



## New Zealand Forest

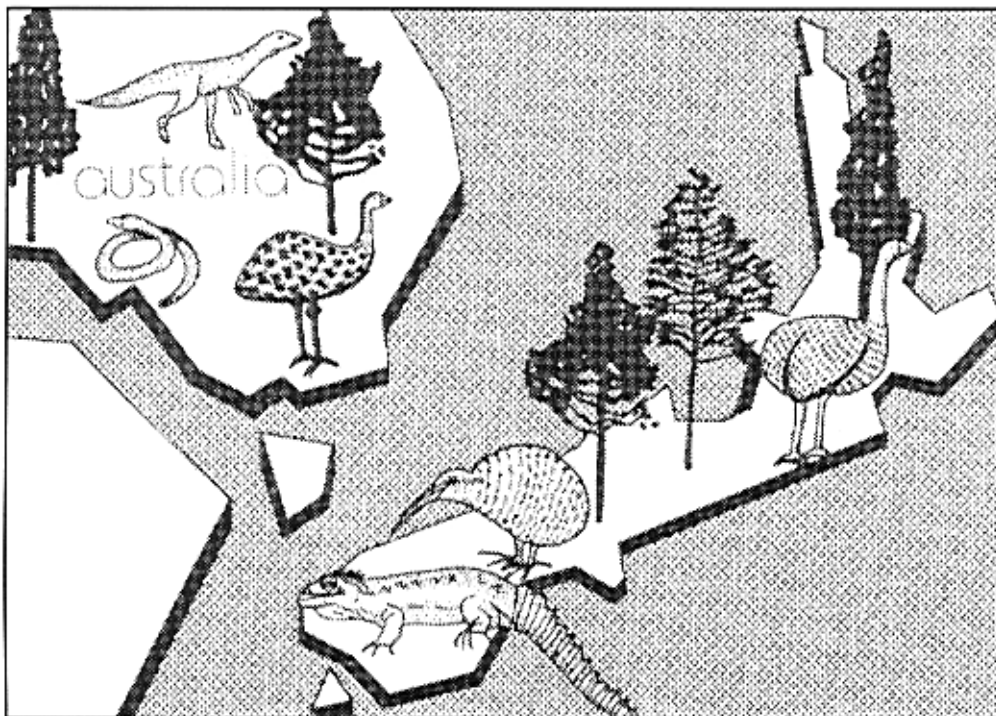
About 250 million years ago New Zealand was part of Gondwanaland, a large landmass that included South America, Africa, India, Antarctica and Australia.

The ancestors of some of our native trees, such as rimu, kahikatea and kauri were here 250 million years ago.

The ancestors of some of our animals, like the tuatara and native frogs, lived here as far back as 150 million years ago, when dinosaurs roamed the earth.

About 80 million years ago Gondwanaland began to move apart. Oceans developed, and the islands that became New Zealand were created. For the plants and animals "on board" the islands became an isolated world on their own.

Since then only a few new plants and animals have arrived from across the sea, so the plants and animals that have developed here are unique to New Zealand, and not found anywhere else in the world.



New Zealand separated from the rest of Gondwanaland before mammals developed or evolved, so we have no native land mammals, except for two species of bats.

With no land mammals, unique species of birds developed including the giant moa, the largest bird ever to have existed; Haast's eagle, the world's biggest eagle which preyed on other birds; the huia, the kiwi and the kakapo.

Unusual insects like the giant weta, the largest insect of its kind in the world, also developed.

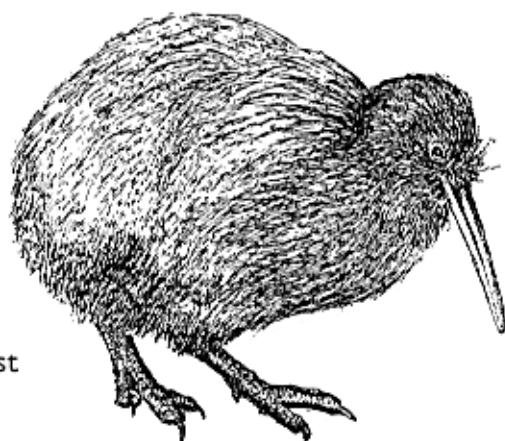
Many geological changes have happened in New Zealand in the last 80 million years. Mountain ranges have formed, volcanic activity has caused mountains and lakes to form, and big changes in climate have occurred, including some very cold times in the ice ages.

Some plants and animals did not survive these changes. Others changed or adapted to these different physical conditions and evolved into plants and animals that exist now.



New Zealand's forests are more like the ancient forests of Gondwanaland than any other forests on earth. They are moist, dense and evergreen, with many vegetation layers. Eighty percent of our native plants are found nowhere else in the world.

When the first people arrived from Polynesia about 800 years ago, dense forest clothed the land.



The early Maori burnt some of the forest to provide fernlands and land for cultivation. They introduced the kiore (rat) and kuri (dog), which were predators of animals that lived on the ground.

When the European settlers arrived in the early 1800's about two thirds of New Zealand was still forested. The new settlers burnt off more forests to provide pasture for sheep and cattle. They introduced animals like cats, dogs, stoats and weasels that killed off the native birds; and possums, deer, goats, and pigs that destroyed the forests. Many birds became extinct, or could only survive deep in the forests or on remote islands.

Others, like the kiwi, kokako, kaka and kereru, are threatened with extinction today unless we put time, effort and money into making sure they survive.



Today native forest covers only 23 percent of New Zealand. The forest, or bush as we know it is slowly changing, and action is needed to protect the forest and the places where native birds live.

- Find out the type of native forest that used to cover your area using the Forestry Insights chart **Which Tree Where?** and the information on pages 11 to 20 of Forestry Insights book **Focus On Forestry**. Your local Department of Conservation Office or branch of the Royal Forest and Bird Protection Society could give you more information about native forest in your area.