

Biodiversity hotspot

A **biodiversity hotspot** is a biogeographic region with a significant reservoir of [biodiversity](#) that is under threat from humans.

[Norman Myers](#) wrote about the concept in two articles in “The Environmentalist” (1988),^[1] & 1990^[2] revised after thorough analysis by Myers and others in “Hotspots: Earth’s Biologically Richest and Most Endangered Terrestrial Ecoregions”.^[3]

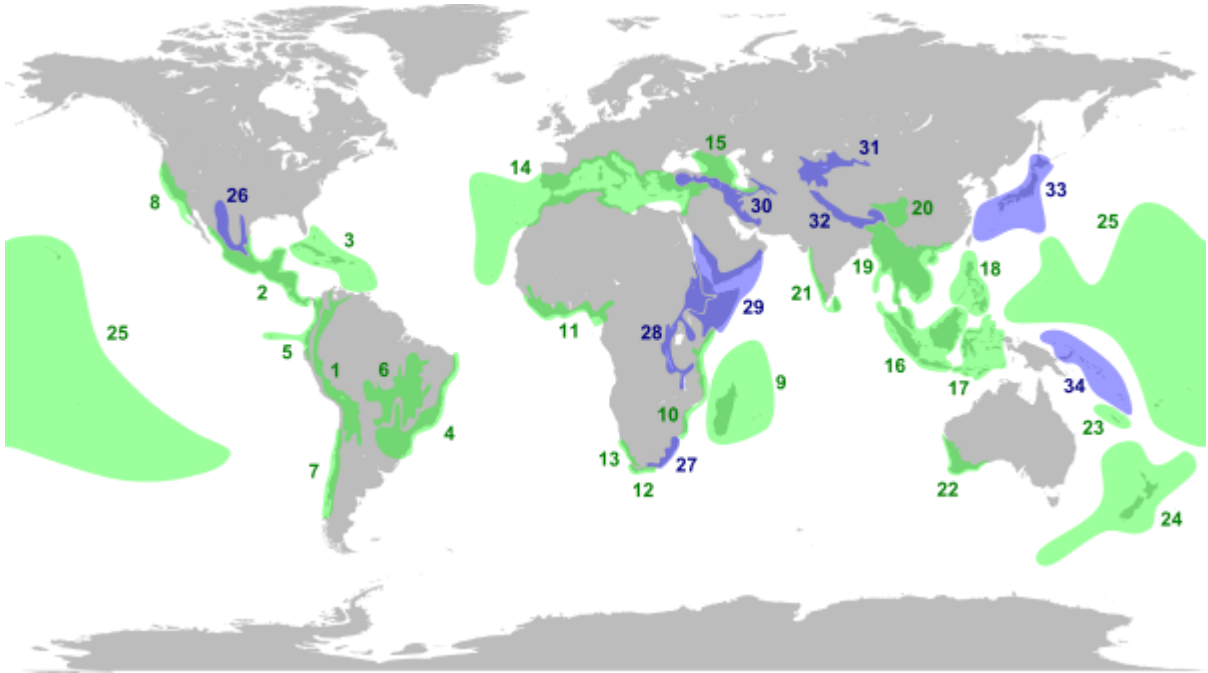
To qualify as a biodiversity hotspot on Myers 2000 edition of the hotspot-map, a region must meet two strict criteria: it must contain at least 0.5% or 1,500 species of [vascular plants](#) as [endemics](#), and it has to have lost at least 70% of its primary vegetation.^[4] Around the world, 25 areas qualify under this definition, with nine other possible candidates. These sites support nearly 60% of the world's plant, bird, mammal, reptile, and amphibian [species](#), with a very high share of endemic species.

Hotspot conservation initiatives^[edit]

Only a small percentage of the total land area within biodiversity hotspots is now protected. Several international organizations are working in many ways to conserve biodiversity hotspots.

