Mount Kaputar

A living volcano

Paula Peeters Adam Fawcett Shannon Greenfields James Faris



Published in 2023 by Paperbark Writer, PO Box 1136, Nerang, Queensland Australia.

Written by Adam Fawcett, James Faris and Shannon Greenfields. Designed and illustrated by Paula Peeters, except for the mountain range on pages 3 and 4, illustrated by James Faris.

Mount Kaputar: a living volcano Adam Fawcett, James Faris and Shannon Greenfields (Authors), Paula Peeters and James Faris (Illustrators).

© 2023 Paperbark Writer; Illustrations © Paula Peeters 2023

Cataloguing in Publication details are available from the National Library of Australia www.trove.nla.gov.au

ISBN 978 0 6454875 3 4 (print) ISBN 978 0 6454875 4 1 (ebook)

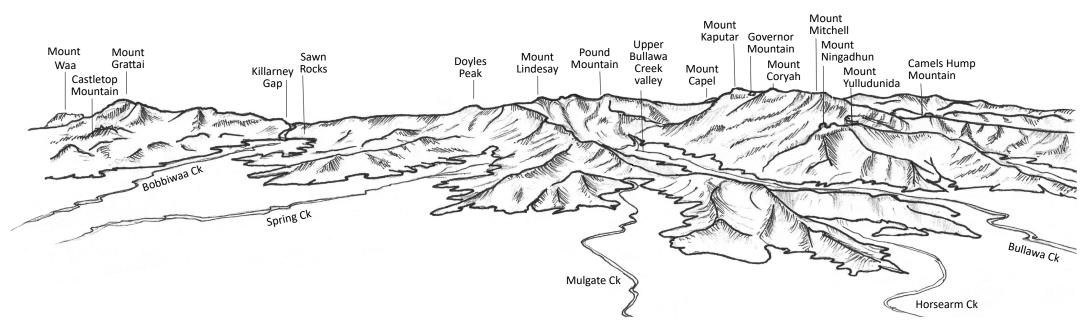
Printed in Australia on recycled paper.

Thanks to Louisa Anderson, Peter Berney, Jessica Stokes, Robert Smith and Steven Booby for their input. This publication was developed in partnership with Saving our Species, NSW Department of Planning and Environment; and in collaboration with NSW National Parks and Wildlife Service.

Mount Kaputar

A living volcano

Paula Peeters Adam Fawcett Shannon Greenfields James Faris



Mount Kaputar National Park covers about 55,000ha, stretching 50km from north to south and 15km from east to west on the North-West Slopes of NSW. It encompasses much of the Nandewar Range, the remnants of an eroded volcano that was active 19-21 million years ago. The peaks tower over the surrounding plains, with Mount Kaputar soaring to 1509m above sea level. Millions of years of erosion have carved a dramatic landscape. The diverse topography of sheltered valleys, exposed rocky terraces and massive change in altitude, lends itself to a wide diversity of habitat for many native plants, animals and fungi.



Heathland on rocky outcrops Occurs from low to mid-slope dry rocky outcrops, to the high elevation exposed peaks and ridges. Includes various species of urn heath, *Melaleuca*, fringe myrtle and *Kunzea*. E.g. Mount Yulludunida / Camels Hump Mountain / Mount Kaputar.



River oak riparian forests Found along the bottom of the main valleys along the creeks where it often forms a cool, dark, closed canopy with other shade and moisture loving species. Includes river oak, black tea-tree, *Lomandra* and ferns. E.g. Upper Bullawa Creek, Bibbla Creek, Spring Creek.

