

Central Region Newsletter

American Society for Photogrammetry & Remote Sensing

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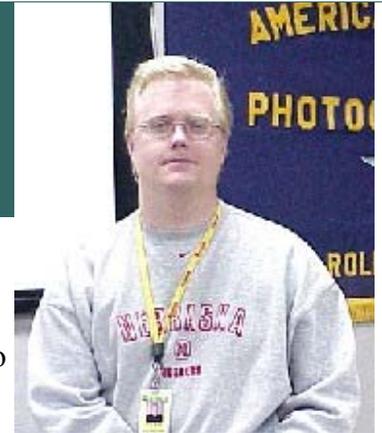
Change Analysis In The United Arab Emirates: An Investigation Of Techniques (An ASPRS Technical Presentation)

Terry L. Sohl, a Senior Scientist from the Science Applications International Corporation (SAIC) who works at the USGS EROS Data in Sioux Falls, South Dakota, made a technical presentation at the USGS Mid-Continent Mapping Center in Rolla, Missouri, on 12 March 2003.

Much of the landscape of the United Arab Emirates has been transformed over the past 20 years by massive afforestation, beautification, and agricultural programs. The "greening" of the U.A.E. has had environmental consequences, however, including degraded groundwater quality and possible damage to natural regional ecosystems. The National Drilling Company of the Abu Dhabi

Emirate asked the U. S. Geological Survey to analyze land cover change in the Emirate

using two dates of Landsat thematic mapper imagery (1987-1996). A number of methodologies were evaluated for information content, accuracy, and ease of use. Based on the investigations, recommendations were given to use an enhanced image-differencing technique along with change-vector analysis to fully analyze change in the Emirate.



Terry Sohl

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Central Region Elections

The Officers and Board of Directors for the Central Region would like to invite members to vote in this year's election for Officers and Directors for the Central Region. The offices to which we are electing members are a Vice-President, a National Director, a Secretary/Treasurer, two Directors for three-year terms, one Director for a two-year term, and one Director for a one-year term. Biographical sketches of the nominees for each office are included below. The actual ballot is included at the end of the newsletter. Ballots must be submitted no later than 20 June 2003 to Vice-

President Matt Reed: The votes will be counted on 20 June.

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Vice-President: Scott Perkins

Scott Perkins is a Vice-President at Western Air Maps, Inc. Scott began his career in the surveying and mapping profession in 1980 while attending Ferris State University, Big Rapids, Michigan, in the Photogrammetric Mapping Technology program. A summer internship at Mid-States Engineering, Indianapolis, Indiana in 1981 working a stereo map compiler provided valuable practical experience.

Upon graduation from Ferris Scott spent two years with Aero-Metric Engineering performing analog map compilation, aerial triangulation and analog ortho photo production.

In 1983 Scott joined Western Air Maps in Overland Park, Kansas. Scott began his career there as a stereo map compiler as producing topographic mapping the old fashioned way, using analog equipment, light tables and drafting tools. Those early years also included time in the field on the survey crew and in the dark rooms of the photo lab.

As technology evolved and map production migrated off the light tables and into the digital world, Scott was responsible for guiding Western's migration. Tasked with creating a strategy for modernizing map production capabilities

he created the company's CAD department in 1985 and later the GIS services department in 1990.

In 2000 Scott completed his Business Mgmt. degree at

Baker University, Overland Park, Kansas. Present responsibilities as Vice President include business development and operational management.

Scott has authored articles for POB Magazine and GIS World and in 2003 Scott was elected to the American Society of Photogrammetry & Remotes Sensing, Central Region, Board of Directors.

It is a love of aerial photography and maps that has contributed to his success and 20 year longevity at Western Air Maps.



Scott with 70lb Spoonbill!

National Director: Kari Craun

Kari Craun is the Chief of the Mid-Continent Mapping Center (MCMC), U.S. Geological Survey (USGS), in Rolla, Missouri. She has been with the National Mapping Discipline of the USGS since 1988. Prior to her position at MCMC, she worked in digital data production, research and development, and standards development. Before her career at USGS, Ms. Craun worked for the Defense Mapping Agency (DMA) in San Antonio, Texas and Brookmont, MD. She obtained her M.S. degree in photogrammetry at Purdue in 1987. In 1992, Kari was accepted into the Ph.D. program at Ohio State University in the Department of Geodetic Science and Surveying. She spent one year in pursuit of that degree and returned to the USGS. Ms. Craun also serves as a member of the Missouri Resource Assessment Partnership Steering Committee and of the Minnesota Governor's Council on Geographic Information.

