

CURRICULUM VITAE

NAME: Scott L. Collins

CURRENT ADDRESS: Department of Biology
University of New Mexico
Albuquerque, NM 87131
Phone: (505) 277-6303
Fax: (505) 277-5355
E-mail: scollins@unm.edu
<http://collins.lternet.edu/>

FIELD AND SPECIALIZATION: Community ecology, grassland ecology, aridland ecosystems, ecological impacts of climate change on grasslands

EDUCATION:

- 1981 University of Oklahoma, Ph.D. - Botany
Dissertation: Habitat relationships and habitat variability in the wood warblers (Parulidae).
- 1977 Miami University, M.S. - Botany
Thesis: Tree species dynamics in the arbor vitae community of Cedar Bog, Champaign County, Ohio.
- 1975 Wittenberg University, B.A. - Biology

PROFESSIONAL EXPERIENCE:

- 2016- Distinguished Professor, University of New Mexico
- 2012- Regents' Professor, University of New Mexico
- 2012- Loren Potter Chair of Plant Ecology, Department of Biology, UNM
- 2003- Professor of Biology, University of New Mexico
- 2003-14 Principal Investigator, Sevilleta LTER Program
- 2001- Adjunct Professor, School of Life Sciences, Arizona State University
- 1998- Adjunct Professor, Division of Biology, Kansas State University
- 1995-01 Program Director, Long-term Ecological Research, NSF
- 1995-03 Adjunct Professor, Department of Zoology, University of Maryland
- 1992-03 Program Director, Ecological Studies, National Science Foundation
- 1991-94 Associate Professor of Botany, University of Oklahoma
- 1988-90, Visiting Assistant Professor, University of Minnesota Forestry and 1992 Biological Station (summer)
- 1985-91 Assistant Professor of Botany, University of Oklahoma
- 1984 Postdoctoral Fellow, Dr. Ralph E. Good, Rutgers University
- 1981-83 Visiting Assistant Professor of Botany, University of Oklahoma
- 1981 Postdoctoral Research Associate, Dr. Bernd Heinrich, University of Vermont
- 1979-81 Research Assistant, Dr. Paul G. Risser, University of Oklahoma
- 1978 Summer Research Assistant, Oklahoma Natural Heritage Program
- 1977-79 Teaching Assistant, Botany Department, Miami University

HONORS AND AWARDS:

Chair, LTER Science Council and Executive Board 2011-2014
Regents' Professor, University of New Mexico 2012-2016
Loren Potter Chair of Plant Ecology, University of New Mexico
2012- Fellow, American Association for the Advancement of
Science President, Ecological Society of America 2012-2013
Vice President for Public Affairs, Ecological Society of America
2013-2014 Fellow, Ecological Society of America
Distinguished Professor, University of New Mexico 2016-
Editor in Chief, *BioScience* 2016-
Distinguished Service Citation, Ecological Society of America, 2018
University Distinguished Lecture Award – University of New Mexico,
2019

COURSES TAUGHT:

Plant Ecology (BOT 3454, Univ Oklahoma)
General Biology (non-science majors, BOT 1045, Univ
Oklahoma) General Botany (BOT 1114, Univ Oklahoma)
Plant Community Ecology (BOT 6484, Univ Oklahoma, BIO 475/575
UNM) Boreal Flora (Univ Minnesota Forestry and Biological Station)
Community Structure and Function (U Minn. Forestry & Biological Station)
Graduate seminars (various topics)(Univ Oklahoma)
Ecology and Evolution (BIO 203, UNM)
Ecological and Evolutionary Genomics (BIO 410/510, UNM)
Ecosystem Dynamics (BIO 405/505, UNM)
Ecosystem Ecology (BIO 514, UNM)
Field Ecology (BIO 515, UNM)
Graduate Core Ecology (BIO 516, UNM)
Population and Community Ecology (BIO 423/523 ASU)
Introductory Ecology Lab (BIO 321, ASU)
Fundamentals of Ecology (BIO 320, ASU)
Principles of Ecology (BIO409/509, UNM)

ADMINISTRATIVE DUTIES AT THE NATIONAL SCIENCE FOUNDATION (1992- 2003):

Program Management Activities:

- Program Director - Ecology Program
 - Organize proposal review panels
 - Determine proposal declines, awards and award budgets
 - Management of overall program annual budget of \$9.35 million
 - Communication with investigators
- Program Director - Long-term Ecological Research Network
 - Organize proposal review panels
 - Coordinate site visits to evaluate research and management at LTER

sites

- Establish and implement policy goals for LTER Network
- Serve as interagency liaison for LTER Network
- Management of overall program annual budget of \$13.7 million •

