



INTERNATIONAL PROGRAMS DIVISION



IPD Special Edition

Retired in December 2020, Paul Lake and Dr. Michael Wilson, share their life’s work, experiences, and reflections with overseas assignments on behalf of NRCS.

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*COVER PHOTO: U.S. Ambassador Hyatt’s visit with the Koror State Urban Growers Program USDA NRCS managed the Embassy Science Fellow program for the US Embassy. Photo Courtesy of Paul Lake (far left)*

The IPD Newsletter is a biannual publication produced by the International Programs Division of the Natural Resources Conservation Service (NRCS).

The document provides a six-month overview of NRCS participation in international activities, which included providing technical assistance and exchanging scientific and technical information.

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### IPD Newsletter

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## Employee Highlight

### Paul Lake



Featured on the cover of the "California Farmer" January 2000

Retired in December 2020, Paul Lake, Resource Conservationist, Hilo, HI shared his International travels, life's work, and experiences with overseas assignments on behalf of NRCS.

#### **Q: Where did you grow up? Did it have an influence on your choices for a career path?**

**A:** I was raised in a hardworking French-Canadian family in the state of Rhode Island. I am the only son in the family and the youngest of the five siblings. My parents always had a nice garden. We canned lots of tomatoes and cucumber pickles but that was about the extent of my exposure to 'farming' as a child. My youngest sister was the first of the five siblings to go to college, that's where I gained an appreciation for what it meant to earn a degree.

#### **Q: When did you begin developing an interest in natural resources and conservation and what were some of the factors**

#### **affecting your decisions to continue developing those interests?**

**A:** I grew up along the Blackstone River. It was considered the hardest working river during the Industrial Revolution. The river powered textile mills but also became the disposal mechanism for factory waste, including dyes. As a result, I became aware of the effects of unregulated waste polluting a river system from a young age. My friends and I would catch fish from the river, but we knew that eating the fish was not an option. The river is now a scenic byway and is much cleaner than in my youth.

#### **Q: What were your major fields of study and what degrees have you obtained?**

**A:** Finishing my tour of duty in the United States Air Force, I started my studies at the American River College in Sacramento, California. Directly as a result of my childhood experience living by a polluted river, I studied science, particularly chemistry, while considering a degree in Environmental Toxicology. I changed my major to Soil and Water Science to study soil and healthy ecosystems.

I took a summer soils class at The University of California (UC), Davis and learned how interesting it was to work outdoors in beautiful settings. Over the weeks in that class, we travelled the length of California seeing various ecosystems and examining soil profiles from many of the soil orders, studying geomorphology, how to interpret and technically describe soil features. That class introduced me to soil mapping, which seemed like the coolest job on the planet...and it pretty much is!

**Q: What is your employment history and the places you were located? What was special about these assignments and their locations?**

**A:** Following graduation from UC Davis, I worked on an organic farm in Winters, California. Working what was then called Sky High Farm, it was an incredible experience. The crop diversity was amazing, with a list of fruits, nuts, and vegetables like only a truck farm in the California central valley could produce.

Following a suggestion by a professor to apply to the USDA Soil Conservation Service (SCS), I took a soil mapping job (Soil Scientist position) in Ely, Nevada, mapping in eastern White Pine County on Bureau of Land Management (BLM) public land. That was a fabulous job. I learned the range sites and soils that make up that part of the Great Basin close to the Utah state border along Highway 50. During the mapping season, we camped out in the survey area so that we wouldn't have to travel back and forth into town every day. Mapping on the alluvial fans in the valleys allowed us to utilize the assistance of BLM backhoes to dig holes for description and characterization. It was a different story on the steeper slopes of the mountains, we had to dig by hand. Some mountain soils are shallow in depth and easy to dig. Other places have deep, rocky soils that required a pit to be dug to 5 feet. It took the better part of a day to dig some soil pits in order to fully describe them...good living! I have memories of herds of wild horses, as well as antelope at some distance running alongside the truck, seemingly with the singular goal of crossing the road in front of my moving vehicle. I never tired of seeing wildlife there, including golden eagles soaring overhead.

I have a long list of positions and

locations with SCS and NRCS. I transferred from eastern Nevada to Colusa, California and helped to complete the Colusa County Soil Survey. I mapped soil on the west side of the county in the Coast Range.

I took my soil mapping experience and later converted to a Soil Conservationist position in the Yuba City Field Office. That was a chance to assist farmers on production agriculture, especially peaches, prunes, walnuts, and almonds. Also, I worked with old school NRCS staff prior to offices having the modern computer systems that we have today. That was when computers had command line prompts for data entry before the development of graphical user interfaces.