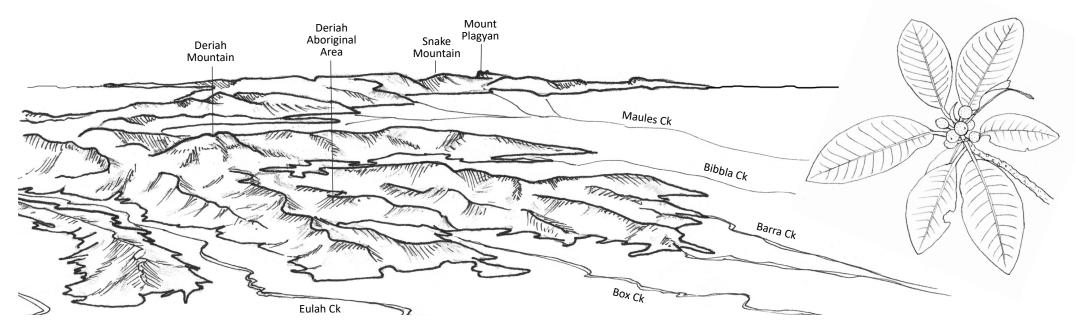


Eucalypt – cypress woodlands Found broadly across the lower to midslopes of the ranges on a variety of soil types, aspect and terrain. Includes a varying mixtures of box gums, ironbarks, wattles, and white and black cypress-pines. E.g. Sawn Rocks / Mount Playgyan / Deriah Aboriginal Area, Mount Ningadhun.



Stringybark – mountain gum – ribbongum open forest

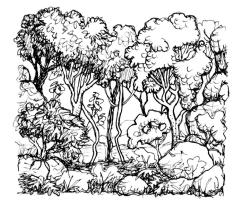
Found at higher elevations with deep volcanic soils with a mostly southern or eastern aspect, where moisture levels are higher. Forms tall forests often with bracken and tree ferns and a shrubby or grassy understorey. E.g. Mount Coryah / Mount Mitchell / Governor Mountain.



The Nandewar Range is an important landscape feature of Gamilaroi, Kamilaroi, Gomeroi, Gamilaraay Country. The mountains provide rich resources for food, medicines, shelter and tools and the landscape features in many cultural stories. Reminders of the traditional owners' connections to this ancient landscape is evident in campsites, marks on trees and axe grinding grooves throughout the ranges. Visit the Deriah Aboriginal Area to discover more about the cultural importance of the landscape.



Subalpine woodland Found on the highest peaks and plateaus where it tolerates occasional winter snowfalls, shallow soils and strong winds. Includes snow gums and mountain gums with a snow and wallaby grass or wattle and coffee-berry understory. E.g. Mount Kaputar / Mount Grattai / Pound Mountain / Doyles Peak.



Dry rainforest A highly variable community found in pockets from low to higher elevations in deep, shaded and sheltered moist gullies, overhangs and gorges. Includes broad-leaved rainforest species, fig trees and ferns. Species are relics of Gondwana rainforest.



Ooline woodland and forest Found on the lower slopes on lighter to gravelly soils in Deriah Aboriginal Area and around Eulah Creek, either as a closed canopy Ooline forest with vine thicket, or as a more open Ooline woodland with white box, ironbark and cypress-pine.



