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Editor’s Note

Issues of this newsletter are available on the World Wide Web (www.statlab.iastate.edu/soils/soildiv). Click on NCSS and then on the desired issue number of the NCSS Newsletter.

You are invited to submit stories for future issues of this newsletter to Stanley Anderson, National Soil Survey Center, Lincoln, Nebraska. Phone—402-437-5357; FAX—402-437-5336; email—stan.anderson@nssc.nrcs.usda.gov.

Review of A History of Soil Survey in Nevada

By Stanley P. Anderson, Editor, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.

For an interesting reading experience, check out this book, which was published in the summer of this year. The book was compiled by Paul W. Blackburn, Resource Soil Scientist, USDA, Natural Resources Conservation Service, Elko Nevada. The subtitle is A Compilation of Short Stories Commemorating the 100th Anniversary of the Soil Survey Program. The Preface, by Paul Blackburn and William E. Dollarhide, MLRA Leader/State Soil Scientist, indicates that the history is divided into five eras:

...We began with the first soil survey of the Fallon Area published in 1909, when the first work was done with a plane table and a compass. Work during the second era, 1938 to 1950, started with the plane table, then evolved with the initial use of aerial photos. These surveys were recognized as Physical Surveys and Surveys for Better Land Use.

The third era, 1950 to 1970, had better photography and more effort was focused on interpretations. Mapping was initiated with connotative symbols and reflected the development of soil taxonomy. These surveys were mostly in key agricultural areas and intended for agronomic uses. However, we made our first efforts to meet urban needs with the Soil Survey for the Las Vegas and Eldorado Valleys Area.

The fourth era, 1970 to 1978, was a brief transitional time, which saw the completion of the soil surveys of key agricultural areas and those intended for urban uses. During this brief era a new relationship was forged between the U.S. Department of Interior’s Bureau of Land Management and the Soil Conservation Service. This relationship paved the way for the rapid acceleration of the soil survey program in the fifth era.

The fifth era, 1978 to 2000, saw the rapid acceleration of the soil survey with major input of both time and money by the U.S. Department of Interior’s Bureau of Land Management. During this period, we needed to cover large amounts of country in a short period of time but still provide the quality of range interpretations needed to protect the resources. The information was being used as fast as it was generated and, using the feedback received, Order 3 surveys, with soil/site/landscape relationships, developed.

The book lists the individuals involved in the Nevada soil survey program during the five eras and includes accounts of the experiences of the soil scientists who mapped in Nevada, especially during the second
and fifth eras. These accounts have touches of local color. Grant Kennedy, for example, describes fishing during the second era:

The only fishing I ever did was on a trip into some "badlands"—a series of volcanic breaks—lava beds—through which the “Little Salmon” flows toward Idaho. The stream was somewhat entrenched where we came to it, and to get down into a boxlike canyon, my fellow crew member Charlie York and I took a steep trail where our horses had their front feet forward and their rear next to the ground as we slid downward.

We camped there overnight. My partner had brought string and fish hooks. We each cut a willow for a pole. Using bacon for bait, we soon had six big trout and quit, as that was enough for supper. Never again did I see such good fishing.

Kennedy describes his experiences when he was mapping on the Pyramid Lake Indian Reservation:

...That afternoon, we stopped to spend the night where the Indians had another corral and a small stack of hay. When we got ready to put our sleeping bags on the ground for the night, Pat had the bright idea to get some of the hay and put it under our bed to make it more comfortable. It sounded good to me so we did that and turned in. In the morning as we got up, both of us were itching something fierce and soon discovered the cause. There were little minute critters crawling everywhere—chicken mites! A bunch of chickens had nested in the hay before it was hauled to the site. We went down to the lake and jumped in, clothes and all, and then took off the duds and hung them over the brush to dry. I wore a Stetson western hat, which I liked. Taking it off, I could see those minute forms racing around inside my hat. I tried to rid them by holding the hat over the flames of our campfire. I killed the mites but, sadly, ruined my hat.

Kennedy also describes how they were thrown off the reservation:

We were busy trying to catch up with some map compilation in the “office” at Nixon. It was
almost the last of June. Suddenly, Pat got a telegram telling us to take all of our equipment and leave the reservation and come to Berkeley immediately. We had to be off of the reservation by the first of July. We didn't know the reason for the sudden exodus but orders were orders. We took the pickup back to Yerington and got an earful about the condition of the vehicle but those in the know realized that this was to be expected if you were to do much fieldwork. They wanted me to take another vehicle to Berkeley, so Judy and I went in it and I reported to Stan Crosby at the Regional Office. He explained the reason for our quick getaway from the reservation. Harold Ickes was then Secretary of Interior and, of course, Indian lands were under the Department of Interior. He could be a feisty person at times and he must have gotten into a squabble with someone in the Department of Agriculture of which the SCS was a part. Perhaps it was with Harry Wallace, the Secretary of the Department of Agriculture. Anyway, he told the SCS head to get its men and equipment off of Interior lands before July 1 or he would see that men and equipment were transferred to the Interior.

