



Status of Mangrove Forests in Honduras

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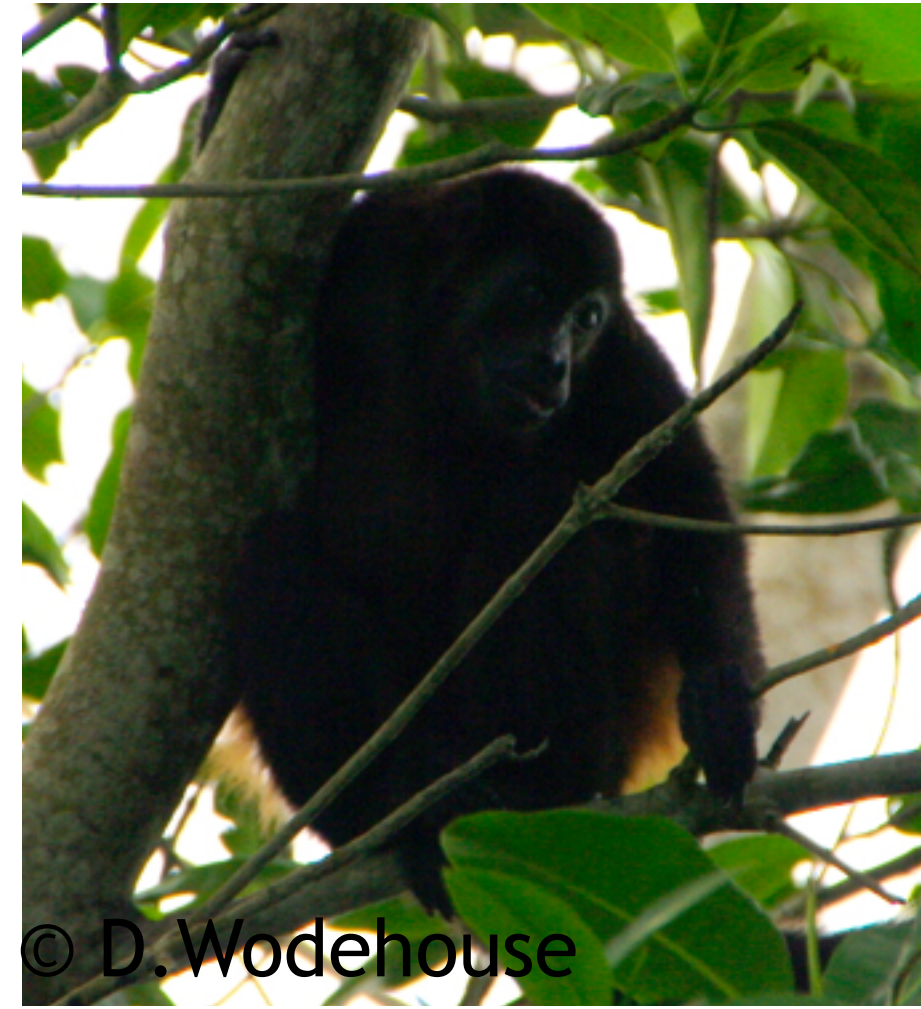
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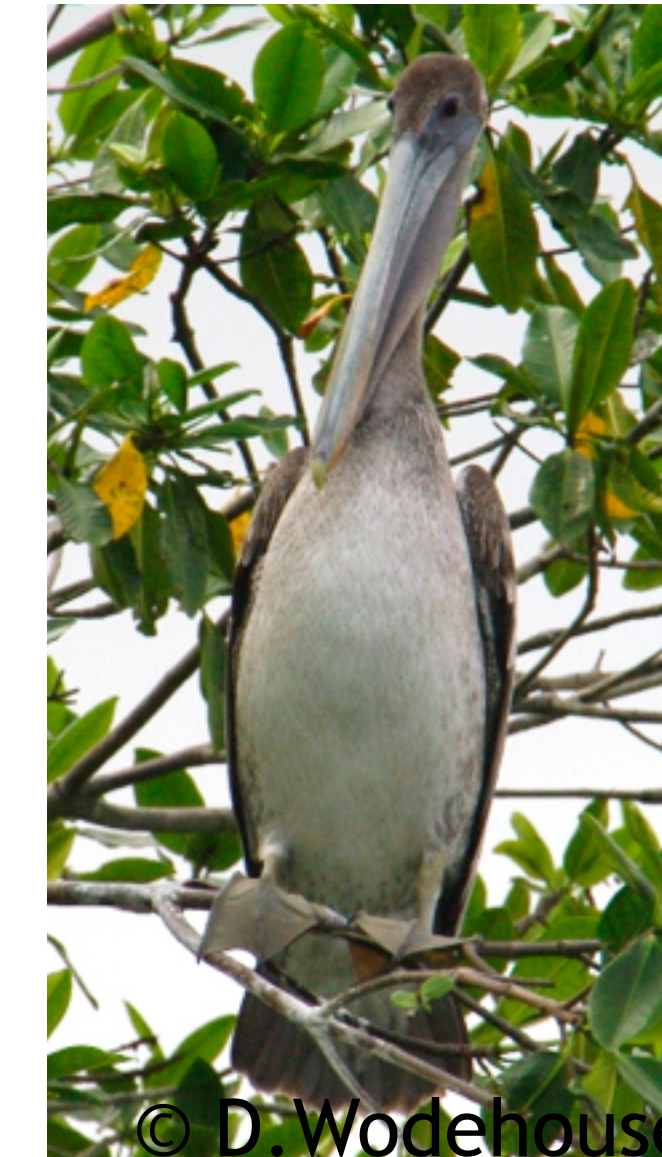
Objectives

