# **ROBERT L. SCHOOLEY**

Department of Natural Resources and Environmental Sciences University of Illinois 1102 S. Goodwin Avenue Urbana, IL 61801 Phone: 217-244-2729 E-mail: schooley@illinois.edu

### **Professional Positions**

2021-present	Professor and Head, Department of Natural Resources and Environmental Sciences,
	University of Illinois
2020-2021	Professor and Interim Head, Department of Natural Resources and Environmental Sciences,
	University of Illinois
2019-2020	Professor and Associate Head, Department of Natural Resources and Environmental Sciences,
	University of Illinois
2012-2019	Associate Professor, Department of Natural Resources and Environmental Sciences,
	University of Illinois
2005-2012	Assistant Professor, Department of Natural Resources and Environmental Sciences,
	University of Illinois
2006-present	Affiliate Faculty, Program in Ecology, Evolution, and Conservation Biology,
	University of Illinois
2006-present	Affiliate Faculty, Illinois Natural History Survey, Prairie Research Institute,
	University of Illinois
2002-2005	Postdoctoral Associate, Department of Wildlife Ecology and Conservation,
	University of Florida
1991-1995	Research Coordinator, Department of Biology, Colorado State University

## Education

- Ph.D. Ecology, Colorado State University (2002)
- M.S. Wildlife Management, University of Maine (1990)
- B.S. Wildlife Science, Pennsylvania State University, High Distinction (1986)

#### **Professional Development and Leadership Training**

- 2021-2022. LEAD21. Leadership Development for the 21<sup>st</sup> Century: Linking Research, Academics, and Extension. Twelve-month process including three week-long sessions focused on developing leaders in land grant institutions. Focal areas included Communicating Effectively, Managing Conflict, Leading Change, Fostering Collaboration, and Valuing Diversity.
- 2020-2021. Academic Leadership Series, Office of the Provost, University of Illinois. Designed for new Executive Officers to share best practices and discuss Leadership, Financial and Strategic Planning, and Faculty Development.
- 2020. Senior Leadership Retreat, August 17-21, 2020, Office of the Provost, University of Illinois. Key topics included On Being a Campus Leader; Stewarding Resources; Diversity, Equity, and Inclusion; Supporting Students, Faculty, and Staff; and Dealing with Crisis.

# **Teaching Experience and Honors**

# Courses Taught

Department of Natural Resources and Environmental Sciences, University of Illinois Wildlife Population Ecology, NRES 407
Mammalogy, IB 462/NRES 442
Vertebrate Natural History, NRES 368
Wildlife Field Techniques, NRES 285-WFT
Wildlife Conservation and Communities—Botswana, NRES 285-WCB
Wildlife Management in Tanzania, NRES 285-WMT
Behavioral Landscape Ecology, NRES 499-BLE (Graduate)
Sources, Sinks, and Sustainability, NRES 512-SSS (Graduate)
Writing Science, NRES 512-WS (Graduate)
NRES Professional Orientation, NRES 594 (Graduate)
Graduate Teaching Assistant, Department of Biology, Colorado State University Mammalogy
Biology of Organisms; Animal Biology Laboratory
Population and Organismal Ecology (Graduate)
Community and Ecosystem Ecology (Graduate)
Graduate Teaching Assistant, Department of Wildlife Ecology, University of Maine
Wildlife-Habitat Relationships
Wildlife Population Management
Wildlife Nutrition (Graduate)

## **Teaching Awards and Recognition**

2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019. Recognized as Excellent Teacher, University of Illinois.

- 2014. NACTA Teacher Fellow Award, North American Colleges and Teachers of Agriculture.
- 2013. College Faculty Award for Excellence in Teaching; College of Agricultural, Consumer, and Environmental Sciences; University of Illinois.
- 2002. Best Graduate Teaching Assistant Award, Department of Biology, Colorado State University.