From that point, I filled Resource Conservationist positions in the Auburn and Grass Valley Field Offices, respectively. That brought me home to where I was living at the time on the western slope of the Sierra Nevada mountain range. I helped develop conservation plans with ranchers, large and small, in the lower elevations of the foothills in grasslands and oak woodlands. I also worked with forest landowners at elevations above 3,000 feet or so in mixed conifer forest on soils with very high Ponderosa pine site index.

**Q: What was your incentive to make you want to travel to foreign countries?**

**A:** My youngest sister had joined the Peace Corps and was posted



USDA NRCS helped develop the grant application to provide wood chips to pig farmers in the state and the Ngardok Nature Reserve reforestation effort. Japanese Embassy staff and Melekeok State Governor hold the key as part of the Hand Over Ceremony of the dump truck and wood chipper by a Japan Embassy grant to Melekeok State, Palau.

to two countries in west Africa. Being seven years younger than her, she was very inspirational to me as a young person.

Unable to afford college after high school, I joined the US Air Force and requested to be assigned to military bases in a foreign country. My first assignment was to the state of Kansas, but luckily, at that early stage of my Air Force career, we were given the option to trade locations with someone in the same class. One classmate received orders to go to Misawa, Japan after having requested to stay stateside. We were able to swap assignments and I went to northern Japan for 2 ½ years. That was a great experience for an 18-year-old. I very much enjoyed exploring Japan and attending myriad festivals throughout the year. I was also able to travel on leave to the Republic of the Philippines during that time. Military training brought my squadron to South Korea, as well, to participate in peace time exercises.

I enjoyed the exposure to foreign countries and their cultures so much that I waited for an opportunity to travel abroad again.



*Students planting lemon grass at the Palau Conservation Society farmer training in Melekeok State, Palau.*

In 2009, I was made aware that the Resource Conservationist position on Pohnpei, an island in the Federated States of Micronesia (FSM), had been advertised. Loving the idea of working abroad again, I submitted my application and was selected.

**Q: What experiences did you encounter that gave you the confidence to apply your skills in a foreign country.**

**A:** When I went to Pohnpei in 2010, there were two local technical staff in the office. They provided me with introductions to NRCS partners and brought me up to speed with the work that we do there in the FSM.

Shortly after arrival, I was sent to a training seminar in American Samoa. The training topic was 'Dry Litter Piggeries'. Pigs are culturally important on most of the Micronesian islands. This newly adopted design for a piggery had benefits that were being emphasized over the traditional wash-down piggery design, including water conservation, better waste management, and regular compost production. I learned a lot about the technology

and knew that it could be applicable in the FSM, as well. One huge benefit of going to the training was to witness the collaboration between the federal, state, and local agencies. I took that experience and emulated it back on Pohnpei. I became the first Chairperson of the Piggery Advisory Council on Pohnpei. As a group, we conducted trainings to decision makers and farmers about the hazards of unmanaged pig waste on the environment and human health. We wrote grants and received funding for a dry litter piggery pilot project, funded by the Australian Embassy, and for the purchase of two woodchippers funded by the Embassy of Japan.

Having local staff as well as the timely and pertinent training gave me the confidence to apply my skills on Pohnpei. The experience that I had on Pohnpei allowed me to seek out the counterpart NRCS partners when I was later posted to Palau. Very similar local positions exist between the two countries so making the initial contact was possible, even without local technical staff person working with NRCS there.

An example of the similarities in culture and agriculture within the Micronesian countries that helped me to 'hit the ground running' in Palau was the importance of pigs in their respective cultures. When I visited with the Director of Agriculture and his staff on Palau, they informed me that they had just received a European Union grant for about €450,000 Euros to build five dry litter piggeries and conduct training workshops to help people understand the value of the system. Having been intimately involved with the introduction of the technology on Pohnpei, I was excited to learn that Palau was also promoting the use of dry litter piggeries and that I would be able to meaningfully contribute to the project.

NRCS was a partner in most aspects of the project, especially the steering and training committees. We provided many training sessions on the design elements and management of the dry litter piggeries.

**Q: Aside from your technical knowledge what would you say are the most necessary skills to interact with foreign counterparts?**

**A:** Interpersonal skills and a certain level of emotional intelligence is important. Although English is spoken widely in the Freely Associated States (FAS), there were many times when I was the only native English speaker in a group. At times, conversation was held in a language that I did not understand. In this situation, one has to have patience to sit and listen. There may be a local colleague that can translate comments as the discussion proceeds or after the meeting has concluded. Over time, I understood enough of the language to follow along, at least, and possibly understand the context of the conversation.

