

Sampling networks of ecological interactions

Pedro Jordano
jordano@ebd.csic.es

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Correspondence: Pedro Jordano, Fax: + 34 954 62 11 25.

E-mail: **jordano@ebd.csic.es**

Running headline: Sampling networks

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seed dispersal, food webs

0.1 Summary

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2. .
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0.2 Introduction

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A & B (2011).

Biodiversity assessment aims at sampling individuals in collections and determining the number of species represented. Given that, by definition, samples are incomplete, these collections enumerate a lower number of the species actually present. The ecological literature dealing with robust estimators of species richness and diversity in collections of individuals is immense, and a number of useful approaches have been used to obtain such estimates (Colwell, 2009; Gotelli & Colwell, 2011, 2001; Hortal, Borges & Gaspar, 2006; Magurran, 1988). Recent effort has been also focused at defining essential biodiversity variables (EBV) (Pereira *et al.*, 2013) that can be sampled and measured repeatedly to complement biodiversity estimates. Yet sampling species or taxa-specific EBVs is just probing a single component of biodiversity; interactions among species are another fundamental component, the one that supports the existence of species. For example, the extinction of interactions represents a dramatic loss of biodiversity because it entails the loss of fundamental ecological functions (Valiente-Banuet *et al.*, 2014). This missed component of biodiversity loss, the extinction of ecological interactions, very often accompanies, or even precedes, species disappearance. Interactions among species are a key component of biodiversity and here I aim to show that most problems associated to sampling interactions in natural communities have to do with problems associated to sampling species diversity. I consider pairwise interactions among species at the habitat level, in the context of alpha diversity and the estimation of local interaction richness from sampling data (Mao & Colwell, 2005). In the first part I provide a succinct overview of previous work addressing sampling issues for ecological interaction networks. In the second part I discuss specific rationales for sampling the biodiversity of ecological interactions.

0.3 Material and Methods

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0.4 Results

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0.5 Discussion

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0.6 Acknowledgements

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0.7 Data archiving

0.8 Tables

Table 1.

Table 1: Table 1. Simple_table.

First Header	Second Header	Third Header
First row	Data	Very long data entry
Second row	Cell	<i>Cell</i>

Table 2.

Table 2: Table 2. Prototype table

Grouping		
First Header	Second Header	Third Header
Content	<i>Long Cell</i>	
Content	Cell	Cell
New section	More	Data

0.9 Figures

Figure 1.
Figure 2.
Figure 3.

0.10 Supplementary Material

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