## Presentations at Teaching Conferences

- Hansen, A. C., A. C. Dilger, N. J. Engeseth, B. Fiese, K. K. Freeman Bost, D. J. Miller, R. L. Schooley, C. D. Suski, and L. Kramer. 2016. Co-curricular high impact learning practices: What are they and how do we document them? Annual meeting of North American Colleges and Teachers of Agriculture, University of Hawaii, Manoa.
- Schooley, R. L. 2014. Building understanding of quantitative approaches for undergraduates in natural resources. Annual meeting of North American Colleges and Teachers of Agriculture, Montana State University, Bozeman.

### **Teaching Grants**

Schooley, R. L. 2016. Arlys Conrad International Teaching Enhancement Grant. College of Agricultural, Consumer, and Environmental Sciences; University of Illinois. \$9,249. "Wildlife Conservation and Communities in Botswana".

## Mentoring of Graduate Students and Postdoctoral Associates

#### **Current Faculty Advisor**

Nathan Alexander, PhD, Natural Resources and Environmental Sciences (2017-present). Casey Wagnon, PhD, Natural Resources and Environmental Sciences (2017-present). Kieran Andreoni, MS, Natural Resources and Environmental Sciences (2021-present).

#### Past Faculty Advisor

Bradley Cosentino. Postdoc, Natural Resources and Environmental Sciences (2011-2012).
Jennifer Duggan. PhD, Animal Biology (2007-2011; co-advised by Ed Heske).
Bradley Cosentino. PhD, Ecology, Evolution, & Conservation Biology (2007-2011; co-advised by Chris Phillips).
Adam Ahlers. PhD, Natural Resources and Environmental Sciences (2010-2015; co-advised by Ed Heske).
Elizabeth Lehrer (née Watson). MS, Natural Resources and Environmental Sciences (2006-2009).
Lisa Cotner (née Bucci). MS, Natural Resources and Environmental Sciences (2007-2009).
Adam Ahlers. MS, Natural Resources and Environmental Sciences (2007-2009).
Adam Ahlers. MS, Natural Resources and Environmental Sciences (2010-2012).
Christi Wortz. MS (online), Natural Resources and Environmental Sciences (2011-2012).
Stacy Beyer. MS, Natural Resources and Environmental Sciences (2011-2012).
Stacy Beyer. MS, Natural Resources and Environmental Sciences (2011-2014).
Patrick Wolff. MS, Natural Resources and Environmental Sciences (2011-2014; co-advised by Ed Heske).
Torrey Rodgers. MS, Animal Biology (2011-2014; co-advised by Ed Heske).
W. Brian Berry. MS, Natural Resources and Environmental Sciences (2013-2016).
Julia Nawrocki. MS, Natural Resources and Environmental Sciences (2013-2016).
Julia Nawrocki. MS, Natural Resources and Environmental Sciences (2013-2016).
Julia Nawrocki. MS, Natural Resources and Environmental Sciences (2014-2017).
Alyson Cervantes, MS, Natural Resources and Environmental Sciences (2018-2021).

