Islands making up the Pitcairn group include a high island (Pitcairn), a raised atoll (Henderson), and two low atolls (Ducie and Oeno). These geological features, their distance from other Pacific islands and their location on the eastern edge of the Indo-West Pacific biogeographic region combine to provide an interesting mix of fauna (animals), flora (plants) and ecology. These islands are also on the eastern edge of the Polynesian region of ancient human distribution which extends from New Zealand through the central Pacific Ocean to Easter Island. For fauna and flora distributions, however, Easter Island is too far east and has been more easily colonized by Neotropical species from South America.

As a high island, Pitcairn is one of only a few such islands in the Pacific Ocean (Figure 1). It has steep cliffs that plunge deep into the ocean with no beaches and poorly developed coral reefs. Its high rugged terrain has provided opportunities for a variety of plants to become established, despite its great distance from other islands. This in turn has helped a variety of animals become established even though the diversity is insignificant. Originally, Pitcairn was covered with a mixed forest habitat, the flora being typical of southeast Polynesian high islands. This is due in part to a sufficient amount of rainfall throughout the year, yet there are few freshwater habitats (only some small streams and no lakes). However, over two hundred years of human habitation, with its associated clearing, burning and animal introductions, has greatly reduced the extent and variety of the original flora.

Pitcairn’s fauna diversity is limited. The only mammals have been introduced and there is little in the way of amphibians and reptiles, insects, or even fish (since the coral reefs around the island are poorly developed). The most prominent and long lasting introductions are the Polynesian rat and the Galapagos Island tortoise. Bird life is similar to other south Pacific avifauna, especially the French Polynesia island groups. Among all four islands there are only about 30 bird species, most of which are oceanic. Only four species are endemic (found only on the islands and nowhere else) and these are on Henderson Island.

While its ecology is interesting, it is not unusual and there are few species unique to the Pitcairn Islands. Several exotic species (those not native to the islands) have been introduced by the islanders over the years while much of the native species (those existing at the time the islanders arrived) have been lost or reduced to very small populations. Native species and populations have done much better on the other three islands than on Pitcairn because the remoteness of these islands and the lack of visitors to these islands have left their environments relatively undisturbed.