

BioBlitz is More than a Bit of Fun

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Abstract

Emerging in the 1990s, bioblitzes have become flagship events for biodiversity assessments. Although the format varies, a bioblitz is generally an intensive, short-term survey in a specific area. Bioblitzes collect biodiversity data and can therefore play a role in research, discovery of new species at a site and monitoring. They may also promote public engagement, community building, and education and outreach. However, the question remains, how effective are bioblitzes at achieving these goals? To evaluate the value of bioblitzes for these multiple goals, we conducted two meta-analyses, one on sixty published bioblitzes and the other on 1860 bioblitzes conducted using [iNaturalist](#). Furthermore, we made an in-depth analysis of the data collected during a bioblitz we organized ourselves.

From these analyses we found bioblitzes are effective at gathering data—collecting on average more than 300 species records—despite limitations of bias, which many types of biodiversity surveys suffer from, such as preferences for charismatic taxa, and uneven sampling effort in time and space. However, because the survey intensity, duration and extent are more controlled, a bioblitz is more repeatable than some other forms of survey. We also found that bioblitzes were highly effective at engaging people in sustained activity after they participated in a bioblitz. A bioblitz may therefore act as a trigger for participation in biological recording, which is supported by the use of technology, particularly smartphone apps. Another important aspect is the involvement of both citizen scientists and professional biologists, creating learning opportunities in both directions. Indeed, it was clear that many bioblitzes acted as brokerage events between individuals and organizations, and between professionals who work in biodiversity research and

conservation. Such community building is important for communication and building trust between organizations and citizens to the benefit of biodiversity research and conservation.

From the impartial perspective of hypothesis-driven science, bioblitzes may seem like a lot of work with limited scientific gain. However, this largely overlooks how important people, communities and their organizations are in gathering data, and in conserving biodiversity.

Keywords

engagement, species inventory, iNaturalist, citizen science, meta-analysis, community building

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Author contributions

ISR, TA, SM and QG developed the concept of the article that this talk is based on and initiated the research. QG, AM, CP, HR, MP, ISR, EM, NC, TA, ET helped to organise and participated in the Akrotiri Bioblitz. ISR, SM, TA, QG, CP, NC, AM contributed to the literature review. QG & SM analysed the data from iNaturalist. TA, SM, QG, IR wrote the initial draft. All authors contributed to, reviewed and revised the manuscript. HR & QG acquired funding. SM & QG administered and supervised the project.

Conflicts of interest