

NOVEMBER 2012

# ANTIGO SILT LOAM

### INSIDE

Awards, Honors, News	2
In Memorium	.2
Johan Bouma Visit	.2
Kelling Award	.2
Supporters	3
Graduates	.3
Alumni Updates	4

# Message from the Department Chair

Friends of Soil Science at UW-Madison:



It took 30 years, but my wish to teach in Soil Science 301, that took root when I was a TA for lab under the tutelage of J. R. Love, came to be this semester. After Jim retired in 1986, it took two to handle the course: Wayne Kussow and Jerry Tyler. They split the duties of the two semesters for some years. As these

two retired, we began offering the course only one semester a year, and it now takes four of us: Phil Barak, Alfred Hartemink, Bill Hickey, and, for now, myself (John Norman and Nick Balster have also been team members recently). Mattie Urrutia holds down the lab, as she has so ably for seven years. Demand remains strong for 301 and all of our other soil science courses. For example, Will Bleam's 321 - Environmental Soil Chemistry continues to grow (and his text for the course will come out in a 2<sup>nd</sup> edition soon).

The classroom experience in American universities is much criticized of late for the old-fashioned toobig lectures, the fast-growing expense, grade inflation, and questions about what is really learned by the majority of students. But every once in a while, we hear from former students about how much their time with us meant to them. Recently, Alan and David Koepke provided just such a testimonial. The Koepke Farm in Oconomowoc, Wisconsin won the Leopold Conservation Award from the Sand County Foundation and the Wisconsin Farm Bureau. They have done a terrific job of conserving and improving their soil resources through no-till, contour strip farming, grassed waterways, careful nutrient management, and close attention to P supplements

# New Soil and Water Specialist

We are delighted to welcome back Dr. Francisco Arriaga as the newest member to our faculty. Francisco is a native of Puerto Rico, where he

received his BS in soil science. He then earned his MSc at Auburn University. His northward travels led him next to UW-Madison, where he earned his PhD under the able tutelage of Birl Lowery. After a brief period as a post-doc with Birl, Francisco took a position with USDA-ARS,



once again in Auburn. There he spent nearly nine years developing conservation agriculture management systems to improve the soil water holding capacity for cropping systems typical to the Southeast, predominately through increasing soil organic matter. He was also an affiliate faculty member in the Dept. of Agronomy and Soils in Auburn University, and this brought him into frequent contact with farmers and students, something he came to greatly value.

In his new position with our department, Francisco will serve as a Soil and Water Conservation Extension Specialist and as a researcher in applied soil physics. Soil erosion is returning to the UW-Extension agenda in new and urgent ways, as CRP lands are put back into production and several major erosion events this season shocked folks in Northwest Wisconsin. We look to Francisco to become a leader in a renewed focus on soil conservation in the state.

in feed. Al and David ascribe their keen sense for conservation, in part, to a course they took as undergraduate students at UW-Madison, Soil Science 327 - *Soil and Water Conservation*, which was taught by Professor Art Peterson (now emeritus). They so appreciated the significance of this experience that they donated a substantial portion of the award to the department. This is what is now called "transformational" education, I gather. Our thanks to Professor Peterson, his engaged students Al and David, and the citizens of the state who continue to support our extraordinary university.

The coming years will surely see additional changes to Soil Science 301, as well as other courses, to take advantage of current knowledge about how today's students learn most effectively. But no amount of instructional technique substitutes for the curiosity, drive, and skill that students like the Koepkes bring to the classroom. We know that they are there and look forward to hearing from them years from now.

Bill Bland, Chair

### Awards, Honors and News

**Doug Soldat** has been promoted to associate professor with tenure effective July 2012. Doug's Extension program, classroom instruction, and research productivity are demonstrating that a few folks, at least, can do it all around here.

**Nick Balster** received the *Class of 1955 Distinguished Teaching Award.* This award is given to an instructor, assistant or associate professor who is recognized by peers and students as an extraordinarily effective and engaged teacher. It is one of 12 recognitions awarded annually by the UW-Madison faculty.

Joel Pedersen was named the Rothermel-Bascom Professor in Soil Science. This professorship is granted for a five-year period to an outstanding researcher in the department, to both recognize and support his or her work. Recent past recipients included professors emeriti John Norman and Phil Helmke.

Two of our faculty received 2012 CALS staff and faculty awards. **Bill Bland** received the *Jung Excellence in Teaching Award* and **Todd Andraski** the *Academic Staff Excellence in Research Award*.

**Ashley "Peyton" Smith**, PhD candidate, received one of four CALS Distinguished Graduate Fellowships. These fellowships are designated to support graduate students who have established an outstanding research record.

