

Graduate Faculty

More than thirty University of Minnesota faculty members serve as advisors to students in the Sustainable Agricultural Systems minor degree program. These professors come from a variety of disciplines; including bioproducts and bio-systems engineering, agronomy, applied economics, entomology, food science and nutrition, forest resources, horticulture, medicine, plant pathology, soil, water and climate science, sociology, landscape architecture and veterinary medicine.

David Andow, Professor, Department of Entomology

Phone: 612-624-5323

E-mail: dandow@umn.edu

Online Profile: <http://www.entomology.umn.edu/People/GradFaculty/Andow/>

Research and Teaching Related to Sustainable Agriculture: Natural pest control, internal and external benefits and risks of ecological agriculture.

Courses taught: ENT 5040 Insect Ecology, ENT 5041 Insect Population Dynamics, ISG 5010 Environmental Risk Analysis and ENT / PLPA 3333 Insects, Microbes and Plants.

Todd Arnold, Professor, Department of Fisheries, Wildlife & Conservation Biology

Phone: 612-624-2220

Email: arnol065@umn.edu

Online Profile: <http://fwcb.cfans.umn.edu/personnel/faculty/arnold/index.htm>

Research and Teaching Related to Sustainable Agriculture: Wildlife use of agricultural landscapes; impacts of grazing, haying, and cropping systems on reproductive success of wildlife (especially birds).

Courses Taught: SUST 3003 Sustainable People, Sustainable Planet and FW 5051 Analysis of Populations.

James Bradeen, Professor, Department of Plant Pathology

Phone: 612-625-9736

Email: brade005@umn.edu

Online Profile: <http://ppg.cfans.umn.edu/personnel/personnel.htm>

Research and Teaching Related to Sustainable Agriculture: Research interests include use of crop wild relatives as sources of resistance genes for crop improvement and the genomics of disease resistance; Teaching emphasizes translation of knowledge of the molecular basis of plant-microbe interactions into approaches for crop disease management.

Courses taught: PLPA 5300 Current Topics in Molecular Plant Pathology, PLPA 5103/8103 Molecular Plant-Microbe Interactions and PLPA 8200 Plant Pathology Seminar.

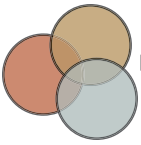
David D. Biesboer, Program Director, Itasca Biological Station/Lab (Department of Plant Biology)

Phone: 612-625-1799

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Online Profile: <http://www.cbs.umn.edu/explore/departments/plantbio/faculty-research/faculty-directory/davidbiesboer>

Research and Outreach Education Related to Sustainable Agriculture: The use of competitive native grass species for control of noxious weeds along highway right-of-ways as alternatives to pesticide usage. The use of native, short-stature, warm season grasses adapted to dry, high saline, compacted soils as low maintenance cover along roadsides. Modeling of eco-toxicological chemicals produced by the transportation industry and methods for decreasing their input into the environment.



Graduate Faculty

Valentine Cadieux, Research Associate, Department of Sociology

Phone:

Email: cadieux@umn.edu

Online Profile: <http://www.tc.umn.edu/~cadieux/>

Research and Teaching Related to Sustainable Agriculture: Cultural Geography of Land Use Change and the Politics of Planning Processes at the urban-rural interface, particularly concentrating on intersections of urbanization, nature conservation, and agriculture activism. Interests include: alternative agri-food movements, the concepts of place, landscape and nature, and epistemological issues involved in the interplay between political ecology and other disciplinary studies of nature-society relations.

Courses Taught: SOC 4090 / PSYCH 5960 Environmental Decision Making: Focus on Food Systems.

Jeffrey Coulter, Associate Professor, Department of Agronomy and Plant Genetics

Phone:

Email: coult077@umn.edu

Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/CoulterJeffreyA/>

Research and Outreach Education Related to Sustainable Agriculture: Extension education and research to help farmers and agricultural professionals increase the productivity and profitability of corn production while improving nutrient cycling and protecting soil and water resources.