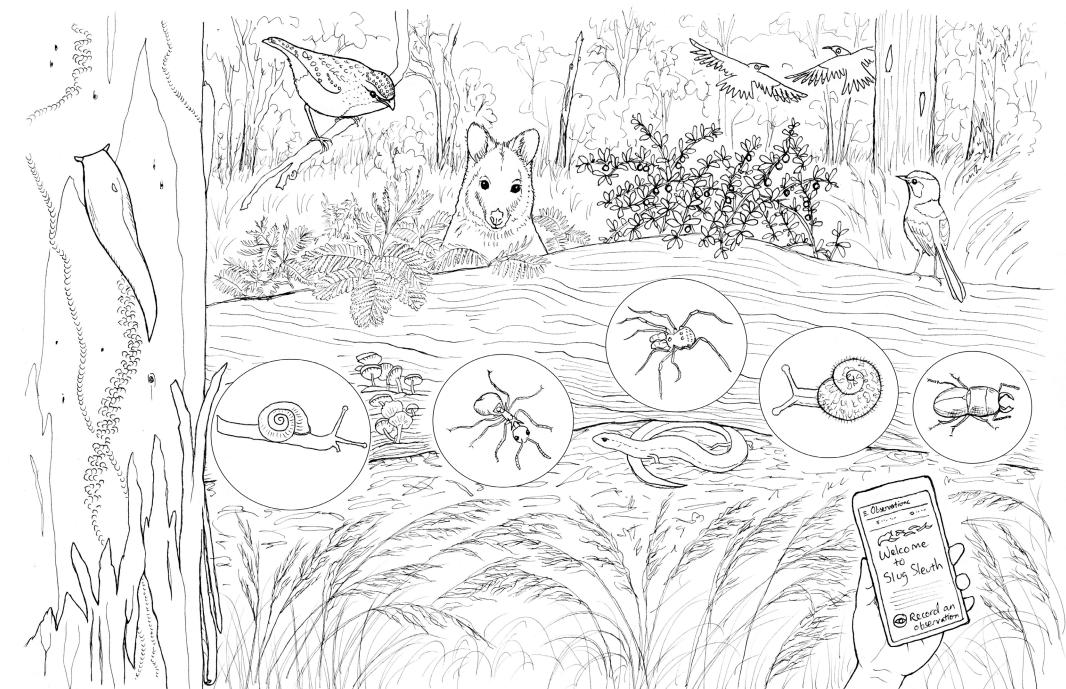
Semi-evergreen vine thicket Found in the deeper volcanic soils mainly in the south of the park near Deriah Mountain and mixed with Ooline and dry rainforest. Includes a mixture of broad-leaved rainforest species, white box, kurrajongs and tangled wonga vines.



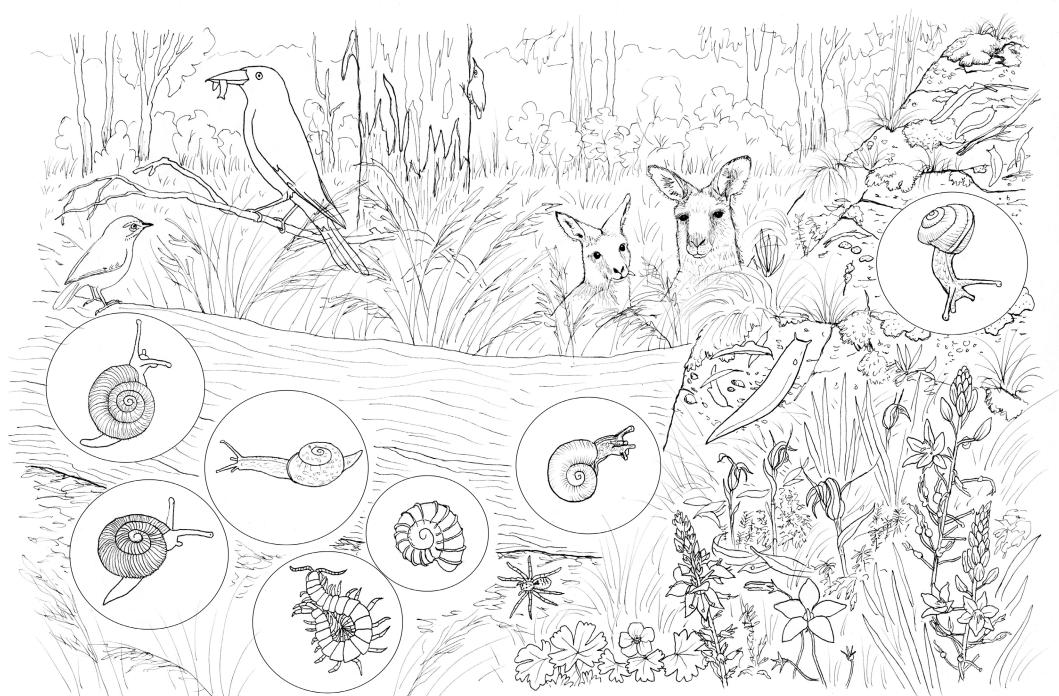
A spectacular reminder of the park's volcanic past are the rock columns of Sawn Rocks, one of Australia's best examples of `organ piping' where slow cooling of lava underground has allowed the rock crystals to align and form the hexagonal columns visible today. In the shaded areas along the creek line below Sawn Rocks, semi-evergreen vine thicket forms moist sheltered habitat for many species. These vine thickets are a type of dry rainforest, relics from when rainforests were spread across much of Australia.



