In This Issue—

Soil Business Area Analysis Group Reactivated .................. 1
Ten Laws of Soil Survey ................... 2
Marbles ........................................ 2
The Soils Explorer Project ................... 3
State Soils .................................... 4
Icomanth Soils Tour ....................... 5
Poems About Soil Taxonomy ................ 6
Correlator’s Lament ............................ 6
First Approximation to the Seventh Approximation ............ 7
Urban Soils Symposium..................... 8

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—sanderson@nssc.nrcs.usda.gov.

Soil Business Area Analysis Group Reactivated

By Jon Gerken, Soil Scientist, USDA, Natural Resources Conservation Service, Columbus, Ohio.

The Soil Business Area Analysis Group (SBAAG) was reactivated in October 1998. The group’s function is to analyze the overall need for automation of soil survey technical and operational processes. The personnel working with SBAAG include the following: Horace Smith, executive sponsor; Jon Gerken, Ohio, chair; Terry Aho, Information Technology Center (ITC), Ft. Collins, Colorado; Jodi Boyce, Colorado; Wayne Gabriel, Texas; Ken Harward, ITC, Ft. Collins; Rich Jaros, Utah; Russ Kelsea, National Soil Survey Center (NSSC), Lincoln, Nebraska; David Kriz, Florida; Carmen Ortiz, program analyst from California; Johnny Patterson, forester at the NSSC in Lincoln; Panola Rivers, Pennsylvania; Kathy Swain, New Hampshire; and Cleveland Watts, North Dakota. Tom Calhoun, from Division Headquarters, and Bill Puckett, from the Southeast Regional Office, serve as advisors to the group, and Bill Adams, with the Resource Inventory Support Branch in Ft. Worth, serves as a liaison from that group.

During its first two meetings, the group developed a list of issues that were identified by staff around the country and began the task of selecting the issues that would be addressed first. The initial list includes 98 issues. These were discussed and grouped by topic, and eight issues were selected as the ones the group would deal with first. These eight issues include the following:

1. Project office connectivity
2. Integration of a spatial perspective into NASIS
3. Sharing of data across MLRA office boundaries
4. Support and maintenance of NASIS
5. Tools for technical soil services
6. Distribution of official data to various users and applications
7. Guidance and standards for data base development
8. Pedon data conversion

Many people have told the group members that the functions of SBAAG should be publicized widely because of the need to keep soil survey staff informed about issues that have been identified for the group to handle, items that are being dealt with by the group, and actions that will be taken in response to these items. The group is very concerned that information be made as accessible to the field as possible. Several avenues are already being used to address this concern. We will periodically provide reports to the states through correspondence. The states should distribute this correspondence to all soil survey staff. We will be providing updates through presentations at meetings and though informational articles.

SBAAG continued on page 2
such as this one, whenever possible. Also, we are looking at other avenues that might be used to keep people informed and help them deal with information regarding SBAAG activities. Terry Aho is leading this effort. If there are issues that require attention in dealing with SBAAG information, Terry would welcome comments. The group will develop methods that can be used to provide the functions needed.

Three additional meetings of SBAAG have been scheduled to date. They are for the weeks of April 26-30, July 12-16, and October 25-29, 1999. Comments, suggestions, or questions can be sent to any members of the group. Any of them would be happy to discuss new ideas and present them at our next meeting.

Ten Laws of Soil Survey

By an old soil correlator who just tried to do his best to serve the Soils Division. From “Stories, Tales, and Bald-Faced Lies,” edited by Henry Mount, Soil Scientist, USDA, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.

The ten laws of soil survey (arranged in David Letterman fashion) that are not mentioned in the National Soil Survey Handbook are as follows:

10. The Party Leader will make every attempt to discredit the previous soil survey, no matter how good it was.

9. Ninety percent of the correlation time will be spent on twenty percent of the taxonomic unit descriptions.

8. A “new” soil will be discovered during the last month of the survey, then correlated into nonexistence.

7. Few fine faint mottles will magically appear in at least one taxonomic unit description for classification purposes near the end of the survey.

6. Support to complete the survey will be pulled away from the Party Leader before the last acre is mapped.

5. The soil survey office will have the oldest computer equipment in the state.

4. The District Conservationist will attempt to steal at least one new vehicle that was supposed to be delivered to the soil survey staff.

3. All notes, special studies, transects, photographs, and other supporting documentation will be lost within 2 years after the survey is completed.

2. All taxonomic unit descriptions will be assembled longhand and without the use of computer tools, such as PEDON.

1. The State Office Soils Staff will rewrite the entire soil survey manuscript prepared by the Party Leader, dismantling every instance of creativity that was in the draft manuscript. An English editor will then completely rewrite the rewritten soil survey manuscript, which will then be published with the Party Leader’s name as the author.

