

More Issues, More Impact, and More Opportunity

We have good news for readers and authors of *Ecosystems*. Starting with this issue, *Ecosystems* will increase the number of issues published each year from 6 to 8. This means more cutting-edge ecosystem studies for readers, and even faster turnaround for authors. *Ecosystems* will continue to be the most rapid high-quality outlet for interdisciplinary research centered on ecosystem and landscape ecology.

Impact factors recently published for *Ecosystems* bring more good news. The journal ranked 24th out of 89 journals of ecology, eclipsing a surprising number of established journals. This is an outstanding performance for a new journal considering the time lag before articles published in *Ecosystems* are cited in subsequent publications. We attribute the high ranking of *Ecosystems* to the broad appeal of the subject matter, the high caliber of papers submitted by our authors, and the high standards applied by the Editorial Board. We look forward to growing impact in the future.

As we survey the status of ecosystem science, we find a number of emerging opportunities for exciting papers in *Ecosystems*. There is growing interest in assessing the condition of ecosystems, particularly with respect to services that ecosystems provide to humanity. While ecological indicators have been around for a long time, the emerging science centers on assessing the future capacity of ecosystems to provide services in an unpredictably changing world (National Research Council 2000 a, b; Heinz Center 1999; Revenga and others 2000). Can the flow of services from a given ecosystem be maintained if certain perturbations occur? How can the potential for the ecosystem to provide services be managed and increased? Can landscape indicators be used to assess ecosystem state and function? Research on the management of resilience for ecosystem services creates new connections between

ecosystem science, economics, and the decision sciences.

Another recent report identified important directions for ecosystem science in the arena of global change (National Research Council 2000 c). Global change was considered broadly as interactions between natural changes in Earth's physical and biological structure and the broader effects of human activity, thus reflecting both natural and anthropogenic components. Regional and local processes that have cumulative or significant global effects were deemed important for understanding global change, and there is clearly an important role for ecosystem science at a variety of scales. For example, relevant dynamics include: conversion of natural landscapes; changing disturbance regimes; intensification of biogeochemical cycles; ecological effects of the increasing concentrations of human populations in urban and coastal areas, changes in the structure and function of natural ecosystems, including the functional effects of species introductions; global dispersions of pollutants; and changes in the hydrologic cycle caused by various human uses of water, structural alterations to rivers and watersheds, and by climate changes. Much ecosystem research is required to understand these dynamics. A forthcoming set of articles address biodiversity and global change in U.S. forests (Hansen and Dale 2001), and we hope to see more contributions to important components of global change in *Ecosystems*.

In June 2000, a remarkably diverse group of 44 social and natural scientists met in Tempe, Arizona to discuss research needs for interdisciplinary understanding of socioecological systems. These were defined as integrated systems, consisting of human institutions and behaviors, non-human ecological systems, and the biogeophysical template, that cannot easily or legitimately be parsed into disciplinary

constituents (Kinzig and others 2000). White papers prepared for this conference will appear in a future issue of *Ecosystems*. The major research recommendations include the evolution and resilience of coupled social and ecological systems; analysis of ecosystem services; coping with uncertainty, complexity and change; and environmental dimensions of human welfare, health and security. This exciting menu of ideas offers rich opportunities for interdisciplinary research centered on ecosystems. We look forward to seeing these insights unfold on the pages of *Ecosystems* in coming years, and we thank our contributors, readers, and members of the Editorial Board for their continuing support.

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