National Cooperative Soil Survey Newsletter

February 2009
Issue 46

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Editor's Note

Issues of this newsletter are available on the World Wide Web (http://soils.usda.gov/). Under Quick Access, click on NCSS, then on Newsletters, and then on the desired issue number.

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

Announcement of the 2009 National Cooperative Soil Survey Conference in Las Cruces, New Mexico

By Maxine Levin, Soil Scientist, NRCS, Soil Survey Division, Washington, D.C.

Registration is open for the 2009 National Cooperative Soil Survey Conference, which will be held May 9-16, 2009, in Las Cruces, New Mexico. The theme of the conference is "Soil Survey—Ecological Relationships and Soil Change in the New Soil Survey."

In 1894, Congress created the USDA, Weather Bureau-Division of Agricultural Soils "for study of climatology and its relation to soils." Milton Whitney was appointed Chief. Whitney is generally given credit for facilitating the concept of the National Cooperative Soil Survey (NCSS), which was established in 1899. Currently, the National Cooperative Soil Survey coordinates technically and operationally at National, regional, and State levels. Its activities relate to the technology involved in the collection, management, and presentation of information about the properties, patterns, and responses of soils. They also relate to other concerns, such as training and coordinated research and operations. Workshops, meetings, and conferences are held at each level to discuss and resolve issues, proposals, and recommendations for the cooperative soil survey.

Participants in the National Cooperative Soil Survey include representatives from the 1862 land-grant universities, agricultural experiment stations, the Natural Resources Conservation Service, U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, Environmental Protection Agency, United States Fish and Wildlife Service, the National Association of Consulting Soil Scientists, the 1890 land-grant universities, and western tribal colleges.

A New Mexico landscape.

The 2009 National Cooperative Soil Survey Conference will be hosted by New Mexico State University, Las Cruces, New Mexico; the Natural Resources Conservation Service, Soil Survey Staff, Albuquerque and Las Cruces, New Mexico; the U.S. Forest Service, Albuquerque, New Mexico; and the Agricultural Research Service, Jornada Experimental Range. This conference will provide an opportunity for U.S. and international representatives from cooperating universities, governmental agencies, and the private sector to meet and address issues of concern to soil science and to the National Cooperative Soil Survey. This year, students are encouraged to participate by preparing

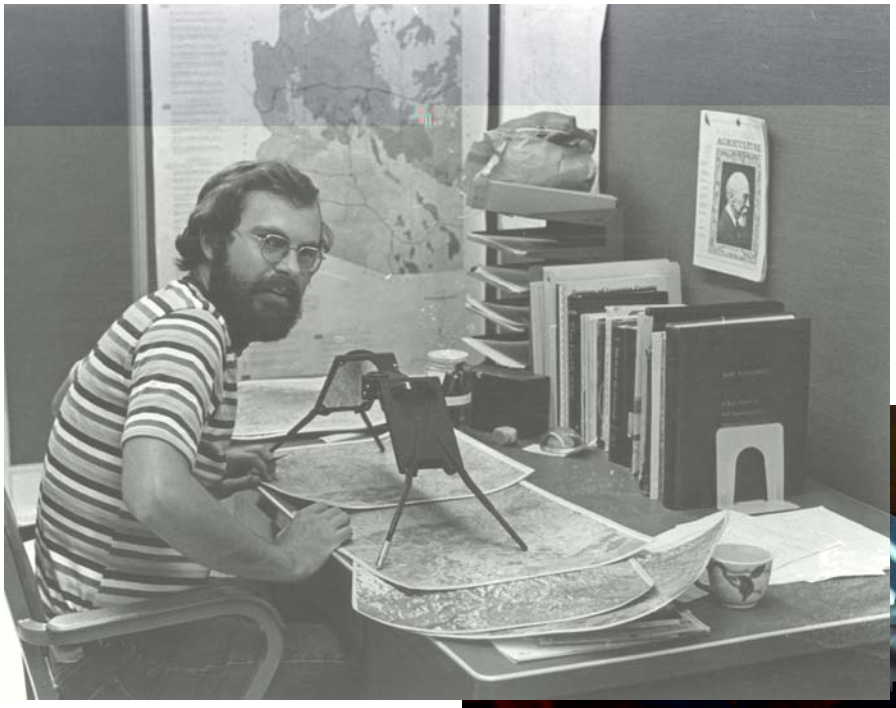
A picture from the *Soil Survey of White Sands Missle Range, New Mexico, Parts of Dona Ana, Lincoln, Otero, Sierra, and Socorro Counties,* which was published in 1976. The caption reads as follows: Gypsum dunes. The White Sands National Monument is predominantly Active dune land, gypsum.