Patience is certainly a virtue when working abroad. This may be obvious, but one must understand that there will be cultural differences when living and working in a foreign nation. Never lose sight of your personal beliefs and ethics but realize that cultural norms from one nation may not be as important, or adhered to, in others.

One example of this is the idea of being punctual or 'on time'. Some of us are used to meetings starting close to the scheduled time. In some places, the concept of punctuality is more fluid, and one must be flexible when it comes to meeting times. Depending on the group, it may be common for some people to arrive 30-45 minutes or even later than the



*Farmer training in Ngarchelong State, Palau provided by the Palau Conservation Society and conservation partners.*

scheduled time. Plan and leave room in your schedule to accommodate this. I always tried to arrive at the scheduled time and would take advantage of the 'free' time to get to know my partners, and the country, a little better. Complaining will only alienate your partners and they are too valuable to lose. We need them as much as we may think they need us. There will be jokes made about the lack of punctuality, but it will continue for various reasons.

**Q: How did you overcome the hardships of being away from your home for extended periods?**

**A:** One has to make an effort to be confident and content, basically happy, wherever they reside and work. It would be easy to complain about not having certain American products or services, but it doesn't help. It certainly can be challenging to live in a foreign country away from loved ones but friendly people make friends wherever they live, whether that be with other expatriates from around the world or with the local

residents. It can also be very exciting to meet new people, see new places, eat new foods, etc.

Looking closely at the name for the region called Micronesia, its easy to get the impression that the place is small. And, in fact, there are probably thousands of small islands that make up the region, and some are tiny. What I'm getting at here is that some people do suffer from island fever. Luckily for federal employees posted to a foreign office, there are certain benefits that allow staff to travel away from the island, including R&R and Home Leave. These are wonderful benefits that help to provide a balance to life while living in a foreign country. The NRCS position may also require travel off-island to work on other islands in the service area or to attend training sessions.

**Q: Can you describe an international project that stood out for you?**

**A:** When I first arrived on Pohnpei, I participated in a special and adventurous project intended to



*Participants of the raised bed gardening training receive certificates and planting materials at the conclusion of the training.*

help determine the outer island's resilience to climate change. NRCS was part of an international, multi-disciplinary team studying various aspects of the small inhabited islands.

A cargo ship was used as a research vessel for the voyage. Outer islands throughout the FSM were visited. Experts from social, economic, and technical sectors completed tasks including interviews and scientific documentation. NRCS conducted surveys of the taro patches with local scientists to help assess the health and productivity of the taro patches. We observed whether the taro patches had been inundated with salt water and if there were fertility or production issues.

This project had its challenges, but they were outweighed by the opportunity to contribute to an effort to document existing conditions and help steer the climate change strategy for the country.

Most projects in the FAS are

international projects. No one agency has all the expertise, nor funding, to complete every project. Collaboration with staff from other embassies, local and foreign-based non-governmental organizations (NGOs), and, of course, national and state officials from the host country always occur.

Another project of note was a USAID-funded project, entitled "Reviving Traditional Croplands to Improve Community Climate Resilience". The goal was to document the traditional soil fertility practices and water management techniques of wetland taro patches and adapt those concepts to upland farming systems. Taro is an extremely important crop in Palau (as in most of Micronesia).

Several community level wetland taro patches were restored during this project. Also, there were workshops in several states to demonstrate farming best management practices, including water management, erosion control techniques and soil

amendments.

Women have traditionally been the farmers in Palauan culture. They are now being educated off-island and returning with college degrees to take important positions in government and private sector leaving less time on the farm. There are challenges, including need for farm labor, but demand is still high for taro, nutritionally and culturally. Luckily, it can be said that Palau is enjoying a renaissance in production and use of this important crop.

**Q: Can you talk about your experience regarding the administrative process and requirements that you had to wade through to take part in an international project?**

**A:** When assigned to a foreign office, the NRCS position has the normal supervisorial chain within the agency; in this case, the PIA Director directly supervises the two foreign positions.

The unique characteristic with these positions is that they also fall under the Mission of the US Ambassador. The Ambassador may be considered the "in country" supervisor for the NRCS position as we are part of the US Embassy Country Team. As the head of a federal agency in a foreign country, the NRCS position meets monthly with the other individuals on the Country Team to report on activities and receive reports from other members, including the Ambassador.

