

Human impacts on the rainforests of Dorrigo plateau



nationalparks.nsw.gov.au

FACT SHEET 14

TIMELINE BP = years before present

60,000 BP It is not known with certainty when people first arrived on the Australian continent. At present, the oldest firmly dated occupation is around 60,000 BP.

40,000 BP Australia was inhabited at the time by a wide variety of Megafauna. Megafauna species began to become extinct, although some forms remained in the fossil record until about 15,000 BP. Many researchers believe humans played a significant role in the demise of these megafauna through over-hunting, and changes in the distribution of plant communities by frequent burning of the landscape. Others stress the importance of climate changes. We can be certain that from the time of their arrival, humans have played a significant role in modifying the landscape and its biota, in particular the distribution of moist forest types.

5000 BP Archaeological evidence for a significant increase in the use by Aboriginal people of the forests along the Dorrigo escarpment and plateau. The Gambalamam clan of the Gumbaynggirr nation identifies as descendents of these people. It is thought that this change in seasonal movement is linked to sea level rises caused by the onset of the warmer climate of the current interglacial period. The rise in sea level created a more gently sloping continental shelf with large areas of estuary and swampland. These habitats are rich in food resources for people, allowing an increase in population densities. The Gumbaynggirr are primarily a coastal people but an increase in population and refinement of their toolkit may have provided the incentive to spend part of the year hunting in inland forests. For thousands of years the Gambalamam clan have moved up the valleys of the rivers flowing northwards off the Dorrigo Plateau during the warmer months of the year. Parts of the plateau were called by them Dandarrga (pl.Dandarrbiin) after the stringybark trees which grew there. Travelling in small, highly mobile hunting groups they burnt the drier forests on the northern plateau to keep them open for travelling and hunting. Within the wetter, more fertile areas supporting subtropical rainforest they made their camps on the grassland plains, also burning these areas to encourage the 'increase' of pademelons and forest wallabies. Rainforest also supplied fruits, medicines and materials for making hunting and fishing nets, water containers and dilly bags. During these visits they maintained sacred places and performed ceremonies to increase food resources and keep Country healthy as well as initiation ceremonies to teach the law. The use of fire as a land management tool may have created a mosaic of eucalypt and rainforest, providing a much higher diversity of food resources.

OCCUPATION OF AUSTRALIA: THE FIRST BOAT PEOPLE

Creation stories of some Aboriginal peoples say they have always been here, created from the land itself by ancestral spirits. Other indigenous stories tell of ancestors who came across the sea.

The oldest fossil remains of Homo sapiens found to date come from the Omo region of southern Ethiopia.

Modern humans dispersed beyond Africa, firstly into the Middle East region possibly around 150,000 BP, then progressively throughout Eurasia.

Although there is some indirect evidence that modern humans may have reached Australia prior to 100,000 BP, the earliest firmly dated human occupation of Australia is around 60,000 BP.

Consequently, most anthropologists believe that people first reached Australia and Papua New Guinea via the Indonesian islands of Timor and the Moluccas some time before 60,000 BP. This journey required an open sea crossing of at least 70 kilometres, making these the first 'boat people' to arrive in Australia.



Bora ring on Dorrigo Plateau

Human impacts on the rainforests of Dorrigo plateau



nationalparks.nsw.gov.au

FACT SHEET 14 (CONTINUED)

TIMELINE

BP = years before present

1832 The first contact between Aborigines of the Dorrigo plateau and Europeans occurred when Richard Craig, an escaped convict from Moreton Bay Penal Settlement, joined Gumbayngirr people in the Clarence Valley. He is known to have participated in seasonal hunting trips to the western parts of the plateau from 1832 to 1836.

1840s Squatters looking for additional land for pasturing stock spread European settlement to Tyringham on the western fringe of the plateau, via Hillgrove, Ebor and Hernani. Violent clashes occurred between settlers and Aboriginal people in the tableland region between 1838 and 1842 as European land use reduced traditional hunting and gathering.

