

Curriculum Vitae - Leon G. Higley

Office

723 Hardin Hall
3310 Holdrege Street
School of Natural Resources,
University of Nebraska-Lincoln
Lincoln, NE 68583-0961

Home

7320 Raven Circle
Lincoln, NE 68506

office (cell phone): (402) 560-6684

e-mail: lhigley1@unl.edu

or lhigley@drshigley.com

cell phone: (402) 560-6684

EDUCATION

Degree	Date	Institution	Major(s)
B.A.	1980	Cornell University	Chemistry
M.S.	1984	Iowa State University	Entomology
Ph.D.	1988	Iowa State University	Entomology/Crop Production & Physiology

M.S. Thesis: Seedcorn maggot population biology in central Iowa. Advisor: Dr. Larry P. Pedigo.

Ph.D. Dissertation: Plant and stand response to early season insect-induced stress in a model system. Advisors: Dr. Larry P. Pedigo, Entomology, & Dr. Richard M. Shibles, Agronomy.

PROFESSIONAL EXPERIENCE

Professor of Applied Ecology (Jan 2010 – present) in the School of Natural Resources, University of Nebraska-Lincoln, transfer from Department of Entomology. Appointment: 30% teaching, 70% research as of Fall 2017 (previously 20% teaching, 80% research). Current teaching assignments include:

1. NRES 801. Topics in Applied Ecology (3h.)
2. NRES 463/862. Advanced Conservation Biology (3h.)
3. NRES 915. Science Communication, Ethics, and Philosophy (3h.)

My research program is broadly focused on insect physiological ecology. Areas of current emphasis are:

1. forensic entomology (insect development/postmortem interval determination and decompositional ecology),
2. insect ecology (ecophysiology), focus on extremophiles
3. arthropod-plant stress interactions and management (particularly photosynthetic responses of plants to arthropod injury), and
4. pest management theory (with emphasis on decision making and environmental impacts).

Other Faculty Appointments

Visiting Professor (2005-present), Dept. Fitossanidade, FCAV/UNESP Jaboticabal, Sao Paulo, Brazil

Affiliate Faculty Member (2018-present), Dept. of Entomology, Iowa State University, Ames, IA

Adjunct Professor of Forensic Science (2013-2015), St. Joseph's College, Rensselaer, IN

Adjunct Professor (2007-2016), Postgraduate Training Program in Forensic Science and Medicine, Lagos State University College of Medicine, Lagos State University, Lagos, Nigeria

Professor of Entomology (July 1997 – Dec 2009)

Associate Professor of Entomology (July 1993 – June 1997)

Assistant Professor of Entomology (Sept 1989 – June 1993) in the Department of Entomology, University of Nebraska, appointment: 1989-2008: 80% research and 20% teaching. Served as distance education coordinator for

the Department (ca. 1998-2006), and as coordinator of the biology preparing future faculty program at UN-L; appointed a member of the graduate faculty, Nov. 13, 1989 and a fellow Mar. 19, 1992; tenure date July 1, 1995.

Temporary Assistant Professor (July 1988 – Aug 1989) in the Department of Entomology, Iowa State University; appointment 75% research and 25% extension. My principal research activities focused on characterizing physiological responses of plants to insect injury, with emphasis on photosynthesis, and extension responsibilities for field crop insects. I also taught Fundamentals of Entomology and Pest Management in the ISU off-campus teaching program and was a temporary member of the graduate faculty.

Predoctoral Research Associate (Aug 1984 - June 1988)

Research Assistant (Jan 1983 - Aug 1984) on the insect pest management project under Dr. L. P. Pedigo. As Research Associate, I supervised and coordinated activities of technicians and graduate students, maintained project finances, conducted insecticide efficacy tests, and wrote grant proposals. My M.S. and Ph.D. research were conducted concurrently.

Laboratory Technician (Sept 1979 - May 1980) at Boyce Thompson Institute for Plant Research under Dr. J. R. R. Renwick. I was responsible for general laboratory work which included rearing cabbage butterflies and cabbage loopers, greenhouse maintenance, and helping prepare experiments. Concurrently, I completed my B.A. degree.

Vector Control Supervisor (summers, 1976-1979) in the Health Dept., City of North Platte, NE under Mr. J. Rich. I was responsible for supervising 3 employees, surveying Lincoln County for mosquito infestations, planning and executing insecticidal treatments, repairing and maintaining equipment, and conducting biological control of mosquito larvae with the mosquito fish, *Gambusia affinis*.

TEACHING EXPERIENCE

Teaching Summaries:

Courses taught	#	Unique courses	#
resident courses	117	developed	17
distance courses taught	33	undergraduate	3
high school/undergraduate	12	undergraduate/graduate	11
international	2	graduate	7
		distance	9
		high school/undergraduate	1
		international	2
Total courses taught	164	Total by subject matter/course #	21

Course	Credits	Level
Advanced Conservation Biology	3	u/g
Advanced Insect Ecology	2	g
Agriculture 489 Employment Seminar	1	u/g
Art Immersion and the Environment	3	u/g
Becoming a Professional Scientist	2	g
Experimental Design	3	g
Ethics in Forensic Science	3	g
Forensic Entomology	3	u/g
Fundamentals of Entomology and Pest Management	3	u/g
Insect Behavior	3	g
Insect Biology	2	u
Insect Ecology	3	u/g

Insect Identification and Natural History	4	g
Insect Pest Management (The Good, the Bad, and the Bugly)	3	u/g
Insects, Science, and Society	3	u
Medical Entomology	3	u/g
Distance MS in Entomology Degree Project	4	g
Principles of Ecology	3	u
Science Communication, Ethics, and Philosophy	3	g
Special Topics in Natural Resources	3	g
Topics in Conservation	3	g
Wildlife Forensics	3	g

Curriculum Development	Institution	Time	Key Activities
Master of Agriculture	Univ. of Nebraska-Lincoln	1998-1999	drafting proposal
Master of Entomology	Univ. of Nebraska-Lincoln	1999-2005	draft proposal, obtain UNL approval, develop business plan and negotiate with Chancellor, direct program
Master of Forensic Science	St. Joseph's College	2012-2013	working with N. Haskell, drafted proposal and assisted with initial offerings
Major in Forensic Science	Univ. of Nebraska-Lincoln	2006-2012	with D. Carter and K. Reinhard, course development, student recruitment and advising

Guest Lecturer

Agricultural Sciences 100 - Agriculture -Man's Frontier; topic IPM; 1993.
 Agriculture 810 - Research Strategies in Agriculture; topic ethics; Fall 1992-2005, 2007.
 Biological Sciences 902 - Introduction to Biotechnology Core Facilities; topic ethics; 1994, 1995, 1996.
 Botany - College of St. Mary's Omaha; topic photosynthesis and it's measurement; Fall 2014
 Economic Entomology; topic legume insects; 1984, 1987.
 Entomology 308 Field Crop Insects; topic EILs; 1991.
 Entomology 817 Pest Management Systems; topic environmental costs in EILs; 1990, 1992, 1994, 1997.
 Entomology Augustana College, Rock Island, IL; topic forensic entomology; Fall 2013, 2014, 2018
 Food Safety and Sanitation; lab exercise or lecture on insects in food; Fall 2003-present (once a year)
 Insect Pest Management; topic semiochemicals; 1984.
 Introduction to Forensic Science; topic forensic entomology; Spring and Fall 2007.
 Nutrition 253; topic entomophagy; 2000-2022.
 Sustainable Agriculture Seminar; topic IPM; 1992, 1993.

Administration and Program Development

Master of Agriculture, distance degree program; initial draft of program proposal; 1997-1998

Master of Science in Entomology, distance degree program; 1998-2006

1. drafted program proposal, and worked (with department colleagues) on proposal approval
2. negotiated with Chancellor on distance tuition return to Department, this established current UNL model for distance tuition return across the campus
3. developed first business plan for distance education program (2001), and developed second business plan (written with P. Higley) (2006)
4. distance education director for Distance M.S. in Entomology Program (1998-2006), responsible for student advising (principally with Graduate Chair, J. Foster), course development, faculty instruction in distance teaching, budgeting and accounting for distance tuition return

Major in Forensic Science; worked with D. Carter and K. Reinhard in developing new undergraduate major; helped establish degree requirements, and advised students in the first two years of the program

High School and Other Outreach Teaching

Entomology 108 (Insects, Science, and Society) to high school students in the LPS Science Focus Program (Zoo School) with Sara Torens, LPS Science Teacher, and various of my senior graduate students, available for joint high school and college credit (1998, 1999, 2001, 2002, 2003, 2004, 2005, 2007, 2008, 2009, 2010)

Various presentations to elementary students in the Lincoln Public School (LPS) system (grades 1-5, 8, and 9-12), public and conservation groups, workshops, and various similar exercises; multiple lectures and laboratory exercises conducted in high school class Forensic Science in the LPS Science Focus Program (2005, 2006, 2007, 2008)

Entomology module in the ISU Science in Agriculture Awareness Program, an on-campus program for selected Iowa high school students and science teachers; Spring 1989.

Annual IPM Workshop, Soybean Insects Sessions; 1985.

Teaching Assistant

Fundamentals of Entomology and Pest Management, Department of Entomology, ISU; undergraduate; 1985

Insect Ecology and Pest Management, Department of Entomology, ISU (graduate course); 1985.

Insect Morphology Department of Entomology, ISU 1982

Medical Entomology Department of Entomology, ISU 1981, 1982

Graduate Students Advised

Totals to date:

19 M.S. degrees (11 co-advised), 17 Ph.D. degrees (7 co-advised); 36 degrees completed, 30 students total

Currently advising 1 PhD students and 1 MS student; served or serving on 37 graduate committees

Student	M.S.	PhD.	Current Position
Ramesh Ayyappath		1995	Scientist, Advanced Biomedical Research, Inc.
Robert K. D. Peterson		1995	Professor and Chair, Montana State University.
Jose Barrigossi		1997	Scientist, EMBRAPA (Brazil)
Thomas Hunt	1993	1999	Professor, Univ. of Nebraska-Lincoln
Fikru Haile	1996	1999	Senior Scientist, Dupont
Wyatt Hoback		1999	Professor, Oklahoma State University
Kevin Delany	2003	2003	Environmental manager, CostCo Corp.
Tulio Macedo	2003	2003	Farm Advisor, Madera and Merced Counties, University of California-Davis
Rod Madsen	2003		Senior Product Manager, Li-Cor Biosciences
Adeney de Freitas Bueno		2004	Scientist, EMBRAPA (Brazil)
William Allgeier	2005		Officer, U.S. Customs Service
Lisa Franzen-Castle	2005		Professor and Associate Dean, University of Nebraska-Lincoln
Paul Nabity	2005		Univ. California-Davis
Michael Fisher	2007		Lieutenant Commander (medical entomologist), U.S. Navy
Tim Huntington	2005	2008	Professor of Biology and Criminal Justice, Concordia University, Seward, NE
Tierney Brosius (née Berger)	2006	2010	Professor of Biology, Augustana College, Rock Island, IL
Sheri Svehla	2007	2011	Deceased (Sheri died from breast cancer while in the last semester of her PhD)
Jose Antonio de Souza Rossato Jr.		2012	Assistant Professor of Biology; Past President (CEO) of Coplana Agricultural Cooperative
Melissa Authement (nee Lein)	2013		High School Teacher
Amanda Roe		2014	Associate Professor of Biology, College of St. Mary, Omaha, NE
Christian Elowsky		2016	Assistant Professor of Practice, UNL

Ricardo Tinoco		2016	IPM Manager, Agropalma, Brazil
Amber MacInnis	2018		Post-doc, Texas A&M University
Braymond Adams	2018	2023	PhD student, Iowa State University (I co-advise)
Brandon Strauss	2019		Research technician
Royce Cumming	2019		PhD. Student, City University of New York
Kelly Willemssens	2019		Lecturer, Clemson
Monica Gotschall	2021		Laboratory technician, State of Nebraska
John Obafunwa	in progress		Director-General, Nigerian Institutes for Medical Research
Fabrice Gbenosi	in progress		Graduate research assistant

Graduate Student Committees

1. Carl Christianssen, Iowa State Univ., M.S. 1989
2. Robert Peterson, Entomology, M.S. 1991
3. Spence Behmer, Biological Sciences, M.S. 1993
4. Daniel Anderson, Agronomy, M.S. 1995
5. Xin Hou, Entomology, M.S. 1995
6. Terence Spencer, Entomology, M.S. 1995
7. John Lindquist, Agronomy, Ph.D. 1996
8. Venkat Pedibhotla, Entomology, M.S. 1993, Ph.D. 1996
9. Paula Gouveia Marçon, Entomology, Ph.D. 1997
10. Mario Urias, Entomology, Ph.D. 1998
11. Jon Miller, Entomology, M.S. 1994, Ph.D. 1998
12. Samba Traore, Agronomy, Ph.D. 1999
13. Rico Rana, Entomology, Ph.D. 1999
14. Connie Reimers, Entomology, M.S. 2000
15. Tiffany Heng-Moss, Entomology, Ph.D. 2000
16. John Bedick, Entomology, M.S. 1997, Ph.D. 2002
17. Nor Aliza Abdul Rahim, Entomology, M.S. 1997, Ph.D. 2001
18. Hasan Tunaz, Entomology, M.S. 1998, Ph.D. 2002
19. Sean Malone, Entomology, VPI, Ph.D. 2001
20. Andrew Smith, Entomology, Ph.D. 2002
21. Federico Ocampo, Entomology, Ph.D. 2004
22. Wyatt Anderson, Entomology, M.S. 2004
23. Nick Aliano, Entomology, M.S. 2004
24. Herbert Siqueira, Entomology, Ph.D. 2004
25. Obdulia Segura, Entomology, Ph.D. 2004
26. Shauna Hawkins, Entomology, M.S. 2005
27. Douglas Golick, M.Ed. 2001, Ph.D. 2006
28. Masaru Takahashi, Biology, M.S. 2006
29. Tom Miller, Biology, Ph.D. 2007
30. Amanda Roe, M.S. 2009
31. Sean Putnam, Entomology, M.S. 2005, Ph.D. 2009
32. Amy Maile, Entomology (Forensic Sci.), M.S. 2011
33. Kelly Willamssens, NRES, M.S. 2015
34. Angela (nee Tan) Florence, Agronomy, Ph.D. 2016
35. John Bowley, M.S., Montana State University, 2021
36. Mia Luang, M.S., Entomology, UNL, 2022
37. Charity Gummert, MS, Natural Resources, UNL 2024

EXTENSION EXPERIENCE

Temporary Assistant Professor (25% extension) (July 1988 - Aug 1989) for Department of Entomology, Iowa State University. My primary extension responsibility was to develop publications and other support materials for the pesticide applicator training program, with emphasis on field crop insects. These materials included information on pest biology, integrated pest management, and other appropriate areas. Additionally, I answered phone inquiries, provided television interviews, prepared newsletter articles, and conducted various other activities.

HONORS

Honor Societies

Gamma Sigma Delta, The Honor Society of Agriculture
 Phi Beta Delta, Honor Society for International Scholars
 Phi Kappa Phi, National Honor Society

Sigma Xi, The Scientific Research Society

Bibliographic Recognition

American Men and Women of Science (2013)

Who's Who in America

Teaching and Research Recognition

2007 Founder's Memorial Award, Entomological Society of America

1996 Outstanding Young Alumnus Award, Iowa State University Alumni Association

Teaching Recognition

2005 Distinguished Teaching Award, University of Nebraska-Lincoln (one annual award from each college; recipient for College of Agricultural Sciences and Natural Resources)

Certificate of Recognition for Contributions to Students 2001, 2004, 2005, 2009, 2015 UNL Parents Association (student nomination)

2004 February Professor of the Month, Black Masque Chapter of Mortar Board, UN-L (student nomination)

2002 American Distance Education Consortium Educational Program Award (team award for Distance M.S. in Entomology Program)

2001 USDA Food and Agricultural Sciences Excellence in Teaching Award – North Central Region

2001 Entomology Educational Project Award of the Board Certified Entomologists of Mid-America for developing *Bug Bash* elementary and public insect education program (with Marion D. Ellis and Doug Golick)

2000 R1Edu National Distance Education Award (one of three national awards for promoting distance education at Research 1 universities)

2000 Entomological Society of America Distinguished Achievement Award in Teaching

2000 North Central Branch – Entomological Society of America Distinguished Achievement Award in Teaching

1999 Teaching Award of Merit, Gamma Sigma Delta, University of Nebraska chapter

1999 Finalist, 20th Annual Telly Awards for Outstanding Non-Network Television, for Course Entomology and Pest Management (top 5% of ca. 10,000 entries)

1998 Excellence in Graduate Education Award, University of Nebraska Alumni Association for outstanding contributions to graduate education; (first recipient of this award, which included a \$500 stipend)

1998 Senior Faculty Holling Family Award for Teaching Excellence, College of Agricultural Sciences and Natural Resources, UN-L; (this award included a \$5,000 stipend)

1998 Entomology Educational Project Award of the Board Certified Entomologists of Mid-America for developing the UN-L Entomology Distance Education Curriculum (with Entomology Department Faculty)

Research Recognition

2005 C.V. Riley Award of the North Central Branch – Entomological Society of America (for outstanding and significant contributions to the science of entomology)

1992 Junior Faculty Recognition for Excellence in Research, Agricultural Research Division, IANR, University of Nebraska-Lincoln; (this award included a \$2,500 grant for research or professional development)

1992 Sigma Xi Outstanding Young Scientist Award, University of Nebraska Chapter

1986 J.H. Comstock Graduate Student Award for Outstanding Graduate Student Achievement - Entomological Society of America (NCB)

1986 Ph.D. Research Award - Entomological Society of America (NCB)

1984 M.S. Research Award - Entomological Society of America (NCB)

Publications

1997 Blue Ribbon Award for American Society of Agricultural Engineers Educational Aids Competition (category publications: bulletins or manuals) for Nebraska Soybean Field Guide (contributing author)

COURTESY APPOINTMENTS

Adjunct Professor of Forensic Science, 2007-2016, Dept. of Pathology and Forensic Medicine, Lagos State University, Lagos

Adjunct Professor of Forensic Science, 2013-2015, at St. Joseph's College, Rensselaer, IN.

