NREL NEWS NOTES
NATURAL RESOURCE ECOLOGY LABORATORY
Colorado State University

No.24 October, November and December 1997

- NREL Fund Raising
- NREL 30th Anniversary
- Announcements
- Research Activities
- Meetings
  - Colorado
  - National
  - International
- New Employees
- NREL Seminars
- Visitors
- Graduate Student News
- Grants Funded
- Proposals Submitted
- Manuscripts Published
- Outreach
- Thought of the Day
- Previous NREL News Notes

NREL Fund Raising

Fund raising efforts instituted in December 1996 have had excellent results. At the end of December 1996, total of all Foundation Accounts was $2,293.49. As of the end of November 1997, gifts to NREL reached a total of $129,944.18. In an unprecedented act at the University, NREL scientists, inspired by Francis and Evelyn Clark's generous donation of $100,000, and organized by David Swift, have donated $23,524.50 to the NREL. From that effort, donations were received from:

Jim Gibson
Tom Hobbs
Vern Cole
Dave Swift
Diana Freckman
Vince McElligott

Other Donors during 1997 include:

Jill Baron       Dennis Ojima
Indy Burke       Christie Barton
Karen Bradley    Elizabeth Cline
Dave Coleman     David Kicklighter
The 30th Anniversary Celebration for NREL and Annual Meeting of the Association of Ecosystem Research Centers AERC titled "Ecosystem Science: Past, Present and Future" was held Tuesday, Oct. 21, 1997 at the Lory Student Center with a reception immediately following. Over 200 people attended the reunion and it was great to see old friends and colleagues who have contributed to making NREL a successful, world-class ecosystem center. The list of attendees and some additional pictures of the reunion can be found on the eb under http://www.nrel.colostate.edu/NREL.html

A general theme of this 30th Anniversary meeting was the early history of the NREL and the participation therein of George Van Dyne. Given this theme, I would like to cite my favorite definition of history. It reads: History is the trick we play on the dead. We can bestow highest of praises or we can bestow the harshest of criticisms. The dead can offer no rebuttal. Personally, I had a lasting friendship and great admiration for George Van Dyne--his driving ambition, his boundless energy, his knowledgeability in many different areas of science. Together let us, in the words of Thomas Gray, "no farther seek his merits to disclosure, or draw his frailities from their dread abode." Rather, let me turn to another definition of history, the one that reads: History is a prologue. George Van Dyne was prologue to the many recent achievements of the NREL, and more importantly, he is prologue to the future successes of the NREL. Vaya con Dios, George

This award, established by NREL in 1997, is presented to an individual whose independent and interdisciplinary research has contributed to sustained, innovative syntheses and new insights in the study of ecosystems. The first recipient of this award is Jerry M. Melillo, Co-Director of the Ecosystems Center at the Marine Biological Laboratory in Woods Hole, Massachusetts.

Recently, Dr. Melillo was Associate Director for Environment at the Office of Science and Technology Policy in the White House where he directed programs on environmental monitoring of ecosystem health. Dr. Melillo is internationally recognized for his contributions to our understanding of the nitrogen and carbon cycles, and the effects of land use and climate change on the structure and function of temperate and tropical forests. He focused attention on the production of trace gases by natural and human-dominated ecosystems, and the effects of trace gases on regional and global climate change. He contributed to early studies on decompositional processes and interactions of element dynamics in terrestrial ecosystems. He is Vice Chairman of the International Geosphere-Biosphere Program IGBP, a non-governmental program of several thousand scientists who are coordinating their research on global change. He is a member of the Intergovernmental Panel on Climate Change IPCC and works with numerous panels of the National Research Council. He is an active member of the Vegetation/Ecosystem Modeling and Analysis Project VEMAP. Dr. Melillo served as the Director of the National Science Foundation's Ecosystem Studies Program. He played an integral role in the organization of the Association of Ecosystem Research Centers and is active in NSF's Long Term Ecological Research Program. Dr. Melillo has authored more than 100 scientific articles and two textbooks. His paper on climate change was one of the most frequently cited scientific papers in 1996. The Award of Excellence in Ecosystem Science will be awarded annually by the Natural Resource Ecology Laboratory at the national meeting of the Association of Ecosystem Research Centers.
Robert L. Sanford was the 1997 recipient of the Distinguished Scholar Award from the University of Denver. This award is to recognize unusually significant and meritorious achievement in professional scholarship, as evidenced by publications and their enhancing effect on classroom teaching. The award was presented to Buck at the Fall Convocation ceremony.