Moving away from the shelter of the creek, the vegetation changes to drier open eucalypt, cypress pine and wattle woodlands. Creek lines erode over time, sometimes revealing the bones of long extinct megafauna species including the Diprotodon, a giant wombat like creature, along with giant kangaroos and flightless birds that once roamed the slopes and plains surrounding the ancient volcano. These fossils are from animals that became bogged and died in drying waterholes and creeks as the climate grew increasingly arid during the last ice age.



Mount Kaputar National Park is a land snail hotspot with the highest number of endemic snail species within NSW, west of the Great Dividing Range. Nine of these snails are found nowhere else on Earth, including the Mt Kaputar carnivorous snail, bronze rippled pinwheel snail, Kaputar keeled snail, Nandewar pinhead snail and the Kaputar giant pink slug. This combination of species has been identified as a threatened ecological community.



The pink slug is the most well-known species on the Nandewar Range. Found at elevations above 1000m, it grows to around 15cm long and 2cm wide and is most commonly seen during and after rainfall and on foggy days and nights. The pink slug creates distinctive scalloped-shaped tracks as it feeds on the biofilm of lichen, fungi, and micro-algae on the surface of rock faces and eucalypt bark. Visitors to Mount Kaputar National Park are encouraged to report sightings using the Slug Sleuth app, to help scientists learn more about this iconic species and how to best protect it.



There's an important breeding cave in the park, used by thousands of threatened large bent-winged bats. The shape of the cave captures and maintains the heat and humidity generated by the cave-roosting bats, creating just the right conditions for this species. There are few caves across Australia with the right shape suitable for these bats to breed, making each and every maternity roost essential for the conservation of this threatened species. It's very important that people don't enter the cave, as disturbance by visitors can result in young bats being abandoned and dying.



A large number of vegetation communities are found across the Nandewar Range landscape. The tall eucalypt forests at high altitudes come alive at night, with gliders and possums leaving their hollows to search for food. Owls and other predators are always on the hunt while bats search for insects across the mountains. These forests have some unique species of orchids and other plants that are under threat from browsing and trampling by feral pigs and goats.



The exposed rock terraces we see today at the Kaputar plateau, Lindsay Rock Tops and along the Bundabulla Circuit walking track, were once buried under successive layers of lava and ash. Over time wind, water, and ice have broken down these layers, exposing these lava flow terraces. The weathering of the rock surface has produced shallow soils that enable pockets of plant communities to exist, the most significant being hanging swamps. These plants stabilise the soil and further increase the breakdown of rock. The composition of plant species found on the rock platform is constantly changing as soil depth increases.



The cracks and crevices in the rock provide shelter for lots of animals including the threatened Kaputar rock skink. These spaces under the rocks take years to develop their own micro-climate, a unique combination of light, temperature and moisture. These rocky homes are essential for the survival of many species during the freezing winters and hot summers. Rock cairns are a threat to the Kaputar rock skink and other species. When rocks are moved to make cairns, it destroys the micro-climate under the rocks. Please leave the rocks in place.

