomic practices are some of the most recent developments applied to the selection, breeding and multiplication of strains of resilient and productive cultivated species, specifically selected for the ever-changing marine environment in which they need to succeed. Phyconometrics involves measurement of stocks, impacts of harvesting as well as production, in the sea and on land; providing data on volumes and values of commercial species, some at very large industrial scales. In so much as tropical phyconomy has been covered (with particular attention to eucheumatoids), by the editorial team in other volumes of the DAPH book series, we realised there was also a large world of temperate activities covering micro and macroalgal species which had not previously been collated and presented to the applied phycological, phyconomic community. That has now been rectified! The co-editorial team of Anicia Q. Hurtado, Iain C. Neish and Alan T. Critchley were grateful to receive the additional assistance of Leonel Pereira and the project Temperate Phyconomy began. It soon became evident there was such a wealth of novel information that could be provided from temperate waters around the phyconomic world and indeed so much so that the title expanded to: *Advances in Temperate Phyconomy: Algal Harvest and Cultivation in Globally Distributed Temperate Waters*. Part I looks at specific topics of phyconomy including wild vs cultivated seaweed species. It dispels some of the myths around get the get-rich-quick seaweed production schemes; it presents some stark facts based in reality on applied phycology and

what it takes to obtain quality seaweed biomass for many value-added applications. New developments in phyconomic practices, harvest, cultivation methods and materials, including strain selection and seed bank maintenance are detailed with a specific focus on temperate regions of the world. Part II will follow with another set of exciting developments on temperate phyconomy from around the world of temperate seaweeds of economic value. The book is aimed at all students, researchers, operators and practitioners in the sphere of applied phycology and phyconomy, i.e., both the macro and microalgal worlds - where there is much in common – if you look with eyes wide open. The book is a great way to read the specifics and also be able to browse relevant areas, presented by global leading teams, in their various phyconomic fields; it is full of information which might not pop up in an online search. In essence anyone working with algae commercially would gain benefits from reading and inwardly digesting the book's contents from start to finish.
