

1. Personal Information

Brian R. Maricle

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2. Education

- 2006 Ph.D. in Botany, School of Biological Sciences, Washington State University
Dissertation title: "The physiological ecology of salt marsh grasses: factors influencing flooding tolerance, salinity tolerance, and species zonation"
Thesis committee: R.W. Lee (Chair), R.A. Black, and G.E. Edwards
- 2002 M.S. in Botany, School of Biological Sciences, Washington State University
Thesis title: "Aerenchyma development and oxygen transport in the estuarine cordgrasses *Spartina alterniflora* and *S. anglica*"
Thesis committee: R.W. Lee (Chair), M. Tegeder, V.R. Franceschi
- 2000 B.S., Biology Comprehensive Major, University of Nebraska at Kearney
Thesis title: "How population density relates to body size in birds"
Thesis advisors: C.J. Bicak and H.G. Nagel

3. Areas of Expertise

- Brian R. Maricle has training in plant physiology and plant ecology. He studies effects of environmental stress on plants, especially drought, salinity, and flooding. Dr. Maricle is interested in anatomical, physiological, and biochemical responses of plants to these conditions, and relating these properties to ecological questions.
- Responses of plants to flooding
 - Environmental factors influencing species zonation in estuaries and wetlands
 - Physiological, biochemical, and anatomical factors influencing flooding tolerance in plants
 - Effects of low oxygen levels on respiration and nitrogen assimilation in plants
 - Roles of flooding tolerance in the success of wetland invasive species
 - Biochemical effects of ethanol and how it relates to flooding tolerance
 - Novel capabilities of plants beneficial to agriculture and phytoremediation
- Effects of environment on photosynthesis in plants
 - Effects of drought and salinity on stomatal conductance, photosynthesis, and transpiration
 - Physiological, biochemical, and anatomical factors influencing drought and salinity tolerance in plants
 - Roles of latent, sensible, and radiative heat exchange under changing environmental conditions
 - Physiological and biochemical responses to oxidative stress in plants
 - Carbon and hydrogen isotope discrimination in photosynthesis and transpiration
 - Effects of chilling on photosynthetic light harvesting, gas exchange, and carbon metabolism

4. Teaching Experience

Fort Hays State University

BIOL 100 C Human Biology

Fall 2012

BIOL 180 A	Principles of Biology	Fall 2012
BIOL 180L	Principles of Biology lab (3 sections)	Fall 2012
BIOL 235	Early Field Experience: Biology	Fall 2012
BIOL 250/250L	Botany	Fall 2012
BIOL 476 A	Apprenticeship in Biology	Fall 2012
BIOL 235	Early Field Experience: Biology	Spring 2012
BIOL 250/250L	Botany	Spring 2012
BIOL 330/330L	Plant Anatomy	Spring 2012
BIOL 180 A	Principles of Biology	Fall 2011
BIOL 180L	Principles of Biology lab (5 sections)	Fall 2011
BIOL 235	Early Field Experience: Biology	Fall 2011
BIOL 250/250L	Introductory Botany	Fall 2011
BIOL 476 A	Apprenticeship in Biology	Fall 2011
BIOL 607 A	Environmental Physiology	Fall 2011
BIOL 235	Early Field Experience: Biology	Spring 2011
BIOL 250/250L	Introductory Botany	Spring 2011
BIOL 495/495L	Plant Physiology	Spring 2011
BIOL 180 B	Principles of Biology	Fall 2010
BIOL 180L	Principles of Biology lab (5 sections)	Fall 2010
BIOL 235	Early Field Experience: Biology	Fall 2010
BIOL 250/250L	Introductory Botany	Fall 2010
BIOL 476 A	Apprenticeship in Biology	Fall 2010
BIOL 235	Early Field Experience: Biology	Spring 2010
BIOL 250/250L	Introductory Botany	Spring 2010
BIOL 330/330L	Plant Anatomy	Spring 2010
BIOL 476 A	Apprenticeship in Biology	Spring 2010
BIOL 100 D	Human Biology	Fall 2009
BIOL 180L	Principles of Biology lab (4 sections)	Fall 2009
BIOL 235	Early Field Experience: Biology	Fall 2009
BIOL 250/250L	Introductory Botany	Fall 2009
BIOL 476 A	Apprenticeship in Biology	Fall 2009
BIOL 607 A	Environmental Physiology	Fall 2009
BIOL 882	Readings in Biology: Advanced Plant Physiology	Fall 2009
BIOL 235	Early Field Experience: Biology	Spring 2009
BIOL 250/250L	Introductory Botany	Spring 2009
BIOL 476 A	Apprenticeship in Biology	Spring 2009

BIOL 495/495L	Plant Physiology	Spring 2009
BIOL 855	Graduate Seminar	Spring 2009
BIOL 882	Readings in Biology: Stable Isotope Uses and Applications	Spring 2009
BIOL 882	Readings in Biology: Advanced Plant Anatomy	Spring 2009
BIOL 100 D	Human Biology	Fall 2008
BIOL 180L	Principles of Biology lab (3 sections)	Fall 2008
BIOL 235	Early Field Experience: Biology	Fall 2008
BIOL 250/250L	Introductory Botany	Fall 2008
BIOL 882	Readings in Biology: Stable Isotope Uses and Applications	Fall 2008
BIOL 100	Human Biology	Summer 2008
BIOL 235	Early Field Experience: Biology	Spring 2008
BIOL 250/250L	Introductory Botany	Spring 2008
BIOL 330/330L	Plant Anatomy	Spring 2008
BIOL 855	Graduate Seminar	Spring 2008
BIOL 100	Human Biology (2 sections)	Fall 2007
BIOL 180L	Principles of Biology lab (3 sections)	Fall 2007
BIOL 250/250L	Introductory Botany	Fall 2007
BIOL 607 A	Posters and Presentations	Fall 2007
BIOL 100	Human Biology	Summer 2007
BIOL 495/495L	Plant Physiology	Spring 2007
BIOL 632	Dendrology	Spring 2007
BIOL 100 A	Human Biology	Fall 2006
BIOL 180L	Principles of Biology lab (3 sections)	Fall 2006
BIOL 476 A	Apprenticeship in Biology	Fall 2006

Washington State University

BIOL 372	General Ecology lab instructor	Spring 2006	supervisor R.N. Mack
BIOL 320	Plant Physiology lab instructor	Fall 2005	supervisors G.E. Edwards and M. Tegender
BIOL 352	Cell Physiology exam grader	Fall 2005	supervisor D.F. Moffett
BIOL 352	Cell Physiology website manager	Fall 2005	supervisor R.W. Lee
BIOL 298	Honors Biology lab instructor	Spring 2005	supervisors H.L. Hosick and B.J. Marshall
BIOL 251	Human Physiology lab instructor	Fall 2004	supervisor S.B. Moffett
BIOL 372	General Ecology lab instructor	Spring 2004	supervisor R.N. Mack
BIOL 320	Plant Physiology lab instructor	Fall 2002	supervisor G.E. Edwards
BIOL 352	Cell Physiology exam grader	Fall 2002	supervisor D.F. Moffett
BIOL 352	Cell Physiology website manager	Fall 2002	supervisor R.W. Lee

ZOOL 251	Human Physiology lab instructor	Spring 2002	supervisor P.A. Carter
BOT 320	Plant Physiology lab instructor	Fall 2001	supervisor G.E. Edwards
ZOOL 251	Human Physiology lab instructor	Spring 2001	supervisor P.A. Carter
ZOOL 251	Human Physiology lab instructor	Fall 2000	supervisor J.L. Lipar

5. **Date of Appointment to Fort Hays State University:** 18 August 2008 (with one year prior service)

6. **Prior Service at Other Institutions**

- 2012- Associate Professor, Fort Hays State University Department of Biological Sciences
- 2008-2012 Assistant Professor, Fort Hays State University Department of Biological Sciences
- 2006-2008 Instructor (non tenure track), Fort Hays State University Department of Biological Sciences
- 2000-2006 Teaching Assistant, Washington State University School of Biological Sciences
- 2003 Research Assistant, Washington State University School of Biological Sciences; supervisor R.W. Lee
- 2001-2002 Research Assistant, Padilla Bay National Estuarine Research Reserve, Washington State Department of Ecology; supervisors D.A. Bulthuis and S.R. Riggs
- 1998-1999 Laboratory Technician, University of Nebraska at Kearney Dept. of Chemistry; supervisor D. Kaufman
- 1998 Research Assistant, University of Nebraska at Kearney Dept. of Physics and Physical Sciences; supervisor J.L. Mena-Werth

7. **Departmental and Institutional Service**

a. **Graduate Students Mentored**

6. Katelyn J. Lindsey, M.S. student, FHSU Biology, 2012-
 - 2007 B.S. in Agronomy, Kansas State University
5. Karina M. Barrett, M.S. student, FHSU Biology, 2011-
 - Thesis topic: Effects of effects of nitrate and phosphate concentration on growth and performance of native and introduced aquatic and riparian plants in western Kansas
 - 2011 B.S. in Biology, Fort Hays State University
4. Jacob T. Olsen, 2012 M.S. in Biology, Fort Hays State University
 - Thesis: Gas exchange and leaf anatomy of *Andropogon gerardii* ecotypes over a climatic gradient of the Great Plains (thesis defended 3/5/2012)
 - 2010 B.A. in Biology, University of Utah
3. Kristen A. Polacik, 2010 M.S. in Biology, Fort Hays State University
 - Thesis: Effects of flooding on photosynthesis and root respiration in saltcedar (*Tamarix ramosissima*), an invasive riparian shrub (thesis defended 11/11/2010)
 - 2010-2011 Outstanding Thesis award by FHSU Graduate School
 - 2008 B.S. in Biology, Marshall University
 - Later went to work as a technician for the U.S. Department of Agriculture
2. Elizabeth F. Waring, 2010 M.S. in Biology, Fort Hays State University
 - Thesis: Flooding tolerance of native and nonnative grasses: variation in photosynthesis, transpiration, respiration, and carbon isotope discrimination (thesis defended 4/16/2010)
 - 2009-2010 Outstanding Thesis award by FHSU Graduate School

