



OHIO PEDOLOGIST

Professional Soil Scientists

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President's Message



By Steve Miller

I must admit that I am looking forward to May when I can peel off my insulated undergarments and decide if I need to wash them or donate them, they probably won't qualify for either. This weather does cause difficulties when sampling and describing soils this time of year. If there is inadequate insulation it is not even possible to get a descent sample. If it is a recently plowed field it is not even worth it. Although the snow does create a nice insulating blanket, if the sun is out, it can cause the colors to become muted. It makes a great time to take a 'staycation'.

AOP is transitioning to a new year with the majority of the executive council being replaced by new individuals. This is always great for new ideas on how to create new ways to promote our profession. I feel the summer workshop is the best service that AOP can provide to our members. The workshop provides every member that is SSSA Certified CEU's and also gives AOP significant financial boost which allows us to provide funds to collegiate soil judging and the OSU soil science scholarship. Since the inception of the summer workshop in 2003 AOP's financial wellbeing has been improving which will allow us the ability to contract with lobbyists to promote our members' services during soil-related rule making processes. The workshop also has been a great opportunity to work with other professionals in the wetland, onsite sewage, engineering and agricultural fields. I would hope that in the future we will have a near 100 percent attendance from SSSA Certified individuals because, as from personal experience, I know it would be difficult and expensive to obtain the require 20 CEUs per year from other organizations.

The Forest Soils Workshop is tentatively scheduled for Southeast Ohio this year. The date has not been set but it

appears AOP may sponsor part of the event by providing drinks and snacks. A planning board meeting is going to schedule for some time in February. If anyone is interested in volunteering for this event please contact Steve Baker at 614-255-2483 or steve.baker@oh.usda.gov.

Our winter meeting date has been set for Thursday March 6th at Highbanks Metro Park. We have a great agenda scheduled so I hope to see everyone there. It has been a pleasure serving as President.

Respectfully,

Steve

Alaska Soil Mapping Detail – 1976

Larry Milliron

I enjoyed the opportunity to map soils in Alaska in the summer of 1976 with SCS. The soil survey area was the Totchaket Area and the report was published in 1980. 1976 was the year that construction of the Trans Alaska Oil Pipeline was pretty well concluded and the state wanted to transfer more public land into private ownership. The soil survey would serve to identify areas most suited to develop for private enterprise – mainly farming.

During my college days at Ohio State in the early '60's I worked for several years in the Soil Characterization Lab at Townshend Hall. Dr. Nick Holowaychuk was the senior manager and Moye Rutledge oversaw the day to day activities. One day in early spring Dr. Nick asked me what I was doing that summer and I replied that I had ROTC summer camp obligations and nothing further was discussed. As things turned out, Marvin Wachtman, another undergraduate soils student who also worked in the lab, went with Dr. Nick to Alaska to work on the research project that Dr. Nick was concluding. I felt that I had forever lost my chance to get to work in Alaska.

In 1976 I was a project member of the soil survey party that was winding down the soil survey of Franklin County, Ohio. At that time the soil survey in Alaska was being accelerated by bringing in soil scientists from the lower '48 to beef up the fieldwork in the short summer season. I had the opportunity to apply and was approved to set out on this adventure.

I drove the 4200 miles to Palmer via the Alcan Highway. Being short of stature and having a VW Squareback

(undersized station wagon) I often spent the night sleeping diagonally in the back of the VW next to my grocery stash. That drive itself introduced several unique 'funny' events that couldn't be replicated under any other circumstances.

At Palmer I met Dr. Sam Rieger, the State Soil Scientist, Cy Furbush the Project Leader and the other detail members: George (the 'old man' being 51 years of age) from Missouri and Dave from Virginia.

From Palmer we traveled north past Mt. McKinley to the Tanana River about half way to Fairbanks from Mt. McKinley. There, just off the highway, we loaded our gear and equipment into canoes and paddled our way to the initial worksite in the bush. At the departing point of Nenana we were joined by aides – young bucks who each carried 12 gauge riot shotguns loaded with slugs and buckshot and whose mission was to pair up with the soil scientists and protect us from mainly the black bear, moose and Toklat grizzly. They were worthless against the mosquitoes. Steve and Moose were two of the best outdoorsmen I have ever met. Kevin, Jason and Collins were also well experienced in adventure which was enjoyed by all as it was recounted by fireside. At the time of departure, we were short one aide – someone didn't show up. Kevin was hiking by with all his worldly possessions in the backpack he carried as we were loading the canoes and inquired what was going on. Ended up, Dr. Rieger hired him on the spot to work as an aide with us for the summer.

The soil mapping experience for me was great. We had permafrost, tussocks, virgin climax vegetation communities, remoteness that made you feel as though perhaps you were the first human to tread in some of those places, and more. One thing that I particularly came to appreciate was how some climax vegetative communities uniquely and reliably identified the soil for you.

The areas we worked and the way we went about it evolved during the summer. Initially we all worked together out of a single camp mostly in extensive tussock environments. Later we relocated the base camp about 20 miles distant and rotated from there to mapping sites via chopper for usually 4-day durations. For me that meant that my aide and I would do a mapping transect each day usually north, east, south and west out of our two man camp.

This last base camp site had apparently been used in times past for other purposes – maybe military training by the few artifacts that we found. We came upon a couple sheets of plywood and a small pallet or two that were in fairly good shape – what a treasure! From that we fashioned a shower stall and sealed it off with some plastic. The plastic effectively separated your most vulnerable hide from the hordes of the ever present blood-thirsty female skeeters.