I would be very honored to continue to serve as the

National Director for the Central Region of ASPRS. In the past 2 1/2 years, I have developed a good understanding of the ASPRS organization and have made many contacts throughout the nation which I believe have been and will continue to be beneficial to the Region in the coming years. I was also elected to be on the Executive Committee of ASPRS. This body includes ASPRS elected officers, the Executive Director (Jim Plasker), and four National Directors. The National Directors on the Executive Committee are elected by their peers on the ASPRS Board of Directors. Being a part of the Executive Committee has increased my awareness and understanding of the financial status and future strategy of the organization. It has also given me some increased insight into both the opportunities



Kari
Craun

and challenges ASPRS is facing and how the Regions must play a role on both sides of this equation in order for the organization, overall, to be successful. The Central Region has made some outstanding progress in the past year in adding new members from across the Region and in providing excel-

lent services, such as access to numerous technical presentations, to its members. I would be very honored to continue to serve as your link between ASPRS National and the ASPRS Central Region.

Secretary/Treasurer: Jerry Wagner

Jerry Wagner is a Cartographer at the USGS, Mid-Continent Mapping Center. He was raised in St. Louis, Missouri and received a Bachelor of Science degree in Earth Science and Biology from Southeast Missouri University, Cape Girardeau and has been working on a Masters of Business Administration from Webster University. Jerry began in his mapping career working at Surdex Corporation in St. Louis before going into federal service at DMAAC (now NIMA) in St. Louis. He then transferred to Mid-Continent Mapping Center in 1977 and entered the Cartographer Development Program (CDP). He has served most of his 26 years with the USGS,

Branch of Production Operations in various positions as cartographer, supervisor and section chief. Jerry and his wife, Linda, have two children, Melissa and Sarah.

Jerry has been a member of ASPRS since 1976. He is currently serving as Secretary/Treasurer for 2002-2003 and is running for a second term. He has served previously as Director and President of Rolla Region.



**Jerry
Wagner**

Director: Dr. Sreekala G. Bajwa



Dr Sreekala G. Bajwa

Dr Sreekala G. Bajwa is an Assistant Professor in the Department of Biological and Agricultural Engineering at the University of Arkansas (UA) at the Fayetteville campus. She holds a Bachelor's degree in Agricultural Engineering from the Kerala Agricultural University at Tavanur, India; a Master's degree in Agricultural Engineering from the Indian Institute of Technology at Kharagpur, India, and a Doctorate in Agricultural Engineering from the University of Illinois at Urbana-Champaign.

She held a variety of teaching and research positions at various academic institutions before becoming a Professor at UA. She is currently responsible for teaching a variety of graduate and undergraduate courses including:

Dr Sreekala G. Bajwa is an Assistant Professor in the Department of Biological and Agricultural Engineering at the University of Arkansas (UA) at the Fayetteville campus. She holds a Bachelor's degree in Agricultural Engineering from the Kerala Agricultural University at Tavanur, India; a Master's degree in Agricultural Engineering from the Indian Institute of Technology at Kharagpur, India, and a Doctorate in Agricultural Engineering from the University of Illinois at Urbana-Champaign.

Precision Agricultural Remote Sensing (graduate course developed with Lei Tian of University of Illinois at Urbana-Champaign); Agricultural Remote Sensing and Geographical Information Systems (graduate level course); Precision Agriculture (Advanced level undergraduate course, currently under development); Mechanical Design in Biological Engineering (Basic undergraduate level design course). Among her research interests are remote sensing and GIS applications in bioresources management, including soil, water and plant monitoring, diagnostic & decision support systems for crop, soil, and water management, comprehensive integrated precision pest management with applications to exotic pest monitoring, and water quality monitoring. High dimensional data processing methods (data mining) to reduce information redundancy in hyperspectral data and model specific geospatial phenomena of interest by using a combination of parametric and optimization models such as regression and multivariate analysis, genetic algorithms, artificial neural networks and/or fuzzy logic. Dr Bajwa is also a member of numerous professional and honor societies in addition to ASPRS.

