

2008 MacArthur Award

Monica Turner

The MacArthur Award is given to an established ecologist in mid-career for meritorious contributions to ecology, in the expectation of continued outstanding ecological research. Nominees may be from any country and need not be ESA members. This year's recipient is Monica Turner.

Dr. Turner is an acknowledged international leader within landscape ecology. This growing discipline addresses the dynamics of large, spatially complex ecological systems. More than any other scientist, Dr. Turner has moved this field beyond mere description to a science that makes important and testable predictions. Many ecologists trace the crystallization of landscape ecology as a scientific discipline to her 1989 paper in *Annual Reviews*. This paper firmly grounded landscape ecology within the traditions of mainstream ecology. It is still remarkable today for its prescience and scope. In 2005, recognizing the impact and importance of the 1989 paper, *Annual Reviews* invited Dr. Turner to revisit the status and future of landscape ecology. The resulting paper was also highly influential. In 2001, Dr. Turner published a textbook, *Landscape Ecology in Theory and Practice*, that has been highly praised and widely adopted. It is generally recognized as the international standard in the field.

Dr. Turner has built principles of landscape ecology through her work on a remarkable variety of systems, including coastal barrier islands, the Pacific Northwest, the southern Appalachians, the Wisconsin River floodplain, the lake-rich Northern Highlands of Wisconsin, and the Greater Yellowstone ecosystem. Her contributions to pragmatic, real-world problem solving must be noted as well. Problems ranging from wildfire in the western U.S., to land-cover change in the southern Appalachians, to management of polluted runoff in Wisconsin are being addressed using data, models, and methods developed by Dr. Turner and her colleagues.

Dr. Turner has been and continues to be a conceptual innovator, topmost communicator, and most effective interpreter in landscape ecology. The field has greatly benefited her impressive breadth of skills. She has been instrumental in developing landscape ecology into a much more strongly quantitative and predictive science. She is generous with her ideas and enthusiasm, and she is widely known as an excellent teacher, mentor, and public speaker. She is a truly exceptional scientist.