Marbles

By Dr. Don Franzmeier, Agronomy Department, Purdue University. From “Stories, Tales, and Bald-Faced Lies,” edited by Henry Mount.

Dr. Bob Ruhe was involved in the Desert Project during its early phases. Some of the soils had much more carbonates than could be attributed to the parent material in the area. Brilliant soil scientists during that period deemed that atmospheric inputs in the form of dust must be the reason for these high amounts of carbonates. Early attempts to trap the dust descending into the desert resulted in dismal failures. Dr. Ruhe came up with the idea that marbles placed in boxes would be effective in trapping the atmospheric dust. He was correct, and more research using marbles was deemed necessary.

Soon he had to order more marbles for this research—500 pounds of compact glass spheres. It was about a week later when someone from GSA called him.

“Dr. Ruhe, I got your order, and I think there must be some mistake. You have ordered 500 pounds of marbles.”

“That’s correct,” Bob replied.

“Why do you need that many marbles?”

“My graduate students lost theirs, and I have to replace them,” he deadpanned.
The Soils Explorer Project

By Adrian Smith, GIS Specialist, USDA, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.

The Soils Explorer is a digital soils data viewer featuring a certified Soil Survey Geographic Data Base (SSURGO), delivered to the customer on a CD-ROM. The user can browse through the digital soils map and accompanying reference data, selected interpretations, and a photo gallery with pictures of soil profiles, landscapes, and block diagrams.

The Soils Explorer project is currently in Phase II. The technical and business requirements for this phase were determined with input from soil scientists, data base managers, and evaluations of the Phase I prototype (released October 1997) sent in from field staff and other customers. The program now features a cleaner look on screen and utilizes the depth and richness of the data.

Some new features are:
- Tabbed pages
- Interpretation value tool tip
- Interpretation for dominant condition
- Detailed information box (shows component table)
- Legend for similar and dissimilar limitations
- Help pages for all topics
- Location map for extents
- Photo gallery
- Status bar
- WWW hot links

Interpretations for the Soils Explorer include selections for agriculture, forestry, range, recreation, soil properties, urban uses, and wildlife habitat. To generate yield and suitability interpretations, states were asked to identify the crop and/or tree species commonly grown in chosen survey areas. This approach will allow field staff members to evaluate the program with data well known to them.

Forty states offered to participate during the production stage of the project. They are working with staff at the National Soil Survey Center to prepare reference data and files for the program. In return, the states will receive five copies of the Soils Explorer CD-ROM for their selected surveys.

The Information Technology Center completed the program for Phase II in November 1998. Since then, the production team, located at the National Geospatial and Cartography Center, in Fort Worth, Texas, has created the image background and Soils Explorer program for nine survey areas. This team is completing about one survey per week. The master CD-ROM’s are sent to the National Production Services Staff, where they are used to make the finished product for the states.

For more information about the Soils Explorer, please visit the web site, located at www.statlab.iastate.edu/soils/nssc/explorer/soilex.htm.
State Soils

By Gary Muckel, Soil Scientist, USDA, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.

Soil scientists at the National Soil Survey Center are coordinating this effort with the help of other soil scientists from the United States Department of Agriculture, Natural Resources Conservation Service, including Chuck Gordon, Montana; Frank Watts, Florida; Ronnie Taylor, New Jersey; and Dennis Potter, Missouri. Each selected state soil has a picture of the landscape and a soil profile. A soil description and laboratory data are provided. Teachers and students are the intended audience. The state soil selection process has proceeded through the state legislature for official designation in several states. Professional soil science societies or the cooperative soil survey participants have made designations in other states. Approval of the state soil has yielded tremendous marketing results within some states.

Following is a list of the state soils of the United States and representative soils of Puerto Rico and the Virgin Islands, as of November 10, 1998:

