Record Nr. UNINA9910409683103321 Evolution of Marine Coastal Ecosystems under the Pressure of Global **Titolo** Changes [[electronic resource]]: Proceedings of Coast Bordeaux Symposium and of the 17th French-Japanese Oceanography Symposium / / edited by Hubert-Jean Ceccaldi, Yves Hénocque, Teruhisa Komatsu, Patrick Prouzet, Benoit Sautour, Jiro Yoshida Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 3-030-43484-2 **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (521 pages) Disciplina 574.52636 Soggetti **Ecosystems** Oceanography Physical geography Water Environment Earth System Sciences Water, general Environment, general Ecologia marina Ecologia de les costes Canvi climàtic Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Part I: Introductory Communications -- Chapter 1. Our Future and The Oceans -- Chapter 2. General guidelines for future exchanges in marine science and technology between the two Sociétés franco-japonaises d'Océanographie -- Part II: Identification and Analysis of Environmental Stressors -- Chapter 3. The Japan Sea: a changing Pacific Asian marginal sea -- Chapter 4. Statistical analysis of surface circulation in Sagami Bay using High FrequencyHFRadar -- Chapter

5. Statistical analysis of high frequency pCO2 data acquired with the Astan buoy (Southern Western English Channel, off Roscoff) -- Chapter 6. Spatial variation in pCO2 based on 16 years of in-situ measurements in the Seto Inland Sea, Japan -- Chapter 7. The Bay of Seine: a resilient socio-eco-system under cumulative pressures -- Chapter 8. Effect of bacterial infection on the expression of stress proteins and antioxidative enzymes in Japanese flounder -- Part III: Impacts on Socio-Eco-Systems and Biological Resources -- Chapter 9. A Review of the Effects of Global Warming and Currents Trends on Fisheries and its Impact on Important Commercial Species in Japan -- Chapter 10. Physiology of winter coral bleaching in temperate zone -- Chapter 11. Preliminary report of impacts of the 2011 earthquake and tsunami and subsequent events on macrobenthic community in a shallow brackish lagoon in Sendai Bay, Japan -- Chapter 12. Post-tsunami oyster feeding environment in Nagatsuraura Bay for three years -- Chapter 13. Seagrass-oyster farmers interaction detected by eelgrass DNA analysis in Hinase area of the Seto Inland Sea, Japan -- Chapter 14. Fisheries Biology of Blue Sharks in Sagami Bay, Japan -- Part IV: Vulnerability of Coastal Ecosystems and Risk Assessment -- Chapter 15. Temperature and salinity changes in coastal waters of Western Europe: variability, trends and extreme events -- Chapter 16. Risk Based Consenting of Offshore Renewable Energy Projects (RICORE) -- Chapter 17. Does global warming favour the occurrence of recent blue mussel mortality events in France? -- Chapter 18. Integrated ecosystem management for exploited coastal ecosystem dynamics under oligotrophication and climate changes -- Chapter 19. Forty years of decline and 10 years of management plan: are European eels (Anguilla anguilla) recovering? --Chapter 20. The management of Mediterranean coastal habitats: a plea for a socio-ecosystem-based approach.

## Sommario/riassunto

Coastal and estuarine environments at the interface of terrestrial and marine areas are among the most productive in the world. However, since the beginning of the industrial era, these ecosystems have been subjected to strong anthropogenic pressures intensified from the second half of the 20th century, when there was a marked acceleration in the warming (climate change) of the continents, particularly at high latitudes. Coastal ecosystems are highly vulnerable to alteration of their physical, chemical and biological characteristics (marine intrusion, acidification of marine environments, changes in ecosystems, evolution and artificialization of the coastline, etc.). In contact with heavily populated areas, these environments are often the receptacle of a lot of chemical and biological pollution sources that significantly diminish their resilience. In this context of accelerated evolution and degradation of these areas important for food security of many populations around the world, it is necessary to better identify the factors of pressure and understand, at different scales of observation, their effects and impacts on the biodiversity and on the socio-ecosystems, in order to determine the degree of vulnerability of these coastal ecosystems and the risks they face. A transdisciplinary and integrated approach is required to prevent risks. Within this framework, operational coastal oceanography occupies an important place but also the implementation of a true socio-eco-system approach in order to set up an environmentally friendly development.