

Marine Ecoregions of the World

A nested, biogeography of marine ecosystems, made up of the following units (as defined in Spalding et al. 2007):

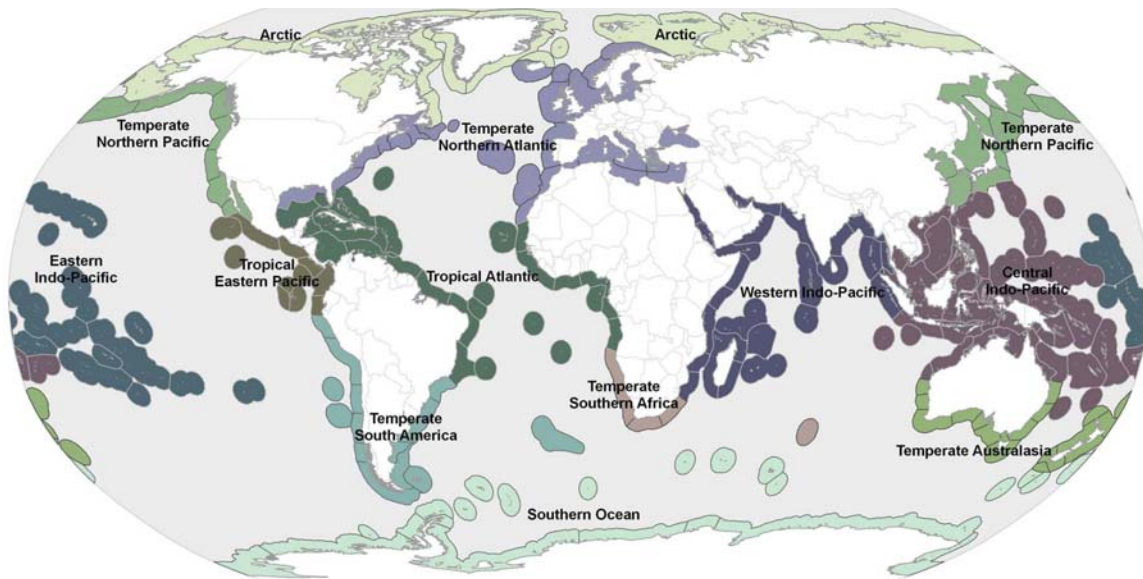
Realm: “Very large regions of coastal, benthic, or pelagic ocean across which biotas are internally coherent at higher taxonomic levels, as a result of a shared and unique evolutionary history. Realms have high levels of endemism, including unique taxa at generic and family levels in some groups. Driving factors behind the development of such unique biotas include water temperature, historical and broadscale isolation, and the proximity of the benthos.”

Provinces: “Large areas defined by the presence of distinct biotas that have at least some cohesion over evolutionary time frames. Provinces will hold some level of endemism, principally at the level of species. Although historical isolation will play a role, many of these distinct biotas have arisen as a result of distinctive abiotic features that circumscribe their boundaries. These may include geomorphological features (isolated island and shelf systems, semienclosed seas); hydrographic features (currents, upwellings, ice dynamics); or geochemical influences (broadest-scale elements of nutrient supply and salinity).”