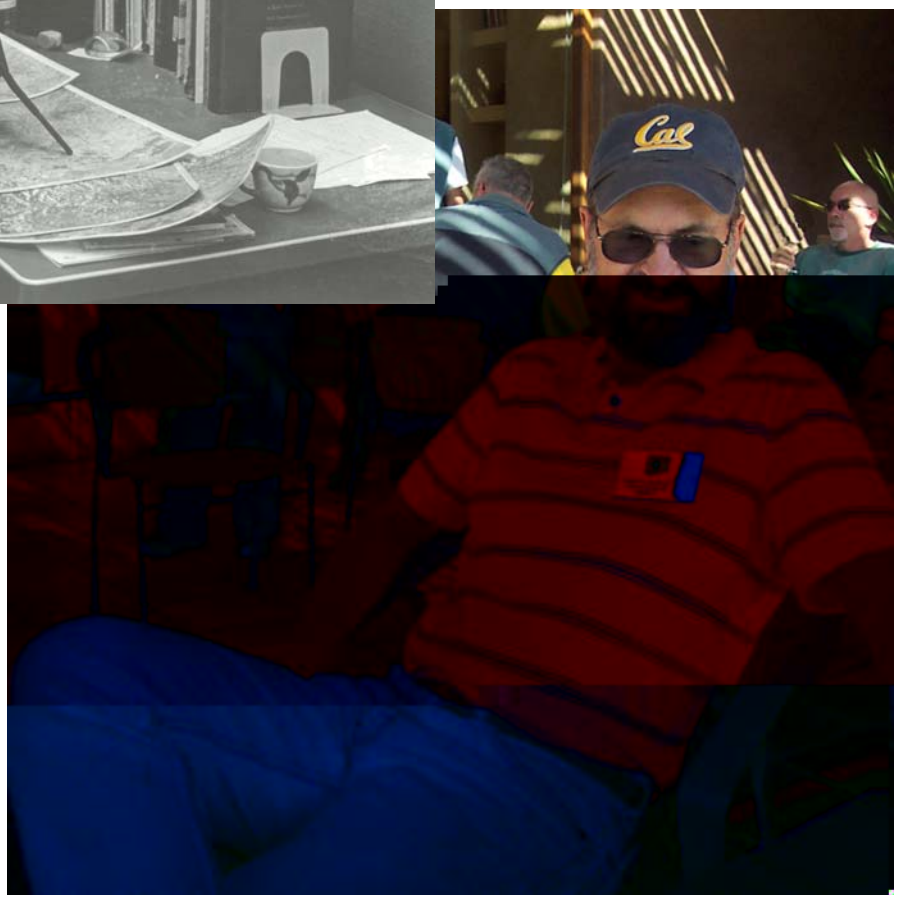
either a poster or another kind of presentation for the conference. As an incentive, the conference can be attended by students at a significantly reduced rate.

All those attending this conference are encouraged participate in the optional field tour of White Sands Missile Range on Sunday, May 10; in a field workshop on desert landscapes, ecological site descriptions, and dynamic soil properties at the Agricultural Research Service, Jornada Experiment Range, on Tuesday, May 12; and a field tour of Mesilla Valley on May 13 to observe soil quality field evaluation on agricultural lands. Participants must register before the conference for the field tours, particularly the Sunday trip to the White Sands Missile Range, which will entail a low-level security clearance. The conference business will begin on Monday morning (May 11) with a special general session for international guests and students and will continue through Friday morning with workshops, speakers, and committee meetings. There will be a poster session/computer demonstration on Monday night. This session will include a student poster competition. Awards will be presented to the winners during a luncheon banquet on Thursday.