<table>
<thead>
<tr>
<th>State soil</th>
<th>Established by legislation</th>
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<tbody>
<tr>
<td>Alabama</td>
<td>Bama</td>
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<td>Alaska</td>
<td>Tanana</td>
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<td>Arizona</td>
<td>Casa Grande</td>
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<td>Arkansas</td>
<td>Stuttgart</td>
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<td>California</td>
<td>San Joaquin</td>
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<td>Colorado</td>
<td>Seitz</td>
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<td>Connecticut</td>
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<td>Delaware</td>
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<td>Florida</td>
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<td>Georgia</td>
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<td>Hawaii</td>
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<td>Ruston</td>
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<td>Maine</td>
<td>Chesuncook</td>
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<td>Maryland</td>
<td>Sassafras</td>
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<td>Massachusetts</td>
<td>Paxton</td>
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<td>Michigan</td>
<td>Kalkaska</td>
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<td>Minnesota</td>
<td>Lester</td>
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<td>Mississippi</td>
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<td>Missouri</td>
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<td>Montana</td>
<td>Scobey</td>
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<td>Nevada</td>
<td>Orovada</td>
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<td>New Hampshire</td>
<td>Marlow</td>
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<td>New Jersey</td>
<td>Downer</td>
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<td>New Mexico</td>
<td>Penistaja</td>
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<td>New York</td>
<td>Honeoye</td>
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<td>North Carolina</td>
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<td>North Dakota</td>
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<td>Oregon</td>
<td>Jory</td>
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<td>Pennsylvania</td>
<td>Hazleton</td>
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<td>Rhode Island</td>
<td>Narragansett</td>
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<td>South Carolina</td>
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<td>South Dakota</td>
<td>Houdek</td>
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<td>Tennessee</td>
<td>Dickson</td>
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<td>Texas</td>
<td>Houston Black</td>
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<td>Utah</td>
<td>Taylorsflat</td>
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<td>Vermont</td>
<td>Tunbridge</td>
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<tr>
<td>Virginia</td>
<td>Pamunkey</td>
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<tr>
<td>Washington</td>
<td>Tokul</td>
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<tr>
<td>West Virginia</td>
<td>Monongahela</td>
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<tr>
<td>Wisconsin</td>
<td>Antigo</td>
</tr>
<tr>
<td>Wyoming</td>
<td>Forkwood</td>
</tr>
</tbody>
</table>

Representative soil

Puerto Rico   Bayamon
Virgin Islands Victory
Icomanth Soils Tour
By Henry R. Mount, Soil Scientist for Classification and Standards, USDA, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.

Representatives of the International Committee of Anthropogenic Soils (ICOMANTH) met in Nevada and California for a two-week workshop and tour from September 21 to October 1, 1998. Over 40 scientists from the United States, Germany, China, Slovakia, and Russia assembled for a two-week agenda that began in Las Vegas, Nevada. Ray Bryant, Professor of Soils at Cornell University, presided over the meetings.

Horace Smith, Director of the Soil Survey Division, gave the keynote address, entitled “Washington, D.C., Soil Survey.” Horace informed the attendees that the Washington, D.C., survey started in 1974 and was published in 1976—in time for the 1976 Bicentennial. There were 44,000 acres, or 69 square miles, in this soil survey area. The area was mapped and published at 1:12,000. Horace completed the map finishing. Nearly 150 map units were correlated in the survey because of the complex geology and the fact that the survey area occurred in two MLRA’s. Since the city of Washington is 200 years old, the survey turned out to be a research project. Eighty percent of the soils in the city are disturbed. Horace informed the attendees that NHQ leadership in the 1970’s was not willing to allow scientists to use series names for Udorthents. He stressed that it is in the best interest of science that administrators not close the door to positive changes in Soil Taxonomy.

The ICOMANTH tour started in Las Vegas and finished in San Francisco. The larger dots show the stops along the way.

Maria Gerasimova from Russia (with microphone) discusses the significance of the San Joaquin soil, while John Kimble (NRCS, National Soil Survey Center) and Kerry Arroues (NRCS, California) compare notes.

Tour continued on page 8
Poems About Soil Taxonomy

Stanley Anderson, the editor of this newsletter, was given the following poems. Included with the first poem was a note by A.H. Paschall dated 12/64. The note reads as follows: “This ‘Correlator’s Lament’ was found among W.S. Ligon’s effects. It was given to me by Mrs. Ligon—with permission to pass it on to interested people.” W.S. Ligon was a soil correlator in the agency now known as the Natural Resources Conservation Service.

Correlator’s Lament

A man there was, Guy Smith by name,
Inventor of a guessing game
To put all other such to shame.

This game, though based upon the soil,
Consisteth chiefly of turmoil
And is a cause of endless toil.

This brainstorm hardly had begun—
Out popped Approximation 1—
And we thought that the job was done!

But ’ere the ink had time to dry,
Our hero made another try.
His second draft bloomed but to die.

Then came Approximation 3;
Our weary eyes began to see
The 4th would not the last one be.

The 5th Approximation found
Us on the ropes and giving ground
From going round and round and round.

The 6th was just a stepping stone,
To make us swear and sweat and groan—
To make us want to be alone

In padded cells, from which to cry
At every sane man passing by
And sense his sympathetic sigh.

Herr Smith now thought the time was ripe
For high-brow nomenclature tripe,
While we were all too beat to gripe.

Now we engage in hide-and-seek
With Sanskrit, Latin, Smith and Greek;
The future never looked more bleak.

But friends, you haven’t heard the half.
Try glossudalfic Fragaqualf
And Albaqualfic Typustalf.

And haplic cryptic Cryudents,
And orthustentic Psammustents
And hyperbolic Haplaquents.

And rhodochruentic Typumbrults
And typumbrultic Rodochrults
And chrodotypic Brultorhults.

