

Spatial patterns of moss and/or lichen colonisation



In forest ecosystems, mosses and lichens often colonise rock faces and stem surfaces in clusters and the progression of spatial colonisation patterns gives clues about the ecological processes involved. Such patterns can be sampled with high-resolution digital cameras and processed with photogrammetry software. Spatial statistics provides characteristics that can quantify the spatial progress of colonisation from such digital records more precisely than any traditional non-spatial measures. An application of these new characteristics has so far not widely been attempted in moss and lichen ecology and yet they are easily accessible in the R software. The purpose of this interdisciplinary project is to explore the potential spatial statistics has for moss and lichen ecology and to uncover new ecological facts. This is a pioneering and exciting new research topic ideal for students interested in quantitative ecology. Prior knowledge of moss/lichen ecology and biology will be an asset but can also be picked up in the thesis project.

Contact/supervisors: Prof. Arne Pommerening (arne.pommerening@slu.se)

References

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