

Foreword

While reading through *Governing Marine Living Resources in the Polar Regions*, I felt an overwhelming need to find my weathered copy of Rachael Carson's best-seller *The Sea Around Us*.¹ First published in 1951, Carson notes that the 1950s were 'an exciting decade in the science of the sea . . . During the fifties, also, the crossing of the entire Arctic basin was accomplished by submarine travelling under the ice. Many new features of the unseen floor of the sea of the sea have been described . . . During the International Geophysical Year, 60 ships from 40 nations, as well as hundreds of stations on islands and seacoasts, co-operated in an enormously fruitful study of the sea'.² And yet, as she concluded, our knowledge of the earth's oceans remained 'meagre'.

Meagre or not, the 1950s were filled with technological, scientific, legal and geopolitical intervention in, on and under the world's ice sheets and oceans.³ Initiatives such as the International Geophysical Year (1957–58) were consequential for the scope and range of human exploration, understanding and impact.⁴ Simultaneously, the UN Continental Shelf Convention (1958) ensured that law was reaching sub-surface depths and seabed. Coastal States were vying to extend and secure their sovereign rights over the water column, the seabed and the life forms that called the ocean home. Nowadays, we talk about terraqueous spaces and histories, but, in the past, it might have been seen as 'sea grabbing'.⁵

If Rachel Carson was asking readers to marvel at the beauty of the sea, then others were thinking of the ocean as ever more exploitable and

¹ Rachel Carson *The Sea Around Us* (Oxford, Oxford University Press 1961). The first edition was published in 1951.

² *Ibid.*, 3.

³ James Ryan and Simon Naylor (eds) *New Spaces of Exploration: Geographies of Discovery in the Twentieth Century* (London, I B Tauris, 2010).

⁴ Klaus Dodds and Alan Hemmings 'Polar Oceans: Sovereignty and the Contestation of Territorial and Resource Rights' in Hance Smith, Juan Suárez de Vivero and Tundi Agardy (eds) *Routledge Handbook of Ocean Resources and Management* (London, Routledge, 2016) 576–91.

⁵ Ann Hollick 'Managing the Oceans' *Wilson Quarterly* 8 (1984): 70–86. On terraqueous histories, see Alison Bashford 'Terraqueous Histories' *Historical Journal* 2 (2017): 253–72.

enclosed. In 1953, in *The Silent World*, Cousteau warned his readers that the world's oceans and seas were being imperilled by humankind.⁶ By 1956, drilling off the continental shelf was well-established, and global fishing patterns were beginning to attract serious scientific attention from bodies such as the UN's Food and Agriculture Organization. After a relative lull in activity during the Second World War, the records from the 1950s onwards are suggestive of an industry dramatically expanding. New on-board freezer technologies facilitated ambitious voyaging and global networks of fish trading. The 'great acceleration' in global fishing catch in the 1950s might in part reflect the relative paucity of data collection prior to the post-1945 period, as well as technological and market-led changes. In terms of percentage of reported landings of fish, the Soviet Union and Japan were world leaders in 1950.⁷

The polar oceans were and are living resource frontiers par excellence.⁸ Whaling and sealing served global markets stretching from North America to China, and Japan and the Soviet Union were active in industrial whaling in the North Pacific Ocean in the post-1945 period. The Norwegians were busy harvesting whales in the Southern Ocean until the early 1960s. For Britain, the harvesting and management of whales in the waters around what was then called the Falkland Islands Dependencies (now British Antarctic Territory) was integral to imperial management. Norwegian whaling activity in and around South Georgia was a useful proxy for imperial control.⁹

Governing marine living resources in any ocean is complex, as the editors and authors of this volume make abundantly clear. It is made and re-made via legal documents, articulated in international fora, modelled via data sources, embodied in intense negotiation, and performed in physical and increasingly digital spaces. The chapters that follow are attentive to the entanglement of multiple sites, objects, expertise, procedures, institutions and geographical framings. The days have long since gone when things were done offline and in private dialogue with a select few.

