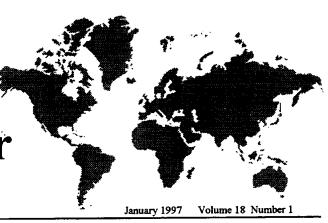
RSSG

Newsletter





From the Chair

In less than two months, many of us will be traveling to Fort Worth, Texas to attend the 93rd Annual Meeting of the Association of American Geographers. I hope that many of you are able to attend

the meetings. The **RSSG Program Com**mittee has organized a variety of sessions and workshops that you can attend. I would also encourage you to attend our RSSG planning meeting which will start at 5:45 and end around 7:00 on Wednesday evening, April 2nd. After the meeting we are planning a social where light food and



refreshments will be served. After this social, many of us typically go out for dinner and have fun getting to know one another. I would encourage the students to also attend this meeting where they can rub shoulders with remote sensing scientists from around the country.

On page 2 is the agenda for our RSSG business meeting. If any of you desire to add additional materials to the agenda, please contact me as soon as possible.

Continued on page 2...From the Chair

AAG 93RD ANNUAL MEETING FT. WORTH, TEXAS APRIL 1-5, 1997

RSSG BUSINESS MEETING 5:45 -7:00 PM APRIL 2, 1997

Nominations Sought

See also page 3 Nominations for Outstanding
Contributions Award

Nominations are requested for the following RSSG offices:

- Director (2-year term)
- Student Director (1 year term)

All nominees must be current members of the AAG and RSSG, and must have agreed to serve. Each officer's responsibilities were outlined in the May 1995 issue of the RSSG Newsletter. Nominations should be submitted by March 21, 1997 to: Kevin Price, Department of Geography, University of Kansas, Lawrence, KS 66045 Tel.: (913) 864-7723; FAX: (913) 864-7789 E-mail: k-price@ukans.edu

From the Chair...continued from page 1.

RSSG Business Meeting Agenda

- (1) Welcome, Introductions, and Attendance (Kevin Price, Chair, University of Kansas)
- (2) Review of Agenda Items (Kevin Price, Chair, University of Kansas)
- (3) Review and Approval of 1996 RSSG Minutes (Doug Ramsey, Secretary, Utah State University)
- (4) Report on RSSG Finances (Doug Ramsey, Treasurer, Utah State University)
- (5) Report on the Fort Worth RSSG Program (Mark Jakubauskas, Program Committee Chair)
- (6) Report on the RSSG Newsletter (Jim Merchant, Editor, University of Nebraska, Lincoln)
- (7) Nominations and Elections for one of the Director Positions and the Student Director (Kevin Price, Chair, University of Kansas)
- (8) Committee Reports
 (a) Honors Committee (M. Duane Nellis,
 Chair)
 - (b) Student Awards Committee (Timothy Warner, Chair, West Virginia University)
 - (c) AAG Committee on Standards for Geographic Data (Kam Lulla, Chair, Johnson Space Flight Center)
 - (d) Regional Councilors
 - (1) Middle States (Ling Bian, SUNY- Buffalo)
 - (2) NESTVAL (Tom Allen, University of Vermont)
 - (3) Southwest (Mark Jakubauskas, University of Oklahoma)
 - (4) Pacific Coast (Janet Franklin, San Diego State University)
 - (5) West Lakes (Sue Berta, Indiana State University)
 - (6) East Lakes (Dave Lusch, Michigan State University)
 - (7) Great Plains/Rocky Mountains (Danny Vaughn, Weber State University
 - (8) Middle Atlantic (Doug Wheeler, USGS)
 - (9) Southeast (Aaron Moody, University of North Carolina)
 - (e) *Publications Committee* (Dale Quat trochi, Chair, NASA/Marshall Space Flight Center)