Director: Eric Constance

Eric Constance is a supervisory cartographer with the USGS, Mid-Continent Mapping Center, Rolla, Missouri. As supervisor of the Elevation Data Production Section, he manages production of digital elevation data and preparation of high-resolution elevation data for updating the National Elevation Dataset. He directs research into LIDAR, IFSAR, and photogrammetric elevation technologies and participates in the development of national standards for elevation data. He has been a contributing member of the National Digital Elevation Program technical subcommittee since its inception in 2001. Eric has been involved in cartographic research and development

activities at Mid-Continent Mapping Center since 1985, serving as Chief, Systems and Techniques Development Section from 1991 to 1998. He worked at Defense Mapping Agency, Aerospace Center in St. Louis from 1983-1985. Eric has a B. S. degree in geography from Central Missouri State University (1980) and a M. S. degree in geography from Oklahoma State University (1983.)



**Eric
Constance**



**Dave
Shaver**

David Shaver is a Geographer with Mid-Continent Mapping Center, Rolla, Missouri. David is the Point of Contact for the Land Cover Trends Project at MCMC. The focus of the Land Cover Trends project is to document within ecoregions, the rates, causes, and consequences of land use and land cover change for the conterminous United States for the 1972-2000 period. This study uses sampling and change analysis tech-

niques combined with Landsat MSS and TM data for measuring land cover change. He is also a GPS and GIS Technical Specialist for the Wildland Firefighting Incident Command System. His role as a Technical Specialist within the ICS has allowed him to support the Space Shuttle Columbia recovery efforts in Nacogdoches, Texas. David obtained a B.S. in Geology from NWMSU, Maryville, Missouri in 1983. Before going to work in 1988 with the USGS, he worked for several years for private companies involved in aerial photogrammetry, engineering, and cadastral mapping.

News From The Mt Oread Student Chapter

The Mt. Oread ASPRS student chapter in Lawrence, KS held their 2003 elections, here are the results:

President: Kevin Dobbs
Vice President: Brian Wardlow
Secretary: Matt Dunbar
Treasurer: Matt Ramspott
Comm. Director: Patrick Taylor

The Mt Oread Chapter accounted well for itself at the recent Association of American Geographers (AAG) annual meeting.

Monika Moskal, the President of the Mt. Oread ASPRS Student Chapter and the AAG Remote Sensing Specialty Group Student Director, was involved in organizing two student competitions at the 99th Annual Association of American Geographers Meeting held in New Orleans, March 5-8, 2003.

For the Remote Sensing honors paper competition, each student submitted a publication quality paper and delivered a 20-minute presentation describing their research. In this competition, Matt Ramspott, a Ph.D. Stu-

dent in the KU Department of Geography and Mt. Oread ASPRS Student Chapter Treasurer, was awarded second place for his work using remotely sensed data to derive biophysical characteristics of Kansas grasslands (At the 2002 AAG meeting in Los Angeles, Sun Park, Mt. Oread ASPRS Student Chapter Member was awarded the same honor).

The Remote Sensing, GIS and Cartography Specialty Groups join together each year to put on an illustrated paper competition. For this competition each student produces a poster to present the results of their research, describes their work in a 5-minute presentation, and interacts with the audience for the remainder of the session. Two of the illus-

trated paper competition award winners were graduate student in the KU Geography Department. Brian Wardlow, Mt. Oread ASPRS Student Chapter Vice President, was awarded first place in the Ph.D. category for his research using MODIS data to map agricultural land use/land cover in the Central Great Plains, and Matt Dunbar, Mt. Oread ASPRS Student Chapter Secretary received the first place award for the Masters category for his work using landscape visualizations to illustrate forest cover change in Northeastern Kansas.

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Classifieds

The Region Board of Directors has decided to start a Classifieds section in the newsletter. Region members seeking to hire or to be hired should send information to the Newsletter editor.

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THE ASPRS MEMBERSHIP APPLICATION IS NOW LIVE ON THE WEB

Individuals can now submit their membership application online, just like they register for an ASPRS conference. We encourage you to announce this convenient service in your newsletter as well as on your regional web site.

The ability to join ASPRS online creates great potential to capture members

from web traffic.

The form may be accessed at <https://www.asprs.org/application>, or by clicking the "Individual Membership" link under the "Membership & Services" button on the ASPRS home page (<http://www.asprs.org>).

If you recruit new members, please be sure to tell your colleagues to enter your name and member identifi-

cation number in the "Member Sponsor" section provided in order to earn an ASPRS BUCK\$ voucher worth \$5 each toward the purchase price of any publication available in the ASPRS Bookstore.

If you have any questions or comments, please let us know at: membership@asprs.org.