### Welcome

**Kevin McSweeney** relinquished his post as Director of the UW-Arboretum and returned to the department on March 1, 2012.

**Julie Arriaga** joined the academic staff as an associate research specialist in August. Julie received her MS with Larry Bundy.

Nick Bero will join the academic staff as an associate research specialist in November. Nick graduated with his MS this summer under Birl Lowery.

**Jennifer Etter Goh** is the newest office staff as the student services coordinator and assistant to the chair. Jennifer will be assuming many of the duties Sheri Speth so ably performed. Sheri will continue to maintain a presence in the office on a part-time basis.

### In Memorium

Professor Jaya G. lyer - PhD, 1962 - Professor Emerita Jaya G. lyer passed away on May 2, at the age of 78. For nearly 40 years, she was a compassionate and caring advisor to countless undergraduate students and a much-valued soil science consultant to mid-western tree nurseries. She brought soil biology prominently into the undergraduate curriculum, a topic that now is appreciated as central to the global challenges of biodiversity loss and climate change. For many years after her retirement, she attended department social events, and remained a keen friend.

John J. Mortvedt - PhD, 1962 - Colorado State University Professor Emeritus John Mortvedt passed away in March, at the age of 80. He worked as a soil chemist with the Tennessee Valley Authority and the USDA ARS until 1993. He then served as an extension specialist with Colorado State University until 1996. John received his PhD in soil chemistry from our department in 1962, under the direction of Professor K. C. Berger. His dissertation was entitled "The effect of manganese and copper on the growth of Streptomyces scabies and the incidence of potato scab."

Kay Tanner - Catherine "Kay" Tanner passed away in July, at nearly 92 years of age. Kay, widow of Professor Emeritus Champ Tanner, was much beloved by students in the soil physics labs. She and Champ regularly entertained visitors, students, and faculty members in the soil physics world in their Middleton home. Kay loved to play the piano and this was usually a part of the evening. For many of us, "Thanksgiving leftovers" served on the Friday after the holiday was a much-anticipated event. Kay did an extraordinary job of making everyone feel special, something graduate students need on occasion. Kay and Champ were an extraordinary couple.

### Johan Bouma Visit



Former soil science faculty member Johan Bouma and his wife Marianne visited the department on October 5, 2012. Johan first joined the department as a student in 1964, and advanced through the ranks to tenure in 1973 before leaving us to return to the Netherlands in 1975. He has served in a wide range of scientific, administrative, and

consultative roles since, but remains a sharp-eyed student of the soil and its management by humans. His most recent service was chairing a large program to foster transitions of Dutch agriculture toward greater sustainability.

# **Kelling Soil Fertility Award**

Professor Emeritus Keith Kelling and his wife Andrea have made our soil fertility faculty members even more competitive in the vital task of recruiting great graduate students. The Kelling Soil Fertility Award supports visits by prospective graduate students and signing bonuses to those who make the decision to attend UW-Madison.

"Effective Extension is built on current research, and nothing moves a research program along like a great graduate student," says Kelling. Our faculty members agree, but note that competition for the best students is increasingly keen. Most students are "shopping around" aggressively, looking for the best fit with major professor, institution, and research problem. The Kellings' generosity will make it easier for our soil fertility faculty members to meet candidates face-to-face, show them what a terrific place our university is, and encourage the best with a bit of extra financial help. Thanks to Andrea and Keith for recognizing and acting on this new strategy for helping keep our research program strong.

# Our Supporters

10/1/2011 thru 9/30/2012

Ms. Nancy L. Bormann Dr. Steven D. Comfort Ms. Jaslyn J. Dobrahner Dr. and Mrs. Bruce Frazier Ms. Janet N. Hauber Mr. Brian G. Hess Ms. Chrystie M. Jackson Mr. James W. Jankus Mr. Douglas L. Karlen Prof. and Mrs. Keith Kelling Prof. M. B. Kirkham Koepke Farms, Inc. Mr. Adam D. Krohn Mr. Richard L. LaCroix Ms. Virginia A. Laszewski Ms. Ita M. Lindquist Prof. Birl Lowery Dr. Clarence J. Milfred Mr. Carl H. Mueller Mr. and Mrs. Robert Neumann Prof. Blair D. Orr Ms. Lily Rose Palmer Mr. William W. Pearson Mr. Kyle L. Rudersdorf Mr. Bradley J. Russell Ms. Patricia Ann Sauer Ms. Selden Collins Dr. Warren J. Sharratt Mr. Joseph J. Stellato Prof. Jack L. Stroehlein Prof. James B. Swan Mr. Robert W. Thull Mr. Gerald E. Timm Mr. Donald R. Timmons Ms. Kathryn A. Trudell Mr. James C. VanHerwynen Prof. Sephen J. Ventura Dean Leo M. Walsh

