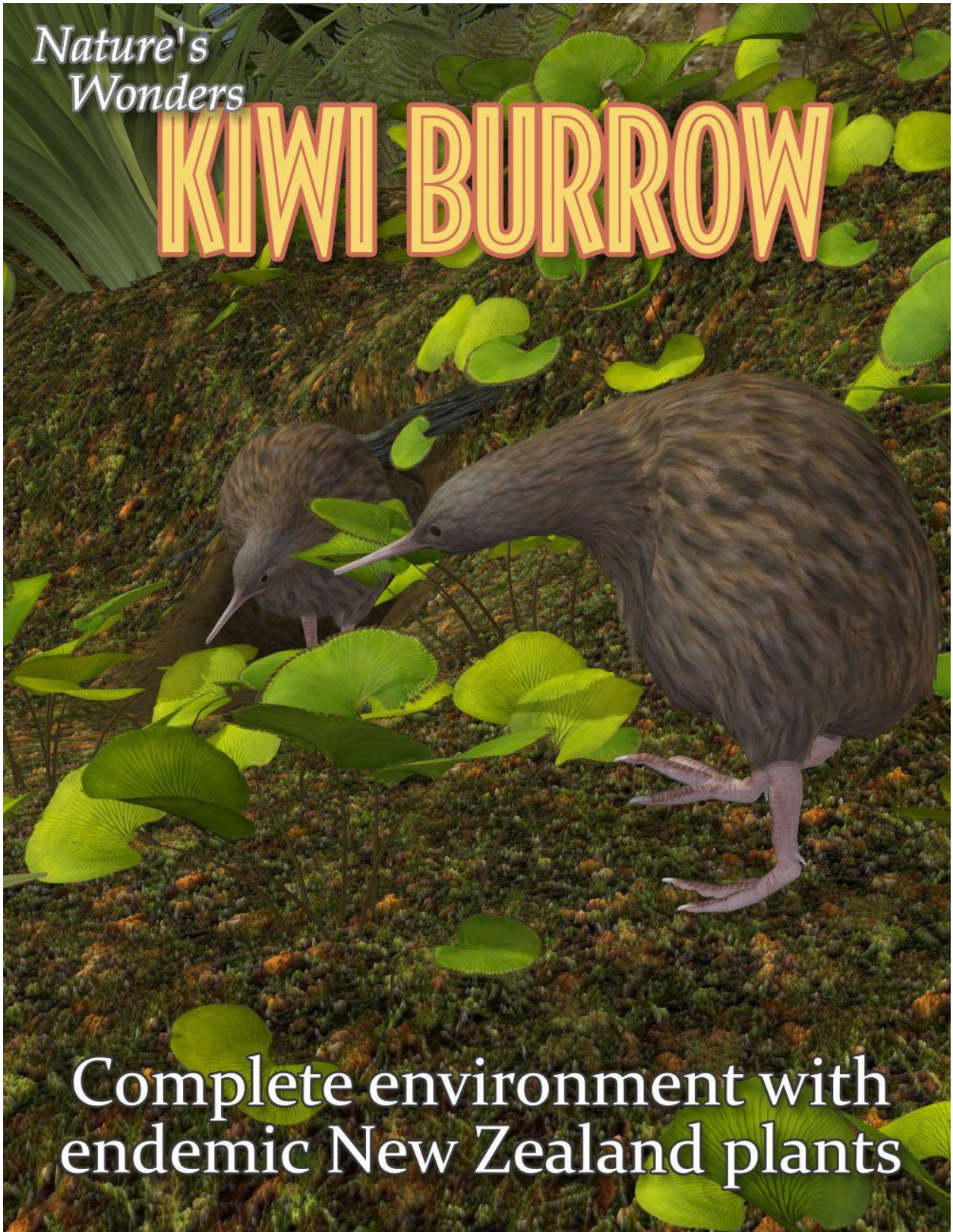


Nature's
Wonders

KIWI BURROW



Complete environment with
endemic New Zealand plants

3D Botanical Models by Ken Gilliland

KIWI BURROW

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Introduction

The Kiwi Burrow is a mini-forest environment perfect for the [Songbird ReMix Kiwis](#). The burrow itself contains a sizing morph so it will accommodate any species of kiwi. The forest environment contains endemic New Zealand flora featuring the Common Shield Fern, the Kidney Fern, the Bush Lily and a Kauri tree snag. The snag has a perching branch and several cavities for birds to hide in. The burrow prop comes in Firefly and Superfly versions for Poser 9+/11 and 3Delight and Iray versions for DAZ Studio 4.8+. Also included are standalone props for the Common Shield Fern, the Kidney Fern and the Bush Lily.

How to Care for Your Kiwi Burrow

Horticultural techniques in Poser

1. Get the planting area ready by installing the product in Poser.
2. Load Poser and go to the Props section. Locate the “Nature’s Wonders/Flora/Kiwi Burrow” folder.
3. Select the entire burrow mound or plant you want to plant by clicking the icon.
4. The plants often look their best when given lots of sunlight (100% on the main light is recommended.)

Horticultural techniques in DAZ Studio

1. Get the planting area ready by installing the product in DAZ Studio.
2. Load Studio and go to the “Environments” folder. Locate the “Nature’s Wonders/Flora/Kiwi Burrow” folder.
3. Select the entire burrow mound or plant you want to plant by clicking the icon.
4. The plants often look their best when given lots of sunlight (100% on the main light is recommended.)

About the Biodiversity and New Zealand

New Zealand is its own Biodiversity hotspot. It is a mountainous archipelago, once dominated by temperate rainforests, and it harbors extraordinary levels of endemic species, including its most famous representative, the kiwi. None of its mammals, amphibians, or reptiles is found anywhere else in the world. Most curious is that the two endemic land mammals found on New Zealand are both species of bats.