Continued on page 5...From the Chair

Cooperative Meetings with the Institute of British Geographers

For Discussion at the RSSG Business Meeting

The Institute of British Geographers (IBG) has inquired about whether the RSSG would be interested in cooperating on a joint offering of paper sessions focused on topics related to geostatistics and remote sensing. The British Remote Sensing Society (RSS), Models and Advanced Techniques (MAT) Special Interest Group, will hold a meeting at the January 1998 IBG annual meeting on quantitative methods in remote sensing with special emphasis on modeling spatial variability (e.g., fractals, variograms), geostatistical analysis (of remote sensing data or in GIS), and integrated analysis of remote sensing and GIS data. In turn, the IBG would like the RSSG to sponsor similar sessions at the AAG meeting in Boston in 1998. The idea is to facilitate collaboration between the IBG and the RSSG and to foster British-American interaction and discussion on these research issues. This collaborative effort would provide a vehicle for potentially jointly editing a special issue of a professional journal (e.g., Geocarto International) on geostatistics, spatial modeling, and remote sensing/GIS integration, and could open a host of opportunities for working with the IBG in exploring different perspectives on geostatistics and related topics in remote sensing. I ask that this topic be considered as an initiative of very high importance at the RSSG Business Meeting in Fort Worth. If you have questions or ideas regarding this cooperative relationship, please contact:

Dale Quattrochi

NASA/Global Hydrology and Climate Center 977 Explorer Blvd.

Huntsville, AL 35806 Tel.: (205) 922-5887

Fax: (205) 922-5723 (fax)

E-mail: dale.quattrochi@msfc.nasa.gov

Student Poster Competition

Eight students are currently entered in the first RSSG/GIS Student Poster Competition. If you would like to visit the posters, the following is a list of entrants. All but one entrant is in Poster Session II on Wednesday, April 2 from 3:45 -5:20 pm:

- Boyce, Ryan. Analysis of Lesser Prairie Chicken Habitat Using Remotely Sensed Data. U. Kansas.
- Burcsu, Theresa. Remote Estimation of Fire Fuel Loads in Oak-Scrub Communities, Merritt Island National Wildlife Refuge, Florida. U. North Carolina.
- Curtin, Kevin. Remote Sensing of Rondonia, Brazil for Hydrologic Analysis. U. California, Santa Barbara.
- Hutchinson, Shawn. Estimating Soil Moisture Over Tallgrass Prairie Using ERS-2 SAR. Kansas State U
- Kaczmarek, Alicia. Understanding Spectral Signatures in Color Composites. Southwest Texas State.
- Stewart, Aimee. Differentiating Land Management Practices Using Multitemporal Satellite Im agery. U. Kansas.
- Volberg, Markus. Frequency-based Contextual Analysis of Urban Land Use from High Reso lution Satellite Imagery. Phillips Universitaet Marburg.

One entrant is in Poster Session III on Thursday, April 3, 10:00 -11:40.

Hedley, Nicholas. Environmental Data Visualiza tion -The Good, The Bad, and The Ugly.
U. Colorado.

Continued on page 4...Student Awards

Nominations Requested for RSSG Outstanding Contributions Award

The RSSG Outstanding Contributions Award and Medal is presented to a selected member (or members) of the AAG and RSSG who have made especially noteworthy contributions to the field of Geographic Remote Sensing. Past honorees have included: Dr. David Simonett (posthumously), Dr. Benjamin Richason, Jr. (posthumously), Dr. Alan Strahler, Dr. John Estes, Dr. John Jensen, Dr. Duane Nellis and Dr. Kamlesh Lulla.

Candidates for the RSSG Outstanding Contributions Award are evaluated by a selection committee appointed by the RSSG board. The Chair of the RSSG Outstanding Contributions Award Committee for the next two years is Duane Nellis (Kansas State University). Other member of the awards committee are Kam Lulla (NASA/Johnson Space Center) and Sue Berta (Indiana State University).

Nominations for the 1997 award are currently invited from the RSSG membership. The selection committee will make recommendations to the RSSG Chair fora final decision. All nominations must be received by March 15, 1997. Nominations must include a letter of nomination and a complete vita for each candidate. Send nominations to:

Dr. M. Duane Nellis Dean's Office College of Arts and Sciences Kansas State University 117 Eisenhower Hall Manhattan, KS 66506-1005 Tel. (913) 532-6900

E-mail: dnellis@queenbee.artsci.ksu.edu

1997 USRA/GSFC Graduate Student Summer Program in Earth System Science

The Universities Space Research Association, in collaboration with the Goddard Space Flight Center's Earth Sciences Directorate, is offering a lim-

ited number of graduate student research opportunities for the Summer of 1997. The Program is scheduled for June 9-August 15, 1997. It is open to students enrolled in or accepted to a U.S. accredited graduate program in the Earth, physical or biological sciences, mathematics, or engineering disciplines. For additional details contact

Roberta Harvey, Program Coordinator

Tel.: (301) 805-8396 or (301) 261-5095

Fax (301) 805-8466

E-mail: rharvey@gvsp.usra.gov.

