



Announcement of the 2020 NCSS Award Recipients

The Soil and Plant Science Division is pleased to announce the recipients of the 2020 National Cooperative Soil Survey (NCSS) Awards.

MAGGIE KIDD PAYNE IS THE RECIPIENT OF THE NCSS SCIENTIST OF THE YEAR AWARD

Maggie Kidd Payne is a NRCS Resource Soil Scientist in Wareham, Massachusetts.

Maggie is a 2001 Magna Cum Laude graduate of Colby College in Waterville, Maine with a B.S. in Biology-Environmental Science Concentration. She received a M.S. in Environmental Science from the University of Rhode Island in 2007 with her thesis *Landscape-Level Assessment of Subaqueous Soils and Water Quality in Shallow Embayments in Southern New England*. Maggie began her NRCS career in 2007 in Warwick, RI as a Biological Science Technician followed by Resource Soil Scientist position in 2008, and Soil Conservationist position in 2012. In 2014, Maggie was promoted to her current position as Resource Soil Scientist in Wareham, MA.



Highlights from Maggie's career include:

- Northeast regional coordinator for National Rapid Carbon Assessment (RaCA) initiative
- Co-authored Field Book for Describing and Sampling Soils 2013 subaqueous soils sampling section
- National Soil Survey Center Interpretations Team detail to write national soil interpretations for Web Soil Survey
- Developed ESRI Story Map as a member of the National Coastal Zone Soil Survey team
- Ground Penetrating Radar (GPR), Real Time Kinematic (RTK), and Electromagnetic Induction (EMI) operator
- Manage Food Security Act Wetland Compliance workload for the state, conduct wetland determinations, and provide training to field staff on wetland compliance.

- Managed over 40 WHIP, EQIP, and CSP contracts on varied land uses including marsh restoration, forestry, wildlife, nutrient management, and grazing projects.
- Served as technical contact on development of new standards for oyster restoration in Rhode Island.
- Member of the MA and RI civil rights committee as the Women’s Special Emphasis Program Manager.
- Member of the MA and RI civil rights committee as the Lesbian, Gay, Bisexual, and Transgender Special Emphasis Program Manager.
- Completed 4 spatial and data updates in 3 years on statewide soils data to improve mapping and soil information on the National Soils Information System (NASIS)
- Regional coordinator for National Rapid Carbon Assessment (RaCA) initiative for the northeast region to train and coordinate NRCS employees and volunteers in sampling 380 points for soil carbon and supervised 5 student lab technicians in association with the University of Rhode Island in completing laboratory analysis of over 10,000 soil samples.
- Completed the first coastal and subaqueous soil survey in the nation as well as the first inland freshwater soil survey in association with the University of Rhode Island and the Rhode Island MapCoast partnership
- Assisted in development of site-specific soil erosion index for Rhode Island.

Maggie is the author or co-author of several professional publications.

- Kennedy, C.D., S Wilderotter, **M. Payne**, A.R. Buda, P.J.A. Kleinman, and R.B. Bryant. 2018. A geospatial model to quantify mean thickness of peat in cranberry bogs. *Geoderma*, 319: 122-131.
- **Payne, M.K.** and M.H. Stolt. 2017. Understanding sulfide distribution in subaqueous soil systems in southern New England, USA. *Geoderma*, 308: 207-214.
- Stolt, M., M. Bradley, J. Turenne, **M. Payne**, E. Scherer, G. Cicchetti, E. Shumchenia, M. Guarinello, J. King, J. Boothroyd, B. Oakley, C. Thornber, and P. August. 2011. Mapping Shallow Coastal Ecosystems: A Case Study of a Rhode Island Lagoon. *Journal of Coastal Research*, 27 (6A): 1-16.
- Erich, E., P.J. Drohan, L.R. Ellis, M.E. Collins, **M. Payne**, and D. Surabian. 2010. Subaqueous soils: their genesis and importance in ecosystem management. *Soil Use and Management*, 26: 245-252.
- **Payne, M.K.**, and J. Turenne. 2009. Mapping the “New Frontier” of Soil Survey: Rhode Island’s MapCoast Partnership. *Soil Survey Horizons*, 50: 86-89.

