

# Giant Wetas

## Endangered and Neglected

Conservationists will readily support a project to rescue an endangered bird, but it takes more persuasion when the species is an insect. Here Alison Ballance of Ecology Division, DSIR, explains the work being carried out to save the world's heaviest insects.

**W**etas are large flightless insects related to crickets, and "giant weta" is an umbrella term for eight species that belong to the genus *Deinacrida*. Giant wetas have squat, heavy bodies and a matt rough-textured exoskeleton. They cannot jump, and they have a generally placid nature. Giant wetas have been described as "insect dinosaurs", in recognition both of their links with Gondwanaland, and their status as the world's heaviest insects.

Tree (or bush) wetas are the wetas that most people are familiar with, and they differ in several significant ways from giant wetas. They are thinner, more streamlined insects with a glossy appearance; they are strong jumpers; they have large, powerful jaws; and they can kick and bite to defend themselves. Cave wetas are another well-

known group of wetas, which are classified in a completely different family from giant wetas and tree wetas. They have small bodies, very long spindly legs and feelers, and are common in dark places such as caves.

Giant wetas are nocturnal vegetarians. During the daytime they retreat into refuges in the foliage of trees or shrubs, or in holes in trunks or branches. At night they feed on leaves, seldom venturing onto the ground. A female giant weta produces several hundred eggs, which are laid in the soil over several months. The eggs are cigar-shaped, about 5mm long, and take between two and nine months to develop and hatch. Hatchlings mature in about 18 months, and they moult about 10 times as they grow. Once they are mature they pair and mate, and then die, shortly after the female has laid eggs. The



lifespan of a giant weta is about two years.

All of the species of *Deinacrida*, except for the high-altitude scree (or boulder) weta which is common and widespread, are legally protected under the 1980 Wildlife Amendment Act. Four of the species that are now confined to islands are listed as "threatened" in the International Red Data Book of endangered species. Until recently little was known about the giant weta species surviving on the mainland, but over the last couple of years those at Kaikoura and Mahoenui have been the subject of much attention by Ecology Division DSIR and the Wildlife Service (now part of the Department of Conservation). Both species survive in low numbers in highly modified farmland habitat, and the history and status of their populations highlight some of the general problems of invertebrate conservation.

Wetas are vegetarians whose favoured foods are leaves. However, like this Kaikoura weta, they will also chew on bark. Photo: Brian Enting