

LARS Newsletter

December 1995

LEVANDOWSKI LECTURE IN NATURAL RESOURCES: To honor the career and life of Professor Don Levandowski (1927-1994) the above titled lecture series has been established by the Department of Earth and Atmospheric Sciences. This is a fitting tribute by friends, students, and colleagues who valued his devotion to them and his enthusiasm for his chosen field. On 5 Oct 95 Melvin H. Podwysocki, research geologist for the USGS in Reston, VA, presented the first series lecture on "Applications of Airborne Imaging Spectrometer Data to Geologic and Environmental Problems". Anyone interested in making a contribution to the Levandowski Lecture fund, should contact Dr. Ernest Agee "agee@vm.cc.purdue.edu".

KRISTOF ACCOUNT: There is still time to make a 1995 deductible contribution to the Stevan J. Kristof Outstanding Graduate Student in Remote Sensing Award. From the earnings we currently make nearly \$300 of the \$400 which is provided to the winner (the difference has been made up anonymously). Make your check payable to Purdue University and send to DAIS, Purdue Memorial Union, West Lafayette, IN 47907-1800 and place the name "Kristof Account, # 880 1884 0000" on your check. Thanks for your support.

APPOINTMENTS: John Moser, Professor of Forestry, has been appointed as the National Program Chair for the Seventh American Forest Congress which will be held in Washington, DC from February 20-24, 1996. The last Forest Congress was held in 1975; this is only the seventh Congress to be convened since 1882. The purpose of the Seventh Congress is to develop a common vision for America's forests, the principles to support that vision and the next steps to achieve the vision. The Congress consists of 2000 citizens with a diversity of interests in forests who will participate in a large group facilitated effort. Chris J. Johannsen began serving on the Committee on Earth Studies, Space Applications Board, National Resource Council for a three-year term.

AWARDS: Bharat K Bhargava, Professor of Computer Science received a meritorious service award from IEEE. He also received an AT&T Special Purpose Award of \$23,000 for his work on Adaptable Video Conferencing. Congratulations!

PROJECTS FUNDED: Ed Mikhail and Jim Bethel, Civil Engineering were awarded a 3 year research project entitled "Rapid Construction of Virtual Worlds". The funding is from ARPA and TEC. The overall goal of the project is to enhance the speed of producing 3D databases from aerial imagery for simulation purposes. The subtasks involve, initially, terrain (DTM) extraction and, later, feature extraction. All of the work is being done in a softcopy photogrammetric environment. The Purdue contract is for \$455,000. Other participants in the program are Carnegie Mellon Univ., Naval Postgraduate School, and SRI.

LARS STUDENT NEWS: Amanda Allen, 1st year Ph.D. student, FNR, interested in the impacts of regional land use on wildlife population, and community ecology (major professor: Barny Dunning). She will be working in landscapes of the SE states dominated by U.S. Forest Service management. She has a special interest in hawks, especially falcons. Email address: a-allen@forest1.fnr.purdue.edu.

Brian Pilcher, 1st year Ph.D. student, FNR interested in the development of land management plans that incorporate both economic use of land and maintenance of biodiversity (major professor: Barny Dunning). Brian has 15 years experience working in the timber industry of the Pacific NW, and is interested in working with his industry contacts to explore the current and future impacts of land management on wildlife. Email: bpilcher@forest1.fnr.purdue.edu.

S. Rasoul Safavian (major professor, David Landgrebe) E&CE, completed his PhD in August 1995. His thesis title is "Inference And Decision-Making With Partial Knowledge."

Bruce Worstell, AGRY graduate student, (major professor Marion Baumgardner), spent Spring 1995 with Dr. Norman Bliss at the EROS Data Center. They were developing tools for soil data conversion from the State Soils Geographic (STATSGO) data base to the Soil and Terrain (SOTER) data base. They also developed new map units based on the SOTER methodology where parent material information from the Soil Interpretations Record (SIR) data base was combined with terrain features extracted from digital elevation models. Bruce expects to finish his M.S. in the fall 1996.

PUBLICATIONS

+Pulliam, H.R., and J.B. Dunning. 1995. Spatially explicit population models. *Ecological Applications* 5:2.

+Dunning, J.B., D.J. Stewart, B.J. Danielson, B.R. Noon, T.L. Root, R.H. Lamberson, and E.E. Stevens. 1995. Spatially explicit population models: current forms and future uses. *Ecological Applications* 5:3-11.

+Liu, J., J.B. Dunning, and H.R. Pulliam. 1995. Potential impacts of a forest management plan on Bachman's Sparrows: linking a spatially explicit model with GIS. *Conservation Biology* 9:62-75.

+Dunning, J.B., R. Borgella, K. Clements, and G. Meffe. 1995. Patch isolation, corridor effects, and avian colonization of habitat patches in a managed pine woodland. *Conservation Biology* 9:542-550.

+Pulliam, H.R., J. Liu, J.B. Dunning, T.D. Bishop, and D.J. Stewart. 1995. Modeling animal populations on changing landscapes. *Ibis* 137:S120-S126.

PRESENTATIONS

Bharat K Bhargava was the keynote speaker at the Database and Expert System Conference on Sept 6 in London presenting "Communication Overheads in Digital Libraries"

Barny Dunning, FNR, participated in a Global Change Workshop at the Ecological Society of America annual meeting at Snowbird, Utah, August, 1995. The program looked at extensive and intensive effects of global change (both climate change and regional land use change) on selected wildlife populations and ecological processes.

Todd Helt, AGRY graduate student, (with T. E. Dobos, E. Micheli, Godollo University; M.F. Baumgardner, & C.J. Johannsen, AGRY) presented a poster titled "Factors Effecting Regional Water Quality - Applications of a Remote Sensing and GIS Enhancement of the Hungarian Soils and Terrain

Laboratory for Applications of Remote Sensing (LARS)
1158 ENTM 220, Purdue University,
W. Lafayette, IN 47907-1158, USA
(317) 494-6305, Fax: (317) 494-7753
johannsn@iies.ecn.purdue.edu