It is linked biogeographically with New Caledonia via the undersea Norfolk Rise. Both New Zealand and New Caledonia split away from Gondwanaland at the same time and did not separate from each other until around 40 million years ago. Both hotspots are "ancient life-rafts" which have been largely isolated and have evolved unique flora and fauna.

New Zealand ranges in latitude from subtropical to subantarctic, and is a land of varied landscapes, with rugged mountains, rolling hills and wide alluvial plains. It is a tectonically active hotspot with frequent earthquakes and volcanic activity. About 75 percent of the hotspot's land area is above 200 meters in altitude, reaching a maximum of 3,700 meters on Aoraki (Mount Cook).

Climate is highly variable throughout the islands and has played a key role in biodiversity distribution. Annual rainfall ranges from 12,000 mm (one of the highest rainfall rates in the world) on the western slopes of the Southern Alps, to less than 300 mm in the rain shadow areas east of the Southern Alps. The Kermadec Islands have a subtropical climate, with warm, moist conditions throughout the year, while the Chatham Islands have a cloudy, humid climate, with cool, wet winters and warm, usually dry summers.

New Zealand's forests have been greatly depleted, but, of the remaining forests, the most impressive are those of giant New Zealand kauri (*Agathis australis*), which are restricted to the far north. Other forests on North Island are dominated by angiosperms, while those in the southern portion of the island and on South Island are dominated by Gondwanan gymnosperms of the family *Podocarpaceae* and southern beeches (*Nothofagus spp.*). The forests on the western flanks of the Southern Alps are among the most extensive temperate rainforests on Earth. Other vegetation types include scrub and shrublands, and snow grasses (*Chionochloa spp.*) above the timberline. At higher altitudes, the vegetation is characterized by cushion plants, many of them endemic and including the peculiar and distinctive "vegetable sheep" (*Raoulia* and *Hastia spp.*), which are highly compacted shrubs of the family *Asteraceae*.