Dean Current, Research Associate, Department of Forest Resources

Phone: 612-624-4299

Email: curre002@umn.edu

Online Profile: <http://www.forestry.umn.edu/People/Current/>

Research and Teaching Related to Sustainable Agriculture: Landscape level integrated natural resource and agricultural management; improved agricultural management including introduction of perennial cropping systems to address water quality issues and sustainability of agricultural landscapes; and agroforestry.

Courses Taught: ESPM 5251 Natural Resources in Sustainable International Development and ESPM 3204 Sustainable Community Based Natural Resource Management.

Mae Davenport, Associate Professor, Department of Forest Resources

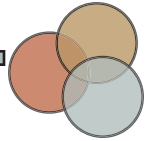
Phone: 612-624-2721

Email: mdaven@umn.edu

Online Profile: <http://www.forestry.umn.edu/People/Davenport/>

Research and Teaching Related to Sustainable Agriculture: The human dimensions of natural resource management, specifically sustainable land use planning; community-based ecosystem management; recreation planning; and human beliefs, attitudes and behaviors associated with landscape change.

Courses taught: ESPM 3245 Sustainable Land Use Planning and Policy.



Graduate Faculty

John Deen, Professor, Department of Veterinary Population Medicine

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Online Profile: <http://www.cvm.umn.edu/vpm/faculty/johndeen/home.html>

Research and Outreach Education Related to Sustainable Agriculture: Identifying the affective states of animals and improving their welfare and international development, particularly in the development of sustainable animal agriculture models.

Ruth Dill-Macky, Professor, Department of Plant Pathology

Phone: 612-625-2227

E-mail: ruthdm@umn.edu

Online Profile: <http://plpa.cfans.umn.edu/People/Faculty/RuthDillMacky/>

Research and Teaching Related to Sustainable Agriculture: Plant Disease Control.

Courses taught: PLPA 2001 Introductory Plant Pathology.

Kathy Draeger, Adjunct Assistant Professor, Department of Agronomy and Plant Genetics and Statewide Director of the U of M Regional Partnerships

Phone: 612-625-3148

Email: draeg001@umn.edu

Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/DraegerKathrynJ/index.htm>

Research and Outreach Education Related to Sustainable Agriculture: Statewide Director of the U of M Regional Partnerships, setting the agenda for sustainable development, and recreating a local food system.

Axel Garcia y Garcia, Assistant Professor, Department of Agronomy & Plant Genetics

Phone: 507-752-5080

Email: axel@umn.edu

Online Profile: <http://swroc.cfans.umn.edu/People/People/index.htm>

Research and Outreach Education Related to Sustainable Agriculture: Water use and efficiency of crops/ cropping systems and climate/weather risks to crops. Other research areas of interest are nitrogen use and efficiency and precision farming.

Julie Grossman, Assistant Professor, Department of Horticulture

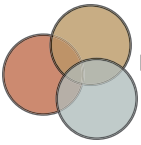
Phone: 612-625-8597

Email: jgross@umn.edu

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Research and Teaching Related to Sustainable Agriculture: Managing plant-soil-microbe relationships in organic systems to enhance soil fertility and develop sustainable food production systems. Current Faculty Adviser for Cornercopia Student Organic Farm.

Courses Taught: Hort 3131 Student Organic Farm Planning, Growing, and Marketing and FdSy 4101 Holistic Approaches to Improving Food Systems Sustainability.



Graduate Faculty

Craig Hassel, Associate Professor, Department of Food Science and Nutrition

Phone: 612-624-7288

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Online Profile: <http://fscn.cfans.umn.edu/people/faculty/craighassel/>

Research and Teaching Related to Sustainable Agriculture: Food and health with cultural communities whose narratives describe health of people and land as intimately inter-related. The craft of cross-cultural engagement (CCE) is founded upon long-term relationships and commitments to trust, mutual respect and protecting the integrity of all forms of human knowledge. My work offers insight into ways that mainstream institutions can become more culturally aware, sensitive and effective in their intercultural work.

