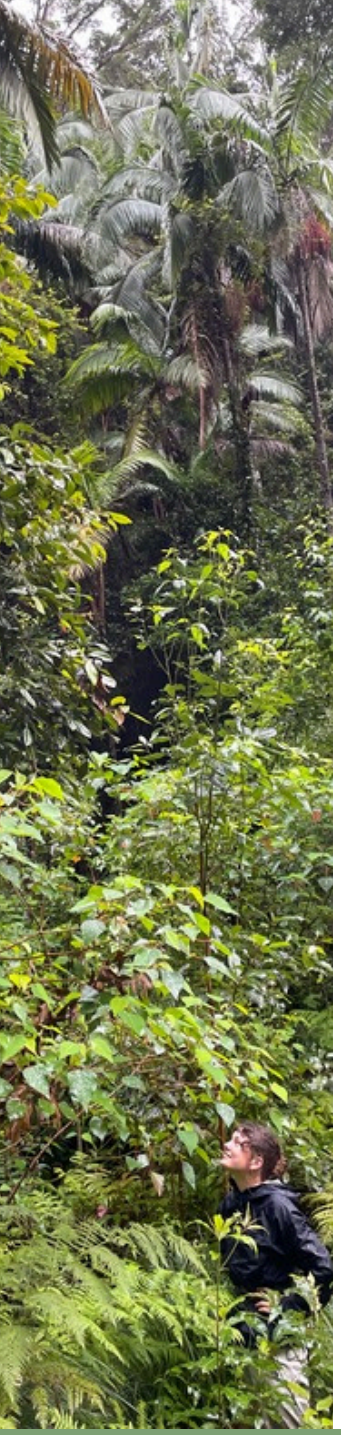

Benefits

Rainforests are important because they support life in countless ways, both for wildlife and for people. Even though subtropical rainforests cover only a tiny fraction of the landscape, they provide disproportionately large environmental benefits, including:

Biodiversity hotspots – rainforests contain an extraordinary variety of plants, fungi and animals that cannot survive elsewhere.

Clean water – rainforest vegetation filters rainfall, protects streams from erosion and sediment, and helps maintain reliable, high-quality water supplies.

Climate regulation – trees store large amounts of carbon, helping reduce greenhouse gases, while the forest canopy cools surrounding areas and influences local rainfall patterns.

Healthy soils – extensive root systems stabilise steep slopes, reduce landslips and erosion, and recycle nutrients through leaf litter and decomposing organic matter.

Wildlife corridors – connected remnants allow animals to move between habitats to find food, mates and shelter.

Pollination and seed dispersal – birds, bats, insects and mammals that live in rainforests pollinate plants and disperse seeds, supporting the regeneration of forests and nearby ecosystems.

Cultural significance – rainforests have deep cultural importance for Aboriginal peoples, who have cared for these landscapes for thousands of years and hold extensive knowledge of their plants, animals and seasonal cycles.

Human wellbeing – spending time in rainforests has been shown to reduce stress and improve mental health.

Natural resilience – healthy rainforests are better able to recover from disturbances such as storms, droughts and fire, making them increasingly important as the climate changes.

Landslip from the 2022 floods 3ha now dominated by Gondwanan rainforests. *Photo: Northern Rivers Ecological*

This project has been supported by the NSW Government through its Environmental Trust

Goonengerry Landcare Group

The importance of Lowland Subtropical Rainforests

Endangered Ecological Community

Goonengerry Landcare
Caring for our natural environment

www.goonengerrylandcare.org

Photo: John Spencer DCCEEW

Background

The subtropical rainforests of Goonengerry are among the oldest forests in the world, with lineages dating back over 500 million years to Gondwanaland. They are now part of one of Australia's most significant and threatened ecosystems, facing ongoing threats from deforestation, invasive species, and climate change.

Once forming part of the vast Big Scrub Rainforest, over 99% of this ancient rainforest was cleared following European settlement, leaving only scattered remnants across the Northern Rivers. Today these remaining forests are recognised as Endangered Ecological Communities and are among the most biologically diverse habitats in New South Wales.

Each hectare of subtropical rainforest is home to over 100 tree species, plus lianas, ferns, orchids and forbs, providing an intricate and diverse habitat for thousands of bird, animal and insect species. These rainforests also support some of Australia's most vulnerable, endangered, and critically endangered species of flora, fauna, and fungi, including an original songbird, the Albert's Lyrebird *Menura alberti*, and the ancient Gondwanan tree, Nightcap Oak *Eidothea hardeniana*.

Goonengerry is particularly important because it contains some of the largest remaining rainforest remnants in Byron Shire, consolidating refugia and providing vital links between surrounding reserves, including Nightcap National Park, Mount Jerusalem National Park, Goonengerry National Park and Whian Whian State Conservation Area. These wildlife corridors allow plants and animals to move, feed and breed, helping maintain healthy, connected ecosystems into the future.

Nightcap Oak
Photo: iNaturalist
© olive_owl_00

Albert's Lyrebird
Photo: iNaturalist
© russnamitz

Restoring Our Rainforests

10 year old Lantana conversion project 5ha that was dominated by Lantana now with a canopy dominated by Pencil Cedar and understory of 40-50 species of latter phase rainforests trees including a variety of Laurels, Red Cedars and Flindersias
Photo: Northern Rivers Ecological

The ecological restoration industry has been working tirelessly for decades to restore, protect and enhance our rainforests. With input from professionals and community groups, knowledge continues to grow, and methodologies are constantly being refined. The diversity and structure are acknowledged as fundamental to the re-establishment and sustained maintenance of lowland subtropical rainforests.

Invasion by weeds such as Lantana and Camphor Laurel is identified as a 'key threatening process' and has significantly impacted our landscape post-clearing. Recent floods and fires have also had an impact. Ecological restoration practitioners, working closely with their greatest ally, Mother Nature, continue to convert thousands of hectares of weed-dominated vegetation into diverse forests.

As these planted and regenerated forests mature, they provide valuable habitat for fauna and a seed source for continued expansion into new rainforests.

10 year old Camphor conversion project. 15 ha now consisting of a diverse young subtropical rainforest
Photo: Northern Rivers Ecological