

Kimmerer, R. W. and T. F. H. Allen. 1982. The role of disturbance in the pattern of a riparian bryophyte community. *American Midland Naturalist* 107:370-383.

Questions

1. What hypothesis are the authors testing in this paper?
2. Describe the sampling design. What was the sample unit and what was its size. How were samples chosen and how many replicates were there?
3. Describe the spatial patterns that the authors observed in terms of elevation and patchiness.
4. The authors use graphical representations of their field data to assert that the distributions of *Conocephalum* and *Fissidens* are controlled by flood frequency. Explain the relationships between flood frequency, elevation, and species distributions as shown in Figures 1 and 3.
5. The authors contend that the patchiness of bare substrate and bryophyte diversity is related to flood magnitude. Explain the relationships between disturbance magnitude, mean patchiness, and species diversity as shown in Figures 4 and 6.
6. The authors contend that the spatial patterns that they observed are associated with flood disturbance. List two other potential influences on these patterns that the authors evaluated.