Region Bylaws Proposed Change

The Board is entertaining a motion to amend the Region Bylaws concerning Region representation on ASPRS national events. The amendment reads:

ASPRS spring/fall annual conference Central Region membership representation.

The board recognizes a need for Central Region representation at all necessary and relevant functions during the ASPRS annual spring/fall conference.

Although the Society does not mandate that Region officers or members attend national conferences and meetings, the Central Region Board recognizes the importance of having Region members attend these events and it encourages all members to attend, if possible. Furthermore, the Board acknowledges that the costs of attending these events can be considerable. The Central Region Board's policies on national conference attendance are:

1. In accordance with the "ASPRS Proxy Policy for

Board of Directors", the Region President will serve as the National Director's proxy at meetings of the National Board of Directors when the elected region National Director cannot attend.

2. The Board does not acknowledge any obligation to financially sponsor a member's ASPRS annual spring or fall conference expenditures.
3. A Board member may, if he or she feels the circumstances are extraordinary, submit a request to the Board for reimbursement of expenditures attending a national event. Such request must include a statement as to why the requestor feels reimbursement is justified. The Board shall consider these requests on a case-by-case basis for approval/disapproval with quorum's majority vote.

Welcome New Members

The Central Region welcomes new members who have recently joined ASPRS:

- Barbara Elaine Boland, Fayetteville, Arkansas
- Jackson Cothren, Fayetteville, Arkansas
- Peter Gogol, Lawrence, Kansas
- Jefferson Gray, Springfield, Missouri
- David Guinotte, Lawrence, Kansas
- Bradley Hammerschmidt, Manhattan, Kansas
- Shannon Lear, Reeds Spring, Missouri
- Johnny Mason, Siloam Springs, Arkansas
- Tiffany Modlin, Salina, Kansas
- Ryan Reker, Manhattan, Kansas



SPECTRAL CHARACTERIZATION OF SOILS

(An ASPRS Technical Presentation)

10:00 - 11:00 AM

Thursday, May 15, 2003

Conference Rooms 501-502

USGS Mid-Continent Mapping Center

1400 Independence Road

Rolla, MO

Dr Ronaldo Luna, Associate Professor, Dept. of Civil, Architectural and Environmental Engineering, University of Missouri - Rolla (Email: rluna@umr.edu) will give this technical presentation.

Abstract: With the advent of hyperspectral imaging, an abundance of information may soon be harvested through remotely sensed data. However, the spectral information obtained from an airborne/satellite sensor is somewhat foreign to the common engineer. Advances in the characterization of natural materials commonly used by civil engineers (e.g., soils and rock) in construction have allowed the correlation of laboratory spectral properties with engineering index tests. The use of a high-resolution spectroradiometer, conventional soils laboratory tests, numerical techniques, and insights into correlations will be discussed. The presentation will focus on outlining the research efforts at the geotechnical laboratories at the University of Missouri-Rolla.

Conference Calendar

May 3-9, **ASPRS Annual Conference**, Anchorage, AK
<http://www.asprs.org/alaska2003>

June 30- July 3, **CORSE 2003**, in Auburn, NY.
The Conference on Remote Sensing Education is designed to teach teachers how to use GIT (Global Information Technology) in the classroom. Sponsored in part by IAGT. Contact corse@iagt.org for more information or visit the CORSE 2003 website at www.iagt.org.

October 6-8th, 2003, **ASPRS 19th Biennial Workshop on Color Photography, Videography and Airborne Imaging for Resource Assessment**. Logan, Utah.

Call for Papers <http://www.asprs.org/cpvaira.htm>
This workshop will explore the applications of high-resolution color and multispectral airborne and satellite imagery along with computer based analysis for the identification, measurement and monitoring of natural and agricultural resources. Contact: Christopher Neale, Dept. of Biological and Irrigation Engineering, Utah State University, Logan, Utah 84322-4105 cneale@cc.usu.edu

October 28-30, **ASPRS/MAPPS Terrain Data: Applications and Visualization - Making the Connection**, Charleston, SC,
at the Charleston Convention Center,
http://www.asprs.org/terrain_data2003/



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Central Region Ballot

National Director

- Kari Craun**

Vice-President

- Scott Perkins**

Secretary/Treasurer

- Jerry Wagner**

Directors (vote for three)

- Dr Sreekala Bajwa**
- Eric Constance**
- David Shaver**

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The Imaging & Geospatial Information Society



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