Student Awards...Continued from page 3.

If you are a student presenting a poster at the conference on a RS/GIS topic, and wish to participate, please contact the RSSG student director, Jerry Griffith, by March 15, 1997.

Jerry A. Griffith
Department of Geography
University of Kansas
Lawrence, KS 66045
Tel.: 913-864-5543

FAX: (913) 864-5378

e-mail: jag@falcon.cc.ukans.edu

NASA Earth System Science Fellowship Program

This Fellowship Program (formerly the Global Change Research Fellowship Program and the Earth Science Graduate Student Research Program) targets students pursuing graduate degrees in fields supporting the study of Earth as a sys-

tem. Applications for research on climate and hydrologic systems, ecological systems and dynamics, biogeochemical dynamics, solid Earth processes, human interactions, solar influences, and data and information systems will be considered. Applications are due March 12, 1997. NASA awards

about 50 new fellowships in September of each year to coincide with the start of the Fall academic semester at U.S. universities.

This announcement and accompanying application forms are available electronically via the Internet at the Mission to Planet Earth homepage: http://www.hq.nasa.gov/office/mtpe under "Publications and Education Programs," and via anonymous ftp at ftp.hq.nasa.gov/pub/mtpe.

A paper copy of this announcement will be available only to those who do not have access to the Internet by calling (202) 358-3552 and leaving a voice mail message with your full name and address, including zip code, and telephone number, including area code.

Questions regarding this announcement can be addressed to:

NASA Headquarters, Code YSP-44 Washington, DC 20546 Attention: Dr. Ghassem Asrar Telephone (202) 358-0273 Fax (202) 358-2770

E-mail: gasrar@hq.nasa.gov

RSSG WWW HomePage

The RSSG WWW HomePage is located at http://www.ksu.edu/rssg/rssg.htm

The homepage includes, or will eventually include, information on RSSG officers, members, links to remote sensing and earth science-related sites, and a message and announcements bulletin board. Most of these are still under construction. Suggestions about page design or contents are welcome. Contact:

Douglas Goodin
Department of Geography
Kansas State University
Manhattan, KS 66506-0801

Tel.: (913) 532-6727 Fax: (913) 532-7310

email: dgoodin@ksu.ksu.edu

USE YOUR NEWSLETTER

The RSSG Newsletter is your vehicle for communicating with colleagues interested in remote sensing. You are invited to send news regarding publications, awards, honors, academic programs, research activities, commercial ventures, students, jobs and other announcements to:

James W. Merchant Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517 Telephone: (402) 472-7531 FAX: (402) 472-2410

Internet: jm1000@tan.unl.edu

If possible, please submit contributions on a disk or via e-mail in Wordperfect or ASCII

From the Chair...Continued from page 2.

- (f) Communications Committee (Doug Goodin, Chair, Kansas State University)
- (9) Program Chair and Vice Chair for Boston, Massachusetts Meetings, March 25-29, 1998 (Kevin Price, Chair, Univerity of Kansas)
- (10) Other Items of Business from the Chair and Membership (Kevin Price, Chair, University of Kansas)
- (11) Social Events Organizers (Dale Quattrochi, Director, NASA/Marshall Space Flight Center; Doug Goodin, Director, Kansas State University)
- (12) Closing of the meeting and attend the RSSG Social Event

You may have noticed in the October 1996 RSSG Newsletter, the K-12 Remote Sensing Curriculum: A Call for Information that was issued by Charles Roberts (Department of Geography and Geology, Florida Atlantic University). I greatly appreciate Charles' willingness to accept responsibility for coordinating RSSG activities in this area. There are a number of our member who are involved in K-12 curriculum development, but I feel our group should provide more formal support for this work. I would like feedback from you concerning ways that RSSG might support the development and implementation of K-12 curriculum. Even my limited experience in this area has convinced me the K-12 teachers would welcome remote sensing educational materials. Students are amazed by the technology and enjoy working with aerial photographs and satellite remotely sensed images. We need to do everything we can to encourage young scholars to major in remote sensing.