Affiliate Professor of Entomology, 2019-present, Iowa State University, Ames, IA

Visiting Professor, 2005-present, Dept. Fitossanidade, Sao Paulo State University- Jaboticabal, Sao Paulo, Brazil

INTERNATIONAL EXPERIENCE

Various invited international seminars and talks listed elsewhere in appropriate sections of CV.

2000-present Cooperative research with Dr. Odair Fernandes, Dept. Fitossanidade, FCAV/UNESP Jaboticabal, Sao Paulo, Brazil

2001 Distance education faculty workshop and consulting (3.5 weeks), Omsk State Agricultural Institute, Omsk, Russia

2003 Plant-Insect Interactions Course, Insect macro-photography workshop, Dept. Fitossanidade, FCAV/UNESP Jaboticabal, Sao Paulo, Brazil

2004 Insect macro-photography workshop, field research on photosynthetic responses of tomatoes to whitefly injury and of fall armyworm on corn (Dr. Odair Fernandes cooperator), Dept. Fitossanidade, FCAV/UNESP Jaboticabal, Sao Paulo, Brazil

2009 Forensic Entomology Course, Dept. of Pathology and Forensic Medicine, Lagos State University, Lagos, Nigeria; also consulted on new State Forensic Science Laboratory with the Minister for Health, Science, and Technology, State of Lagos, Nigeria

2010-present Cooperative research with Dr. Jose Alexandre Barrigossi, EMBRAPA Rice and Beans Research Center, Goiania, GO, Brazil

2013 Professional Development and Scientific Ethics; 3 credit hours; FCAV/UNESP Jaboticabal, Sao Paulo, Brazil

2014 Forensic Archeoparasitology and Entomology; A Fundação Oswaldo Cruz, Rio de Janeiro, Brazil, with Karl Reinhard

FORENSIC ENTOMOLOGY

Training and Continuing Education

Death scene investigation: a forensic entomology and anthropology field training workshop, Rensselaer, IN, June, 2003, 2005, 2022

Crime Scene Reconstruction, Oct. 25-27, 2006 Lincoln, NE

Forensic Investigation and Management of Mass Disasters & Medico-Legal Investigation of Child Abuse Cases, Oct. 31-Nov. 2, 2007

Forensic Pathology, 2007- 2008; training with Dr. Matthias Okoye, Coroner's Physician to Lancaster County and President of Nebraska Institute of Forensic Science, Inc. (ca. 20 h)

Memberships in Forensically Related Organizations

American Academy of Forensic Science, Associate Member

International Association for Identification, Nebraska Chapter of the IAI

American Board of Forensic Taphonomy, one of six founding members, Secretary (2012-2013) – currently Board is inactive

[American Board of Forensic Entomology (2007-2010) – I was a Diplomate of the Board between Feb. 2007 and Sept. 2010, when I resigned over concerns I developed regarding By-Law violations by officers, and other ethical issues in the operations and leadership of the Board. Other members, including two founding members, also resigned about this time.]

Workshops, and Other Forensic Teaching

(Forensic Courses I've taught are listed elsewhere)

Forensic Entomology and Archeoparasitology (with K. Reinhard). 3-day workshop with lab. Oswaldo Cruz Foundation, Rio de Janeiro, Brazil. June 2-4, 2014

2009 Forensic Entomology Course, Dept. of Pathology and Forensic Medicine, Lagos State University, Lagos, Nigeria; also consulted on new State Forensic Science Laboratory with the Minister for Health, Science, and Technology, State of Lagos, Nigeria

Forensic entomology (with T. Huntington): undergraduate/graduate course over 45h,: Southern Institute for Forensic Science, WMSU St. Joseph, MO, May 17-22, 2010 (22 participants)

Forensic entomology 2-day workshop (with T. Huntington): Iowa Chapter of the International Association for Identification (ca. 50 participants); June 2007

Forensic entomology workshop; Nebraska Wesleyan University, Forensic Science Graduate Program, 2002-2011 (excluding 2006), (ca. 50 attendees each workshop)

Forensic entomology 3-h workshop (with F. Baxendale, T. Huntington); FBI Regional Evidence Response Team, Omaha Field Office: Fall 2002 (ca. 15 attendees)

Forensic Entomology, ENTO 414/814, undergraduate/graduate resident and distance education course (Instructor), Dept. of Entomology, University of Nebraska Lincoln: developed and offered in Spring 2005, 2006, 2008, 2010

Various guest lectures to undergraduate and high school classes

Coauthored Posters and Presentations

(Various invited talks, book chapters, and papers are listed elsewhere in appropriate sections of my CV.)

1. Quadruple Homicide – Entomology. Annual Meeting of the Kansas International Identification Association, Junction City, KS, April 10, 2019. *Invited presentation.*
2. Why butterflies aren't elephants, hitmen aren't applied ecologists, and scientists too often lie: The need for skepticism in science. Symposium "The Inspiring, Exploding Skeptical Movement and its Impact on Entomology" 2017 Annual Meeting of the American Entomological Society, Denver, CO, Nov. 10, 2017
3. Insect Development and Forensic Entomology, University of Sao Paulo, Riberao Preto, SP, Brazil, July 17, 2014.
4. Life After Death: Maggots, Murder, and Forensic Science. Dept of Biology, University of Nebraska at Kearney, Jan. 14, 2013
5. Using a Faceless Murder Victim to Illustrate Crap Tests, Quackery, and Incompetence in Using or Not Using Forensic Entomology. Ann. Meeting Amer. Acad. Forensic Sci., Chicago, IL Feb. 24, 2011 (Abstract in Proc. Amer. Acad. Forensic Sci. 2011. 17:207-208.)
6. Lay lady lay, lay upon my big dead head – Flies and Homicides. Beta Beta Beta Honorary (biology, Nebraska Wesleyan University, Lincoln, NE May 6, 2008.
7. Forensic Entomology from a Nursing Perspective. Bryan-LGH Nursing Program, Lincoln, NE, 2006, 2008, 2009.
8. Death, Taxes, and Maggots: Basics of Forensic Entomology, Osher Lifelong Learning Institute (educational program for students 55 and older), UN-L, Lincoln, NE, Dec. 12, 2008.
9. Huntington, T. E., and L.G. Higley. 2007. Have I Eaten Here Before? Considering Multigenerational Colonization of Remains by Blow Flies. American Academy of Forensic Sciences Proceedings 13 (published reviewed abstract).
10. Huntington, T. E., L. G. Higley, D. W. Voigt. 2006. Not the Usual Suspects: Human Wound Myiasis by Phorids. Entomological Society of America National Meeting, Indianapolis, IN.
11. Huntington, T. E., L. G. Higley, F.P. Baxendale. 2006. Maggot Development During Morgue Storage and the Effects on the Estimation of the Postmortem Interval. American Academy of Forensic Sciences Annual Meeting, Seattle, WA.
12. Huntington, T.E. and F.P. Baxendale. 2005. A Year in Review: Forensic Entomology Research Published in 2004. North American Forensic Entomology Conference, Orlando, FL.
13. Huntington, T.E., L.G. Higley, F.P. Baxendale. 2004. Coming out of the Closet: A Case Study in Forensic Entomology. Central States Entomological Society Annual Meeting, Lincoln, NE.
14. Huntington, T.E., L.G. Higley, F.P. Baxendale. 2004. Temperature-dependent Development of the Blow Fly *Calliphora vicina* (Diptera: Calliphoridae) and the Effects on the Estimation of the Postmortem Interval. American Academy of Forensic Sciences Annual Meeting, Dallas, TX.
15. Does anyone really know what time it is: Problems in estimating PMI with insect thermal development. North American Forensic Entomology Conference, Las Vegas, Nevada, Aug. 2003.

Professional Consulting

Established Fall 2017, I partnered with Dr. Amanda Roe to establish Death and Decomposition Sciences, LLC, a forensic consulting and education business (see deathanddecomp.com)

Summary to Date: 27 total cases: 21 homicides, 3 myiasis, 1 death investigations, 1 plagiarism (digital analysis), 1 food contamination; 3 countries, 8 states

Active cases in which I have not yet submitted a report are not included. Additionally, some cases in which I worked with Dr. Neal Haskell are not listed.

1. Higley, L. G. 2024. Criminal (homicide): cold case Minot PD., ND Activities: analysis of photographic evidence Disposition: unknown.
2. Higley, L. G. 2019. Criminal (homicide): State of Nevada v. Cristobal Ortiz-Hernandez. Activities: analysis of evidence, PMI estimate, preparation for attorney. Expert for the defense. Disposition: conviction manslaughter (verdict sought by defense).
3. Higley, L. G. 2018. Criminal (homicide): State of New Mexico v. Santino Rodriguez, Dana Ana County. Activities: analysis of evidence, PMI estimate, testimony in trial. Expert for the prosecution with Dr. N. Haskell. Disposition: unknown.
4. Higley, L. G. 2018. Criminal (homicide): Case #17CF002151 State of Wisconsin v. Kris V. Zocco, Milwaukee County Circuit Court. Activities: analysis of photographs, PMI estimate, testimony in trial. Expert for the prosecution with Dr. N. Haskell. Disposition: conviction (life).
5. Higley, L. G. 2018. Criminal (homicide): Case #2016-CF-001752 State of Florida v. David Adam Mariotti; Lakewood County, FL. Activities: analysis of photographs, PMI estimate, testimony in deposition and trial. Expert for the prosecution with Dr. N. Haskell. Disposition: conviction (life).
6. Haskell, N., Higley, L. G. 2015. Criminal (triple homicide): Cases #:13-4033, 13-4034, 13-4035 for Johnson County Sheriff's Office, Olathe, KS. Activities: PMI estimate, expert for the prosecution with N. Haskell. Disposition: conviction (death penalty).
7. Higley, L. G. 2013 - 2017 Civil (food contamination, IL: Consultant to attorney with food processor (company name withheld by request) regarding source and time of death of bird remains found in large sugar processing tank. Activities: analysis of photographs and bird remains, processing procedures, and preparation of written report. Disposition: closed agreement.
8. Higley, L. G., and Roe, A. 2014. Civil (myiasis, IL): Carol McCann as next friend of Catherine McCann vs. Lutheran Home for the Aged, Inc.; aural myiasis of Mrs. Catherine McCann. Expert for plaintiff. Activities: analysis of photos, video, medical records, and depositions; written report, deposition by counsel for the defense, trial testimony. Disposition: case decided for plaintiff
9. Higley, L. G. 2012-13. Criminal (homicide): Case #11-10785 Jasper County MO (Joplin, MO); homicide of Emjay Corn, aged ca. 18 months) Expert for prosecution (Jasper County Attorney's Office). Activities: Analysis of scene photographs, video, police and pathology reports, determined PMI from insect evidence and liver mortis patterns in photographs, and determined body location during establishment of liver mortis pattern; written report and deposition by defense. Disposition: case closed with conviction (plea agreement, 25-year sentence).
10. Higley, L. G., and Roe, A. Aug 2011. Criminal Investigation (homicide): Lancaster County Sheriff's Department. Activities: scene investigation, data recovery, and analysis. Disposition: death by natural causes.
11. Higley, L. G., and Roe, A. Aug 2011. B1-007244. Criminal Investigation: Lancaster County Sheriff's Department. Activities: scene investigation, data recovery, and data analysis. Disposition: death by unknown causes.
12. Higley, L. G. 2011. Civil (plagiarism): Expert witness to Ethics Committee of the American Academy of Forensic Science. Expert for committee (non-partisan). Activities: analyzed published text for evidence of plagiarism and testified to committee. Disposition: senior author of questioned chapter censured by AAFS.
13. Higley, L. G., and Roe, A. Sept. 2010. B0-086407. Criminal Investigation (homicide): Lincoln Police Department; body of adult male. Activities: scene investigation, data recovery, and analysis. Disposition: natural death unknown causes.
14. Higley, L. G. 2009. Civil (myiasis, NM): John Duran, personal representative of the estate of Steve Duran, deceased, plaintiff, v. New Mexico State Veteran's Home and Las Cruces Medical Center, LLC d/b/a Mount View Regional Medical Center; maggot infestation (myiasis) in mouth. Expert for plaintiff. Activities: Report for plaintiff with review of medical evidence, determination of possible fly species, and estimate regarding duration of infestation. Disposition: case closed out of court (details of settlement not made public).
15. Higley, L. G. 2009. Civil (myiasis, NE): Mary A. Smith v. Arbor Manor Nursing Home; Maggot infestation (myiasis) in leg wound. Expert for plaintiff. Activities: report for plaintiff with review of medical evidence, determination of possible fly species, and estimate regarding duration of infestation; and deposition by counsel for the defendant. Disposition: case closed out of court (details of settlement not made public).
16. Higley, L. G. 2008. Criminal (homicide): Extradition request for homicide, Kingdom of Spain v. Kevin ROD. Expert for Government of Canada (International Assistance Group, Department of Justice, Canada). Activities: review of report on entomological insect evidence (from plaintiff's counsel) and consultation with senior counsel in IAG. Disposition unknown.

17. Huntington, T. E., D. E. Carter, and L. G. Higley. 2007. Criminal (homicide): Case # A7-010136; suspicious death of Nathan Anton. Expert for prosecution (Lincoln Police Department, Nebraska.) Activities: Death scene collection of evidence and consultation with LPD. Disposition: case closed, ruled suicide.
18. Huntington, T. E., and L. G. Higley. 2007. Criminal (homicide): Case # A7-091468; suspicious death: Jeffery Stephens. Expert for prosecution (Lincoln Police Department, Nebraska.) Activities: Death scene collection of evidence and report for LPD. Disposition: case closed, ruled suicide.
19. Higley, L. G., and Huntington, T. E. 2007. Criminal (homicide): Case # SSO070183; homicide of Trista Peterson, infant. Expert for prosecution (Seward County Sheriff's Office, Nebraska.) Activities: Death scene and autopsy collection of evidence. Disposition: case closed with misdemeanor conviction, a felony conviction was overturned.
20. Huntington, T. E., and L. G. Higley. 2007. Criminal (homicide): case # A7002448; homicide of Arop Arou Mabang Daljang. Expert for prosecution (Lancaster County Sheriff's Office). Activities: death scene collection of evidence and analysis, report for County Sheriff. Disposition: case closed with plea agreement and multiple convictions.
21. Higley, L. G. 2006. Criminal (homicide): Case #3/59; FEI# 1042; appeal of conviction for homicide of Lynne Harper. Expert for prosecution (Ministry of the Attorney General, Crown Law Office-Criminal, Province of Ontario, Toronto, Canada.) Activities: analysis of defense and Crown reports on insect evidence and calculations of PMI, identification and interpretation of pertinent biological, experimental, and statistical issues, case report and consultation with Crown Attorney. Disposition: conviction reversed on appeal.
22. Huntington, T. E., L. G. Higley, and F. P. Baxendale. 2004. Criminal (homicide): Lincoln Police Department, NE. Case # A4-032906 (Homicide: Carl Bitner). Expert for prosecution (Lincoln Police Department, Nebraska). Activities: death scene collection of evidence, identification and analysis of collected evidence and evidence from autopsy, estimation of PMI, case report for LPD and Lancaster Country Attorney. Disposition: case closed with plea agreement and conviction.
23. Huntington, T. E., L. G. Higley, and F. P. Baxendale. 2004. Criminal (homicide): Lancaster County Sheriff's Office. Case#A4-002092, homicide of Rodrigo de la Rosa. Expert for the prosecution (Lincoln Police Department and Lancaster County Attorney, Nebraska). Activities: death scene collection of evidence, identification and analysis of collected evidence and evidence from autopsy, estimation of PMI, case report for LPD and Lancaster Country Attorney., deposition by defense. Disposition: case closed with conviction.
24. Huntington, T. E. and L. G. Higley. 2003. Criminal (homicide): Adam's County Sheriff's Department, NE Case#S3-381, homicide of Guadalupe Cervantes. Expert for prosecution (Adam's County Sheriff's Department and Adam's Country Attorney, Nebraska). Activities: death scene collection of evidence, identification and analysis of collected evidence and evidence from autopsy, estimation of PMI, prepared case report for Adam's County Sheriff's Department and Adam's Country Attorney. Disposition: case open but inactive (suspect in jail on other charges).
25. Huntington, T. E. and L. G. Higley. 2003. Criminal (homicide): Case#A3-102235, homicide of James Hagan. Expert for prosecution (Lincoln Police Department, Nebraska). Activities: death scene collection of evidence, identification and analysis of collected evidence and evidence from autopsy, estimation of PMI, case report for LPD and Lancaster Country Attorney, testified in pre-trial hearing. Disposition: case closed with plea agreements and two convictions.
26. Higley, L. G., F. P. Baxendale, and T. E. Huntington. 2002. Criminal (homicide): Case#A1-089173, homicide of Marie Hall. Expert for prosecution (Lincoln Police Department, Nebraska). Activities: identification and analysis of provided insect evidence, estimation of PMI, prepared case report for LPD and Lancaster Country Attorney, subpoenaed by defense to testify, but not called. Disposition: case closed with conviction.
27. Baxendale, F. P., and L. G. Higley. 2002. Criminal (homicide): Case#A1-112185, suspected suicide of Kenneth Yost, teenager. Expert for prosecution (Lincoln Police Department, Nebraska). Activities: death scene collection of evidence, identification and analysis of collected evidence, estimation of PMI. Disposition: case closed, ruled suicide.