John Moore was chosen as the 1997 Distinguished Scholar for the College of Arts and Sciences and the 1997 University Distinguished Scholar, at UNC.

Vern Cole was honored at a special retirement dinner on the evening of Oct. 20, which was organized by Ted Elliott and attended by Vern's family, NREL colleagues and scientists from several countries. Vern was presented an award for his outstanding contributions to biogeochemistry, ecosystem science and contributions to climate change mitigation.

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Effective immediately, Diana all Freckman has officially changed her name to: Diana Harrison all her original name.

Drs. Tom Lovejoy, Gene Likens, Paul Risser and Pam Matson NREL External Advisory Committee met at CSU/NREL on Oct. 21 -22 for the NREL 30th Anniversary and AERC Annual Meeting. Dr. Likens and Dr. Risser will complete their committee terms this year and several people are under consideration to replace them. A big THANKS to both Dr. Likens and Dr. Risser for all of their contributions and dedication to NREL.

Dr. Stuart Bamforth, a soil protozoologist and collaborator on Diana Freckman's Antarctic grants, has generously donated many issues of the Journal of Protozoology to Colorado State University's Morgan Library for replacement of library materials lost to the July 1997 flood.

Dennis Ojima was the Midwest Regional expert at the Sep. 30-Oct. 1 Global Climate Change Broadcast eathercasters Briefings at the NOAA Headquarters in ashington, DC. This meeting culminated with a reception and receiving line at the hite House with President Clinton and Vice President Gore in attendance and speaking to the group on global climate change.

Deb Coffin has accepted a USDA/ARS position as Research Scientist at Las Cruces, New Mexico, and will be leaving NREL about Jan. 5, 1998. Deb has established an excellent interdisciplinary scientific program, has served NREL on numerous committees, including the NREL Executive Committee, has been an active teaching and research member of the Rangeland Ecosystem Department, and has served as Academic Coordinator for the Graduate Degree Program in Ecology. Thank you, Deb, for your many contributions to NREL and we wish you much happiness and success in your new position.

Elisabeth Holland was nominated by NCAR for a James S. McDonnell Centennial Fellowship. The intent of the Centennial Fellowships is to support and encourage exceptional scientists and scholars in the early stages of their careers. Ideal fellowship candidates are those scientists and scholars whose work will, over the first half of the 21st Century, contribute substantially to the development of knowledge and its responsible application. Fellowship candidates should be at a stage in their careers where they have demonstrated evidence of great scholarly promise, but where they have not yet achieved full academic maturity and/or professional recognition. Ten fellowships of 1 million dollars each will be awarded. Announcements will be made a year from now.

On Friday, Dec. 5, NREL staff, students and their families celebrated the 1997 holiday season by gathering at the Ludlow Room of the Lincoln Center for a relaxing evening of food, drink and the
annual presentation of awards. Award recipients honored this year were Arlene Boaman Outstanding Support Staff, Dave Theobald Outstanding Post Doc, Geneva Chong Outstanding Graduate Student, Keith Paustian Most Publications, and a dual award winner, Dennis Ojima Most Travel and Most Proposals Submitted. In keeping with tradition, the winner of the Most Travel award was traveling and couldn't attend. Throughout the evening, a wildly entertaining MC delivery by Andy Parsons kept the events flowing. The NREL graduate students made a special video presentation, depicting an insider's look at how an audit might proceed, and featuring insightful, creatively done caricatures of the NREL Senior Staff this roast was so appreciated that it has already had one encore showing. Santa and Mrs. Claus arrived early, joined us for dinner, and sat with all the NREL children. Not to be left out, the graduate students gathered round the Claus's en masse for a group photo. And after a full evening, the last hangers-on wound down with informal music and singing. The party was well received: Kudos to all involved with putting on a great evening.

Diana H. all and Andy Parsons leave for the Antarctic on Dec. 26. They will be trading places with Ed Kuhn and joining Dan Bumbrger and Amy Treonis, who have been out there since Nov. 10. Track their adventures on the www www.nrel.colostate.ecu/soil/CM.html.