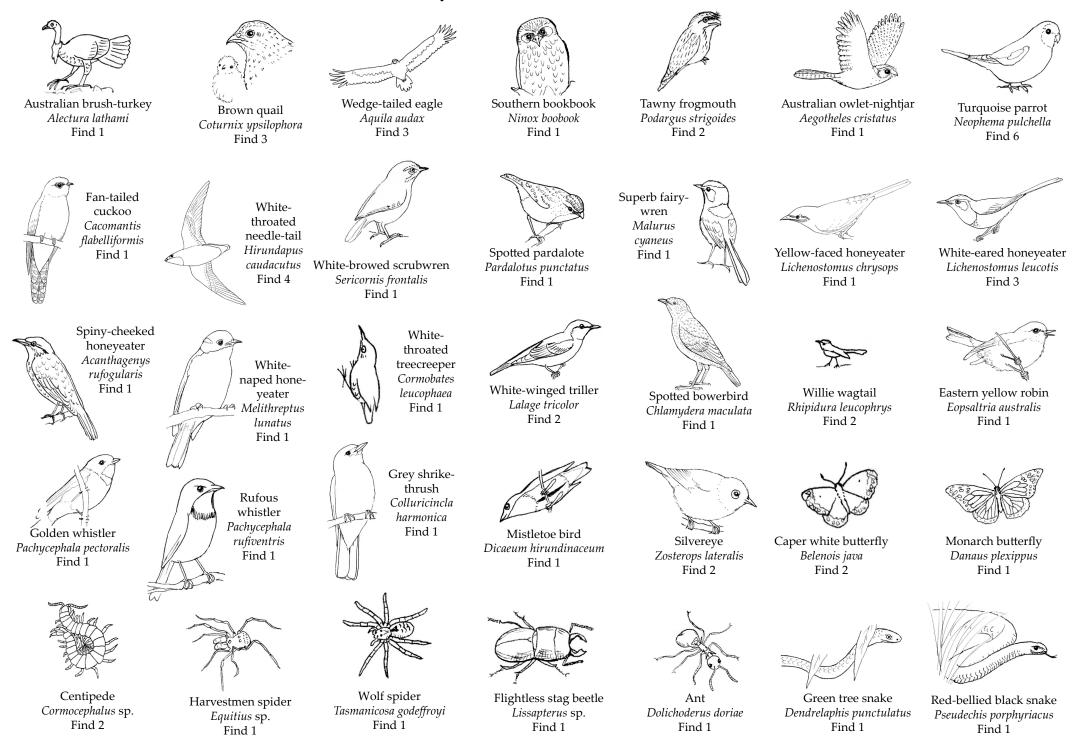


There are less than ten individuals of the brush-tailed rock-wallaby in the Mount Kaputar National Park colony. This colony is one of only two remaining colonies west of the Great Dividing Range that are well adapted to the semi-arid conditions. The colony is genetically distinct from other colonies across NSW making this particular population important to the long-term survival of the species. Once widely considered an agricultural pest and hunted for their skins, the brush-tailed rock-wallaby continues to decline due to competition from feral pests including foxes and goats as well as from loss of habitat. The NSW National Parks and Wildlife Service are working to conserve the remaining population by controlling these threats.

