

**TITLE:** SEASONAL VARIATIONS IN BACTERIAL COMMUNITIES IN ADIRONDACK STREAMS EXHIBITING PH GRADIENTS

**Authors:** Marcy P. Osgood and Charles W. Boylen

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**Abstract:** Measurements of microbial biomass, bacterial numbers, and microbial production were determined for three small woodland streams located in the Adirondack Mountain region of New York State, USA. These streams exhibited spatial and temporal gradients in water pH ranging from a high of 7.0 to a low of 4.5. Twelve sites along these streams were used for comparative analyses of the effects of pH and related water chemistry parameters on the planktonic, sedimentary, and epilithic bacterial communities. The planktonic bacterial communities were not influenced by water pH or related water chemistry parameters. For sedimentary populations, the organic content of the sediment was more important than the chemistry of the overlying water. The epilithic bacterial communities, however, were influenced significantly by the pH of the water column, showing decreased bacterial production at lower pH.

**Full article can be found at:** <http://dx.doi.org/doi:10.1007/BF02543878>