Courses taught: CFANS 1902 Ways of Knowing and Science, CSPH 5111 Ways of Thinking About Health and CSPH 5115 Cultural Awareness Knowledge and Health.

George Heimpel, Professor, Department of Entomology

Phone: 612-624-3480

Email: heimp001@umn.edu

Online Profile: <http://www.entomology.umn.edu/People/GradFaculty/Heimpel/index.htm>

Research and Teaching Related to Sustainable Agriculture: Host-parasitoid interactions and biological control, aspects of host specificity in parasitoids, indirect interactions in natural and agricultural systems, sex determination in parasitoid wasps, evolution of parasitoid reproductive strategies, and ecosystem services (biological control) associated with biofuel cropping systems.

Courses taught: ENT 4231 Insect Behavior and ENT 5341 Biological Control.

Brad Heins, Assistant Professor, West Central Research and Outreach Center

Phone: 320-589-1711

Email: hein0106@umn.edu

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Research and Outreach Education Related to Sustainable Agriculture: Organic Dairy Production.

Jason Hill, Assistant Professor, Department of Bioproducts and Biosystems Engineering

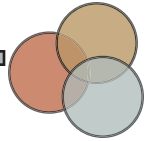
Phone: 612-624-2692

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Online Profile: <http://hill.cfans.umn.edu/>

Research and Teaching Related to Sustainable Agriculture: Areas of interest include the consequences of energy, agriculture, and natural resource use from a life-cycle perspective with particular focus on technological, environmental, economic, and social aspects of sustainable bioenergy production from traditional and next-generation feedstocks.

Courses taught: ESPM/MGMT 3603/5603 Environmental Life Cycle Analysis, ESPM 3607 Natural Resource Consumption and Sustainability, BBE 3201 Sustainability of Food Systems: A Life Cycle Perspective and GCC 3001 Grand Challenge: Can We Feed the World Without Destroying It?



Graduate Faculty

Stan Hokanson, Professor, Department of Horticultural Science

Phone: 612-624-1203

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Online Profile: http://www.horticulture.umn.edu/Who_sWho/Faculty/StanHokanson/

Research and Teaching Related to Sustainable Agriculture: Plant breeding for cold hardiness

Courses taught: HORT 1015 Woody and Herbaceous Plants and HORT 4015 Flowering Woody Trees and Shrubs.

Emily Hoover, Professor, Horticultural Science,

Phone: 612-624-6220

E-mail: hoove001@umn.edu

Online Profile: http://www.horticulture.umn.edu/Who_sWho/Faculty/EmilyHoover/

Research and Teaching Related to Sustainable Agriculture: Sustainable fruit production practices particularly focused on methods for developing small ecological footprints for fruit crops.

Courses taught: HORT 5031 Fruit Production and Viticulture for Local and Organic Markets.

Bill Hutchinson, Professor, Department of Entomology

Phone: 612-624-3278

Email: hutch002@umn.edu

Online Profile: <http://www.entomology.umn.edu/People/GradFaculty/Hutchison/index.htm>

Research and Teaching Related to Sustainable Agriculture: Understanding the role of insect population dynamics as a basis for managing pest populations, and the use of host plant resistance and insecticide alternatives as compatible strategies to support sustainable agriculture.

Courses Taught: CFANS 3001 Pests and Crop Protection.

Nicholas Jordan, Professor, Department of Agronomy and Plant Genetics

Phone: 612-625-3754

E-mail: jorda020@umn.edu

Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/JordanNicholasR/index.htm>

Research and Teaching Related to Sustainable Agriculture: Agroecology, focusing on management of functional biodiversity in agroecosystems, plant-soil biota interactions, and innovation processes in sustainable agriculture.

Courses taught: AGRO 5321 Ecology of Agricultural Systems.