NRCS also subscribes to International Cooperative Administrative Support Services, otherwise known as ICASS. Usually administered by the Department of State (DOS), ICASS is a mechanism for federal agencies under a given Mission to share in the common costs of operation with the intent to reduce

duplicative costs and gain budgetary efficiencies as a group. NRCS receives limited services under ICASS but does contribute to security costs and receives vouchering assistance for making local purchases, for instance.

Additionally, there are several administrative details that only apply to the foreign office positions within NRCS, including certain benefits, the need for an Official Passport, and a Secret security clearance with the Department of State (DOS). With only the two positions in foreign offices, the Resource Conservationist must seek guidance on completing each task properly and timely; guidance is received from both USDA and DOS sources.

**Q: From what you have learned, do you have any advice or recommendations to share with future NRCS International Travelers for developing strategies or plans to meet their assignment objectives?**

**A:** There are only two full-time NRCS positions that are posted to the countries of the FSM and to the Republic of Palau. In many ways, these positions are like positions in the United States or territories with the exception that there is no cost-share money available to assist farmers in the FAS.

Without programmatic funding, I describe the mission of NRCS offices in the FASs as helping in the areas of capacity building, technology transfer, and brief technical assistance. While assistance may overlap between these three areas; assistance is provided to host country government agencies such as their Department of Agriculture equivalent, foreign government entities such as another nation's embassy, domestic and foreign NGOs with project development and delivery, including application

development for grant funding from donor sources. Technology transfer is comprised of activities such as workshops, forums, and project implementation where best management practices are presented. Brief technical assistance is the one-on-one interaction with landowners and producers providing advice on sustainable land management options, albeit without cost-share funding.

There are many types of projects that NRCS staff can assist with in the foreign areas. Given that the foreign offices are in island nations with vulnerable near shore environments, including coral reefs, it is valuable to have education and experience in erosion and sediment control and storm water runoff practice design and implementation.

**Q: What were some of the difficulties you encountered when you were implementing your project objectives?**

**A:** When providing brief technical assistance, for instance, farmers

don't always have funding to implement the best management practices recommended by NRCS. It requires NRCS to be creative and adapt solutions to locally available materials or tools.

For instance, when working with a farmer to demonstrate how to implement filter strips, commonly called hedgerows in Palau, an engineer's level would be useful to mark the contour across the slope but that is not usually available to farmers. An A-frame level is appropriate technology that can be inexpensively constructed and is simple to use.

Furthermore, although Vetiver grass may be a preferred erosion control vegetative material in filter strips, lemon grass is more abundant on Palau, so it was used as a suitable alternative to Vetiver grass and is available to farmers.

**Q: How did you succeed in improving the conservation methods and techniques for the groups you were training?**

**A:** The Resource Conservationist



*US Diplomats receiving a tour of one of the USAID funded Palau Conservation Society project site.*

will rely on their own knowledge, skills, and abilities to help in the foreign areas. NRCS is rich with tools and guidance that the Resource Conservationist has access to assess the resource condition and treat resource concerns.

One example of using an existing NRCS tool and adapting to a specific project was the use of the forest zigzag transect. The zigzag transect is often used to determine whether a forest stand is properly stocked with trees or whether it is understocked or overstocked; in other words, do trees need to be thinned or additional trees be planted.

Part of a Palau Conservation Society (PCS) project working with the Palau Protected Area Network (PAN) was to document the benchmark condition of the protected areas. The goal was to monitor the forests annually and follow natural disasters, like forest fires, typhoons, or pest infestation, to assess the impacts of the disaster and develop a recovery strategy.

We adapted the use of the zigzag transects to locate sampling sites in the protected areas. Although the points along a traditional zigzag transect are not normally revisited over time, the points for the PAN monitoring project will be monitored to capture changes over time to the forest, whether they be positive or negative.

It is worth noting a couple of things to consider when planning and delivering training in foreign countries, particularly to farmers and community members. One is that although English is pervasive in Micronesia and some people speak as well as any native English speaker, English is really the second language for most people. Speaking clearly and not too fast is important. Speaking audibly is also important but speaking loudly doesn't help if not speaking clearly. Furthermore, using technical English words and explaining their meaning is useful because that helps to develop vocabulary of those continuing to learn English. I like to provide outreach materials in English and

the local language when possible. This helps the young and old to develop their technical language in their native tongue, too. Some NRCS materials have already been translated into Pohnpeian and Palauan.

**Q: Were you able to readily identify common problems in the countries you visited that were the same or similar to those in the USA?**

**A:** The NRCS planning process, particularly understanding the landowner goals, assessing the resource condition, identifying resource concerns, and recommending conservation practices to treat those resource concerns, is effective at home and abroad. NRCS staff are well equipped to work in any climate zone and in any agricultural setting. It may take time to understand the local soils and crops, but information is available to help develop that knowledge in order to help where needed.