PROFESSIONAL SOCIETIES

American Academy of Forensic Science (associate member), Entomological Society of America, National Association of Biology Teachers, Sigma Xi

Society Offices Held

Secretary, 2010-2014, American Board of Forensic Taphonomy
Chair, Section F, 2002, Entomological Society of America

President, 1992-1993, Kansas (Central States) Entomological Society
 Chairman, Section F, 1992, North Central Branch - Entomological Society of America
 Secretary, 1995-1999, UNL-Chapter, Sigma Xi

PROFESSIONAL ACTIVITIES

Departmental (Entomology 1984-2009, SNR 2009-present)

1983-1984	ISU Linnean games team
1983-1984	ISU Entomology Department Curriculum Committee
1983-1984	Vice-president, ISU Entomology Graduate Student Organization
1989	ISU Entomology Departmental Response to the University Strategic Long Range Planning Committee; co-author of written response
1989	ISU Entomology Department Experiment Station Centennial Committee
1989	Coach, 1989 ISU Entomology Linnaean Games Team
1991-1992	Crop Protection and Dept. Review Teaching Committees; Co-Chairman, Insect Science Curriculum, Mentoring Ad Hoc, Dept. Review Teaching Committees, Dept. of Entomology, UN-L
1990-1994	Publication, Recruitment, and Grants Committees; Chairman, Computer Committee, Dept. of Entomology, UN-L
1992-1994	Graduate Committee, Dept. of Entomology, UN-L
1994-1996	Chair Facilities Committee, Dept. of Entomology, UN-L
1996-2000	Chair, Graduate Committee, Dept. of Entomology, UN-L
1990-1992, 1996-1998	Faculty representative, Bruner Club, Dept. of Entomology, UN-L
2000-2005	Distance Education Committee, Dept. of Entomology, UN-L
2008-2009	Curriculum Committee, Dept. of Entomology, UN-L
2009	Search Committee for Forensic Biologist, Forensic Science Faculty, UN-L
2015-2023	Promotion and Tenure Committee, SNR, UN-L (3 terms as member)
2017-2018	Ad hoc Distance Education Committee, SNR, UN-L
2016-2018	Chair, Awards Committee, SNR, UN-L
2020	Search Committee for Professor of Practice in Applied Ecology, SNR, UN-L

College/Institute

1990	Member, IANR Computing Advisory Committee
1991-1992	Secretary, College of Agriculture and Natural Resources Instructional Improvement Committee
1991-1996	Faculty Associate, Center for Sustainable Agricultural Systems
1991 - present	Faculty Associate, Center for Biotechnology
1993-1995	Chair (1994-1995) College of Agriculture and Natural Resources Faculty Advisory Council (secretary 1993-1994)
1994	Academic Year Equivalent Appointments Ad Hoc Committee
1995-1997	Biotechnology Graduate Application Standing Committee
1994	IANR Program Review Task Force
1994-1995	IANR Research Travel Selection Committee
1994	Plant Health Curriculum Task Force
1994--1995	Chair, Entomology Department Head Search Advisory Committee
1999-2002	Member, Advisory Committee on International Student Affairs (Chair, 2002)
1999-2002	Member, Extended Education Academic Program Council
2002-2004	Member, Academic Rights and Responsibilities Panel
2004 - present	Member, ARD Oil Seeds and Miscellaneous
2005-2007	Member, UN-L Teaching Council
2001-2006	Member, Extended Education and Outreach Faculty Advisory Council
2006-present	Member, Forensic Science Undergraduate Curriculum Committee
2008-2009	Member, CASNR Curriculum Committee (Entomology Representative, Ex-Officio Representative for Forensic Science)

2008-2009 CASNR Representative to the University Curriculum Committee (UCC), UCC subcommittee for Achievement Centered Learning (UN-L general education program)

Regional/National

1983 Co-moderator, paper session, ESA national meeting
 1983-1985 ISU representative, NCB-ESA Committee on Student Affairs
 1986-1987 ISU representative, S-157 Regional Research Project (Tactics for Management of Soybean Pest Complexes), & subcommittee chairman
 1989 Co-moderator, paper session, ESA national meeting
 1990-1992 Nebraska representative, NCR-125, Biological Control of Arthropod Pests
 1992-1993 Member (1992) and Chairman (1993), Section F Nominating Committee, Entomological Society of America
 1996-present Nebraska representative and secretary, NC-193 Regional Research Project, Spatial Dynamics of Leafhopper Pests and their Management on Alfalfa
 1988-1992 Nebraska representative, S-219 Regional Research Project, Arthropod Induced Stress on Soybean: Evaluation and Management, Chairman, Soybean Response to Arthropod Injury Subcommittee
 1993-2009 Nebraska representative, S-255 Regional Research Project, Development of Sustainable IPM Strategies for Soybean Arthropod Pests; secretary 1994, Chair 1995-96
 1994-1997 Handbook Publication Committee, Entomological Society of America
 1995-1996 Resolutions Committee, North Central Branch, Entomological Society of America
 1995-2001 Liaison, Crop Science Society of America to the Entomological Society of America
 1999-2000 Strategic Review of Publications Committee, Entomological Society of America

Reviews

Peer Reviewer for 52 journals: AgriEngineering, Agronomy, Agronomy Journal, American Entomologist, American Midland Naturalist, Annals of the Entomological Society of America, Arab Gulf Journal of Scientific Research, Biology, Biomolecules, Canadian Journal of Plant Science, Current Agricultural Science and Technology, Crop Protection, Crop Science, Diverity, Entomologia Experimentalis et Applicata, Environmental Entomology, Forage and Grazinglands, Forests, Genes, Great Plains Research, Insects, International Journal of Environmental Research and Public Health, International Journal of Pest Management, Journal of Agricultural and Urban Entomology, Journal of Applied Ecology, Journal of Applied Science, Journal of Biological Education, Journal of Economic Entomology, Journal of Entomological Science, Journal of Environmental Quality, Journal of Insect Behavior, Journal of Insect Science, Journal of the Kansas Entomological Society, Journal of Medical Entomology, Journal of Forensic Sciences, Journal of Natural Resources and Life Sciences Education, Journal of Pest Science, Peanut Science, Microorganisms, Physiological Entomology, Plant Physiology, Plants, Naturwissenschaften, Revista Colombiana de Entomología, Scientia Agricola, Stresses, Sustainability, Toxins.

Grant Reviewer for 8 agencies: EPA Bio-Pesticides Program North Central Region; Kansas State University Research Grants; National Institutes of Justice Research Program; National Science Foundation; Southern Regional IPM program, CSRS-USDA; University of Nebraska-Lincoln (various internal grant programs); USDA-NRI Program; Western Regional IPM Program, CSRS-USDA

External Tenure and Promotion Reviewer (exclusive of UNL) (# of faculty reviewed) for: Bahauddin Zakariya University Multan, Pakistan (5); Indiana University (1); Montana State University (1); The Ohio State University (1); United Arab Emirates University (1); University of California-Berkeley (1); University of Florida (1); Virginia Tech (1).

Program reviews: UDSA-ARS

GRANTS AND CONTRACTS RECEIVED

Summary

All grants: \$2,587,203

All federal competitive (including USFWS monies submitted through Nebraska Game and Parks): \$943,926

1. ISU Professional Advancement Grants - Research: 1985. "Population dynamics of the Plusiinae of central Iowa." \$350.
2. ISU Professional Advancement Grants - Research: 1986. "Alternate hosts of the green cloverworm." \$350.
3. ISU Professional Advancement Grants - Research: 1987. "Interactions between insect injury to germinating soybean and damping off pathogens." \$800. Co-PIs: L. Higley, P. Higley.
4. USDA Competitive Grants Program: 1983-1987. "Plant and stand response to early season insect-induced stress in a model system." \$106,900. Written with L. P. Pedigo, basis of dissertation research.
5. USDA Competitive Grants Program: 1988-1990. "Physiological mechanisms underlying plant response to arthropod leaf injuries." \$50,000. Co-PIs: L. Higley, L. Pedigo, R. Shibles.
6. Leopold Center for Sustainable Agriculture: 1989-1990. "Incorporating environmental costs into economic injury levels." \$8,500. Co-PI: L. Higley, W. Wintersteen.
7. NCR-Pesticide Impact Assessment Program (USDA): 1990. "Establishing environmental costs for registered field crop insecticides in the north central region." \$15,500. Co-PIs: L. Higley, W. Wintersteen.
8. NCR-Integrated Pest Management Program (USDA): 1990-1992. "National investigation of soybean stress from defoliating pests: northern region." \$128,727. Principal investigator and project coordinator; co-principal investigators: C. R. Edwards, R. B. Hammond, M. Kogan, and L. P. Pedigo.
9. U.S. Fish and Wildlife Service: 1991-1992. "Ecology and phenotypic distribution of *Heperia leonardus* in the Loess Hills." \$3,100. Co-principal investigator; S. M. Spomer, principal investigator and T. T. Orwig, co-principal investigator.
10. U.S. Fish and Wildlife Service: 1991-1992. "Characterizing rare tiger beetle populations in threatened salt marsh communities." \$4,400. Co-principal investigator; S. M. Spomer, principal investigator.
11. USDA/CSRS Research Apprenticeship for Minority High School Students Program: 1991. \$1,850. One research apprenticeship to work with my research project from June - Aug.
12. USDA/CSRS Research Apprenticeship for Minority High School Students Program: 1992. \$1,450. One research apprenticeship to work with my research project from June - Aug.
13. USDA/CSRS Research Apprenticeship for Minority High School Students Program: 1994. \$2,370. One research apprenticeship to work with my research project from June - Aug.
14. USDA/CSRS Research Apprenticeship for Minority High School Students Program: 1995. \$2,500. One research apprenticeship to work with my research project from June - Aug.
15. NCR-Pesticide Impact Assessment Program (USDA): 1992-1994. "Reducing Environmental Risks from Pesticides and Improving Pesticide Risk Assessment Through Environmental Cost Estimates." \$32,500. Principal investigator with W. K. Wintersteen.
16. Center for Biotechnology, University of Nebraska-Lincoln, Competitive Equipment Grants: 1992. "Video digitizing and analysis system." \$11,050.
17. Center for Biotechnology, University of Nebraska-Lincoln, Competitive Equipment Grants: 1993. "Steady State Porometer." \$6,440.
18. Center for Biotechnology, University of Nebraska-Lincoln, Competitive Equipment Grants: 1994. "Variable LED Lighting System for Measuring Photosynthesis." \$2,955.
19. Center for Biotechnology, University of Nebraska-Lincoln, Competitive Equipment Grants: 1994. "Video Recorders and Photomicroscopy Equipment for Video Digitizing System." \$16,914.
20. North Central Soybean Research Program: 1993-1994. "Narrow rows as a preventive tactic against soybean arthropod defoliators." \$107,640 (NE \$27,000). Co-principal investigator, R. B. Hammond (Ohio State), principal investigator; other co-principal investigators are C. R. Edwards (Purdue) and L. P. Pedigo (Iowa State).
21. U.S. Fish and Wildlife Service: 1995. "Biology and preservation of the threatened Salt Creek tiger beetles." \$3,000. Co-principal investigator; S. M. Spomer, principal investigator.
22. Research Council, University of Nebraska-Lincoln, Research Grant-In-Aid: 1995. "Characterizing differences in injury responses of chemically-defended and undefended plants." \$2,880.
23. USDA-Extension Pest Management Program: 1995-1997. "Expanding and adapting MAIZE, a microcomputer decision-support system to Midwest corn production." \$97,588 (NE \$27,010). Co-principal investigator, W. K. Wintersteen (Iowa State) principal investigator; other co-principal investigators are D. Calvin (Penn State) and J. Tollefson (Iowa State).
24. Research Council, University of Nebraska-Lincoln, Research Grant-In-Aid: 1996. "Biology, conservation, and recovery of the threatened tiger beetle, *Cicindela nevadica lincolniana*." \$2,880.

25. ACCESS-IANR, multimedia development grant: 1998-1999. "Know your insect: A multimedia approach for teaching basic insect systematics" \$4,820. Principal investigator/project coordinator; co-PIs: W. Hoback (assistant project coordinator), M. Jameson, J. Kalisch, L. Meinke, R. Peterson, B. Ratcliffe, and L. Silberman.
26. Excellence in Education Council Education Innovation Fund, State of Nebraska: 1999-2001. "Doing science as a community of learners" \$100,000. Co-principal investigator, principal investigator M. Ellis, other co-principal investigators D. Tonack and S. Leroy-Toren, (Lincoln Public Schools) and M. Wickless (Folsom Children's Zoo)
27. National Research Initiative, USDA: 1999-2002. "Light modulation of herbivore-elicited chlorosis." \$150,000 (NE \$50,000). Co-principal investigator, principal investigator X. Ni (U. Montana), co-principal investigators S. Quisenberry (U. Montana) and F. Haile (DowAgrosciences)
28. University of Nebraska-Lincoln Distance Education Grants: 1999-2000. "Multimedia equipment for course development and faculty training in the distance masters of entomology" \$10,000. Principal investigator., co-principal investigator Sharron Quisenberry.
29. University of Nebraska-Lincoln Distance Education Grants: 2000-2001. "Development of a distance education course for teaching biology" \$4,300. Principal investigator, co-principal investigator W. Hoback (U. Nebraska at Kearney).
30. Lincoln Public Schools Foundation: 2000. "Creepy Crawley Creatures" \$2,835. Co-principal investigator; principal investigator Susan Glissman (Lincoln Public Schools); other co-principal investigators J. Jasa, C. Reddekopp, D. Rousek, A. Schroeder, M. McCauley-Long, J. Barstow, and B. Reier (all Lincoln Public Schools).
31. Council for Biotechnology Information: 2001-2003. "Developing an Informational and Educational Web Site on Crop Biotechnology and Safety" \$454,756. Principal investigator, co-principal investigators J. E. Foster, B. D. Siegfried, D. J. Lee, and R. J. Roeber.
32. University of Nebraska-Lincoln Distance Education Grants: 2001-2002. "A proposal to develop a distance education version of insect behavior" \$6,900. Co-principal investigator, principal investigator W. Hoback (U. Nebraska at Kearney).
33. USDA Higher Education Challenge Grants: 2001-2003. ESCAPE: Exotic species curriculum for agricultural problem-solving education. Co-principal; principal investigator, W. Hoback (UN-K), other co-principal investigator K.M. Skinner. \$82,700
34. U.S. Fish and Wildlife Service. 2001-2003. "Basic biology and conservation of the Salt Creek tiger beetle, *Cicindela nevadica lincolniiana*." Principal investigator, co-principal investigator S.S. Spomer and W. W. Hoback. \$50,000
35. Nebraska Potato Board. 2001-2002. "Improving Integrated Pest Management for Potato in Nebraska." Principal investigator: W. Hoback, co-principal investigators L.G. Higley, and T.E. Hunt. Nebraska Potato Board. \$20,000
36. Nebraska Potato Board. 2002-2003. "Improving Integrated Pest Management for Potato in Nebraska." Principal investigator: W. Hoback, co-principal investigators L.G. Higley, and T.E. Hunt. Nebraska Potato Board. \$14,900
37. Nebraska Potato Board. 2003-2004. "Potato research to improve regional integrated pest management of insects." Principal investigator: W. Hoback, co-principal investigators T.E. Hunt and L.G. Higley. Nebraska Potato Board. \$18,000
38. Nebraska Game and Parks Commission. 2002-2003. Biology and conservation of Salt Creek tiger beetle. Principal investigator, co-principal investigator S. S. Spomer. \$28,166
39. Nebraska Soybean Board. 2002-2003. "Monitoring for soybean aphid in Nebraska." Principal investigator: T. Hunt, co-principal investigator L. G. Higley. \$14,000
40. Nebraska Game and Parks Commission (USFWS). 2003-2004. Nebraska Game and Parks Commission. Biology and Conservation of the Salt Creek tiger beetle, *Cicindela nevadica lincolniiana*, in Lancaster County, Nebraska. Principal investigator, co-principal investigators S. S. Spomer and W. J. Allgeier. \$29,000
41. Nebraska Soybean Board. 2003-2004. "Soybean aphid survey and early warning program." Principal investigator: T. Hunt, co-principal investigator L. G. Higley. \$12,625
42. USDA-CREES North Central Regional IPM. 2004-2005. "Development and delivery of user-friendly IPM tools for use with PC and PDA." Principal investigator, co-PI T. Hunt. \$34,000.
43. University of Nebraska-Lincoln Enhancing Teaching and Learning Grants: 2004 - 2005. "Cite Right: Interactive Instruction on Plagiarism and Intellectual Ownership in Writing." L. G. Higley, D. Golick, T. Heng-Moss, D. Stanley. \$8,100
44. University of Nebraska-Lincoln ARD - Competitive Equipment Grant Request: 2004. "Precision Series Automated Pipetting System - Equipment Grant." T. Heng-Moss, B. D. Siegfried, F. P. Baxendale. \$17,077
45. University of Nebraska-Lincoln ARD - Competitive Equipment Grant Request: 2004. Raytek Thermoview Ti30 digital thermal imager - Equipment Grant." \$7,000

46. Center for Great Plains Studies, 2005. "Occurrence and frequency of multi-generational colonization of carrion by blow flies." T. Huntington, L. Higley, and F. Baxendale. \$400.
47. Nebraska Soybean Board. 2004-2005. "Soybean aphid life table research." Principal investigator: T. Hunt, co-PI L. G. Higley. \$29,000
48. North Central Soybean Research Program. 2004-2006. "Management of Soybean Aphid in North Central States." Cooperator on multistate project (PI D. Ragsdale), co-PI T. Hunt, L. G. Higley. \$38,961
49. USDA-CREES North Central Regional IPM. 2005-2006. "Development and delivery of user-friendly IPM tools for use with PC and PDA." Principal investigator, co-PI T. Hunt. \$28,208.
50. Nebraska Soybean Board. 2005-2007. "Influence of irrigation, planting date and maturity group on soybean aphid management." Principal investigator: T. Hunt, co-PI L. G. Higley, W. L. Kranz. \$59,903.
51. IANR Innovation Grant, UN-L. 2005-2006 "Enhancing Distance and Resident Education Delivery with Molting and Nerve Function Animations." PI: P. Higley, Co-PI: B. Siegfried, T. Heng-Moss, L. Higley, J. Foster, F. Baxendale. \$9000
52. North Central Soybean Research Program. 2006-2009. "Soybean Aphid Management in the North Central States." Pi T. Hunt, Co-PIs t. Heng-Moss, L. Higley. \$47,748
53. Nebraska Game and Parks Commission (USFWS). 2006-2007. Develop captive rearing protocols for the Salt Creek tiger beetle. PI: L. Higley, Co-PI: S. Spomer. \$22,760
54. Nebraska Game and Parks Commission (USFWS Section 6 Habitat Conservation Planning Assistance Grants). 2007-2009. "Habitat Conservation Plan for the Salt Creek Tiger Beetle and the Eastern Saline Wetlands of Nebraska." PI: L. Higley, Co-PI: S. Spomer. \$138,000
55. USFWS Cooperative Endangered Species Fund Grant. 2008-2010. "Salt Creek tiger beetle rearing and reintroduction pilot program." PI: L. Higley, Co-PIs: S. Spomer, T. Brosius, S. Svehla., J. Chapo. \$60,000.
56. Nebraska Game and Parks Commission (USFWS Section 6 Habitat Conservation Planning Assistance Grants). 2009-2011. "Developing Captive Rearing Capacity for the Salt Creek tiger beetle, *Cicindela nevadica lincolniana* PI: L. Higley, Co-PIs: S. Spomer, T. Brosius, S. Svehla., J. Chapo. \$25,961 (supplemental to Nebraska Game and Parks Commission "Habitat Conservation Plan for the Salt Creek Tiger Beetle and the Eastern Saline Wetlands of Nebraska.")
57. U.S. Department of Justice - National Institute of Justice. 2010-2013. "Establishing Blow Fly Development and Sampling Procedures to Estimate Postmortem Intervals". PI: L. Higley, Co-PIs N. Haskell, T. Huntington. \$483,323
58. USDA-ARS Contract. 2016-2019. Determining the Nutritional Requirements of Colonized and Genetic Profile of Colonized and Endemic Screwworms. PI: L. Higley. \$30,000.
59. Therion, LLC. Contract. 2019-2022. Insect Adaptations in Extreme Environments. \$400,000. PI: R. Peterson, Co-PI L. Higley. UN-L subcontract of \$208,034.