If you have questions about the conference, please contact Maxine Levin, NRCS, Soil Survey Division, Washington, D.C. (telephone—202-720-1809 and email—maxine.levin@wdc.usda.gov) or H. Curtis Monger, Professor of Pedology and Environmental Science, Department of Plant and Environmental Sciences, New Mexico State University, Las Cruces, New Mexico 88003-8003 (telephone—575-646-1910; fax—575-646-6041, and email—cmonger@nmsu.edu).

Information about the agenda, registration, and committee contacts and descriptions is available online (http://soils.usda.gov/partnerships/ncss/conferences/2009_national/). ■





Left: **Bob Ahrens back in the day. Note the picture of Eugene W. Hilgard (1833-1916) and the 1975 edition of *Soil Taxonomy*.**

Bottom: **Bob Ahrens taking a break while on a tour in Chile about a month before his retirement.**

Retirement of Robert Ahrens, Director, National Soil Survey Center

From an email message Bob sent to the staff of the National Soil Survey Center in December of 2008.

Subject: The end is near

I have always been a big fan of Hilgard. After all, I took classes in Hilgard Hall, marveled over his collection of soils, still stored in their original glass jars, and admired the classical homes on Hilgard Ave. Only a true admirer would admit all this. Now comes the good part. Well over 30 years ago, I cut a picture from a magazine of Hilgard in his later years and framed it. Throughout my career, I displayed this picture and promised myself when I started looking old and decrepit like the picture of Hilgard, I would retire. Well, the time has come.

This is the first time in my life that I don't have a definite plan, other than retiring and moving to Sheridan. It's both exciting and a little scary. We have been enjoying the Big Horn Mountains for many years and will continue to do so. I'll also get involved with volunteer work and may even work part-time. Time will tell. ■

Effects of a Fire on a Soil Survey Office in Colorado

By Charles ("Chuck") Peacock, Project Leader in Moffat County, Craig, Colorado, at the time of the fire; currently, Soil Scientist at the MLRA Office in Grand Junction, Colorado.

So, you've had a particularly bad day at work, and you think to yourself, "I wish this place would just burn to the ground!" You don't think much more about that idea, but it has been a passing joke in most work places. But then there are slightly more thoughtful questions, such as "What would you grab on the way out if you knew the building was burning down?" or "What would all the impacts be if this building burned?" These thoughts are also tossed about, and we typically shrug them off, believing, "Nah, it'll never happen here, or to us, or to me." I wish!

On the weekend after the Thanksgiving holiday last year (2007), the building housing the USDA Service Center and several private offices in Craig, Colorado, caught fire. The fire burned through Sunday night and into Monday morning, resulting in a total loss of the building and everything in it. Fortunately, a veterinarian's office in the building had no animals boarded at the time. About half of the walls of the single-story building, 22,000 square feet in size, are left standing. Other than that, you could say that the building burned to the ground.

I drove to work that Monday morning, ready to get back to the grind after a long holiday weekend. I saw the lights down the road and thought that someone had been stopped for a traffic violation—no big deal. Then I saw smoke drifting and more lights. "A fire! Man, someone's having a bad morning." As I got closer, it became obvious that the smoke was coming

Burning of the building housing the USDA Service Center in Craig, Colorado.

from the building that housed my office. That was just the initial shock. I optimistically thought, "Surely they were able to contain it to a small part of the building." Then I pulled into a parking lot across the street to get out of traffic and a get better view. That's when my jaw hit the floor. The whole building was still burning. The entire roof was gone (fallen), and flames were still shooting out in spots. Many of the walls on one side of the building had fallen in. I moved to get a better look through my office windows. The large new skylight lit up the smoldering rubble quite nicely—lots of smoke and a few flames. The only things recognizable were the twisted remains of metal bookshelves. Un-believable!

