

## Arthropods on the NZAC pare

1. Auckland tree wētā
2. black tunnelweb spider
3. bush giant dragonfly
4. chorus cicada
5. common seabird tick
6. giant centipede
7. giraffe weevil
8. New Zealand blue blowfly
9. New Zealand giant stag beetle
10. plume moth
11. puriri moth
12. shield bug
13. striated ant

### 1. Auckland tree wētā

**Māori name:** wētā, pūtangatanga, taepo, taipo, tokoriro

**English name:** Auckland tree wētā

**Scientific name:** *Hemideina figurata* (Walker); order = Orthoptera; family = Anostomatidae (formerly Stenopelmatidae);

- is found on Te Ika a Māui / North Island, north of the Manawatu Gorge;
- differs from other species of tree wētā in having the body plate behind the head largely pinkish white;
- has a complicated social life, with one male (the big-headed specimen as depicted here) maintaining a harem of females, and many young;
- shelters in trees - in clumps of kahakaha, or in puriri moth tunnels, or large wood-borer galleries that they have enlarged with their powerful mandibles;
- communicates by stridulating - moving their thighs, which have a group of pegs on the inner side, against a scraper or ridge on the side of the abdomen.

### 2. Black tunnelweb spider

**English name:** black tunnelweb spider

**Scientific name:** *Porrhothele antipodiana* (Walckenaer); order = Araneae; family = Hexathelidae

- is a native spider common throughout Aotearoa / New Zealand, and is quite at home in urban gardens;

- is not poisonous to humans, unlike its relative the Australian funnelweb spider, although it can inflict a painful bite if mishandled;
- is a "primitive" spider, like the tarantulas;
- has a tunnel-shaped web, about 200 mm deep and 20-30 mm across, built in damp places: under logs or stones, in rock walls, or in basements or wood piles;
- picks up vibrations of potential prey (e.g., insects) moving across the mouth of the web. The spider rushes out to overpower prey, and carries it to the back of the tunnel;
- feeds mainly on beetles, slaters, and millipedes.

### 3. Bush giant dragonfly

**Māori name:** kapowai, kakapowai, kapokapowai, titiwaiora, uruuruoroa

**English name:** bush giant dragonfly

**Scientific name:** *Uropetala carovei* (White); order = Odonata; family = Petaluridae

- is found throughout the two main islands, but rarely in eastern districts.

The adult:

- is a large yellow and black dragonfly with a body length of about 80-85 mm;
- often flies slowly and noisily about the edges of bush or scrub;
- will settle quickly on a nearby surface if the sun is suddenly obscured by dense cloud, possibly even an unsuspecting bystander;
- male has large, petal-shaped hind appendages.

The nymphs:

- tunnel into the soft earth of a stream bank or seepage, where they occupy a chamber half-filled with water;
- are long-lived (perhaps 5 or 6 years);
- emerge at night to seek prey near the burrow entrance;
- are sensitive to disturbance so are rarely observed.

### 4. Chorus cicada

**Māori name:** kihikihi wawa, matua kihikihi, ngengeti

**English name:** chorus cicada

**Scientific name:** *Amphipsalta zealandica* (Boisduval); order = Hemiptera; family = Cicadidae

- is found throughout most of Aotearoa / New Zealand;
- typically lives in tall forest (or where tall forest used to be);
- males "sing" in unison;
- when numerous males sing together they can produce a deafening, strident uproar, which suddenly changes to synchronised "clicks" as the wings are clapped against the tree trunk;
- females lay eggs in herringbone-patterned slots in branches;
- nymphs hatch out the following spring and drop down to the ground;
- nymphs spend several years underground, sucking sap from tree roots;
- a nymph emerges from a wide burrow when ready to become an adult, climbs a tree trunk, and splits its skin down the back. The adult pulls itself out, expands its wings, and flies off.

#### 5. Common seabird tick

**English name:** common seabird tick

**Scientific name:** *Ixodes uriae* White; order = Acari; family = Ixodidae

- is found on many species of seabirds, such as petrels, penguins, and shags, particularly at their nesting sites;
- occurs around the coasts of Aotearoa / New Zealand and the subantarctic islands of the Southern Hemisphere, and in the North Pacific and North Atlantic regions of the Northern Hemisphere;
- is thought to be a vector that spreads a viral disease of seabirds. Once established, the virus may persist for a number of years in nesting colonies. Many nestlings may die from it.

#### 6. Giant centipede

**Māori name:** hara, hura

**English name:** giant centipede

**Scientific name:** *Cormocephalus rubriceps* (Newport); order = Chilopoda; family = Scolopendridae

- is native to Aotearoa / New Zealand, where it is found on Te Ika a Māui / North Island and nearby islands, more commonly in the north. It also occurs in Australia;
- may grow up to 160 mm in length and 10 mm across;

- shelters under or in logs and amongst leaves on the ground;
- is carnivorous, crushing and piercing prey with its fearsome jaws, or mandibles;
- has a bite that is painful although not poisonous to humans.

