Sampling ecological diversity and process across scales using fractal triads

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Ecological processes are scale dependent

dispersal

competition/facilitation

environmental filtering
Overview

1) Building a fractal triad sampling scheme

2) Efficacy of fractal triad sampling
   a) Diversity change across environmental gradients
   b) Partitioning variance across scale

3) Summary
Sampling with fractal triads
Sampling with fractal triads
Sampling with fractal triads
Comparisons

Distance between plots (km)

Statistical power at relevant spatial scales
Sampling changes in diversity across environment at Right Hand Fork
Diversity Metrics

Taxonomic
species presence & abundance

Phylogenetic
evolutionary history & relatedness

Environmental gradients
Partitioning variance across scales
Different scales capture variance for different metrics
Summary
Summary
Acknowledgements

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