Warren Archer describes his experience with a “kamikaze cow” during the last era:

One day, as I was driving up a dry wash in the Pine Grove Hills, a cow fell from the sky, missing my truck by just a few inches. I thought this was rather strange so I investigated to see if I could find out where the critter came from. Apparently what had happened was the hapless cow had been grazing too close to the edge of a very steep slope. Presumably, the cow got nervous or excited because it hadn't seen a truck before, lost its footing, rolled to the edge of the cliff, and fell over. What an interesting accident report that would have been had the cow’s aim been a little better. When I came back down later on, it was still twitching so I put it out if its misery with a pick handle. It belonged to Baron Hilton of the Hilton Hotels. Its loss didn’t cause the collapse of his hotel empire.

The book is interesting because of accounts such as these and the historical information it provides. It has an effective cover and is professionally laid out. It is dedicated to Edmund A. Naphan, who was the State Soil Scientist in Nevada from 1950 to 1984. The book is available on the Internet (http://www.nv.nrcs.usda.gov).

**NRCS National Soil Scientist of the Year**

By Joe Moore, MO Leader, Region 17, Natural Resources Conservation Service, Palmer, Alaska.

The NRCS National Soil Scientist of the Year 2000 is Marcus (Mark) H. Clark. Mark is a Soil Survey Project Leader headquartered in Palmer, Alaska. Mark’s nomination was supported by all of the National Cooperative Soil Survey (NCSS) cooperators in Alaska.

Mark’s award was announced by Horace Smith, Soil Survey Division Director, during the West Region Work Planning Conference in June. Mark was unable to attend the conference because of the logistics of his current soil survey assignment. Chuck Bell, Alaska State Conservationist, subsequently presented the award at the annual meeting of the Alaska Association of Soil and Water Conservation Districts.

A graduate of Montana State University, Mark began his career in soil science under the Old West Regional Commission in Montana. He became a permanent full-time NRCS employee in Arizona. In 1983, he transferred to Alaska as a Project Leader.

During Mark’s tenure in Alaska, he has completed soil survey projects for the Copper River Area, the Matanuska-Susitna Valley Area, and the Gulkana River Area. He is currently leading the soil survey of the Denali National Park
and Preserve. All of these positions have involved not only technical leadership and strong supervision, but also full coordination of logistics for remote field camps and survey areas accessible primarily by helicopter, riverboat, or raft.

Mark thoroughly researches and learns all that he can about the tasks at hand. He has become a recognized expert on permafrost-affected soils and soil hydrology. He has coauthored several publications in refereed journals. Upon invitation, he has addressed numerous agency, university, and even international groups and has participated in joint studies. He has been highly complimented for each of these efforts. His international activities include formal presentations on permafrost soils and mapping techniques to the Russian Academy of Sciences in Pushchino, Russia, and field studies and lab sampling of permafrost soils in China and Tibet.

No single achievement can exemplify the knowledge, enthusiasm, professionalism, leadership, and willingness to share that Mark brings to soil science. On numerous occasions he has received high praise from Alaska cooperators. He is respected by the public; by his NRCS peers within Alaska, other States, and the National Soil Survey Center; by State and local agencies within Alaska; by university researchers in Alaska and other States; and by soil scientists and other professionals he has worked with on foreign assignments.

Mark epitomizes the very best that there is in a soil survey soil scientist. He continues to make every field assignment an innovative, challenging experience, and his results set a standard for all other soil scientists to reach. Mark serves as an excellent role model for all soil scientists within both NRCS and NCSS.

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**Keys to Soil Taxonomy Translated**

By Robert Ahrens, Director, National Soil Survey Center, Natural Resources Conservation Service, Lincoln, Nebraska.

**Keys to Soil Taxonomy** was recently translated into Indonesian. Soil taxonomy is an international standard used in classifying soils for the purpose of making and interpreting soil surveys. The National Soil Survey Center (NSSC) is responsible for maintaining the classification system described in the **Keys to Soil Taxonomy**. This document has been translated into the following 12 languages:

- Indonesian
- Malaysian
- Chinese
- Russian
- Japanese
- Thai
- French
- Spanish
- Portuguese
- German
- Korean
- Italian

The NSSC has only library copies of these translations; it does not have copies for distribution.

Because the taxonomic system is used around the world, the NSSC anticipates the need to translate the document into more languages in the future.

For more information, contact:
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Translations of **Keys to Soil Taxonomy** and of **Soil Taxonomy: A Basic System of Soil Classification for Making and Interpreting Soil Surveys**.