There have been some notable innovations in marine living resource management. For example, the 1980 Convention on the Conservation of

⁶ Jacques Cousteau, *The Silent World* (London, Hamish Hamilton, 1953).

⁷ David Tickler et al 'Far from Home: Distance Patterns of Global Fishing Fleets' *Science Advances* 4 (2018) no. 8, eaar3279.

⁸ Adrian Howkins *The Polar Regions: An Environmental History* (Cambridge, Polity, 2016) and Joy McCann *Wild Sea: A History of the Southern Ocean* (Sydney, New South Publishing, 2018).

⁹ Peder Roberts *The European Antarctic: Science and Strategy in Scandinavia and the British Empire* (London, Palgrave, 2011).

Antarctic Marine Living Resources (CAMLR Convention) was established in direct response to the exploitation of krill and its risks to the marine ecology of the Southern Ocean. Krill is elemental to Southern Ocean food-chains. Used in aquaculture, Japan and the Soviet Union were leaders in the field in the 1970s. The final text of the CAMLR Convention was carefully calibrated to meet the twin goals of conservation and exploitation. The Convention recognised that the area of application was not going to be adequately defined by the same line of latitude used for the Antarctic Treaty of 1959 (i.e. south of 60° South latitude). As the Convention noted:

This Convention [i.e. CCAMLR] applies to the Antarctic marine living resources of the area south of 60° South latitude and to the Antarctic marine living resources of the area between that latitude and the Antarctic Convergence which form part of the Antarctic marine ecosystem . . . The objective of this Convention is the conservation of Antarctic marine living resources. For the purposes of this Convention, the term 'conservation' includes rational use.¹⁰

Whatever claims CCAMLR might reasonably make for novelty and innovativeness, it was attuned to the prevailing geopolitics of the Southern Ocean and wider international developments. CCAMLR and its signatories were mindful that the sovereignty moratorium of the Antarctic Treaty would need to be co-terminus with the sovereign rights of coastal States in the Southern Ocean such as France, Australia, New Zealand and Norway and the rights of others to the high seas. The bi-focal approach of CCAMLR was designed to be respectful of claimant and non-claimant States, conservation-minded parties and parties wishing to exploit, and those who had sovereign islands in the Southern Ocean.¹¹

The formal entry into force of CCAMLR, in 1982, coincided with the signing of the United Nations Convention on the Law of the Sea (UNCLOS). This global framework established 'new global geographies'; continental shelves, exclusive economic zones, deep seabed, and water columns are identified. It introduced extractive, redistributive and protective measures for the world's seas and oceans.¹² Law, politics and geology intersected with one another to produce elemental separations of water from seabed, sedentary and mobile marine species, and extended/outer

¹⁰ Convention on the Conservation of Antarctic Marine Living Resources, available at: <<https://www.ccamlr.org/en/organisation/camlr-convention>> accessed 14 March 2019.

¹¹ Christopher Joyner *Antarctica and the Law of the Sea* (Dordrecht, Martinus Nijhoff Publishers, 1992).

¹² Philip Steinberg *The Social Construction of the Oceans* (Cambridge, Cambridge University Press, 2001).

continental shelves on the basis of ocean depth, geological composition of the seabed and distance from the continental baseline.

The legal and political management of the oceans demonstrates the tensions inherent in the unruly, dynamic and fluid geographies of these water bodies and its division into national and international areas of responsibility and rights.¹³ The CAMLR Convention, and more recent developments such as the 2017 Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean, are engaged in a complex game of reconciling conservation and exploitation. If there are ambiguities and ‘foggy futures’ aplenty in the 2017 Agreement then that is not unique to the recently identified Central Arctic Ocean. It haunts living resource management around the world’s oceans – and using scientific evidence to guide total allowable catches (TACs) is shot through with political and legal considerations. In the absence of regulatory control and/or conservation management, however, a hyper-extractive logic can and does prevail.

