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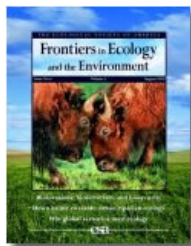
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Reviews

### Why global scenarios need ecology

EM Bennett<sup>1</sup>, SR Carpenter<sup>1</sup>, GD Peterson<sup>1</sup>, GS Cumming<sup>2</sup>, M. Zurek<sup>3</sup>, and P. Pingali<sup>3</sup>

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Human well-being depends on ecosystem services such as food and clean water. Yet ecosystems and the services they provide are changing, often in ways we cannot anticipate. How can we cope with surprises and uncertainties when we cannot predict them? One approach is to make decisions that are robust to a number of different futures. Those interested in global environmental issues have used scenarios – sets of stories about the future – to help discuss those issues and to identify policy alternatives. To date, most global environmental scenarios have treated ecological dynamics as the product of large-scale anthropogenic drivers and have not considered ecological feedbacks to these drivers. Global scenarios could benefit from the input of ecologists, as this would lead to the incorporation of more realistic ecosystem dynamics. Similarly, ecology could benefit from involvement in scenario planning. Unlike many technical models, scenarios, easily understood as stories, can be used for communication and outreach, to build public appreciation of ecological science and the ecological dilemmas we face.

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