



Threats to Mangroves

Around the world, mangroves are faced with many challenges. Below, we outline some of the threats to mangrove wetlands.

Natural Disasters



Hurricanes and tsunamis are a major threat to mangroves. Strong winds and large waves can damage and uproot trees while some storms can wipe out entire forests. This can then lead to changes in hydrology and increase the risk of erosion from storm surge.

Climate Change



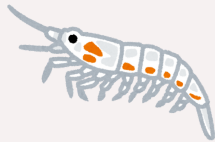
Rising sea levels, higher temperatures and changes in weather patterns all have an effect on mangroves. With current global sea level rise at a rate of around 4mm per year, coastal mangroves are being forced further inland. An increase in more powerful hurricanes and longer droughts are also some ways climate change is threatening mangroves.

Deforestation



Deforestation is just as big of a threat to coastal forests as it is to tropical and dry forests. In addition to clearing the trees for land use, many places use the trunks of mangroves as timber to build homes, some also use the tannins from the red mangrove bark as dye for clothing and leather.

Aquaculture



The construction of coastal farms, like shrimp farms, can damage mangrove trees and interfere with the hydrology to the rest of the forest. Many farms use pesticides and chemicals which can pollute the surrounding area and lead to eutrophication. This can then have a negative impact on the biodiversity of the ecosystem.

Coastal Development



Developing coastal areas does not only destroy mangroves and the habitat they create, but it also disturbs the sediment which stores large amounts of carbon dioxide. Mangrove forests are carbon sinks that absorb and store carbon dioxide, helping to reduce the effects of climate change. When the sediment is disturbed, this stored carbon is re-released into the atmosphere.

Pollution



Pollution of all kinds can be harmful to mangroves. Plastic pollution can become caught in the trees and their roots, entangling or suffocating marine life and birds. Water pollution is also a major threat to mangroves as contaminated water can poison the tree.