MODELS AND SOFTWARE DEVELOPED

- DEFSIM. 1985. A program for calculating daily soybean leaflet removal to simulate defoliation by green cloverworm larvae, based on temperature-consumption relationships. (Unpublished - developed for project research.)
- DEGDY. 1985. A program for calculating degree days by 3 different methods. (Published - Environ. Entomol. 15:999-1016; also included in software with Pedigo and Zeiss, 1995, *Analyses in Insect Ecology and Management*, Iowa State Univ. Press.)
- SCMSIM. 1985. A simulation model of seedcorn maggot population dynamics in central Iowa. (Unpublished - developed to test hypotheses regarding impact of biotic vs. abiotic mortality factors on seedcorn maggot populations.)
- THRESHOLD. 1987. A program for estimating upper and lower developmental thresholds using the least variability method. (Unpublished - used in celery looper research [Peterson et al. 1988].)
- DEFOL. 1988-1991. A program for establishing daily defoliation totals by plot based on a generalized insect consumption scheme. This program is designed for defoliation by leaflet, therefore it calculates mean leaflet size by plot and adjusts daily totals based on measure leaf area removed. (Unpublished - used in the national soybean defoliation study and related research).
- Basic Entomology. 1994-present. A multimedia software program for teaching fundamentals of entomology, based on my book "Manual of Entomology and Pest Management." Principal development work was by Robert Peterson.
- MAIZE. 1995-1999. Developing multimedia reference component to accompany expert system for corn insect management in the mid-western United States.

WEB SITES DEVELOPED

deathanddecomp.com – site for forensic consulting with teaching and reference information (developed by L. Higley)
 Know Your Insect (informational/educational web site to provide ordinal insect identification, developed by D. Golick and L. Higley)

Marine Insects (informational/educational web site, developed by W. Hoback, D. Golick, L. Cheng, and L. Higley):

Salt Creek Tiger Beetle (informational web site developed by L. Higley, S. Spomer, and D. Golick)

Tiger Beetles of Nebraska (informational/educational web site, developed by W. W. Hoback, S. M. Spomer and L. G. Higley)

PATENTS

1. U.S. Provisional Patent Application No. 63/187,817. Process for establishing uniform liquid films on polar and non-polar substrates, 2021. L. G. Higley, and R. K. D. Peterson, inventors; NUtech Ventures and Montana State University, applicants. Filed 05/12/2021. [US20220363343A1 - Process for establishing uniform liquid films on polar and non-polar substrates - Google Patents](https://patents.google.com/patent/US20220363343A1)

PUBLICATIONS AND PRESENTATIONS

Author Impact Analysis

Query date: Jan. 29, 2025

Google Scholar: citations 8162; h-index 50; h10-index 116

Erdős Number: 4 (see <https://mathscinet.ams.org/mathscinet/freeTools.html?version=2> for details)

SUMMARY

Books:	5 books (1 co-authored, 4 co-edited)
Book Chapters:	26 book chapters
Book Contributions:	13 shorter book entries (<10 pages, peer-reviewed)
Articles:	165 scientific papers: <ul style="list-style-type: none"> 148 refereed journal articles 18 non-refereed journal articles 16 columns on scientific ethics and professionalism (peer-reviewed) 13 published technical reports 8 extension publications 4 published book reviews
Editorships:	7 journals (8 terms: 25 years total)
Nature Photography:	3 exhibits, 2 journal covers, 6 books and magazines
Presentations:	17 paper or poster presentations (senior authored only) 125 invited presentations, and seminars

Editorships

Editorial Board Member (Ecology Section), Biology: 2024-present

Editorial Board Member, (Ecology Section), Insects: 2023-present

Editorial Board Member, (Forensic Biology Section), Current Forensic Science: 2023-present

Editorial Board Member (= subject editor), PeerJ: 2013-2018

Associate Editor, Agronomy Journal (Integrated Pest Management Section): 1995-1997, 1997-2000

Contributing Editor (with Dr. David W. Stanley), American Entomologist (Commentary Section): 1993-2000

Subject Editor (Field Crops), Journal of Economic Entomology: 2002

Books

1. Higley, L. G., L. L. Karr, and L. P. Pedigo. 1989. Manual of entomology and pest management. Macmillan Pub. Co., New York, NY.
2. Higley, L. G., and D. J. Boethel, editors. 1994. Handbook of insect pests of soybean. Entomological Society of American, Hyattsville, MD
3. Higley, L. G., and L. P. Pedigo, editors. 1997. Economic thresholds for integrated pest management. Univ. of Nebraska Press, Lincoln, NE.
4. Peterson, R. K. D., and L. G. Higley, editors. 2001. Biotic Stress and Yield Loss. CRC Press, Boca Raton, FL
5. Lamp, W., R. Berberet, L. Higley, and C. Baird, editors. 2007. Handbook of forage and rangeland insects. Entomological Society of American, Hyattsville, MD.

Book Chapters

1. Higley, L. G. 1992. New understandings of soybean defoliation and their implications for pest management. p. 56-65. *In* L. G. Copping, M. B. Green, and R. T. Rees (eds.) Pest Management of Soybean. Elsevier Science Pub., Amsterdam, The Netherlands.
2. Wintersteen, W. K., and L. G. Higley. 1993. Advancing IPM systems in corn and soybeans. p. 9-32. *In* A. R. Leslie and G. W. Cuperus (eds.) Successful Implementation of Integrated Pest Management for Agricultural Crops. Lewis Publishers, Inc., Chelsea, MI (refereed)
3. Funderburk, J. E., and L. G. Higley. 1993. Management of arthropod pests. p. 199-228. *In* J. L. Hatfield and D. L. Karlen (ed.) Sustainable Agriculture Systems. CRC Press, Boca Raton, FL.
4. Higley, L. G. and L. P. Pedigo. 1993. Economic injury level concepts and their use in sustaining environmental quality. *in* C. A. Edwards, M. K. Wali, D. J. Horn, and F. Miller (eds.) Agriculture and the Environment. Elsevier, New York. (reprinted from Agric. Ecosystems Environ. 46:233-243)
5. Higley, L. G., and R. K. D. Peterson. 1994. Initiating sampling programs. p119-136 *in* L. P. Pedigo and G. D. Buntin (eds.) Handbook of Sampling Methods for Arthropods in Agriculture. CRC Press, Boca Raton, FL
6. Higley, L. G., and R. K. D. Peterson. 1996. Environmental risk and pest management. *in* Ted Radcliffe's Gopher State IPM Site (a comprehensive site devoted to IPM), URL: <http://www.ent.agri.umn.edu/academics/classes/ipm/chapters/higley.htm>
7. Higley, L. G., and R. K. D. Peterson. 1997. The biological basis of the economic injury level. *in* L. G. Higley and L. P. Pedigo, (eds.) Economic Thresholds for Integrated Pest Management. Univ. of Nebraska Press, Lincoln, NE.
8. Higley, L. G., and L. P. Pedigo. 1997. The economic injury level concept. *in* L. G. Higley and L. P. Pedigo, (eds.) Economic Thresholds for Integrated Pest Management. Univ. of Nebraska Press, Lincoln, NE.
9. Higley, L. G. and W. K. Wintersteen. 1997. Thresholds and environmental quality. *in* L. G. Higley and L. P. Pedigo, (eds.) Economic Thresholds for Integrated Pest Management. Univ. of Nebraska Press, Lincoln, NE.
10. Pedigo, L. P., and L. G. Higley. 1997. Future outlook for decision making in pest management. *in* L. G. Higley and L. P. Pedigo, (eds.) Economic Thresholds for Integrated Pest Management. Univ. of Nebraska Press, Lincoln, NE.
11. Pedigo, L. P., and L. G. Higley. 1997. Introduction. *in* L. G. Higley and L. P. Pedigo, (eds.) Economic Thresholds for Integrated Pest Management. Univ. of Nebraska Press, Lincoln, NE.
12. Higley, L. G., and L. P. Pedigo. 1999. Decision thresholds in pest management. *in* J. R. Ruberson (ed.) Handbook of Pest Management. Marcel Dekker, Inc., New York
13. Higley, L. G., and N. H. Haskell. 2001. Insect development and forensic entomology. *In* J. H. Byrd and J. L. Castner, ed. Forensic Entomology: The Utility of Arthropods in Legal Investigations, CRC Press, Boca Raton, FL.
14. Peterson, R. K. D., and L. G. Higley. 2001. Preface. *In* R. K. D. Peterson and L. G. Higley, eds. Biotic Stress and Yield Loss. CRC Press, Boca Raton, FL.
15. Peterson, R. K. D., and L. G. Higley. 2001. Illuminating the black box: The relationship between injury and yield. *In* R. K. D. Peterson and L. G. Higley, eds. Biotic Stress and Yield Loss. CRC Press, Boca Raton, FL.
16. Higley, L. G. 2001. Yield loss and pest management. *In* R. K. D. Peterson and L. G. Higley, eds. Biotic Stress and Yield Loss. CRC Press, Boca Raton, FL.
17. Higley, L. G. 2003. Changing perspectives on insects in the 19th and 20th centuries as illustrated through advertising trade cards. *In* Élisabeth Motte-Florac & Jacqueline M. C. Thomas, eds. Les Insectes dans la Tradition Orale – Insects in Oral Literature and Traditions. Peeters Publishers, Leuven/Louvain, Belgium.
18. Huntington, T. E., and L. G. Higley. 2008. Collection and analysis of climatological data. *In* N. A. Haskell and R. E. Williams (eds.) Entomology and Death: A Procedural Guide. 2nd edition. East Park Printing, Clemson, SC.

19. Higley, L. G., and R. K. D. Peterson. 2008. Economic decision levels for pest management. p. 25-32. *In* T. Radcliffe, W. Hutchison, and R. Cancelado (eds.) *Integrated Pest Management*. Cambridge University Press, Cambridge, UK.
20. Higley, L. G., and N. H. Haskell. 2009. Insect development and forensic entomology. *In* J. H. Byrd and J. L. Castner, eds. *Forensic Entomology: The Utility of Arthropods in Legal Investigations*, second edition, CRC Press, Boca Raton.
21. Louda, S. M., and L. G. Higley. 2010. Interplay of observation and experiment in “contingent science”. *In* I. Billick and M. Price (eds.), *Ecology of Place*, University of Chicago Press, Chicago. (peer-reviewed)
22. Haskell, N. H., R. D. Hall, and L. G. Higley. 2013. Forensic (medicocriminal) entomology – applications in medicolegal investigations. *In* C. H. Wecht, ed. *Forensic Sciences*. Vol. 2. Matthew Bender, Danvers, MA.
23. Haskell, N., L. Higley, and P. Cicero. 2022. Entomological photograph protocols. *In* *Handbook of Forensic Photography*, CRC Press, Boca Raton, FL.
24. Haskell, N. H., and L. G. Higley. *In Press*. How local climate affects PMI estimates using entomological methods. *In* R. Grant, ed. *Applying Local Climate Effects to Homicide Investigations*. CRC Press, Boca Raton, FL.
25. Obafunwa, J. and L. G. Higley. *In Press*. Chapter 54. Forensic Entomology. *In* J. Obafunwa. *Forensic Medicine*.
26. Obafunwa, J. and L. Higley. *In Press*. Forensic pathology and forensic entomology: An interdisciplinary approach. *In* L. Iancu, ed. *Forensic Entomology in the 21st Century*. Springer-Verlag, New York, NY

Book Contributions

1. Higley, L. G., and D. J. Boethel. 1994. How to use this book. p. 1, *In* Higley, L. G., and D. J. Boethel, (eds.). *Handbook of Insect Pests of Soybean*. Entomological Society of American, Hyattsville, MD
2. Higley, L. G. Insect injury to soybean. 1994. p. 11-13 *In* Higley, L. G., and D. J. Boethel, (eds.). *Handbook of Insect Pests of Soybean*. Entomological Society of American, Hyattsville, MD
3. Steffey, K. L., M. E. Gray, and L. G. Higley. 1994. Introduction to identification and injury diagnosis. p. 17-34, *In* Higley, L. G., and D. J. Boethel, (eds.). *Handbook of Insect Pests of Soybean*. Entomological Society of American, Hyattsville, MD
4. Higley, L. G., and R. B. Hammond. Seedcorn maggot. 1994. p. 77-79 *In* Higley, L. G., and D. J. Boethel, (eds.). *Handbook of Insect Pests of Soybean*. Entomological Society of American, Hyattsville, MD,
5. Higley, L. G. Evaluating insect pest problems. 1994. p. 113-114. *In* Higley, L. G., and D. J. Boethel, (eds.). *Handbook of Insect Pests of Soybean*. Entomological Society of American, Hyattsville, MD
6. Higley, L. G., and R. K. D. Peterson. 2002. Decision making. *In* D. Pimentel, ed. *Encyclopedia of Pest Management*. Marcel Decker, NY. p.184-186.
7. Peterson, R. K. D., and L. G. Higley. 2002. Thresholds for pest management. *In* D. Pimentel, ed. *Encyclopedia of Pest Management*. Marcel Decker, NY. p. 228-230.
8. Higley, L. G. 2004. Insects. *In* D. Wishart, ed. *Encyclopedia of the Great Plains*. Univ. of Nebraska Press, Lincoln, NE
9. Buntin, G. D., and L. G. Higley. 2006. Arthropod sampling and decision making. p. 25-26 *In* J. N. All and M. F. Treacy, (eds.) *Utilization and Management of Insecticides, Acaricides, and Transgenic Crops*. Entomol. Soc. Amer., Lanham, MD.
10. Lamp, W., and L. Higley 2007. Integrated pest management. p. 28-33. *In* W. Lamp, R. Berberet, L. Higley, and C. Baird, (eds.) *Handbook of forage and rangeland insects*. Entomological Society of American, Hyattsville, MD.
11. Higley, L. 2007. Identification of arthropods and diagnosis of injury. p. 33-40. *In* W. Lamp, R. Berberet, L. Higley, and C. Baird, (eds.) *Handbook of forage and rangeland insects*. Entomological Society of American, Hyattsville, MD.
12. Higley, L. G. Seedcorn maggot. 2007. *In* G. D. Bunin, (ed.), *Handbook of Small Grain Insects*. Entomol. Soc. Amer., Lanham, MD.
13. Brosius, T., L. Higley, S. Spomer, W. Allgeier, and S. Svehla. 2009. Salt Creek tiger beetle conservation and art; About the Salt Creek tiger beetle. p. 4-6. *In* T. Brosius and K. I. Helms, eds. *Salt Creek Environment: Local and Endangered*. Great Plains Chapter Guild of the Scientific Illustrators Inc., Lincoln, NE. (catalog of exhibit, July 2-31, 2009)

