**Region: Mesoamérica**

Countries included: Belize, Costa Rica, El Salvador, Guatemala, Honduras, México, Nicaragua

**Biodiversity and Global Environmental Benefits Regional Highlights:**

|  |  |
| --- | --- |
| Country | Country-level biodiversity significance |
| Belize | * Belize remains a high-forest-cover country as of 2018 with 73 percent tree cover, home to Central America’s largest intact forest landscapes. However, Belize lost 12 percent or 217,000 hectares of its tree cover from 2001 to 2018, equivalent to 70 million tonnes of carbon emissions. The Maya Mountain block is among the most species rich ecosystems in the Maya lowlands. Belize also has high marine biodiversity, with the largest unbroken barrier reef in the western hemisphere, the Mesoamerican Barrier Reef System (MBRS).[[1]](#footnote-0) Belize’s landscapes have 118 globally threatened species, including three marine species at the brink of, or extinct due to marine pressures. * In terms of range-size rarity the Maya Mountain block and the islands to the East of Belize City, and Northern Belize are of highest importance. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 42.03 to 44 percent, respectively. Large KBAs partially within Protected Areas (PAs) are distributed throughout the country and include: [Belize Off-shore and Barrier Islands](http://www.keybiodiversityareas.org/site/factsheet/20766), [Maya Mountains and southern reserves](http://www.keybiodiversityareas.org/site/factsheet/20761), and [Crooked Tree and associated wetlands](http://www.keybiodiversityareas.org/site/factsheet/20763), among others. PA protection of KBAs has risen from 2000, from 38.82 percent. * An updated IWGIA [Country Technical Notes on Indigenous Peoples’ Issues](https://www.ifad.org/documents/38714170/40258424/Belize%2C+country+technical+note.pdf/20c0863a-8c4c-4156-abac-8a597462808e) for Belize is also provided, which contains a map illustrating the distribution of Indigenous Peoples. * Academic and prioritization studies include a variety of resources: A join IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32) (which highlights considerable Indigenous Peoples claims throughout Southern and Northern Belize); This [guide on conservation and Indigenous Peoples in Mesoamerica](https://www.indianlaw.org/sites/default/files/2015-01-12_MesoamericaConservationGuide_ENG.pdf) from IUCN, Indian Law Resource Center, and CEESP (highlighting past outcomes of conservation efforts coordinated with IPLCs); a [joint PRISMA, Rainforest Foundation, Clark University study on conservation and community rights](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32). * Belize contains several priority KBAs for the Mesoamerica Hotspot, this [dated CEPF profile](https://www.cepf.net/sites/default/files/final.mesoamerica.northernmesoamerica.ep_.pdf) contains extensive modeling of its protected areas system. Priority among this research is the Chiquibul/Montañas Mayas. * Stores of irrecoverable carbon are moderate throughout the country, with significant stores in the Maya Mountain block, and along the entire coast of Belize and its islands. * FAO has no classified land cover data for Belize, but its forest data shows the following distribution: Naturally Regenerated Forest -765kha; Primary Forest - 599kha; Planted Forest - 2.40kha; Other Tree Cover - 0ha; and Non-Forest - 931kha. * Belize has 2 Ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Belize.pdf). * Belize is below the global average of ocean health with considerable deficiencies in sustainable food provision and coastal protection. The country has high coastal biodiversity and the marine ecosystems support strong livelihoods and local economies. |
| Costa Rica | * Costa Rica is a high forest cover and biodiversity country, with additional wetlands, moors, and mangrove ecosystems. Due to external and internal pressures; however, the country has few remaining intact landscapes. Preserved ecosystems are in non-suitable landscapes for human development.[[2]](#footnote-1) Given its size, Costa Rica has exceptional species richness, claiming about 5 percent of species worldwide.[[3]](#footnote-2) This is captured in terms of range-size rarity, where the central corridor of the country is homogeneously of very high importance. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 47.34 to 44 percent, respectively. Large KBAs partially within Protected Areas (PAs) are distributed throughout the country and include: [Cordillera de Talamanca Sur](http://www.keybiodiversityareas.org/site/factsheet/26573), [Caribbean lowlands and wetlands](http://www.keybiodiversityareas.org/site/factsheet/20416), [Nicoya Peninsula](http://www.keybiodiversityareas.org/site/factsheet/20403), and the [Guanacaste lowlands](http://www.keybiodiversityareas.org/site/factsheet/20402), among others. PA protection of KBAs has risen from 2000, from 45.6 percent. * Academic and prioritization studies include a variety of resources: A join IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32) (which highlights considerable Indigenous Peoples claims throughout the South of the Country bordering Panama); This [guide on conservation and Indigenous Peoples in Mesoamerica](https://www.indianlaw.org/sites/default/files/2015-01-12_MesoamericaConservationGuide_ENG.pdf) from IUCN, Indian Law Resource Center, and CEESP (highlighting past outcomes of conservation efforts coordinated with IPLCs); a [joint PRISMA, Rainforest Foundation, Clark University study on conservation and community rights](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32); and a [potential synergies study on Payment for Ecosystem Services](https://www.cambridge.org/core/journals/environmental-conservation/article/assessing-the-potential-for-synergies-in-the-implementation-of-payments-for-environmental-services-programmes-an-empirical-analysis-of-costa-rica/FB7043EA873A1D23E90EA8C9249AE4B4). * Costa Rica contains several priority KBAs for the Southern Mesoamerica Hotspot, this [dated CEPF profile](https://www.cepf.net/sites/default/files/final.mesoamerica.southernmesoamerica.ep_.pdf) contains extensive modeling of its protected areas system. Priorities among this research are the corridors of Talamanca/Osa, Indio Maiz/La Selva, and Talamanca/Bocas del Toro. * Stores of irrecoverable carbon are low throughout the country, though recoverable carbon stock is high. * The primary land cover types are Forest - 3.64Mha; Agriculture - 1.40Mha; Wetland - 61.6kha; Settlement - 44.3kha; and Water - 39.5kha. * Costa Rica has 12 Ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Costa-Rica.pdf). * Costa Rica is below the global average of ocean health with deficiencies in sustainable food provision, clean waters, artisanal fishing opportunities, and carbon storage. |
| El Salvador | * El Salvador is a small country in Central America in the Mesoamerica Biodiversity Hotspot. While the country is endowed with significant landscape and species diversity, land use changes and economic pressures have led to a rapid degradation of the country’s ecosystems. The country’s mangroves in La Union Bay provide significant ecosystem services and livelihood benefits for the country’s fishing population. * El Salvador has low importance in terms of range-size rarity, with some importance on the Northwest border of the country with Honduras. * Key Biodiversity Areas (KBAs) within the country are protected at a rate well below the global average, 26.58 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are distributed throughout the country and include: [Alotepeque Range](http://www.keybiodiversityareas.org/site/factsheet/20883), [Los Cóbanos](http://www.keybiodiversityareas.org/site/factsheet/20902), [La Unión Bay](http://www.keybiodiversityareas.org/site/factsheet/20899), and [Río Sapo/Perquín](http://www.keybiodiversityareas.org/site/factsheet/20900), among others. PA protection of KBAs has risen from 2000, from 1.15 percent. * Academic and prioritization studies include a variety of resources: A joint IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32) (which highlights considerable Indigenous Peoples claims throughout the South of the country by Nahua and Lenka Peoples, which have share considerable areas with current Protected Areas); This [guide on conservation and Indigenous Peoples in Mesoamerica](https://www.indianlaw.org/sites/default/files/2015-01-12_MesoamericaConservationGuide_ENG.pdf) from IUCN, Indian Law Resource Center, and CEESP (highlighting past outcomes of conservation efforts coordinated with IPLCs); a [joint PRISMA, Rainforest Foundation, Clark University study on conservation and community rights](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32). * Stores of irrecoverable carbon are low throughout the country, with significant stores in the mangroves in La Union bay, and the Southern coastline. * The primary land cover types are Forest - 1.46Mha; Agriculture - 505kha; Wetland - 46.2kha; Water - 39.3kha; and Settlement - 32.9kha. * El Salvador has 8 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-El-Salvador.pdf). * El Salvador is below the global average for ecosystem health, with gaps in sustainable food provision, clean waters, and carbon storage. The marine environments of El Salvador have considerable biodiversity. |