Program Director - Integrated Research Challenges (IRCEB), an interdisciplinary funding opportunity in ecological and evolutionary biology (annual budget \$12.0 million)

- Program Director - NEON, the National Environmental Observatory Network.
- Served as Technical Coordinator for:
 - The cooperative funding agreement between NSF and UC Santa Barbara for the National Center for Ecological Analysis and Synthesis
 - The cooperative funding agreement between NSF and Michigan State University for the Center for Microbial Ecology, a Science and Technology Center
 - The cooperative funding agreement between NSF and the University New Mexico for the LTER Network Office
- Program development (e.g., new research competitions)
 - Includes organization and planning of workshops, presentations at national meetings, etc.
 - Develop and implement policy on program management within NSF
 - Recruit and train rotators to serve as Program Directors in the Ecology Program
- Directorate for Biological Sciences representative for 2001-2002 STC competition

INTERAGENCY ACTIVITIES WHILE AT NSF (1992-2003):

- Committee on Environment and Natural Resources
- Subcommittee on National Environmental Monitoring and Research Network
- EPA-STAR interagency working group
- Interagency working group on Terrestrial Ecology and Global Change (TECO) competition (NSF, DoE, USDA, NASA, EPA)
- NSF-NIH Technical Advisory Group for International Cooperative Biodiversity Groups
- NSF-NIH working group on Biodiversity and the Ecology of Emerging Diseases
- LTER liaison for the Global Fiducials Program – a joint activity with the Intelligence community for use of classified remote sensing images for long-term ecological research

PROFESSIONAL AFFILIATIONS:

American Institute of Biological Sciences

Editorial Board Member, *BioScience* 1998-

Editor-in-Chief, *BioScience* 2016-
American Association for the Advancement of Science
Elected Fellow, AAAS 2012
Ecological Society of America
Editorial Board Member, *Conservation Ecology* 1996-2003
Vice Chair, Chair, Vegetation Section 2001-2003
Vice Chair, Chair, Long-term Studies Section 2004-2008
Member, ESA Visions Committee 2003-2004
Member, ESA Rapid Response Team 2004-2012, 2015-
Member, Cooper Award Committee 2004-2006
Chair, Editor-in-Chief of *Ecology* Review Committee 2004,
2009 Chair, Publications Committee 2006-2011
Chair, USGS GAP Analysis Review Panel 2008
Editorial Board Member, *Ecosphere* 2012-2016
Editorial Board Member, *Ecology/Ecological Monographs* 2017-
President-Elect, President, Past-President Ecological Society of America
2011-2014
Vice President for Public Affairs 2014-2015
Publication Transitions Committee 2014-2015
Elected Fellow, Ecological Society of America 2016
ESA Distinguished Service Citation 2018
Member, Nominations Committee 2020
International Association for Vegetation Science
Secretary, North American Section 1991-1993
Associate Editor, *Journal of Vegetation Science* 1992-1996
Book Review Editor, *Journal of Vegetation Science*
2004-2012 American Geophysical Union
British Ecological Society
Editorial Board Member, *Journal of Ecology* 2005-2008
International Association for Landscape Ecology
Secretary, North American Section 1992-1994
Editorial Board Member, *Community Ecology* 2000-2003
Editorial Board Member, *Oecologia* 2008-2016
LTER Network
Member, LTER Science Council 2003-2011
Member, LTER Executive Committee 2004-2007 (elected)
Chair-elect (2010), Chair (2011-2014) LTER Science Council and Executive
Board
President, Association of Ecosystem Research Centers 2005
National Ecological Observatory Network
Member, STEAC2 2016-2019
Member, Observatory Director/Chief Scientist Search Committee
2017 INTECOL, Governing Board 2020-

GRADUATE STUDENTS:

University of Oklahoma

Sabine Klahr – MS (University of Utah)
Susan Glenn – PhD (Gloucester County College)
Ernie Steinhauer – PhD (Massachusetts Audubon Society)
Bruce Hoagland – PhD (University of Oklahoma)