- Fleharty Fellowship recipient, 2009-2010
 - 2007 B.S. in Biology, University of Wisconsin, Milwaukee
 - Later went into a Ph.D. program at Texas Tech University
1. Shi He, M.S. student, FHSU Biology, 2007-2008
 - 2007 B.S. in Biology, Wuhan University
 - Project: Nitrate reductase activities in wetland grasses
 - Later went into a Ph.D. program at the University of Idaho

b. Undergraduate Students Mentored

14. Nyasha G. Maforo, 2012. Fort Hays State University, Kansas Academy of Math and Science. Project: The role of ethanol toxicity on flooding susceptibility in plants
13. Bliss M. Betzen, 2012-present. Fort Hays State University, Kansas Academy of Math and Science. Project: Physiological effects of salinity on inland saltmarsh species
12. Taylor N. Biggs, 2012-present. Fort Hays State University Biology. Project: Effects of $\text{NO}_3^-/\text{NH}_4^+$ nutrition on photosynthesis and nitrogen assimilation in *Phalaris arundinacea*
11. Cera M. Smart, 2012-present. Fort Hays State University, Kansas Academy of Math and Science. Project: Physiological effects of salinity on inland saltmarsh species
10. Shaley J. White, 2011-2012. Fort Hays State University, Kansas Academy of Math and Science. Project: The role of ethanol toxicity on flooding susceptibility in plants
9. Alondra Meraz, 2011-2012. Fort Hays State University, Kansas Academy of Math and Science. Project: The role of ethanol toxicity on flooding susceptibility in plants
8. Keri L. Caudle, 2010-present. Fort Hays State University Biology. Projects: Effects of oil spills on photosynthesis and respiration in coastal grasses; Effects of NO_3^- concentration on N uptake rates, assimilation, and photosynthesis in native and introduced grasses
 - 2011-2012 Outstanding Undergraduate Student, FHSU College of Health and Life Sciences
 - Botanical Society of America “Spotlight Member,” March – May of 2012
7. Rika Isomura, 2010. Fort Hays State University Biology. Project: Effects of soil water on respiration and photosynthesis in *Celosia* (Amaranthaceae)
6. Cali R. Parker, 2008-2009. Fort Hays State University Biology. Project: Mechanisms of chilling-tolerant C_4 photosynthesis in marsh grasses
5. Jordan J. Brungardt, 2008-2010. Fort Hays State University Biology. Projects: Effects of oil well brine on surrounding plants; Factors influencing aerenchyma development in *Spartina* (Poaceae); Chemical influence on root hair curling in nodulating and non-nodulating legumes; later went to work for a biotechnology company
4. Aaron M. Pfeifer, 2007-2009. Fort Hays State University Biology. Projects: Effects of diet, drugs, and activity levels on $\delta^{13}\text{C}$ of breath and hair of humans; Ascorbate concentrations and osmolalities in orange and apple juices; later went into medical school at the University of Kansas Medical Center
3. Jeremiah J. Crosier, 2003-2004. Washington State University Biology. Project: Respiration enzyme activities in marsh plants in relation to flooding; later went to work as a technician at a lab supply company
2. Brian C. Bussiere, 2000-2004. Washington State University Biology. Project: Ammonium assimilation in wetland plants; later went into graduate school at the University of San Francisco

1. Toru Tzusaki, 2000-2001. Washington State University Biology. Project: Aerenchyma formation in *Spartina* roots; later went into graduate school at the University of Southampton, UK to work on a similar project

c. Technicians Mentored

1. Sam R. Zwenger, 2007. Fort Hays State University Biology. (2007 M.S. in Biology, Fort Hays State University) Project: Carbon, nitrogen, and hydrogen isotope ratios in creekside trees in western Kansas

d. Graduate Teaching Assistants Supervised

BIOL 180L, Principles of Biology lab: Karina M. Barrett, Jessica J. Bitner, Brandon L. Calderon, Sarah A. Carrow, Jessica L. Casey, P. Allen Casey, Carol D. Grover, Georgina Y. Jacquez, Kristen A. Polacik, Zac L. Ripperger, Jeffrey G. Sekavec, Katherine M. Talbott, Lloyd W. Towers III

BIOL 250L, Introductory Botany lab: Karina M. Barrett, Shi He, Jordan R. Hofmeier, Ashley A. Inslee, Georgina Y. Jacquez, Kristen A. Polacik, Elizabeth F. Waring

BIOL 330L, Plant Anatomy lab: Shi He, Jacob T. Olsen, Kristen A. Polacik

e. Undergraduate Apprentices Supervised

BIOL 180L, Principles of Biology lab: Andrew S. Ables, Joanna L. Fay, Mike D. Howell, Jennifer R. Pfannenstiel, Jenna B. Shepherd, Ashley M. Spaeny, Maniphone V. (Katrina) Thirakul

BIOL 250L, Introductory Botany lab: Jordan J. Brungardt, Robert “Andy” Calhoun

f. Graduate Thesis Committees

14. Brian M. Zinke. M.S. student, 2011-present, Fort Hays State University. Major Advisor: Elmer J. Finck. Thesis topic: Small mammal diversity and functional group composition at a dried wetland site
13. Jessica L. Casey. M.S. student, 2011-present, Fort Hays State University. Major Advisor: Jordana J. LaFantasie. Thesis topic: Timing and intensity of cattle use on Old World bluestem (*Bothriochloa ischaemum*) and native grasses in southern mixed-grass prairie
12. Clinton J. Helms. M.S. student, 2011-present, Fort Hays State University. Major Advisor: Jordana J. LaFantasie. Thesis topic: Relationship of wet meadow vegetation with nest success in grassland bird species
11. Amanda E. Cheeseman. M.S. student, 2010-present, Fort Hays State University. Major Advisor: Elmer J. Finck. Thesis topic: Dietary analysis of spotted skunks
10. Jeffrey G. Sekavec. M.S. student, 2010-present, Fort Hays State University. Major Advisor: Eric T. Gillock. Thesis topic: Chlorhexidine resistance in *Streptococcus mutans*
9. William T. Moore. M.S. student, 2010-present, Fort Hays State University. Major Advisor: Eric T. Gillock. Thesis topic: Production of biofilms by *Staphylococcus succinus*
8. Shingo Ishihara. 2010 M.S. in Biology, Fort Hays State University. Major Advisor: Eric T. Gillock. Thesis title: Genetic analysis of vancomycin-resistant Gram-positive cocci isolated from wild songbirds (thesis defended 9/24/2010)
7. Stephanie A. Kane. 2011 M.S. in Biology, Fort Hays State University. Major Advisor: Greg H. Farley. Thesis title: Breeding habitat structure and use by Kansas-occurring black rail (thesis defended 4/26/2011)

6. Lloyd W. Towers III. 2011 M.S. in Biology, Fort Hays State University. Major Advisor: Elmer J. Finck. Thesis title: Alarm-calling and response behaviors of the black-tailed prairie dog in Kansas (thesis defended 10/17/2011)
5. Jacob M. Carter. 2010 M.S. in Biology, Kansas State University. Major Advisor: Jesse B. Nippert. Thesis title: *Tamarix ramosissima* whole plant and leaf level physiological response to increasing salinity (thesis defended 7/14/2010)
4. Claudia M. Dasilva-Carvalho. 2009 M.S. in Biology, Fort Hays State University. Major Advisor: Eric T. Gillock. Thesis title: Isolation and characterization of halophilic bacteria from Quivira National Wildlife Refuge (thesis defended 4/16/2009)
3. Jason K. Black. M.S. student, 2007-present, Fort Hays State University. Major Advisor: Elmer J. Finck. Thesis topic: Stable isotope analyses of waterfowl diet and assessment of natal origin of hunter-harvested ducks at Cheyenne Bottoms Wildlife Area, Kansas
2. Christian N. Edwards. 2009 M.S. in Biology, Fort Hays State University. Major Advisor: Greg H. Farley. Thesis title: Snowy plover nest density and reproductive success at Great Salt Lake, Utah (thesis defended 4/23/2009)
1. P. Allen Casey. 2009 M.S. in Biology, Fort Hays State University. Major Advisor: Joseph R. Thomasson. Thesis title: Comparative studies of two small, freshwater wetlands in Ellis County, Kansas (thesis defended 3/30/2009)

g. Professional Service

Peer review: *Acta Physiologiae Plantarum*
American Journal of Botany
Annals of Botany
Aquatic Biology
Aquatic Botany
Aquatic Conservation: Marine and Freshwater Ecosystems
Benjamin Cummings Publishing, textbook review
Environmental and Experimental Botany
Estuarine, Coastal and Shelf Science
Global Change Biology
Jones and Bartlett Publishers, textbook review
Journal of Agricultural Science and Technology
Journal of Coastal Research
Journal of Plant Growth Regulation
Journal of Plant Physiology
Limnology and Oceanography Methods
Marine Ecology Progress Series
National Science Foundation, proposal review
Photosynthesis Research
Photosynthetica
Plant Biology
Plant Ecology
Sensors
Southwestern Naturalist
Wageningen University, Ph.D. proposal review
Water, Air, and Soil Pollution
W.H. Freeman Publishers, textbook review

Session moderator, Plant Ecology session, Kansas Academy of Science annual meeting, March 2012