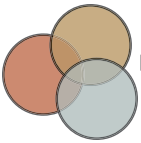
Gregg Johnson, Associate Professor, Southern Research and Outreach Center

Phone: 507-827-5617

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Online Profile: <http://sroc.cfans.umn.edu/People/Faculty/GreggJohnson/>

Research and Outreach Education Related to Sustainable Agriculture : My research is focused on designing biomass cropping systems that provide a reliable and consistent source of feedstock for the emerging bioeconomy. Furthermore, I believe these systems must be designed to provide multiple economic and environmental benefits that ultimately add value to the rural landscape.



Graduate Faculty

Robert P. King, Professor, Department of Applied Economics

Phone: 612-625-1273

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Research and Teaching Related to Sustainable Agriculture: Economics of transition to organic production, Local food supply chains, Values based food supply chains, Food access and food security for low income households and Food system indicators.

Courses Taught: APEC 3002 Managerial Economics, APEC 3202 An Introduction to the Food System: Analysis, Management, and Design, and APEC 8902 Graduate Seminar.

Mindy Kurzer, Professor, Department of Food Science & Nutrition

Phone: 612-624-9789

Email: mkurzer@umn.edu

Online Profile: <https://fscn.cfans.umn.edu/faculty-staff/mindy-s-kurzer>

Research and Teaching Related to Sustainable Agriculture: Director of the Healthy Foods, Healthy Lives Institute. Food and Health.

Courses Taught: FScN 2001 A Food System Approach to Cooking, and FScN 2002 Cooking on a student's budget.

Tom Michaels, Professor, Department of Horticultural Science

Phone: 612-624-7711

Email: michaels@umn.edu

Online Profile: http://www.horticulture.umn.edu/Who_sWho/Faculty/TomMichaels/

Research and Teaching Related to Sustainable Agriculture: Breeding dry beans for organic production systems and the hydroponic salad table project.

Course Taught: HORT 1014 Edible Landscapes, HORT 3131/5131 Student Organic Farm Planning, Growing and Marketing, APS 5101 Polyculture Design and FDSY 2101 Plant Production Systems. Current Faculty Adviser for Cornercopia Student Organic Farm.

Roger D. Moon, Professor, Department of Entomology

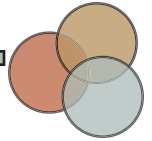
Phone: 612-624-2209

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Online Profile: <http://www.entomology.umn.edu/People/GradFaculty/Moon/>

Research and Teaching Related to Sustainable Agriculture: Animal health, comfort and productivity, as affected by flies and other ectoparasites. Current projects involve cultural management options for organic dairies that can reduce abundance of biting and nonbiting filth flies.

Courses taught: ENT 4281 Veterinary Entomology, ENT 5045 Insect Population Dynamics and AGRO 5121 Applied Experimental Design.



Graduate Faculty

David Mulla, Professor, Department of Soil, Water and Climate

Phone: 612-625-6721

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Research and Teaching Related to Sustainable Agriculture: The measurement, modeling, and management of uncertainty and risk for non-point source pollution of surface and groundwater; the characterization and estimation of field-scale variability for precision farming; the evaluation of alternative farm management strategies for improved soil quality and sustainability and evaluation of policies for soil and water resources. Courses taught: ES 3131 Environmental Physics.

Helene Murray, Director, Minnesota Institute for Sustainable Agriculture and Adjunct Faculty, Department of Agronomy and Plant Genetics

Phone: 612-625-0220

E-mail: hmurray@umn.edu

Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/MurrayHelene/>

Research and Teaching Related to Sustainable Agriculture: Participatory research, systems research, cases studies and local food systems.

Courses Taught: SAGR 4888/8010 Issues in Sustainable Agriculture / Colloquium in Sustainable Agriculture.

Laura Musacchio, Associate Professor, Department of Landscape Architecture

Phone: 612-626-0810

Email: musac003@umn.edu

Online Profile: <http://landarch.design.umn.edu/people/musacchio.html>

Research and Teaching Related to Sustainable Agriculture: Urban agriculture, urban ecosystem services, biodiversity, greening cities, sustainable landscapes, and resilience thinking.

