

## Intro/background

Mangrove forest in Puerto Rico was reduced by almost half because of agricultural development in the 19th and 20th centuries. Mangroves, however, are resilient in optimal conditions. They have been legally protected in Puerto Rico since 1972 and therefore have increased in numbers overall. Unfortunately, today they are more sparsely populated throughout the island (Martinuzzi et al.).

## Methods/materials

To contribute to the mangrove restoration efforts in the Northeast Ecological Corridor of Puerto Rico, we used pruning shears to remove suffocating vines from the trunks and limbs of the young mangroves.

## Results

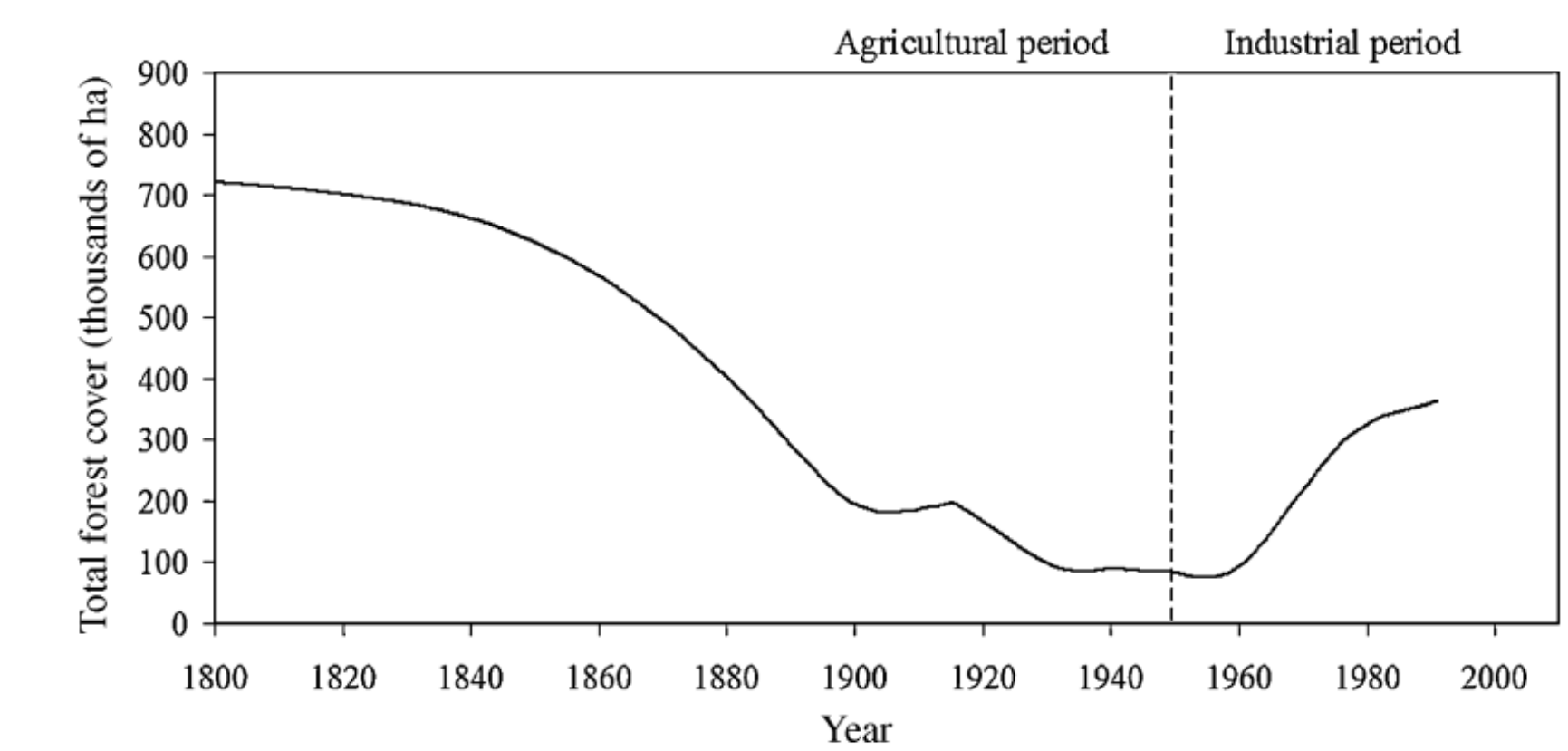
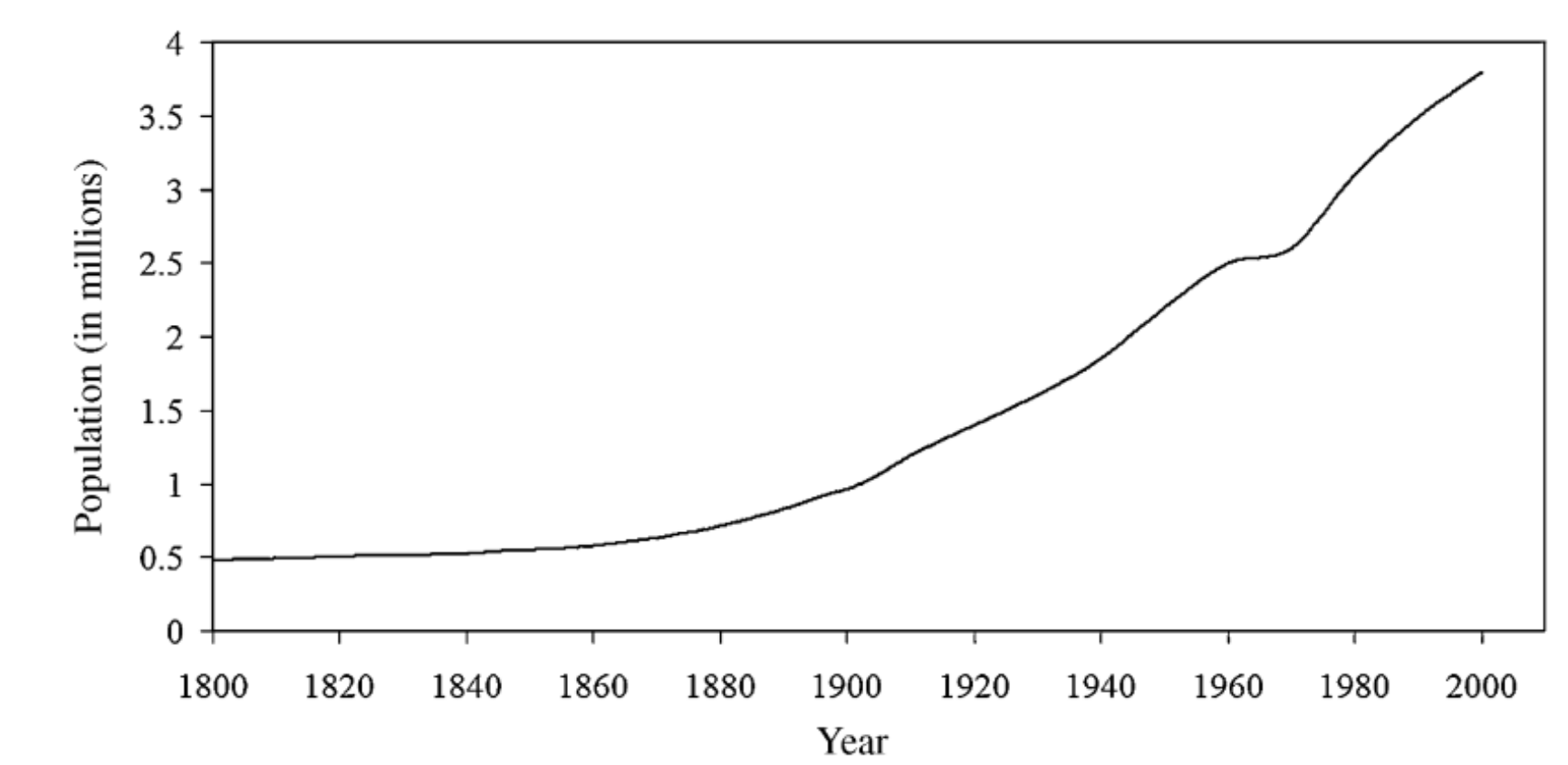
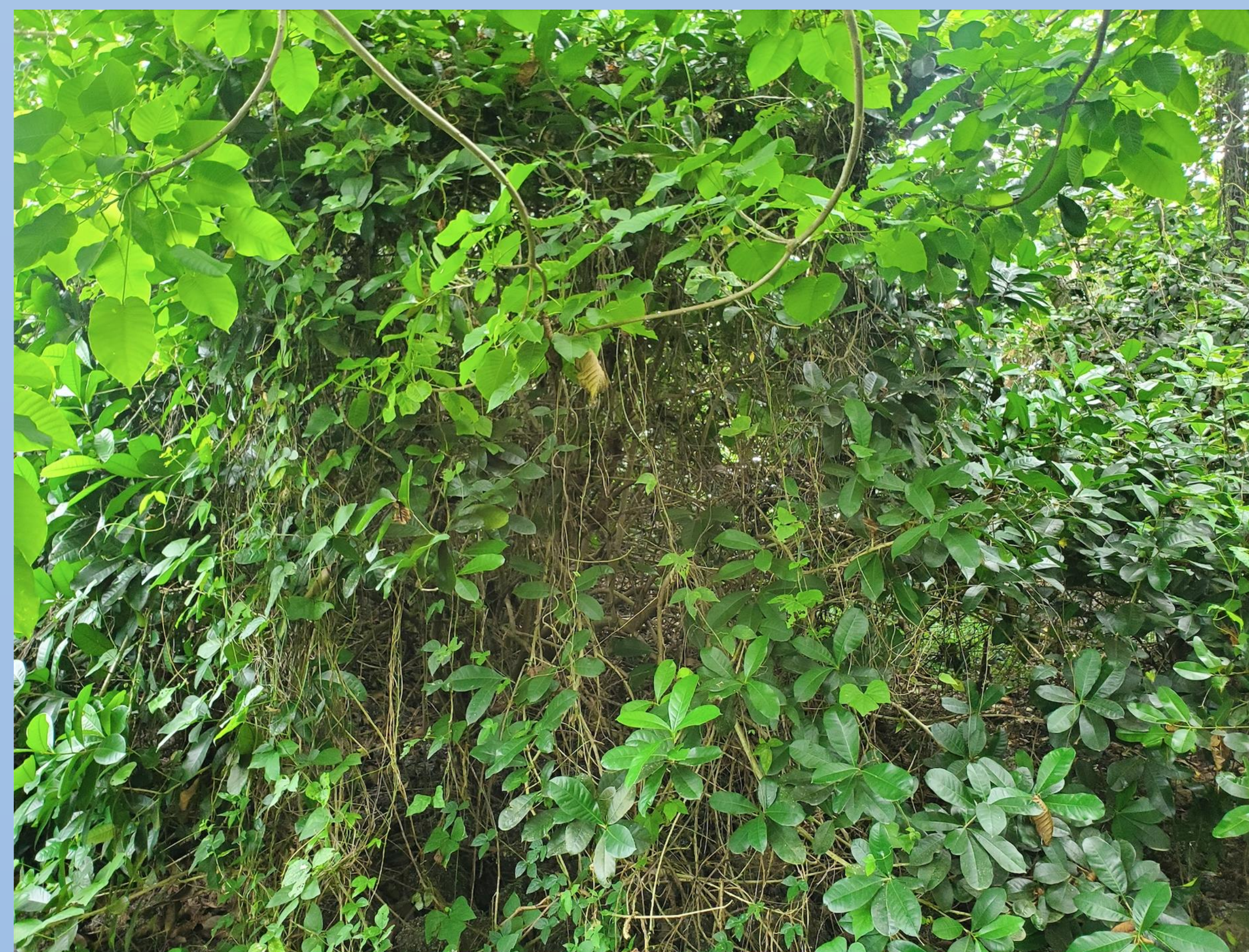
We successfully cleared a large section of the *Pterocarpus/Amphitecna/Anona* forest of restrictive vines.