This in turn begs the question what is novel or distinct about the polar oceans in the contemporary moment? One obvious point of difference was that, due to their geographical remoteness and environmental extremes, the Arctic and Southern Oceans were spared some of the worst excesses of resource-led capitalism. But even that claim can look shaky when you consider either the fate of the Alaskan Pollock in the North Pacific Ocean/Alaskan waters and/or the near-extinction of the Antarctic fur seal by the first part of the twentieth century. In the 1990s, attention turned to illegal, unregulated and unreported fishing of Patagonian Toothfish in the Southern Ocean and spurred on CAMLR Convention parties to introduce new conservation measures and introduce in 2009 the first marine protected area (MPA). But as Cassandra Brooks reminds us, resource management is never divorced from the geopolitical, economic and legal interests of CCAMLR parties. In the late 1970s, China did not feature in debates about the living resource exploitation of the polar oceans. It does now.¹⁴ The Soviet Union no longer exists and now other parties have to negotiate with a resurgent Russia, eager to remind the world that the federation is a ‘great power’. The torturous negotiations over the Ross Sea MPA serve as a powerful reminder that geopolitics, resource management, fisheries science and law make for uncomfortable bed-fellows at times.

Another intriguing aspect of the polar oceans is sovereignty

¹³ John Gillis and Franziska Torma (eds) *Fluid Frontiers: New Currents in Marine Environmental History* (Whitstable, White Horse Press, 2015).

¹⁴ Nengye Liu and Cassandra Brooks ‘China’s Changing Position Towards Marine Protected Areas in the Southern Ocean: Implications for Future Antarctic Governance’ *Marine Policy* 94 (2018): 189–95.

experimentation. The Antarctic is governed by the Antarctic Treaty and associated legal instruments such as the CAMLR Convention in a unique arrangement of sovereignty management. While the regulatory landscape has become more complex, thanks to legal instruments such as the Convention on Biological Diversity and UNCLOS, parties to the CAMLR Convention recognise that sovereign rights vary above and below 60° South. In the Arctic, Norway has worked with international parties via the 1920 Spitzbergen Treaty and negotiated, at times awkwardly, fisheries-related measures in a maritime region where there is an absence of agreement about the legal status of the waters around the archipelago. In the Central Arctic Ocean, ten parties including China and the European Union have acted in advance of commercial fishery development. Parties can and do work together, and the polar oceans provide good evidence of this cooperative spirit. The allure of sovereignty and the territorial temptation is near-far away, and how this might impact indigenous peoples and their rights in the maritime North is a pressing issue.¹⁵

The polar oceans continue to undergo elemental state-change.¹⁶ The Polar Regions are being scrambled, and the scrambling continues apace.¹⁷ It is a moot point as to whether we have the capacity and willingness to manage the living resources of oceans. Are we post-rational, post-scientific and post-alarmist? New technologies such as underwater drones will generate and reveal new data, information and visions of the polar oceans as complex and dynamic spaces.¹⁸ At the same, we are going to face further disturbing revelations and accompanying ‘weird factualities’ about the polar oceans, and their place in the Anthropocene.¹⁹ Marine living resource management is going to become ever more complicated in a warmer and wetter world filled with 10 billion people by the end of the current century. Governance regimes must keep pace. This book provides us with invaluable insights.

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¹⁵ Christopher Rossi *Sovereignty and the Territorial Temptation* (Cambridge, Cambridge University Press, 2017).

¹⁶ *The State of the Polar Oceans* (2018) available at: <https://library.wmo.int/doc_num.php?explnum_id=4830> accessed 14 March 2019.

¹⁷ Klaus Dodds and Mark Nuttall *The Scramble for the Poles* (Cambridge, Polity, 2016).

¹⁸ Franck Bille (ed) *Volumetric States* (Durham NC, Duke University Press, 2019).

¹⁹ I am thinking here of Don DeLillo’s novel and his argument about the ‘third line’ in *Libra*.