

# WILDLIFE BIOLOGY

## Research Article

# Camera trap distance sampling for density estimation of prey in a Sumatran ecosystem restoration concession

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Estimating prey species densities is critical for *tigris* recovery strategies. Several statistical methods for estimating densities of unmarked species from camera trap data, all of which require marked individuals, are often viewed by field conservationists as inapplicable in landscapes where ungulates are rare. We used camera trap distance sampling to estimate the density of prey species from random transect surveys in a restoration concession in central Sumatra. We estimated the density of eastern red muntjac *Muntiacus muntjak* ( $2.14 \pm 0.14$  individuals km<sup>-2</sup>) and eastern pig-tailed macaque *Macaca nemestrina* ( $6.14 \pm 0.14$  individuals km<sup>-2</sup>) to represent the first quantitative density estimates within the Sundaic forests of South-east Asia. This was likely due to the low sample size of camera trap surveys and the low detectability of tiger prey species (i.e. sambar *Rusa unicolor* and



tiger prey species (i.e. sambar rusa muntjak), w  
were insufficient to estimate density, trap si  
than camera traps set in a conventional tiger-f