## Discussion

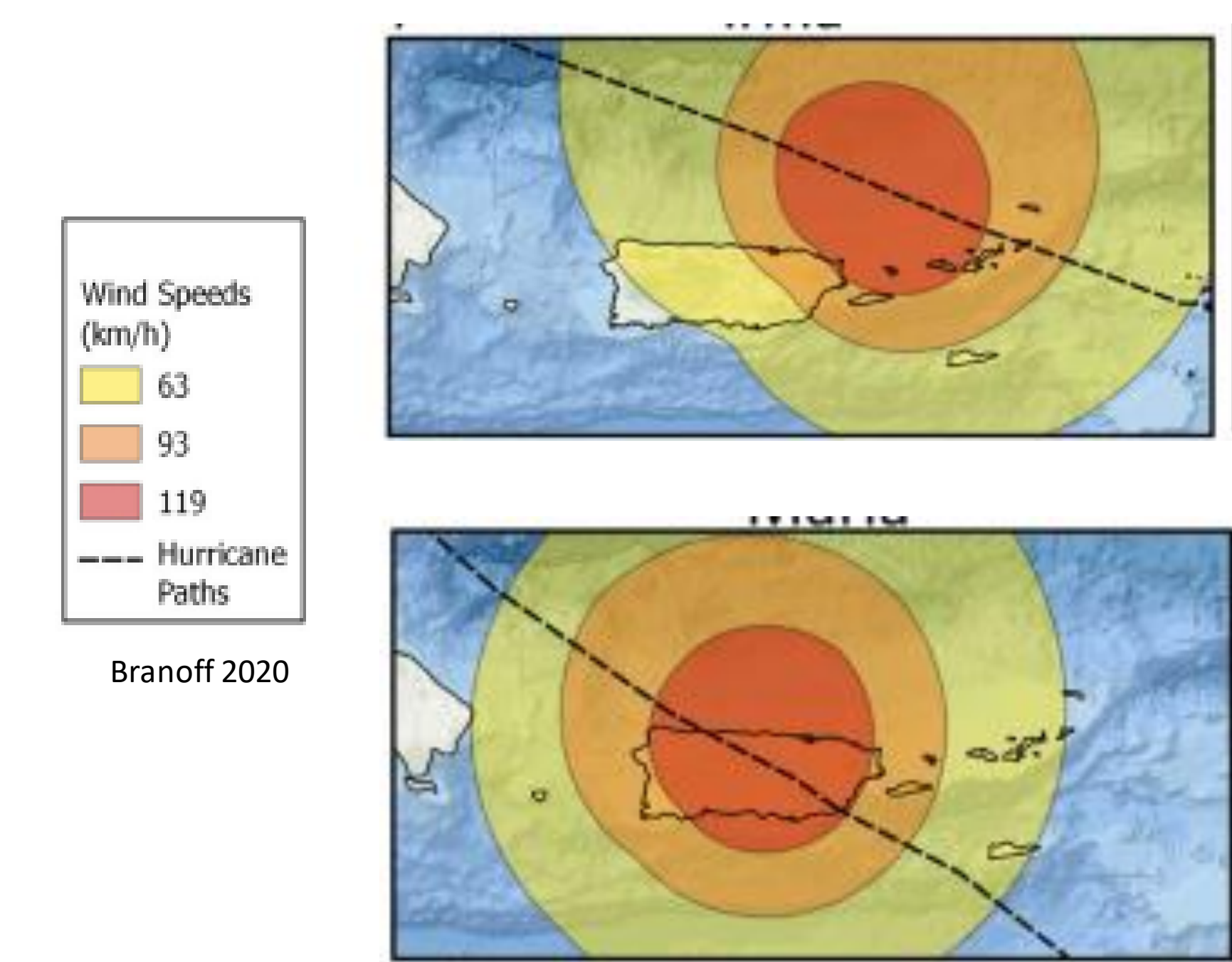
Mangroves and the surrounding wetlands they belong to are large carbon stores and perform ecosystem services such as erosion control and water filtration. They also reduce flood impacts which can be costly to island communities like Puerto Rico which face frequent hurricanes and offshore disturbances (Griffiths et al.). Restoration work continues in an effort to support the mangroves as they carry out these many important roles.