R s ar i i i s

The management of wild horses on federal lands in the west has been under tremendous public scrutiny, over the past year as evidenced by the outpouring of newspaper articles and reorganization of the BLM's wild horse program. NREL scientists are at the cutting edge of research that guides Bureau of Land Management in their management of the horses. Francis Singer spent most of October 1997 at the Pryor Mountains where he assisted in the gather and removal. His studies of parentage, genetic heterozygosity and models of genetic effective number Ne, with John Gross of NREL, will guide managers on the optimum removal scenarios and minimum population number. Francis received a fast track award from BLM for his work on this fall's gather. Michael Coughenour is applying his SAVANNA model to the Pryor Mountains uestions of appropriate numbers of wild horses and potential competition with bighorn sheep. James Detling has had 3 Ph.D. students study grazing impacts of horses, including Jace Fahnestock who successfully defended in early Dec. 1997.

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"Recent Evidence of Global arming, Its Impact, and Contribution from Mobile Sources" was presented by Bill Parton at the Annual Clean Air Conference held in Steamboat Springs, Sep. 17-19.

Bill Parton, Dennis Ojima, Robin Kelly, Laura Stretch, and Becky McKeown attended the EOS-IDS project meeting in Boulder on Oct. 6-7. Bill stayed for a MMIA project meeting on Oct. 8 with Beth Holland and other researchers.

Jill Baron presented the CSU Animal Science Seminar Oct. 14 on the topic of "Elevated Nitrogen Deposition to the Colorado Mountains: The Role of the Livestock Industry."

The U.S. Geological Survey Mississippi Basin Carbon Project Meeting on Modeling, held in Boulder, CO, Sep. 16-18 was attended by Dennis Ojima, Bill Parton, Dave Schimel and Melannie Hartman. Dennis, Dave and Bill all gave short talks at this meeting.
A paper titled "Daily Dataset Requirements and Planned Generation Approaches for VEMAP2" was presented by Tim Kittel at the Statistical Downscaling Meeting, ACADIA Program, Electric Power Research Institute, on Nov. 5 in Boulder, CO.

Dave Theobald gave a presentation titled "Fragmentation by Inholdings and Exurban Development" at the Forest Fragmentation in the Central Rocky Mountain workshop held at CSU, Nov. 12 -13. He also gave a presentation titled "Land Use Change in the Rocky Mountain est" at the irth Forum on Growth, Sustainability, and the Future of the est at the University of Colorado, Boulder on Nov. 14-15.

Diana H. all represented CSU and presented testimony at the Vision 20/20 field hearing before the United States Senate Subcommittee on National Parks, Historic Preservation, and Recreation of the Committee on Energy and Natural Resources held in Denver on Nov. 17. If you would like a copy of Diana's written testimony, please contact Kay by phone at 970 491 -1991 or via email: kaynrel.colostate.edu

Beth Holland presented a lecture titled "Nitrogen Deposition Over the United States and Europe," Atmospheric Chemistry Division Research Report in November.

Jill Baron was a guest lecturer for NR120, Dec. 3, and presented "A Global Change Primer." She repeated the lecture as a seminar for the USGS Mid-Continent Ecology Science Center in Fort Collins on Dec. 15.

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Bill Parton attended the BESR/Committee on Geophysical and Environmental Data CGED meeting at the National Academy of Sciences in ashington, DC, Sep. 11 -12.

Tim Kittel presented a paper, co-authored with J.A. Royle, titled "100-ear Climate History of the Rocky Mountains" at the Human-Induced Changes to Rocky Mountain Ecosystems workshop at Flathead Lake Biological Station, MT, Sep. 17-21. The workshop was sponsored by USGS/Biological Resources Division.

Bill Parton, Lenora Bohren and Indy Burke attended a NIH Project "Population and Environment in the U.S. Great Plains" meeting in Austin, T, Sep. 21 -23. This is a collaborative project with Myron Guttman at the University of Texas, Austin.


Beth Holland presented an invited lecture titled "How Does the Variability in Temperature Regulation of Heterotrophic Respiration in Tropical Ecosystems Influence the Global Carbon Budget" to the Agronomy Society of America in October. She also presented a lecture for the Kuehnast Memorial Lecture at the University of Minnesota in September titled "Global Nitrogen Cycling: Acceleration and Consequences."

Diana H. all was an invited participant at the National Academy of Sciences and National Research Council's Second Forum on Biodiversity titled "Nature and Human Society: The euestion for a Sustainable orld" held Oct. 27 -30 in ashington, DC.

Bill Parton, Dennis Ojima and Becky McKeown traveled to Oregon State University in Corvallis for a collaborative NIGEC project meeting, Oct. 28-31.

Serita Frey presented a poster titled "Soil Moisture Effects on Bacterial and Fungal Abundance and