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January 3rd, 2022

To: Edmund D. Brodie, III, Natural History Editor, *The American Naturalist*

Dear Dr. Brodie,

We are writing to submit a Natural History Miscellany “*Floral phenology of an Andean bellflower and pollination by Buff-tailed Sicklebill hummingbird*” for consideration at *The American Naturalist*.

Our manuscript provides experimental and photographic evidence of pollination of an Andean bellflower (*Centropogon granulosus*)—an understory vine with extremely curved floral tubes—by the elusive Buff-tailed Sicklebill hummingbird. The Andean bellflowers have garnered increasing interest following the discovery of the highest diversification rates recorded in flowering plants. Similarly, hummingbirds are one of the most diverse avian families, and among them, the “hermit” clade appears to be comprised of specialized pollinators. Although pollinator specialization is thought to play a role in the rapid radiation of both Andean plants and hummingbirds, the pollination ecology of most species has yet to be elucidated, in part because certain hermit hummingbirds are rarely seen.

We solved this problem by making pollinator observations via camera traps and conducting a pollinator exclusion experiment. Moreover, we develop and implement a protocol for quantifying an overlooked trait, floral phenological type, and demonstrate how this metric can inform the degree of specialization. Finally, by the study of its food plant, we provide a rare glimpse into the behaviour and ecology of Buff-tailed Sicklebill, a species for which virtually nothing is known in the scientific literature.

This study provides an exciting natural history counterpoint to recent studies of bellflower macroevolution. By field-testing predictions from these models, we believe this manuscript achieves the goal of unifying fine-scale ecological phenomena with large-scale evolutionary processes, and thus will be of broad interest to the readership of *The American Naturalist*.

Thank you for considering this manuscript.

Sincerely,

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