Kevin Price Department of Geography University of Kansas Lawrence, KS 66045 Tel.: (913) 864-7723

FAX: (913 864-7789

E-mail: kprice@falcon.cc.ukans.edu

Land Cover Characterization Data Available for Evaluation

The U.S. Geological Survey (USGS) and the University of Nebraska-Lincoln (UNL) have released for evaluation a series of 1-km resolution land cover characteristics data bases for North America, South America and Africa. The data set, part of a land cover characteristics data base that is being developed for the globe, is derived from 1-km AVHRR data spanning a 12-month period (April 1992-March 1993). Seasonal land cover regions provide a framework for presenting the temporal and spatial patterns of vegetation in the data base. The regions are composed of relatively homogeneous land cover associations (e.g., similar floristic and physiognomic characteristics) which exhibit distinctive phenology (onset, peak, and seasonal duration of greenness) and have common levels of primary production. These databases are designed to be suitable for use in a wide range of environmental research and modeling applications. Comments and suggstions are welcome and should be e-mailed to lcc@edcserver1.cr.usgs.gov To access and download the data bases and to obtain additional details, contact WWW http://edcwww.cr.usgs.gov/landdaac/glcc/glcc.html (scroll down to link to Global Land Cover Characterization).

Virtual Nebraska An Online Source for Images of Nebraska

The Consortium for the Application of Space Data for Education (CASDE) is a multi-institutional program aimed at improving K-12 education by facilitating teacher and student access to remotely sensed imagery, image processing tools, lesson plan activities and NASA data holdings. Project partners include the California Institute of Technology / Jet Propulsion Laboratory (JPL), Johns-Hopkins University's Institute for the Academic Advancement of Youth (IAAY) and The University of Nebraska Center for Advanced Land Management Information Technologies (CALMIT). CALMIT serves as the host center providing the infrastructure through which data and information are delivered. Significant progress has been made since the project's inception. Most notable are the development of the Nebraska from Space and Virtual Nebraska web pages. Nebraska from Space features AVHRR GOES imagery. In addition to viewing current images, it is possible to download previous images from the data archive, and view GOES animation loops spanning the previous 24 hours. The Virtual Nebraska home page is the mechanism through which Nebraska-specific remotely sensed data are displayed and distributed. This site provides easy access to space shuttle, satellite, and aircraft imagery, educational resources (guides, on-line tutorials, data and image descriptions), and analysis/demonstration tools (upcoming). For additional details regarding the CASDE project, Nebraska from Space, and Virtual Nebraska, connect to the CASDE home page at (http://www.casde.unl.edu/casde.html). The page can also be accessed through CALMIT's homepageat http://www.calmit.unl.edu/calmit.html For additional details contact:

Brian Tolk or Rick Perk CALMIT/Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517 Tel: (402) 472-4598 or (402) 472-0310

e-mail: tolk@tan.unl.edu or rperk@tan.unl.edu

Remote Sensing Research Centers Kansas Applied Remote Sensing Program

University of Kansas

Established in 1972 by NASA and the State of Kansas, the Kansas Applied Remote Sensing (KARS) Program is celebrating its 25th year as a center for conducting applied remote sensing research. KARS is affiliated with the Kansas Biological Survey and is housed in the Space Technology Center on the campus of the University of Kansas in Lawrence, Kansas. KARS Program staff, comprised of University of Kansas faculty members, researchers, and graduate students, come from a wide array of disciplines in the earth sciences, natural resources sciences, and biological sciences. KARS facilities include industry standard state-of-the-art software, workstations, input devices, and plotters for image processing and geographic information systems research. KARS recently acquired a satellite downlink for capturing AVHRR HRPT (1.1 km) data. KARS is involved in numerous local, national, and international projects that range from joint commercial ventures to NSF-funded global change research. Current projects focus on some of the following areas:

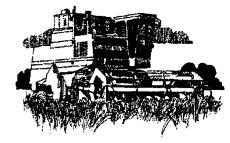
- -The *Green Report*, a commercial joint venture that distributes value-added greenness products over communications links to agri-business industries and others with an interest in monitoring crop health and yield potential.
- -The Gap Analysis Program (GAP), a nationally and locally funded program to map natural habitats for biodiversity.
- -Multitemporal land cover modeling. To update the state's first comprehensive digital land cover map produced in 1993, multitemporal Thematic Mapper imagery is being used to map the state at a high level of detail.
- -Modeling the effects of climate and human influence on the Inner Mongolian and Mongolian grasslands.
- -Modeling habitat for threatened and endangered species in Mexico.
- -Modeling the influence of landscape structure on nonpoint source pollution in the midwestern U.S.

