**Ecological drivers of macaque (Macaca ochreata brunnescens) crop raiding in Buton, Indonesia: Human responses & implications for conservation.**

Rebecca Wyper

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Rebecca Wyper was awarded a grant to cover some of her field work expenses in Indonesia. Unfortunately, due to illness, she was never able to collect all the data she had hoped to and was unable to write up the work for a PhD. Nevertheless, she did complete the part of the study funded by the grant she was awarded.

Rebecca did manage to analyse and write up for publication some of her observational research on the macaques and their behaviour in farmers’ fields. This work was published as Priston, N. E., Wyper, R. M., & Lee, P. C. (2012). Buton macaques (*Macaca ochreata brunnescens*): crops, conflict, and behavior on farms. *American Journal of Primatology*, 74(1), 29-36. Rebecca’s data on macaque ranging behaviour when not in fields and on the sources of the macaques’ wild foods have not, as yet, been examined.

Key questions of Rebecca’s research focused on how much time the macaques spent in natural habitats as opposed to fields, and did this vary seasonally as a function of farmed food or natural food availability? Rebecca’s data confirmed previous suggestions that macaques spent over a third of their time in fields and additional time in the forest interface in close proximity to fields. Natural forest was being rapidly cut under the pressure of new farm development. These clearances effectively isolated three small forest reserves on Buton as refuges in steep hilly areas that were unsuitable for cultivation. Thus macaques were left with few alternatives but to forage in fields, which they did on a daily basis.

We still need much more information on the natural history of these macaques, even after over 20 years of study. We also need solutions to retaliatory poisoning and farmer hostility, which are human questions rather than a biological issue.

Questions remain about the population size of the macaques (estimates of around 6000 in 2006 were made by Wheeler & Dwiyahreni), what they eat when not foraging and whether they can persist in the face of rapid agricultural and infrastructure development.

Perhaps it is time to use some e-DNA techniques (as was done for the anoa on Buton) to address these macaque-based questions.

Wheeler, P., & Dwiyahreni, A. (2006). Large mammal monitoring in Lambusango. *Interim Progress Report January*. Lambusango Forest Conservation Programme. https://cdn.yello.link/opwall/files/2017/11/Opwall-Indonesia-Buton-Large-Mammal-Monitoring-Report-2006.pdf

Submitted by P.Lee