### **Recent Graduates**

Bernau, Dustin G. - BS, 2012 Agricultural Science-Production

Betcher, Joseph R. - BS, 2012 Agricultural and Life Sciences

Fish, Matthew P. - BS, 2012 Agricultural and Life Sciences

**Groth, Nicholas K. - BS, 2012** Agricultural Science-Production

Kramper, Wendy C. - BS, 2012 Agriculture and Natural Sciences

Krohn, Adam D. - BS, 2012 Agriculture and Natural Resources

Mellenthin, Erin K. - BS, 2012 Agricultural and Natural Resources

**Richards**, **Jeremy K. - BS**, **2012** Agricultural Science-Production

**Steadman, Jacob D. - BS, 2011** Agriculture and Natural Resources

Beilke, Adam J. - MS, 2011 Carbon and nitrogen trends in chronosequences of transantartic mountain soils (Bockheim)

Bero, Nicholas J. - MS, 2012 Controlled-release fertilizer effect on groundwater nitrogen concentration in sandy soils under potato production (Lowery)

Griffith, Shane E. - MS, 2011 Biosolids - based Poa pratensis sod production in Wisconsin: Agronomic impacts, soil dynamics, and potential limitations (Soldat)

Lee, Joonhee - MS, 2012 Effect of 15-N-labeled urine, dung, and fertilizer on pasture yield, N uptake, and N dynamics in pasture-soil systems (Barak)

# Nocco, Malika A. - MS, 2012

Effect of vegetation type on the cycling of DOC, N, and P in residential-scale urban stormwater basins (Balster)

# Rathsack, Brittney R. - MS, 2011

Harvest intensity impacts on oak-dominated ecosystems on sandy soils in northwestern Wisconsin (Bockheim)

## Wilhelm, Kelly R. - MS, 2011

Effects of timber harvest intensity on macronutrient cycling on oak-dominated sandy soils of northwest Wisconsin (Bockheim)



Emeritus faculty at the annual "Subs and Soils" event in September. Pictured from left to right: Jerry Tyler, Jim Love, Leo Walsh, Art Peterson John Norman, John Harkin, Larry Bundy.

# Department of Soil Science at the University of Wisconsin-Madison l/we wish to join other students/alumni, industry, and friends in enhancing the teaching, research and outreach programs in

City:			State	:	Zip:	
Address:						
Home Phone:			Work	Phone:		
Name:						
Cardholder's Sig	gnature:				Date:	
Cardholder's Na	ame (please pr	int):				
Card Number:					Expiration D	Date:
Please charge r	my gift of \$	to my (plea	ase circle): Ma	stercard	Visa	American Express
\$50 _	\$100	\$250	\$500	\$1,	000	Other

University of Wisconsin Foundation • US Bank Lockbox • P.O. Box 78807 • Milwaukee, WI 53278-0807

# **Alumni Updates**

**Donald W. Rhodes** (PhD 1950) is retired and now is 93 years old. He worked in chemical processing plants that recovered U-235 and Pu-139 from irradiated fuels. He spent a lot of time working on waste disposal projects and determining how the Pu and fission products reacted with the soils. Dr. Rhodes graduated from Brigham Young University in 1947 with a BS in Chemistry and recieved his PhD in Soil Science at UW-Madison under E. Truog.

Pat Sauer (MS 1991) is the Stormwater Program Administrator for the Iowa Stormwater Education Program at the Iowa Association for Municipal Utilities.

Ryosuke Fujinuma (MS 2002, PhD 2009) was appointed assistant professor at the University of Queensland in Australia in spring 2012. He will be in the School of Agriculture and Food Science.

David Omen (BS 1979) is now retired and working in Art. He completed a BS in Environmental Art from Montana State University - Billings in 2010.

Alumni I	We'd love to hear from you! Please complete and return this form or send your updates via email to: jgoh@wisc.edu							
Name:								
Degree(s) and \	rear(s):	BS (	)	MS (	)	PhD (	)	
Home Address:								
Email:								Phone No.:
Position:						Employe	r:	
News to share:								
Return to:	Pro	files					rsity of Wisco n WI 53706-:	onsin-Madison 1207

Printing/mailing paid for with UW Foundation/WALSAA/ Department funds.

Web site: www.soils.wisc.edu Email: jgoh@wisc.edu

> University of Wisconsin 1525 Observatory Drive Madison, WI 53706-1207

Department of Soil Science Jennifer Etter Goh, Editor

University of Wisconsin-Madison SOIL SCIENCE

Nonprofit Organization US POSTAGE BAID Madison, UN Retmit No. 658