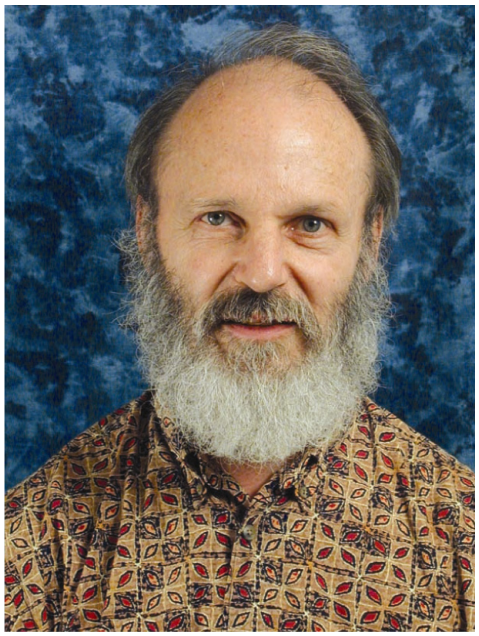

2008 Sustainability Science Award

F. Stuart Chapin, III and Colleagues

The Sustainability Science Award is given to the authors of a scholarly work that makes the greatest contribution to the emerging science of ecosystem and regional sustainability through the integration of ecological and social sciences. One of the most pressing challenges facing humanity is the sustainability of important ecological, social, and cultural processes in the face of changes in the forces that shape ecosystems and regions. This ESA award is for a single scholarly contribution (book, book chapter, or peer-reviewed journal article) published in the last 5 years. Nominees need not be ESA members and can be of any age, nationality, or place of residence.

This year's recipient is F. Stuart Chapin III and colleagues for their paper "Policy strategies to address sustainability of Alaskan boreal forests in response to a directionally changing climate" (2005, *Proceedings of the National Academy of Sciences* 103: 16637-16643). Coauthors on the paper were Amy L. Lovecraft, Erika S. Zavaleta, Joanna Nelson, Martin D. Robards, Gary P. Kofinas, Sarah F. Trainor, Garry D. Peterson, Henry P. Huntington, and Rosamond L. Naylor.

The paper by Chapin et al. is an excellent example of scientifically based policy approaches that encompass both ecological and human well-being. The paper identifies policy approaches for addressing climate change in Alaskan boreal forests. It integrates several disparate sources of theory to address sustainability in directionally changing social–ecological systems, applies this framework to climate-warming impacts in interior Alaska, and describes a suite of policy strategies that emerge from these analyses. One of the many insightful aspects of the paper is that the authors identify policy strategies for adapting to change based on the framework.

This paper stands out as a model for the scientific community in terms of identifying sustainable policy strategies. The authors address climate change in Alaskan boreal forests and the implications for local communities; however, the approach is applicable in many locations and across many issues in sustainability science.