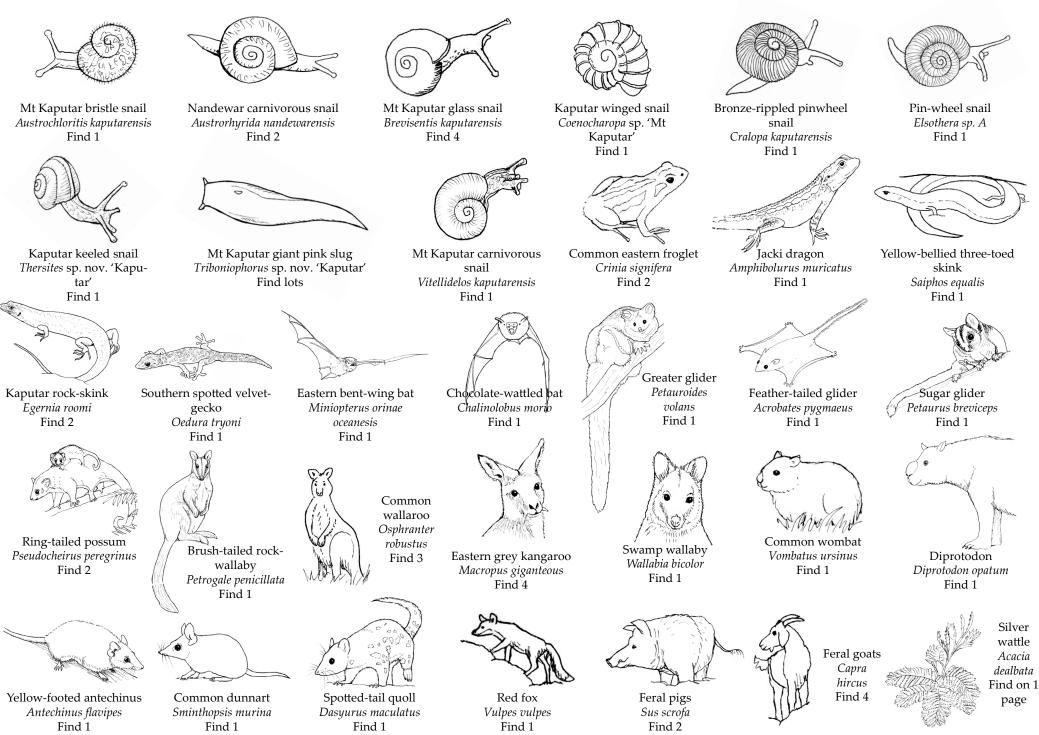


Areas of dry rainforest are important for many species across the Nandewar Ranges. As well as providing habitat for many of the endemic snails, other species such as the Australian brush-turkey, the threatened spotted-tailed quoll and common wombat all call dry rainforest their home. Eight different types of dry rainforests occur within the park including semi-evergreen vine thicket and Ooline. Goats and pigs are a major threat to these communities and the native species that depend on them.

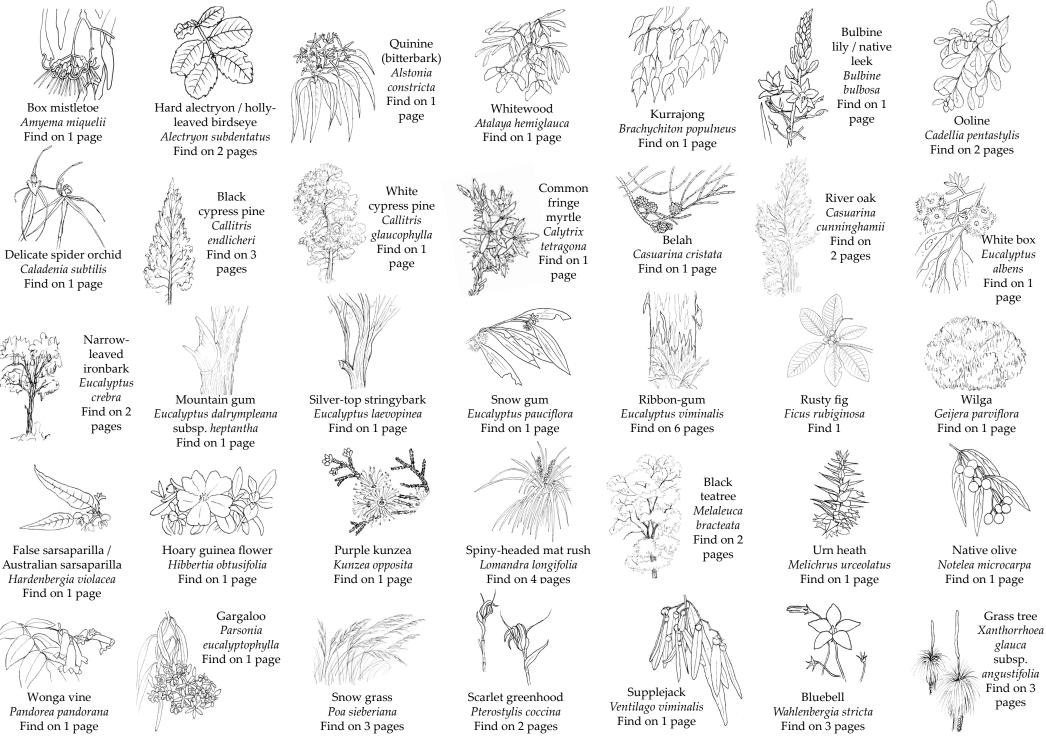
Can you find these animals in the book?