#### 7. Giraffe weevil

**Māori name:** pēpeke nguturoa, tuwhaipapa, tuwhaitara

**English name:** giraffe weevil

**Scientific name:** *Lasioryhynchus barbicornis* (Fabricius); order = Coleoptera; family = Brentidae

- occurs throughout Aotearoa / New Zealand;
- at up to 80 mm is the longest of our beetles;
- length is mostly taken up by the snout, underneath which is a long comb of stiff bristles;
- antennae are very near the tip of the snout in males, but in the smaller female they are near the middle;
- eggs are commonly laid in holes chewed by the female in the wood of karaka, houhere, and pigeonwood;
- larvae that hatch from these eggs tunnel in the wood, feeding and growing until they are ready to change into adults;
- male is considered to resemble closely a Māori canoe, or waka, and it fittingly has a place in Māori mythology as the god of a new-made waka.

#### 8. New Zealand blue blowfly

**Māori name:** rango pango, ngaro, rako; iroiro

**English name:** New Zealand blue blowfly

**Scientific name:** *Calliphora quadrimaculata* (Swederus); order = Diptera; family = Calliphoridae

- occurs throughout Aotearoa / New Zealand, but is most common on high mountains, and in the cooler parts of Te Waipounamu / South Island and on Rakiura / Stewart Island. Its range extends as far south as Campbell Island and the Auckland Islands;
- is our largest endemic blowfly;
- rarely comes indoors;
- females will readily "blow" woollen bedding, clothes, and meat;

- maggots have occasionally been found on fly-struck sheep, but they are secondary invaders rather than fly-strike initiators;
- maggots can develop on mountain top areas in the absence of carrion, apparently feeding on the decaying leaf bases of snow tussock.

### 9. New Zealand giant stag beetle

**English name:** New Zealand giant stag beetle, Helms' stag beetle

**Scientific name:** *Geodorcus helmsi* (Sharp); order = Coleoptera; family = Lucanidae

- is found only on Te Waipounamu / South Island, Rakiura / Stewart Island, and adjacent tītī (muttonbird) islands;
- is a large, flightless beetle;
- males are recognisable by enormous mandibles (jaws) as depicted here; in females the mandibles are small and inconspicuous;
- stays under logs and stones in damp forests during the day;
- emerges at night to feed on sap exuding from tree trunks;
- grubs are large and cream-coloured, live in peaty soil, and feed on rotting plant material;
- adults walk very slowly and cannot fly, so they are particularly vulnerable to predation by introduced rats and mice.

### 10. Plume moth

**English name:** plume moth

**Scientific name:** *Pterophorus monospilalis* (Walker); order = Lepidoptera; family = Pterophoridae

- is found on both main islands of Aotearoa / New Zealand, and on Rakiura / Stewart Island;
- is one of 21 species of plume moth found in Aotearoa / New Zealand;
- is a member of a group of plume moths that sit in a rather sprawling posture;
- is often seen lying flat on the leaves of its host plants: pate, raukawa, and puahou (tauparapara);
- caterpillars and pupae are somewhat furry.

### 11. Puriri moth

**Māori name:** pepe tuna; mokoroa, ngutara; pungoungou

**English name:** puriri moth

**Scientific name:** *Aenetus virescens* (Doubleday in White and Doubleday); order = Lepidoptera; family = Hepialidae

- is the largest moth in Aotearoa / New Zealand, and is found only on Te Ika a Māui / North Island;
- relatives live in Australia, New Caledonia, and Papua New Guinea;
- caterpillars start life living in a bracket fungus;
- older caterpillars make a refuge tunnel in the trunk of a large tree;
- caterpillars feed on the wound tissue of the tree around the tunnel entrance, which is concealed by a silken "tent";
- pupation occurs in the tunnel;
- adult moths do not feed, and live only for a few days;
- moths are active at night.

### 12. Shield bug

**English name:** shield bug

**Scientific name:** *Oncacontias vittatus* (Fabricius); order = Hemiptera; family = Acanthosomatidae

- was one of the first insects from Aotearoa / New Zealand to be described by a European scientist (by the Swedish entomologist Fabricius in 1781), from collections made during Captain Cook's visits;
- occurs throughout Aotearoa / New Zealand in many habitats;
- produces one generation each year;
- nymphs seem to prefer grasses, especially toetoe;
- adults apparently feed on a wide range of endemic plants;
- is one of very few species of plant bug in Aotearoa / New Zealand known to feed on "hard-leaved" trees such as rimu.

### 13. Striated ant

**English name:** striated ant

**Scientific name:** *Huberia striata* (Smith); order = Hymenoptera; family = Formicidae

- is widely distributed throughout Aotearoa / New Zealand, and its offshore islands;
- nests in the soil, often under stones and in rotting logs;
- is not encountered as often as the introduced ants, which tend to invade houses and gardens;

- has a general diet
- may keep scale insects in its nests, to feed on the honeydew they excrete.
- There are less than a dozen species of native ants, probably owing to the early isolation of Aotearoa / New Zealand from other land masses. Most of these have close relatives in other parts of the world, but the genus *Huberia*, with two species, is unique to this country.

Trevor Crosby (Curator, NZAC)  
Landcare Research, Private Bag 92170,  
Auckland, New Zealand.