

sDiv Workshop Summary

BIODIVERSITY CHANGES

10. – 12.10.2014

Several recent meta-analyses investigated whether and how biodiversity is changing over time in local communities worldwide. The conflicting results and interpretations from these studies have evoked a controversial discussion. We aimed to bring together people and data from both sides of the discussion to clarify points of agreement and disagreement and to identify data and analyses that could build consensus moving forward.

Main results and conclusions

After a series of 16 presentations, workshop participants reached unanimous consensus on eleven statements, which will be published soon. Further, workshop participants identified the key disagreement that there is imperfect sampling in current meta-analyses of local biodiversity trends. There is disagreement about whether these sampling gaps cause large bias in the estimate of the overall local trends in biodiversity leaving disagreement about the overall global average trend in local diversity.

Products of workshop and next steps

Products of the workshop will include: (1) a perspectives paper and (2) a proposal for subsequent workshops or working group meetings to pursue the identified quantitative syntheses. Forest Isbell is leading the perspectives paper. A first draft of this paper is expected before the end of 2014. Sarah Supp, Maria Dornelas, and Mary O'Connor produced and submitted a proposal to continue this work at sDiv. Their proposed next steps include: 1) determining the effect of noise (e.g. natural variability, sampling, time series duration) on our ability to detect diversity change and 2) developing an approach that uses data on species abundance and richness to robustly detect diversity change through time at different spatial scales (i.e., local, regional, global) and to make hypotheses for how richness will change under different disturbance regimes.

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