Courses Taught: LA 5205 Regreening Minds, Cities, and Regions and LA 5204 Metropolitan Landscape Ecology.

Kristen Nelson, Professor, Department of Forest Resources

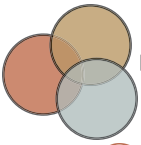
Phone: 612-624-1277

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Online Profile: <http://www.forestry.umn.edu/People/Nelson/>

Research and Teaching Related to Sustainable Agriculture: Urban food networks, social networks and production transitions to sustainable practices and the landscape effects.

Farmer motivations for change Courses taught: ESPM 3271 Environmental Policy, Law, and Human Behavior, ESPM 3202W/5202 Environmental Conflict Management, Leadership, and Planning, ESPM 4041W ESPM 4601 Soils and Pollution, and Hort 4601 Aquaponics: Integrated fish and plant food systems.



Graduate Faculty

Kent Olson, Professor, Department of Applied Economics

Phone: 612-625-7723

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Online Profile: <http://www.apec.umn.edu/people/FacultyDirectory/KentOlson/>

Research and Teaching Related to Sustainable Agriculture: Analysis of organic and other alternative crop management strategies, and alternative policies for sustainable agriculture. Courses taught: APEC 3811 Principles of Farm Management and APEC 4103 World Food Problems.

Angela Orshinsky, Assistant Professor, Department of Plant Pathology

Phone: 612-625-9274

Email: aoershins@umn.edu

Online Profile: <http://hortpathology.cfans.umn.edu/home/people/>

Research and Outreach Education Related to Sustainable Agriculture: Extension education and research focused on developing molecular diagnostic procedures for plant pathogens, assessing plant host species and cultivars for resistance responses, and cultural practices to reduce disease severity.

Chris Phillips, Assistant Professor, Department of Entomology

Phone: 218-327-4490

Email: cphilips@umn.edu

Online Profile: <http://www.entomology.umn.edu/faculty-staff/chris-philips>

Research and Outreach Education Related to Sustainable Agriculture: Sustainable integrated management of arthropod pest, pollinator and beneficial species of fruit and vegetable crops in diverse production systems.

Paul Porter, Professor, Department of Agronomy and Plant Genetics

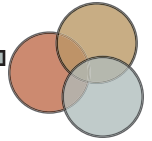
Phone: 612-625-6719

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Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/PorterPaulM/>

Research and Teaching Related to Sustainable Agriculture: Rye as a cover crop, Sustainable agriculture and Subsistence agriculture. Agroecosystem analysis.

Courses Taught: AGRO 4103 World Food Problems, AGRO 3305 Agroecosystems of the World, AGRO 4605 Strategies for Agricultural Production and Management and AGRO 5999 Agroecosystems Analysis Field Course.



Graduate Faculty

Mary Rogers, Assistant Professor, Department of Horticulture

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Online Profile: <http://horticulture.umn.edu/directory/faculty/maryrogers>

Research and Teaching Related to Sustainable Agriculture: Organic insect pest management and ecological strategies to improve horticultural crop production. Member of the Sustainable Agriculture Education Association and the U of M Food Systems Consortium. Current Faculty Adviser for Cornercopia Student Organic Farm.

Courses Taught: HORT 2031: Organic Horticulture and Sustainable Food Systems; HORT 5032: Organic Vegetable Production; HORT 3480: Topics in Sustainable Horticulture: Food Justice in the Twin Cities and HORT 1901: Growing Food and Building Community: Urban Farming in the Twin Cities.

Craig Sheaffer, Professor, Department of Agronomy and Plant Genetics

Phone: 612-625-7224

E-mail: sheaf001@umn.edu

Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/SheafferCraigC/>

Research and Teaching Related to Sustainable Agriculture: Organic cropping systems.

