

A Celebration and Exploration of Joseph H. Connell's Conceptual and Empirical Influence, Inspiration, and Legacy in Ecological Research and Education

Symposium 14 was organized by Kyle E. Harms and held at the ESA Annual Meeting in Pittsburgh, Pennsylvania on 4 August 2010. This report was written by Kyle E. Harms, Department of Biological Sciences, Louisiana State University, Baton Rouge, Louisiana 70803 USA.

Symposium Presentations, listed in the order presented (* = presenter)

Wayne P. Sousa,* University of California, Berkeley – Connell's insights about the influence of disturbance on the structure and dynamics of marine communities.

Michael J. Keough,* University of Melbourne – Triple play: settlement, competition, and disturbance in marine communities.

Robert W. Day,* University of Melbourne; Sylvain Huchette, SCEA France Haliotis; Cameron Dixon, SARDI Aquatic Sciences; Patrick Gilmour, University of Melbourne; Luke McAvaney, University of Melbourne – Connell's settlement versus post-settlement question: Density-dependent processes in abalone populations.

David A. Spiller,* University of California, Davis – Connell's legacy on species-interactions studies.

William W. Murdoch,* University of California, Santa Barbara; Roger M. Nisbet, University of California, Santa Barbara; Cheryl J. Briggs, University of California, Santa Barbara – Connell's influence on ecological theory.

Stephen C. Schroeter,* University of California, Santa Barbara; Joseph H. Connell, University of California, Santa Barbara; Susan Swarbrick, University of California, Santa Barbara – The legacy of Connell's long-term time-series data.

Bill Platt,* Louisiana State University; Kyle E. Harms, Louisiana State University – A Connell legacy of paradigm shifts in community ecology: what are the most important determinants of local biodiversity?

Peter T. Green,* La Trobe University; Kyle E. Harms, Louisiana State University; Joseph H. Connell, University of California, Santa Barbara – Connell's long-term forest dynamics legacy in Far North Queensland.

Tad C. Theimer,* Northern Arizona University; Catherine A. Gehring, Northern Arizona University; Peter T. Green, La Trobe University; Joseph H. Connell, University of California, Santa Barbara – Connell's other rainforest legacy: Seedling community responses to 13 years of terrestrial vertebrate exclusion.

Joseph B. Yavitt,* Cornell University; S. Joseph Wright, Smithsonian Tropical Research Institute; Dennis H. Knight, University of Wyoming; Gerald E. Lang, West Virginia University – Gaps in our understanding of tree diversity in a tropical secondary forest.

Margaret D. Lowman,* New College of Florida – Tropical conservation and education outreach, as influenced by Connell's legacy. Our symposium honored ESA Eminent Ecologist (awarded in 1985) Joseph H. Connell, University of California, Santa Barbara (Professor Emeritus). Connell helped usher in a new

era in ecological research with the experiments he published nearly 50 years ago in the ESA journals *Ecology* and *Ecological Monographs* (Connell 1961*a,b*). In those ISI Science Citation Classics (see essays in Connell 1981, 1992) Connell demonstrated the context-dependent roles of environmental factors, competition, and predation as mechanisms structuring communities. Throughout his career, Connell has sought synthetic mechanistic explanations for ecological phenomena, while establishing and maintaining the world's longest regularly censused, individual-based field observations of coral (e.g., Connell et al. 1997, 2004) and tree (e.g., Connell et al. 1984, Connell and Green 2000) communities. As Bill Murdoch put it during his Symposium talk: "Joe had the data!"

Connell's observations, insights, syntheses, and example have motivated education and research in population and community ecology for over six decades. During our Symposium, the assembled group (including Joe and his wife, Margaret) enjoyed a series of presentations in the spirit of a festschrift, i.e., reflections on Connell's contributions to our discipline by his former students (undergraduate and graduate), post-docs, and other colleagues (including special guest Peter O'Reilly, one of the founders of the O'Reilly's Rainforest Guesthouse in Lamington National Park, Queensland, Australia, site of one of Connell's long-term forest dynamics projects).

Our symposium celebrated and examined Connell's influence on the conceptual development and future of the key topics in ecological education and research that formed the core of his career, including: species interactions (e.g., Connell 1971, 1980); recruitment dynamics (e.g., Connell 1975, 1979); mechanisms of coexistence (e.g., Connell 1978); and disturbance-related ecological processes (e.g., Connell and Slatyer 1977). In addition, speakers represented a range of favored research organisms and ecosystems, with an emphasis on coastal marine and tropical



Photo 1. Joseph H. Connell photographing a long-term coral quadrat on Heron Island, Queensland, Australia (1967). Photo by Don Potts.



Photo 2. Joseph H. Connell enjoying the Ecological Society of America Annual Meeting, Pittsburgh, Pennsylvania (2010). Photo by Margaret Connell.

forest communities, in keeping with Connell's breadth of research interests. The Symposium talks (see list below) will be archived with the ESA Historical Records Committee, especially in anticipation of making them available for ESA's 100th anniversary celebration in 2015.

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