President-Elect, Kansas Academy of Science, 2012

Judge for student oral and poster presentations, Botanical Society of America annual meeting, July 2011

Vice President, Kansas Academy of Science, 2011

Judge for student poster presentations, Kansas Academy of Science annual meeting, April 2011

Judge for student oral and poster presentations, Kansas Academy of Science annual meeting, April 2010

Judge for McCarley student grant proposals, Southwestern Association of Naturalists, March 2009

Judge for Wilks student presentation award at the Southwestern Association of Naturalists annual meeting, April 2008

Judge for Hubbs student poster award at the Southwestern Association of Naturalists annual meeting, April 2008

h. Department and University Service

Fort Hays State University

2010-2012 University Graduate Council

2009-2012 University Research Environment Committee

2007-2010 University Department/Program Review Committee

College of Health and Life Sciences, Fort Hays State University

2009- College of Health and Life Sciences Dean's Faculty Advisory Council

2008-2009 College of Health and Life Sciences Professional Science Master's Program Committee

Department of Biological Sciences, Fort Hays State University

28 Apr 2012 Department of Biological Sciences representative during Tiger pre-enrollment day

13 Mar 2012 Department of Biological Sciences representative during FHSU Majors and Graduate Programs Fair

26 Jan 2012 Student recognition program: Phillipsburg, KS

19 Aug 2011 FHSU Department of Biological Sciences social for incoming freshmen and transfer students

2011-2012 Advisor for 2 graduate students

2011-2012 Advisor for 12 undergraduate students

2011-2012 Evaluation committees for 8 graduate student applications

2011-2012 Graduate oral exam committees for 6 students

2011-2012 Student recruitment: met with 23 prospective students individually

2011-2012 Graduate student recruitment: met with 2 prospective graduate students individually

2011-2012 Department of Biological Sciences Merit Review Committee

2011- Department of Biological Sciences Graduate Selection Committee

30 Apr 2011 Department of Biological Sciences representative during Tiger pre-enrollment day

16 Apr 2011 Department of Biological Sciences representative during Tiger pre-enrollment day

1 Mar 2011 Department of Biological Sciences representative during FHSU Majors and Graduate Programs Fair

24 Jan 2011 Student recognition program: Beloit, KS

- 6 Nov 2010 “Field Biology” representative, Tiger Day recruitment
- 2010-2011 Chair, Faculty search committee, Plant Taxonomist, FHSU Department of Biological Sciences
- 2010-2011 Advisor for 2 graduate students
- 2010-2011 Advisor for 5 undergraduate students
- 2010-2011 Evaluation committees for 6 graduate student applications
- 2010-2011 Graduate oral exam committees for 3 students
- 2010-2011 Student recruitment: met with 28 prospective students individually
- 2010-2011 Graduate student recruitment: met with 7 prospective graduate students individually
- 2010- Evaluation committee for graduate student Balthazor fellowship applications
- 2010- Department of Biological Sciences Professional Science Master’s Program Committee

- 14 June 2010 Department of Biological Sciences representative during Tiger pre-enrollment day
- 3 May 2010 Department of Biological Sciences representative during Tiger pre-enrollment day
- 17 Apr 2010 Department of Biological Sciences representative during Tiger pre-enrollment day
- 9 Mar 2010 Department of Biological Sciences representative during FHSU Majors and Graduate Programs Fair

- 25 Jan 2010 Student recognition program: Great Bend, KS
- 9 Nov 2009 Botany lab demonstrations for high school students during Science Day
- 2009-2010 Chair, Faculty search committee, Animal Physiologist, FHSU Department of Biological Sciences

- 17 Oct 2009 Botany lab representative, Tiger Day recruitment
- 2009-2010 Advisor for 2 graduate students
- 2009-2010 Advisor for 12 undergraduate students
- 2009-2010 Evaluation committees for 12 graduate student applications
- 2009-2010 Graduate oral exam committees for 10 students
- 2009-2010 Student recruitment: met with 27 prospective students individually
- 2009-2010 Graduate student recruitment: met with 20 prospective graduate students individually

- 21 Aug 2009 FHSU Department of Biological Sciences social for incoming freshmen and transfer students

- 4 May 2009 Department of Biological Sciences representative during Tiger pre-enrollment day
- 25 Apr 2009 Department of Biological Sciences representative during Tiger pre-enrollment day
- 2009 Faculty search committee, Manager, Kansas Wetlands Education Center

- 29 Jan 2009 Student recognition program: Phillipsburg, KS
- 27 Oct 2008 Lab tours for high school students during Science Day
- 2008 Faculty search committee, Environmental Microbiologist, FHSU Department of Biological Sciences
- 2008-2009 Advisor for 2 graduate students

- 2008-2009 Advisor for 10 undergraduate students
- 2008-2009 Evaluation committees for 4 graduate student applications
- 2008-2009 Graduate oral exam committees for 6 students
- 2008-2009 Student recruitment: met with 27 prospective students individually
- 2008-2009 Graduate student recruitment: met with 7 prospective graduate students individually
- 2008- Department of Biological Sciences Graduate Studies Committee
- 2008- Department of Biological Sciences Curriculum Committee
- 2008- Department of Biological Sciences Faculty Awards Committee
- 2008- Graduate teaching assistant award selection committee
- 22 Aug 2008 FHSU Department of Biological Sciences social for incoming freshmen and transfer students
- 10 June 2008 Department of Biological Sciences representative during FHSU Transfer Enrollment day
- 2 April 2008 Department of Biological Sciences representative during Tiger Mania student recruitment
- 26 Feb 2008 “Designing research posters” tutorial given to FHSU faculty
- 4 Feb 2008 Student recognition program: Great Bend, KS
- 3 Nov 2007 Zoology lab representative, Tiger Day recruitment
- 15 Oct 2007 Captain, “Tiger Call” phonathon, FHSU Foundation (Endowment Center)
- 2007 FHSU Department of Biological Sciences Biosciences Institute Development Committee
- 17 Aug 2007 FHSU Department of Biological Sciences social for incoming freshmen and transfer students
- 2007-2008 Advisor for 1 graduate student
- 2007-2008 Advisor for 4 undergraduate students
- 2007-2008 Evaluation committees for 9 graduate student applications
- 2007-2008 Graduate oral exam committees for 7 students
- 2007-2008 Student recruitment: met with 19 prospective students individually
- 2007-2008 Graduate student recruitment: met with 21 prospective graduate students individually
- 2007 Chair, Graduate teaching assistant award selection committee
- 4 April 2007 Department of Biological Sciences representative during Tiger Mania student recruitment
- 5 Feb 2007 Student recognition program: Holdrege, NE
- 2007 Department plant technician search committee
- 2007 Cell biology/physiology lab development committee
- 18 Dec 2006 Greenhouse tour for high school biology students
- 6 Nov 2006 Lab tours for high school students during Science Day
- 16 Oct 2006 Captain, “Tiger Call” phonathon, FHSU Endowment Center

- 14 Oct 2006 Botany lab representative, Tiger Friends and Family Day recruitment
- 2006-2007 Evaluation committee for 1 graduate student application
- 2006-2007 Graduate oral exam committees for 2 students
- 2006-2007 Student recruitment: met with 3 prospective students individually
- 2006-2007 Graduate student recruitment: met with 9 prospective graduate students individually
- 2006-2009 Biology Club sponsor, FHSU Department of Biological Sciences

Washington State University

- 2005-2006 Faculty search committee, Plant Cell Biologist, WSU School of Biological Sciences

8. Scholarly Submissions, Publications, and Papers Presented

a. Peer-Reviewed Publications (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)

16. Waring, E.F.[†] and **B.R. Maricle**. 2012. Photosynthetic variation and carbon isotope discrimination in invasive wetland grasses in response to flooding. *Environmental and Experimental Botany* 77:77-86
15. **Maricle, B.R.** and P.B. Adler. 2011. Effects of precipitation on photosynthesis and water potential in *Andropogon gerardii* and *Schizachyrium scoparium* in a southern mixed grass prairie. *Environmental and Experimental Botany* 72:223-231
14. **Maricle, B.R.**, S.R. Zwenger[†], and R.W. Lee. 2011. Carbon, nitrogen, and hydrogen isotope ratios in creekside trees in western Kansas. *Environmental and Experimental Botany* 71:1-9
13. **Maricle, B.R.** and R.W. Lee. 2010. Mechanisms of sulfide and anoxia tolerance in salt marsh grasses in relation to elevational zonation. pp 47-53 in: Ayres, D.R., D.W. Kerr, S.D. Ericson, and P.R. Olofson, Eds. *Proceedings of the Third International Conference on Invasive *Spartina*, 2004 Nov. 8-10, San Francisco, CA, USA. San Francisco Estuary Invasive *Spartina* Project of the California State Coastal Conservancy, Oakland, CA*
12. **Maricle, B.R.**, O. Kiirats, R.W. Lee, and G.E. Edwards. 2010. Effects of salinity on photosynthesis in C₄ estuarine grasses. pp 55-58 in: Ayres, D.R., D.W. Kerr, S.D. Ericson, and P.R. Olofson, Eds. *Proceedings of the Third International Conference on Invasive *Spartina*, 2004 Nov. 8-10, San Francisco, CA, USA. San Francisco Estuary Invasive *Spartina* Project of the California State Coastal Conservancy, Oakland, CA*
11. **Maricle, B.R.** 2010. Changes in chlorophyll content and antioxidant capacity during dark to light transitions in etiolated seedlings: Comparisons of species and units of enzyme activity. *Transactions of the Kansas Academy of Science* 113:177-190
10. Pfeifer, A.M.* , R.W. Lee, and **B.R. Maricle**. 2010. Effects of diet, drugs, and activity levels on δ¹³C of breath and hair of humans. *Transactions of the Kansas Academy of Science* 113:91-102
9. **Maricle, B.R.**, N.K. Koteyeva, E.V. Voznesenskaya, J.R. Thomasson, and G.E. Edwards. 2009. Diversity in leaf anatomy, and stomatal distribution and conductance, between salt marsh and freshwater species in the C₄ genus *Spartina* (Poaceae). *New Phytologist* 184:216-233
8. **Maricle, B.R.** and A.M. Pfeifer*. 2009. Ascorbate concentrations and osmolalities in orange and apple juices. *Transactions of the Kansas Academy of Science* 112:77-86
7. **Maricle, B.R.**, R.W. Lee, C.E. Hellquist, O. Kiirats, and G.E. Edwards. 2007. Effects of salinity on chlorophyll fluorescence and CO₂ fixation in C₄ estuarine grasses. *Photosynthetica* 45:433-440