Refereed Scientific Publications

1. Funderburk, J. E., L. G. Higley, and L. P. Pedigo. 1984. Seedcorn maggot (Diptera: Anthomyiidae) phenology in central Iowa and examination of a thermal unit system to predict development under field conditions. *Environ. Entomol.* 13:105-109.
2. Higley, L. G., and L. P. Pedigo. 1984. Seedcorn maggot (Diptera: Anthomyiidae) population biology and aestivation in central Iowa. *Environ. Entomol.* 13:1436-1442.
3. Higley, L. G., and L. P. Pedigo. 1984. Seedcorn maggot (Diptera: Anthomyiidae) reproductive biology and techniques for examining ovarian dynamics. *J. Econ. Entomol.* 77:1149-1153.
4. Ostlie, K. R., G. L. Hein, L. G. Higley, L. V. Kaster, and W. B. Showers. 1984. European corn borer (Lepidoptera:Pyralidae) development, larval survival, and adult vigor on meridic diets containing marker dyes. *J. Econ. Entomol.* 77:118-120.
5. Higley, L. G., and R. M. Hammond. 1985. Examination of some adult sampling techniques for the seedcorn maggot (Diptera:Anthomyiidae). *J. Agric. Entomol.* 2:52-60.
6. Higley, L. G. 1986. Morphology of reproductive structures in *Cicindela repanda* (Coleoptera: Cicindelidae). *J. Kansas Entomol. Soc.* 59:303-308.
7. Higley, L. G., L. P. Pedigo, and K. R. Ostlie. 1986. DEGDAY: a program for calculating degree days, and assumptions behind the degree day approach. *Environ. Entomol.* 15:999-1016 (FORUM).
8. Hutchins, S. H., L. G. Higley, L. P. Pedigo, and P. H. Calkins. 1986. Linear programming model to optimize management decisions with multiple pests: an integrated soybean pest management example. *Bull. Entomol. Soc. Am.* 32:96-102.
9. Pedigo, L. P., S. H. Hutchins, and L. G. Higley. 1986. Economic injury levels in theory and practice. *Annu. Rev. Entomol.* 31:341-368.
10. Hutchins, S. H., L. G. Higley, and L. P. Pedigo. 1988. Injury equivalency as a basis for developing multiple-species economic injury levels. *J. Econ. Entomol.* 81:1-8 (FORUM).
11. Higley, L. G., and R. B. Hammond. 1988. Establishing and discriminating seedcorn maggot injury to soybean. *J. Agric. Entomol.* 5:61-68.
12. Peterson, R. K. D., L. G. Higley, and W. C. Bailey. 1988. Phenology of the adult celery looper, *Syngrapha falcifera* (Kirby), (Lepidoptera: Noctuidae) in Iowa: evidence for migration. *Environ. Entomol.* 17:679- 684.
13. Peterson, R. K. D., L. G. Higley, and W. C. Bailey. 1988. Occurrence and relative abundance of Plusiinae species (Lepidoptera: Noctuidae) in Iowa. *J. Kansas Entomol. Soc.* 61:355-356.
14. Kephart, K. D., L. G. Higley, and L. P. Pedigo. 1990. Cicer milkvetch forage yield, quality, and acceptability to insects. *Agron. J.* 82:477-483.
15. Peterson, R. K. D., L. G. Higley, and W. C. Bailey. 1990. Occurrence and relative abundance of *Papaipema* species (Lepidoptera: Noctuidae) in Iowa. *J. Kansas Entomol. Soc.* 63:447-449.
16. Higley, L. G., and L. P. Pedigo. 1990. Soybean growth responses and intraspecific competition from simulated seedcorn maggot injury. *Agron. J.* 82:1057-1063.
17. Higley, L. G., and L. P. Pedigo. 1991. Soybean yield responses and intraspecific competition from simulated seedcorn maggot injury. *Agron. J.* 83:135-139.
18. Higley, L. G., and W. K. Wintersteen. 1992. A novel approach to environmental risk assessment of pesticides as a basis for incorporating environmental costs into economic injury levels. *Am. Entomologist.* 38:34-39.
19. Pedigo, L. P., and L. G. Higley. 1992. The economic injury level concept and environmental quality: a new perspective. *Am. Entomologist.* 38:12-21.
20. Peterson, R. K. D., S. D. Danielson, L. G. Higley. 1992. Photosynthetic responses of alfalfa to actual and simulated alfalfa weevil (Coleoptera: Curculionidae) injury. *Environ. Entomol.* 21:501-507.
21. Higley, L. G., M. R. Zeiss, W. K. Wintersteen, and L. P. Pedigo. 1992. National pesticide policy: a call for action. *Am. Entomol.* 38:139-146.
22. Peterson, R. K. D., S. D. Danielson, L. G. Higley. 1992. Alfalfa development after simulated alfalfa weevil injury. *Agron. J.* 84:988-993.
23. Browde, J. A., L. P. Pedigo, T. A. DeGooyer, L. G. Higley, W. K. Wintersteen, and M. R. Zeiss. 1992. Sampling technique comparisons for grasshopper (Orthoptera: Acrididae) in soybean. *J. Econ. Entomol.* 85:2270-2274.
24. Higley, L. G., J. A. Browde, and P. M. Higley. 1993. Moving towards new understandings of biotic stress and stress interactions. p. 749-754 in D. R. Buxton, R. Shibles, R. A. Forsberg, B. L. Blad, K. H. Asay, G. M. Paulson, and R. F. Wilson (eds.) *International crop science I*. Crop Science Soc. of America, Madison, WI. (refereed)

25. Peterson, R. K. D., S. D. Danielson, L. G. Higley. 1993. Yield responses of alfalfa to simulated alfalfa weevil injury and development of economic injury levels. *Agron. J.* 85:595-601.
26. Novak, M., L. G. Higley, C. A. Christianssen, and W. A. Rowley. 1993. Evaluating larval competition between *Aedes albopictus* and *Aedes triseriatus* (Diptera: Culicidae) through replacement series experiments. *Environ. Entomol.* 22:311-318. (Note correction in *Environ. Entomol.* 23(6): ii.)
27. Peterson, R. K. D., L. G. Higley, G. D. Buntin, and L. P. Pedigo. 1993. Flight activity and ovarian dynamics of the yellow woollybear, *Spilosoma virginica* (Lepidoptera: Arctiidae), in Iowa. *J. Kansas Entomol. Soc.* 66:97-103.
28. Higley, L. G. and L. P. Pedigo. 1993. Economic injury level concepts and their use in sustaining environmental quality. *Agric. Ecosystems Environ.* 46:233-243.
29. Funderburk, J. E., L. G. Higley, and G. D. Buntin. 1993. Concepts and Directions in Arthropod Pest Management. *Advances in Agronomy* 51:125-172. (invited paper)
30. Peterson, R. K. D., and L. G. Higley. 1993. Arthropod injury and plant gas exchange: Current understandings and approaches for synthesis. *Trends in Agric. Sci. Entomol.* 1:93-100.
31. Peterson, R. K. D., and L. G. Higley. 1993. Communicating pesticide risks. *Am. Entomol.* 39:206-211.
32. Spomer, S. M. and L. G. Higley. 1993. Population status and distribution of the salt creek tiger beetle, *Cicindela nevadica lincolniensis* Casey (Coleoptera: Cincindelidae). *J. Kansas Entomol. Soc.* 66:392-398.
33. Spomer, S. M., T. T. Orwig, L. G. Higley, G. L. Selby, and L. J. Young. 1993. Clinal variation in *Hesperia leonardus* (Hesperiidae) in the Loess Hills of the Missouri River Valley. *J. Lepidopterists Soc.* 47:291-302.
34. Hunt, T. E., L. G. Higley, and J. F. Witkowski. 1994. Soybean growth and yield after simulated bean leaf beetle injury to seedlings. *Agron. J.* 86:140-146.
35. Hunt, T. E., L. G. Higley, and J. F. Witkowski. 1995. Bean leaf beetle injury to seedling soybean: consumption, effects on leaf expansion, and economic injury levels. *Agron. J.* 87:183-188.
36. Ayyappath, R., J. F. Witkowski, L. G. Higley, and B. D. Siegfried. 1995. Influence of sublethal doses of permethrin and methyl parathion on the dispersal behavior of two species of spider mites (Acari: Tetranychidae) on corn. *Environ. Entomol.* 24:226-232.
37. Peterson, R. K. D., L. G. Higley, and S. D. Danielson. 1995. Alfalfa consumption by the adult clover leaf weevil (Coleoptera: Curculionidae) and development of injury equivalents for stubble defoliators. *J. Econ. Entomol.* 88:1441-1444.
38. Peterson, R. K. D., L. G. Higley, and S. M. Spomer. 1996. Cecropia moth, *Hyalophora cecropia* (L.) (Lepidoptera: Saturniidae), injury and photosynthetic responses of apple and crabapple. *Environ. Entomol.* 25:416-422.
39. Peterson, R. K. D., and L. G. Higley. 1996. Temporal changes in soybean gas exchange following simulated insect defoliation. *Agron. J.* 88:550-554.
40. Anderson, D. D., L. G. Higley, A. R. Martin, and F. W. Roeth. 1996. Competition between triazine-resistant and -susceptible common waterhemp (*Amaranthus rudis*). *Weed Sci.* 44:853-859.
41. Oberg, A. L., L. J. Young, and L. G. Higley. 1996. A comparison of two measures of competition. *J. Agricultural, Biological, and Environmental Stat.* 1:393-403.
42. Ayyappath, R., J. F. Witkowski, and L. G. Higley. 1996. Population changes of spider mites (Acari: Tetranychidae) following insecticide applications in corn. *Environ. Entomol.* 25:933-937.
43. Ayyappath, R., J. F. Witkowski, and L. G. Higley. 1997. Ovipositional responses of two species of spider mites (Acari: Tetranychidae) to sublethal concentrations of permethrin and methyl parathion on corn. *Environ. Entomol.* 26:489-496.
44. Peterson, R. K. D., L. G. Higley, F. J. Haile, and J. A. Barrigossi. 1998. Mexican bean beetle injury affects photosynthesis of *Glycine max* (L.) Merrill and *Phaseolus vulgaris* L. *Environ. Entomol.* 27:373-381.
45. Haile, F. J., L. G. Higley, and J. E. Specht. 1998. Soybean cultivars and insect defoliation: yield loss and economic injury levels. *Agronomy J.* 90:344-352.
46. Haile, F. J., L. G. Higley, J. E. Specht, and S. M. Spomer. 1998. Soybean leaf morphology and defoliation tolerance. *Agronomy J.* 90:353-362.
47. Hoback, W. W., L. G. Higley, D. W. Stanley, and M. C. Barnhart. 1998. Survival of immersion and anoxia by larval tiger beetles, *Cicindela togata*. *American Midland Naturalist* 140:27-33.
48. Hoback, W. W., T. M. Svatos, S. M. Spomer, and L. G. Higley. 1999. Trap color and placement affects estimates of insect family-level abundance and diversity in a Nebraska salt marsh. *Entomologia Exp. Appl.* 91: 393-402.
49. Hunt, T. E., F. J. Haile, W. W. Hoback, and L. G. Higley. 1999. Indirect measurement of insect defoliation. *Environ. Entomol.* 28:136-1139.
50. Haile, F. J., R. K. D. Peterson, and L. G. Higley. 1999. Gas-exchange responses of alfalfa and soybean treated with insecticides. *J. Econ. Entomol.* 92: 954-959.

51. Bedick, J.C., B.C. Ratcliffe, W.W. Hoback, and L.G. Higley. 1999. Distribution, ecology, and population dynamics of the American burying beetle [*Nicrophorus americanus* Olivier (Coleoptera, Silphidae)] in south-central Nebraska, USA. *J. Insect Conservation*. 3:171-181.
52. Ellis, M. D., L. G. Higley, A. Jones, W. W. Hoback, and S. S. Quisenberry. 1999. Bug bash – a pyramid of teaching and learning about insects. *Amer. Entomologist* 45:200-203.
53. Lohr, L., T. Park, and L. Higley. 1999. Farmer risk assessment for voluntary insecticide reduction. *Ecological Economics* 30:121-130.
54. Burkness, E. C., W. D. Hutchison, and L. G. Higley. 1999. Photosynthetic response of 'Carolina' cucumber to simulated and actual striped cucumber beetle (Coleoptera: Chrysomelidae) defoliation. *Entomologia Sinica* 6:29-38.
55. Haile, F. J., L. G. Higley, X. Ni, and S. Quisenberry. 1999. Physiological and growth tolerance in wheat to Russian wheat aphid (Homoptera: Aphididae) injury. *Environ. Entomol.* 28:787-794
56. Hunt, T. E., L. G. Higley, and L. P. Pedigo. 2000. A re-examination of economic injury levels of potato leafhopper (Homoptera: Cicadellidae) on soybean. *J. Entomol. Sci.* 35: 97-104.
57. Haile, F. J., D. L. Kerns, J. M. Richardson, and L. G. Higley. 2000. Impact of insecticides and surfactant on lettuce physiology and yield. *J. Econ. Entomol.* 93:788-794.
58. Hoback, W. W., J. Podrabsky, L. G. Higley, D. W. Stanley, and S. C. Hand. 2000. Anoxia tolerance of con-familial tiger beetle larvae is associated with differences in energy flow and anaerobiasis. *J. Comp. Physiol.* 170:307-314.
59. Hoback, W.W., and L. G. Higley. 2000. Insect predation, prey defense, and community structure. Association for Biology Laboratory Education Workshop/Conference Proceedings: Tested Studies for Laboratory Teaching 21:293-304 (peer reviewed)
60. Hunt, T. E., R.L. Hellmich, J.M. Dyer, L.G. Higley, and J.F. Witkowski. 2000. Oil-Soluble dyes for marking European corn borer (Lepidoptera: Crambidae). *J. Entomol. Sci.* 35:338-341.
61. Hoback, W. W., D. A. Golick, T.M. Svatos, S. M. Spomer, and L. G. Higley. 2000. Salinity and shade preferences result in ovipositional differences between sympatric tiger beetle species. *Ecological Entomol.* 25:180-187.
62. Hammond, R. B., L. G. Higley, L. P. Pedigo, L. Bledsoe, S. M. Spomer, and T. A. DeGooyer. 2000. Simulated insect defoliation on soybean: influence of row width. *J. Econ. Entomol.* 93:1429-1436.
63. Urías-López, M. A., L. J. Meinke, L. G. Higley, and F. J. Haile. 2000. Influence of western corn rootworm (Coleoptera: Chrysomelidae) larval injury on photosynthetic rate and vegetative growth of different types of maize. *Environ. Entomol.* 29:861-867.
64. Barrigossi, J. A. F, G. L. Hein, and L. G. Higley. 2001. Life tables and larval dispersal of Mexican bean beetle (Coleoptera: Coccinellidae) on dry bean in the high plains. *Environ. Entomol.* 30:235-243.
65. Barrigossi, J. A. F, L. J. Young, C. A. Gotway Crawford, G. L. Hein, and L. G. Higley. 2001. Spatial and probability distribution of Mexican bean beetle (Coleoptera: Coccinellidae) egg mass populations in dry bean. *Environ. Entomol.* 30:244-253.
66. Hoback, W. W., L. G. Higley, and D. W. Stanley. 2001. Tigers eating tigers: evidence of intraguild predation operating in an assemblage of tiger beetles. *Ecol. Entomol.* 26: 367-375.
67. Ni, X., S. S. Quisenberry, J. Markwell, T. Heng-Moss, L. Higley, F. Baxendale, G. Sarath, and R. Klucas. 2001. In vitro enzymatic chlorophyll catabolism in wheat elicited by cereal aphid feeding. *Entomologia Experimentalis et Applicata*. 101:159-166.
68. Hunt, T. E., L. G. Higley, J. F. Witkowski, L. J. Young, and R. L. Hellmich. 2001. Dispersal of adult European corn borer (Lepidoptera: Crambidae) within and proximal to irrigated and non-irrigated corn. *J. Econ. Entomol.* 96: 1369-1377.
69. Hoback, W. W., T. L. Clark, L. J. Meinke, L. G. Higley, and J. M. Scalzitti. 2002. Immersion survival differs between three *Diabrotica* species. *Entomologia Experimentalis et Applicata*. 105:29-34.
70. Ni, X., S. S. Quisenberry, J. Markwell, T. Heng-Moss, L. Higley, F. Baxendale, G. Sarath, and R. Klucas. 2002. Dynamic change in photosynthetic pigments and chlorophyll degradation elicited by cereal aphid feeding. *Entomologia Experimentalis et Applicata*. 105:43-53.
71. Macedo, T. B., C. S. Bastos, L.G. Higley, K. R. Ostlie, and S. Madhavan. 2003. Photosynthetic responses of soybean to soybean aphid (Homoptera: Aphididae) injury. *J. Econ. Entomol.* 96:188-193.
72. Macedo, T. B., L. G. Higley, X. Ni, and S.S. Quisenberry. 2003. Light activation of Russian wheat aphid-elicited physiological responses in susceptible wheat. *J. Econ. Entomol.* 96:194-201.
73. Hunt, T. E., L. G. Higley, and F. J. Haile. 2003. Imported longhorned weevil (Coleoptera: Curculionidae) injury to soybean: physiological response and injury guild-level economic injury levels. *J. Econ. Entomol.* 96: 1168-1173.

