

# Wētāpunga / Giant wētā



Up close and personal with a wētāpunga. Photo: Liz Whitwell

## What are they?

Wētāpunga are very large insects, unique to New Zealand, which when fully grown can be heavier than a mouse or sparrow. During the day they usually hide in dead foliage such as the drooping dead fronds of tree ferns, nīkau palms or cabbage trees, but leave their resting

places at night to move around in trees or on the ground. Adult wētāpunga live for only about 6-9 months, during which time they will mate repeatedly, with the females laying many groups of eggs in soft soil on the forest floor.

## Where do they live?

Although wētāpunga were originally distributed across Northland, Auckland and Great Barrier Island (Aotea), the species has only survived on Hauturu-o-Toi / Little Barrier Island. Habitat destruction and predation from exotic pests saw to their demise. It is fortunate these special creatures have survived, even if just in one place on Hauturu-o-Toi / Little Barrier Island.

Successful breeding and translocation projects mean that they are also now present on Tiritiri Matangi and Motuora Islands.



Department of  
Conservation  
*Te Papa Atawhai*

## Future survival – the breeding project

*To help safeguard this threatened species, an experimental breeding project was skilfully and successfully undertaken by the staff at Butterfly Creek in South Auckland under the guidance of the Weta Recovery Group.*

No-one had previously attempted captive breeding on this scale before, and much was learnt from being able to closely study the breeding habits of these animals. From an initial 18 wētāpunga captured from Hauturu o Toi / Little Barrier Island, 25 adults or near adults were released on Tiritiri Matangi Island in December 2011. A similar number of younger wētāpunga were released in September 2010 onto Motuora Island, another pest-free island in the Hauraki Gulf Marine Park.



### **Auckland Zoo is overrun**

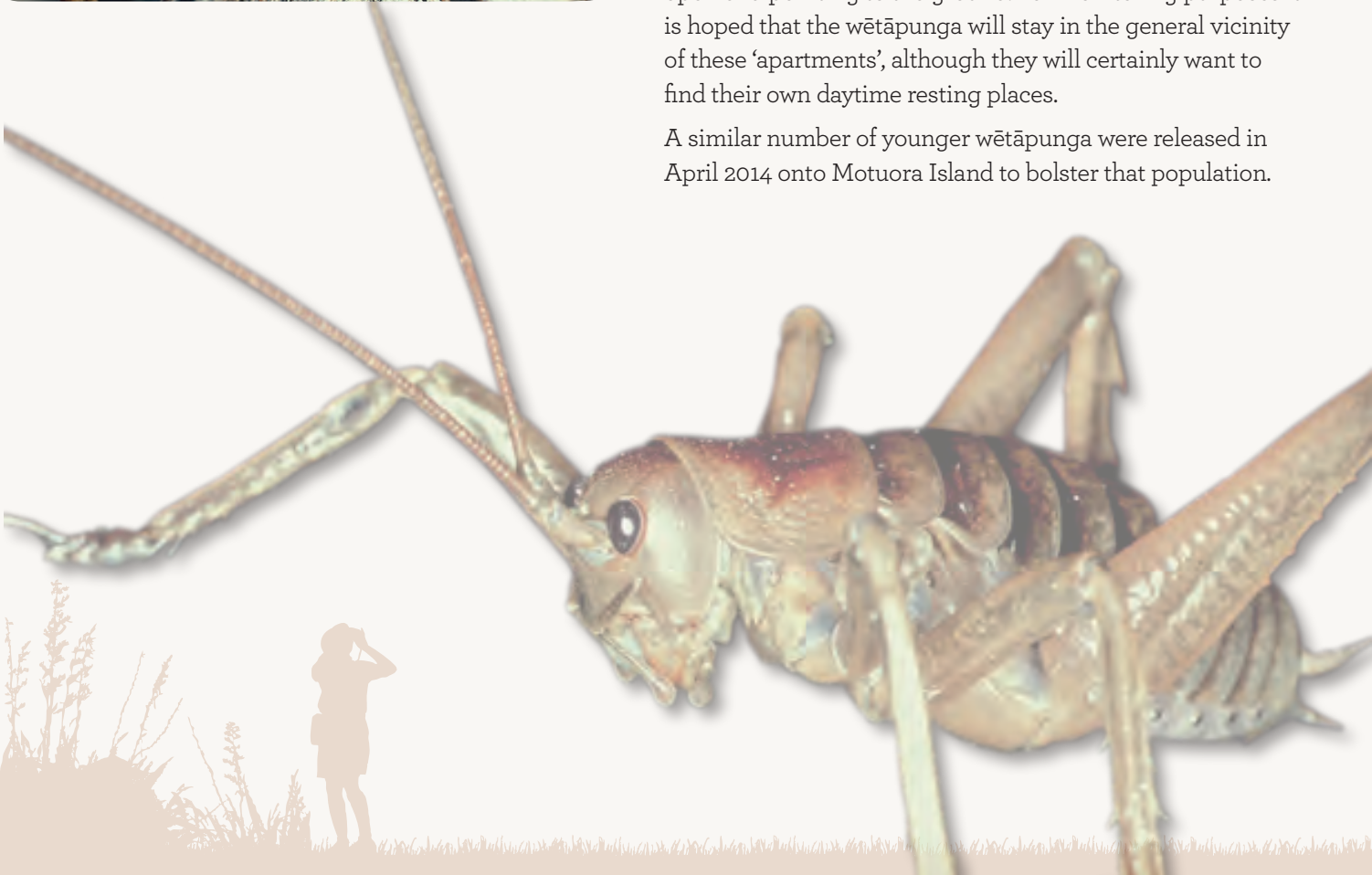
The breeding project was joined by Auckland Zoo in May 2012 when staff captured 12 adult wētāpunga from Hauturu o Toi / Little Barrier Island and returned them to purpose-built facilities at the Zoo. Following lots of mating and egg laying activity, hundreds of baby wētāpunga began hatching in early 2013. These are called first 'instars' meaning they are the first growth stage after the egg. Wētāpunga go through 11 'instars' before reaching adulthood, meaning they shed or moult their hard outer covering (exoskeleton) an incredible 11 times. Moulting is necessary to enable them to grow in size – it can take up to two years for them to become adults.