6. **Maricle, B.R.**, D.R. Cobos, and C.S. Campbell. 2007. Biophysical and morphological leaf adaptations to drought and salinity in salt marsh grasses. *Environmental and Experimental Botany* 60:458-467
 5. **Maricle, B.R.** and R.W. Lee. 2007. Root respiration and oxygen flux in salt marsh grasses from different elevational zones. *Marine Biology* 151:413-423
 4. **Maricle, B.R.**, J.J. Crosier*, B.C. Bussiere*, and R.W. Lee. 2006. Respiratory enzyme activities correlate with anoxia tolerance in salt marsh grasses. *Journal of Experimental Marine Biology and Ecology* 337:30-37
 3. Kroemer, J., C. Kirkpatrick, **B. Maricle**, R. Gawrych, M.D. Mosher, and D. Kaufman. 2006. Reike zinc as a reducing agent for common organic functional groups. *Tetrahedron Letters* 47:6339-6341
 2. **Maricle, B.R.** and R.W. Lee. 2006. Effects of environmental salinity on carbon isotope discrimination and stomatal conductance in *Spartina* grasses. *Marine Ecology Progress Series* 313:305-310
 1. **Maricle, B.R.** and R.W. Lee. 2002. Aerenchyma development and oxygen transport in the estuarine cordgrasses *Spartina alterniflora* and *S. anglica*. *Aquatic Botany* 74:109-120
- b. Other Publications** (daggers[†] indicate graduate student authors)
10. Olsen, J.T., R.K. Goad, M.L. Mendola, H.M. Tetreault, L.C. Johnson, S.G. Baer, and **B.R. Maricle**. 2012. Gas exchange and leaf anatomy of big bluestem populations and sand bluestem across a precipitation gradient. *Kansas Native Plant Society Spring Newsletter*, April 2012, pp. 5-8
 9. **Maricle, B.R.** Plant biologists investigate leaf anatomy. *Research Matters: The Newsletter of Research and Creative Activity at Fort Hays State University*, Spring 2010
 8. Polacik, K.A.[†] and **B.R. Maricle**. 2009. Response to flooding in invasive saltcedar (*Tamarix ramosissima*). *Grassland Heritage Foundation Newsletter*, December 2009, pp. 4-5
 7. **Maricle, B.R.** General Botany BIOL 250/250L Laboratory Manual. FHSU Print Shop, revised May 2012
 6. **Maricle, B.R.** Plant Anatomy BIOL 330/330L Laboratory Manual. FHSU Print Shop, revised May 2012
 5. **Maricle, B.R.** BIOL 495 – Plant Physiology Laboratory Manual. FHSU Print Shop, revised May 2011
 4. Packauskas, R.J., Y. Kobayashi, and **B.R. Maricle**, with contributions from K.R. Hickman, M.L. Morgan, E.T. Gillock, and P.A. Casey[†]. *Principles of Biology Laboratory Manual*. FHSU Print Shop, revised December 2011
 3. **Maricle, B.R.** 2008. How to approach phone interviews. *American Society of Plant Biologists (ASPB) News* 35:7-8
 2. **Maricle, B.R.** and R.W. Lee. 2003. The effect of mowing on oxygen transport in *Spartina anglica* (Poaceae). Padilla Bay National Estuarine Research Reserve Technical Report No. 27. Padilla Bay National Estuarine Research Reserve, Mount Vernon, Washington, 26 pp
 1. **Maricle, B.R.** and J.L. Mena-Werth. 1999. The determination of circumstellar material around stars observed with the International Ultraviolet Explorer Satellite using asymmetries in the singly ionized magnesium h and k lines. *Proceedings of the Thirteenth Annual National Conference of Undergraduate Research, Volume V (Physical Sciences):1285-1288*

- c. **Manuscripts Accepted** (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)
2. Caudle, K.L.* and **B.R. Maricle**. 2012. Effects of flooding on photosynthesis, chlorophyll fluorescence, and oxygen stress in plants of varying flooding tolerance. Manuscript in press: Transactions of the Kansas Academy of Science
 1. Lee, R.W., **B.R. Maricle**, and K. Patten. Glyphosate uptake and transport in the estuarine cordgrass *Spartina alterniflora*: a novel stable isotope tracer approach and implications for invasive species control. Manuscript accepted pending revisions: Weed Technology
- d. **Manuscripts in Review** (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)
2. Waring, E.F.† and **B.R. Maricle**. Stomatal conductance correlates with flooding tolerance in *Phragmites australis* and *Sorghum halepense*. Manuscript in review: Transactions of the Kansas Academy of Science
 1. Polacik, K.A.† and **B.R. Maricle**. Effects of flooding on photosynthesis and root respiration in saltcedar (*Tamarix ramosissima*), an invasive riparian shrub. Manuscript in review: Biological Invasions
- e. **Manuscripts in Preparation** (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)
5. Olsen, J.T.†, K.L. Caudle*, S.G. Baer, L.C. Johnson, and **B.R. Maricle**. Anatomical leaf variation among five ecotypes of *Andropogon gerardii* planted in common gardens across a precipitation gradient. Manuscript in preparation
 4. Olsen, J.T.†, H.M. Tetreault†, R.K. Goad†, M.L. Mendola†, S.G. Baer, L.C. Johnson, and **B.R. Maricle**. Variation in photosynthesis of *Andropogon gerardii* ecotypes in a reciprocal common garden experiment across a precipitation gradient. Manuscript in preparation
 3. Olsen, J.T.†, H.M. Tetreault†, R.K. Goad†, M.L. Mendola†, S.G. Baer, L.C. Johnson, and **B.R. Maricle**. Gas exchange and establishment of *Andropogon gerardii* in reciprocal common gardens across a climactic gradient. Manuscript in preparation
 2. Waring, E.F.† and **B.R. Maricle**. CO₂ fixation and chlorophyll fluorescence in C₄ grasses under chilling: comparisons between chilling-tolerant *Spartina pectinata* and chilling-sensitive *Zea mays* and *Sorghum halepense* (Poaceae). Manuscript in preparation
 1. **Maricle, B.R.**, K.L. Caudle*, J.J. Brungardt*, T. Tsuzaki†, and R.W. Lee. Factors influencing aerenchyma development in *Spartina* (Poaceae). Manuscript in preparation
- f. **Abstracts Published** (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)
8. Caudle, K.L.* and **B.R. Maricle**. 2011. Effects of oil deposition on respiration and photosynthesis in coastal native and introduced wetland grasses. Transactions of the Kansas Academy of Science 114:151-152
 7. Olsen, J.T.†, H.M. Tetreault†, R.K. Goad†, M.L. Mendola*, L.C. Johnson, S.G. Baer, and **B.R. Maricle**. 2011. Variation of photosynthesis in big bluestem and sand bluestem reciprocally planted across a precipitation gradient. Transactions of the Kansas Academy of Science 114:170
 6. Polacik, K.A.† and **B.R. Maricle**. 2010. Effects of flooding and soil type on photosynthesis in saltcedar (*Tamarix ramosissima*), an invasive riparian shrub. Transactions of the Kansas Academy of Science 113:133

5. Waring, E.F.[†] and **B.R. Maricle**. 2010. Mechanisms of chilling tolerance in C₄ plants. Transactions of the Kansas Academy of Science 113:140
4. Pfeifer, A.M.*, R.W. Lee, and **B.R. Maricle**. 2009. Effects of diet, drugs, and activity levels on δ¹³C of breath and hair of humans. Transactions of the Kansas Academy of Science 112:150
3. Polacik, K.A.[†] and **B.R. Maricle**. 2009. Response to flooding in invasive saltcedar (*Tamarix*). Transactions of the Kansas Academy of Science 112:150
2. Waring, E.F.[†] and **B.R. Maricle**. 2009. Effects of flooding on light harvesting and CO₂ fixation in native and nonnative wetland grasses of central Kansas. Transactions of the Kansas Academy of Science 112:157
1. **Maricle, B.**, R. Gawrych, and D. Kaufman. 1999. Riecke zinc as a possible reducing agent for common organic functional groups. Program and Proceedings of the Nebraska Academy of Sciences 119:101

g. Guest Lectures/Demonstrations

9. “Forests.” Guest demonstrations for the EPA “Environmental Educators Day” workshop for elementary, middle school, and high school teachers, Sternberg Museum of Natural History, Fort Hays State University, Hays, KS, August 2011
8. “Measurement of Photosynthesis.” Guest demonstration for the Crop Physiology class (AGRI 425), Fort Hays State University, Hays, KS, April 2011
7. “Light energy and photosynthesis.” Guest lecture for FHSU “Energizing Middle School Science and Social Studies” workshop for middle school teachers (PHYS 603 E), Fort Hays State University, Hays, KS, July 2010
6. “Measurement of Photosynthesis.” Guest demonstration for the Crop Physiology class (AGRI 425), Fort Hays State University, Hays, KS, May 2010
5. “Macroclimate” and “Microclimate.” Guest lectures for the General Ecology class (BIOL 372), Washington State University, Pullman, WA, January 2006
4. “Photosynthetic Light Harvesting” and “Alternative Respiration Strategies.” Guest lectures for the Cell Physiology class (BIOL 352), Washington State University, Pullman, WA, September 2005
3. “Near shore environments.” Guest lecture for the Ecology class (FOR 221), University of Idaho, Moscow, ID, May 2002
2. “Cardiovascular System: Blood and Blood Pressure.” Guest lecture for the Human Physiology class (ZOOL 251), Washington State University, Pullman, WA, April 2002
1. “Respiratory System: Mechanics” Guest lecture for the Human Physiology class (ZOOL 251), Washington State University, Pullman, WA, April 2001

h. Invited Presentations

9. Johnson, L.C., S.G. Baer, and **B.R. Maricle**. Ecotypic and genetic variation in a dominant prairie grass: Implications for grassland conservation in a changing climate. Invited presentation at the European Science Federation ConGenOmics Network Programme, Seville, Spain, February 2012
8. **Maricle, B.R.** How do flooding, salinity, and drought influence plants? Themes from coastal marshes and the mixed-grass prairie. Invited presentation at the Wichita State University Seminar Series in Biological Sciences, Wichita, KS, November 2011

