

GBICT SUMMER STUDENTSHIP 2012/13.



This past summer the GBI Trust supported an Auckland University Student (Asher Cook) to investigate the abundance of tomtits and kakariki on Hirakimata and to undertake 5-minute bird

counts. Asher was one of the top Ecology students in 2012 and is now in his final year of the B.Sc.

Tomtits and Kakariki on Hirakimata. Asher's report provides estimates of 0.79 tomtits/ha and 0.02 kakariki /ha. These values, with their error bars, suggest that there are perhaps as many as 100 pairs of tomtits remaining on GBI. Tomtits are more or less restricted to the 'old-growth' forest near the summit of Mt. Hobson and on the Hogs Back. Kakariki are more widespread and mobile, and their numbers are consequently more difficult to estimate. However, it is unlikely that there are 20 pairs, possibly even fewer than ten pairs, on the Island.

*TOP "Old growth forest" – Kirk's pine (*Halocarpus kirkii*) and rimu (*Dacrydium cupressinum*) on the Hog's Back, Hirakimata..*

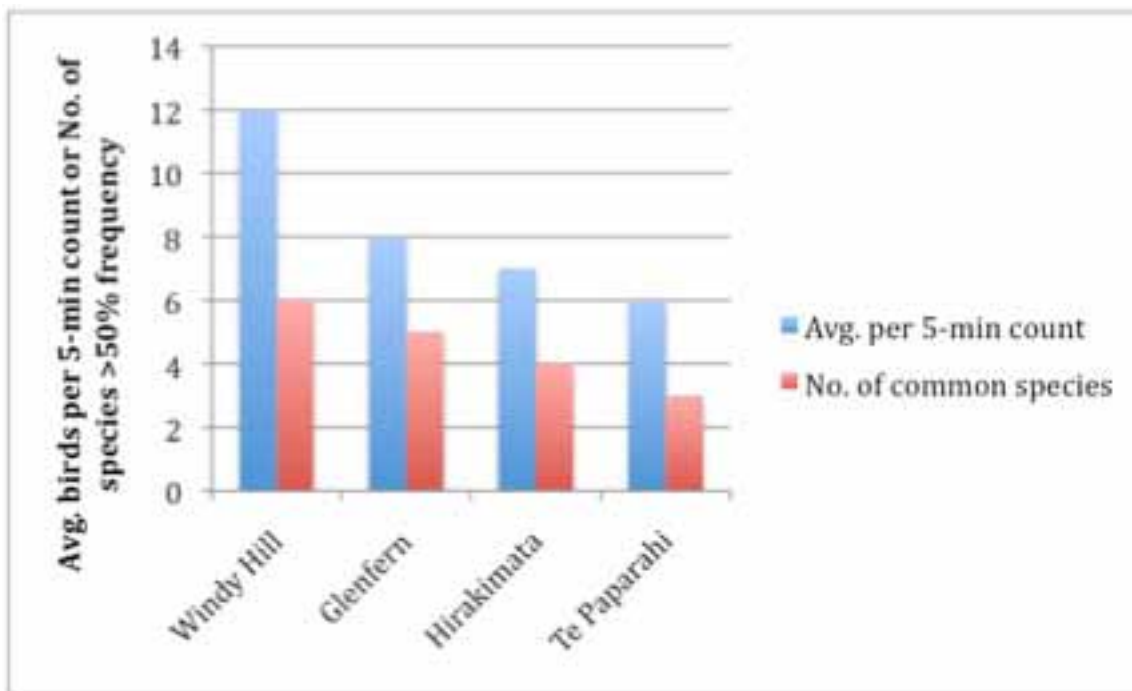
MIDDLE Male (l) and female (R) tomtits. (DOC photo)

BOTTOM Kakariki (DOC photo)



Bird counts show benefits of rat control. Five minute bird counts carried out by Asher Cook demonstrate higher bird abundances at Windy Hill and Glenfern Sanctuary, where rat control occurs, compared to Te Paparahi (the northern block) and Hirakimata/Mt. Hobson, where there is no control. The results confirm other studies comparing managed and unmanaged areas at Windy Hill, demonstrating the benefits of the years of effort spent getting rat numbers down.

However the highest bird diversity (number of species) was in the old-growth forest on Hirakimata, which was the only place where tomtit, kakariki and long-tailed cuckoo were recorded in the study. Asher's results emphasise again the value the Hirakimata summit area, which is also the main nesting area for the endangered black petrel and cook's petrel. In contrast, Te Paparahi, though remote, has been ravaged by goats and cattle in the past, and probably still has very high rat numbers.



Bar diagram showing the number of common bird species (defined as those recorded in more than half the counts made), and the average number of species recorded in a 5-minute count. Derived from data in Asher Cook's report.

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