**Q: What were some of the things you enjoyed about your travels and the people you met?**

**A:** For those people who thrive on diversity and new adventures, living and working in the FAS can be very rewarding. On Pohnpei, an agriculturist will witness some of the most diverse and productive agroforestry systems in the world. To the untrained eye, the agroforest looks like a jungle with various trees, shrubs and vines. After becoming more familiar with tropical crops, one can point out the individual components of the agroforest and realize just how agriculturally productive it is.

Like many of the Micronesian islands, the lagoon surrounding Palau is healthy and clean. Living there provided unparalleled access to some of the world's most beautiful ocean resources. Most divers from around the world know about 'Pristine Palau' and



USDAS NRCS discussing the growth habit and use of lemon grass in erosion control with the Palau Community Action Agency Agricultural Specialist and a visiting Japanese Agricultural Specialist.

diving there is on their bucket list if they haven't already visited. Boating, kayaking, snorkeling, fishing, and picnicking in the Rock Islands are all activities that I enjoyed tremendously. The air and water are wonderfully warm, too.

I find Micronesians to be very friendly people. If a foreigner, like the NRCS Resource Conservationist, is honestly interested in the people and culture, it is easy to be accepted there. With little or no language skills, greetings can be exchanged, and impromptu conversations started. Showing a little humility goes a long way. For example, if entering a so-called 'summer house' in Palau, public areas located around the country, where some people are already sitting, a good way to approach is to ask if its ok to sit there also. Permission is not needed, per se, but it breaks the ice and opens the door to possible conversation or interaction.

Micronesians, like most people, like to laugh. Simple, and maybe silly, jokes are often made without judgement. It's easy to laugh, which is a great way to enjoy new friends.

**Q: Is there a particular observation or incident you want to recall and share?**

**A:** Since NRCS is mainly a domestic agency with most offices in the 50 states, including several offices in territories, the Caribbean Sea and in the Pacific Ocean, only two offices are in foreign countries. This provides a unique work setting, particularly the relationship with the US Embassy working in the countries.

When I arrived on Pohnpei in early 2009, the US Ambassador to the FSM had also arrived ahead of me by only weeks. There are many activities the US Embassy and the Ambassador do upon arrival of the



*Members of the Ngardmau State Protected Area Network receive forest monitoring training from the Palau Conservation Society and USDA NRCS.*

new Ambassador. As a member of the Country Team, the NRCS Resource Conservationist may be invited to participate in some of these activities.

One such activity was an evening soiree at the new Ambassador's residence. Being so new, I was basically unaware of the real intent of the party and who might be attending. As I mingled to introduce myself as working for USDA, one man responded to me saying, "My name is Manny Mori, President of the Federated States of Micronesia." I was certainly surprised to meet the President so casually and with no formal security team present that I could recognize. He was very engaging and interested in agriculture, asking me for information on how to properly fumigate agricultural commodities in support of future exports to US states/territories and other foreign locations. I mentioned to him that NRCS does not usually provide that kind of assistance, but I promised to provide him with contact information for USDA Animal and Plant Health Inspection Service

(APHIS).

I later asked the Deputy Chief of Mission at the US Embassy how to provide the information to President Mori. He asked me to provide him with the information, which would be used to create a Diplomatic Note and delivered to the President's office.

Over the course of my time posted to Pohnpei and Palau, I feel fortunate to have attended many diplomatic events including presentation of the US Ambassador's credentials to the President of the country, as well as the FSM President's State of the Nation address.

**Q: What would you say to encourage young NRCS employees who are interested in international opportunities?**

**A:** It is not widely known that NRCS has two Resource Conservationist positions in foreign locations. I would encourage NRCS employees who have an interest in international work to apply. I often liken the

work of NRCS positions abroad to the Peace Corps except that the NRCS positions receive professional wages and other benefits.

Certainly, one piece of advice is to be prepared for a diversity of work. We all have our personal skill set and experiences that help us to develop the technical assistance program in the foreign offices. Along with traditional NRCS technical work on agricultural and environmental projects, there is the opportunity to work with the US Embassy, international partners, policy makers and regulators, land use planners, and schools, for instance, on projects with adults and children alike.

**Q: How will you apply your experiences from your international travels as you go forward in your new adventures?**

**A:** I do have a big adventure coming up... I am scheduled to retire in December 2020 and my wife is a citizen of the Philippines. I plan to emigrate to the Philippines as soon as COVID-19 travel restrictions are relaxed. We will buy a farm and live an agrarian lifestyle. Wish us luck!