7. **Maricle, B.R.** Environmental influences on salt marsh grasses: the roles of waterlogging, salinity, and sulfide. Invited presentation at the Kansas State University Seminar Series in Ecology and Evolutionary Biology, Manhattan, KS, October 2008
 6. **Maricle, B.R.** Wetland vegetation. Invited seminar presented at the Cheyenne Bottoms Wetlanders Festival, Hoisington, KS, April 2007
 5. **Maricle, B.R.** Environmental regulation of species zonation in salt marshes: the roles of flooding, salinity, and sulfide. Invited seminar at Loras College, Dubuque, IA, February 2007
 4. **Maricle, B.R.** The physiological ecology of salt marsh grasses: factors influencing flooding tolerance, salinity tolerance, and species zonation. Invited seminar at the University of St. Thomas, St. Paul, MN, March 2006
 3. **Maricle, B.R.** and R.W. Lee. Respiration and oxygen transport in saltmarsh grasses in relation to elevational zonation. Invited for presentation in the “Environmental Physiology” Minisymposium at the American Society of Plant Biologists Annual Meeting, Seattle, WA, July 2005
 2. **Maricle, B.R.** and R.W. Lee. Oxygen transport through aerenchyma in *Spartina* (Poaceae). Invited for presentation in the “Structure and Function of Wetland Plants” Symposium at the Botanical Society of America Annual Meeting, Mobile, AL, July 2003
 1. Lee, R. W. and **B.R. Maricle**. Why are *Spartina* grasses so successful? Adaptations to anoxia and hydrogen sulfide. Invited presentation at the *Spartina* Mini Conference, Long Beach, WA, June 2001
- i. Contributed Oral Presentations** (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)
37. Gray, M.†, P. St. Amand, H. Tetreault†, S. Baer, **B. Maricle**, T. Morgan, R. Goad†, J. Olsen†, and L. Johnson. Ecotypic variation in drought tolerance and genetic diversity of the ecologically dominant grass big bluestem (*Andropogon gerardii*) across the Great Plains precipitation gradient. Presented at the Ecological Society of America Annual Meeting, Portland, OR, August 2012
 36. Caudle, K.L.* and **B.R. Maricle**. Physiological responses of coastal marsh species to spilled oil. Presented at the Botanical Society of America Annual Meeting, Columbus, OH, July 2012
 35. Olsen, J.T.†, R.K. Goad†, M.L. Mendola*, H.M. Tetrault†, L.C. Johnson, S.G. Baer, and **B.R. Maricle**. Photosynthetic gas exchange of big bluestem (*Andropogon gerardii*) ecotypes across a precipitation gradient of the Great Plains. Presented at the Botanical Society of America Annual Meeting, Columbus, OH, July 2012
 34. Caudle, K.L.*, P.B. Adler, and **B.R. Maricle**. Influence of water availability on photosynthesis, water potential, and phenology in Kansas grasses. Presented at the Botanical Society of America Annual Meeting, Columbus, OH, July 2012
 33. Barrett, K.M.† and **B.R. Maricle**. Effects of nitrate and phosphate concentration on photosynthesis and nitrate assimilation in *Phalaris arundinacea* and *Phragmites australis*. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
 32. Caudle, K.L.*, P.B. Adler, and **B.R. Maricle**. Physiological and ecological responses of Kansas grasses to water availability. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
 31. Olsen, J.T.†, R.K. Goad†, M.L. Mendola*, H.M. Tetrault†, L.C. Johnson, S.G. Baer, and **B.R. Maricle**. Gas exchange of *Andropogon gerardii* (big bluestem) ecotypes across a climatic gradient of the Great Plains. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012

30. Caudle, K.L.* and **B.R. Maricle**. Influence of spilled oil on respiration and photosynthesis in coastal marsh species. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
29. Caudle, K.L.* L.C. Johnson, S.G. Baer, and **B.R. Maricle**. Influence of precipitation on trichome density in five *Andropogon gerardii* ecotypes. Presented at the Big Bluestem Consortium Annual Meeting, Manhattan, KS, March 2012
28. Olsen, J.T.[†], H.M. Tetrault[†], R.K. Goad[†], L.C. Johnson, S.G. Baer, M.L. Mendola*, and **B.R. Maricle**. Gas exchange and leaf anatomy of *Andropogon gerardii* ecotypes across a climatic gradient of the Great Plains. Presented at the Big Bluestem Consortium Annual Meeting, Manhattan, KS, March 2012
27. Caudle, K.L.* and **B.R. Maricle**. Responses of respiration and photosynthesis to spilled oil in coastal wetland grasses. Presented at the Botanical Society of America Annual Meeting, St. Louis, MO, July 2011
26. Olsen, J.T.[†], H.M. Tetrault[†], R.K. Goad[†], M.L. Mendola*, L.C. Johnson, S.G. Baer, and **B.R. Maricle**. Photosynthetic variation of big bluestem and sand bluestem influenced by ecotype and precipitation. Presented at the Botanical Society of America Annual Meeting, St. Louis, MO, July 2011
25. Caudle, K.L.* and **B.R. Maricle**. Effects of oil deposition on respiration and photosynthesis in coastal native and introduced wetland grasses. Presented at the Kansas Academy of Science Annual Meeting, Baldwin City, KS, April 2011 [2nd place oral presentation by an undergraduate student]
24. Olsen, J.T.[†], H.M. Tetrault[†], R.K. Goad[†], M.L. Mendola*, L.C. Johnson, S.G. Baer, and **B.R. Maricle**. Variation of photosynthesis in big bluestem and sand bluestem reciprocally planted across a precipitation gradient. Presented at the Kansas Academy of Science Annual Meeting, Baldwin City, KS, April 2011
23. Olsen, J.T.[†], H.M. Tetrault[†], R.K. Goad[†], L.C. Johnson, S.G. Baer, M.L. Mendola*, and **B.R. Maricle**. Effects of ecotype and precipitation on photosynthesis in big bluestem. Presented at the Big Bluestem Consortium Annual Meeting, Manhattan, KS, February 2011
22. Waring, E.F.[†] and **B.R. Maricle**. Photosynthetic variation and carbon isotope discrimination in response to flooding in native and invasive grasses of central Kansas. Presented at the Society of Wetland Scientists Annual Meeting, Salt Lake City, UT, June 2010 [honorable mention oral presentation by a graduate student]
21. Polacik, K.A.[†] and **B.R. Maricle**. Effects of flooding on photosynthesis in saltcedar (*Tamarix ramosissima*), an invasive riparian shrub. Presented at the Southwestern Association of Naturalists Annual Meeting, Junction, TX, April 2010
20. Waring, E.F.[†] and **B.R. Maricle**. Changes in photosynthesis caused by flooding in native and nonnative wetland grasses of Central Kansas. Presented at the Southwestern Association of Naturalists Annual Meeting, Junction, TX, April 2010
19. Polacik, K.A.[†] and **B.R. Maricle**. Effects of flooding and soil type on photosynthesis in saltcedar (*Tamarix ramosissima*), an invasive riparian shrub. Presented at the Kansas Academy of Science Annual Meeting, Hays, KS, April 2010
18. Waring, E.F.[†] and **B.R. Maricle**. Mechanisms of chilling tolerance in C₄ plants. Presented at the Kansas Academy of Science Annual Meeting, Hays, KS, April 2010 [3rd place oral presentation by a graduate student]
17. Polacik, K.A.[†] and **B.R. Maricle**. Response to flooding in invasive saltcedar (*Tamarix*). Presented at the Weed Science Society of America Annual Meeting, Denver, CO, February 2010