Courses taught: AGRO 1103 Crops, Environment and Society, AGRO 4888 / SAGR 8010 Issues in Sustainable Agriculture / Sustainable Agriculture Colloquium.

Chery Smith, Professor, Department of Food Science and Nutrition.

Phone: 612-624-2217

E-mail: csmith@umn.edu

Online Profile: <http://fscn.cfans.umn.edu/people/Faculty/AlphabeticalList/cherysmith/>

Research and Teaching Related to Sustainable Agriculture: I am interested in how environment, age, socioeconomic status, culture, and food insecurity influence the nutritional status, dietary behavior, and health of selected populations (Native Americans, Hmong, African Americans, homeless individuals, veterans, and Sherpas). I am also particularly interested in the hunger-obesity paradox in the US. I have also been looking at food access by Minnesotans living in food deserts (places with limited food resources). Lastly, I am interested in the anthropology of foods.

Courses taught: FSCN 4614 Community Nutrition, FSCN 3615 Socio-Cultural Aspects of Food, Nutrition, and Health and NUTR 8620 Advanced Nutritional Anthropology.

Ulrike Sorge, Assistant Professor, Department of Veterinary Population Medicine

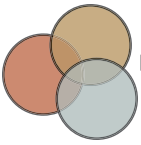
Phone: 612-624-3428

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Online Profile: <http://www.cvm.umn.edu/vpm/faculty/ulrikesorge/home.html>

Research and Teaching Related to Sustainable Agriculture: Dairy production medicine with a particular focus on animal welfare and health through preventive or curative management practices of organic dairy farms and the impact of human-animal interactions (stockmanship).

Courses Taught: Veterinary courses on bovine health, epidemiology and dairy herd management.



Graduate Faculty

Marla Spivak, Professor, Department of Entomology

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Online Profile: <http://www.entomology.umn.edu/People/GradFaculty/Spivak/>

Research and Teaching Related to Sustainable Agriculture: Pollinator habitat, Pollination, and Bee health.

Courses taught: ENT 4021 Honey Bees and Insect Societies and ENT 4022 Bee Management and HORT 4850 Pollinator Protection in Managed Landscapes.

Jeff Stroock, Professor, SW Research and Outreach Center

Phone: 507-752-5064

Email: jstroock@umn.edu

Online Profile: <http://www.swac.umn.edu/People/Faculty/JeffStroock/index.htm>

Research and Outreach Education Related to Sustainable Agriculture: Agricultural water management and conservation; Nutrient management (N, P, S); and Cropping system impacts and interactions among soil properties, the water balance and nitrogen and carbon cycling.

Kate Venable MD, Assistant Professor, Department of Medicine

Phone: 612-625-2415

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Online Profile: http://www.umphysicians.org/providers/UMP_CONTENT_392172.html

Research and Teaching Related to Sustainable Agriculture: Child, Adolescent and Family Nutrition, Adolescent Obesity, Nutrition for Internists, Why doctors should care about food and Healthy Food Education. Currently a faculty adviser to the Nutrition, Education and Health Awareness Student Interest Group.

M. Scott Wells, Assistant Professor, Department of Agronomy & Plant Genetics

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Online Profile: <http://www.extension.umn.edu/agriculture/forages/team/>

Research and Outreach Education Related to Sustainable Agriculture: Sustainable intensification of both perennial and annual cropping systems; integrating cover crops into corn and soybean systems; developing cover crop technologies and determining the varied ecosystem services provided to the subsequent crops and local environment; and investigating intensive management strategies that focus on improving alfalfa yield and persistence along with increased utilization.

Donald Wyse, Professor, Department of Agronomy and Plant Genetics

Phone: 612-625-7064

Email: wysex001@umn.edu

Online Profile: <http://agronomy.cfans.umn.edu/People/FacultyDirectory/WyseDonaldL/>

Research and Teaching Related to Sustainable Agriculture: Perennial weed control for grass and legume seed production groundwater quality.

Courses Taught: AGRO 4505 Biology, Ecology, and Management of Invasive Plants.