1. To review the status of mangroves in Honduras (reforestation programs).
2. To perform a literature review about pesticides tested in mangrove sediments of Honduras, including a scientific literature search in PubMed and PubMedCentral.



Introduction

- The ecological value of mangroves ecosystems include carbon storage, coastal protection against extreme weather events and erosion, improvement of water quality and wildlife habitat. ¹
- Historically, the total area of mangrove forests in Honduras was 100,625 ha. ²
- The dominant mangrove species found in the Gulf of Fonseca and the Caribbean Sea are *Rhizophora mangle*, *Laguncularia racemosa*, *Avicennia germinans* and *Conocarpus erectus*. *Rhizophora racemosa* and *Avicennia bicolor* are also found in the Gulf of Fonseca. ²

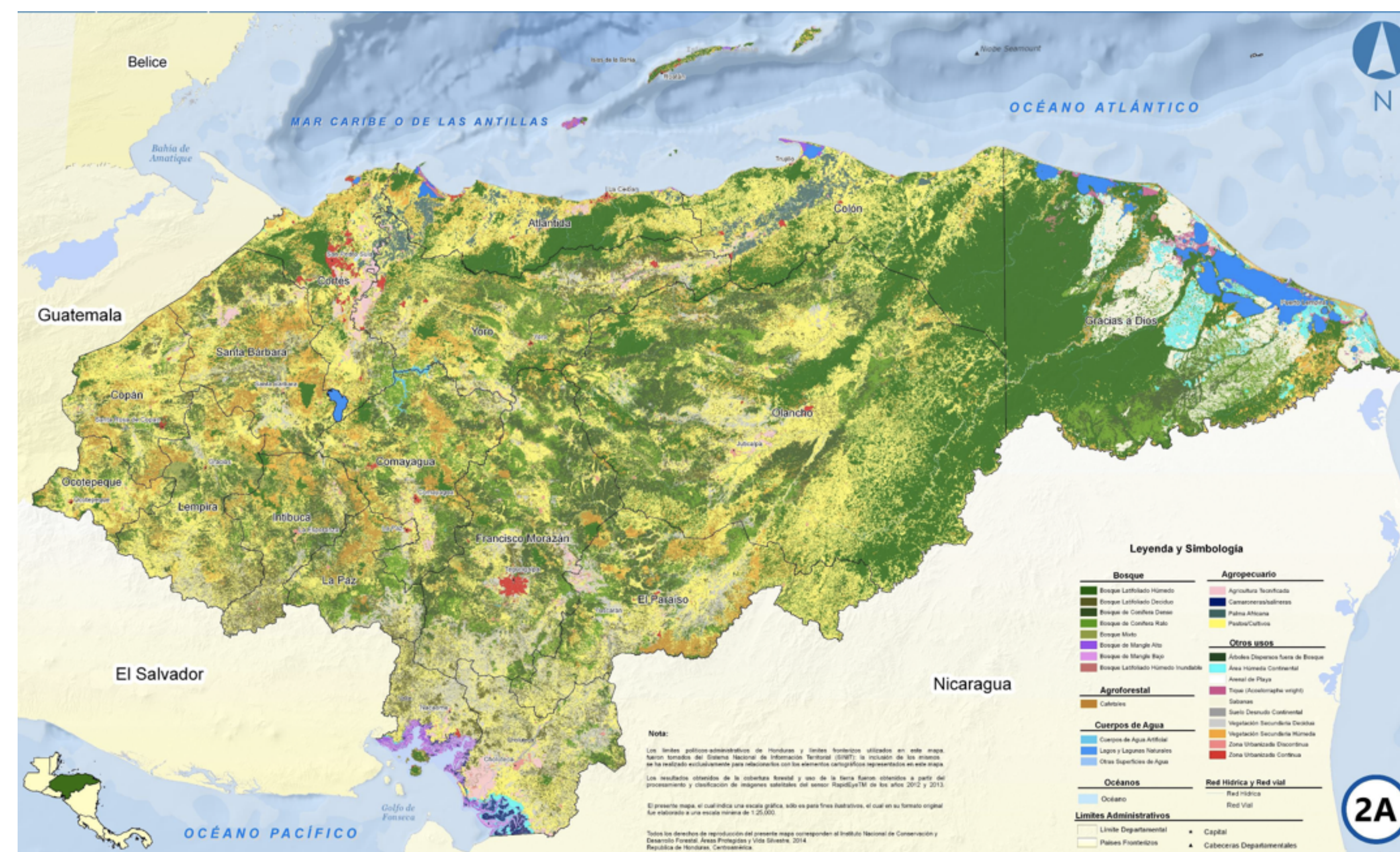


Results

1. Information is available from various government agencies and NGOs, including:
 - MiAmbiente+, Tegucigalpa, Honduras lanier_reyestorres@yahoo.com
 - CREDIA (Centro Regional de Documentación e Interpretación Ambiental), cruz.irismariela@gmail.com
 - ICF (Instituto de Conservación Forestal), mariaquihn@yahoo.es
2. A summary of the historical, current and deforested areas of mangroves is in Table 1.
3. The literature search revealed that there is no information on metals in sediments of Honduras mangroves. See Table 2.

Table 1. Historical, current and lost areas of mangroves in Honduras, by location²

Location	Mangroves extent (2014 data)				
	Historically (in ha)	Currently (in ha)	Lost (in ha)	Deforested for shrimp farming (in ha)	Deforested for other human activities (in ha)*
