

his estimates, based on his belief that every fighting man had on average one wife and two children. These two non-missionary estimates cannot be taken as independent from the missionary work, as both estimates would have called upon the missionaries informally for population information.

For some reason, of all these estimates, Dieffenbach's has obtained by far the most attention in the academic literature, perhaps because it was published as part of a book. Yet Dieffenbach's direct experiences of New Zealand and of the local language and customs were quite limited compared to those of Williams, Clarke or Hamlin. His lack of knowledge is reflected in his choice of a fighting-man multiplicand of four, a number which early Māori censuses suggest is almost certainly too high.

By the 1840s, however, the main inadequacies of the fighting-man method of Māori population estimation were probably evident to all who those who had used it. The decline of Māori warfare by the 1840s had resulted in a much greater and more economically efficient dispersion of the Māori population across the land, making counts of fighting men both less relevant to Māori, and also more difficult to achieve for enumerators.<sup>16</sup> In any case, most estimates of counts of fighting men were rounded to the nearest hundred – or more often thousand – and were thus quite imprecise. Lastly, the multiplicand to turn numbers of fighting men into an overall population estimate was an unknown variable, and one upon which overall population estimates were highly conditional. As a consequence, when comparing fighting-man-based estimates over time, there was too much error to derive a meaningful quantitative measure of population change. This issue of Māori population change, or more specifically depopulation, was becoming an important policy concern for the missionaries, and the British more generally.

### Depopulation concerns move missionaries from population estimates to censuses

The depopulation question driving the humanitarian concerns expressed as the central object for taking the 1858 census emerged as a concern of New Zealand missionaries in the 1830s.

The first recorded observations of Māori depopulation following the establishment of regular contact with an expanding Europe were made to missionaries by Māori themselves.<sup>17</sup> The fact that Māori were first to remark upon their own depopulation is unsurprising: only they were in a position to compare their populations over time, both before and after European contact. In addition, Māori were directly experiencing this depopulation, and it would have been a central concern to them. Missionaries were recording their often urgent