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Soil Photography Archive Under Construction

By Tom Reedy, Soil Scientist, National Soil Survey Center, Natural Resources Conservation Service, Lincoln, Nebraska.

The presentation “Soil Survey Photography—Principles and Techniques” is intended to serve as a springboard for soil scientists to accumulate a national archive of a wide variety of high-quality, consistently formatted slide photography. National Cooperative Soil Survey cooperators, universities, international scientists, and the general public can download scanned images. Archived images will be used to illustrate the Soil Survey Manual as it is revised. Eventually, the NSSC will announce a “call for slides” that depict topics to be addressed in the revised Soil Survey Manual.

Any soil scientist can submit slides to the NSSC at any time. The original photographers will be credited for the images in the database. States are encouraged to contribute slides of soil profiles with associated landscapes, diagnostic and morphologic features, soil survey field techniques, interpretations, and sampling and monitoring equipment innovations. The idea is to be creative.

Because the quality of duplicated slides is not acceptable for USDA publications, only original slides will be archived. Original slides are the current standard to which publication images are compared for color proofing. Therefore, when a photo is taken, each scene should be shot twice (i.e., two profile shots, two landscape shots, and two shots of a diagnostic horizon or other feature). Send one original slide per scene. We will scan and retain original slides for future use.

Please include the following information for each slide:

- Photographer’s name
- E-mail address
- Phone number
- MLRA and other location information
- Soil type
- Taxonomic classification
- Geomorphic position
- Feature depicted in the image
- Associated lab data or NSSL pedon number
- Other

Send slides to:
National Leader, Soil Classification and Standards
National Soil Survey Center
100 Centennial Mall North
Federal Building, Room 152, MS 35
Lincoln, NE 68508-3866

We have yet to determine the appropriate Web layout that will best depict thumbnail images or how our users will selectively query and download high-resolution images with associated narrative information. We anticipate that thumbnail images will be interactively queried by categories, such as taxonomic placement, diagnostic horizons, morphologic features, geomorphologic attributes, contributing state, and MLRA. Lab characterization data will be associated with selected images of soil profiles. We look forward to any thoughts and suggestions that you may have.
NRCS-SSSA Soil Planning Guide Soon To Be Published

By Tom Reedy, Soil Scientist, National Soil Survey Center, Natural Resources Conservation Service, Lincoln, Nebraska.

The NRCS 2001 Soil Survey Planning Guide is expected to hit the streets around mid-December. The planner is a collaborative project of the National Soil Survey Center, the Soil Quality Institute, and the Soil Science Society of America. The theme for 2001 is “Soil Biology and the Soil Food Web.” The planner showcases the functions of organisms in decomposing organic matter; in processing organic carbon, nitrogen, and plant-available nutrients; and in enhancing soil structure and waterflow. It introduces a few simple outdoor experiments for K-12 students.

The planner should provide useful information applicable in the fields of education, soil science, and conservation. It is intended to be marketed to a broad audience, including soil and water conservation districts, the National Cooperative Soil Survey partners, state and local officials, educators, and outreach groups.

Copies of the planner can be requested either by contacting the appropriate State Conservationist or by calling the NRCS publications distribution facility in Ankeny, Iowa, at 1-888-LANDCARE.

Assistant Soil Resource Specialist in Cooperative Extension, University of California, Davis

The Soils and Biogeochemistry program of the Department of Land, Air and Water Resources seeks applicants for a career track 11-month appointment at the Assistant Specialist in Cooperative Extension level. The appointee will develop a statewide extension and applied research program in land use interpretation, soil management, and soil restoration. Contributions are expected in extension education, research, and University and public service. The objective of the position is to develop and extend soils knowledge to solve a variety of land-use problems, such as determining land suitability for specific agricultural and urban uses, restoring degraded land, and protecting soil from damage, such as erosion, compaction and salinization caused by improper management. No formal classroom teaching is expected of the individual. The appointee will serve as a link between County CE Advisors and government agency professionals, share responsibility as the University representative to the National Cooperative Soil Survey, and must engage in professional activities and service to the University and public. The position is available July 1, 2001. Applicants must hold a Ph.D. degree in soil science or a related field with an emphasis on pedology (soil genesis and classification).

Applications and inquiries should be made on the LAWR website at (http://lawr.ucdavis.edu). Applicants without access to web resources should contact Michael J. Singer, CE Specialist Search Committee Chair, Department of LAWR, One Shields Avenue, University of California, Davis, CA 95616. Telephone 530-752-7499 or 1406, FAX 530-752-1552, email mjsinger@ucdavis.edu. Applicants must submit: complete curriculum vitae; two-page statement of research and extension interests and background in each; copies of undergraduate and graduate transcripts and the name, address, telephone number, FAX and email address of five references. (Please refer to the website.) Open until filled. To ensure consideration, applications should be submitted by February 15, 2001.

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