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Special Issue

Patterns, Trends, and Ecological Applications of Phenology

Liang Liang[1] and Kate S. He[2]

[1]Department of Geography, University of Kentucky, Lexington, Kentucky 40506, USA

[2]Kate S. He, Department of Biological Sciences, Murray State University, Murray, Kentucky 42071, USA

Over the past few decades, phenology has been a focal point of monitoring ecosystem change under climate change, species invasion, and other environmental stresses. However, the potential of using phenology to track ecosystem status and function has been limited by a lack of knowledge concerning the ecological processes underlying observed phenological patterns at scales ranging from species to ecosystems. In line with this research need, we invite high-quality contributions, which depict diverse patterns, trends, and ecological applications of phenology, to a special issue of Remote Sensing in Ecology and Conservation. The aim is to bring together recent works demonstrating unique phenological patterns in different environments, as derived primarily from remote sensing measurements, enhanced by sensor fusion technology and data integrations. We are particularly interested in studies that contribute to a better understanding of 1) spatiotemporal patterns of phenology that are tied to both climatic variability and species diversity and distribution; 2) the utilities of novel remote sensing technologies, including high spatial and temporal resolution sensors and digital repeat photography in capturing land surface phenology and ground phenology; and 3) explicit linkages between phenology and specific ecological applications in conservation effort. Research demonstrating innovative approaches to monitoring and modeling phenology are also welcome. The main objective is to stress the need to illuminate the ecological context of phenological research and to identify better ways of using phenology for ecological monitoring and conservation. High-quality submissions for this special issue will be considered on a case-to-case basis for a full fee waiver, where authors are unable to pay the Article Processing Fees. **Submission deadline: October 31, 2017**