### **Another successful release**

Auckland Zoo were extremely successful at breeding hundreds of wētāpunga. There were so many that as well as rearing them in separate containers, many had to be reared in groups in larger cages, which had not been attempted before in the breeding programme. Both methods of rearing were successful and produced a range of different sized wētāpunga for release. In May 2014 150 adult or near adult wētāpunga were released onto Tiritiri Matangi to significantly bolster the population. These will breed and add to the genetic diversity of those already present on Tiritiri Matangi from the earlier release.

The wētāpunga were installed in the bush in 'wētā apartments' made of sections of giant bamboo, with the open end pointing to the ground. For monitoring purposes it is hoped that the wētāpunga will stay in the general vicinity of these 'apartments', although they will certainly want to find their own daytime resting places.

A similar number of younger wētāpunga were released in April 2014 onto Motuora Island to bolster that population.



## Amazing facts about wētāpunga

- Adult female wētāpunga are heavier than the males and can weigh up to 35 grams, heavier than an average house sparrow.
- Having achieved adulthood in approximately 14-24 months, wētāpunga commence breeding 1 to 2 months after maturity. The females will lay eggs throughout their adult life, generally producing between 100 to 300 cigar-shaped eggs.



- They filled the role of rodents before land mammals came to New Zealand, although their behaviour and diet are quite different. They are older than tuatara – 190,000,000 years.
- Wētāpunga were previously distributed throughout Northland, Auckland and Great Barrier Island.
- There are over 70 endemic species of wētā in New Zealand, including 11 species of giant wētā, of which wētāpunga is the largest.

- Wētāpunga feed on fresh leaves and prefer native plants with large leaves such as karaka, karamu, māmāngi, māhoe, and kohekohe.
- Auckland Zoo is home to the largest collection of native and exotic wildlife species in New Zealand and attracts over half a million visitors annually. The zoo contributes practical skills, veterinary expertise and funding to help protect and conserve native endangered wildlife in New Zealand.
- The wētā were housed in purpose-built facilities at Auckland Zoo and reared both individually and in groups. So many hatched that extra staff were brought in to help feed the many hundreds of growing wētāpunga with fresh foliage.



# What now and how can you help?

These wētāpunga deserve to be back where they belong, on other island sanctuaries in the Hauraki Gulf. The Wētā Recovery Group's plan is to establish several populations around the gulf, ensuring the survival of the species and their long term security. By using captive breeding we can now improve the chances of the species surviving in the event of a catastrophe on Hauturu-o-Toi / Little Barrier that would have otherwise wiped them out forever.

## How you can help

You can also make a difference by becoming members of the community groups in the gulf like the Supporters of Tiritiri Matangi who are key to the ecological restoration of these islands.

You can also help by being careful when you visit special "Treasure Islands" like Tiritiri Matangi. Wētāpunga need islands free of mammalian predators to survive.



## Islands in the Hauraki Gulf provide sanctuaries for native plants and animals

You can help keep it that way

### Stowaways in my gear?

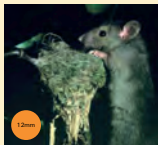
Yes, pests can and have hitched a ride on or in bags, clothing and boats.



Rainbow skink Photo: Tony Whitaker



Mouse



Rat at fantail nest



Argentine ant Photo courtesy Alex Wild



Weeds seeds and soil

Rats can squeeze through a 12mm gap, and mice through a 7mm gap!  
Mice, insect pests and the invasive rainbow skink could hide in your bag.  
Weed seeds cling to clothing and shoes.  
Soil on shoes or gear may carry unwanted plant diseases.

## Pests can easily destroy our wildlife

### What you need to do

Check your bags and gear for rats, mice, Argentine ants, rainbow skinks, soil and seeds.



Visiting overnight? Check tents, bedding and camping gear thoroughly for "stowaways"



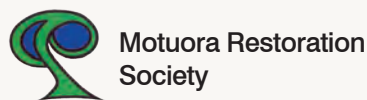
No open bags allowed. Put sleeping bags into a zipped bag or pack.

Clean dirty gear especially footwear, removing soil and seeds.



Thank you for helping to keep Islands in the Hauraki Gulf pest free!

For more information visit:  
[www.treasureislands.co.nz](http://www.treasureislands.co.nz)



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