**The Nettle in the Hay Stack: Tracking pollen abundance to locate small plant populations**

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There is a large degree of uncertainty surrounding small plant population estimates, both in presence/absence and quantitative parameters, most likely due to the difficulties associated with surveying a large landscape for few individuals. This is a problem for species management as it reduces our ability to, firstly, set goals for manipulating species and populations, and secondly, for enacting action plans to achieve those goal. To deal with this, we must firstly be using data collection techniques that minimize uncertainty from the beginning and also be using the most recent modeling and statistical methods for interpretation of data that inevitably comes with uncertainty. In this study I present a new survey tool that interpolates likely locations of an unknown plant population by tracking pollen captured from the surrounding landscape. This tool attempts to reduce the resources spent on plant surveys while maximizing confidence in population location. I show how my survey method is advantageous to current best practices in reducing the need for in-person sampling while simultaneously giving a numerical estimate of the confidence associated with the location of a population.