74. Barrigossi, J. A. F, G. L. Hein, and L. G. Higley. 2003. Economic injury levels and sequential sampling plans for Mexican bean beetle (Coleoptera: Coccinellidae) on dry beans. *J. Econ. Entomol.* 96:1160-1167.
75. Haile, F. J., and L. G. Higley. 2003. Changes in soybean gas-exchange after moisture stress and spider mite injury. *Environ. Entomol.* 32: 433-440.
76. Bedick, J. C., B. C. Ratcliffe, and L. G. Higley. 2004. A new sampling protocol for the endangered American burying beetle, *Nicrophorus americanus* Olivier (Coleoptera: Silphidae). *Coleopterist's Bull.* 58:57-70.
77. Madsen, R. A., T. E. Hunt, and L. G. Higley. 2004. Simulated clover leaf weevil injury and alfalfa yield and quality. *Agron. J.* 96: 224-228.
78. Anderson, W.G., T.M. Heng-Moss, F.P. Baxendale, L.M. Baird, G. Sarath, and L. G. Higley. 2006. Chinch bug (Hemiptera: Blissidae) mouthpart morphology, probing frequencies, and location on resistant and susceptible germplasm *J. Econ. Entomol.* 99: 212-221.
79. Heng-Moss, T., T. Macedo, L. Franzen, F. Baxendale, L. Higley, and G. Sarath. 2006. Physiological responses of resistant and susceptible buffalograsses to *Blissus occiduus* (Hemiptera: Blissidae) feeding. *J. Econ. Entomol.* 99:222-228.
80. Delaney, K. J., and L. G. Higley. 2006. An insect countermeasure impacts plant physiology: midrib vein cutting, defoliation, and leaf photosynthesis. *Plant Cell Environ.* 29:1245-1257.
81. Nabity, P. D., L. G. Higley, and T. M. Heng-Moss. 2006. Effects of temperature on development of *Phormia regina* (Diptera: Calliphoridae) and use of development data in determining time intervals in forensic entomology. *J. Med. Entomol.* 43: 1276-1286.
82. Ziems, J. R., B. J. Zechmann, W. W. Hoback, J. C. Wallace, R. A. Madsen, T. E. Hunt, and L. G. Higley. 2006. Yield response of indeterminate potato (*Solanum tuberosum*) to simulated insect defoliation. *Agron. J.* 98: 1435–1444.
83. Nabity, P. D., T. M. Heng-Moss, and L. G. Higley. 2006. Effects of insect herbivory on physiological and biochemical (oxidative enzyme) responses of the halophyte *Atriplex subspicata* (Chenopodiaceae). *Environ. Entomol.* 35: 1677-1689.
84. Huntington, T. E., L. G. Higley, and F. P. Baxendale. 2007. Maggot development during morgue storage and its effect on estimating the postmortem interval. *J. Forensic Sci.* 52:453-458.
85. Nabity, P. D., L. G. Higley, and T. M. Heng-Moss. 2007. Light-induced variability in the development of the forensically important blow fly, *Phormia regina* (Diptera: Calliphoridae). *J. Med. Entomol.* 44: 351-358.
86. Brosius, T. R., L. G. Higley, and T. E. Hunt. 2007. Population dynamics of soybean aphid and biotic mortality at the edge of its range. *J. Econ. Entomol.* 100:1268-1275.
87. Franzen, L. D., T. M. Heng-Moss, L. G. Higley, G. Sarath, and J. D. Burd. 2007. Physiology and biochemical responses of resistant and susceptible wheat to Russian wheat aphid. *J. Econ. Entomol.* 100:1692-1703.
88. Huntington, T. E., D. W. Voigt, and L. G. Higley. 2008. Not the usual suspects: human wound myiasis by phorids. *J. Med. Entomology.* 45:157-159
89. Huntington, T. E., D. O. Carter, and L. G. Higley. 2008. Testing multigenerational colonization of carrion by blow flies in the Great Plains. *Great Plains Res.* 18:33-38.
90. Ziems, J. R., W. W. Hoback, L. G. Higley, T. E. Hunt, O. A. Fernandes, C. Bastos, and A. Bueno. 2008. Second generation European corn borer injury and Irish potato physiology, yield, and quality. *Agron. J.* 100:720-725.
91. Delaney, K. J., F. J. Haile, R. K.D. Peterson, and L. G. Higley. 2008. Impairment of leaf photosynthesis after insect herbivory or mechanical injury on common milkweed, *Asclepias syriaca*. *Environ. Entomol.* 37: 1332-43.
92. Franzen, L. D., A. R. Gutsche, T. M. Heng-Moss, L. G. Higley, and T. B. Macedo. 2008. Physiological responses of wheat and barley to Russian wheat aphid, *Diuraphis noxia* (Mordvilko) and bird cherry-oat aphid, *Rhopalosiphum padi* (L.) (Hemiptera: Aphididae). *J. Arthropod-Plant Interactions* 2: 227-235.
93. Carter, D. O., J. Filippi, L. G. Higley, T. E. Huntington, M. I. Okoye, M. Criven, and J. Bliemeister. 2009. Using ninhydrin to reconstruct a disturbed outdoor death scene. *J. Forensic Identification* 59: 190-195.
94. Peterson, R. K. D., R. S. Davis, L. G. Higley, and O. A. Fernandes. 2009. Mortality risk in insects. *Environ. Entomol. (Forum)* 38:2-10
95. Golick, D. A., L. G. Higley, and R. K. D. Peterson. 2009. Using the world wide web to educate and inform the public about risk and agricultural biotechnology. *J. Agricultural Food Information* 10:102-112.
96. Bueno, A., R. Bueno, P. D. Nabity, L. G. Higley, and O. A. Fernandes. 2009. Photosynthetic response of soybean to twospotted spider mite (Acari: Tetranychidae) injury. *Brazilian Archives Biol. Technol.* 52: 825-834.
97. Delaney, K. J., F. J. Haile, R. K.D. Peterson, and L. G. Higley. 2009. Seasonal patterns of leaf photosynthesis after insect herbivory on common milkweed, *Asclepias syriaca*: reflection of a physiological cost of reproduction, not defense? *Amer. Midland Naturalist* 162: 224-238.

98. Gutsche, A. R., T. M. Heng-Moss, L. G. Higley, G. Sarath, and D. W. Mornhinweg. 2009. Physiological responses of resistant and susceptible barley, *Hordeum vulgare*, to injury by Russian wheat aphid, *Diurpaphis noxia* (Mordvilko). J. Arthropod-Plant Interactions. On-line, doi: 10.1007/s11829-009-9067-6.
99. Huntington, T. E., and L. G. Higley. 2010. Decomposed flesh as a vitellogenic protein source for the forensically-important blow fly *Lucilia sericata* (Diptera: Calliphoridae). J. Med. Entomol. 47:482-486.
100. Brosius, T. R., L. G. Higley, and T. E. Hunt. 2010. Biotic and abiotic influences on within-plant distribution of soybean aphid (Hemiptera: Aphididae: *Aphis glycines*). J. Kansas Entomol. Soc. 83: 273-282.
101. De Jong, G. D., W. W. Hoback, and L. G. Higley. 2011. Effect of investigator disturbance in experimental forensic entomology: carcass biomass loss and temperature. J. Forensic Sci. 56: 143-149.
102. Davis, R. S., R. K. D. Peterson, L. G. Higley. 2011. M-DEC: A spreadsheet program for producing multiple decrement life tables and estimating mortality dynamics for insects. Computers and Electronics in Agriculture 75: 363-367.
103. Fujikawa, A., L. Barksdale, L. Higley, and D. Carter. 2011. Changes in the morphology and presumptive chemistry of impact and pooled bloodstain patterns by *Lucilia sericata* (Meigen) (Diptera: Calliphoridae) J. Fors. Sci. 56:1315-1318.
104. Bastos, C., S. D. Whipple, W. W. Hoback, and L. G. Higley. 2011. Grasshopper injury to potato: Consumption, effect on photosynthesis, and economic injury level. Agron. J. 103: 1655-1660.
105. Spicka, A., R. Johnson, J. Bushing, L. G. Higley, and D. O. Carter. 2011. Carcass mass can influence rate of decomposition and release of ninhydrin-reactive nitrogen into gravesoil. Fors. Sci. International 209: 80-85.
106. De Souza Rossato, J. A., O. A. Fernandes, M. J. Rossini Mutton, L. G. Higley, and L. L. Madaleno. 2011. Sugarcane response to two biotic stressors: *Diatraea saccharalis* and *Mahanarva fimbriolata*. International Sugar J. 113: 453-455.
107. Peterson, R. K. D., R. S. Davis, L. G. Higley, and O. A. Fernandes. 2011. Reply to "Peterson, R. K. D., R. S. Davis, L. G. Higley, and O. A. Fernandes. 2009. Mortality risk in insects. Environ. Entomol. (Forum) 38:2-10." Environ. Entomol. 40: 1344.
108. Golick, D. A., T. M. Heng-Moss, A. L. Steckelberg, D. W. Brooks, L. G. Higley, and D. Fowler. 2012. Using web-based key character and classification instruction for teaching undergraduate students insect identification. J. Sci. Educ. Technol. DOI 10.1007/s10956-012-9410-z
109. De Souza Rossato, J. A., G. H. G. Costa, L. L. Madaleno, M. J. Rossini Mutton, L. G. Higley, and O. A. Fernandes. 2013. Characterization and impact of the sugarcane borer on sugarcane yield and quality. Agron. J. 105: 643-648.
110. Brosius, T. R., and L. G. Higley. 2013. Behavioral niche partitioning in a sympatric tiger beetle assemblage and implications for the endangered Salt Creek tiger beetle. PeerJ. 1:e169. <http://dx.doi.org/10.7717/peerj.169>
111. Brosius, T. R., L. G. Higley, and L. Johnson. 2014. Using the visual arts to promote the conservation of the Salt Creek tiger beetle. American Entomologist 60: 39-43.
112. Roe, A., L. G. Higley. 2015. Development modeling of *Lucilia sericata* (Diptera: Calliphoridae) PeerJ 3:e803 <https://dx.doi.org/10.7717/peerj.803>
113. Hoback, W. W., A. Pursley, A. K., Farnsworth-Hoback, and L. G. Higley. 2015. A laboratory exercise to explore sustained gravitational force tolerance by insects. American Biol. Teacher. 77: 707-709.
114. Torrisi, G. J., W. Wyatt Hoback, W. W., Foster, J. E., Heinrichs, E. A., and Higley, L. G. 2015. Predation of introduced mosquito larvae by the midge, *Metriocnemus knabi* in the phytotelma of the pitcher plant *Sarracenia purpurea*, and colonization following dry conditions. Northeastern Naturalist 2(3):513-520. doi: <http://dx.doi.org/10.1656/045.022.0307>
115. Hoback, W.W., Bueno, A.F., Martinez, C.A., Higley, L.G., and Fernandes, O.A. 2015. Photosynthetic responses of potato to Colorado potato beetle injury and differences in injury between adult males and females. Entomologia Experimentalis et Applicata. 157: 181-189. DOI: 10.1111/eea.12354
116. Fisher, M. L., L. G. Higley, and J. E. Foster. 2015. The influence of photoperiod on development rates of three species of forensically-important blow flies. Journal of Insect Science <https://jinsectscience.oxfordjournals.org/content/15/1/153>
117. Morrow, J. J., D. A. Baldwin, L. Higley, D. Piombino-Mascali, and K. J. Reinhard. 2015. Curatorial implications of *Ophyra capensis* (Order Diptera, Family Muscidae) puparia recovered from the body of the Blessed Antonio Patrizi, Monticiano, Italy (Middle Ages). Journal of Forensic and Legal Medicine. 36: 81-83.
118. Higley, L. G., T. R. Brosius, K. J. Reinhard, and D. Carter. 2016. Cleaning puparia for forensic analysis. J. Forensic Science. doi: 10.1111/1556-4029.13121

119. Johnica J. Morrow, J. J., A. Myhra, D. Piombino-Mascali, D. Lippi, A. Roe, L. Higley, and K. J. Reinhard. 2016. Archaeoentomological and archaeoacarological investigations of embalming jar contents from the San Lorenzo Basilica in Florence, Italy. *J. Archeological Sciences* 10:166-171.
120. LaMotte, L. R., A. L. Roe, J. D. Wells, and L. G. Higley. 2017. A statistical method to construct confidence sets on carrion insect age from developmental stage. *J. Agric. Biol. Environ. Statistics*. 22: 161-171.
121. Peterson, R. K. D., A. C. Varella, and L. G. Higley. 2017. Tolerance: The forgotten child of plant resistance. *PeerJ* DOI 10.7717/peerj.3934
122. Reinhard, K., K. Lynch, A. Larsen, B. Adams, L. Higley, M. do Amaral, J. Russ, Y. Zhou, D. Lippi, J. Morrow, and D. Piombino-Mascali. 2018. Pollen evidence of medicine from an embalming jar associated with Vittoria della Rovere, Florence, Italy. *Journal of Archaeological Science: Reports*. 21: 238–242.
123. Peterson, R. K. D., L. G. Higley, and L. P. Pedigo. 2018. Whatever happened to IPM? *American Entomologist* 64:146-150.
124. Rossato, J. A. S. Jr.; Madaleno, L. L.; Mutton, M. J. R.; Higley, L. G.; and Fernandes, O. A. 2019. Photosynthesis, yield and raw material quality of sugarcane injured by multiple pests. *PeerJ*:e6166 <http://doi.org/10.7717/peerj.6166>
125. Florence, A. M., Higley, L. G., Drijber, R. A., Francis, C.A., Lindquist, J. L. 2019. Cover crop mixture diversity, biomass productivity, weed suppression, and stability. *PLoS ONE* 14(3):e0206195. <https://doi.org/10.1371/journal.pone.0206195>
126. Bowley, J. L., Willemssens, K. A., Higley, L. G. 2020. *Thamnophis elegans* (western terrestrial gartersnake) extreme habitat use. *Herpetological Review* 51:360-361.
127. Hoback, W. W., Hayashida, R., Ziems, J., Zechman, B., de Freitas Bueno, Higley, L. G. 2020. Yield response of determinate chipping potato, *Solanum tuberosum* L. to artificial defoliation. *J. Econ. Entomol.* 114: 371-376.
128. McInnis, A., Higley, L. G. 2020. Competition among three forensically important blow fly species (Diptera: Calliphoridae): *Phormia regina*, *Lucilia sericata*, and *Chrysomya rufifacies*. *Environ. Entomol.* 49:1473-1479
129. Gotschall, M. M., Bowley, J. L., Winton, R., Willemssens, K. A., Adams, B., Higley, L. G., Peterson, R. K. D., 2021. County Records of *Cicindelidia punctulata* (Olivier) (Coleoptera: Carabidae) in Idaho, USA. *The Coleopterists Bulletin* 75: 812-814.
130. Pinto, J. R. L., Fernandes, O. A., Higley, L. G., and Peterson, R. K. D. 2022. Do patterns of insect mortality in temperate and tropical zones have broader implications for insect ecology and pest management? *PeerJ*. 10(9): e13340. DOI:10.7717/peerj.13340
131. Authement, M. L., Higley, L. G, Hoback, W. W. 2023. Anoxia tolerance in four forensically important calliphorid species. *Forensic Sciences*. 3(1), 1-11; <https://doi.org/10.3390/forensicsci3010001> (registering DOI)
132. Svehla, S., Brosius, T., Higley, L., Hunt, T. 2023. High sensitivity of the tiger beetle, *Cicindela circumpecta*, to toxicity from pyrethroids and neonicotinoids, and implications for ecosystem function and species extinctions. *Conservation* 3:191–198. <https://doi.org/10.3390/conservation3010014>
133. Barrufaldi, A. P. F., Hayashida, R., Hoback, W. W., Higley, L. G., Carvalho, J. R., Oliveira, R. C. 2023. Trade-offs between temperature and fitness in *Euschistus heros* (Fabricius) (Hemiptera:Pentatomidae): implications for mass rearing and field management. *Insects* 14: 448; <https://doi.org/10.3390/insects14050448>
134. Roe, A.L., Higley, L.G. 2023. Stage transitions in *Lucilia sericata* and *Phomia regina* (Diptera: Calliphoridae) and implications for forensic science. *Insects* 14: 315. <https://doi.org/10.3390/insects14040315>
135. Roe, A., Barnes, R. J., Higley, L. G., Haskell, N. H. 2023. Changing blowfly (Diptera: Calliphoridae) populations in Orlando, Florida, United States. *Florida Entomologist*. 106: 189-191.
136. Higley, L. G., Golick, D. A., Higley, P. M. 2023. Ewe...dung beetles and poop: a nutrient cycling and population ecology lesson for elementary students. *American Entomologist*. 69: 28-31. <https://doi.org/10.1093/ae/tmad058>
137. Willemssens, K. A., Bowley, J. L., Cavallini, L., Oberg, E., Peterson, R. K. D., Higley, L. G. 2024. Habitat characteristics, distribution, and abundance of *Cicindelidia haemorrhagica* (LeConte) (Coleoptera: Cicindelidae) in Yellowstone National Park. *Insects*. 15(1), 15; <https://doi.org/10.3390/insects15010015>
138. Adams, B., Bowley, J., Rohwer, M., Oberg, E., Willemssens, K., Wintersteen, W., Peterson, R.K.D., Higley, L.G. 2024. Heavy metal movement through insect food chains in pristine thermal springs of Yellowstone National Park. *PeerJ* 12:e16827. <http://doi.org/10.7717/peerj.16827>
139. Higley, L. G., Higley, P. M, Brosius, T. R. 2024. The value of “bad” drawing in teaching. *American Biology Teacher*. 86 (3): 136–142. <https://doi.org/10.1525/abt.2024.86.3.136>

140. Higley, L., Obafunwa, J., Belcher, W., 2024. Entomological observations on a decomposing pig (*Sus scrofa*) in Nebraska: late Spring to early Summer. *Journal of Forensic Science and Criminology* 12(1): 102.
141. Adams, B. V., and Higley, L. G. 2024. Water, feeding efficiencies, and development of *Dermestes maculatus* DeGeer (1774) Inter. J. of Zool. Animal Biol. 7(1): DOI: 10.23880/izab-16000565
142. Adams, B. V., and Higley, L. G. 2024. Bone traces and modifications from feeding by *Dermestes maculatus*. Inter. J. of Zool. Animal Biol. 7(2): DOI: 10.23880/izab-16000575.
143. Bowley, J. L., Heveran, C., Weaver, D. K., Adams, B., Rohwer, M., Willemssens, K., Oberg, E., Higley, L. G., and Peterson, R. K. D. 2024. Thermal profiles of *Cicindelidia haemorrhagica* (Coleoptera: Cicindelidae) activity in hot springs in Yellowstone National Park. *Environ. Entomol.* 53(5), 829–836 <https://doi.org/10.1093/ee/nvae067>
144. Roe, A., Wells, J. D., and L. G. Higley. 2024. Development modeling of *Phormia regina* (Diptera: Calliphoridae). *Insects* 15, no. 7: 550. <https://doi.org/10.3390/insects15070550>
145. Obafunwa, J., Roe, A., and L. Higley. 2025. A review of postmortem interval estimation using forensic entomology. *Medicine, Science, and the Law.* 65(1):52-64. DOI: 10.1177/00258024241275893
146. Elowsky, C., and L. Higley. 2025. Confocal laser scanning microscopy as a method for identifying variation in puparial morphology and establishing characters for taxonomic determination. *Insects.* 16(1): 88; <https://doi.org/10.3390/insects16010088>
147. Obafunwa, J., Roe, A., and L. Higley. 2025. Estimating the postmortem interval using forensic acarology, palynology and taphonomy: a review. *For. Sci. Med. Pathol. In press.*
148. Willemssens, K. A., Bowley, J. L., Adams, B., Rohwer, M., Maxcer, M. J., Heveran, C. M., Weaver, D. K., Brosius, T., Oberg, E., Higley, L. G., and Peterson, R. K. D. 2025. Hot Springs, Cool Beetles: Extraordinary Adaptations of a Predaceous Insect in Yellowstone National Park. *Annals. Entomol. Soc. Amer. In press.*

Scientific Publications (not peer-reviewed)

