

Sabbatical Report
Dennis M. Merkel
October 4, 2013
For Academic Year 2012-2013

Researching correspondence between J. O. Veatch and the Bureau of Soils: Investigation of the Soil Profile Method as a Paradigm Shift.

Prior to 1917, the Bureau of Soils based its classification on untested assumptions of the geological origin or derivation of soils. In contrast, the profile method classified soils using direct observations of soil characteristics, marking the start of a new science, Pedology. The purpose of this sabbatical was to investigate correspondences relating to the implementation of the profile method at the National Archives and Records Administration's Archives II in College Park, Maryland.

Through the kind agencies of Dr. William W. Bowerman and the Department of Environmental Science and Technology (ENST) I was afforded a Visiting Professorship at the University of Maryland at College Park (UMD). I taught ENST 440 – Crops, Soils, and Civilization (a cultural diversity course at UMD); and a graduate seminar (ENST 689 – Soil Survey to Soil Science). The summer of 2012 was spent in course and archival preparation.

I moved to College Park on October 23 and Hurricane Sandy arrived on the 26th. Unpacking while it stormed, I discovered that my office neighbor was Dr. Edward R. Landa, a noted soil historian, employed by the US Geological Survey. I didn't realize Ed was at UMD as an adjunct and we had many long conversations about soil history.

Archives II was conveniently located next to the University of Maryland Campus and I began going through the records on October 26 and would continue to work at the Archives through May 14th, 2013. I began with the soil surveys led by J. O. Veatch. The records not only contained all the correspondences between the leader of the survey party and C.F. Marbut, the Chief of the Soil Survey in Washington, D.C., but also edited drafts of the survey reports. It was clear from the dust and binding that many of these records had not been opened since they were filed away. It was also clear that Veatch was a man of few words. A one or two sentence reply to a two to three page letter was not uncommon.

I soon realized the serendipitous nature of following threads through archival material and the necessity of having blocks of time to follow them. In short, I needed the entire time of the sabbatical to complete this project. After going through dozens of boxes I found that correspondences between Marbut and some of the state soil survey leaders were an especially rich vein of information and followed that track. In addition, I found that I had to expand my search timeline to include to dates several years earlier than initially planned. Overall, I looked

through several hundred boxes of records and returned with a bookcase full of scanned documents. Although the correspondences of JO Veatch were not as expansive as I had hoped, the letters of his former teacher, C. F. Marbut, were astounding. It became clear that Marbut had almost singlehandedly changed the culture of a Federal Bureau. The project expanded to include this thread and now I had not one, but two books to finish.

In addition to the Archives, I was able to work at the National Agricultural Library, which has an unparalleled collection of published materials from the Bureau of Soils, as well as several special collections. Two in particular were the Charles E. Kellogg papers and the papers of agricultural historian Douglas Helms. Kellogg began his career working for Veatch on Michigan soil surveys and the Library had his field notebooks from the early 1920's as well as an unpublished autobiography. I was also able to access the special collections at George Washington University's Gellman Library, UMD's Hornbake Library and had full access to UMD's McKeldin Library.

The graduate seminar was a totally new experience for me as I had never taught a graduate course. I was privileged to have Dr. Delvin S. Fanning, Emeritus Professor of Pedology, Dr. Martin Rabenhorst, Current Professor of Pedology, and Dr. Edward R. Landa participate in the graduate seminars. It was unique experience to be able to interact with scholars of their caliber. The seminar gave me the opportunity to summarize and refine ideas on the historical development of soil science. In addition I prepared several historical abstracts and timelines which have been helpful in the writing stage.

Work Products:

The nature of the archival hunt was such that most of my time was spent searching. Combined with the unexpected expansion of the topic I did not complete as much writing as I was expecting to. However, I did produce several tangible work products.

- February 15, 2013. Presentation for the ENST Soil Seminar Series, *Dancing With A Dinosaur: Inertia and Innovation in the Soil Survey*. Background information on the development of the profile method in the US and Archival finds of early conflicts with respect to its application.
- Spring 2013. An article: *The Long Struggle to the Adoption of the Soil Profile Method. Part 1: Setting the Stage*, was prepared for the newsletter of the Soil Classifiers Association of Michigan. This was a compilation of some of the work I had done in the Archives.
- August 2013. Presentation at the annual meeting of the Soil Classifiers Association of Michigan. *An Overview of Soil History*.