Since the island's colonization by humans (700 years ago), 50 bird species have gone extinct. Invasive species pose the most serious threat to the flora and fauna of New Zealand's islands, but habitat destruction, through deforestation and wetland drainage, is also a key problem.

Species Name: *Astelia fragrans*

Common Name: *Bush Lily, Brush Flax or kakaha*

Long, sword-like green leaves, with midribs that can be red. In the center of the plant, clumps of green flowers are produced between October and November. During summer yellow-orange fruit is created by female plants. It is one of the most common species of *Astelia* growing throughout New Zealand

Plant Family: Asteliaceae

Plant Type: Shrub

Height by Width: 1m H x 1m W

Growth Habit: Mounding

Deciduous/Evergreen: Evergreen

Growth Rate: Fast

Sun Exposure: Semi-shade or shade

Soil Preference: Rich, moist soils.

Water Requirements: Regular.

Cold Hardy to: Frost hardy.

Flower Season: October/November

Flower Color: Green

Endangered?: Not listed

Distribution: Throughout New Zealand

Natural Habitat: Scrub and forests from sea level to 900m elevations.



Species Name: *Trichomanes reniforme*

Common Name: *Kidney Fern or raurenda*

A filmy fern species endemic to New Zealand. Individual kidney-shaped ferns stand upright. In hot weather they shrivel up to conserve moisture, but open up again when precipitation returns. This species has very thin fronds which are only four to six cells in thickness.

Plant Family: Hymenophyllaceae

Plant Type: Perennial

Height by Width: 5-10cm

Growth Habit: Upright, spreading

Deciduous/Evergreen: Evergreen

Growth Rate: Fast

Sun Exposure: Full to partial shade

Soil Preference: Rich, damp soil.

Water Requirements: Regular to heavy.

Cold Hardy to: Not frost hardy.

Flower Season: none

Flower Color: none

Endangered?: Not listed

Distribution: Throughout New Zealand

Natural Habitat: Commonly grows on the forest floor of open native bush.



Species Name: *Polystichum richardii*

Common Name: *Common Shield Fern or pikopiko*

A New Zealand endemic composed of long erect evergreen leathery dark blue-green fronds, held on hairy black stems.

Plant Family: Dryopteridaceae

Plant Type: Perennial

Height by Width: fronds can be up to 50 by 25cm

Growth Habit: Mounding

Deciduous/Evergreen: Evergreen

Growth Rate: Slow to moderate

Sun Exposure: Light Shade to Shade

Soil Preference: Adaptable

Water Requirements: Occasional

Cold Hardy to: Frost hardy.

Flower Season: None

Flower Color: None

Endangered?: Not listed

Distribution: Found throughout
New Zealand

Natural Habitat: Dry places from the coast to lowland forest areas



Species Name: *Agathis australis*

Common Name: *New Zealand Kauri*

It is the largest tree by volume (but not tallest species) in New Zealand, standing up to 50 m tall in the emergent layer above the forest's main canopy. The tree has smooth bark and small narrow leaves. Kauri forests are among the most ancient in the world.

Plant Family: Araucariaceae

Plant Type: Tree

Height by Width: 40-50m height, up to 5m trunk width

Growth Habit: Upright and spreading, growth slower as the tree matures

Deciduous/Evergreen: Evergreen

Growth Rate: Slow to moderate

Sun Exposure: Full sun to full shade

Soil Preference: Rich, moist soil

Water Requirements: Regular water

Cold Hardy to: Protect from frost when young

Flower Season: None

Flower Color: None

Endangered?: Not listed

Distribution: Northland to the Bay of Plenty

Natural Habitat: Oak Woodland, chaparral, coastal sage scrub, open or shady places to 2,400'

Special Thanks to...

....my beta tester, FlintHawk.

Sources

Critical Ecosystem Partnership Fund (<http://www.cepf.net>)

Wikipedia (<http://www.wikipedia.com>)

New Zealand Native Plant Centre (<http://www.nznativeplants.co.nz>)



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