December 9th, 2021

To: The Editor-in-Chief,

Professor Mark A. Burgman,

Centre for Environmental Policy,

Imperial College London,

London,

United Kingdom

Professor Burgman,

We are pleased to resubmit our thoroughly revised manuscript ‘Quantifying wildlife conflicts with metabarcoding and traditional dietary analyses’ for publication as an article in Conservation Biology.

Conflicts between iconic species are increasing globally with mounting pressures during the Anthropocene. Importantly, we provide critical quantitative information for the management of a contentious wildlife conflict in southern Australia, between two species of conservation concern – the recovering long-nosed fur seal and the culturally important little penguin. This conflict has resulted in repeated calls to cull the fur seal, recolonizing their former range and predation assessments are required to predict impacts on seabird populations. Indeed, one penguin population has crashed in during the time we were revising this manuscript – the causes are not known and the recommendations we provide herein are critical step towards better monitoring and management of this conflict.

This paper applies a reproducible and modular framework for wildlife interaction surveillance that is of broad interest to the Conservation Biology readership and community. We combine traditional morphological and modern DNA metabarcoding assays to quantify predation incidence and impacts to a vulnerable prey species. Specifically, we offer: (i) a multi-assay method for comparison of target species identification – producing more reliable and nuance predation estimates than that offered by the traditional assay alone; (ii) a reproducible protocol for DNA metabarcoding analyses for identifying target prey species from predator scat samples; and (iii) a compelling exploration of haplotype polymorphism for genetic diversity and probable abundances of target species from eDNA.

We present original work carried out by the authors and acknowledge the requirements for publication in the Society for Conservation Biology’s prestigious journal, Conservation Biology. We appreciate your time and attention in considering this manuscript.

Sincerely,

On behalf of all co-authors,

Natasha Hardy