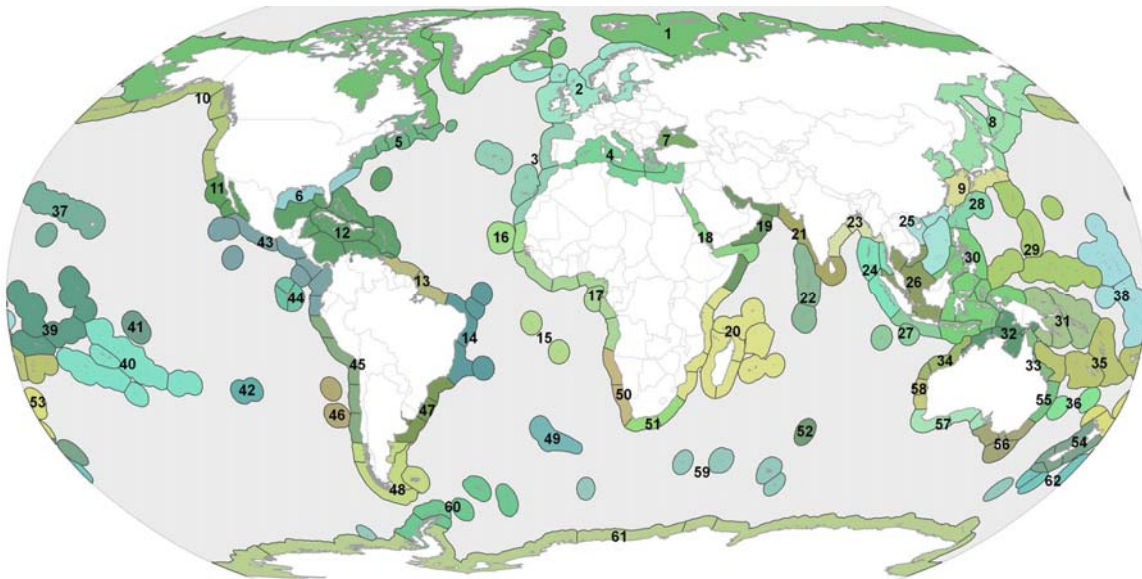
Ecoregions: “Areas of relatively homogeneous species composition, clearly distinct from adjacent systems. The species composition is likely to be determined by the predominance of a small number of ecosystems and/or a distinct suite of oceanographic or topographic features. The dominant biogeographic forcing agents defining the ecoregions vary from location to location but may include isolation, upwelling, nutrient inputs, freshwater influx, temperature regimes, ice regimes, exposure, sediments, currents, and bathymetric or coastal complexity.”

The following pages include indexed maps of each of these units.

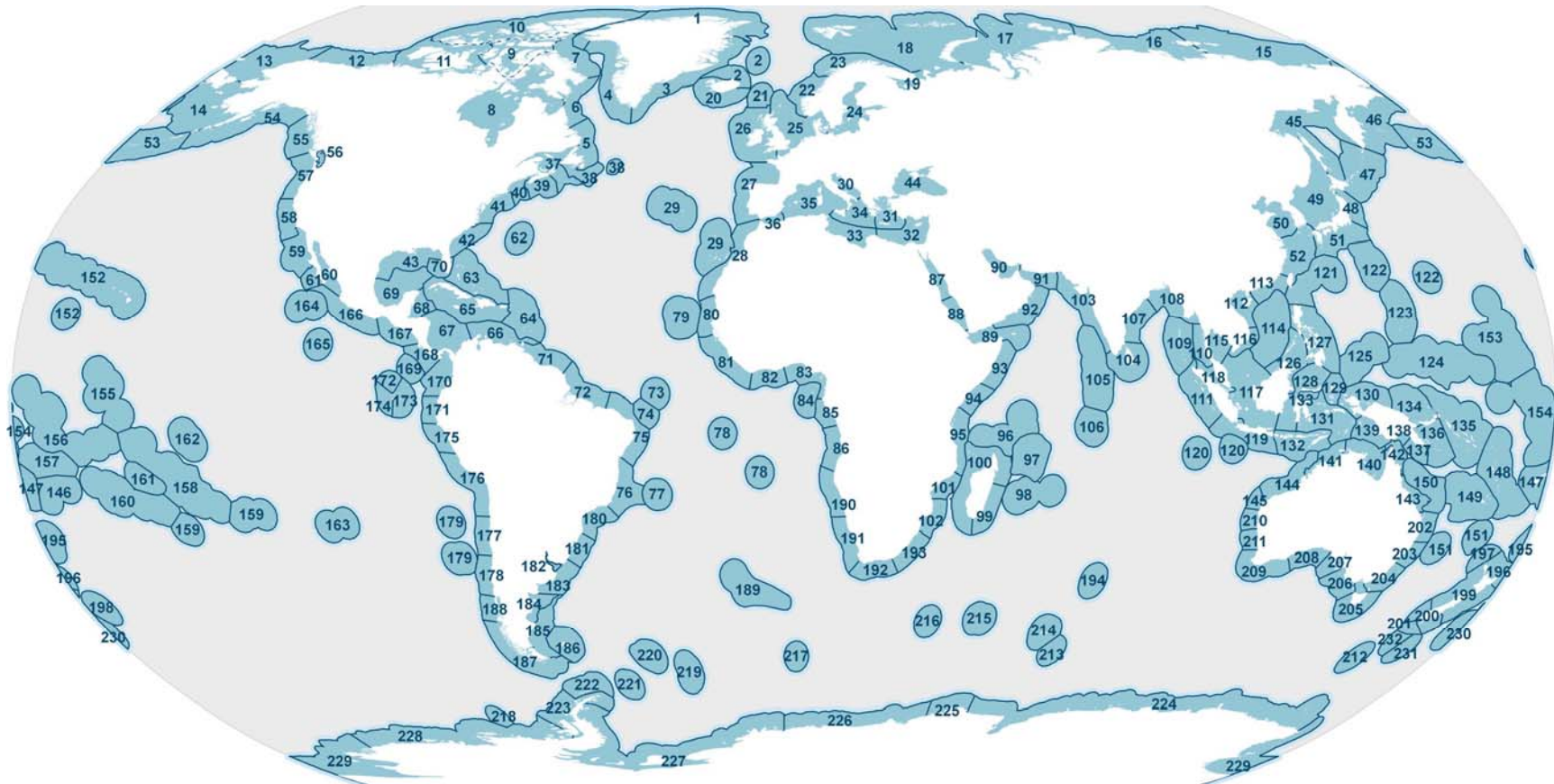
Citation: Spalding MD, Fox HE, Allen GR, Davidson N, Ferdaña ZA, Finlayson M, Halpern BS, Jorge MA, Lombana A, Lourie SA, Martin KD, McManus E, Molnar J, Recchia CA, Robertson J (2007) Marine Ecoregions of the World: a bioregionalization of coast and shelf areas. *BioScience* 57: 573-583