Arizona State University

Julie Ripplinger – PhD 2015 (co-advised with Janet

Franklin) University of New Mexico

Selene Báez - PhD 2008 (Escuela Politécnica Nacional, Quito, Ecuador) Laura (Calabrese) White – MS 2009 (nex+Gen Academy, Albuquerque) Michell Thomey – PhD 2012 – (California State University, Bakersfield) Sally Koerner – PhD 2012 (Assistant Professor, UNC Greensboro) Laura Ladwig – PhD 2014 (Assistant Professor, U Wisconsin-Oshkosh) Matt Petrie – PhD 2014 (Assistant Professor, UNLV)
Kina Murphy – PhD 2016 (Environmental Consultant, WCS)
Martina Suazo – MS 2016 (Plant Ecology Tech, US Forest Service) Sydney Jones – PhD 2017
Jenny Noble – PhD 2017 (CNM, Albuquerque)
Alec Carrigy – MS 2017 (Environmental Consultant, Alberta, Canada) Catherine Cumberland – PhD 2019 (co-advised with Ken Whitney) Andrea Lopez – MS 2020 (Lab Tech, NMSU)
Alesia Hallmark – PhD 2020 (Resident Manager, Sevilleta Field Station)
Brooke Wainwright – MS 2021 (PhD student, UC Davis)
Renee Brown – PhD current
Timothy Ohlert – PhD current
Elizabeth Fain – MS current
Mariah Patton – PhD current (co-advised with Jennifer Rudgers) Juan Camacho – MS current
Sasha Escamilla – MS current
Samantha Brodley – MS current

OTHER SYNERGISTIC ACTIVITIES:

2020 INTECOL Governing Board
2018- Faculty Affiliate, Global Drylands Center at Arizona State Univ
2014-2017 Co-Leader, NCEAS Community Dynamics Working Group
2010-2012 Faculty Co-Advisor for SEEDS Chapter at Arizona State Univ
2009- Faculty Member, F1000Opinions
2008- PI, Sevilleta REU Sites Program
2008 Hosted Regional SEEDS workshop at the Sevilleta LTER 2008
Hosted Regional LTER Symposium at UNM
2007-2008 NCEAS-sponsored Distributed Graduate Seminar
2005-2007 Lead PI for the LTER Planning Process
2005 Hosted annual SEEDS workshop at the Sevilleta LTER
2005- Faculty Advisor, UNM Biology SEEDS Chapter

2003-2004 NCEAS KNB Working group: North America-South Africa grasslands

EXTERNAL EXAMINER:

Bengt-Gunner Johanson – PhD, University of Umea, Sweden (1993)
Adrian Pyrke – PhD, University of Tasmania (1994)
Kristin Svavarsdottir – PhD, Lincoln University, New Zealand (1995)
Andrew Zacharek – MS, University of Tasmania (1996)
Matthew Appleby – MS, University of Tasmania (1998)
Andrew MacDougall – PhD, University of British Columbia (2004)
Michael Voysey – MS, University of Pretoria (2018)

BIOLOGY DEPARTMENT AND UNM COMMITTEES:

Biology Department Cell Biology Search Committee (2007)
Biology Department Graduate Student Selection Committee (2004-2006; 2015-2021; Chair, 2016, 2018, 2019, 2020)
Biology Department Diversity, Equity and Inclusion Committee (2021-2022; Co-Chair)
Biology Department Tenure and Promotion Committee (2007-2009; 2015-2017; Chair, 2009)
Biology Department Faculty Review Committee (2014-2015)
Biology Graduate Student Association Faculty Rep (2008-2010)
University Executive Research Advisory Committee (2008-2013; Chair 2011-2012)
Popejoy Dissertation Award Committee (2009)
Chair, Senior Ecologist Search Committee (2011-2012), Department of Biology
Member, Vice President for Research and Economic Development Search Committee (2012-2013)
Member, Regent's Professor Selection Committee, College of Arts and Sciences (2013)
Member, Vice President for Research Strategic Advisory Committee (2014) Chair, Quantitative Ecologist Search Committee (2013-2014), Department of Biology
Member, Distinguished Professor Selection Committee, Provost's Office (2017, 2018, 2020)
College of Arts and Sciences Sabbatical Committee (2020)
Member, Aquatic Ecologist Search Committee (2021), Department of Biology

RESEARCH INTERESTS:

Plant community dynamics, gradient models and gradient structure, the role of disturbance in communities, fire ecology, patch dynamics, grassland ecology, analysis of species distribution and abundance, local-regional interactions, productivity-diversity relationships, dynamics of aridland ecosystems, climate change impacts on aridland ecosystems

GRANTS:

- 2021 Collaborative Research: Understanding spatiotemporal dynamics of plant soil feedbacks: Consequences for shrub-grass interactions in a dryland ecotone. NSF - \$307,495 (6/1/2021-5/31/2025) PI: Jennifer Rudgers, CoPI: Scott Collins, Catherine Harris.
- 2020 REU Sites: Population, community and ecosystem dynamics in the Northern Chihuahuan Desert. NSF - \$288,764 (2/1/2020-1/31/2023) PI: Scott Collins.
- 2019 LTREB: Community reordering alters ecosystem processes in desert grassland. NSF - \$489,000 (5/15/2019-4/30/2024) PI: Scott Collins, CoPI: Jennifer Rudgers.
- 2019 COLLABORATIVE RESEARCH: LTREB RENEWAL: The role of ecological heterogeneity in a long-term grassland restoration experiment. NSF - \$600,000 (7/15/2019-6/30/2024) PI: Sara Baer, CoPI: John Blair, Scott Collins.
- 2019 Quantifying the microbial contribution to community recovery from drought. NSF - \$1,009,923 (8/15/2019-7/31/2023) PI: Jennifer Rudgers, CoPI: Scott Collins.
- 2019 Seasonal fire frequency and carbon sequestration in aridland ecosystems. US Forest Service RMRS - \$35,000 (6/1/19-12/31/21); PI: Scott Collins
- 2018 The Sevilleta Meteorological Network: Enhancing and expanding technological infrastructure to assess climate variability in dryland ecosystems. NSF - \$204,025 (9/1/2018-8/31/2022) PI: Renée Brown, CoPIs: Scott Collins, Don Natvig
- 2017 Quantifying the effects of species range shifts and management of post fire recovery on regional carbon dynamics in a changing climate. USDA - \$850,000 (7/1/2017-6/30/2020) PI: Matthew Hurteau, CoPIs: Marcy Litvak, Dan Krofchek, Scott Collins
- 2017 REU Site: Dynamics of aridland ecosystems in the northern Chihuahuan Desert. NSF - \$298,462 (2/1/2017-1/31/2020) PI: Scott Collins, CoPI: Amaris Swann
- 2017 RAPID: Impact of exceptional drought on transformation of a South African savanna grassland. NSF - \$70,439 (1/1/2017-12/31/2017) PI: Melinda Smith, CoPIs: Scott Collins, Alan Knapp, Sally Koerner, Deron Burkepile

- 2015 Collaborative Research: Parsing the effects of host specificity and geography on plant-fungal symbioses under climate change. NSF - \$1,089,436 (UNM portion \$406,128) (6/1/15-5/31/19); UNM PI: Jennifer Rudgers, CoPI: Scott Collins
- 2015 Sevilleta LTER V: Abiotic pulses and constraints: effects on dynamics and stability in an aridland ecosystem. NSF - \$1,960,000 (4/1/15-3/31/18); PI: Will Pockman, CoPIs: Scott Collins, Cliff Dahm, Marcy Litvak, Kristin Vanderbilt
- 2015 Interannual variability in net primary production. US Forest Service RMRS - \$92,999 (1/1/15-12/31/19); PI: Scott Collins
- 2013 Dissertation Research: Semiarid soil microbial response to global change. NSF - \$19,479 (4/15/13-4/14/15). PI: Laura Ladwig, CoPI: Scott Collins.
- 2013 Collaborative Research (U Wisconsin, UNM, UCSB): ABI Development: A toolbox for analysis of long-term ecological dynamics using the Kepler Workflow System. NSF - \$887,101 (UNM portion \$272,160) (4/15/13-3/31/17); UNM PI: Scott Collins.
- 2013 Sevilleta LTER V: Abiotic pulses and constraints: effects on dynamics and stability in an aridland ecosystem. NSF - \$1,960,000 (1/1/13- 12/31/14) plus supplements (2014 - \$12,000); PI: Scott Collins, CoPIs: Cliff Dahm, Marcy Litvak, Will Pockman, Kristin Vanderbilt.
- 2012 Student research and teaching improvements at the Sevilleta Field Station. NSF - \$96,750. (9/1/12-8/31/13). PI: Don Natvig, CoPIs: Scott Collins, Jennifer Johnson.
- 2012 Collaborative Research (Southern Illinois U, Kansas State, UNM): LTREB: The role of ecological heterogeneity in a long-term grassland restoration experiment. NSF – \$450,000 (7/1/12-6/30/17); PI: Sara Baer, CoPIs: John Blair, Scott Collins.
- 2012 Collaborative Research (CSU, UNM, U Oklahoma): Grassland sensitivity to climate change at local to regional scales: assessing the role of ecosystem attributes versus environmental context. NSF - \$3,755,556 (UNM portion \$1,079,257 plus \$16,000 for REU supplements) (1/15/12- 12/31/18); UNM PI: Scott Collins, CoPI: Will Pockman.
- 2011 Long-term carbon dynamics in aridland ecosystems. US Forest Service RMRS - \$148,000 (6/1/10-5/31/15); PI: Scott Collins, CoPIs: Marcy Litvak, Paulette Ford, Deb Finch, Matt Reeves.