KARS has created a home page (like most home pages, it is under ongoing construction) where many recent and current projects are displayed. You can visit it at: http://arc.kars.ukans.edu. In the near future, you will be able to reach it via its standard alias: http://www.kars.ukans.edu. The digital maps produced by the KARS program for the state land cover mapping project are available via ftp from the State of Kansas Data Access and Support Center at the Kansas Geological Survey: http://gisdasc.kgs.ukans.edu For additional details contact:

Kevin Price Department of Geography University of Kansas Lawrence, KS 66045 Tel.: (913) 864-7723

FAX: (913 864-7789

E-mail: kprice@falcon.cc.ukans.edu



Faculty Position Landscape Ecology/GIS/ Remote Sensing University of Nebraska

Assistant Professor, tenure-track position with 60% teaching and 40% research responsibilities available in the Department of Forestry, Fisheries and Wildlife. Will teach and advise in the Natural Resources and Forestry, Fisheries and Wildlife programs including courses in Integrated Resources Management, Plant Community Ecology, and Landscape Ecology. Will also develop a new course to serve as the foundation course for the department dealing with ecology and field biology. Will focus research on the relationship between environmental patterns and ecological processes, including the pattern and distribution of habitat types and their influence on biodiversity. Requires Ph.D. in landscape ecology, forestry, botany, plant ecology, or related area; strong communication skills; and

commitment to undergraduate education. Important factors in the selection process include experience in the application of GIS to large-scale ecological problems, as well as remote sensing, vegetative community analysis, and biodiversty. A letter of application, complete resume, statements of research and teaching interests, and the names, addresses and telephone numbers of three references should be postmarked by March 24, 1997, and sent to: Dr. Gary L. Hergenrader, Head and State Forester, Department of Forestry, Fisheries and Wildlife, University of Nebraska, 102 Plant Industry Bldg., Lincoln, NE 68583-0814. Phone: 402/472-2944. NU is committed to a pluralistic campus community through Affirmative Action and Equal Opportunity; is responsible to the needs of dual career couples; and assures reasonable accommodation under the Americans with Disabilities Act.



Graduate Research Assistantship Opportunity

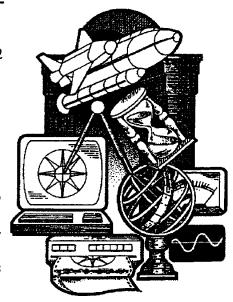
Remote Sensing/Biogeography/ Climatology/Landscape Ecology

> Department of Geography University of Oklahoma

The National Aeronautics and Space Administration recently awarded EPSCoR funds to the State of Oklahoma. Graduate research assistantships are available under this award for a project element titled

Modeling regional-scale vegetation dynamics through integration of Mesonet and remotely sensed data. Applications are solicited from graduate students with an interest in remote sensing, biogeography, climatology, and landscape ecology for 1 or 2 twelve-month research assistantships, starting with the 1997-1998 academic year. It is expected that students working on the project will develop a dissertation project in conjunction with project research objectives. Twelve-month appointment, salary competitive, duration 3-5 years contingent on continued funding.

PROJECT SUMMARY: The primary goal of this research is to use multitemporal remote sensing data at multiple spatial and temporal scales to characterize and model the seasonal and interannual dynamics of natural and managed land cover types as they relate to underlying environmental gradients. Because of its sensitivity to variations in climate, the Oklahoma/Texas/Kansas region may be one of the first areas in the United States to show



significant and detectable changes as a result of global change. Vegetation dynamics will be assessed across a climatological gradient in Oklahoma, with the intent of deriving accurate estimates of vegetation type and condition at multiple spatial and temporal scales. Furthermore, the project will study the effects of spatial scaling and meteorological factors upon satellite estimates of biophysical variables.