1857 First commercial Red Cedar cutting on the plateau as cedar getters moved eastwards from the Bostobrick area, opening access tracks into the dense forest.

1860s European settlement on blocks of land in the most fertile red soil areas of the plateau, especially at Little Plain and Paddy's Plain. Traditional lifestyles of Aboriginal people collapsed and they settled on the outskirts of the growing villages and towns along the coastal rivers and on the New England tableland.

1890 Red Cedar logged out of the plateau. Other timbers were harvested, as farm clearings expanded.

1893 Dorrigo Mountain Road opened, improving access between the plateau and the coast. Government Botanist J.H. Maiden visited the Dorrigo Forest Reserve on the eastern plateau and wrote an enthusiastic report on the size and quality of high-value timber trees.

1894 Small dairy blocks were released for purchase to encourage closer settlement on the plateau.

1901 First reservation of land for public recreation and preservation of native flora: 15 hectares around Sherrard and Newell Falls. This reserve became the nucleus for later additions, becoming Dorrigo National Park in 1967.

1905 The NSW Minister for Lands introduced a Crown Lands Bill initiating a new form of land tenure, with settlement of the Dorrigo Plateau in mind. Settlers were required to improve their blocks by clearing rainforest and fencing, within a certain period.

1906 The Dorrigo Scrub, including the Dorrigo Forest Reserve was rapidly subdivided and cleared for farming. A forest ranger estimated the loss of potential valuable timber revenue to be 'billions of pounds'.

1911 The Agricultural Gazette reported: 'During the last twelve months ... fully 3,000 acres (1200 hectares) of timber have been committed to the flames so that at the present rate it will not be long before the entire original scrub has disappeared.'



Timber cutters of the 19th century



Cottage built below the cleared slopes of the Dome. Courtesy of Dorrigo and Guy Fawkes Historical Society



Clearing land, Dorrigo

Human impacts on the rainforests of Dorrigo plateau



nationalparks.nsw.gov.au

FACT SHEET 14 (CONTINUED)

MORE RECENT HUMAN IMPACTS

Farming practices such as the use of artificial fertilisers can increase phosphates in runoff. Grazing cattle stop rainforest from regenerating and imported pasture grasses can spread to rainforest.

Some **plants and animals introduced** by Europeans have become a threat to rainforest habitats by displacing or preying on native species.



Introduced fox with prey

Logging of warm temperate rainforests continued until 1983.

Regeneration was poor and many areas were replanted with eucalypts. Logging of eucalypt forests has led to road building, post-logging burning, sediment flows and exposure of adjacent rainforest to drying winds.

Farm forestry has led to some replanting of trees around rainforest remnants, which helps protect the edges from wind exposure and creates a buffer between grazing animals and rainforest remnants.

Landcare projects include fencing of rainforest remnants to exclude cattle and reduce the introduction of weeds. Tree planting has regenerated rainforest edges, created wildlife corridors and protected water runoff quality.

Tourism led to the Glade Picnic Area being cleared in the 1960s. Increased car travel has helped spread weeds and potential threats such as plant diseases and cane toads.

Changed social attitudes to rainforest conservation since the 1980s has allowed expenditure on environmental education, and protective measures in Dorrigo National Park to reduce visitor impacts, e.g. paved paths, boardwalks. Modern ecotourism focuses on sustainability.

Increased burning by landholders has continued the risk of accidental destruction of the rainforest by fire.

Carbon emissions into the atmosphere have led to the global greenhouse effect and climate change – potentially the most severe threat to rainforest survival so far.



Dorrigo Mountaintop Landcare Group has carried out rainforest remnant protection and reforestation of wildlife corridors



Walk With The Birds boardwalk allows a view into different levels of rainforest while reducing the impact of high numbers of people.



Increasingly severe storms resulting from climate change can devastate rainforest.



Eucalypt logging