Best Practices for Using eBird Data

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Welcome

Best Practices for Using eBird Data is a supplement to *Analytical guidelines to increase the value of community science data: An example using eBird data to estimate species distributions* (Johnston et al. 2021). This paper describes the challenges associated with making inferences from biological citizen science data and proposes a set of best practices for making reliable estimates of species distributions from these data. Throughout, the paper uses eBird, the world's largest biological citizen science project, as a case study to illustrate the good practices. This book acts as a supplement to the paper, showing readers how to implement these best practices within R using real data from eBird. After completing this book, readers should be able to extract data from the eBird database suitable for their own studies, process these data to prepare them for robust analyses, collect environmental covariates for modeling, and fit and assess models estimating encounter rate, occupancy, and relative abundance. Readers should be comfortable with the R programming language, and read the Prerequisites and Setup sections of the introduction, before diving into this book.

This book is a living document that will be regularly updated. To submit fixes or suggest additions and improvements to the book, please file an issue on GitHub.

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