| Guatemala | * Guatemala has the highest rate (13 percent) of species endemism in Central America. However, biodiversity is being degraded due to land occupation and unsustainable land uses. Traditional practices and knowledge associated with the use of biological resources are at risk of being lost. The number of species included on the list of threatened species has increased. In addition, the majority of the production systems in the country are unsustainably managed. Protected areas in Guatemala comprise 32 percent of the national territory.[[4]](#footnote-3) Forests inside protected areas (41 percent) are primarily located in the north where the largest biosphere reserves exist. An estimated 67 percent of forests exist in some perturbed state, primarily due to the extraction of individuals for commercial purposes. An exception is the forest concessions in the Mayan Biosphere Reserve, under sustainable management. On the Atlantic coast, severe coral bleaching in Bahía de Amatique is provoked by high concentrations of sediment from the Motagua River. Good vegetation cover on the Atlantic beaches is used as refuge for many species (e.g. Hawksbill Sea Turtle) however organic and non-organic waste can block access to this cover for turtles and other animals. More than 50 percent of mangrove cover has been lost over the last 60 years.[[5]](#footnote-4) * Guatemala has high, horizontally banded zones of importance in terms of range-size rarity. * Key Biodiversity Areas (KBAs) within the country are protected at a rate well below the global average, 30.75 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are distributed throughout the country and include: [Cuilco](http://www.keybiodiversityareas.org/site/factsheet/20359), [Candelaria - Campur](http://www.keybiodiversityareas.org/site/factsheet/20366), and [Rio Chajmaic - Sierra Santa Cruz - Semuy and surrounding areas](http://www.keybiodiversityareas.org/site/factsheet/26612), among others. PA protection of KBAs has risen from 2000, from 26.74 percent. * Academic and prioritization studies include a variety of resources: A joint IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32); this [guide on conservation and Indigenous Peoples in Mesoamerica](https://www.indianlaw.org/sites/default/files/2015-01-12_MesoamericaConservationGuide_ENG.pdf) from IUCN, Indian Law Resource Center, and CEESP (highlighting past outcomes of conservation efforts coordinated with IPLCs); and the geographic selection of areas for programs and projects via Guatemala’s [FIP program](https://www.climateinvestmentfunds.org/sites/default/files/meeting-documents/inb_-_plan_inversio_n_forestal_final_18-05-17_def.pdf) focused on forest landscapes considering carbon reserves, conservation and connectivity value, and social indicators (pp. 53-56). * Stores of irrecoverable carbon are moderate throughout the country, with significant stores along the Southern coastline. * The primary land cover types are Forest - 6.61Mha; Agriculture - 3.12Mha; Shrubland - 929kha; Grassland - 453kha; and Water - 135kha. * Guatemala has 7 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Guatemala.pdf). * Guatemala is well below the global average for ecosystem health, with gaps in sustainable food provision, clean waters. The marine environments of Guatemala have considerable biodiversity, coastal protection, and carbon storage. |
| Honduras | * Honduras has a northern coastline on the Caribbean Sea and a southern coastline on the Pacific Ocean (via the Gulf of Fonseca). Due to its geographical location which converges on tropical and subtropical ecosystems, Honduras possesses a high degree of diversity of terrestrial, marine and coastal and freshwater biological resources. This has led to the existence of endemic species concentrated in relic sites or hotspots, in environmental conditions unaffected by anthropogenic activity, particularly in mountain areas with cloud forests rising above 1,000 metres above sea level. In the Gulf of Fonseca region, species such as snapper, sea bass and turtles no longer migrate to spawn in the southern coastal region. Seasonal ponds no longer exist to serve as a breeding habitat for a large number of birds. While bivalves, such as curil and casco de burro, still exist in the region they are exposed to high levels of stress from harvesting and pollution.[[6]](#footnote-5) * Honduras has moderate and heterogeneously distributed importance in terms of range-size rarity. * Key Biodiversity Areas (KBAs) within the country are protected at a rate well above the global average, 65.03 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are distributed throughout the country and include: [Pico Bonito](http://www.keybiodiversityareas.org/site/factsheet/23472), [Sierra de Agalta](http://www.keybiodiversityareas.org/site/factsheet/23480), [Pico Bonito](http://www.keybiodiversityareas.org/site/factsheet/23472), and [Celaque](http://www.keybiodiversityareas.org/site/factsheet/23474), among others. PA protection of KBAs has risen from 2000, from 57.43 percent. * Academic and prioritization studies include a variety of resources: A joint IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32); and this [guide on conservation and Indigenous Peoples in