



Kapiti Island

Photograph Colin M Mckenzie

## THE GREAT KAPITI ISLAND TICK HUNT

On 8<sup>th</sup> May, David Pulford (MAF Virologist), Geoff de Lisle (Veterinarian/Ornithologist), Dallas Bishop (Entomologist), Andrea Wilson (Veterinarian, Raumatia clinic) and I, visited Kapiti Island, after having obtained a low impact research and collection permit from Queen Elizabeth II (via DoC) to enter the northern end of the reserve and collect ticks.

Photo Robert Gibbs



As readers will recall, a spoonbill was found by Mik Peryer and his friend Eileen in February [newsletter No 48] at the Waikanae estuary, with a large number of sea bird ticks, *Ixodes eudyptidis* on its head; a first record anywhere for ticks on a spoonbill. The bird was very ill and eventually after examination by Andrea, and with no hope of recovery, it was euthanased. After conversations with Nga Manu staff as well as Dave Wrightson (Kapiti ranger) and Mik, I discovered that a number of spoonbills nested at the northern end of Kapiti, adjacent to the Okupe lagoon. Furthermore, a large number of black-backed gulls were also in the same nesting area. As I thought that the Waikanae estuary where the spoonbill was found was a low risk tick area, I surmised that the bird may have originated from the Kapiti colony, together with its ticks. The ticks found on the spoonbill are not uncommon on black-backed gulls and blue penguins,

and in fact a range of other sea birds (21 host records to date), so a look at the Kapiti colony seemed justified. Another aspect of the trip was that David was hoping if we found enough ticks, he could have some for virus isolation as there is evidence of viruses in NZ sea bird populations and their ticks. We landed at Waiorua Bay and a half-hour walk along the shingle brought us to where Geoff had recalled seeing spoonbills nesting some 10 years earlier. Initially we poked about amongst the old gull nests, lifting rocks and twigs, digging up small amount of soil and poring over the detritus in a white tray hoping to spot ticks. After a bit of searching Geoff found some spoonbill Nests, clustered fairly closely together and most on top of wiry scrub (*Coprosma propinqua*) on the gravel bank, about 50 metres from the lagoon edge.



Spoonbill's nest [note garden trowel]

Geoff's eagle eye also spotted the skeleton of an immature spoonbill. So we were definitely in the right place.

Unfortunately, although it was the right place for nests, it is apparently bereft of ticks. We examined around 40 nests in all, about 10 spoonbill and the remainder black-backs with not a sign of a tick. It wasn't easy work in the scrub but we pulled old nests apart and searched the soil beneath among large pebbles and the occasional boulder. What impressed me was how a bird like a spoonbill with what seems such an improbable bill for nest building activities, can make such a recognisable nest out of tough, interwoven plant material. It seemed to me it would be like trying to knit with barbecue tongs.

**Photo Robert Gibbs**



So, no ticks, at least after what was a limited but rigorous search, of a small sample of all the possible nests there, but if ticks were as common as the numbers on the unfortunate spoonbill suggested, I would have expected to find some. Either we were looking in the wrong place, and the spoonbill came from elsewhere and acquired the ticks elsewhere, or ticks are somewhere on Kapiti and we have yet to find them. A blue penguin squawked at us as we headed out of the nesting area, so perhaps they are the culprits as far as ticks are concerned and could bring them in amongst the spoonbills. Blue penguins are arguably the most common host for *I. eudyptidis*. Dave said that weka also commonly went hunting

for eggs in that area, but I have so rarely found ticks on them I think they can be discounted as being part of the overall tick picture.

Anyway, I think the best bet is to hope some ornithologists will have the opportunity one day, funding permitting, to examine black-backed chicks or even spoonbill and blue penguin chicks and these, being 'tick magnets', would provide a more directed survey. If no ticks were present on such birds then we could assume with some confidence that the spoonbill was infested elsewhere, and maybe I should reconsider my views about the estuary as source of ticks.

All in all a satisfying study so far, but a bit like a broken clock; no ticks. Nevertheless, despite this foul pun, and the apparent absence of our quarry, the search is not yet over as far as I am concerned.

Many thanks to all involved and especially to my 'tick teaser' team for their hard work.

Dr Allen Heath Senior Scientist Parasitology, National Centre for Biosecurity and Infectious Disease  
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Overlooking the Estuary Reserve from our front lawn

Photograph Grant Rawstorn