in the Nothal Southern Hemisphere (opposite of Boreal), New Zealand and New Caledonia may be regarded as the largest emergent land areas within the largely submerged ‘continent’ of Zealandia [1, 2, 3, 4]. Fossil-bearing Jurassic sedimentary sequences are known from a number of accretionary basement terranes that formed along the eastern margin of Gondwana prior to Cretaceous-Paleogene rifting of Zealandia from Gondwana. Crustal extension associated with this long-lived rifting event is considered responsible for the formation of the Tasman Sea floor (oceanic crust, 83-53 Ma) as well as the substantial thinning and submergence of Zealandia.

The Murihiku Terrane of New Zealand is especially notable for its well-documented, well-preserved marine record [5, 6]. It offers considerable potential for age correlation with terrestrial Jurassic sequences from elsewhere in Nothal Gondwana, and especially Australia, because of its associated palynomorph record and primary volcanic ash (tuff) content [7, 8]. New Zealand Murihiku Terrane Jurassic sequences also offer potential for new research on both the Triassic-Jurassic and Jurassic-Cretaceous boundaries.

References: