

The Guyana Mangrove Restoration Project

Mangrove forests in Guyana are destroyed by natural coastal erosion processes and by human activities. Mangrove conservation and rehabilitation is therefore a priority of the Government of Guyana.

Through the implementation of Guyana Mangrove Restoration Project the Government's overall objective is to:

- a. **abate climate change through carbon sequestration, reforestation and forest preservation.**
- b. **mitigate the effect of climate change on the sea defence structures and biodiversity.**

The project is managed by the Mangrove Action Committee (MAC) within the Climate Change and Agricultural Adaptation Unit of the National Agricultural Research Institute (NARI) of the Ministry of Agriculture (MoA), Government of Guyana (GoG). The committee is made of representatives of 12 governmental agencies.

Actions that will Help Save Guyana's Mangroves

- Avoid grazing animals in mangrove areas
- Avoid careless cutting of trees for fuel wood and poles for fishing nets.
- Harvest tannins in the amount needed and with responsible harvesting techniques
- Avoid dumping garbage at mangrove sites
- Avoid pulling fishing boats through the mangrove forest
- Talk to other persons about avoiding the above bad practices

The Guyana Mangrove Restoration Project (GMRP)

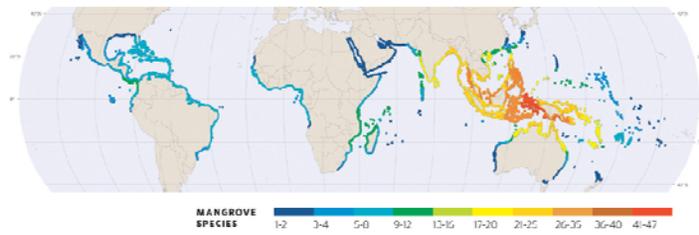
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Mangrove
Restoration Project

Mangrove Forest Guide





Mangrove Forests

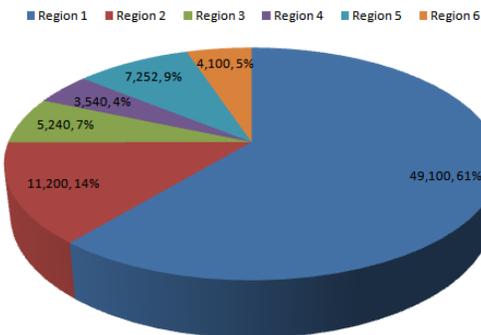
Mangroves are coastal and riverain forests made up of trees and shrubs that can thrive in areas of high salinity and tidal flooding. Altogether, mangroves cover approximately 172,000 km² of the earth's surface. Approximately 35% of the world's mangrove forest was lost during the last several decades of the twentieth century.

Mangroves are important because they :

- Hold the soil together and help to prevent coastal erosion
- Shield inland areas during storms
- Trap and break down pollutants
- Serve as a source of food for the aquatic life in the rivers and the shallow areas of the sea/ocean.
- Provide homes for numerous animal species (refuge for juvenile fish, shrimp and crab)

Guyana currently has **80,432 hectares** of mangrove forest, now less than a 1990 FAO estimate of 91,000 hectares.

Estimated Area (ha.) of Mangrove Forest among the Coastal Administrative Regions of Guyana (GFC 2001)



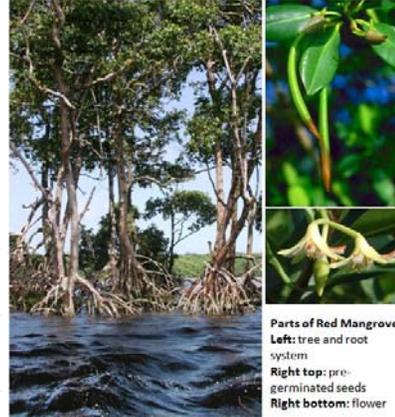
Common Type of Mangroves

In **Guyana**, there are three major mangrove species. These are commonly called the **red, black and white mangroves**.

RED MANGROVE

Rhizophora mangle

The Red Mangrove is easily identified by its exposed, arching prop roots and long seedlings (propagules) that hang from its branches like green cigars. Its oval, leathery leaves are slightly darker on top than below and are larger than those of other mangroves.



BLACK MANGROVE

Avicennia germinans

Black mangrove are characterized by leaves that are shiny green on top and light gray-green below and often have salt on them. This tree has special roots which have many pencil-like projections that grow vertically called breathing roots (pneumatophores) which help the tree obtain oxygen in semi-flooded soils.



WHITE MANGROVE

Laguncularia racemosa

The easiest way to identify the white mangrove is by its foliage. Its thick, pale green leaves are oval in shape and notched at the tip. At the base of each leaf are two small glands. Depending on where these mangroves grow, they can develop breathing roots or rarely prop roots.



BUTTONWOOD

Conocarpus erectus

Buttonwood mangrove gets its name from the round, cone-like fruits, which resemble old-fashioned buttons.

buttons.

Depending on the variety, their leaves can be either green or silvery in color. Glands at the base of each leaf excrete salt.