16. Waring, E.F.[†] and **B.R. Maricle**. Effects of flooding on photosynthesis and respiration in native and invasive wetland grasses of central Kansas. Presented at the Weed Science Society of America Annual Meeting, Denver, CO, February 2010
15. **Maricle, B.R.**, S.R. Zwenger[†], A.M. Pfeifer*, and R.W. Lee. Effects of creek drying on shallow- and deep-rooted trees in western Kansas. Presented at the Ecological Society of America Annual Meeting, Milwaukee, WI, August 2008
14. **Maricle, B.R.** Biophysical and morphological leaf adaptations to drought and salinity in salt marsh grasses. Presented at the Ecological Society of America Annual Meeting, San Jose, CA, August 2007
13. **Maricle, B.R.** The physiological ecology of salt marsh grasses: factors influencing flooding tolerance, salinity tolerance, and species zonation. FHSU seminar series, Hays, KS, October 2006
12. **Maricle, B.R.** The physiological ecology of salt marsh grasses: factors influencing flooding tolerance, salinity tolerance, and species zonation. WSU exit seminar, Pullman, WA, April 2006
11. **Maricle, B.R.** and R.W. Lee. Oxygen transport and physiological mechanisms influencing zonation in salt marsh grasses. Presented at the Third International Conference on Invasive *Spartina*, San Francisco, CA, November 2004
10. **Maricle, B.R.**, O. Kiirats, G.E. Edwards, and R.W. Lee. Effects of salinity on carbon isotope discrimination and photosynthesis in C₄ estuarine grasses. Presented at the Ecological Society of America Annual Meeting, Portland, OR, August 2004
9. **Maricle, B.R.**, J.J. Crosier*, B.C. Bussiere*, and R.W. Lee. Potential for marsh plants to oxygenate sediments and enhance bioremediation of pollutants. Presented at the Society of Wetland Scientists Annual Meeting, Seattle, WA, July 2004
8. Lee, R.W. and **B.R. Maricle**. Oxygen transport and adaptations to flooding in estuarine cordgrasses. Presented at the EPA Joint Program in Phytoremediation PI Meeting, Washington, DC, January 2004
7. Lee, R.W. and **B.R. Maricle**. Oxygenation of sediments by *Spartina* marsh grasses: Potential facilitation of pollutant degradation. Presented at the U.S. EPA International Applied Phytotechnologies Conference, Chicago, IL, March 2003
6. **Maricle, B.R.** What makes a successful estuarine invader? Comparative hypoxia- and salt-stress physiology of introduced *Spartina* and native *Distichlis* grasses. Presented at "Eco-Evo Lunch," WSU School of Biological Sciences informal departmental seminar, January 2003
5. **Maricle, B.R.** and R.W. Lee. Physiological mechanisms of hypoxia tolerance in invasive *Spartina* cordgrass: The significance of aerenchyma development and oxygen transport. Presented at the American Society of Limnology and Oceanography Annual Meeting, Victoria, BC, June 2002
4. **Maricle, B.R.** and R.W. Lee. Aerenchyma development and oxygen transport in the estuarine cordgrasses *Spartina alterniflora* and *S. anglica*. Presented at the International Conference on Aquatic Invasive Species, Alexandria, VA, February 2002
3. **Maricle, B.R.** Aerenchyma development and oxygen transport in the estuarine cordgrasses *Spartina alterniflora* and *S. anglica*. Presented at "Eco-Evo Lunch," WSU School of Biological Sciences informal departmental seminar, October 2001
2. **Maricle, B.R.** How population density relates to body size in birds. Undergraduate thesis defense, Kearney, NE, July 1999
1. **Maricle, B.R.**, R. Gawrych, and D. Kaufman. Riekie Zinc as a possible reducing agent for common organic functional groups. Presented at the Nebraska Academy of Sciences, Lincoln, NE, April 1999

- j. Poster Presentations** (asterisks* denote undergraduate authors; daggers† indicate graduate student authors)
36. Caudle, K.L.* and **B.R. Maricle**. Responses of respiration and photosynthesis to spilled oil in coastal marsh species. Presented at Fort Hays State University's Scholarship and Creative Activities Day, Hays, KS, May 2012 [2nd place poster in undergraduate research experience category]
 35. Caudle, K.L.* and **B.R. Maricle**. Effects of flooding on photosynthesis and root oxygen stress in plants of different flooding tolerance. Presented at Fort Hays State University's Scholarship and Creative Activities Day, Hays, KS, May 2012 [1st place poster by an undergraduate student]
 34. Betzen, B.M.* , C.M. Smart*, **B.R. Maricle**, and K.L. Caudle*. Effects of salinity on plant water potential in native and introduced salt marsh species. Presented at Fort Hays State University's Scholarship and Creative Activities Day, Hays, KS, May 2012
 33. White, S.J.* , A. Meraz*, N.G. Maforo*, and **B.R. Maricle**. Effect of ethanol toxicity on enzymes of respiration and carbon metabolism in plants. Presented at Fort Hays State University's Scholarship and Creative Activities Day, Hays, KS, May 2012
 32. Biggs, T.N.* and **B.R. Maricle**. Effects of nitrogen source and wind on photosynthesis and nitrate reductase activity in reed canarygrass. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
 31. White, S.J.* , A. Meraz*, N.G. Maforo*, and **B.R. Maricle**. Effect of ethanol toxicity on enzymes of respiration and carbon metabolism in plants. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
 30. Caudle, K.L.* , C.M. Smart*, B.M. Betzen*, and **B.R. Maricle**. Effects of salinity on plant water potential in native and introduced salt marsh species. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
 29. Caudle, K.L.* and **B.R. Maricle**. Effects of flooding on photosynthesis and root oxygen stress in plants of different flooding tolerance. Presented at the Kansas Academy of Science Annual Meeting, Wichita, KS, March 2012
 28. Gray, M.† , H. Tetreault† , C. Rodewald*, P. St. Amand, S. Baer, **B. Maricle**, T. Morgan, N. Bello, R. Goad† , J. Olsen† , L. Wheeler*, E. Akhunov, K. Garrett, G. Bai, and L. Johnson. Evidence for local adaptation and genetic differentiation across *Andropogon gerardii* (big bluestem) tall grass ecotypes occurring along a precipitation gradient. Presented at the 9th Annual Ecological Genomics Symposium, Kansas City, MO, November 2011
 27. Bryant, J.* , A. De La Cruz† , K. Price, N. An† , M. Knapp, H. Tetreault† , **B. Maricle**, J. Olsen† , K. Caudle*, R. Goad† , S. Baer, and L. Johnson. Remote sensing to detect plant performance in common gardens of big bluestem ecotypes across the Great Plains. Presented at the 9th Annual Ecological Genomics Symposium, Kansas City, MO, November 2011
 26. Bryant, J.* , A. De La Cruz† , K. Price, N. An† , H. Tetreault† , **B. Maricle**, J. Olsen† , K. Caudle*, S. Baer, and L. Johnson. Use of chlorophyll fluorescence analysis to detect plant performance in common gardens of big bluestem ecotypes across the Great Plains. Presented at the Grasslands in a Global Context meeting, Manhattan, KS, September 2011
 25. Goad R.K.† , S.G. Baer, L.C. Johnson, and **B.R. Maricle**. Patterns in aboveground net primary productivity in prairie reciprocally restored with dominant grasses from across a precipitation gradient. Presented at the Grasslands in a Global Context meeting, Manhattan, KS, September 2011
 24. Goad R.K.† , S.G. Baer, L.C. Johnson, **B.R. Maricle**, H.M. Tetrault† , and J.T. Olsen† . Patterns in aboveground net primary productivity of an assembling tallgrass prairie. Presented at the Ecological Society of America Annual Meeting, Austin, TX, August 2011

23. Tetreault, H. †, C. Rodewald*, S. Baer, **B. Maricle**, T. Morgan, R. Goad†, J. Olsen†, and L. Johnson. Local drought adaptation of the ecologically dominant prairie grass big bluestem *Andropogon gerardii*: Contribution of genotype and environment to phenotypic variation. Presented at the Ecological Society of America Annual Meeting, Austin, TX, August 2011
22. Tetreault, H. †, M. Gray†, C. Rodewald*, M. Mendola†, R. Goad†, J. Olsen†, E. McCrea*, L. Wheeler, N. Bello, T. Morgan, M. Knapp, P. St. Amand, E. Akhunov, K. Garrett, G. Bai, S. Baer, **B. Maricle**, L. Johnson. Phenotypic variation and population differentiation of *Andropogon gerardii* along the Great Plains precipitation gradient. Presented at the Gordon Research Conference on Ecological and Evolutionary Genomics, Biddeford, ME, July 2011
21. Tetreault, H. †, C. Rodewald*, M. Mendola*, R. Goad†, J. Olsen†, E. McCrea*, N. Bello, T. Morgan, R. Wynia, S. Baer, **B. Maricle**, and L. Johnson. Phenotypic variation of big bluestem ecotypes across the Great Plains precipitation gradient. Presented at the Evolution 2011 Meeting, Norman, OK, June 2011
20. Caudle, K.L.* and **B.R. Maricle**. Effects of oil deposition on respiration and photosynthesis in coastal native and introduced wetland grasses. Presented at Fort Hays State University's Research and Creative Activities Week, Hays, KS, April 2011 [1st place poster by an undergraduate student]
19. Olsen, J.T. †, H.M. Tetreault†, R.K. Goad†, M.L. Mendola*, S.G. Baer, L.C. Johnson, and **B.R. Maricle**. Effects of precipitation and ecotype on photosynthesis in two grass species. Presented at Fort Hays State University's Research and Creative Activities Week, Hays, KS, April 2011
18. Gray, M. †, H. Tetreault†, C. Rodewald*, S. Baer, **B. Maricle**, P. St. Amand, E. Akhunov, K. Garrett, T. Morgan, L. Wheeler*, R. Goad†, J. Olsen†; B. Guihua, L. Johnson. Local adaptation of the dominant prairie grass big bluestem: Contribution of genetics and environment to phenotype. Presented at the Ecological Genomics Symposium, Kansas City, MO, November 2010
17. Johnson, L.C., **B.R. Maricle**, and S.G. Baer. Ecotypic variation of *Andropogon gerardii* across a precipitation gradient in midwest grasslands. Presented at Konza Prairie visitor's day, Manhattan, KS, September 2010
16. Waring, E.F. † and **B.R. Maricle**. Effects of flooding on transpiration in *Sorghum halepense* (johnsongrass) and *Phragmites australis* (common reed). Presented at the Society of Wetland Scientists Annual Meeting, Salt Lake City, UT, June 2010
15. Polacik, K.A. † and **B.R. Maricle**. Response to flooding in invasive saltcedar (*Tamarix*). Presented at the Kansas Native Plant Society Annual Wildflower Weekend, Pittsburgh, KS, September 2009
14. Waring, E.F. † and **B.R. Maricle**. Differences in photosynthesis and respiration due to flooding in native and nonnative wetland grasses of central Kansas. Presented at the Society of Wetland Scientists Annual Meeting, Madison, WI, June 2009
13. Polacik, K.A. † and **B.R. Maricle**. Response to flooding in invasive saltcedar (*Tamarix*). Presented at Fort Hays State University's Research and Creative Activities Week, Hays, KS, April 2009
12. Waring, E.F. † and **B.R. Maricle**. Effects of flooding on light harvesting and CO₂ fixation in native and nonnative wetland grasses of central Kansas. Presented at Fort Hays State University's Research and Creative Activities Week, Hays, KS, April 2009 [3rd place poster by a graduate student]
11. Polacik, K.A. † and **B.R. Maricle**. Response to flooding in invasive saltcedar (*Tamarix*). Presented at the Kansas Academy of Science Annual Meeting, Topeka, KS, March 2009
10. Waring, E.F. † and **B.R. Maricle**. Effects of flooding on light harvesting and CO₂ fixation in native and nonnative wetland grasses of central Kansas. Presented at the Kansas Academy of Science Annual Meeting, Topeka, KS, March 2009