*A picture of a portion of a large farm in Airai State, Palau. With most agricultural products and supplies imported from the United States, Japan, Korea, Australia, and the Philippines, technical and financial support to Palauan farmers is critical to continued farm development and increasing independence.*

## Dr. Michael Wilson



*China 2002: Mike Wilson examining clay coatings with a hand lens (Aotou Village, Guangdong Prov-*

Retired in December 2020, Dr. Michael A. Wilson, Senior Scientist for Climate Change in Lincoln, NE shared his International travels, life's work, and experiences with overseas assignments on behalf of NRCS.

### ● Where did you grow up? Did it have an influence on your choices for a career path?

I grew up in Salina, Kansas and didn't have an agricultural background. When I started in college, I went to the University of Kansas as a biology major. I wasn't sure on a direction other than science. During my freshman year, the floor monitor in the dorm told me how he went on custom cutting wheat harvest each summer. So, with his recommendation, I got a job with a farmer in Lenora, KS, and decided to give it a try. The crew travelled from northern Oklahoma to Fort Benton, Montana in three months each summer. I drove a truck for the first month, then got chance to operate a combine, which became my permanent role on the crew. I didn't make a lot of money, maybe about \$700 for the summer, but I liked it enough to do it a second summer.

During my junior year in college, I switched to Kansas State and took some agriculture courses. After my first soils course, I was hooked. Soils applied the chemistry that I'd learned in other cours-

es and it caught my interest. I also joined the soil judging team, which added to my enthusiasm.

### ● When did you begin developing an interest in natural resources and conservation and what were some of the factors affecting your decisions to continue developing those interests?

My degree from Kansas State University (KSU) exposed me to several soils and conservation courses. After my two summers on the wheat harvest crew, the following summer I worked as a pest management scout in Hugoton, KS as part of a KSU program. Then worked the following summer for the Federal Crop Insurance Program in Oklahoma City, OK. After my bachelor's degree, I tried to get employment with the Soil Conservation Service. I was told by a state office employee I knew that they wouldn't hire me since I hadn't grown up on a farm and didn't speak "farming". I didn't pursue it any further, and then went to graduate school at Michigan State University, followed by a PhD at Virginia Tech.

### ● Did your home surroundings and your friends have an influ-

### ence on your decisions to select a career that brought you to your eventual professional path?

Likely growing up in Kansas had an influence since it's an agricultural state, but my first exposure to agriculture on a wheat harvest crew which I chose because it was something different to do as a summer job. Things just evolved from there.

### ● What were your major fields of study and what degrees have you obtained?

I earned a Bachelor of Science degree from the Kansas State University in soils, a Master's In Science degree from Michigan State University in soil chemistry, and a Ph.D. from Virginia Tech in soil chemistry and mineralogy.

### ● What is your employment history and the places you were located? What was special about these assignments and their locations?

After my PhD, I got a position as an Assistant Professor at Eastern Kentucky University (EKU) where I taught soils and crops classes. In the 6 years I was at EKU, I taught



*UAE, 2008: Mike Wilson travelling between sampling sites.*

16 different undergraduate courses. I learned a lot about applied agriculture but also found that I needed more practical, applied experiences to be effective in the classroom. For example, teaching Kentucky farm kids about raising tobacco was difficult without practical experience. No matter how many extension bulletins or textbooks I read on that topic; I hadn't grown up on a farm raising tobacco to give me insight into that crop. During those 6 years, I had summers off and one summer I volunteered with the Soil Conservation Service (SCS) to map soils. I was assigned to the Lancaster County, KY field office and John Kelly was the project leader. It was a great summer of learning to map, trying to apply all my "book learning" to the field. I enjoyed it so much, I decided to teach the following year and then looked for a position with SCS as a soil scientist. Beginning in the summer of 1989, I ended up working full time for SCS out of the Bowling Green, KY area office. I enjoyed going to the field examining soils and landscapes and getting hands-on field experience.

In January 1991, an opportunity arose, and I moved to Lincoln, NE as a Research Soil Scientist in the Soil Survey Laboratory at the National Soil Survey Center. I had that position for 22 years and had opportunities for teaching, working with field soil scientists on sampling, as well as conducting research on laboratory methodologies and soil landscapes.

In 2013, I was asked to temporarily fill in on climate change position for the agency, and that later evolved into a permanent position. I've worked as a Senior Scientist on climate change issues for the past 7 years.