Atlantic (Caribbean Sea)	38,025	35,280	2,745 - 3,304	-	2,559
Pacific (Gulf of Fonseca)	62,600	38,600	24,000	22,800	1,200
Total mangrove area	100,625	73,880	26,745	22,800	3,759



Map 1. Map of forest cover and land use in Honduras. Areas of mangrove forests are in purple and pink. Shrimp farms are in navy blue. ³

Table 2. Literature review of information on metals in sediments of Honduras mangroves

Search Terms	Literature Search	
	Results	Specifications
Mangrove Honduras	0	-
AND	8	For Mexico
	0	-
	0	-
	3	Attached



Conclusion

- Shrimp aquaculture, port and urban development, solid waste and agrochemical contamination are some of the human activities that are endangering mangrove ecosystems in Honduras. 26.6% of mangroves have already been lost. ²
- According to the Honduran strategy for the integrated management of marine, coastal and freshwater ecosystems, shrimp aquaculture and the impacts of climate change are considered to be very high threats to the conservation of Honduran mangroves.⁵ Shrimp aquaculture is the main threat to mangroves in the Pacific coast and the mangroves in the Caribbean Coast and the Bay Islands are vulnerable climate change impacts such as sea level rise, increased salinity and increased severity of tropical storms and surges. ¹
- Mangrove conservation, protection and restoration should be environmental priorities in Honduras, otherwise their ecological services are seriously threatened.



References:

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