- [Critical Ecosystem Partnership Fund](#) (CEPF) is a global program that provides funding and technical assistance to nongovernmental organizations and participation to protect the Earth's richest regions of plant and animal diversity including: biodiversity hotspots, high-biodiversity wilderness areas and important marine regions. CI works in more than 40 countries on four continents, with headquarters near Washington, D.C.^[5]
- The [World Wildlife Fund](#) has derived a system called the “[Global 200 Ecoregions](#)”, the aim of which is to select priority Ecoregions for conservation within each of 14 terrestrial, 3 freshwater, and 4 marine habitat types. They are chosen for their species richness, endemism, taxonomic uniqueness, unusual ecological or evolutionary phenomena, and global rarity. All biodiversity hotspots contain at least one Global 200 Ecoregion.
- [Birdlife International](#) has identified 218 “[Endemic Bird Areas](#)” (EBAs) each of which hold two or more bird species found nowhere else. Birdlife International has identified more than 11,000 Important Bird Areas^[6] all over the world.
- [Plantlife International](#) coordinates several the world aiming to identify [Important Plant Areas](#).
- [Alliance for Zero Extinction](#) is an initiative of a large number of scientific organizations and conservation groups who co-operate to focus on the most threatened endemic species of the world. They have identified 595 sites, including a large number of Birdlife’s Important Bird Areas.
- The [National Geographic Society](#) has prepared a world map^[7] of the hotspots and ArcView shapefile and metadata for the Biodiversity Hotspots^[8] including details of the individual endangered fauna in each hotspot, which is available from Conservation International.^[9]

Distribution by region[[edit](#)]



Biodiversity hotspots. Original proposal in green, and added regions in blue.

North and [Central America](#)

- [California Floristic Province](#) •8•
- [Madrean pine-oak woodlands](#) •26•
- [Mesoamerica](#) •2•

[The Caribbean](#)

- [Caribbean Islands](#) •3•

[South America](#)

- [Atlantic Forest](#) •4•
- [Cerrado](#) •6•
- [Chilean Winter Rainfall-Valdivian Forests](#) •7•
- [Tumbes-Chocó-Magdalena](#) •5•
- [Tropical Andes](#) •1•

[Europe](#)

- [Mediterranean Basin](#) •14•

Africa

- [Cape Floristic Region](#) •12•
- [Coastal Forests of Eastern Africa](#) •10•
- [Eastern Afromontane](#) •28•
- [Guinean Forests of West Africa](#) •11•
- [Horn of Africa](#) •29•
- [Madagascar and the Indian Ocean Islands](#) •9•
- [Maputaland-Pondoland-Albany](#) •27•
- [Succulent Karoo](#) •13•

Central Asia

- [Mountains of Central Asia](#) •31•

South Asia

- [Eastern Himalaya, Nepal](#) •32•
- [Indo-Burma, India](#) and [Myanmar](#) •19•
- [Western Ghats, India](#) •21•
- [Sri Lanka, Sri Lanka](#) •21•

South East Asia and Asia-Pacific

- [East Melanesian Islands](#) •34•
- [New Caledonia](#) •23•
- [New Zealand](#) •24•
- [Philippines](#) •18•
- [Polynesia-Micronesia](#) •25•
- [Southwest Australia](#) •22•
- [Sundaland](#) •16•
- [Wallacea](#) •17•

East Asia

- [Japan](#) •33•

- [Mountains of Southwest China](#) •20•

West Asia

- [Caucasus](#) •15•
- [Irano-Anatolian](#) •30•

References[[edit](#)]

1. Myers, N. *The Environmentalist* 8 187-208 (1988)
2. Myers, N. *The Environmentalist* 10 243-256 (1990)
3. Russell A. Mittermeier, Norman Myers and Cristina Goettsch Mittermeier, *Hotspots: Earth's Biologically Richest and Most Endangered Terrestrial Ecoregions*, Conservation International, 2000 [ISBN 978-968-6397-58-1](#)
4. Myers, N. et al. [Nature \(journal\)](#) 403, 853–858 (2000)
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General references

- Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca, and J. Kent. 2000. Biodiversity hotspots for conservation priorities. [Nature](#) 403:853-858