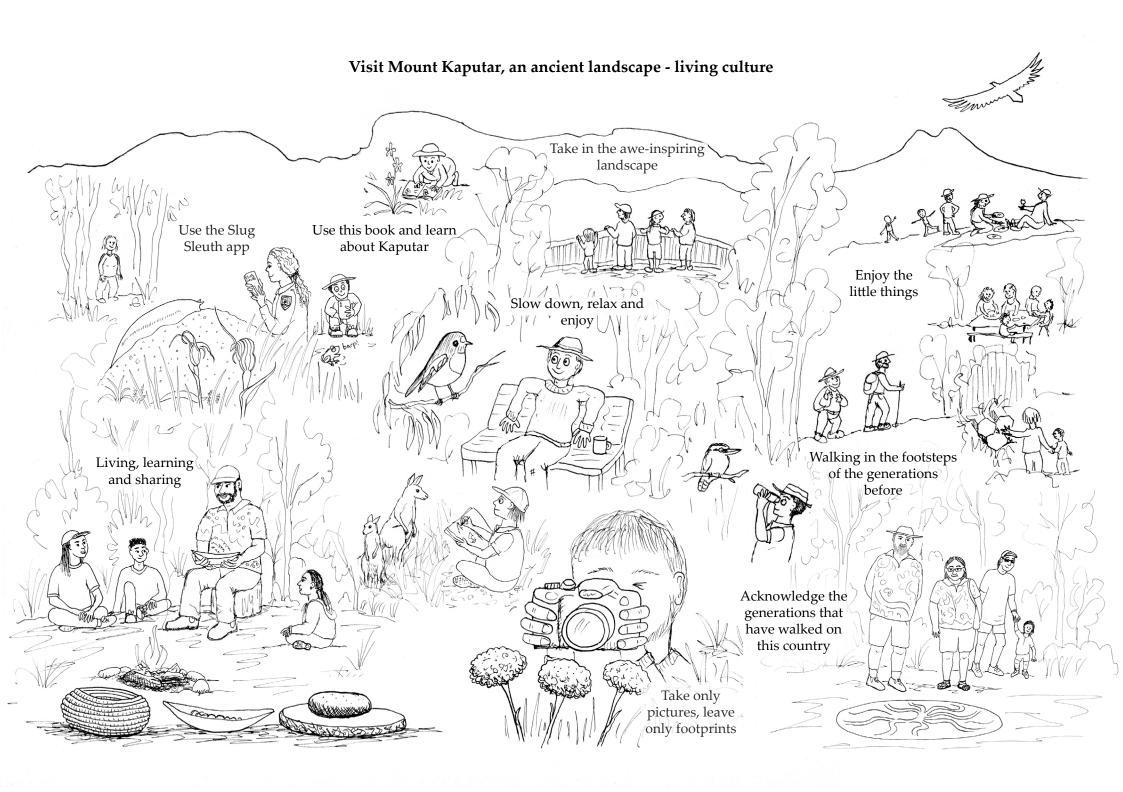


Can you find these animals (and plant) in the book?



Can you find these plants in the book?





Welcome to the Nandewar Ranges and Mount Kaputar National Park, a remnant that was part of an ancient volcano, active more than 19 million years ago.

Mount Kaputar National Park is rich in diversity, supporting hundreds of species of plants, animals and fungi. Some species found here, like the Kaputar giant pink slug, are not found anywhere else on Earth!

This book is your guide as you journey through this awe-inspiring landscape. It explores how the mountain range was formed, its ecological value, and introduces you to over 150 plant and animal species that you may encounter during your visit.