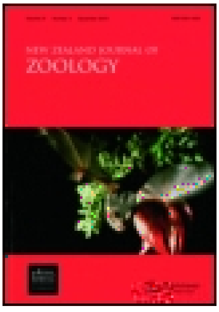

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Scree weta phylogeography: Surviving glaciation and implications for Pleistocene biogeography in New Zealand

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Scree weta phylogeography: surviving glaciation and implications for Pleistocene biogeography in New Zealand

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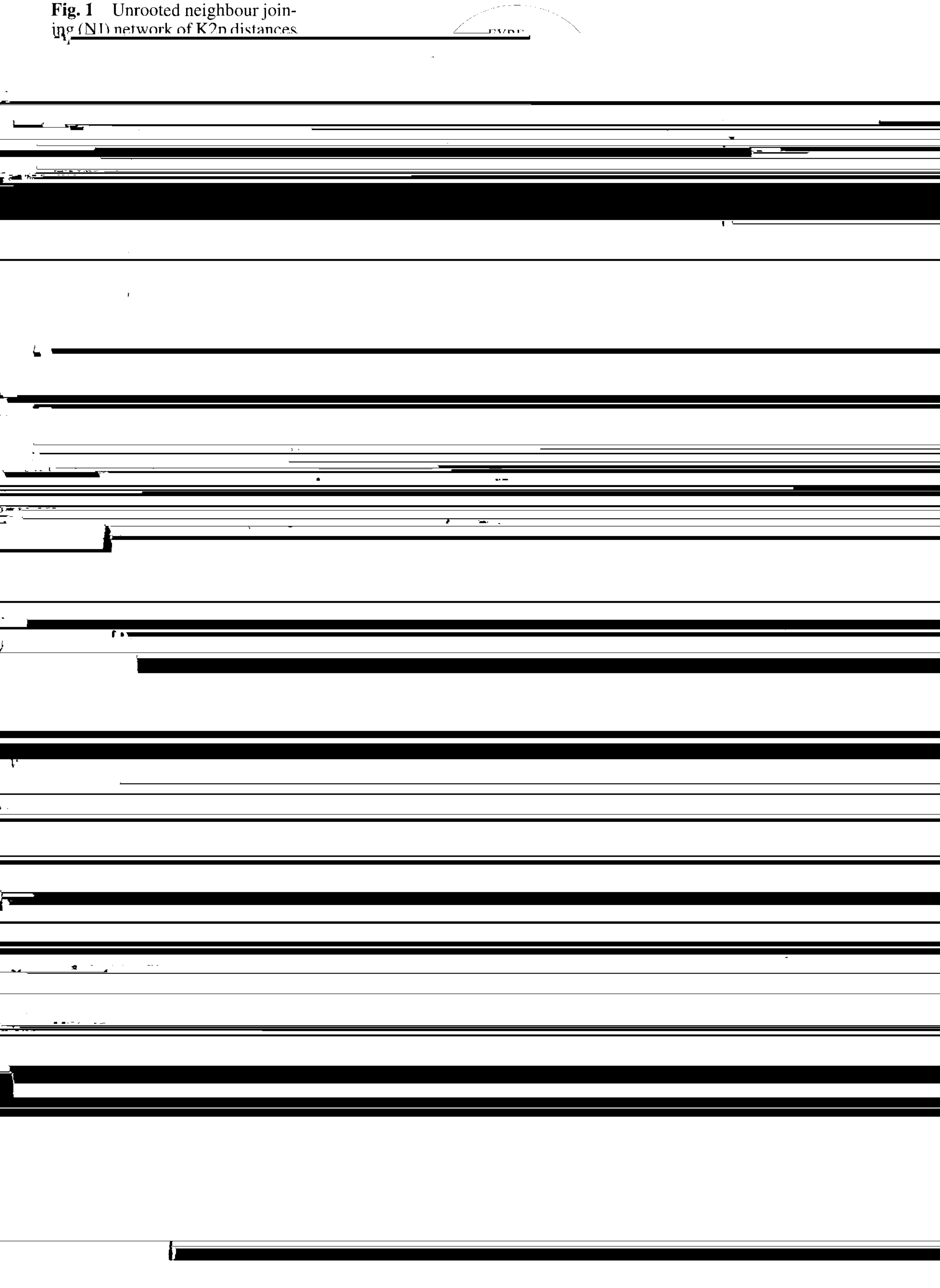
INTRODUCTION

Pleistocene climate change and glaciation have been advanced to explain distribution patterns among [redacted] invertebrates in New Zealand are few (but see Emerson & Wallis 1995; King et al. 1996; Buckley et al. 1998; Trewick 2000a). Phylogeography has [redacted]

method of Sunnucks & Hales (1996). Molecular analysis used primers that target part of the mitochondrial DNA (mtDNA) cytochrome oxidase [redacted]

Fig. 1 Unrooted neighbour joining (NJ) network of K2p distances



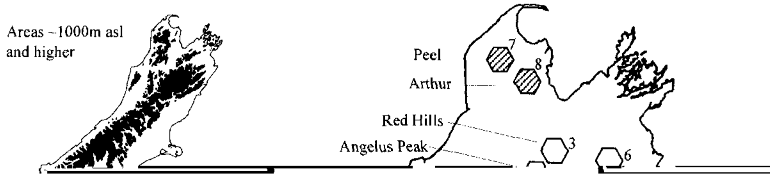


Fig. 2 Map of the South Island, New Zealand, showing sites sampled for scree weta. Filled hexagons correspond with those in Fig. 1. Insert maps indicate: approximate maximal extent of Pleistocene glaciers (re-drawn from Pillans et

ranges are extensive but ice was scarce during

possible when the alpine zone extended more widely than today (McGlone 1988), resulting in the wide distribution of lineage a (Fig. 1). The presence of

comparatively low in the central waist of the South

this region are alpine specifics (McGlone 1985), but some alpine endemics are present (Cockayne 1917; Wardle 1963; Burrows 1965). The evidence from

Modern montane habitats in the South Island are

considered to be more similar (more humid and with

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