

## Mauritius – ‘Centre of Plant Diversity’ at risk

Mauritius has been designated by IUCN as a “Centre of Plant Diversity” and is a biodiversity hotspot. The island’s location, age, isolation and varied topography has resulted in 39% of plants, 80% of non-marine birds, 80% of reptiles, and 40% of bat species as endemic.



Some 691 species of indigenous flowering plants, 52 native species of vertebrates and 30 species of land birds are found in forests. The marine environment, comprising 16,840 km<sup>2</sup> of territorial sea hosts 1,700 species (e.g. 786 species of fish, of which about 5% are of commercial value; 17 species of marine mammals; 2 species of marine turtles).

However, this unique biodiversity is at risk.

Overall, 89% of endemic Mauritian flora is now considered threatened and 61 of the country’s indigenous species are already



classified as extinct. As for the fauna, 24 native species of vertebrates that were known to have occurred on Mauritius and the adjacent islets are now extinct,

including the Dodo (*Raphus cucullatus*), Broad-billed Parrot (*Lophopsittacus mauritianus*) and two species of the Giant Tortoise (*Cylindropsis* sp.).



Similarly, of the three species of fruit bat known to have occurred, only one – the Mauritian fruit bat (*Pteropus niger*) – remains in Mauritius.

Although 12 species of land birds have escaped extinction, 9 of these are threatened. Finally, of the 17 native reptile species known to have once inhabited mainland Mauritius, only 12 remain.



Seven of these are restricted to remnant populations on the northern offshore islets and the burrowing boa (*Bolyeria multicaudata*), last seen in 1975, is probably extinct. Six species of reptiles have been successfully translocated from Round Island, Gunner’s Quoin and Ile Aux Vacoas to other rat-free offshore islets.

Some of the main pressures of change in biodiversity are given below.

## 1. Habitat loss

Loss of habitat, a place where an animal or plant lives naturally, has been identified as the main threat to 85% of all endangered species. Deforestation, fire, over-use, and

urbanization are responsible. The invasion of bats in Mauritius is cited as a case in point.

## 2. Over-exploitation for commercialization

Over-exploitation of resources is responsible for most of the environmental degradation. than earning. The over-exploitation of coastal areas in Mauritius

has led to the destruction of wetlands, mangrove, pollution of coastal waters and degradation of coastal fisheries.

## 3. Invasive species

Invasive species are ‘alien’ or ‘exotic’ species which are introduced accidentally or intentionally by humans. These species become established in their new environment and spread unchecked, threatening the local biodiversity.



naturalized with detrimental effects on native biodiversity.

Examples: Javan deer, feral pigs, macaques, rats, Chinese guava, lantana camara and privet.

In Mauritius, at least 21 introduced species of mammal, reptile and mollusc are

## 4. Pollution

Pollution from land-based sources and activities (mainly nonpoint sources) is a major threat. The waste from rivers, agricultural run-off, which contains a variety of fertilizers and pesticides, may seep into ground water and rivers before ending up in the ocean.

The oil spill from Wakasio in August



2020, had seriously affected the marine and coastal ecosystems.

## 5. Climate change

Greenhouse effect is likely to raise world temperatures by about 2°C by 2030, and sea level may rise by around 30-50 cm. Global warming, coupled with accelerating

rates of resource use will bring further losses in biological diversity. Extreme weather events like flooding,



intense cyclones, drought and forest fires

are affecting ecosystems.

## **6. Population growth and over-consumption**

Population growth has resulted in a rapid growth in the exploitation of natural resources— water, foods and minerals.

Such exploitation of natural resources that impacts on biodiversity is currently not sustainable.

## **7. Illegal wildlife trade**

The international trade in wild plants and animals is considerable.

It poses serious threats to the stressed ecosystems.

## **8. Species extinction**

Extinction is a natural process. But the current rate of species extinction is at least

a hundred to a thousand times higher than the natural rate.