After a few minutes of gawking and not saying much, we tossed a few jokes around, but we were really just trying to get a handle on the situation (at least I was). Rick Stephenson, the DC in the field office, had been there a while and was already letting people know what happened and getting new

Fighting the fire.

Still fighting the fire.

communications going. I was trying to think of specific things that were gone and couldn't be replaced—difficult to do when in shock.

After the shock wore off (which took a couple of days), the magnitude of the loss started to set in. It sounds pretty selfish, but I was thankful that it was "only" my office and not my house. The complete devastation of a building fire is overwhelhat'.ifelv and beeperensrealla of.

kind of thing before. My perspective about fire has changed a bit, and I can understand the feeling of total loss experienced by someone who has lost everything in a house fire.

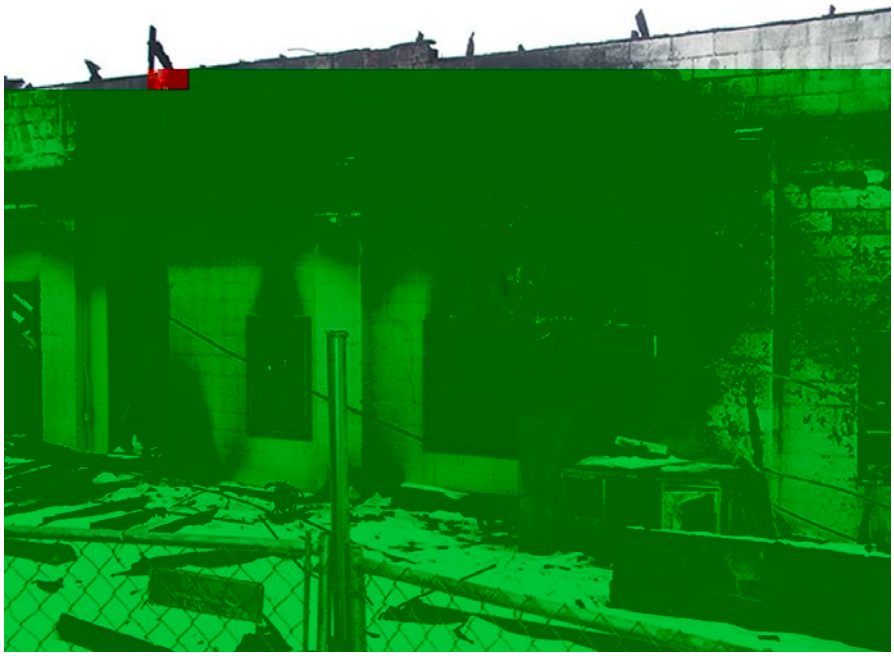
I lost only about $2,000 worth of personal items, mostly in the form of text and reference books that I had accumulated over the years. Some wall maps, photos, and other small but sentimental items were lost. It's a similar scenario for most of the other people in the USDA offices. However, the private businesses had far more personal loss.

Impacts on the Soil Survey Office

I have been working to finish the soil survey of Routt County for a few years now and am pretty close to wrapping it up. This entailed some final field work and data collection, refining the map work a bit and editing the NASIS database. We have just finished getting the digital maps SSURGO certified, and now my main focus is on finishing the database.

The fire was deemed to be caused by arson. Although the investigators and insurance people are finished with their work, we are not allowed to go in because of an asbestos problem. It would likely be a dangerous and difficult task anyway. Even in the unlikely event that something wasn't burned or water damaged, the building is still considered to be unsafe and unusable because it is likely contaminated with asbestos. That leaves us with literally nothing left to work with in the form of hard copy data. Even the soil box samples are gone. So now we turn to the data that was in electronic form and backed up.

Here's the good news! We had just finished getting the digital map layer



The soil survey office.

A close-up through the window of the soil survey office.

SSURGO certified the previous summer. Several years ago we had also scanned the original field sheets into tiff files, and there are several copies of those in various places. The originals were handy in case there was something I couldn't read from the scans. Since we already went through certification, this will be even less of an issue if it is one at all. So, maps are not a problem.

