Conservation Outcomes
Northern Mesoamerica

1 / 1,500,000

11 December 2007

scale: 1/244,000,000
projection: Albers Equal Area Conic
38° east longitude 7° south latitude

Northern Mesoamerica • Conservation Outcomes

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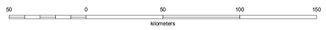
Northern Mesoamerica



scale: 1/1,500,000
projection: Albers Equal Area Conic
central meridian: 90° west longitude
standard parallels: 15° & 20° north latitude

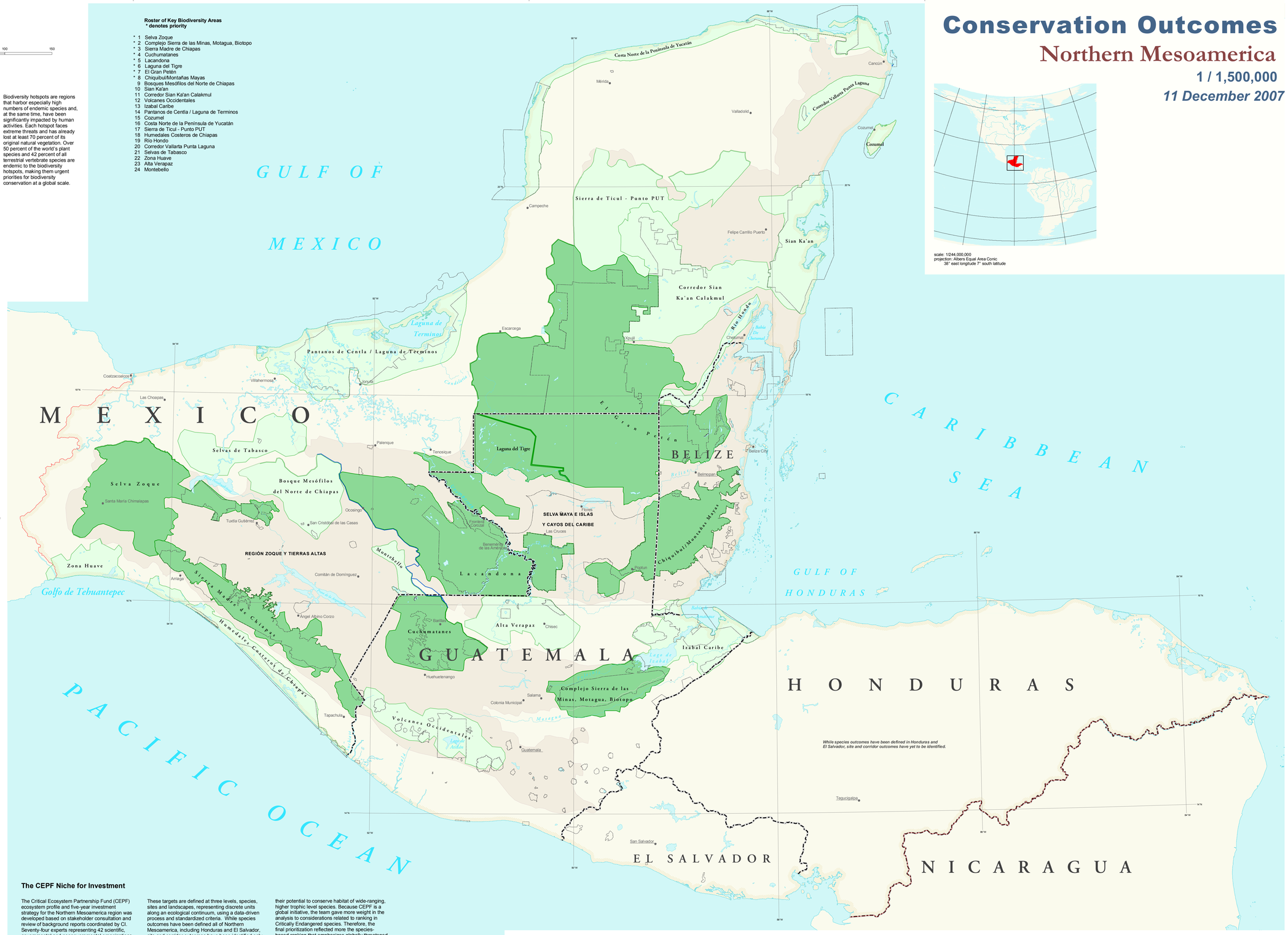
- **CEPF focal area**
- **CEPF investment corridor**
- **Key Biodiversity Area, CEPF Priority** (Lacandona)
- **Key Biodiversity Area, Other** (Cozumel)
- **protected area**[†]
- **town** (*national capitals underlined*) (Huehuetenango)
- **country border**
- **river**
- **lake**

[†]IUCN Categories Ia, Ib, II-VI

Biodiversity hotspots are regions that harbor especially high numbers of endemic species and, at the same time, have been significantly impacted by human activities. Each hotspot faces extreme threats and has already lost at least 70 percent of its original natural vegetation. Over 50 percent of the world's plant species and 42 percent of all terrestrial vertebrate species are endemic to the biodiversity hotspots, making them urgent priorities for biodiversity conservation at a global scale.