- 2011 REU Sites: Pulse dynamics research in aridland ecosystems. NSF - \$565,896 (4/1/11-3/1/17); PI: Scott Collins, CoPI: Les McFadden.
- 2010 ULTRA-Ex: Collaborative research: Land and Water Use Decision Making and Ecosystem Services along a Southwestern Socio-Ecological Gradient. NSF - \$120,000. (9/1/10-6/30/14). PI: Scott Collins, CoPIs: Kristine Grimsrud, Cliff Dahm, Kristin Vanderbilt.
- 2010 RAPID: Ecosystem reconstruction under climate change conditions following fire. NSF - \$150,055. (6/1/10-5/31/12). PI: Scott Collins, CoPIs: Marcy Litvak, Will Pockman, Bob Sinsabaugh, Blair Wolf.
- 2010 Student research and teaching improvements at the Sevilleta Field Station. NSF - \$95,290. (10/1/09-9/30/10). PI: Don Natvig, CoPI: Scott Collins.
- 2009 Roots with a view: the eukaryotic microbial metatranscriptome of blue grama grass rhizosphere soils shows the way to transformational lignocellulose degrading technologies and elucidates carbon flux through aridland ecosystems. DOE Joint Genome Institute, Community Sequencing Program, 600 MB of sequencing (1/1/10-12/31/11). PI: A.J. Powell, CoPIs: B. Simmons, D.O. Natvig, S.L. Collins, R.L. Sinsabaugh, A. Porras-Alfaro, D. Martinez, C. Detter, R.A. Dean, J. Magnuson, R. Berka.
- 2009 Dissertation Research: Effects of global climate change, loss of mega herbivore biodiversity, and altered fire regimes on savanna grassland ecosystems. NSF - \$14,860 (5/1/09-4/30/11). PI: Sally Koerner, CoPI: Scott Collins.
- 2009 Collaborative Research (Yale, CSU, UNM, KSU): Convergence and contingencies in savanna grasslands (renewal). NSF - \$807,000 (UNM portion \$155,038) (2/1/09-1/31/12); UNM PI: Scott Collins.
- 2008 Collaborative research (UNM and UVa): Do vegetation-microclimate feedbacks promote shrub encroachment in the southwestern United States? NSF - \$553,989 (UNM portion \$289,008) (2/1/08-1/31/11); UNM PI: Marcy Litvak, CoPIs: Will Pockman, Scott Collins.
- 2008 Sevilleta LTER REU Sites Program. NSF - \$246,705 (3/1/08-2/28/11); PI: Scott Collins, CoPI: Les McFadden.
- 2008 Ecosystem consequences of precipitation extremes in semiarid grassland and shrubland. DoE/NICCR - \$374,829 (4/1/08-8/31/12); PI: Will Pockman, CoPIs: Scott Collins, Eric Small-Tilden.

