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W.S. Cooper Award: Etienne Laliberté, Graham Zemunik, and Benjamin L. Turner

(2014) Environmental filtering explains variation in plant diversity along resource gradients. *Science* 345:1602–1605. DOI:10.1126/science.1256330



Etienne Laliberté



Benjamin Turner

The Cooper Award honors the authors of an outstanding publication in the field of geobotany, physiographic ecology, plant succession, or the distribution of plants along environmental gradients. William S. Cooper was a pioneer of physiographic ecology and geobotany, with a particular interest in the influence of historical factors, such as glaciations and climate history, on the pattern of contemporary plant communities across landforms. Dr. Laliberté of the Université de Montréal



Graham Zemunik

(at the University of Western Australia at the time of the study), Dr. Zemunik of the University of Western Australia, and Dr. Turner of the Smithsonian Tropical Research Institute take a similar geobotanical angle in a study that simultaneously addresses alternative hypotheses underlying a geographic plant diversity gradient. Specifically, they tackle an age-old question in ecology—what determines spatial variation in species diversity—using a cleverly chosen system, an ancient dune ecosystem in southwestern Australia. The end result is a rare, compelling, example of regional and historical processes being key to explaining a local-scale diversity gradient.