Roster of Key Biodiversity Areas
*** denotes priority**

* 1 Selva Zoque
* 2 Complejo Sierra de las Minas, Motagua, Biotopo
* 3 Sierra Madre de Chiapas
* 4 Cuchumatanes
* 5 Lacandona
* 6 Laguna del Tigre
* 7 El Gran Petén
* 8 Chiquibul/Montañas Mayas
9 Bosques Mesófilos del Norte de Chiapas
10 Sian Ka'an
11 Corredor Sian Ka'an Calakmul
12 Volcanes Occidentales
13 Izabal Caribe
14 Pantanos de Centla / Laguna de Terminos
15 Cozumel
16 Costa Norte de la Península de Yucatán
17 Sierra de Ticul - Punto PUT
18 Humedales Costeros de Chiapas
19 Río Hondo
20 Corredor Vallarta Punta Laguna
21 Selvas de Tabasco
22 Zona Huave
23 Alta Verapaz
24 Montebello



While species outcomes have been defined in Honduras and El Salvador, site and corridor outcomes have yet to be identified.

The CEPF Niche for Investment

The Critical Ecosystem Partnership Fund (CEPF) ecosystem profile and five-year investment strategy for the Northern Mesoamerica region was developed based on stakeholder consultation and review of background reports coordinated by CI. Seventy-four experts representing 42 scientific, governmental and nongovernmental organizations from Belize, Guatemala and Mexico participated in the preparation of the profile.

Data on biodiversity, socioeconomic factors, institutional context and conservation efforts were compiled and synthesized from more than 330 organizations, representing international donors, NGOs, public agencies, universities, community-based groups and the private sector. A three-week tour of the region in January 2003 permitted field observation and discussion with local communities and park staff, followed in February 2003 with a stakeholder workshop in Guatemala that enabled broad input from the conservation community to formulate the niche and investment strategies proposed for CEPF. Experts in the region then validated the niche and investment strategy in August 2003.

The Northern Mesoamerica ecosystem profile includes a new commitment and emphasis on using conservation outcomes - targets against which the success of investments can be measured - as the scientific underpinning for determining CEPF's geographic and thematic focus for investment. Species and site outcomes for the region were defined in cooperation with scientists at CI's Center for Applied Biodiversity Science (CABS). Conservation outcomes are the full set of quantitative and justifiable conservation targets in a region that need to be achieved in order to prevent biodiversity loss. Having these targets in place ensures that conservation action focuses on the species at the greatest risk of extinction and the sites and landscapes that are most important for their protection.

These targets are defined at three levels, species, sites and landscapes, representing discrete units along an ecological continuum, using a data-driven process and standardized criteria. While species outcomes have been defined all of Northern Mesoamerica, including Honduras and El Salvador, site and corridor outcomes have been identified only for the Mexico, Belize, and Guatemala portion of the region. Species outcomes aim to avoid extinctions, and the primary set of targets for species outcomes are those species that are globally threatened (Critically Endangered, Endangered and Vulnerable) according to the IUCN Red List. In Northern Mesoamerica, a total of 470 species representing six taxonomic groups (mammals, birds, amphibians, reptiles, invertebrates and plants) were defined as targets for achieving species outcomes. Of these 470, the 106 Critically Endangered species of the region (including El Salvador and Honduras) were prioritized for funding by CEPF.

Recognizing that most species are best conserved through the protection of sites in which they occur, Key Biodiversity Areas were defined as targets for achieving site outcomes. Key Biodiversity Areas are globally important sites for the conservation of threatened and endemic species, as well as species that congregate in very large numbers at a particular site during their life cycle. Investments to create protected areas or special conservation regimes, expand existing protected areas and improve protected area management should be targeted towards these sites in order to prevent species extinctions and biodiversity loss. The experts in the Northern Mesoamerica region identified 24 Key Biodiversity Areas, targets for achieving site outcomes.