9. Pfeifer, A.M.* , R.W. Lee, and **B.R. Maricle**. Effects of diet, drugs, and activity levels on $\delta^{13}\text{C}$ of breath and hair of humans. Presented at the Kansas Academy of Science Annual Meeting, Topeka, KS, March 2009
8. **Maricle, B.R.**, J.R. Thomasson, J.L. Casey*, J.J. Bitner[†], J.L. Gorney[†], C.M. Dasilva-Carvalho[†], R.M. Shofner*, E.V. Voznesenskaya, N.K. Koteyeva, and G.E. Edwards. Functional and ecological leaf anatomy in grass leaves of the genus *Spartina*. Presented at Fort Hays State University's Research and Creative Activities Week, Hays, KS, April 2008
7. **Maricle, B.R.** and R.W. Lee. Respiration and oxygen transport in saltmarsh grasses in relation to elevational zonation. Presented at the American Society of Plant Biologists Annual Meeting, Seattle, WA, July 2005
6. **Maricle, B.R.**, O. Kiirats, G.E. Edwards, and R.W. Lee. Effects of salinity on photosynthesis in C_4 estuarine grasses. Presented at the Third International Conference on Invasive *Spartina*, San Francisco, CA, November 2004
5. Hellquist, C.E., R.W. Lee, **B.R. Maricle**, S. Riggs, and R.A. Black. Interactions of *Spartina anglica* with native plant and animal species in northern Puget Sound, WA, USA: an overview. National Estuarine Research Reserve System Mixer. Presented at the Estuarine Research Federation Biennial Conference, Seattle, WA, September 2003
4. **Maricle, B.R.** and R.W. Lee. Changes in carbon and nitrogen isotopic composition of C_4 estuarine grasses under different salinity levels. Presented at the Estuarine Research Federation Biennial Conference, Seattle, WA, September 2003
3. **Maricle, B.R.**, T. Tsuzaki*, B.C. Bussiere*, and R.W. Lee. Aerenchyma development in *Spartina alterniflora* and *S. anglica*: Differential responses to flooding and nutrient limitation. Presented at the Science and Engineering Research Symposium, Pullman, WA, March 2001
2. **Maricle, B.R.** and R.W. Lee. Aerenchyma development in *Spartina alterniflora* and *S. anglica*: Differential responses to flooding. Presented at the William R. Wiley Research Exposition, Pullman, WA, February 2001
1. **Maricle, B.R.** and J.L. Mena-Werth. The determination of circumstellar material around stars observed with the International Ultraviolet Explorer Satellite using asymmetries in the singly ionized magnesium *h* and *k* lines. Presented at the National Conference of Undergraduate Research, Rochester, NY, April 1999

9. Research Grants Received

- a. **Current Research Grants** (asterisks* indicate undergraduate authors; daggers[†] indicate graduate student authors)

United States Department of Agriculture

- 2010 **Maricle, B.R.** Ecotypic variation of *Andropogon gerardii* across a precipitation gradient in Midwest grasslands. Subaward from USDA Plant Biology Abiotic Stress program, \$35,545

Enironmental Protection Agency

- 2012 Caudle, K.L.* and **B.R. Maricle**. Fall 2012 EPA Environmental Protection Agency Greater Research Opportunities (GRO) Fellowships for Undergraduate Environmental Study, \$48,900

Botanical Society of America

- 2011 Caudle, K.L.* and **B.R. Maricle**. Does soil nitrogen facilitate invasive potential of non-native grasses? Effects of NO_3^- concentration on nitrogen uptake rates, assimilation, and photosynthesis in native and introduced grasses. Botanical Society of America Undergraduate Student Research Award, \$200

Weed Science Society of America

- 2012 Caudle, K.L.* and **B.R. Maricle**. Does salinity tolerance encourage invasiveness in marsh communities? How physiological advantages of the invasive saltcedar *Tamarix ramosissima* impact a Kansas salt marsh. Weed Science Society of America Undergraduate Research Award, \$1000

Society of Wetland Scientists

- 2012 Caudle, K.L.* and **B.R. Maricle**. Physiological, anatomical, and ecological responses of salt marsh communities to spilled oil using experimental mesocosms. Society of Wetland Scientists Student Research Grant, \$989

American Society of Plant Biologists

- 2012 Caudle, K.L.* and **B.R. Maricle**. Genetic and environmental influence on physiological drought tolerance in big bluestem. American Society of Plant Biologists Summer Undergraduate Research Fellowship (SURF), \$4700

Kansas Academy of Science

- 2011 Caudle, K.L.* and **B.R. Maricle**. Does spilled oil induce anaerobic soil conditions in coastal wetlands? Effects of oil deposition on respiration and photosynthesis in coastal native and introduced wetland grasses. KAS Student Research Grant, \$1000

Kansas IDEa Network of Biomedical Research Excellence (K-INBRE)

- 2012 Biggs, T.N.* and **B.R. Maricle**. Effect of ethanol toxicity on enzymes of respiration and carbon metabolism in plants. K-INBRE Summer Scholars Program, \$4000

Fort Hays State University

- 2012 **Maricle, B.R.** Genetic and environmental influence on physiological drought tolerance in big bluestem. FHSU Faculty Summer Research and Creative Activity Grant, \$3467
- 2012 **Maricle, B.R.** Request for travel money. FHSU Faculty/Staff Development Plan, \$1200
- 2011 **Maricle, B.R.** Physiological and ecological effects of oil spills on coastal marsh plants. FHSU Undergraduate Research Experience (URE) application, \$1500

- b. Pending Research Grants** (asterisks* indicate undergraduate authors; daggers† indicate graduate student authors)

National Science Foundation

- 2012 Johnson, L.J., A. Jumpponen, A.E. Whitfield, D. Rotenberg, L.J. Szabo, S.G. Baer, K.A. Garrett, C.M. Malmstrom, **B.R. Maricle**. IOS Preliminary Proposal: Collaborative Research: Genetic and environmental controls of a dominant grass: Community and ecosystem effects. NSF Division of Integrative Organismal Systems, pre-proposal
- 2011 LaFantasie, J.J. and **B.R. Maricle**. Sensitivity of above/belowground linkages to foliar fungi and insect herbivores across a precipitation gradient in tallgrass prairie. Subaward from NSF Division of Ecological Biology 1120556, \$258,448

National Aeronautics and Space Administration (NASA)

- 2012 Swamy, A.A., L.C. Johnson, M. Knapp, K. Price, S.G. Baer, **B.R. Maricle**. Notice of Intent: Tallgrass ecotypic adaptation to dynamic climatic forcings at local to regional scales: measuring, modeling and predicting. NASA Modeling, Analysis, and Prediction, pre-proposal

Prairie Biotic Research, Inc.

- 2012 Caudle, K.L.* and **B.R. Maricle**. Influence of precipitation on native tallgrass *Andropogon gerardii* ecotypes. Prairie Biotic Research, Inc., Small Grant, \$1000
- 2012 Barrett, K.M.† and **B.R. Maricle**. Effects of stream pollution on aquatic and riparian plant diversity. Prairie Biotic Research, Inc., Small Grant, \$1000

c. Past Research Grants (asterisks* indicate undergraduate authors; daggers† indicate graduate student authors)

National Science Foundation

- 2004 Lee, R.W. and **B.R. Maricle**. DISSERTATION RESEARCH: Mechanisms of anoxia tolerance in marsh grasses in the genus *Spartina* (Poaceae). National Science Foundation Doctoral Dissertation Improvement Grant DEB-0508833, \$8542

U.S. Environmental Protection Agency

- 2001 Lee, R. W. and **B.R. Maricle**. Physiological mechanisms of estuarine sediment oxidation by *Spartina* cordgrasses. U.S. Environmental Protection Agency Joint Program in Phytoremediation, \$110,307

Li-Cor Biosciences, Inc.