We’ve made a lot of Pfalsistarts
And let a lot of Psuephopharts
And spun the wheels upon Ourcarts.

Despite the 7th being bound
We still cannot get off the ground;
The spit and polish keeps us downed.

If one of us is still alive
In 19 hundred 65
There is no doubt that he will strive
To get past sub-group and to see
What he can do with family.
It may be you! It won’t be me!

(Praise Allah!)

1 The editor made the following changes in the text of this poem:
1. Added periods at the end of line 3, stanza 1; line 2, stanza 4; and line 1, stanza 12.
2. Deleted a period at the end of line 3, stanza 7.
3. Changed “Psammustent” to “Psammustents” in line 2, stanza 13.
4. Changed a comma to a period at the end of line 2, stanza 16.
I once was happy as could be
Until this fellow Smith, Guy D.,
Fouled up soil classification
With his seventh approximation.

I can only sit and ponder
Till my mind begins to wander.
How can mortal mind recall
Cryaqueptic Haplaquall?

Or whose mind would not be rent
By Thapto Mollic Hapludent?
And what strong man has never wept
O’er Quartzopsammentic Haplumbrept?

But I must try to learn you all,
Hapludox and Hapludoll,
And Oxisol, Aridisol,
And it’s enough to make me bawl.

For I had just learned Latosol.
And what became of Pratosol
And Entisol and Vertisol?
Most people think it’s dirt, that’s all.

I must admit that I get weary,
And at times my eyes get bleary,
When I behold Altalf, Altoll,
Aquept, Aquent, Aqualf, Aquoll.

And Altic or Histic Glossaqualf,
Or Aquic, Orthic Glossudalf,
Or Natric or Cumulic Haplaltoll,
And is there no relief at all?

But now I’ve spent my whole vacation
Learning this seventh approximation.
Now I find that I can speak
In terms I’m sure would choke a Greek.

I can say the whole darned list
Without a slip, without a twist.
Just one more thing before I quit,
To learn which soils these names should fit.

Anonymous
Tour continued from page 5

Following two full days of scientific presentations in Las Vegas, the attendees rode nearly 1,000 miles by bus throughout Nevada and California and examined 16 human-altered soils. Numerous stops illustrated that many of the soils of the Great Central Valley in California have been ripped, slipped, dipped, and tipped. John Kimble, Research Soil Scientist, and Robert Ahrens, National Leader for Classification and Standards, coordinated these stops with assistance from NRCS soil scientists in Nevada and California and members of the Professional Soil Scientist Association of California (PSSAC).

At each site, protocols set up by the organizers of the ICOMANTH TOUR were enforced. First, a local scientist explained the human-altered influence on the site, and then the attendees were allowed to take pictures. Next came a period to observe the soil, usually in a pit excavated with a backhoe. Each stop concluded with discussions of the significance of the soil and how one might deal with human-altered soils either in the present system described in Soil Taxonomy or in a system of new taxonomic categories. Assigned attendees documented all discussions.

Five working groups met periodically throughout the tour. Leaders of these groups presented their recommendations during the final day in Burlingame, California. A collection of papers by the presenters is being assembled and will be distributed during 1999. In the meantime, an Internet address of the 1998 tour can be viewed by logging on http://www.scas.cornell.edu/icomanth/.

Urban Soils Symposium

By Joyce Mack Scheyer, Soil Scientist, USDA, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska.

Soils in urban areas will be the focus of a symposium to be held during the 1999 annual meetings of the American Society of Agronomy, the Crop Science Society of America, and the Soil Science Society of America (ASA-CSSA-SSSA) from October 31 to November 4. The symposium is sponsored by Division S-6 (Soil and Water Management and Conservation). Urban areas are defined as population centers and the surrounding watersheds that support human communities with food, drinking water, storm-water outlets, building materials, waste disposal, recreation lands, and other natural resources. We especially welcome papers reporting research and monitoring of physical, chemical, or biological soil processes and heavy metal toxicity in urban environments. Participants are encouraged to discuss procedures in urban soil mapping, development of soil interpretations, measurement of use-dependent soil properties, or implementation of soil-based guidelines for land-use planning.

The oral and poster sessions will include invited as well as volunteered papers on the function of soils in urban areas (both natural and human-affected soils), at the site, landscape, and ecosystem scales. Please indicate interest in the Urban Soils Symposium on the Title-Summary Forms available in Crop Science-Soil Science-Agronomy News. Title-Summary Forms are due at ASA headquarters by March 26. For more information, contact Joyce Mack Scheyer, Soil Scientist, USDA, Natural Resources Conservation Service, National Soil Survey Center, Lincoln, Nebraska, 68508-3966; phone, 402-437-5698; fax, 402-437-5336; e-mail, jscheyer@nssc.nrcs.usda.gov.

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