To ensure that CEPF invests in those areas of the highest priority for global conservation, the team prioritized the 24 Key Biodiversity Areas further. The areas were ranked based on two considerations: their importance for the protection of endemic and globally and nationally threatened species and on their potential to conserve habitat of wide-ranging, higher trophic level species. Because CEPF is a global initiative, the team gave more weight in the analysis to considerations related to ranking in Critically Endangered species. Therefore, the final prioritization reflected more the species-based ranking that emphasizes globally threatened species. In the end, CEPF decided to focus on eight of the 24 Key Biodiversity Areas, based on the prioritization and an analysis of current investment.

For some species, protecting sites alone will not be sufficient to ensure their conservation in the long-term. Corridor outcomes, which are the larger landscapes that need to be conserved to allow the persistence of biodiversity over time, were defined based on the needs of wide-ranging and migratory species. These corridors are anchored on Key Biodiversity Areas (site outcomes) embedded in a matrix of other natural habitat and anthropogenic land uses. Two conservation corridors were identified for the Northern Mesoamerica region as important for biodiversity conservation. The full set of outcomes is designed to help guide actions by the wider conservation and donor communities.

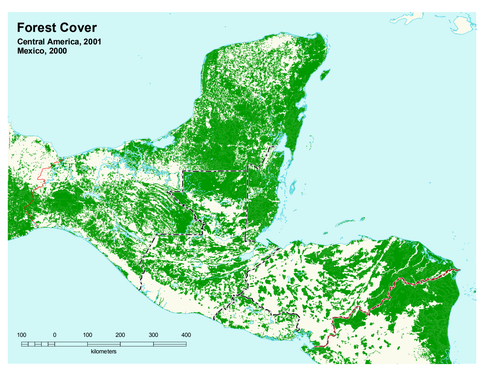
The CEPF niche for investment was formulated based on five major parameters: evaluation of threatened and endemic biodiversity, determination of priority geographical areas, potential impact of thematic directions, assessment of available institutional capacity and analysis of current funding gaps and opportunities. With this imperative in mind, the CEPF niche is designed to promote win-win solutions to achieve the critical regional goals of poverty alleviation and conservation by influencing select development investments and policies in the Selva Maya and the Selva Zoque and Chiapas/Guatemala Highlands corridors.

For more information, visit www.cepf.net.

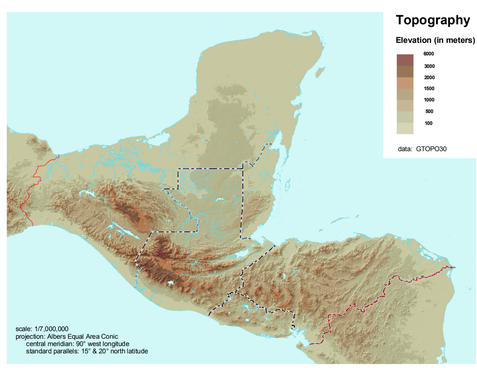
Overview
Mesoamerican Hotspot

scale: 1/30,000,000

Forest Cover
Central America, 2001
Mexico, 2000



Topography
Elevation (in meters)



scale: 1/7,000,000
projection: Albers Equal Area Conic
central meridian: 90° west longitude
standard parallels: 15° & 20° north latitude

data:
2000 National Forest Inventory of Mexico
Secretaría de Medio Ambiente y Recursos Naturales, México
2001 Central American Ecosystem Map
Comisión Centroamericana de Ambiente y Desarrollo
and World Bank
BirdLife International
Comisión Nacional de Áreas Naturales Protegidas, México
Comisión Nacional de Áreas Protegidas, Guatemala
Comisión Nacional para el Conocimiento y Uso de la Biodiversidad
Consejo Internacional para la Preservación de las Aves México
Center for Applied Biodiversity Science at
Conservation International, Arlington, VA USA
Conservation International, Selva Maya
Global Shoreline Database, January 2001, Veridian (GDAIS)
Ministerio de Ambiente, Ganadería y Alimentación de Guatemala
tomado del Plan Ecoregional de la Selva Maya, Zoque y Olmeca
TNC-Pronatura Yucatán
The Central American System of Protected Areas
PROARCA-TNC-WCPA-CBM-CI
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The Critical Ecosystem Partnership Fund (CEPF) is a joint initiative of Conservation International, the Global Environment Facility, the Government of Japan, the MacArthur Foundation, L'Agence Française de Développement, and the World Bank. A fundamental goal of CEPF is to ensure civil society is engaged in biodiversity conservation.

The political and geographic designations shown on this map do not imply the expression of any opinion on the part of CEPF concerning the legal status or delineation of the frontiers of any country, territory or area.