

Biodiversity Bingo Fact Sheet

Go out in nature and play a biodiversity bingo.

The plants and animals on the sheet are common across the country and even possible to find in a garden. Some parts of the country the flora and wildlife differs, but there is also where you can make your own bingo sheet.

Choose an area of preference and pick species that are local and easy to find. You don't have to pick the same category of species, you can mix it up with different kinds of animals, for example, bumble bees, praying mantis, copper skink and tui.

Half the pleasure can be making your own sheet of what you would like to find and see.

So after this - just get out and start playing. Don't expect to finish the sheet off straight away unless you are lucky. If you cannot find a raukawa gecko, a skin or another native lizard will be okay too. Same goes for the painted weta, a normal tree weta will work too

You can also report your finding on the nature watch app, Inaturalist, so we can get a better understanding on where things live and can be observed.

Tauhau / Silvereye (*Zosterops lateralis*)

<http://nzbirdsonline.org.nz/species/silvereye#bird-sounds>

A fairly recent self-introduction from Australia. Often found in forest, gardens park etc, these small songbird lives in flocks. Can be easily recognized by their white ring around the eye. Silvereyes feeds on fruit in gardens, including grapes, oranges, cherries and apples. They may also spread weed seeds through eating small fruits, so it is a good thing that you keep the garden weed free. They are known to spread seeds of native trees and shrubs, including kahikatea and coprosmas. And assist with pollination of some tree species such as kowhai and fuchsia.

Piwakawaka / Fantail (*Rhipidura fuliginosa*)

<http://nzbirdsonline.org.nz/species/new-zealand-fantail#bird-sounds>

One of our most iconic native birds, the fantail is well known and easy to spot with its flickering flight and its fantail. Giving it its name. Also known as piwakawaka. These guys seems friendly, but most often come up close as they are looking for insect that people may disturb while gardening or walking through the forest. Often seem common nesting adults, eggs and chicks are often being preyed upon by introduced mammalian predators like rats. Fantails eat small invertebrates, such as moths, flies, beetles and spiders, but can sometimes be seen eating small fruit of plants like coprosma too. If one is super lucky, you might even spot the black color morph too.

Tui (*Prosthemadera novaeseelandiae*)

<http://nzbirdsonline.org.nz/species/tui#bird-sounds>

A large dark iconic honeyeater that is known for its mix of calls and song and its tuft of white throat feathers. Tui are also known as koko in some parts of the country and early Maori. With its flappy wingbeat, sounding like a plastic bag in the wind and song, tui is one of the most well known native birds. Widespread and now found in forest, park and gardens, especially during flowering season of tree species like kowhai, kohekohe, rewarewa, tree fuchsia, but also flax and some exotic gum species. They will also eat fruit of a wide range of

native species, like ngaio, mahoe, wineberry and kohekohe, that they will then disperse. Tui are also very aggressive and will even harass birds of prey, like the native falcon with a repetitive scream.

Kererū (*Hemiphaga novaeseelandiae*)

<http://nzbirdsonline.org.nz/species/new-zealand-pigeon#bird-sounds>

This fruit pigeon inhabit a wide variety of forest eco systems; podocarp broadleaf, coastal forest, beech, regenerating native and remnants, to exotic urban parks, rural and suburban gardens. While they can spend weeks on months living within an area of a few hectares, such periods can be interspersed with long distance flights, up to 60 km between suburbua, remnant forest or other habitats in their quest for seasonally food sources. Kererū eat large fruit intact, and then distribute the seed through their droppings, sometimes kilometres away from the parent tree. Without the kereru, the rate of decline of kereru-dependent tree species is alarmingly high. Plant species with large fruit include tawa, titoki, nikau, miro and kohekohe. These trees add to biodiversity and are needed as part of a healthy ecosystem.

Kotare / Kingfisher *Todiramphus sanctus*

<http://nzbirdsonline.org.nz/species/sacred-kingfisher#bird-sounds>

Our only native kingfisher. A greenblue shimmering wings to a yellow-orange belly and a large black bill. It has a broad black eye-stripe and cannot be mistaken for any other native bird. Kingfishers are found throughout the country in both coastal and inland areas. Often seen in gardens or perched on power lines as they keep a look out for prey, such as insects, lizards and sometimes small birds. They nest sites are in hollows in trees, cliffs and banks. Most often heard than seen with their 'kek-kek-kek' territorial call.

Raukawa gecko *Woodworthia maculata*

The Raukawa gecko or also known as the common gecko is a small to medium sized gecko with a tail, often the same the length of the body itself. Its back is largely grey or brown with irregular markings and spots, including black, white, orange, and even olive ish green spots. This gecko can sometimes been seen when foraging at night on vegetation, such as flowering flax. A terrestrial and arboreal gecko which can be found across a wide range of habitats from shorelines to inland forest. Often found in garages or garden sheds. Mostly active at night, when it is dark but will sun bask. All lizards are protected by law and are not to be handled or disturbed. A shedded gecko skin found, will also be a point on the bingo sheet.

Flax spider *Trite planiceps*

Black-headed *flax* jumping *spider* is one of the large native jumping spiders of New Zealand. Named after their ability to jump while catching prey or getting to different hard to reach spots and unlike most spiders, they have a super eyesight as it would be pretty tough to be able to jump on prey if they didn't! Look out for these near or in flax and cabbage trees, during the day you can find them out and about hunting for prey. It is harmless to humans and sometimes jumps up on your hand if you hold it out.

