Contribution to pollen deposition in *Verbena hastata* (Verbenaceae) by day and night active pollinators

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Pollination by nocturnal insects is poorly studied due to the logistical challenges of traditional sampling methods. Although much is unknown about these pollinators, previous research has uncovered that nocturnal pollination is complementary and potentially as important to the reproductive success of plants as diurnal pollination efforts. Pollinators face threats such as higher temperatures due to anthropogenic activity and climate change. These vary in impact between day and night, potentially affecting species and pollination services differently. We completed a pollinator exclusion experiment using *Verbena hastata* (blue vervain) to measure differences in pollen deposition during the day and night. Temperature sensors were deployed to record variation experienced by individual plants. It was found that the average amount of pollen deposition during the day and night was not significantly different. Unbagged flowers had significantly higher pollen deposition, pointing to the potential importance of crepuscular pollinators active at dawn and dusk when we were exchanging pollinator exclusion bags, or that the bags themselves impacted pollinator visits. Temperature also did not impact pollen deposition, and future studies should consider conducting landscape level temperature assessments to better align with pollinator behaviour. We recommend that nocturnal pollinators are critical conservation targets for supporting native biodiversity.