Now for the bad news. I had been editing the NASIS database with the original pedon descriptions, transects, and map unit notes that were all placed nicely in their proper folders in the file cabinets. I also had been using the historical map unit descriptions from decades past (this is an old survey). These were in three-ring binders on my bookshelves. Yes, you guessed it. None of these were in electronic form. In some cases there were duplicate hard copies, but they were all still in the same building. In every soils office I've worked in, I have considered scanning the hard copies of all the documentation but never followed through because always I thought, "It'll never happen to me" and "I've got other things to do." It is now a new mandate in Colorado to scan all hard copy documentation to pdf files.

My challenge now is to glean as much information as I can from the historical data that was backed up electronically on the office's server. Fortunately, I do have some relatively recent draft map unit descriptions and taxonomic unit descriptions that I can get data from, but they are typically incomplete. NASIS also has data but, like the old electronic MUDs and TUDs, the database is not complete. These are basically all I have to work with at this point. I have about 50 map units left to edit in NASIS. I am currently evaluating the available data for each map unit and will have to decide on the amount of additional documentation that will be needed in order to finish the survey… quickly!

Lessons Learned

This is pretty simple. In this day and age of everything conceivable existing in electronic format, it is a "no brainer" to convert all hard copy data into electronic format. Don't let the thought "It won't happen here!" sway you from the task. Now that we are on the verge of getting field documentation directly into an electronic format using Pedon PC and tablet computers, the need to scan paper copies or manually enter data should be reduced in the near future. In fact, it should be a nonissue at some point. Not that you should not carry paper anymore; you never know when the computer will fail.

But there is another big lesson to be learned beyond getting everything into electronic format. Once it is in that format, back it up, more than once, and store it at different locations. Also, make sure the backup is done properly! It's quite disappointing when you actually need the backup data and find that it is unusable or part of it is missing. This happened to some folks in the office. A portion of the server was not backed up properly, and consequently some data was lost. It did not affect the soil survey office much, but it could have.

I think the soil survey office came through this with relatively minor "injuries." It could have been much worse. The added workload of gathering more documentation and the lost time will certainly extend completion a few months. There is something for us all to learn from the experience. Don't be complacent, and don't think that it won't happen to you. Be prepared for the worst! ■

Prairie Chickens in Soil Surveys

By Stanley P. Anderson, Editor, NRCS, National Soil Survey Center, Lincoln, Nebraska.

In the fall of 1985, I received a speed memo from John Doll, Soil Scientist, SCS State Office in Illinois, asking my opinion of three pictures of prairie chickens that were being considered for inclusion in the soil survey of Jasper County, Illinois. One of the pictures was not suitable for publication, but the other two, taken by Tom Ulrich, a professional photographer, were really good. Part of my response to John's memo is as follows:

> I think we should use the two pictures taken by the professional (the male booming and the two males fighting). Credit can be given in the caption ("Photo courtesy of..."). A possible caption for the two pictures is, "Typically, the male prairie chicken is interested in sex and violence."

I do not know why the pictures were not included in the survey when it was published in 1992. The section "Wildlife Habitat" includes a paragraph about prairie chickens, where the pictures could have been referenced (with or without my suggested caption).

In 1999, I asked Bob McLeese, State Soil Scientist in Illinois, if he had any "quotable quotes" about the National Cooperative Soil Survey that I could include in the NCSS Newsletter in honor of the NCSS Centennial. Bob's response included the 1985 speed memo in which John Doll and I had communicated about the pictures of prairie chickens. Bob attached a note

saying, “You can run but you can’t hide.” John must have kept the memo for 14 years.