Marine Realms: 12 biogeographic realms with varied colors and ecoregion boundaries outlined



Marine Provinces: 62 provinces numbered and with varied colors, and ecoregion boundaries are outlined.



Marine Ecoregions: 232 ecoregions are numerically identified.

REALM*Province**Ecoregion***ARCTIC***1 Arctic (no provinces identified)*

- 1 North Greenland
- 2 North and East Iceland
- 3 East Greenland Shelf
- 4 West Greenland Shelf
- 5 Northern Grand Banks - Southern Labrador
- 6 Northern Labrador
- 7 Baffin Bay - Davis Strait
- 8 Hudson Complex
- 9 Lancaster Sound
- 10 High Arctic Archipelago
- 11 Beaufort-Amundsen-Viscount Melville-Queen Maud
- 12 Beaufort Sea - continental coast and shelf
- 13 Chukchi Sea
- 14 Eastern Bering Sea
- 15 East Siberian Sea
- 16 Laptev Sea
- 17 Kara Sea
- 18 North and East Barents Sea
- 19 White Sea

TEMPERATE NORTHERN ATLANTIC*2 Northern European Seas*

- 20 South and West Iceland
- 21 Faroe Plateau
- 22 Southern Norway
- 23 Northern Norway and Finnmark
- 24 Baltic Sea
- 25 North Sea
- 26 Celtic Seas

3 Lusitanian

- 27 South European Atlantic Shelf
- 28 Saharan Upwelling
- 29 Azores Canaries Madeira

4 Mediterranean Sea

- 30 Adriatic Sea
- 31 Aegean Sea
- 32 Levantine Sea
- 33 Tunisian Plateau/Gulf of Sidra
- 34 Ionian Sea
- 35 Western Mediterranean
- 36 Alboran Sea

5 Cold Temperate Northwest Atlantic

- 37 Gulf of St. Lawrence - Eastern Scotian Shelf
- 38 Southern Grand Banks - South Newfoundland
- 39 Scotian Shelf
- 40 Gulf of Maine/Bay of Fundy
- 41 Virginian

6 Warm Temperate Northwest Atlantic

- 42 Carolinian
- 43 Northern Gulf of Mexico

7 Black Sea

- 44 Black Sea

TEMPERATE NORTHERN PACIFIC*8 Cold Temperate Northwest Pacific*

- 45 Sea of Okhotsk
- 46 Kamchatka Shelf and Coast
- 47 Oyashio Current
- 48 Northeastern Honshu
- 49 Sea of Japan
- 50 Yellow Sea

9 Warm Temperate Northwest Pacific

- 51 Central Kuroshio Current

- 52 East China Sea

10 Cold Temperate Northeast Pacific

- 53 Aleutian Islands
- 54 Gulf of Alaska
- 55 North American Pacific Fjordland
- 56 Puget Trough/Georgia Basin
- 57 Oregon, Washington, Vancouver Coast and Shelf
- 58 Northern California