Mesoamerica](https://www.indianlaw.org/sites/default/files/2015-01-12_MesoamericaConservationGuide_ENG.pdf) from IUCN, Indian Law Resource Center, and CEESP (highlighting past outcomes of conservation efforts coordinated with IPLCs). * Stores of irrecoverable carbon are moderate throughout the country, with significant stores along the Northern and Southern coastline. * The primary land cover types are Forest - 7.51Mha; Agriculture - 2.66Mha; Shrubland - 742kha; Grassland - 496kha; and Water - 111kha. * Honduras has 11 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Honduras.pdf). * Honduras is well below the global average for ecosystem health, with gaps in sustainable food provision, clean waters.The marine environments of Honduras have considerable biodiversity, coastal protection, and support thriving coastal economies. |
| México | * Mexico is distinguished as one of the world’s megadiverse countries and centers of domestication and origin of cultivated plants. The [Natural Capital of Mexico (2017)](http://bioteca.biodiversidad.gob.mx/janium/Documentos/14039.pdf) remains the benchmark document on the status of Mexican biodiversity. As of 2011, over a quarter (28.7 percent) of Mexican territory has lost its natural ecosystems while the remaining portion is characterized by different levels of conservation. Also, the natural vegetation that remains is impacted by significant degradation processes. In 2011, only 49.5 percent of the remaining expanse of rainforests and forests was associated with a primary state of conservation. As for mangroves, an estimated extension of 764,486 hectares in 2010 ranked Mexico fourth worldwide for the largest extensions of this ecosystem.[[7]](#footnote-6) * Mexico has high importance in terms of range-size rarity, with clusters primarily in the Southern states and along the coastal corridors. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 34.13 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are distributed throughout the country and include: [Sierra del Nido](http://www.keybiodiversityareas.org/site/factsheet/10134), [Coalcomán-Pómaro](http://www.keybiodiversityareas.org/site/factsheet/10025), [Humedales del Sur de Tamaulipas y Norte de Veracruz](http://www.keybiodiversityareas.org/site/factsheet/10088), and [Sierra de Atoyac y Bosques de Niebla de la Costa Grande](http://www.keybiodiversityareas.org/site/factsheet/10020), among others. PA protection of KBAs has risen from 2000, from 19.09 percent. * Academic and prioritization studies include: a study on [biocultural heritage of Indigenous Peoples](http://idegeo.centrogeo.org.mx/uploaded/documents/El_patrimonio_biocultural-Eckart_Boege.pdf) in Mexico, including the overlap between national Protected Areas and Indigenous Peoples’ territories (p. 141), and priority areas for biocultural conservation and development (pp. 144-145). * Stores of irrecoverable carbon are moderate throughout the country, with significant stores along the Gulf of California and along the Western forests. * The primary land cover types are Shrubland - 78.9Mha; Forest - 77.0Mha; Agriculture - 34.8Mha; Grassland - 16.7Mha; Bare - 3.21Mha; and Water - 1.75Mha. * Mexico has 142 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Mexico.pdf). * Mexico is just below the global average for ecosystem health, with gaps in sustainable food provision, clean waters, and ability to support coastal livelihoods and economies.The marine environments of Mexico have considerable biodiversity, and high carbon storage. |
| Nicaragua | * Nicaragua is home to the largest and best preserved tracts of tropical rainforests and lowland ecosystems in Central America. Nicaragua has a high variety of both terrestrial and marine ecosystems, with 68 ecosystems representing 60 percent of the Central American region's ecosystemic richness. The Atlantic slope has an exceptional biodiversity and habitats. The country’s extensive continental shelf, especially in the Caribbean, provides great marine richness—home to the largest area of relatively pristine forest, where populations of endangered species (e.g. tapir, harpy eagle, jaguar) are still found and whose survival depends on large areas of undisturbed forests. Similarly, the area also serves as a vital link in the chain of humid forests stretching from Mexico to Colombia, known as the Atlantic Biological Corridor. The Pacific slope presents a mosaic of terrestrial and marine and coastal ecosystems, crossed by a chain of 25 volcanoes. The country’s geography has allowed for the existence of a variety of wetlands in both the Pacific and Atlantic coastal zones. Although no official inventory exists, 50 wetlands have been identified.