

A Picture of Norfolk Island's Historic Biodiversity

A clear picture of what Norfolk Island looked like before European arrival has emerged from a project that has, for the first time ever, mapped native vegetation across the entire island, as it exists now and before 1750. These maps will be on display for the first time ever at the Royal A&H Show on the 11th October.

"Over two years we worked with local and mainland experts to create digital maps of what Norfolk Island's forests, woodlands and grasslands looked like before Europeans arrived on the island, and what that landscape looks like now," Invasive Species Council CEO Andrew Cox said.

"Our detailed analysis included searching through old photo and illustration archives, extensive field work, interviews with locals about remnant native plant communities and flying aerial drones across the island to map out the current landscape."

"The project has unlocked a map that can now be used to help Norfolk Islanders replant and restore many of the threatened native plants and plant communities that are under pressure from weeds and past habitat loss."

There are about 180 native plant species on Norfolk Island, of which about a quarter are found nowhere else on the planet and 46 are listed as threatened.

Another 430 plant species have been introduced to the island, some have become environmental weeds that have pushed out native species. Past land management has also pushed many native plant species into small, fragmented pockets of remnant vegetation. Norfolk Island's plant communities have evolved in relative isolation over 2.5 to 3 million years, creating a landscape rich in native plant and animal species.



Photo: Norfolk Island Robin. Merv Whicker

The island is home to the world famous Norfolk Island Pine and a substantial number of our native species are found nowhere else on Earth, including 43 plants and 15 bird species, including the critically endangered Norfolk Island green parrot.

Norfolk Island has a fascinating human history and an incredibly rich natural heritage, but past land management and the introduction of non-native species has put huge pressures on our natural landscape.

These maps describe and map 14 native plant communities across the island and provide a vital resource for planning effective conservation, restoration and management of the remaining native vegetation.

Dr Ray Nias, director at TierraMar, says "an 1804 drawing by Ferdinand Bauer gives a very clear indication of what Norfolk Island looked like 200 years ago."



"The illustration by Ferdinand Bauer shows Norfolk Island with dense, thick forest cover stretching as far as the eye can see," Dr Nias said.

"Hardwood forest covered most of the island's hinterland and pines could be found in coastal areas and along mountain ridges."

"There has been a real push by the Norfolk Island community recently to repair and restore areas that are suffering from weeds and past land management practices."

"These new maps will play a crucial role in helping the community restore our rich natural heritage and secure a future for many of our threatened native plants and animals."

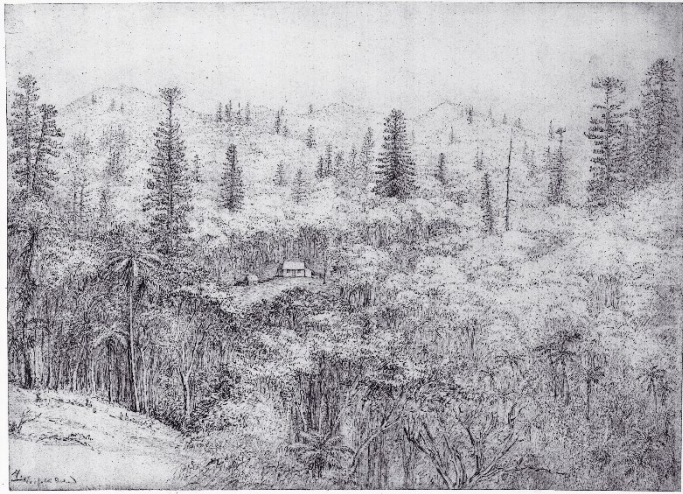
Norfolk Island Regional Council plan to use the mapping to guide revegetation of public land, particularly in the island's public reserves. The mapping is also expected to be popular with land holders wishing to restore native vegetation on private land. Restoration efforts have recently been strengthened through the refurbishment of the Norfolk Island National Park Nursery, which provides endemic and other native species to the community for a low cost.

The mapping is based on extensive survey work conducted by Naomi Christian, a Norfolk Islander, and recognised plant ecologist Dr Kevin Mills. This work was completed in 2020. Funding was provided through the Eldon and Anne Foot Trust, administered by the Lord Mayor's Charitable Foundation, the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications, and supported by the Norfolk Island Regional Council.

Remember to come along to the A&H show on Monday 11th October to have a look at these incredible new maps and check out the 14 native plant community fact sheets that will be at the Norfolk Island Regional Council, the Flora and Fauna Society and Parks Australia display.

FAST FACTS

- The new maps describe and map 14 native plant communities across the island and will help land managers protect and restore habitat for threatened species and other wildlife of Norfolk Island.
- Some 3 million years ago a volcano erupted in the southern Pacific Ocean on a ridge of the largely submerged continent of Zealandia. The lava that flowed from



Drawing by Ferdinand Bauer, dated 1804. Natural History Museum, London.



multiple eruptions over the next 700,000 or so years built up into a mountain that emerged from the sea. Thus was born land far from any other land mass, the Norfolk Island group.

- A native plant community is a distinct association of native plants that grow together, as determined by environmental factors including moisture availability, maritime influence, aspect, prevailing winds and soil characteristics.
- The 14 distinct native plant communities on Norfolk Island include forests, swamps, shrublands and grasslands.

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