

New Zealand Arthropod Collection

Ko te Aitanga Pepeke o Aotearoa



The New Zealand Arthropod Collection (NZAC) was started in 1920, and is now accorded 'National Significance' status. It holds about 6 million specimens — 1 million are pinned and 5 million are stored in ethanol. These represent about 18,000 endemic (native) species and 2000 adventive (exotic) species. We act as custodians on behalf of several South Pacific Islands, but 90% of the specimens are from New Zealand. 75% were collected during the last 40 years.

With the move to Tamaki, the pinned specimens are being transferred to drawers ensuring safer long-term storage than the shelved wooden boxes used previously. Soft-bodied specimens are stored in vials and jars in the ethanol collection room.

What are the functions of NZAC?

- To discover the arthropod species present in New Zealand, and make this information available to the world.
- To be a physical record of the arthropod species and their distribution in New Zealand.
- To be a resource available to future generations.
- To be the authority for correct names and accurate identifications.
- To undertake taxonomic and biosystematics research.
- To support conservation (biodiversity) and environmental restoration.
- To assess biosecurity risks and assist with issues relating to trade of products.

Who uses the collections?

Specimens are loaned to researchers in New Zealand and around the world for taxonomic studies. DOC and MAF also use NZAC.

Biosystematic collections, such as NZAC (plus its supporting databases) are fundamental to all biological research, environmental management and biosecurity monitoring programmes.

Arthropods include insects, spiders and mites—animals that have an external skeleton and jointed limbs.

The longest weevil in the world is the New Zealand giraffe weevil, which grows up to 80 mm long. Captain Cook's crew collected a giraffe weevil during their first voyage to New Zealand in 1769. The smallest weevil is another New Zealand species, only 0.7–0.8 mm long, that lives in topsoil around the fine roots of pōhutukawa, kānuka and mānuka.

The Little Barrier Island giant wētā is one of the heaviest insects in the world—females normally weigh about 40g, but one was recorded as 70 g.

Our largest native spider is from Golden Bay. This cave-dweller has a leg span of 130 mm and body length of 24 mm. Our smallest spider, which is yet to be given an official name, has a body length of 0.5 mm.

Information resources

Taxonomic research is published in the *Fauna of New Zealand* series (Manaaki Whenua Press). Some databases and resources are available online via our web site

<http://www.landcareresearch.co.nz/research/biodiversity/invertebratesprog/>

Specialist applications include BioAssist

<http://www.landcareresearch.co.nz/research/biodiversity/invertebratesprog/bioassist/index.asp>

Interesting resources for the public, and educational and fun pages in English and Māori are available for school students at

<http://www.landcareresearch.co.nz/research/biodiversity/invertebratesprog/invertid/>

NZAC IS HELPING TO
MAKE A DIFFERENCE
FOR A TRULY CLEAN
GREEN NEW ZEALAND