For further information and details on how to apply, contact:

Prof. Mark Jakubauskas Department of Geography 100 E. Boyd Street University of Oklahoma Norman, OK 73019

Tel.: (405) 325-4319) Fax: (405) 325-6090,

E-mail: jakubaus@uoknor.edu

WHAT'S NEW

NCDC Satellite Data Home Page

The National Climatic Data Center (NCDC) has added a Satellite Data, Products, and Services page to its home page under the Products, Publications, and Services section. The site includes: high-level information on Polar-Orbiting Environmental Satellites (POES), Geostationary Operational Environmental Satellites (GOES), and the Defense Meteorological Satellite Program (DMSP); detailed listings of available satellite data and products; a pricing and ordering guide; and many examples of retrospective image products created using the Mancomputer Interactive Data Access System (McIDAS). This new Web page can be accessed directly at URL: http://www.ncdc.noaa.gov/psguide/satellite/sathome.html
For additional detailes contact: National Climatic Data Center, Asheville, NC 28801;

Tel.: (704) 271-4800; Fax: (704) 271-4876

ArcScene World Tour

Satellite images are frequently used to help answer questions about the natural environment and the results of human activity: What will be the result of advancing glaciers? What effects will human settlement have on the tropical rain forest? How do volcanism and other natural hazards affect human habitation and land use patterns? ArcScene World Tour CD-ROM is designed to help answer these and other questions, and it provides an opportunity to explore the world using satellite images in an easy, intuitive way. The CD-ROM contains fourteen images from the French SPOT earth observation satellite including Porto Velho, Brazil; Rolim de Moura, Brazil; Cairo, Egypt; Paris, France; Albertville, France; Mount Vesuvius, Italy; Mount Etna, Italy; Mount Sakura-Jima, Japan; Meghna River, Bangladesh; Guangzhou, China; Hubbard Glacier, Alaska; Weddell Sea, Antarctica; and, Mayotte, Comoro Islands. In addition to the satellite images, ArcScene World Tour contains narrative information about applications of satellite images, basic remote sensing concepts, SPOT satellite characteristics and image interpretation concepts. ArcScene World Tour was developed by the Environmental Systems Research Institute (ESRI) in conjunction with the SPOT Image Corporation. The CD includes a custom ArcView interface that allows viewing of all imagery with no additional software. For additional details, contact:

ESRI

Attn: Dan Sherrill (ArcData)

380 New York St. Redlands, CA 92373 Tel.: (909) 793-2853

E-mail: dsherrill@esri.com

NCGIA Core Curriculum in Remote Sensing

The National Center for Geographic Information and Analysis (NCGIA) Remote Sensing Core Curriculum (RSCC) is a logical follow-on to the original NCGIA Core Curriculum in GIS. An urgent need exists for developing educational materials stressing the integration of remote sensing, GPS, and geographic information systems. This project seeks to develop educational materials to advance scientific understanding of the field of remote sensing. A set of eleven core courses were suggested to represent the fundamental topics of remote sensing. Out of the eleven core courses, four were chosen by the steering committee as being high priority. These are:

- 1. Aerial Photography and Introduction to Photogrammetry
- 2. Overview of Remote Sensing of the Environment
- 3. Introductory Digital Image Processing
- **Remote Sensing Applications** 4.

The steering committee members are: Timothy W. Foresman, University of Maryland Baltimore County (Principal Investigator); Tina Cary, EOSAT; Ron Eastman, Clark University, John E. Estes, University of California, Santa Barbara; Nick Faust, Georgia Technical Research Institute; John Jensen, University of South Carolina; Karen K. Kemp, National Center for Geographic Information and Analysis; Kenneth C. McGwire, Desert Research Institute; and Anthony Shupin, EOSAT.



The American Society for Photogrammetry and Remote Sensing has accepted the proposal to house and manage the Remote Sensing Core Curriculum as part of ASPRS's long-term educational commitment. For additional details, see the RSCC homepage located at http://www.umbc.edu/rscc or http://research.umbc.edu/~tbenja1/ or contact:

Dr. Timothy W. Foresman University of Maryland Baltimore County Department of Geography 1000 Hilltop Circle Baltimore, MD 21250 Tel.: (410) 455-3149

E-mail: foresman@umbc.edu

This article abstracted from Foresman, T.W., T. Serpi, J.E. Estes and K. Kline. 1996. NCGIA Curriculum in Remote Sensing in Proceedings of GIS/LIS '96, Denver, CO, November 19-21, 1996.

RSSG Newsletter c/o James W. Merchant Conservation and Survey Division University of Nebraska-Lincoln 113 Nebraska Hall Lincoln, NE 68588-0517