11 Warm Temperate Northeast Pacific

- 59 Southern California Bight
- 60 Cortezian
- 61 Magdalena Transition

TROPICAL ATLANTIC*12 Tropical Northwestern Atlantic*

- 62 Bermuda
- 63 Bahamian
- 64 Eastern Caribbean
- 65 Greater Antilles
- 66 Southern Caribbean
- 67 Southwestern Caribbean
- 68 Western Caribbean
- 69 Southern Gulf of Mexico
- 70 Floridian

13 North Brazil Shelf

- 71 Guianan
- 72 Amazonia

14 Tropical Southwestern Atlantic

- 73 Sao Pedro and Sao Paulo Islands
- 74 Fernando de Noronha and Atoll das Rocas
- 75 Northeastern Brazil
- 76 Eastern Brazil
- 77 Trindade and Martin Vaz Islands

15 St. Helena and Ascension Islands

- 78 St. Helena and Ascension Islands

16 West African Transition

- 79 Cape Verde
- 80 Sahelian Upwelling

17 Gulf of Guinea

- 81 Gulf of Guinea West
- 82 Gulf of Guinea Upwelling
- 83 Gulf of Guinea Central
- 84 Gulf of Guinea Islands
- 85 Gulf of Guinea South
- 86 Angolan

WESTERN INDO-PACIFIC*18 Red Sea and Gulf of Aden*

- 87 Northern and Central Red Sea
- 88 Southern Red Sea
- 89 Gulf of Aden

19 Somali/Arabian

- 90 Arabian (Persian) Gulf
- 91 Gulf of Oman
- 92 Western Arabian Sea
- 93 Central Somali Coast

20 Western Indian Ocean

- 94 Northern Monsoon Current Coast
- 95 East African Coral Coast
- 96 Seychelles
- 97 Cargados Carajos/Tromelin Island
- 98 Mascarene Islands
- 99 Southeast Madagascar
- 100 Western & Northern Madagascar
- 101 Bight of Sofala/Swamp Coast
- 102 Delagoa

21 West and South Indian Shelf

- 103 Western India

- 104 South India and Sri Lanka
- 22 *Central Indian Ocean Islands*
 - 105 Maldives
 - 106 Chagos
- 23 *Bay of Bengal*
 - 107 Eastern India
 - 108 Northern Bay of Bengal
- 24 *Andaman*
 - 109 Andaman and Nicobar Islands
 - 110 Andaman Sea Coral Coast
 - 111 Western Sumatra
- CENTRAL INDO-PACIFIC**
- 25 *South China Sea*
 - 112 Gulf of Tonkin
 - 113 Southern China
 - 114 South China Sea Oceanic Islands
- 26 *Sunda Shelf*
 - 115 Gulf of Thailand
 - 116 Southern Vietnam
 - 117 Sunda Shelf/Java Sea
 - 118 Malacca Strait
- 27 *Java Transitional*
 - 119 Southern Java
 - 120 Cocos-Keeling/Christmas Island
- 28 *South Kuroshio*
 - 121 South Kuroshio
- 29 *Tropical Northwestern Pacific*
 - 122 Ogasawara Islands
 - 123 Mariana Islands
 - 124 East Caroline Islands
 - 125 West Caroline Islands
- 30 *Western Coral Triangle*
 - 126 Palawan/North Borneo
 - 127 Eastern Philippines
 - 128 Sulawesi Sea/Makassar Strait
 - 129 Halmahera
 - 130 Papua
 - 131 Banda Sea
 - 132 Lesser Sunda
 - 133 Northeast Sulawesi
- 31 *Eastern Coral Triangle*
 - 134 Bismarck Sea
 - 135 Solomon Archipelago
 - 136 Solomon Sea
 - 137 Southeast Papua New Guinea
- 32 *Sahul Shelf*
 - 138 Gulf of Papua
 - 139 Arafura Sea
 - 140 Arnhem Coast to Gulf of Carpentaria
 - 141 Bonaparte Coast
- 33 *Northeast Australian Shelf*
 - 142 Torres Strait Northern Great Barrier Reef
 - 143 Central and Southern Great Barrier Reef
- 34 *Northwest Australian Shelf*
 - 144 Exmouth to Broome
 - 145 Ningaloo
- 35 *Tropical Southwestern Pacific*
 - 146 Tonga Islands
 - 147 Fiji Islands
 - 148 Vanuatu
 - 149 New Caledonia
 - 150 Coral Sea
- 36 *Lord Howe and Norfolk Islands*
 - 151 Lord Howe and Norfolk Islands
- EASTERN INDO-PACIFIC**
- 37 *Hawaii*
 - 152 Hawaii
- 38 *Marshall, Gilbert and Ellis Islands*