- 2007 Renovations to increase residence capacity at the UNM Sevilleta Field Research Station. NSF - \$250,000 (10/15/07-10/14/10); PI: Scott Collins, CoPIs: Don Natvig, Will Pockman, Tim Lowery, Mike Friggens.
- 2006 Sevilleta LTER IV: Abiotic pulses and constraints: effects on dynamics and stability in an aridland ecosystem. NSF - \$4,920,000 (11/1/06- 10/31/12) plus supplements (2008 - \$101,163; 2009 - \$145,862; 2010 - \$112,221; 2011 - \$125,000; 2012 - \$140,000); PI: Scott Collins, CoPIs: Cliff Dahm, Marcy Litvak, Will Pockman, Kristin Vanderbilt.
- 2006 Track 1, GK-12: E-MRGE: Ecohydrogeology in the Middle Rio Grande Environment. NSF - \$1,663,165 (5/1/06-12/31/10); PI: Scott Collins, CoPIs: Laura Crossey, Douglas Earick.
- 2006 Enabling distributed network sensing of arid ecosystem adaptation resulting from global climate change. UNM-LANL - \$90,000 (6/1/2006- 8/31/2007); PI: Scott Collins, Luis Bettencourt; CoPIs: Aric Hagberg, Alejandro Aceves, Gabriel Huerta.
- 2005 Global change effects on grass-shrub interactions in an arid ecosystem. NSF - \$297,494 (7/15/05-6/30/09); PI: Joe Fargione, CoPIs: Scott Collins, Will Pockman.
- 2005 The nitrogen cycle of a semiarid grassland: a fungal loop? NSF - \$120,000 (7/1/05-6/30/06); PI: Robert Sinsabaugh, CoPIs: Scott Collins, Mike Allen, David Hanson.
- 2005 Collaborative Research (UNM, CSU, KSU, Yale): Convergence and contingencies in savanna grasslands. NSF - \$830,000 (UNM portion \$60,000) (9/1/05-8/31/08); UNM PI: Scott Collins.
- 2005 LTREB: Long-term ecosystem responses to more extreme precipitation patterns and warming. NSF - \$300,000 (5/1/05-4/30/10); PI: John Blair, CoPIs: Alan Knapp, Phil Fay, Scott Collins, Melinda Smith.
- 2004 Preparing the LTER Network for collaborative science, education and synthesis: a planning proposal. NSF - \$1,135,461 (9/1/04-3/31/08); PI: Scott Collins, Co-PIs: Barbara Benson, Dan Childers, Allison Whitmer.
- 2003 The Sevilleta Field Research Station: Infrastructure enhancements for high-quality water resources and wireless data transmission. NSF - \$76,270+\$25,424 UNM Match (3/1/04-10/31/08); PI: Don Natvig, CoPIs: Scott Collins, Will Pockman, Robert Parmenter, Cliff Dahm.

- 2003 Sevilleta Long-term Ecological Research Program. NSF - \$3,177,024 with supplements (11/1/02-10/31/08); PI: Scott Collins, Co-PIs: Will Pockman, Blair Wolf, Jim Gosz, Deb Peters, Robert Parmenter.
- 1997 Evaluating the role of resource heterogeneity in restoring grasslands. NSF - \$178,196 (4/1/97 to 9/30/00); PI: Alan Knapp, CoPIs: John Blair, Scott Collins.
- 1995 Diversity and stability in tallgrass prairie vegetation. \$8,837 - Kansas State University subcontract for NSF funded Long-term Ecological Research.
- 1994 Patterns of species diversity in the Konza Prairie landscape. \$8,837 - Kansas State University subcontract for NSF funded Long-term Ecological Research.
- 1994 Experimental analysis of species percolation through communities. NSF - \$147,000 (1/1/94 to 12/31/96); PI: Susan Glenn, CoPI: Scott Collins).
- 1992 Vegetation-environment relationships at Konza Prairie. \$7,957 - Kansas State University subcontract for NSF funded Long-term Ecological Research.
- 1991 Travel grant to Hungary to develop cooperative research. \$1,200 - National Science Foundation Division of International Programs.
- 1991 Interactive effects of fire and grazing on community dynamics at Konza Prairie. \$7,599 - Kansas State University subcontract for NSF funded Long-term Ecological Research.
- 1990 Spatial and temporal analysis of species abundance and distribution. \$12,513 - NSF PI: Scott Collins, CoPI: Susan Glenn.
- 1990 SGER: Phase-space ordination and the complexity of successional trajectories. \$18,674 - NSF PI: Scott Collins, CoPIs: Susan Glenn, Steward Pickett.
- 1990 Vegetation heterogeneity in the Konza Prairie landscape: patterns in space and time. \$10,569 - Kansas State University subcontract for NSF funded Long-term Ecological Research.
- 1989 Survey of permanent plots at Konza Prairie Research Natural Area. \$4,443 - Kansas State University subcontract for NSF funded Long-term Ecological Research.

- 1988 Experimental analysis of patch dynamics in tallgrass prairie vegetation. NSF Doctoral Dissertation Improvement Grant. \$2,689. PI: Susan Glenn, CoPI: Scott Collins.
- 1988 Effects of habitat structure on survival and growth of tree seedlings in hemlock-hardwood forest. Edmund Niles Huyck Preserve, Inc. \$1,550.
- 1987 Plant community dynamics on soil disturbances on burned and unburned tallgrass prairie. Junior Faculty Summer Research Fellowship. University of Oklahoma. \$4,000.
- 1987 Habitat structure of tree seedlings in hemlock-hardwood forest. Edmund Niles Huyck Preserve, Inc. \$1,600.
- 1985 Plant colonization of small-scale disturbances in a native prairie. Junior Faculty Summer Research Fellowship. University of Oklahoma. \$3,500.
- 1984 Effects of ecosystem fragmentation on forest vegetation in the New Jersey Pine Barrens. Victoria Foundation. \$20,000. PI: Ralph Good, CoPI: Scott Collins.