1. Pedigo, L. P., L. G. Higley, and P. M. Davis. 1989. Concepts and advances in economic thresholds for soybean entomology. p. 1487-1493. in A. J. Pascale (ed.) *Proc. World Soybean Res. Conf. IV. Vol. III, Asociacion Argentina de la Soja, Buenos Aires, Argentina.* (invited paper).
2. Higley, L. G. 1990. Making management decisions for pests: past, present, and future approaches. p. 155-160. in *Proc. First Ann. Crop Prod. Protection Conf., Iowa State Univ., Ames. Pm-1379.* (invited paper).
3. Wintersteen, W. K., and L. G. Higley. 1990. Advanced IPM systems in corn and soybeans. *Proc. American Chemical Soc. National Meet. Washington, D.C. Aug. 26-31, 1990* (invited paper).
4. Teare, I. D., J. E. Funderburk, L. G. Higley, A. J. Mueller, and T. P. Mack. 1991. Investigation of soybean stress from defoliating pests: southern region. *Univ. of Florida Res. Bull. NF-91-2.*
5. Higley, L. G., and T. E. Hunt. 1992. Economic thresholds in IPM. in R. J. Wright and P. Mattran, ed. *Proc. Crop Pest Management update Conf., Univ. of Nebraska-Lincoln, Lincoln, NE.* p. 1-6. (invited paper)
6. Higley, L. G., and W. K. Wintersteen. 1992. Incorporating environmental costs into insect management decisions. *Proc. Ill. Agr. Pesticide Conf. '92, Univ. of Ill., Champaign, IL.* p. 29-37. (invited paper)
7. Higley, L. G. 1993. Research Brief: Pathogens may not evolve toward reduced resistance. *Amer. Entomologist.* 39:188.
8. Higley, L. G., and W. K. Wintersteen. 1994. Modeling and managing environmental risks from pest management practices. in B. Naopmpeth, ed. *Soybean Feeds the World. Proc. World Soybean Res. Conf. V., Kasetsart Univ. Press, Bangkok, Thailand.* p.229-232. (invited paper)
9. Peterson, R. K. D., L. G. Higley. 1994. Communicating pesticide risks - a primer. *Wing Beats of the American Mosquito Control Association* 5(2):18-22. (invited paper, based on *Am. Entomologist* 39:206-211)
10. Peterson, R. K. D., L. G. Higley. 1994. Communicating pesticide risks - the framework. *Wing Beats of the American Mosquito Control Association* 5(3):4-6, 12 (invited paper, based on *Am. Entomologist* 39:206-211)
11. Higley, L. G., and T. E. Hunt. 1994. Early-season soybean insects: past problems and future risks. *Proc. 1994 Integrated Crop Management Conference, Iowa State Univ., Ames.* p. 91-99 (invited paper)
12. Spomer, S. M., L. G. Higley, and W. W. Hoback. 1997. Nebraska's salt marsh tigers. *University of Nebraska State Museum Notes* 97:1-4.
13. Hoback, W. W., and L. G. Higley. 2000. Creating a hypothesis-based web page. *Bull. Ecol. Soc. Am.* 81:88-89.
14. Higley, L. G. 2006. The devil and Leon Higley: An IPM story. *Proc. Ill. Crop Protect. Tech. Conf. '06, Univ. of Ill., Champaign, IL.* p. 131-134. (invited paper)
15. Higley, L. G., and P. M. Higley. 2007. Can insects be bioterrorism agents? *Proc. XVI Int. Plant Prot. Congress, 15-18 Oct., 2007, Glasgow, Scotland, UK.* 2:422-423.

16. Higley, P. M. and L. G. Higley. 2007. Limitations to the use of plant pathogens as agents of bioterrorism. Proc. XVI Int. Plant Prot. Congress, 15-18 Oct., 2007, Glasgow, Scotland, UK. 2:424-425.
17. Haskell, N. H., R. D. Hall, L. G. Higley, T. E. Huntington, and R. E. Williams. 2007. Rebuttal to forensic entomology: myths busted! Forensic Magazine 4(3): 58.
18. Higley, L. G. 2008. How to lose money despite high crop prices or misuses, misapplications, and mistakes with insect thresholds. Proc. Ill. Crop Protect. Tech. Conf. '08, Univ. of Ill., Champaign, IL. p. 67-69. (invited paper)

Book Reviews

1. Higley, L. G. 1996. Review of *Ecologically Based Pest Management: New Solutions for a New Century*. Field Crops Res. 54:76-77.
2. Higley, L. G. 2001. Review of *Emerging Technologies for Integrated Pest Management: Concepts, Research, and Implementation*. Crop Sci. 41:580a-581a.
3. Higley, L. G. 2003. Review of *Tiger Beetles: The Evolution, Ecology, and Diversity of the Cicindelids*. Bull. Coleopterists Soc. 57:431-432.
4. Higley, L. G., and T. E. Huntington. 2009. Review of *Forensic Entomology*. J. Med. Entomol. 46:1244.

Columns

1. Stanley-Samuelson, D. W., and L. G. Higley. 1993. A lifetime of science: What is a lifetime of science? Am. Entomol. 39:10-11.
2. Higley, L. G., and D. W. Stanley-Samuelson. 1993. What do you mean, have I read my own paper? Am. Entomol. 39:74-75.
3. Stanley-Samuelson, D. W., and L. G. Higley. 1995. What is the role of scholarship in scientific writing? Am. Entomol. 41: 18-19.
4. Higley, L. G., and D. W. Stanley-Samuelson. 1995. Hit the deck running: A vision of doable projects. Am. Entomol. 41:80-81.
5. Stanley-Samuelson, D. W., and L. G. Higley. 1995. High crimes and misdemeanors or exploring scientific misconduct with gun and camera. Am. Entomol. 41:145-146.
6. Higley, L. G., and D. W. Stanley-Samuelson. 1995. Are graduate students required for tenure? Ethics and the practice of science. Am. Entomol. 41:208-209.
7. Stanley-Samuelson, D. W., and L. G. Higley. 1996. Taking the heat: What are we going to do about increasing pressures and misconduct in the kitchens of science? Am. Entomol. 42:17-18
8. Higley, L. G., and D. W. Stanley-Samuelson. 1996. When is writing not writing? The ethics of recycling. Am. Entomol. 42:204-205.
9. Stanley-Samuelson, D. W., and L. G. Higley. 1997. Lies, damn lies, and grant proposals. Am. Entomol. 43:7-10.
10. Higley, L. G., and D. W. Stanley. 1997. Preparing for an uncertain future: Wizards, mystics, and graduate education. Am. Entomol. 43:79-80.
11. Stanley-Samuelson, D. W., and L. G. Higley. 1997. Putting a (large) price tag on scientific misconduct. Am. Entomol. 43: 136-137.
12. Higley, L. G., and D. W. Stanley. 1997. The dark landscape of a world with ten ounces to the pound. Am. Entomol. 43: 210-211.
13. Stanley, D. W., and L. G. Higley. 1998. Language, images, and ethics. Am. Entomol. 44:14-15.
14. Stanley, D. W., and L. G. Higley. 1999. Twenty-four/seven. Am. Entomol. 45: 140-141.
15. Stanley, D. W., and L. G. Higley. 2000. What are graduate students preparing to do? Am. Entomol. 46:73-74
16. Stanley, D. W., and L. G. Higley. 2000. I ain't got time to waste on my career. Am. Entomol. 46:215-216.

Extension Publications

1. Higley, L. G., and W. K. Wintersteen. 1987. Using degree days in an integrated pest management program. Iowa Coop. Ext. Serv. Pamph. PM-1296.
2. Higley, L. G., W. K. Wintersteen, T. H. Klubertanz, and M. E. Rice. 1989. Twospotted spider mites on soybeans and corn. Iowa Coop. Ext. Serv. Pamph. Pm-1363.
3. Holscher, K. H., D. R. Lewis, M. E. Rice, W. K. Wintersteen, and L. G. Higley. 1989. Iowa insect pest management for 1989. Iowa Ext. Surv. Pamph. IC-328.
4. Holscher, K. H., D. R. Lewis, M. E. Rice, W. K. Wintersteen, and L. G. Higley. 1989. Iowa insect pest management for 1989. Iowa Ext. Serv. Pamph. IC-328

5. Rice, M. E., W. K. Wintersteen, and L. G. Higley. 1990. Common soybean insects. Iowa Ext. Serv. Pamph. Pm-463.
6. Wintersteen, W. K., K. Giles, L. G. Higley, M. E. Rice, and J. Obrycki. 1992. Biological control of the alfalfa weevil in Iowa. Iowa Ext. Serv. Pamph. Pm-1484.
7. Wright, R., R. Seymour, L. Higley, and J. Campbell. 1993. Spider mite management in corn and soybeans. Nebraska Ext. Serv. Pamh. C-36.
8. Martin, A., R. Elmore, R. Grisso, G. Hergert, L. Higley, M. Holoubek, T. Hunt, J. Kendrick, N. Klocke, C. Shapiro, D. Shelton, R. Smith, J. Witkowski, and D. Wysong. 1997. Nebraska Soybean Handbook. Nebr. Coop. Extn. Serv. Lincoln, NE.

TECHNICAL REPORTS

Author or coauthor of 12 published technical reports (1982-1987) in Insecticide and Acaricide Tests, Entomological Society of America.

Spomer, S. M., L. G. Higley, and J. E. Foster. 1993. Alfalfa insect control, 1993. Arthropod Management Tests 19:176-177.

Nature and Forensic Photography

Exhibits

1. Robber Fly with Prey (11x14 in). Salt Creek Environment: Local and Endangered Exhibit, Haydon Art Center, Lincoln, NE July 2-31, 2009.
2. Mosquito on flower (male), photo in Science Buzz Exhibit. Science Museum of Minnesota, St. Paul, MN. 2006.
3. Blow fly maggots. Photo in Forensics Gallery Exhibit. Edmonton Space & Science Centre, Edmonton, Canada, 2001.
4. Taxa, exhibit of 24 animal photographs, Gallery, Unitarian Church of Lincoln, Lincoln, NE, Nov. 2023.

Published Photographs (exclusive of photo figures in journal articles and webpages)

1. Salt Creek tiger beetle, Salt Creek habitat, tiger beetle larvae, robber fly with prey (4 total). 2009. Salt Creek Environment: Local and Endangered. Great Plains Chapter Guild of the Scientific Illustrators Inc., Lincoln, NE. (catalog of exhibit, July 2-31, 2009).
2. Human skull (from homicide), cover photo. Tibbett, M., and D. Carter. 2008. Soil Analysis in Forensic Taphonomy: Chemical and Biological Effects of Buried Human Remains. CRC Press, Boca Raton, FL.
3. Milkweed tussock moth larva, cover photo. Plant Cell and the Environment, 29(7). July 2006.
4. 17-Year Cicada Emerging. 2 page photo in article *The Calm Before the Song*. Natural History, June 2004
5. Bumblebee, *Bombus pennsylvanicus*. cover photo. American Entomologist, 49(2), summer 2003.
6. Bean leaf beetle (in text and 1 of 3 cover photos), soybean leaf miner (3), seedcorn maggot larvae, and salt marsh caterpillar adult (8 total). Higley, L. and D. Boethel, eds. 1994. Handbook of Insect Pests of Soybean. Entomological Society of American, Hyattsville, MD.
7. Bean leaf beetle adult. Soybeans: Improvement, Production, and Uses. Crop Science Society of America, Madison, WI.

PAPERS AND POSTERS PRESENTED (Senior Authored Only)

1. Higley, L. G., K. R. Ostlie, and R. A. Higgins. 1982. Screening soil- applied insecticides with soybean isolines sensitive to the potato leafhopper. Annu. Meet. NCB-ESA, Sioux Falls, SD.
2. Higley, L. G., and L. P. Pedigo. 1983. Population dynamics of the seedcorn maggot in central Iowa. Annu. Meet. NCB-ESA, St. Louis, MO.
3. Higley, L. G., and L. P. Pedigo. 1983. Seedcorn maggot bionomics and population dynamics in central Iowa. Annu. Meet. ESA, Detroit, MI.
4. Higley, L. G., and L. P. Pedigo. 1984. Soybean response to early season seedcorn maggot injury. Annu. Meet. NCB-ESA, Wichita, KS.
5. Higley, L. G., and L. G. Pedigo. 1984. Interactions between seedcorn maggot damage and subsequent stressors on soybean. World Soybean Res. Confer. III., Ames, IA.
6. Higley, L. G. 1986. Plant and stand response to early-season insect induced stress in a model system. Annu. Meet. NCB-ESA, Minneapolis, MN.

7. Higley, L. G., and L. P. Pedigo. 1986. Interactions between *Delia platura*, *Empoasca fabae*, and *Septoria glycines* on soybean. Annu. Meet. NCB-ESA, Minneapolis, MN.
8. Higley, L. G., and L. P. Pedigo. 1986. Intraspecific competition in soybean mediated by insect injury. Annu. Meet. ESA, Reno, NV.
9. Higley, L. G., and L. P. Pedigo. 1987. Implications of seedcorn maggot-induced phenological delay of soybean in stress interactions. Annu. Meet. NCB-ESA, Des Moines, IA.
10. Higley, L. G., L. P. Pedigo, and S. H. Hutchins. 1987. Theoretical basis for multiple species economic-injury levels. Annu. Meet. ESA, Boston, MA.
11. Higley, L. G., M. Bryan, and L. P. Pedigo. 1989. IPM teaching software. Annu. Meet. NCB-ESA, Indianapolis, IN.
12. Higley, L. G., and L. P. Pedigo. 1989. Characterizing effects of defoliation on soybean physiology. Annu. Meet. NCB-ESA, Indianapolis, IN.
13. Higley, L. G., and L. P. Pedigo. 1989. Soybean compensation to defoliation through delayed leaf senescence. Annu. Meet. ESA, San Antonio, TX.
14. Higley, L. G. 1990. Photosynthetic responses of soybean to arthropod-induced leaf injury. Annu. Meet. ESA, New Orleans, LA.
15. Higley, L. G., and W. K. Wintersteen. 1991. Incorporating environmental costs into economic injury levels. Annu. Meet. Leopold Center for Sustainable Agric., Ames, IA (poster).
16. Higley, L. G. and W. K. Wintersteen. 1991. Incorporating environmental costs into economic injury levels. Annu. Meet. NCB-ESA, Milwaukee, WI (poster).
17. Higley, L. G., and W. K. Wintersteen. 1991. Incorporating environmental considerations in IPM decisions through environmental EILs. Annu. Meet. Entomol. Soc. Am., Reno, NV (poster).
18. Higley, L. G., J. A. Barrigossi, G. Hein, and T. B. Macedo. 2001. Biological control and pest management decision making. VII Simpósio de Controle Biológico, Poços de Caldas, Brazil (poster).

Invited Presentations and Seminars

1. Oviposition-detering semiochemicals. Dept. of Entomology, Iowa State Univ., Feb., 1983.
2. Seedcorn maggot population biology in central Iowa. Thesis seminar, Dept. of Entomology, Iowa State Univ., March, 1984.
3. How plants respond to insect stress. Dept. of Entomology, Iowa State Univ., Oct., 1985.
4. Assumptions in using degree-days. Dept. of Entomology, Iowa State Univ., 1986.
5. Bridging the gap: entomology and agronomy. Depts. of Entomology and Agronomy, Univ. of Missouri, 1986. (with R. A. Higgins)
6. Entomologists and agronomists sharing research responsibilities: why to's and how to's. Depts. of Entomology and Agronomy, Kansas State Univ., 1987. (with R. A. Higgins)
7. Opportunity and methods for interdisciplinary research in agronomy and entomology. Dept. of Entomology, Iowa State Univ., 1987. (with R. A. Higgins)
8. Soybean diseases and seedcorn maggot injury interactions. Dept. of Plant Pathology, Iowa State Univ., 1987. (with P. M. Higley)
9. Plant and stand response to early season insect-induced stress in a model system. Dissertation seminar, Dept. of Entomology, Iowa State Univ., 1988.
10. Competition and compensation in insect-plant interactions. Dept. of Biological Sciences, Univ. of Nebraska-Lincoln, 1990.
11. Advanced IPM systems for corn and soybeans. Division of Environmental Chemistry, American Chemical Society National Meeting, Washington, D.C., Aug., 1990. (with W. K. Wintersteen)
12. Structure and presentation of a seminar. Dept. of Entomology, Univ. of Nebraska-Lincoln, Sept., 1990.
13. Making management decisions for pests: past, present, and future approaches. First Annual Crop Production and Protection Conference, Iowa State Univ., Dec. 18, 1990.
14. Impact of defoliating insects on soybeans mediated through light interception. Dept. of Agricultural Meteorology, Univ. of Nebraska-Lincoln, 1991.
15. Economic injury level concepts and use in sustaining environmental quality. International Conference on Agriculture and the Environment, Ohio State Univ., Columbus, OH, 1991.
16. Economic thresholds in IPM. Crop Pest Management Update, Univ. of Nebraska-Lincoln, Kearney, NE, Dec. 3, 1991.