- 153 Marshall Islands
- 154 Gilbert/Ellis Islands
- 39 *Central Polynesia*
 - 155 Line Islands
 - 156 Phoenix/Tokelau/Northern Cook Islands
 - 157 Samoa Islands
- 40 *Southeast Polynesia*
 - 158 Tuamotus
 - 159 Rapa-Pitcairn
 - 160 Southern Cook/Austral Islands
 - 161 Society Islands
- 41 *Marquesas*
 - 162 Marquesas
- 42 *Easter Island*
 - 163 Easter Island

TROPICAL EASTERN PACIFIC

- 43 *Tropical East Pacific*
 - 164 Revillagigedos
 - 165 Clipperton
 - 166 Mexican Tropical Pacific
 - 167 Chiapas-Nicaragua
 - 168 Nicoya
 - 169 Cocos Islands
 - 170 Panama Bight
 - 171 Guayaquil
- 44 *Galapagos*
 - 172 Northern Galapagos Islands
 - 173 Eastern Galapagos Islands
 - 174 Western Galapagos Islands

TEMPERATE SOUTH AMERICA

- 45 *Warm Temperate Southeastern Pacific*
 - 175 Central Peru
 - 176 Humboldtian
 - 177 Central Chile
 - 178 Araucanian
- 46 *Juan Fernández and Desventuradas*
 - 179 Juan Fernández and Desventuradas
- 47 *Warm Temperate Southwestern Atlantic*
 - 180 Southeastern Brazil
 - 181 Rio Grande
 - 182 Rio de la Plata
 - 183 Uruguay-Buenos Aires Shelf
- 48 *Magellanic*
 - 184 North Patagonian Gulfs
 - 185 Patagonian Shelf
 - 186 Malvinas/Falklands
 - 187 Channels and Fjords of Southern Chile
 - 188 Chilense
- 49 *Tristan Gough*
 - 189 Tristan Gough

TEMPERATE SOUTHERN AFRICA

- 50 *Benguela*
 - 190 Namib
 - 191 Namaqua
- 51 *Agulhas*
 - 192 Agulhas Bank
 - 193 Natal
- 52 *Amsterdam-St Paul*
 - 194 Amsterdam-St Paul

TEMPERATE AUSTRALASIA

- 53 *Northern New Zealand*
 - 195 Kermadec Island
 - 196 Northeastern New Zealand
 - 197 Three Kings-North Cape
- 54 *Southern New Zealand*
 - 198 Chatham Island

- 199 Central New Zealand
- 200 Southern New Zealand
- 201 Snares Island
- 55 *East Central Australian Shelf*
 - 202 Tweed-Moreton
 - 203 Manning-Hawkesbury
- 56 *Southeast Australian Shelf*
 - 204 Cape Howe
 - 205 Bassian
 - 206 Western Bassian
- 57 *Southwest Australian Shelf*
 - 207 South Australian Gulfs
 - 208 Great Australian Bight
 - 209 Leeuwin
- 58 *West Central Australian Shelf*
 - 210 Shark Bay
 - 211 Houtman

SOUTHERN OCEAN

- 59 *Subantarctic Islands*
 - 212 Macquarie Island
 - 213 Heard and Macdonald Islands
 - 214 Kerguelen Islands
 - 215 Crozet Islands
 - 216 Prince Edward Islands
 - 217 Bouvet Island
 - 218 Peter the First Island
- 60 *Scotia Sea*
 - 219 South Sandwich Islands
 - 220 South Georgia
 - 221 South Orkney Islands
 - 222 South Shetland Islands
 - 223 Antarctic Peninsula
- 61 *Continental High Antarctic*
 - 224 East Antarctic Wilkes Land
 - 225 East Antarctic Enderby Land
 - 226 East Antarctica Dronning Maud Land
 - 227 Weddell Sea
 - 228 Amundsen/Bellingshausen Sea
 - 229 Ross Sea
- 62 *Subantarctic New Zealand*
 - 230 Bounty and Antipodes Islands
 - 231 Campbell Island
 - 232 Auckland Island