[[8]](#footnote-7) * Nicaragua has low importance in terms of range-size rarity relative to the region, with isolated patches scattered throughout the country. * Key Biodiversity Areas (KBAs) within the country are protected at a rate above the global average, 68.6 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are distributed throughout the country and include: [Wetlands of Northern Lake Managua](http://www.keybiodiversityareas.org/site/factsheet/20430), and [Domitila](http://www.keybiodiversityareas.org/site/factsheet/20434), among others. PA protection of KBAs has risen from 2000, from 68.22 percent. * Academic and prioritization studies include a variety of resources: A joint IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32); and this [guide on conservation and Indigenous Peoples in Mesoamerica](https://www.indianlaw.org/sites/default/files/2015-01-12_MesoamericaConservationGuide_ENG.pdf) from IUCN, Indian Law Resource Center, and CEESP (highlighting past outcomes of conservation efforts coordinated with IPLCs). * Stores of irrecoverable carbon are moderate throughout the country, with significant along the Northern coastline of the country. * The primary land cover types are Forest - 6.99Mha; Agriculture - 4.31Mha; Water - 1.04Mha; Grassland - 391kha; Shrubland - 324kha; and Wetland - 142kha. * Nicaragua has 9 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Nicaragua.pdf). * Nicaragua is far below the global average for ecosystem health, with gaps along nearly every dimension, except for biodiversity and the ability to support coastal livelihoods and economies. |
| Panama | * Panama is located in the world’s most biodiverse region and on the isthmus linking Central and South America, with access to the flora and fauna of three different bodies of water, namely the Caribbean Sea, Gulf of Chiriquí and Gulf of Panama. Panamanian forests provide an important biological corridor for species migration. At 100 km wide, the country is however particularly vulnerable to experience multiple natural disasters and severe impacts from activities linked to climate change, which can easily disrupt this corridor through the destruction of habitat. Significant land use changes are also occurring in the country as a result of agricultural expansion, urban sprawl and tourism. Protected areas currently comprise 3.5 million hectares, accounting for 38.66 percent of the national area (35.85 percent land, 2.81 percent marine). Panama has also identified 57 Key Biodiversity Areas (KBAs), of which 53 are also Important Bird Areas (IBAs).[[9]](#footnote-8) * Panama has moderately high importance in terms of range-size rarity relative to the region, with homogeneously distributed concentrations along the North of the country. * Key Biodiversity Areas (KBAs) within the country are protected at a rate below the global average, 37.4 to 44 percent, respectively. Large KBAs outside of/or partially within Protected Areas (PAs) are distributed throughout the country and include: the [Golfo de los Mosquitos Forests](http://www.keybiodiversityareas.org/site/factsheet/19277), [La Amistad International Park](http://www.keybiodiversityareas.org/site/factsheet/19263), and [Narganá Wildlands Area](http://www.keybiodiversityareas.org/site/factsheet/19337), among others. PA protection of KBAs has risen from 2000, from 34.2 percent. * Academic and prioritization studies include a variety of resources: A joint IPLC conservation mapping initiative coordinated with IUCN available as a [web map here](http://iucn.cr/arcgis/apps/webappviewer/index.html?id=3df3649c80d44ac59094818872858c32); and Panama’s [NBSAP](https://www.cbd.int/doc/world/pa/pa-nbsap-v2-es.pdf). * Stores of irrecoverable carbon are moderate throughout the country, with significant peaks along the Northern and Southern coastlines. * The primary land cover types are Forest - 4.84Mha; Agriculture - 2.34Mha; Wetland - 160kha; Water - 137kha; and Shrubland - 88.2kha. * Panama has 9 ramsar sites with additional context [here](https://rsis.ramsar.org/sites/default/files/rsiswp_search/exports/Ramsar-Sites-annotated-summary-Panama.pdf). * Panama is just below the global average for ecosystem health, with notable gaps along the dimensions of sustainable food provision, clean waters, and carbon storage. |

1. <https://www.cbd.int/countries/profile/?country=bz#facts> [↑](#footnote-ref-0)
2. <https://www.cbd.int/countries/profile/?country=cr#facts> [↑](#footnote-ref-1)
3. <https://www.cbd.int/doc/world/cr/cr-nbsap-v2-es.pdf> [↑](#footnote-ref-2)
4. https://www.cbd.int/countries/profile/?country=gt#facts [↑](#footnote-ref-3)
5. https://www.cbd.int/countries/profile/?country=gt#facts [↑](#footnote-ref-4)
6. https://www.cbd.int/countries/profile/?country=hn#facts [↑](#footnote-ref-5)
7. <https://www.cbd.int/countries/profile/?country=mx#facts> [↑](#footnote-ref-6)
8. https://www.cbd.int/countries/profile/?country=ni#facts [↑](#footnote-ref-7)
9. https://www.cbd.int/countries/profile/?country=pa#facts [↑](#footnote-ref-8)