JOURNAL PUBLICATIONS:

- Collins, S.L. and W.H. Blackwell. 1979. Bassia (Chenopodiaceae) in North America. **Sida** 8: 57-64.
- Collins, S.L., J.L. Vankat and J.V. Perino. 1979. Potential tree species dynamics in the arbor vitae association of Cedar Bog, a west-central Ohio fen. **Bulletin of the Torrey Botanical Club** 106: 290-298.
- Collins, S.L., P.G. Risser and E.L. Rice. 1981. Ordination and classification of mature bottomland forests in northcentral Oklahoma. **Bulletin of the Torrey Botanical Club** 108: 152-165.
- Collins, S.L. 1981. A comparison of nest-site and perch-site vegetation structure for seven species of warblers. **Wilson Bulletin** 93: 542-547.
- Collins, S.L., J.V. Perino and J.L. Vankat. 1982. Woody species and microtopography in the bog meadow association of Cedar Bog, a west-central Ohio fen. **American Midland Naturalist** 108: 245-249.
- Adams, D.E., R.C. Anderson and S.L. Collins. 1982. Differential response of woody and herbaceous species to summer and winter burning in an Oklahoma grassland. **Southwestern Naturalist** 27: 55-61.

Collins, S.L., F.C. James and P.G. Risser. 1982. Habitat relationships of wood warblers (Parulidae) in northern central Minnesota. **Oikos** 39: 50-58.

Heinrich, B. and S.L. Collins. 1983. Caterpillar leaf damage and the game of hide-and-seek with birds. **Ecology** 64: 592-602.

Collins, S.L. and D.E. Adams. 1983. Succession in grasslands: thirty-two years of change in a central Oklahoma tallgrass prairie. **Vegetatio** 51: 181-190.

Collins, S.L. 1983. Geographic variation in habitat structure of the Black-throated green Warbler (*Dendroica virens*). **Auk** 100: 382-389.

Collins, S.L. 1983. Geographic variation of habitat structure for the wood warblers in Maine and Minnesota. **Oecologia** 59: 246-252.

Collins, S.L. and G.E. Uno. 1983. The effect of early spring burning on vegetation in Buffalo wallows. **Bulletin of the Torrey Botanical Club** 110: 474-481.

Polley, H.W. and S.L. Collins. 1984. Relationships between vegetation and environment in buffalo wallows. **American Midland Naturalist** 112: 178-186.

Dooley, K.L. and S.L. Collins. 1984. Ordination and classification of western oak forests in Oklahoma. **American Journal of Botany** 71: 1221-1227.

Collins, S.L. and G.E. Uno. 1985. Seed predation, seed dispersal and disturbance: a comment. **American Naturalist** 125: 866-872.

Collins, S.L. and S.C. Barber. 1985. The effects of disturbance on diversity in mixed grass prairie. **Vegetatio** 64: 87-94.

Collins, S.L. and R.E. Good. 1987. The seedling regeneration niche: habitat structure of tree seedlings in oak-pine forest. **Oikos** 48: 89-98.

Pickett, S.T.A., S.L. Collins and J.J. Armesto. 1987. A hierarchical consideration of models and mechanisms of succession. **Vegetatio** 69: 109-114.

Collins, S.L. and R.E. Good. 1987. Canopy-ground layer relationships in New Jersey Pine Barrens oak-pine forests. **American Midland Naturalist** 117: 280-288.

Pickett, S.T.A., S.L. Collins and J.J. Armesto. 1987. Models, mechanisms and pathways of succession. **Botanical Reviews** 53: 335-371.

Collins, S.L. 1987. Interaction of disturbances in tallgrass prairie: a field

experiment. **Ecology** 68: 1243-1250.

Uno, G.E. and S.L. Collins. 1987. Plant succession on granite outcrops in southwestern Oklahoma. **Bulletin of the Torrey Botanical Club** 114: 387-392.

Collins, S.L., J.A. Bradford and P.L. Sims. 1988. Succession and fluctuation in Artemisia dominated grassland. **Vegetatio** 89-99.

Gibson, D.J., S.L. Collins and R.E. Good. 1988. Effects of ecosystem fragmentation on vegetation in oak-pine forests in the New Jersey Pine Barrens. **Forest Ecology and Management** 25: 105-122.

Collins, S.L. 1988. Pattern and association of herbaceous layer species in three central Maine forests. **Castanea** 53: 271-285.