17. Incorporating environmental costs into insect management decisions. Illinois Agricultural Pesticides Conference '92. Univ. of Illinois, Urbana, IL, Jan, 8, 1992.
18. Incorporating environmental costs into pest management decisions. Dept. of Plant Pathology, Univ. of Nebraska-Lincoln, Jan. 21, 1992.
19. EILs in theory and practice. Dept. of Entomology, Auburn Univ., Jan. 27, 1992.
20. Pest management decision making and environmental considerations. *in* Challenges and new directions in pest management decision making. Section F Symposium, North Central Branch Meeting, Entomological Society of America, Kansas City, MO, 15-18 March, 1992.
21. Courage, conscience, and science. Sigma Xi Address, Univ. of Nebraska Chapter, Apr. 22, 1992.
22. A conceptual basis for characterizing plant biotic stress and stress interactions. First International Crop Science Congress, Ames, IA, July 15, 1992.
23. Environmental quality and pest management decision making. Dept. of Entomology, Univ. of Georgia, Oct. 22, 1992.
24. Environmental quality and pest management decision making. Georgia Experiment Station - Griffin, Univ. of Georgia, Oct. 23, 1992.
25. Photosynthetic responses to arthropod injury. Dept. of Biological Sciences, Univ. of Nebraska-Lincoln, Nov. 18, 1992.
26. Environmental considerations in pest management decision making. Dept. of Entomology, Kansas State Univ., Jan. 22, 1993.
27. The scientist and society. Dept. of Forestry, Fisheries, and Wildlife, Univ. of Nebraska-Lincoln, 1993.
28. Integrated pest management: making cost-effective decisions on pest management in an urban environment. 1993 Urban Pest Management Conference, Lincoln, NE, Mar. 1, 1993.
29. Workshop on authorship and ethics. IANR Ethics Conference, University of Nebraska-Lincoln, Mar. 11, 1993. (with David W. Stanley-Samuelson)
30. Ethics and authorship. Dept. of Food Science and Technology, Univ. of Nebraska-Lincoln, Nov 12, 1993. (with David W. Stanley-Samuelson)
31. Structure and sustainability: Implications of corn insect management. 1993 Fall Agricultural Policy Conference: Changes and Choices for Agriculture and Rural Communities, Council for Agriculture and Rural Development/Leopold Center for Sustainable Agriculture, Council Bluffs, IA, Nov. 18, 1993.
32. Physiological mechanisms of tolerance in legumes. Symposium: Tolerance to insect herbivory in natural and managed ecosystems. Annu. Meet. Entomol. Soc. Amer., Indianapolis, IN, Dec. 14, 1993.
33. Modeling and managing environmental risks from pest management practices. World Soybean Res. Conf. V., Chiang Mai, Thailand, Feb. 23, 1994.
34. Insect thermal development and its use in integrated pest management. Dept. of Agricultural Meteorology, Univ. of Nebraska-Lincoln, Oct. 11, 1994. (with Robert Peterson).
35. Using entomology to teach scientific literacy. Nebraska Association of Teachers of Science Annual Fall Conference, Oct. 30, 1994.
36. Understanding insects and mites as pests. Biological Control of Insects Conference, Univ. of Nebraska-Lincoln, Lincoln, NE, Nov. 1, 1994.
37. Early season soybean insects: past problems and future risks. 1994 Integrated Crop Management Conference, Iowa State Univ., Dec. 1, 1994.
38. Paradigm lost: whither pest science and IPM? Dept. of Agronomy, Univ. of Nebraska-Lincoln, Lincoln, NE, Feb. 10, 1995.
39. The death and resurrection of IPM. National IPM Coordinators Conference, Washington, DC, March 21, 1995.
40. A Midwest perspective on insect dispersal - who moves and why is their movement so important. *in* Program Symposium, North Central Branch Meeting, Entomological Society of America, Lexington, KY, March 28, 1995.
41. New opportunities for reducing risk: environmental costs, thresholds, and pest management. 1995 National Turfgrass Entomology Workshop, Omaha, NE, Oct. 23, 1995.
42. Careers in science: are personal satisfaction and professional excellence mutually exclusive? Dept. of Plant Pathology, Univ. of Nebraska-Lincoln, Oct. 24, 1995. (with David Stanley-Samuelson)
43. IPM, control, and the status quo: What are we implementing. *in* Symposium: IPM and 75 percent implementation: Have most states already delivered? Annu. Meet. Entomol. Soc. Amer., Las Vegas, NV, Dec. 20, 1995.
44. Ethics and grant writing. Dept. of Animal Science, Univ. of Nebraska-Lincoln, Feb. 21, 1996. (with David W. Stanley-Samuelson)

45. Science and ethics. Research undergraduates, Dept. of Chemistry, Univ. of Nebraska-Lincoln, June 13, 1996. (with David W. Stanley-Samuelson)
46. Science and ethics. McNair summer students, Univ. of Nebraska-Lincoln, July 3, 1996 (with David W. Stanley-Samuelson)
47. Ethics and doing science. Teaching assistants, Dept. of Chemistry, Univ. of Nebraska-Lincoln, Aug. 22, 1996 (with David W. Stanley-Samuelson).
48. Pest science at a crossroads. Dept. of Entomology, Iowa State Univ., Ames, IA, Sept. 26, 1996.
49. Integrated cropping systems research: Entomological perspectives. *in* Workshop on Integrated cropping systems research: A viable opportunity for whole plant physiologists. National meeting American Society for Horticultural Science, Lexington, KY, Oct. 7, 1996.
50. The currency of our careers: Scientific publications and ethics. Dept. of Biometry, Oct. 30, 1996 (with David W. Stanley-Samuelson)
51. The ethics of authorship. IANR, Univ. of Nebraska-Lincoln, Nov. 11, 1996 (with David W. Stanley-Samuelson)
52. Soybean insects: Managing unexpected pests. Crop Pest Management Short Course, Univ. of Minnesota, St. Paul, MN, Nov. 20, 1996.
53. Business ethics: Professionalism for the industry. Nebraska Aviation Trades Association Annual Convention. Kearney, NE, Feb. 18, 1997 (with David W. Stanley)
54. Multimedia software, distance education, and other new teaching approaches in entomology. Nebraska Independent Crop Consultants Association Meeting, Kearney, NE, Mar. 4, 1997.
55. Mechanisms and tolerance of plant stress from insect injury. Dept. of Entomology, Univ. of Maryland, College Park, MD, Apr. 7, 1997
56. Ethics in science. Undergraduate research students in chemistry, Univ. of Nebraska-Lincoln, July 3, 1997 (with David W. Stanley)
57. Ethics and doing science. Teaching assistants, Dept. of Chemistry, Univ. of Nebraska-Lincoln, Aug. 22, 1997 (with David W. Stanley).
58. Ethics, professionalism, and engineering. College of Engineering, Univ. of Nebraska-Lincoln, Feb. 10, 1998 (with David W. Stanley)
59. Better soybean insect management through new understandings of plant stress. XVII Congresso Brasileiro de Entomologia, Rio de Janeiro, RJ Brazil, Aug. 12, 1998.
60. Insect Pest Management and Collaborative Research Opportunities in Brazil, International Eye Opener Seminar, University of Nebraska-Lincoln, Sept. 17, 1998
61. Bring out your dead: Plagues past, present, and future. Speech for University of Nebraska Speakers Bureau: 1998-1999, Dundee Kiwanis Club, Omaha, NE, Oct. 5, 1998
62. Bring out your dead: Plagues past, present, and future. Speech for University of Nebraska Speakers Bureau: 1998-1999, SAGE Program, UN-L, Lincoln, NE, Nov. 16, 1998
63. Of mites and men: Insects and human societies. Speech for University of Nebraska Speakers Bureau: 1998-1999, Tau Beta Pi (engineering honorary society) fall initiation ceremony, UN-L, Lincoln, NE Dec. 9, 1998
64. Guns or Butter: Insects, Photosynthesis, and Plant Defense. School of Biological Sciences, UN-L, Lincoln, NE, Jan. 28, 1999
65. Bring out your dead: Plagues past, present, and future. Speech for University of Nebraska Speakers Bureau: 1998-1999, Lincoln Unitarian Church, Lincoln, NE, Feb. 7, 1999
66. Ethics and New Agricultural Technologies. Alpha Zeta, (agriculture undergraduate honorary society), UN-L, Lincoln, NE, Feb. 10, 1999
67. Lightning strikes and chemical bites: Technology and risk. Speech for University of Nebraska Speakers Bureau: 1998-1999, Cotner Center, Lincoln, NE, Mar. 24, 1999.
68. Challenges and opportunities in building distance education programs. *in* BCE Symposium: Use of distance education to meet degree and lifelong learning needs, North Central Branch Meeting, Entomological Society of America, Des Moines, IA, March 29, 1999
69. Entomology, the academy, and the future: Plus ca change, plus c'est la meme chose. *In* Student-sponsored Symposium: Will you for Y2K compatible? Career development for graduate students in entomology, North Central Branch Meeting, Entomological Society of America, Des Moines, IA, March 30, 1999
70. Bring out your dead: Plagues past, present, and future. Speech for University of Nebraska Speakers Bureau: 1998-1999, Chadron Kwanis Club, Chadron, NE, Apr. 27, 1999
71. Of mites and men: Insects and human societies. Speech for University of Nebraska Speakers Bureau: 1998-1999, Chadron High School, Chadron, NE, Apr. 27, 1999

72. Of mites and men: Insects and human societies. Speech for University of Nebraska Speakers Bureau: 1998-1999, Nebraska Environmental Education Association Conference, Halsey, NE, June 18, 1999
73. Prairie insects. Wildlife Educators, Chet Ager Nature Center, Pioneers Park, Lincoln, NE, Aug. 19, 1999.
74. Tolerance in the transgenic era, Section F Symposium, National Meeting Entomological Society of America, Atlanta, GA Dec. 15, 1999.
75. Insect engineers, Tau Beta Pi (engineering honorary society) fall initiation ceremony, UN-L, Lincoln, NE Dec. 17, 1999.
76. Insects, photosynthesis, and plant stress. Dept. of Biology, University of Nebraska, Omaha, Feb. 9, 2000
77. Bugs from afar: Teaching distance entomology courses and degree programs. Kansas (Central States) Entomological Society Meeting, Emporia, Kansas, April 15, 2000.
78. Managing heteropteran pests: From theory to practical implementation. XXI World Congress of Entomology, Igassu, Brasil, Aug. 26, 2000.
79. Changing perspectives on insects in the 19th and 20th centuries as illustrated through advertising trade cards. Les "insectes" dans la Tradition Orale ("Insects" in Oral Literature and Traditions), LAngues et Civilisations à Tradition Orale, CNRS, Paris (Villejuif), France, Oct. 6, 2000.
80. The uses of entomological teaching. Teaching symposium, National Meeting Entomological Society of America, Montreal, Canada, Dec. 3, 2000.
81. Selling with insects: insights into insights from advertising trade cards into perceptions and conservation of insects. Department of Entomology, University of Florida, Jan. 23, 2001.
82. Entomology and education: new opportunities in distance and resident instruction. Department of Entomology, University of Minnesota, Feb. 13, 2001.
83. Distance education and other teaching opportunities and challenges in entomology. Department of Entomology, Purdue University, Feb. 22, 2001.
84. How insects alter plant photosynthesis and yield. Department of Entomology, Montana State University, Mar. 19, 2001.
85. Exploring distance education with gun and camera. College of Agriculture, Montana State University, Mar. 20, 2001.
86. Opportunities and challenges in distance education: the entomology experience. Department of Agronomy and Horticultural Sciences, University of Nebraska-Lincoln, Oct. 5, 2001
87. Brains versus bugs: Evolution's role in humanity's war against insects. Keynote Address 45th Annual Meeting of the Association of College and University Biology Educators (ACUBE), University of Nebraska at Kearney, Oct. 12, 2001
88. Why should we conserve insects? Conservation Education Conference, Nebraska Game and Parks Commission, Kearney, Nebraska, Feb. 16, 2002
89. Does anyone really know what time it is: Problems in estimating PMI with insect thermal development. Coauthors P. Nabity, F.P. Baxendale, T.E. Huntington North American Forensic Entomology Conference, Las Vegas, Nevada, Aug. 2003.
90. Can and should we save the Salt Creek tiger beetle? Wachiska Chapter Audubon Society, Lincoln, Nebraska, Oct. 16, 2003
91. Are there unifying principles in applied biology? Chalk Talk, Dept. of Plant Pathology, Univ. of Nebraska-Lincoln, Oct. 3, 2005.
92. Stress tolerance to insect injury in legumes. Medicago Genomic Function and Response to Biotic Stress. Samuel Roberts Noble Foundation, Ardmore, OK, Oct. 27, 2005.
93. The Devil and Leon Higley, Illinois Crop Protection Technical Conference 2006, Univ. of Ill., Champaign, IL, Jan. 5, 2006.
94. (Non-?) traditional academic degree training: concept to development. National IPM Conference, St. Louis, MO, April 4, 2006.
95. For whom the bug tolls: Entomology and forensic science. ASCP-CLMA-NSCLS (American Soc. for Clinical Pathology-Clinical Laboratory Management Association- Nebraska Society for Clinical Laboratory Science) Spring Educational Meeting, Lincoln, NE April 21, 2006.
96. When opportunity knocks don't peak through the blinds: Opening the door to distance education. College Public Forum, College of Agriculture, Iowa State University, Ames, IA, Sept., 2006.
97. Forensic science and the UN Millennium Development Goals. Fulbright Academy for Science and Technology Annual Meeting, Panama City, Panama, March 2, 2007.

98. Asa Fitch and the future of entomology, Founders Memorial Lecture, Annual Meeting Entomological Society of America, San Diego, CA, Dec. 9, 2007.
99. How to lose money despite high crop prices or misuses, misapplications, and mistakes with insect thresholds. Illinois Crop Protection Technical Conference 2008, Univ. of Ill., Champaign, IL, Jan. 10, 2008.
100. Lay lady lay, lay upon my big dead head – Flies and Homicides. Beta Beta Beta Honorary (biology, Nebraska Wesleyan University, Lincoln, NE May 6, 2008.
101. Forensic entomology from a nursing perspective. Bryan-LGH Nursing Program, Lincoln, NE, Oct. 5, 2008.
102. Salt Creek Tiger Beetle and Insect Conservation, Osher Lifelong Learning Institute (educational program for students 55 and older), UN-L, Lincoln, NE, Nov. 14, 2008.
103. Building bridges with Randy: Agronomy, entomology, and their interactions. Symposium: Honoring the Life and Work of Randy Higgins: Past Successes Lead to New Beginnings in Pest Management, Annual Meeting Entomological Society of America, Reno, NV, Nov. 19, 2008.
104. Death, taxes, and maggots: basics of forensic entomology, Osher Lifelong Learning Institute (educational program for students 55 and older), UN-L, Lincoln, NE, Dec. 12, 2008.
105. Biodiversity and the Salt Creek Tiger Beetle. Forum, Eastridge Presbyterian Church, Lincoln, NE, Feb.22, 2009.
106. Teaching scientific thinking with insects. Teaching Symposium, Annual Meeting Entomological Society of America, Indianapolis, IN, Dec. 13, 2009.
107. Back to the future. Symposium Celebrating the 50th Aniversary of the Publication of the Integrated Control Concept by Stern et al., Annual Meeting Entomological Society of America, Indianapolis, IN, Dec. 15, 2009.
108. Essential elements of forensic entomology. Seminar, Dept. Fitossanidade, FCAV/UNESP Jaboticabal, Sao Paulo, Brazil, June, 2010.
109. Leaves, light, and loss: How insect feeding reduces plant yields. Brown Bag Seminar, USDA Northern Plains Agricultural Research Laboratory, Sidney, MT, Jan. 4, 2011.
110. The emperor's new shroud: Applications, problems, and solutions in forensic entomology. Brown Bag Seminar, USDA Northern Plains Agricultural Research Laboratory, Sidney, MT, Jan. 5, 2011.
111. Using a Faceless Murder Victim to Illustrate Crap Tests, Quackery, and Incompetence in Using or Not Using Forensic Entomology. Ann. Meeting Amer. Acad. Forensic Sci., Chicago, IL Feb. 24, 2011 (Abstract in Proc. Amer. Acad. Forensic Sci. 2011. 17:207-208.)
112. How do you avoid being a potted palm or, How to ask expert witnesses real questions & avoid putting a noose around your client's neck every time you open your mouth. Osher Lifelong Learning Institute (educational program for students 55 and older), UN-L, Lincoln, NE, Mar. 7, 2011.
113. CSI Quincy – Murder, Maggots, and Some Inside Stories of Forensic Science. North Florida Research and Education Center, Institute of Food and Agricultural Sciences, Univ. of Florida, Quincy, FL Sept 10, 2012.
114. The uniquely cool ecophysiology of the endangered salt creek tiger beetle: a tale of science, politics, and death. Department of Entomology, Univ. of Florida. Gainesville, FL Sept 13, 2012.
115. A growing science? Blow fly thermal development and human death. *In* Symposium: Current Global Trends in Forensic Entomology. 2012 Annual Meeting of the Entomological Society of America, Knoxville, TN, Nov. 13, 2012.
116. Life After Death: Maggots, Murder, and Forensic Science. Dept of Biology, University of Nebraska at Kearney, Jan. 14, 2013
117. Applications of curvilinear development modeling for the blow fly *Lucilia sericata* (Meigen). With Amanda Fujikawa. NIJ Grantees Meeting “The research behind eureka – how NIJ[-]funded research supports the science of forensics, 65th Annual Meeting of American Academy of Forensic Science, Washington, DC, Feb. 18, 2013
118. Publishing higher impact papers: problems and solutions or Temos a grata satisfação de convidá-los para a palestra. Seminar, Dept. Fitossanidade, FCAV/UNESP Jaboticabal, Sao Paulo, Brazil, August 28, 2013.
119. Climate change and insects of the Great Plains. Paul A. Olson Seminar, Center for Great Plains Studies, Lincoln, NE, Nov 20, 2013.
120. Insect Development and Forensic Entomology, University of Sao Paulo, Riberão Preto, SP, Brazil, July 17, 2014.
121. Why butterflies aren't elephants, hitmen aren't applied ecologists, and scientists too often lie: The need for skepticism in science. Symposium “The Inspiring, Exploding Skeptical Movement and its Impact on Entomology” 2017 Annual Meeting of the American Entomological Society, Denver, CO, Nov. 10, 2017
122. Quadruple Homicide – Entomology. Annual Meeting of the Kansas International Identification Association, Junction City, KS, April 10, 2019. *Invited presentation.*
123. How are they alive? The tiger beetle, *Cicindelida haemorrhagica* in thermal areas of Yellowstone National Park. Dept. of Entomology and Plant Pathology, Oklahoma State University, Stillwater, OK, Sept. 22, 2023

124. Some like it hot, tiger beetles in Yellowstone. Day of Insects, Reiman Gardens, Iowa State University, Ames, IA, March 23, 2024.
125. Entomological tour of a death scene. Day of Insects, Reiman Gardens, Iowa State University, Ames, IA, March 23, 2024.

PERSONAL INFORMATION

Born: March 7, 1958

Married: Aug. 15, 1981 to Dr. Phyllis Maraulja Higley, (Professor and Program Chair of Biology, College of St. Mary, Omaha, NE)

Children: Addison Reese Higley (born Jan. 12, 1990), Cameron Skye Higley (born May 21, 1993)

Hobbies: bibliophily, magic tricks, computer gaming (strategic and flight simulation mostly), military history, nature (insect) photography, piano, sketching and nature journaling, woodworking

Health Explanation: from 2018 to 2023 I fought bladder, prostate, and kidney cancers and the (substantial) radiation damage resulting from treatment, which explains the significant reduction in many/most of my professional activities