Painted Weta *Neonetus variegatus*

The painted weta is small cave weta that inhabit forest, especially among the damp litter and decaying logs, sometime in damp tree holes or places like wood piles. They use lengthy legs to leap from any danger. Although they have no hearing organs on their front legs like other species of weta, they have extra-long antennae, which they can feel their surroundings with as they are sensitive to vibrations. Due to their smaller mouths they tend to eat plant material, fungi and dead invertebrates.

Yellow admiral *Vanessa itea*

Admirals are usually a forest edge species, but can often be seen in more native gardens. They rely on host plants in the stinging nettle family (*Urtica* spp), which the larvae eat and live on. The common nettle (*Urtica dioica*) and Ongaonga (*Urtica ferox*) are admiral favourites, ongaonga sometimes less by the yellow. However, both will feed on any of the nettle species including the introduced nettle *Urtica urens*.

Both species have experienced a population decline over the last few decades, due to reduced numbers of host plants around gardens and towns. With its painful stings, ongaonga is unpopular with gardeners, but planted at less accessible sites will be truly beneficial for admiral butterflies. Some of the other nettle species are less ferocious and can be used in more domestic situations. The more nettles we plant, the higher our chances of bringing colourful admiral butterflies back to our gardens.

Copper butterfly *Lycaena salustius*

These pretty butterflies are most often seen near coastal areas, but what all species have in common is their host plants: the *Muehlenbeckia* genus (wire vines / pohuehue), including the tiny-leaved, pillow-shaped *M. complexa* and the extensive vines of *M. australis*, great for hiding ugly fences and walls. Attracting copper butterflies to your garden is fairly easy: grow some *Muehlenbeckia* and a few nectar-producing plants. All copper butterfly species suffer from wasp predation, especially paper wasps, as they provide a good source of protein for the wasp's developing larvae. Their numbers have further decreased due to host plant loss, especially in dune areas

Stick insect order *Phasmatodea*

There is 23 known species of stick insects in New Zealand, but the number might grow as we learn more about them. Stick insects feed on plant material and are most active at night when it is dark.. During the day they are mostly still and camouflaging themselves on the species they feed on. They can be found on a variety of native plants in addition to some introduced plants common in gardens. *Muehlenbeckia* species like pohuehue and rata, including pohutukawa are species these can be found foraging on. When disturbed or handled, stick insects will often fall to the ground and "play dead" to avoid being eaten.

Huhu beetle *Prionoplus reticularis*

The huh beetle is our largest endemic longhorn beetle that is most often encountered when it's dark and when it is attracted to outdoor lights. The adult beetle only lives for 2 weeks as it does not eat while it lives, but as a larvae, live up to 3 years eating juicy soft wood under bark or rotten wood. The main native predators of adult beetles are moreporks and kiwi for the larvae. These days, introduced animals such as mice, rats, and hedgehogs are fond of them and are known to consume them in large numbers, making them rare in places.

Ngaio *Myoporum laetum*

A beautiful, fast growing coastal tree, with a rough, furrowed grey trunk, often in old age becoming gnarled and full of holes for nest building birds, geckos and weta. Also an older tree is great for building the kids tree house.. Tolerant of salt spray and wind makes this species one of the best choices for a coastal tree, providing, both, shelter and food for our native wildlife. Grows up to 10 meters, but often less with a dome shaped crown.

Mahoe *Melicytus ramiflorus*

Mahoe is an attractive tree growing up to 10 metres high with a wide sometimes intertwined and hollow trunk. Also often also seen with exposed roots. This tree does well in coastal forest situations. The large bright or sometimes dark green leaves have serrated edges. Flowers are small with a slight greenish-yellow coloration in early summer are scented. The flowers are insect pollinated and later turns into beautiful violet or dark violet berries. When ripe berries are eaten by a large number of native birds, including Kereru. They are also eaten by geckos. The softness of the wood makes it prone to insect attacks and creating useful holes for nesting birds and weta.

Karamu Coprosma robusta

One of our best known coprosma species and also one of the best species for establishing shelter or new bush. Grows up to 6 meters tall with glossy and leathery leaves and masses of fruit for birds, lizards and insect like weta. The masses fruits also known as drupe can ripe all year in some cases, but often in autumn. Fruit however takes a year to ripe. They can be orange to red, up to a cm long and have a slight sweet taste. Branches and branchlets spreading with often dark green shining leaves 5-13cm long and 3-4 cm wide. A fast growing colonising shrub that is often used for planting projects.

Manuka Leptospermum scoparium

Manuka is probably the best known New Zealand tree due to all its different uses. From honey to body lotions and tea. Ornamental as individual or in groups with masses stunning white flowers during flowering and many benefit for native wildlife. Often regarded as a shrub or a small tree up to 5 metre in height with small leaves with a short spine at the tip, giving it a somewhat prickly feel when handled, in opposite to the similar kanuka whose leaves are soft when handled The trunk has a light grey or brown coloration, peeling in long papery flakes often mistaken with the very similar tree fuschia. Branches are often sitting dense and erect. The flowers are white or sometimes pinkish and can sometimes almost cover the crown, giving the tree an appearance of being covered in snow. A small dry seed capsule if followed after flowering.

Lancewood Pseudopanax crassifolius

lancewood is one of the oddities in New Zealand's forest. The explanation to its oddities can be explained as a defense against browsing moa. At the height of 3 to 4 meters, well above moa head height, more normal looking leaves are starting to emerge, becoming smaller without the serrated edges. The trunk becomes wider and branches are beginning to take form. This usually happens after 10 to 15 years. During its juvenile stage, leaves are leathery and tough with sharply pointed serrated edges or teeth. These leaves can be up to 1 meter, but usually around 60 cm. Studies of leaf colouration shows that the leaves are putting all attention to their teeth. Telling browsing birds off. Fruit is however often eaten by birds.