



### Grants: December 2006

1. **Keim, Paul.** Institute for Genomic Research. \$175,757. SNP assay development for Ricinus Communis. (Biology)
2. **Khatibi, Mehrdad.** National Tribal Environmental Council and Walker River Paiute Tribe. Funding for Institute for Tribal Environmental Professionals (ITEP) (2 grants). \$195,589. Provide tribal environmental training support. (ITEP)
3. **Koch, George.** National Science Foundation. \$93,483. Analyze biophysical and ecological constraints on tree height. (Biology)
4. **Rogers, Tom.** ARRO grant, Arizona Board of Regents. \$99,135. Complete the on-line suite of courses for MS in Construction Management. (Construction Management)
5. **Sisk, Tom.** Department of Defense and Grand Canyon Trust (2 grants). \$229,076. Refine software for effective area monitoring, and landscape assessment of the Kaibab Plateau. (Center for Environmental Sciences & Education)
6. **Wiebke, Kathleen.** Arizona Department of Education. \$1,000,000. Governor's master teaching program. Identify and train new master teachers. (Arizona K-12 Center, College of Education)

### Books/Creative Activity/Recognition & Awards: December 2006

1. Carrasco-Nuñez, G., **Ort, M. H.**, & Romero, C. (2006). Anatomy of a maar volcano: Case study of Atexcac crater. *Journal of Vulcanology and Geothermal Research*, 159, 179-197. (Geology)
2. **Francis, Norbert.** (2006). Indigenous languages and the study of bilingualism. *International Journal of Bilingual Education and Bilingualism*, 9, 521-534. (Educational Specialties)
3. **Fulé, P. Z., & Laughlin, D. C.** (2006). Wildland fire effects on forest structure over an altitudinal gradient., Grand Canyon national Park, USA. *Journal of Applied Ecology*, 44, 136-146. (Forestry)
4. **Hawley, Dawn.** (2006). From beatniks to Britney and beyond: The socio-cultural evolution of the American coffeehouse. In L. Wilson (Ed.), *Americana: Readings in popular culture* (pp. 242-249). Hollywood, CA: Press Americana. (Geography)
5. **McDonough, Kim,** & Mackey, Alison (2006). Responses to recasts: Repetitions, primed production, and linguistic development. *Language Learning*, 56, 693-720. (English)
6. **Reich, P., Hungate, B., & Luo, Y.** (2006). Carbon-Nitrogen interactions in terrestrial ecosystems in response to rising atmospheric carbon dioxide. *Annual Review of Ecology*, 37, 611-636.
7. **Vaughn, Jacqueline, & Otenyo, Eric.** (2006). *Managerial discretion in government decision making*. Sudbury, MA: Jones and Bartlett. (Political Sciences)
8. **Whitham, Tom.** (2006). Community and Ecosystems genetics: a gene to ecosystem approach for integrative ecology. Plenary at first meeting of the Sociedad Científica Mexicana. (Biology)

**The NAU Colorado Plateau Stable Isotope Laboratory** is directed by Dr. Bruce Hungate and managed by Dr. Rick Doucett. This lab supports research that requires the analysis of the isotopes of carbon, nitrogen, oxygen, or hydrogen in gases, organic matter or water. Students, post-doctoral researchers, and faculty all make use of the services provided. Stable isotopes techniques are at the frontier of many scientific disciplines.

## Research Profiles

**George, Koch** Professor of Ecology and Plant Physiology in the Department of Biology. He received his PhD in Biology from Stanford University in 1988 and began his career at NAU in 1994. Since his time at NAU he has received 15 grants from the National Science Foundation and Department of Energy, totaling over \$5 million. Since the late 1980s, he has published 50 journal articles, 7 book chapters and an edited book. Particularly noteworthy are his book “*Carbon Dioxide and Terrestrial Ecosystems*” in 1996 and two papers in *Nature* in 2004.

He is sometimes referred to as “the tree person”, climbing trees nearly 400 feet in height to do his “extreme botany”. But, in fact, his interests and specializations extend far beyond his well publicized research on tree height limitations. He is a co-Director of the Western Regional Center of the National Institute for Climatic Change Research (NICCR). He also co-directs the Colorado Plateau Stable Isotope Laboratory at NAU. His research includes studies of carbon and nitrogen cycling in terrestrial ecosystems as affected by climate change and insect pests, forest restoration ecology, and the application of wireless sensor networks to ecology. Recently, he and Bruce Hungate founded the NAU Carbon Project, which is conducting an inventory of greenhouse gas emissions at NAU with the goal of reducing emissions to zero (carbon neutrality). This work may provide an important model for greenhouse gas mitigation elsewhere.

**Tom Sisk** is Professor of Ecology in the Center for Environmental Sciences and Education (CESE). He received his PhD in Biology from Stanford University in 1992 and began his career at NAU in 1996. Since 2000, he has been the PI or Co-PI on 13 grants from such sources as Arizona Game and Fish, the Strategic Environmental Research and Development Program, and the Ecological Restoration Institute, and he has collaborated with other NAU faculty to develop graduate student opportunities with support from the US Agency for International Development and the Doris Duke Foundation. Overall, he has received over \$2.7 million in grant funding since 2000. He has authored or co-authored 35 journal articles and book chapters since coming to NAU in 1996, including articles in *Ecology* and *Conservation Biology*.

Major research specializations include landscape ecology, land use, and habitat quality; forest restoration and the influence of management on wildlife, especially birds; and the impact of drought and livestock grazing on grasslands. Before coming to NAU, he led a tropical conservation program at the Stanford Center for Conservation Biology. From 1992 to 1994, he served as Special Assistant to the Director of the National Biological Service, U.S. Department of the Interior. Currently, he coordinates NAU’s interdisciplinary M.S. program in Environmental Sciences and Policy and serves on numerous editorial boards and advisory committees. In 2001, he was named a fellow of the Aldo Leopold Leadership Program of the Ecological Society of America, and he was recently elected to the Board of Governors of the international Society for Conservation Biology.

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