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Dear Dr Kirkland,

### **Population estimate for the Bellinger River turtle**

Thank you for your enquiry about the size of the remaining wild population of the Bellinger River turtle, *Myuchelys georgesi*.

Using data from a snorkelling survey of the Bellinger River conducted by the New South Wales Office of Environment and Heritage in November 2017, and parametric statistical methods described by Thompson S.K. (2012), *Sampling* (3<sup>rd</sup> edition), John Wiley & Sons, I have estimated the total population of *M. georgesi* in the river at that time as 109 individuals. Only about 15% of the population are adults or subadults.

My colleague Dr Hugh Jones has produced an alternative estimate of turtle detectability by a nonparametric bootstrapping method, which yields a population estimate of 127 individuals.

These estimates have considerable uncertainty because of factors such as sampling variability, uncertainty about the total area of *M. georgesi* habitat, and the possibility that some turtles are able to avoid detection by snorkelers through cryptic behaviour. However, I consider it unlikely that the population exceeds 200 individuals.

Dr Jones and I intend to include population estimates for *M. georgesi* in a manuscript for submission to a peer-reviewed scientific journal, which is currently in preparation.

Yours sincerely,



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