Maggie is a volunteer with the Rochester, MA Conservation Commission and is a board member with the Marion MA Natural History Museum. She is a member of Society of Soil Scientists of Southern New England, the Rochester Land Trust, and Community Supported Agriculture and is a student at the New Bedford Ballet.

CHAD REMLEY IS THE RECIPIENT OF THE NCSS SCIENTIST ACHIEVEMENT AWARD

James Chad Remley is the Regional Director for Soil Survey Region 5 in the Soil and Plant Science Division headquartered in Salina, KS.

Chad Remley has had a long and distinguished career with NRCS, and its predecessor, SCS. Currently the regional director for the Great Plains Soil Survey Region, SSR5, Chad earned his B.S. degree at Purdue University, where he met his future wife, Trish. Although successful at finding a spouse, he struck out at being hired by SCS and went on to earn his M.S. degree at the University of Missouri. He eventually was hired by SCS, beginning his career as a soil scientist in 1987 as a soil survey project member in northern Missouri mapping soils in Putnam County. Chad has held many different positions with NRCS/SCS in multiple states, including Missouri, Kansas and Florida. While in Putnam County, he completed a soil mapping detail to Baker County, FL in 1989. In the days before cell phones, when we relied on a wake-up call from the front desk, Chad's request was not honored. This resulted Chad being docked an hour for showing up 30 minutes late.



Chad's first job as a project leader came in 1990, when he went to Laclede County in Southern Missouri. He then moved on to a liaison position with the Kansas City District Army Corps of Engineers, a role in which he worked for four years resolving wetland issues between SCS, the USEPA and Corps of Engineers. His next move was to Salina, Kansas, as the Assistant State Soil Scientist, a position which he held for two years, becoming a Soil Data Quality Specialist in 1998, with MLRA Region 5 Office in Salina. This was his longest running position, holding this for 14 years before becoming the Assistant State Soil Scientist for Kansas, for the second time, until becoming the State Soil Scientist for Kansas in 2013. In October 2015, Chad moved into his current role as the Regional Director for Soil Survey Region 5, the Great Plains.

Chad has also made significant technical contributions, collaborating with National Soil Survey Center staff on several occasions. He helped develop a crisp-logic version of Soil Rating for Plant Growth in NASIS, working with Ray Sinclair. He later worked with Bob Nielsen to develop a fuzzy logic version of Soil Rating for Plant Growth, which was used to develop the National Commodity Crop Productivity Index, or NCCPI. This interpretation is used extensively throughout the US.

Chad led the Research Focus Team for almost a year and is currently the Focus Team Leader for Dynamic Soil Survey, or DSS, as well as the Soil Survey Coordination sub-team leader within the

Dynamic Soil Properties Focus Team. As a team lead for DSS, Chad has collaborated with NSSC staff, soil survey regional staff, and staff from other federal agencies. He recently helped develop the Dynamic Soil Property National Instruction as a co-author. Chad has had a significant role in helping shape the future of the Soil and Plant Science Division and National Cooperative Soil Survey through his leadership activities.

In 2017, Chad also served as a member of a multi-disciplinary team conducting state Quality Assurance Compliance Reviews. Chad visited several states to assess both the states' program administration and regional soil survey activities. On one such review in West Virginia, Chad was left behind at the local service center following lunch. Although the review team assured him that he was left behind by mistake, Chad stayed close to the review team following that incident.

Chad is known for his willingness to step up and take on additional roles, troubleshoot issues, and find solutions. While he was a Soil Data Quality Specialist, Chad took on roles as Assistant for Field Operations in Dodge City, Kansas, and acting State Soil Scientist for New Mexico. More recently, in 2018, Chad served 15 months as acting Regional Director for Region 9, and most recently as acting National Leader for Research and acting National Leader for Kellogg Soil Survey Lab for 10 months.

Chad's distinguished career of accomplishment, combined with his willingness to volunteer for details and step up to new challenges, make him a valuable member of the SPSD leadership team. Chad also, unofficially, frequently serves as a valuable sounding board for his colleagues, a mentor, an organizer, and supplier of decadent treats (he bakes, and he bakes well).

ROBERT VAUGHAN IS THE RECIPIENT OF THE NCSS COOPERATOR AWARD

Robert Vaughan is the Team Manager for the Terrestrial Ecological Unit Inventory Group at the U.S. Forest Service Geospatial Technology Applications Center.

Rob is a 2002 graduate of the University of Maryland receiving a B.S. in Environmental Science and Policy with a concentration in Soil, Water, and Land Resources. He was a soil scientist with the University of Maryland, Department of Environmental Science and Technology where he collaborated on a University of the Autonomous Regions of the Caribbean Coast of Nicaragua (URACCAN) to produce a first-order soil survey of two, eight-hectare plots located in lowland tropical rainforests on the Atlantic coast of Nicaragua.



Rob lived and worked in Nicaraguan rainforests for the month of January for two consecutive years. In 2005, he received a M.S. degree from University of Maryland in Natural Resource Science – Soil Science with a focus in pedology. His thesis was *Agricultural drainage ditches: Soils and implications for phosphorus transport and retention*.

Upon completion of his Master's degree, Rob was a soils research and a forest research technician at the University of Idaho then took a position as a faculty research associate in the Department of Civil and Environmental Engineering at Washington State University in 2006. In 2008, Rob accepted a position in the U.S. Forest Service Geospatial Technology Applications Center. Rob was the Forest Service Terrestrial Ecological Unit Inventory (TEUI) Geospatial Toolkit (ArcGIS Add-In) Administrator responsible for software development, training, outreach, and inter-agency coordination (NRCS, BLM, NPS, private sector). He also was the technical lead on team for the USFS Terrestrial Condition Assessment (TCA) -- an assessment of ecological conditions on all USFS Administered lands. Rob's duties as a project leader included responsibility for project design, coordination, communication with cooperators, execution, and deliverables.

In addition to his full-time position with the U.S. Forest Service, Rob also had positions from 2012 to 2015 as a lecturer and faculty research assistant at Cal Poly-San Luis Obispo in the Natural Resources Management and Environmental Sciences. His work at Cal Poly-SLO focused was on geospatial data and their potential uses. He taught a course called *Applications in GIS* and collaborated on an USDA-NRCS funded grant entitled *Quantification of outcomes generated using multi-scale geomorphic classification systems and predictive and updates modes of digital soil mapping*.

In 2018, Rob accepted his current position as Team Manager for the TEUI Group at the USFS Geospatial Technology Applications Center. As team manager, Rob is responsible for prioritizing staff resources, scoping task orders, providing level-of-effort estimates, and overseeing the technical development of TEUI and soil survey projects at GTAC. He coordinates and provides assistance to the USFS National Soils Program Leader and Regional Soil Scientists on digital soil mapping (DSM) and National Cooperative Soil Survey projects on USFS lands. Rob represents the USFS in USDA-NRCS Soil Survey DSM Focus Group. He is the technical lead for the Terrestrial Condition Assessment Team – A USDA-USFS Key Performance Indicator (KPI), responsible for all geospatial data development, statistics, and data visualizations.

Rob is the author or co-author on 15 publications. He received the Red Castle Resources Inc. Achievement Award in 2009 and placed 3rd in the TEUI poster contest held at the 2011 ESRI International User Conference. Rob also is a member of the Soil Science Society of America and holds a certification as a GIS Professional from the GIS Certification Institute.