- I have just received two initial reviews of a paper; *The Curious Origin of Podlogy: The Story of a Milestone Paper*. The paper is the back story about a groundbreaking article by J. O. Veatch and others at Michigan Agricultural College. It will be submitted soon to the Soil Science Society of America Journal. A draft is attached.
- I am in the early stages of a collaboration with Dr. Edward Landa having to do with the long delay in the implementation of soil conservation, almost 30 years after forest conservation was in vogue. We have a tentative title of *The Bureau of Soils and Soil Conservation: An Opportunity Missed?*

Additional Professional Development Activities:

- On November 10, attended a Hydric Soils Workshop put on by the Mid-Atlantic Professional Soil Scientists. Information from that class has already been used in the BIOL230 class at LSSU.
- Attended a presentation on acid sulfate soils by one of the world's foremost authorities, Dr. Delvin S. Fanning, Emeritus Professor at UMD.
- The ENST soils section had a series of Friday Seminars and although I did not have perfect attendance, I was able to attend most of them.
- During the period of July 5-15 I was a Visiting Forester at the Boy Scouts of America, Philmont Scout Ranch in Cimarron, New Mexico. I made 4-5 presentations a day on forestry and fire ecology in the southwest.
- October 2012. Interviewed Loren Berndt, a soil surveyor in Michigan who began his career in 1960, as the first interviewee for an oral history of the soil survey project.
- September and October 2012. Collected information on JO Veatch's later soil survey work throughout Michigan from the Natural Resource Conservation Service's archived files in Lansing Michigan.

Acknowledgements:

I would like to express my gratitude to LSSU for granting me this sabbatical opportunity. A sabbatical is supposed to be an opportunity to expand intellectual

horizons, to bring back experiences from a very different institution, and to be able to integrate these experiences into courses at LSSU. For me, this experience has done all of that and more. During the sabbatical application process I was primarily focused on getting done what needed to be done to make it happen. Once the sabbatical was awarded, I had my doubts and began to wonder if I had taken on too much. After having spent the last 27 years at LSSU, did I have the wherewithal to jump into the deep end of a tier 1 research institution?

My deepest appreciation is extended to Dr. William W. Bowerman and the Department of Environmental Science and Technology (ENST) at UMD, College Park for the privilege of being a Visiting Professor at their august institution and providing the additional support needed to make this opportunity a reality. The faculty and staff of the ENST Department gave me such a warm reception that I felt as though I really belonged. I'm especially grateful for the kind words and warm welcome from Drs. Ray Weil and Stephanie Yarwood, to Ms. Kimberly Monahan I express profound thanks for guiding me through issues of students and policies.

My ability to have a roof and food were due to the diligence and administrative efforts of Maria Robey and Ruth Koster and they have my lasting thanks. I would be remiss not to express appreciation to Ina Anderson for her dry, witty, and warm sarcasm.

I consider myself privileged to have had the opportunity to interact with soil scientists of the caliber of Martin Rabenhorst and Edward Landa, their generous personalities and interest in soil history made this the best academic experience I have ever had.

Finally, special and heartfelt appreciation is extended to Delvin Fanning, truly a force of nature, who so graciously and expansively shared experiences from his 60 year career in soil science. I will always treasure our conversations.

Oh, the answer to the question at the top of the page is yes.



Binders of Archive Scans (as of March 27, 2013)



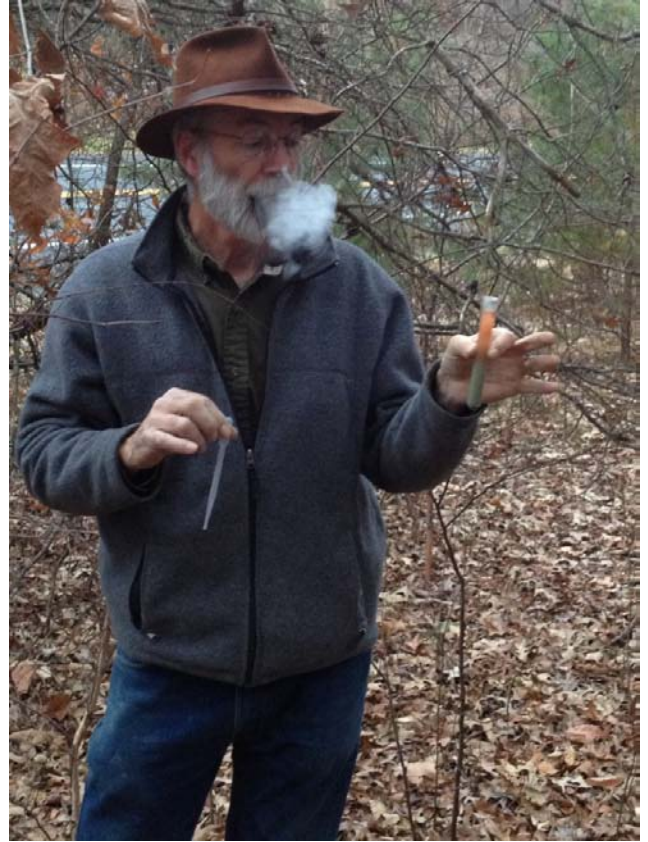
Work Station at Archives II



**Dr. William W. Bowerman,
Chair, Department of Environmental Science and Technology**



Dr. Edward R. Landa



**Dr. Martin Rabenhorst
Professor of Pedology**



**Dr. Delvin S. Faninng
Emeritus Professor of Pedology**