The following passage is from the section “Wildlife Habitat” in the *Soil Survey of Jasper County, Illinois* (1992):

> The Jasper County Prairie Chicken Sanctuary is in an area...west of Newton. The goal in managing this sanctuary is to ensure the survival of one of the remaining populations of prairie chickens in Illinois. The prairie chicken, which at one time was abundant in Illinois, is a grassland grouse and a distant relative of the quail and pheasant. It requires large areas of undisturbed grassland for nesting and adequate food and cover. A hen prefers to nest in a grassy area that has an abundance of dried vegetation left over from the previous year. The area should provide cover that is open enough to allow easy movement and should have a good supply of insects, which are the primary food for the chicks. Redtop, timothy, and small grain should be included in the area. Meadows of clover are not good nesting sites. Mowing should be delayed until July. Adequate cover should be maintained throughout the winter, when the diet of the prairie chickens consists mainly of waste grain and weed seeds.

At some point in the 1980s, the Minnesota State Staff sent me a picture of a large statue of a prairie chicken in a rest area in Wilkin County, Minnesota. The staff wanted to know what section of the survey was most

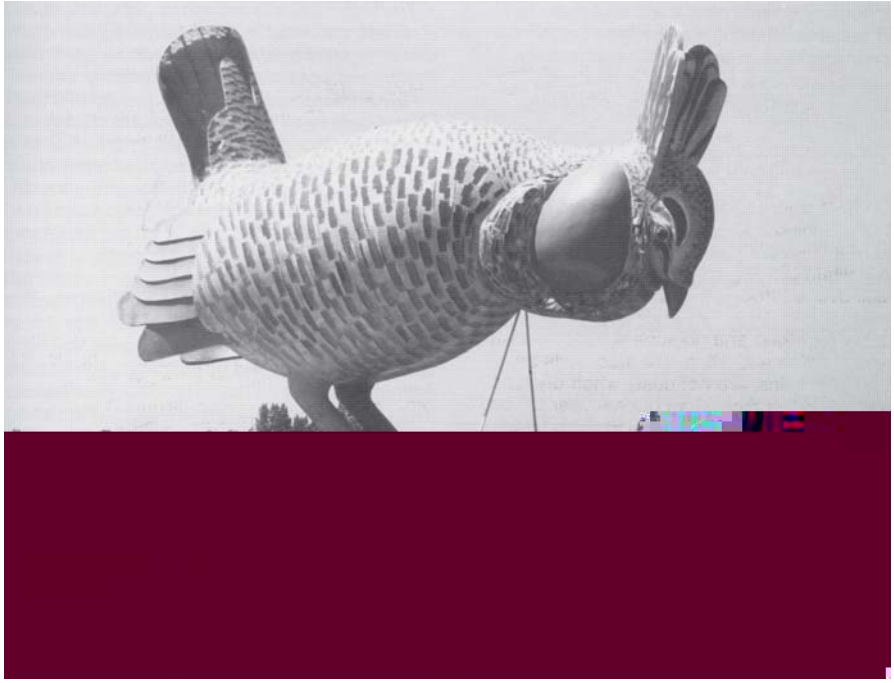
A male prairie chicken booming . Photo by Tom Ulrich.

Two male prairie chickens in combat. Photo by Tom Ulrich.

appropriate for the picture. I lobbied for the cover, but that suggestion was rejected, so I then suggested that the picture could be included in the "Wildlife Habitat" or "Recreation" section, depending on how you look at it. The picture and the following paragraph were eventually included in the section "Wildlife Habitat" in the *Soil Survey of Wilkin County, Minnesota* (1989):

> Wilkin County has a number of Nature Conservancy preserves. These include Western Prairie, Town Hall Prairie, Kettle Drummer Prairie, and Foxhome Prairie. These areas are inhabited by some of the remaining prairie chickens in the valley prairie area. During the mating season, the prairie chickens are on these booming grounds. The male birds fan their tails, display erect feathers on their necks, and inflate orange skin sacs at the sides of their necks. These sacs serve as resonating chambers that produce a hollow booming sound that can carry as much as a mile.

A poem entitled "Booming grounds" was published in the journal *Prairie Poetry* in 2006. It can be accessed online (http://www.prairiepoetry.org/poetry06/poems/andersons1.html). ■



A large reproduction of a booming prairie chicken in a roadside rest area near Rothsay, in Wilkin County, Minnesota.

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