● **What was your incentive to make you want to travel to foreign countries?**



*Micromorphology post-meeting field excursion in Chongqing, China (2008). L to R: Dr. Nicolas Fedoroff (France). Professor from Russia, Mike Wilson,*

My international travel all occurred during my time as a Research Soil Scientist. My incentive was to see soils and work with scientists outside the US. One thing I learned was that much of the world seemed to be working and meeting together, but I had been focused only on the US.

● **What countries did you work in and how long did you stay at each one?**

I traveled to conferences in Russia such as the Tenth International Working Meeting on Soil Micromorphology, Moscow, July 8-13, 1996, Belgium for the International Working Meeting on Micropedology, Gent, 9-13 July 2001, China, for the 13th International Conference on Soil Micromorphology, September 11-16, 2008, Chengdu, and United Arab Emirates (UAE) for the International Conference on Soil Classification and Reclamation of Degraded Lands in Arid Environments, May 17-19, 2010, Dubai. I also had the opportunity to travel for two-week scientific exchanges to Zimbabwe in 1998, China in 2002, and the Unit-

ed Arab Emirates in 2008.

● **What experiences did you encounter that gave you the confidence to apply your skills in a foreign country.**

My work experience and knowledge gave me the initial confidence. But I found that foreign scientists are happy to cooperate with others and that all scientists, no matter what part of the world they live in, share a similar enthusiasm for science. I discovered that cultures are different in each country, and with that, social expectations vary.

Increasing confidence comes from experience, making mistakes and learning from these. Being willing to learn and being interested in the life and culture of the people you are working with. In every country, work is important, but so is family. Focus on both topics as you get to know these scientists.

● **Aside from your technical knowledge what would you say are the most necessary skills to interact with foreign counter-**



*UAE, 2008: Review team discussing profile characteristics of a soil with a Petrogypsic horizon.*

## parts?

I thought of my first experience in Zimbabwe that, based on my education and experience in the United States, that I would go to Africa to assist and educate the scientists. I discovered that the scientists we were working with were bright and well trained; several with graduate degrees from Europe. While we had some different field and laboratory techniques in the US and their lab weren't as well equipped as ours due to financial limitations, it turned out to be a shared learning experience.

For all the scientists I worked with in foreign countries, a project was an opportunity to work together, share an interest in science, and learn from each other. Since the NRCS soil survey program is so well established in both the field and laboratory, foreign scientists were interested in learning about our methods to adapt and improve their surveys. As I mentioned, it helps to build a common bond by showing interest in their life, family, and culture; what they believe, their history, and customs. Being personally interested in your for-

eign colleagues and inquisitive about their experiences and life opens the door to a better understanding, greater cooperation, and more success. I also found, as I do with US colleagues that I successfully work with, you work best with people that become your friends and you build trust over time.

## • How did you overcome the hardships of being away from your home for extended periods?

My trips were never long enough to have too many hardships related to being away from home. When things seemed to be unclear and confusing in a country, its often due to a language difficulty. So, avoid being too stressed and rely on the guidance from your hosts. Even if your hosts can speak English to some degree, don't assume what you communicate is how they hear it, and what they might tell you in English may not be exactly what they mean. In China, it was helpful to have someone available that could translate to help around this issue.

## • Can you describe an international project that stood out for you?

One project that stands out was the technical exchange with China in December 2002. It was a project that I created with John Kelly and a colleague Dr. Ming Chen in Florida. Ming knew several scientists in both in Beijing and Guangzhou at the South China Agricultural University (SCAU). We designed a project where we would visit various agricultural research institutes and universities in Beijing and sample soils in Guangdong Province as part of an ongoing soil survey. It was an opportunity to train the university scientists in our US field and laboratory methodology but also to learn how they describe and map soils in China. Samples collected were split between SCAU and the Soil Survey Laboratory.

Initially, we spent several days in Beijing, then 10 days sampling in different parts of Guangdong Province. Local farmers were hired to dig the soil pits, John completed the detailed profile descriptions, and I led the laboratory sampling. We had excellent photos of the soils and landscapes. It was a very complete collection of samples and site data.

But...the last day before we left Guangzhou, a group of provincial government officials, who didn't really understand our project or the objectives met with us. We were informed that the samples would be confiscated and destroyed as they feared the resulting lab data, especially geochemistry, would provide too much information to the US on soil characteristics in their province. Despite our explanation, my continued efforts in our last day in China as well as when I returned to the US, we lost all the samples. Even though we had national level government officials with us from Beijing, they did not stand in the way of these provincial officials. That

loss was a huge disappointment for all of us, both Chinese and US scientists.