- 2008 **Maricle, B.R.** Application for LI-6400 XTR package through the Li-Cor Environmental Education Fund (LEEF) program, \$71,850

Weed Science Society of America

- 2011 Caudle, K.L.* and **B.R. Maricle**. Does soil nitrogen facilitate invasive potential? Effects of NO₃⁻ concentration on N uptake rates, assimilation, and photosynthesis in native and introduced grasses. Weed Science Society of America Undergraduate Research Award, \$1000

Kansas Academy of Science

- 2009 Waring, E.F.† and **B.R. Maricle**. Mechanisms of cold-tolerance in C₄ photosynthetic plants. KAS Student Research Grant, \$1000
- 2009 Polacik, K.A.† and **B.R. Maricle**. Response to flooding in invasive salt cedar (*Tamarix*). KAS Student Research Grant, \$922

Washington State Department of Ecology

- 2001 **Maricle, B.R.** Physiological assessments of vigor in Pacific estuary invaders *Spartina alterniflora* and *S. anglica*: How effective is mowing as a control agent? Washington State Department of Ecology Research Assistantship, \$5000

Fort Hays State University

- 2011 **Maricle, B.R.** Precipitation manipulation and its role on photosynthesis and water potential in mixed-grass prairie grasses. FHSU Faculty Summer Research and Creative Activity Grant, \$3293
- 2011 **Maricle, B.R.** Request for travel money. FHSU Faculty/Staff Development Plan, \$775
- 2010 **Maricle, B.R.** Effects of oil spills and nitrogen pollutants on coastal and wetland plants. FHSU Undergraduate Research Experience (URE) application, \$1500
- 2010 **Maricle, B.R.** Funding for FHSU Masters II Graduate Faculty designation, \$500
- 2010 **Maricle, B.R.** Effects of water on photosynthesis in mixed-grass prairie grasses. FHSU Faculty Summer Research and Creative Activity Grant, \$3261

- 2009 **Maricle, B.R.** Effects of water on photosynthesis in mixed-grass prairie grasses. FHSU Graduate School Small Research Grant, \$1719
- 2009 Waring, E.F.[†] and **B.R. Maricle**. Mechanisms of cold-tolerance in C₄ photosynthetic plants. FHSU Graduate School Mini-Grant, \$249
- 2009 Waring, E.F.[†] and **B.R. Maricle**. Effects of flooding on photosynthesis and respiration in native and invasive wetland grasses of central Kansas. FHSU Graduate School Travel Grant, \$250
- 2009 Polacik, K.A.[†] and **B.R. Maricle**. Response to flooding in invasive salt cedar (*Tamarix*). FHSU Graduate School Mini-Grant, \$200
- 2008 **Maricle, B.R.** Mechanisms of chilling-tolerant C₄ photosynthesis in marsh grasses. FHSU Graduate School Small Research Grant, \$1190
- 2008 **Maricle, B.R.** Request for travel money. FHSU Faculty/Staff Development Plan, \$516
- 2007 **Maricle, B.R.** Physiological and ecological assessments of water stress in riparian trees. FHSU Graduate School Small Research Grant, \$4798
- 2007 **Maricle, B.R.** Request for travel money. FHSU Faculty/Staff Development Plan, \$600
- 2007 **Maricle, B.R.** Faculty teaching grant award. FHSU College of Health and Life Sciences, \$500
- 2006 **Maricle, B.R.** Physiological and biochemical mechanisms of flooding tolerance in plants. FHSU Graduate School Small Research Grant, \$740
- 2006 **Maricle, B.R.** Request for travel money. FHSU Faculty/Staff Development Plan, \$825

Washington State University

- 2006 **Maricle, B.R.** Environmental regulation of species distribution in Washington salt marshes. Betty W. Higinbotham Trust for off-campus training and research, \$975
- 2005 **Maricle, B.R.** Physiological mechanisms of anoxia tolerance in marsh grasses in the genus *Spartina* (Poaceae). Betty W. Higinbotham Trust for off-campus training and research, \$1028
- 2005 **Maricle, B.R.** Physiological mechanisms of anoxia tolerance in marsh grasses in the genus *Spartina* (Poaceae). WSU Orlin and Susann Biddulph Summer Research Award, \$1000
- 2004 **Maricle, B.R.** What makes a successful estuarine mudflat invader? Comparative hypoxia- and salt-stress physiology of introduced *Spartina* and native *Distichlis spicata* (Poaceae). WSU Betty W. Higinbotham Trust for off-campus training and research, \$1933
- 2004 **Maricle, B.R.** The physiology of an estuarine invader: What makes introduced *Spartina* so successful? WSU Orlin and Susann Biddulph Summer Research Award, \$1000
- 2003 **Maricle, B.R.** Oxygenation of sediment by *Spartina* marsh grasses: Facilitation of pollutant degradation. WSU Noe Higinbotham Endowment in Botany, \$500
- 2002 **Maricle, B.R.** Aerenchyma development and oxygen transport in the estuarine cordgrasses *Spartina alterniflora* and *S. anglica*. WSU Graduate School Travel Grant, \$270
- 2002 **Maricle, B.R.** What makes a successful estuarine invader? Comparative hypoxia- and salt-stress physiology of introduced *Spartina* and native West-Coast estuarine vegetation. WSU Betty W. Higinbotham Trust for off-campus training and research, \$1824
- 2001 **Maricle, B.R.** Aerenchyma formation and function in Pacific estuary invaders *Spartina alterniflora* and *S. anglica*: Physiological adaptations to hypoxia. WSU Betty W. Higinbotham Trust for off-campus training and research, \$2620

10. Honors and Distinctions

a. Professional Distinctions

- 2012 Nominee, Botanical Society of America Charles Edwin Bessey Teaching Award
- 2010 Nominee, Fort Hays State University Pilot Award for teaching excellence
- 2009-2010 Outstanding Thesis/Field Study Chair, Fort Hays State University Graduate School
- 2009 Outstanding Research Award, Fort Hays State University, Spring 2009
- 2008-2009 Outstanding Scholarship Award, FHSU College of Health and Life Sciences

b. Academic Honors

- 2006 Graduated Summa Cum Laude, Ph.D. in Botany, WSU
- 2002 Graduated Summa Cum Laude, M.S. in Botany, WSU
- 2000-2006 Dean's List, Washington State University
- 2000 Selected as Outstanding Graduating Senior by the UNK Department of Biology
- 2000 Graduated Summa Cum Laude, B.S. in Biology, UNK
- 1996-2000 Dean's List, University of Nebraska at Kearney
- 1996-2000 Member of UNK Honors Program

c. Professional Affiliations

- American Society of Plant Biologists (member 2001 - present)
- Botanical Society of America (member 2008 - present)
- Ecological Society of America (member 2004 - present)
- Kansas Academy of Science (member 2009 - present; Lifetime member)

d. Current and Recent Collaborators

- Peter B. Adler, Department of Wildland Resources and the Ecology Center, Utah State University, Logan, UT
- Sara G. Baer, Department of Plant Biology, Southern Illinois University, Carbondale, IL
- R. Alan Black, School of Biological Sciences, Washington State University, Pullman, WA
- Colin S. Campbell, Decagon Devices, Inc., Pullman, WA
- Douglas R. Cobos, Decagon Devices, Inc., Pullman, WA
- Gerald E. Edwards, School of Biological Sciences, Washington State University, Pullman, WA
- Karen A. Garrett, Department of Plant Pathology, Kansas State University, Manhattan, KS
- Keith R. Harmony, Kansas State University Ag Research Center, Hays, KS
- C. Eric Hellquist, Department of Biological Sciences, Oswego State University, Oswego, NY
- Loretta C. Johnson, Division of Biology, Kansas State University, Manhattan, KS
- Ari Jumpponen, Division of Biology, Kansas State University, Manhattan, KS
- Olavi Kuirats, School of Biological Sciences, Washington State University, Pullman, WA
- Nouria K. Koteyeva, Laboratory of Anatomy and Morphology, V. L. Komarov Botanical Institute of Russian Academy of Sciences, St. Petersburg, Russia

Mary Knapp, Department of Agronomy, Kansas State University, Manhattan, KS

Maurice S. B. Ku, Graduate Institute of Agricultural Biotechnology, Center of Agricultural Biotechnology, National Chiayi University, Chiayi, Taiwan

Jordana J. LaFantasie, Department of Biological Sciences, Fort Hays State University, Hays, KS

Raymond W. Lee, School of Biological Sciences, Washington State University, Pullman, WA

Carolyn M. Malmstrom, Department of Plant Biology, Michigan State University, East Lansing, MI

Kevin P. Price, Department of Agronomy, Kansas State University, Manhattan, KS

Dorith Rotenberg, Department of Plant Pathology, Kansas State University, Manhattan, KS

Aavudai A. Swami, Department of Agronomy, Kansas State University, Manhattan, KS

Les J. Szabo, Cereal Disease Laboratory, USDA Agricultural Research Service, St. Paul, MN

Joseph R. Thomasson, Department of Biological Sciences, Fort Hays State University, Hays, KS

Elena V. Voznesenskaya, Laboratory of Anatomy and Morphology, V. L. Komarov Botanical Institute of Russian Academy of Sciences, St. Petersburg, Russia

Anna E. Whitfield, Department of Plant Pathology, Kansas State University, Manhattan, KS

Samuel R. Zwenger, Department of Biological Sciences, Fort Hays State University, Hays, KS

11. Community Service

Maricle, B.R., T. Mannell, and J.T. Olsen. Tree/shrub identification and sampling. Sternberg's Wildlife Explorer's Camp for students in third to eighth grade, August 2010

Work with the FHSU Biology club to develop an outdoor classroom at the Sternberg Museum of Natural History (Spring 2007 to Spring 2009)

Presentations to a lay audience:

Maricle, B.R. Responses of plants to abiotic stress. Invited presentation at the Phi Kappa Phi Honors Society Induction Ceremony, Fort Hays State University, Hays, KS, April 2012

Maricle, B.R. Wetland vegetation. Invited seminar presented at the Cheyenne Bottoms "Wetlanders" Festival, Hoisington, KS, April 2007

12. References

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