Pickett, S.T.A., J. Kolasa, J.J. Armesto and S.L. Collins. 1989. The ecological concept of disturbance and its expression at various hierarchical levels. **Oikos** 54: 131-139.

Collins, S.L., G. Mitchell and S. Klahr. 1989. Vegetation-environment relationships in granite outcrop plant communities. **American Midland Naturalist** 122: 339-348.

Collins, S.L. 1989. Experimental analysis of patch dynamics and community heterogeneity in tallgrass prairie. **Vegetatio** 85: 57-66.

Glenn, S.M. and S.L. Collins. 1990. Patch structure in tallgrass prairies: dynamics of satellite species. **Oikos** 57: 329-336.

Collins, S.L. 1990. Habitat relationships and survivorship of tree seedlings in hemlock-hardwood forests. **Canadian Journal of Botany** 68: 790-797.

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INVITED PRESENTATIONS:

1982 Illinois Natural History Survey

1982 University of Arkansas

1986 Oklahoma State University

1987 USDA-ARS Range Research Station, Woodward, Oklahoma

1988 University of Minnesota Forestry and Biological Station

1989 University of West Florida

University of Minnesota Forestry and Biological
Station

1990 University of Nebraska

1991 Hungarian Academy of Sciences, Vacratot, Hungary

1992 University of Colorado

1993 Miami University

University of Umea, Sweden

University of Maryland

1994 Penn State University

University of Arizona

University of Virginia, Blandy Experimental Farm

University of Kansas

Colorado State University
1995 Arizona State University
University of Maryland
1996 University of California-Riverside
Kansas State University
1997 Syracuse University
Texas A&M University
University of Kyoto
University of Hokkaido
1998 University of Virginia, Blandy Experimental Farm
Northern Arizona University
2000 University of Washington
University of Vermont
University of California-Davis
University of Nebraska
2001 Utah State University
Desert Research Institute
Rutgers University
2002 Cornell University
Arizona State University
University of New Mexico
2004 Michigan State University
University of California-Irvine
2006 Miami University
St Olaf's College
Colorado State University
2008 University of Rhode Island
Kellogg Biological Station
University of Oklahoma
2009 University of Arizona
Washington University
University of Idaho
2010 University of Wisconsin
Texas Tech University
2011 Institute of Ecological Botany, Vacratot, Hungary
Northern Arizona University
2012 University of Virginia
Chicago Botanic Garden
2013 Georgetown University
Southern Illinois University
University of New Mexico (Invited Plenary Speaker for Research
Day) 2014 Texas A&M University
Colorado State University
2015 University of New Mexico
Arizona State University

2017 Lanzhou University, Lanzhou, China
2018 Institute of Botany, Chinese Academy of Sciences, Beijing
2019 New Mexico Tech
University of Nevada, Las Vegas

PAPERS PRESENTED AT SCIENTIFIC MEETINGS:

Ecological Society of America: 1980(2), 1981, 1982, 1983, 1984, 1985, 1986(2), 1987(2), 1988(2), 1989(3), 1990, 1991(4), 1992, 1993(2), 1994(3), 1995(3), 1996, 1997, 1998(2), 1999(2), 2000, 2001(2), 2002(2), 2003(3), 2004(5), 2005(6), 2006(5), 2007(9), 2008(5), 2009(7), 2010(5), 2011(9), 2012(6), 2013(9), 2014(6), 2015(9), 2016(6), 2017(7), 2018(9), 2019(3), 2020(14), 2021(6) North American Benthological Society: 2004, 2005
Southwestern Association of Naturalists: 1978, 1980(2), 1981(3), 1982, 1983, 1986, 1987(3)
Botanical Society of America: 1985, 1988
British Ecological Society: 1985, 1987, 2008, 2014
International Association for Vegetation Science: 1985, 1987, 1991(2), 1998, 2009, 2011(2), 2013(3), 2018(Plenary)
International Botanical Congress: 1987
Tenth North American Prairie Conference: 1986
Oklahoma Academy of Science: 1977, 1979(2), 1982, 1989
New Jersey Academy of Science: 1984
US-International Association for Landscape Ecology: 1989, 1990(2), 1994, 1996 IALE World Congress: 1991(2)
Landscape Ecology and Regional Planning: 1990
International Symposium on Community Ecology & Conservation Biology: 1994 Society for Conservation Biology: 2007
American Geophysical Union: 2007, 2008(2), 2009, 2010, 2011, 2012, 2013(3), 2014(4), 2015(2), 2016(4), 2017(3), 2018(3), 2019(3), 2020(3), 2021(3)
Association of American Geographers 2010
European Geophysical Union 2015(2)