



# Skinks and geckos

## Native animals

There are two kinds of lizards in New Zealand – geckos and skinks. Geckos have broad heads with large bulging eyes, clearly defined necks, and soft, velvety-looking skin that is covered in very small, granular scales. Skinks are more slender with narrow heads and small eyes. Skinks have smooth, shiny, fish-like scales on the surface of their skin. Both groups can lose their tails, which can distract predators while the animal escapes.

There are about 80 different species of skinks and geckos in New Zealand, although this figure will change as more species are discovered and more research is conducted. They are long-lived animals (some over 40 years) with relatively low breeding rates. Some are active at night while others only come out during the day. In order to survive and carry out their daily activities, skinks and geckos have to raise their body temperature by extracting heat from the sun's rays and from rock surfaces.

### Where are they found?

Skinks and geckos are found in a wide variety of habitats from sea level to altitudes of more than 2000 metres. Species are generally adapted to a specific habitat type such as high altitude tussocklands, alpine outcrops, treetops, rocky shorelines, and sandy beaches. Because of the threat of introduced mammals on the mainland, many species only survive today on predator-free offshore islands.

### Skink facts

- Skinks are the most frequently encountered reptiles in New Zealand and they are often glimpsed in gardens.
- They vary in colour and size, with the longest skink measuring 350 millimetres from head to tail.
- Skinks eat insects and fruit. They are highly alert animals, with an exceptional sense of smell, hearing and sight.

Forest gecko  
C Robertson



- One New Zealand skink (called the egg-laying skink) lays eggs, but all other species give birth to fully-formed young. They usually have three to six babies each year, but sometimes have more than ten.

### Gecko facts

- Geckos in New Zealand generally give birth to twins in late summer or early autumn.
- Like skinks, geckos have an excellent sense of smell, sight and hearing. We also know that some species click and squeak at each other. When under threat they arch their backs, open their mouths and flick their tails.
- Geckos show a great variety in colour and size, from bright greens and yellows to bark-like greys and browns. The largest gecko measures 230 millimetres from head to tail.
- Geckos are renowned for their climbing ability. Some species are able to climb vertical glass using rows of incredibly fine 'hairs' on their toe pads.
- Geckos eat insects, fruit, nectar and carrion. Geckos may be important pollinators and seed dispersers for certain native plants.
- Geckos' eyelids are fused shut and the lower lid is transparent. They lick their lids to keep them clear.
- NZ geckos are some of the world's most anatomically primitive geckos and were in the New Zealand region before its separation from Gondwanaland 80 million years ago.



Forest gecko  
B W Thomas

### Some special species

- **Chevron skink:** This species is thought to survive only on Great Barrier Island. Most sightings of chevron skinks have been in close proximity to streams or other damp places. Dark bands extend down the face of the chevron skink from below the eye to just under the lower lip. Between these two bands is a distinctive pale-coloured teardrop shape.
- **Striped skink:** Fewer than 120 striped skinks have ever been found. They are presently known from around 40 widely scattered sites throughout the central and northern North Island in lowland forest and pastoral farmland. The species is easily recognised by the pale stripes running down the length of its body.

Green skink  
M. Aviss



- The **Otago skink** and **grand skink** are unique to Central Otago and are the largest skinks in New Zealand. Grand skinks are black with yellowish flecks, while Otago skinks are black with grey, green, or yellowish blotches. These colour patterns provide fantastic camouflage amid the lichen-covered rocks where they live. Once widespread in Central Otago, these skinks are now found in only eight per cent of their former range.
- The **black-eyed gecko** lives high in the alpine zone of the mountains inland from Kaikoura. It is not yet known how it survives at such high altitudes, where snow covers the ground much of the year and temperatures drop well below zero.

### Threats

The major threats to skinks and geckos are introduced predators and habitat loss. Lizards are eaten by cats, ferrets, stoats, weasels, hedgehogs, rats, mice, and even some birds like magpies, kingfishers and blackbirds.

Habitat depletion is the main threat to some species, especially as a result of agricultural development. The loss of indigenous forest from the North Island lowlands has led to the local extinction of many lizard populations. Similarly, the conversion of tussocklands to pasture has reduced habitat available to alpine species.

### How can you help?

The Department of Conservation needs your help to learn of any sightings of geckos, especially in the alpine zone of the South Island. If you have seen what you think is an unusual or rare gecko, please submit the following information to DOC:

- When you made your observation.
- Details of the location where you found it (a place name, description of where it was, the altitude, and a map grid reference if possible).
- As much detail as you can remember about the site (aspect, amount of rock, type and amount of vegetation).
- How you found the gecko, and what it was doing at the time.
- Its size and colour.
- A photograph of the gecko and its habitat if possible.

### Further information

The Department of Conservation welcomes any comments or suggestions you may have about the conservation of skinks and geckos. These can be directed to the recovery group via any office of the Department.

See [www.reptiles.org.nz](http://www.reptiles.org.nz) (NZ Herpetological Society) for more information on reptiles in New Zealand.