

June 30, 2009

Dear Board Member,

Below is a brief list of special activities and accomplishments in sustainability at ASU this month. In addition, I'm pleased to introduce Professor B.L. Turner II, one of ASU's most distinguished faculty members. Professor Turner is well known for his creative, pioneering work on sustainable land use models that inform policy decisions.

Highlights on ASU's sustainability activities

- Decision Theater hosted an international conference on mitigating the spread of swine flu, thus building on two years of simulations and sustainability planning exercises on pandemics. These decision tools aid health departments and schools in preparing response plans. Attendees included scientists from the U.S. Centers for Disease Control, Public Health Agency of Canada, Mexico Ministry of Health, Cedars-Sinai Medical Center, Los Alamos National Laboratory, Entropy Research Institute, University of British Columbia, York University (Canada), Purdue, Yale, and UCLA.
- Professor Nancy Grimm, an affiliated faculty member of the School of Sustainability, is among the authors of an important new federal study on the effects of climate change in the U.S. The report, "Global Climate Change Impacts in the United States," was just released by the U.S. Office of Science and Technology Policy, which advises President Obama. Access the full report at: <http://www.globalchange.gov/usimpacts>
- The Global Institute of Sustainability building just won the Excellence in Design Award (education category) from *Environmental Design + Construction* magazine. GIOS' renovated "home" will be featured in the September issue.
- The Ecological Society of America bestowed its 2009 Sustainability Science Award on a special feature on land change science edited by ASU geography professor Billie Lee Turner, an affiliated faculty member of the School of Sustainability. The articles originally appeared in the *Proceedings of the National Academy of Sciences*. See: <http://www.pnas.org/content/104/52.toc>
- A grant from the Grand Canyon River Outfitters Association is enabling ASU engineering students to develop special clean, quiet, battery-powered electric motors for use in rafting through Grand Canyon National Park and Glen Canyon National Recreation Area. This technology will help meet National Park Service goals for reducing pollution and noise in these pristine, sensitive environments. See: http://www.gcroa.org/Pages/alt_motors.htm

You can reach me at rob.melnick@asu.edu or 480-965-5233 with any questions or comments about this June briefing. Following is the interview with Dr. Turner.

Best regards,



Rob Melnick
Executive Dean

cc: Jim Buizer, Teresa Forst

Q&A With Dr. B.L. Turner II

Global Leader in Land Change Science

Dr. Billie Lee Turner is the Gilbert F. White Chair of Environment and Society in the School of Geographical Sciences and Urban Planning and a member of the National Academy of Sciences and the American Academy of Arts and Sciences. His research addresses climate change by examining the interactions between humans and the environment that lead to deforestation and desertification.

How were you introduced to the term “sustainability”?

In 1987 while I was at Clark University, I became involved with an activity that led to the landmark volume, *The Earth as Transformed by Human Action*, which I edited along with Bob Kates, Bill Clark and others. Later I was involved with the Global Land Project and other efforts tied to global change and sustainability, and I played a bit role in developing *Our Common Journey*, the 1999 National Academy of Science report that staked out sustainability science.

What is the most important sustainability-related research project you are currently working on?

The Southern Yucatan Peninsular Region (SYPR) project is an interdisciplinary study of tropical forest change resulting from human-environment interactions. Begun in 1997, this project helped establish what is now known as “land change science.” A special feature on this sustainability subfield in the *Proceedings of the National Academy of Sciences* recently won an award from the Ecological Society of America for the best contribution to sustainability in 2008.

How do you think your research affects policy or other decisions in the “real world”?

The SYPR project, which is intended to be independent so as to maintain legitimacy among the many stakeholders in the region, nevertheless has provided the science used by NGOs and various state and federal agencies to address policy decisions. I am also currently working to create a sustainable land architecture model that is designed to be decision-maker friendly. That work is in conjunction with ASU’s Central Arizona - Phoenix Long-Term Ecological Research project and Decision Center for a Desert City.

What is the world sustainability challenge that concerns you most?

My largest concern is over the ideologies involved in the interpretations of the subject, especially the proliferation of extreme, polarizing views about the condition of the earth, the role of humans, and where we should go from here. These views interfere with our understanding of the dynamics in question.



Turner (left) and student setting up a transect to examine deforestation in southern Yucatan.



agriculture-related deforestation



addressing sustainability of local agriculture