# Restoring Mangrove Forests in Puerto Rico: Protecting Ecosystems that Protect Us

By Sydney Hundelt (Environmental Economics and Policy, Spanish)

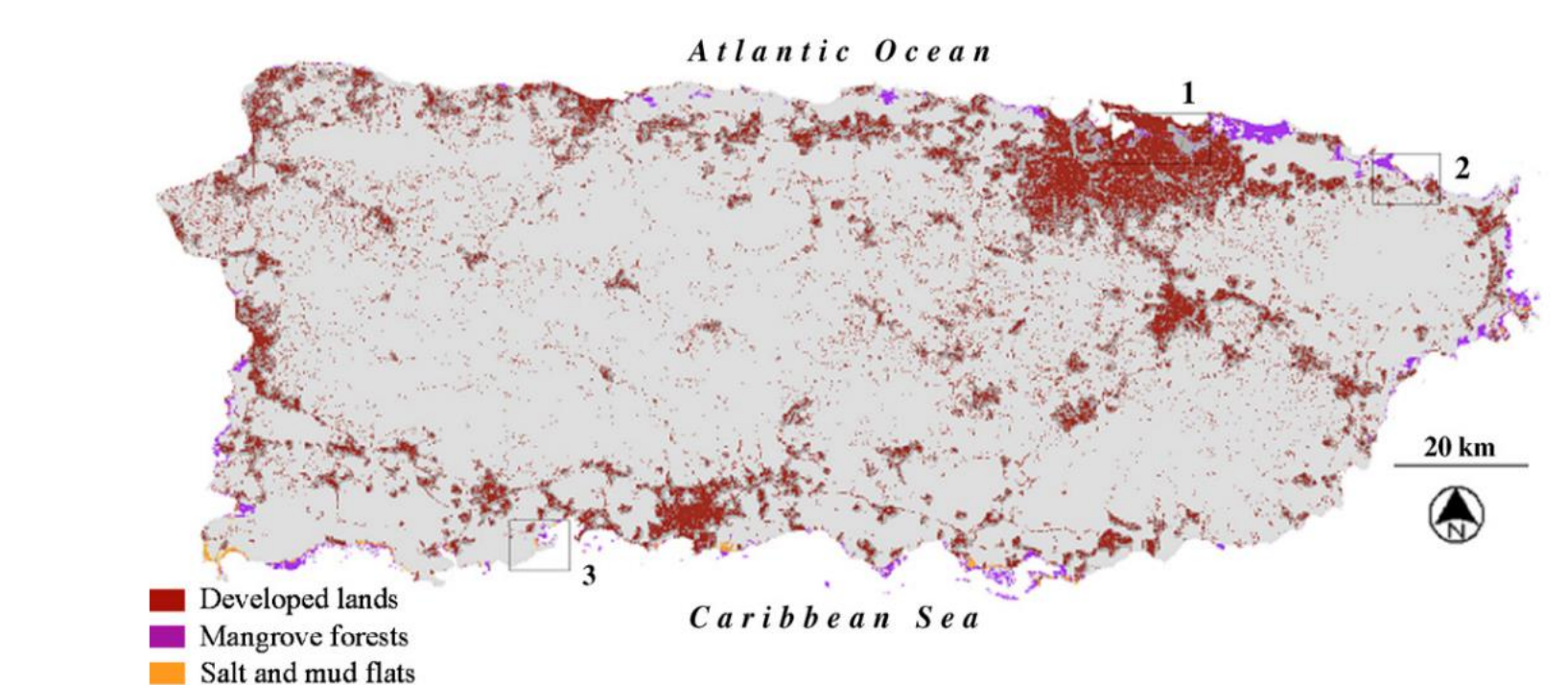


Human population (top) and forest cover (bottom) in Puerto Rico between 1800 and 2000. Martinuzzi et al. Source for population: Va'zquez-Calzada (1988) and IITF (2005). Source for forest cover: IITF (2005), Ramos and Lugo (1994), Helmer et al. (2002).



Country	Mangrove fishers	% SFF who are mangrove fishers
Indonesia	893,000	39
India	570,000	38
Bangladesh	286,000	82
Myanmar	286,000	69
Brazil	278,000	53
Vietnam	240,000	44
Mexico	208,000	73
Nigeria	150,000	89
Thailand	127,000	55
Philippines	118,000	41

Ermgassen et al.



2002 land cover map (Gould et al., 2008)

## Acknowledgements

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