Finding the mjor descriptors of species networks

Tanya Strydom

Andrew P. Beckerman

2025-03-24

Abstract

TODO

Blah blah blah [1]

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 1: An informative caption about the different network properties   | Label | Definition | | --- | --- | | Basal | Percentage of basal taxa (taxa without resources) | | Connectance | , where is the number of species and the number of links | | Cannibal | Percentage of cannibals | | ChLen | Mean food chain length, averaged over all species | | ChSD | Standard deviation of ChLen | | ChNum | log number of food chains | | Clust | mean clustering coefficient (probability that two taxa linked to the same taxon are also linked) | | GenSD | Normalized standard deviation of generality of a species standardized by | | Herbivore | Percentage of herbivores plus detritivores (taxa that feed on basal taxa) | | Intermediate | percentage of intermediate taxa (with both consumers and resources) | | LinkSD | normalized standard deviation of links (number of consumers plus resources per taxon) | | Loop | Percentage of taxa in loops (food chains in which a taxon occurs twice) | | L/S | links per species | | MaxSim | Mean of the maximum trophic similarity of each taxon to other taxa, the number of predators and prey shared by a pair of species divided by their total number of predators and prey | | Omnivory | Percentage of omnivores (taxa that feed on 2 taxa with different trophic levels) | | Path | characteristic path length, the mean shortest food chain length between species pairs | | Richness | Number of trophic species, or taxa | | TL | prey-weighted trophic level averaged across taxa [2] | | Top | Percentage of top taxa (taxa without consumers) | | VulSD | Normalized standard deviation of vulnerability of a species standardized by | | Links | The number of links in the network | | Diameter | Diameter of food web, the longest shortest path between two nodes | |

# References

1. Vermaat, J.E. *et al.* (2009) [Major dimensions in food-web structure properties](https://doi.org/10.1890/07-0978.1). *Ecology* 90, 278–282

2. Williams, R.J. and Martinez, N.D. (2004) [Limits to Trophic Levels and Omnivory in Complex Food Webs: Theory and Data](https://doi.org/10.1086/381964). *The American Naturalist* 163, 458–468