We were randomly in and out of the base camp. As we completed each remote mapping assignment we would return to base camp to ink the field sheets, maintain records and prepare for our next trip out.

One night at base camp, under twilight light conditions, I awakened to a strange sound from the area of the shower stall. Sounded like something gnawing on the plywood – what is THAT? The shower stall was a prized creature comfort feature of our primitive existence. Important enough to be protected. So I jumped into my boots and hustled over to investigate. I discovered a porcupine to be the intruder and he was caught in the act of chewing the plywood – likely attracted to the preserving salts in the wood. He reluctantly retreated as I advanced and after a bit I thought the problem was resolved, besides, the mosquitoes were doing a number on my bare legs.

I went back to my tent and fell asleep. Soon, I awakened again to the sound of the porcupine in the process of deconstructing the shower stall. This time I dressed better, picked up the shovel and went over to protect our interests. This time a little retreat maneuver wasn't satisfactory and I was in the mood to permanently resolve the issue with the shovel. Perhaps the porcupine sensed his dire predicament and started running. I'm not much of a runner but neither was he so GAME ON! As I chased him I thought that I should make a trophy of him so should be careful about how I dispatched him. Now the chase extended as I sought the preferred strike angle so as to not damage his skull. The sequence of short runs and standoffs developed in an erratic zig-zag course that I wasn't particularly attentive about. Finally, I did the deed. But then I experienced another realization – I was lost! Maybe the porcupine would have his revenge in the end.

The base camp was in a relatively flat landscape densely vegetated with black spruce that characteristically didn't grow over 25 feet tall and had a diameter breast high of 4 to 6 inches. (I wore out the elbows of my wool shirts when pushing through such areas while mapping) That vegetation is a most effective noise muffler. I considered hollering and hoping someone from the camp would hear and respond but discounted the likelihood. Then I regretted that I didn't pick up the gun to bring with me. It's report would be sharper than my hollering but still maybe not effective enough. So I tried to focus on the wild chase and reconstruct a backtrack. Fortunately for me, I did somewhat retrace my way back to camp and went to bed once again.

The next day was a day in base camp. I retrieved the porcupine and Moose and Steve coached me in processing and preparing my trophy in appreciation of my valiant effort to maintain the esprit de corps.

Today the porcupine trophy is somewhere in the garage, I think, since my wife won't let me display it honorably on the mantle of the fireplace.

As I reflect on my career as a soil scientist with SCS and NRCS I appreciate how fortunate I had been in working outdoors, in professional relationships with many great co-workers, in opportunities of working soil survey details in Connecticut, Alaska and Montana and for my major assignments in Ohio and Nebraska. I have commented that

I never became a millionaire but in terms of my experience my career was priceless. I have ended many days expressing thanks to the Lord for the privileges He has granted me.

2014 Slate of Candidates

President-elect:
Tom Zimmerman

Secretary: Gordon Starr

Treasurer: Jim Svoboda

Editor: Mike Plunkett

Member at Large
(top 3 vote getters)

Charles Hanner

Dan Michael

Larry Milliron

Larry Tornes

Steve Prebonick

AOP members who won't be attending the Winter Meeting may get an absentee ballot from Gordon Starr if they wish to vote.

Gordonstarr3@gmail.com

Cover Crop & Soil Health Forums scheduled for Feb. 18th



You are invited to attend a free, live broadcast of the February 18th SARE-sponsored *National Conference on Cover Crops and Soil Health*. Join the conversation at one of nearly 200 *Cover Crops and Soil Health Forums* to be hosted nationwide by the Natural Resource Conservation Service (NRCS) and Cooperative Extension offices. [Find a forum location near you.](#)

Please RSVP! There is no cost to participate, but please contact the site you plan to attend to register and confirm both the location and other program details. Providing an RSVP will help host locations make adequate accommodations.

Soil health webinar series kicks off Jan. 16th



Webinars presented by leading soil health advocates—several of them farmers—are lined up in 2014 to provide training on soil health topics including the biology of soil compaction, soil health benefits of mob grazing, and regional soil health case studies. Information needed to participate in the webinars will be provided at the Science and Technology Training Library at <http://conservationwebinars.net> as it becomes available. If you can't make a live presentation, each webinar will be offered as a replay from the training library. [Click here](#) to view the schedule of 2014 NRCS webinars.

Let's start taking the other 50% of soil erosion seriously.

by [Tom Buman](#)

For years, resource professionals have had the RUSLE2 soil erosion model to predict the amount of sheet and rill erosion that occurs on a farm. Unfortunately, the same cannot be said for ephemeral gullies. Ephemeral gullies are defined as small channels eroded by concentrated flow that can be easily filled by normal tillage, only to reform again in the same location by additional runoff. Ephemeral gully erosion is far more visible than sheet and rill erosion and everybody can see it is occurring. To read the article: <http://precisionconservation.com/2013/12/30/lets-start-taking-the-other-50-of-soil-erosion-seriously/>

Model helps reveal soil's secrets

By Kenneth Macdonald

It looks like the world's largest sugar cube. Or perhaps a pale, unsuccessful imitation of SpongeBob Squarepants. But it holds the key to a hidden world beneath our feet. It's a 3D-printed model of soil, a large plastic cube full of holes. So many holes that even an Emmental cheese would raise the white flag. And the holes are what matter here. To read the article: <http://www.bbc.co.uk/news/uk-scotland-tayside-central-25905147>