But it was a great learning experience overall and several of the scientists we met in China have remained in close contact over the years. In fact, two years after our visit, the SCAU scientists did a reciprocal exchange and came to the US. We spent time in DC meeting with USDA staff, and then travelled to North Carolina to examine and sample soils and landscapes that were very similar to soils we had observed in China. In 2014, Dr. Ying Lu from SCAU spent two weeks visiting the National Soil Survey Center to discuss soil survey operations and laboratory procedures.

● **Can you talk about your experience regarding the administrative process and requirements that you had to wade through to take part in an international project?**

Each international trip I had went as planned. For China, I submitted a project proposal to International Programs Division and felt very excited to be selected for this opportunity. Overall, IPD and the

Foreign Ag Service provided us with the needed documents and handled all the background paperwork that was needed. We had Catherine Jackson, China Program Coordinator, USDA-FAS member travel with us to China.

● **From what you have learned, do you have any advice or recommendations to share with future NRCS International Travelers for developing strategies or plans to meet their assignment objectives?**

It is rewarding to spend time getting to know the people you are working with and understand what each person can gain from the experience. A well-planned agenda and firm objectives are important as the time in country is short and goes by rapidly. Plan on working every day unless the hosts decide a break day is needed.

Then savor the experience, while you always plan to keep traveling and working internationally, those opportunities can be rare. Think about how you might be able to cooperate with these foreign scientists once you return to the US. Projects can continue and you can

have follow-up meetings at scientific conference, write papers together, and have exchange visits by the foreign scientists to the US.

● **What were some of the difficulties you encountered when you were implementing your project objectives?**

Other than the lost samples in China, all projects I went on went smoothly due to the upfront planning. Knowing what the daily schedule is and being willing to work long hours to stay on schedule is important. Be flexible if things go wrong or get behind. Realize your in-country colleagues are leading the schedule and work with their suggestions. Roll with things.

● **How did you succeed to improve the conservation methods and techniques for the groups you were training?**

In China and Zimbabwe, we shared knowledge and provided training on site and profile descriptions, and sampling techniques. We also learned about procedures used in each country. The follow up visits by the Chinese scientists gave them the opportunity to learn first-hand about US procedures and visit with many US soil scientists and conservationists.

In the UAE, John Kelly and I worked with local scientists on the same issues, but also worked on laboratory instrumentation and analysis, map unit design, and components of the soil survey document. Also, in the UAE, there were Australian scientists working with the UAE soil survey and that opportunity enabled a greater amount of shared information.

● **Were you able to readily identify common problems in the countries you visited that were the same or similar to those in the USA?**



*UAE 2010: John Kelly and Mike Wilson attending the International Conference on Saline Soils.*

For China, we found that the soils in Guangzhou were very similar to North Carolina, where John was located. Many of the same land use limitations were present in both areas. That's one reason we followed up with a return visit with the SCAU scientists to North Carolina.

- **What were some of the things you enjoyed about your travels and the people you met?**

I liked meeting the people and getting to know them. I still communicate with many of these scientists to this day. I have a belief that, despite difference in culture and opportunities, people are generally the same the world over. A chance to have dinner together and toast each other's health was always memorable.

- **Is there a particular observation or incident you want to recall and share?**

In terms of culture, I appreciated the religious devotion of UAE scientists. I remember that during field sampling, we stopped a couple times daily for two Muslim UAE scientists, they would unroll their small rug behind the truck and pray for a few minutes.

Another thing that was fun in China was meeting families and kids in the villages we worked. The school kids were interested in what we were doing and enjoyed looking at the tools, color books, clinometers, etc. Plus, we had a chance to visit a couple homes in small farm villages in China.

- **What would you say to encourage young NRCS employees who are interested in international opportunities?**

You have to pursue the opportunities. If there is an IPD travel list of NRCS employees, get your name on that list with what expertise you can contribute. For my trips, I initi-

ated each project by my own contacts and travelled to meetings because I was interested.

I do recall that I was offered the opportunity to travel to a foreign country in the early 1990's that was undergoing civil unrest, and it was a mutual decision by IPD and myself that it was best to not go. Also, realize the experience you have might be the only one. I travelled internationally several times in the period 2000-2010 but have not travelled internationally on a NRCS project since. You never know how many opportunities you may get.

- **How will you apply your experiences from your international travels as you go forward in your new adventures?**

I hope to continue to travel internationally in retirement. Based on my experience, I feel pretty confident to travel most places, but also know how to take precautions and travel with a larger group if necessary.



*China 2002: Field sampling of soils in Bulou County, Guangdong Province.*