# **Research Publications**

#### **Peer-reviewed Papers**

- 75. Alexander, N., B. J. Cosentino, and R. L. Schooley. 2022. Testing the niche reduction hypothesis for a fossorial rodent (*Geomys bursarius*) experiencing agricultural intensification. Ecology and Evolution 12:e9559.
- 74. Schooley, R. L., B. T. Bestelmeyer, C. J. Wagnon, and J. M. Coffman. 2021. Shrub encroachment, landscape restoration, and intraguild predation. Journal of Arid Environments 193:104588.
- 73. Cardenas, P. A., E. Christensen, M. Ernest, D. Lightfoot, R. L. Schooley, P. Stapp, and J. A. Rudgers. 2021. Declines in rodent abundance and diversity track regional climate variability in North American drylands. Global Change Biology 27:4005-4023.
- 72. Douglas, M. R., S. M. Mussmann, T. K. Chafin, W. J. B. Anthonysamy, M. A. Davis, M. P. Mulligan, R. L. Schooley, W. Louis, and M. E. Douglas. 2021. Population connectivity in voles (*Microtus* sp.) as a gauge for tall grass prairie restoration in midwestern North America. PLoS ONE 16(12): e0260344.
- 71. Iwaniec, D. C. et al. 2021. Connectivity: insights from the U.S. Long Term Ecological Research Network. Ecosphere 12(5):e03432.
- 70. Andreoni, K. J., C. J. Wagnon, B. T. Bestelmeyer, and R. L. Schooley. 2021. Exotic oryx interact with shrub encroachment in the Chihuahuan Desert. Journal of Arid Environments 184:104302.
- 69. Wagnon, C. J., R. L. Schooley, and B. J. Cosentino. 2020. Shrub encroachment creates a dynamic landscape of fear for desert lagomorphs via multiple pathways. Ecosphere 11(9):e03240. (Invited paper for Special Feature on Dynamic Deserts).
- Cosentino, B. J., R. L. Schooley, B. T. Bestelmeyer, H. Campos, and L. M. Burkett. 2019. Does habitat disturbance promote geographical parthenogenesis in whiptail lizards? Evolutionary Ecology 33:839-853.
- 67. Bestelmeyer, B. T., L. M. Burkett, L. Lister, J. R. Brown, and R. L. Schooley. 2019. Collaborative approaches to strengthen the role of science in rangeland conservation. Rangelands 41:218-226.

- 66. Nawrocki, J. A., R. L. Schooley, and M. P. Ward. 2019. When good animals love restored habitat in bad neighborhoods: ecological traps for eastern cottontails in agricultural landscapes. Biodiversity and Conservation 28:953-973.
- 65. Schooley, R. L., B. T. Bestelmeyer, and A. Campanella. 2018. Shrub encroachment, productivity pulses, and core-transient dynamics of Chihuahuan Desert rodents. Ecosphere 9(7) e02330 (Invited paper for Special Feature on Dynamic Deserts).
- 64. Bestelmeyer, B. T., D. P. C. Peters, S. R. Archer, D. M. Browning, G. S. Okin, R. L. Schooley, and N. P. Webb. 2018. The grassland-shrubland regime shift in the southwestern United States: misconceptions and their implications for management. BioScience 68:678-690 (Invited paper for Special Feature on Integrating Complex Landscapes).
- 63. Dornelas M., L. H. Antão, F. Moyes, A. E. Bates, A. E. Magurran, and BioTIME consortium (200+ authors including R. L. Schooley). 2018. BioTIME: a database of biodiversity time series for the Anthropocene. Global Ecology and Biogeography 27:760-768.
- 62. Williams, R. E., B. A. Roundy, A. Hulet, R. F. Miller, R. J. Tausch, J. C. Chambers, J. Matthews, R. Schooley, and D. Eggert. 2017. Pretreatment tree dominance and conifer removal treatments affect plant succession in sagebrush communities. Rangeland Ecology and Management 70:759-773.
- 61. Berry, W. B., R. L. Schooley, and M. P. Ward. 2017. Landscape context affects use of restored grasslands by mammals in a dynamic agroecosystem. American Midland Naturalist 177:165-182.
- 60. DaVanon, K. A, L. K. Howard, K. E. Mabry, R. L. Schooley, and B. T. Bestelmeyer. 2016. Effects of exurban development on trophic interactions in a desert landscape. Landscape Ecology 31:2343-2354.
- 59. Lehrer, E. W., R. L. Schooley, J. M. Nevis, R. J. Kilgour, P. J. Wolff, and S. B. Magle. 2016. Happily ever after? Fates of translocated nuisance woodchucks in the Chicago metropolitan area. Urban Ecosystems 19:1389-1403.
- 58. Ahlers, A. A., E. J. Heske, and R. L. Schooley. 2016. Prey distribution, potential landscape supplementation, and urbanization affect occupancy dynamics of American mink in streams. Landscape Ecology 31:1601-1613.
- 57. Wolff, P. J., C. A. Taylor, E. J. Heske, and R. L. Schooley. 2016. Predation risk for crayfish differs between drought and nondrought conditions. Freshwater Science 35:91-102.
- 56. Cosentino, B. J., R. L. Schooley, B. T. Bestelmeyer, A. J. McCarthy, and K. Sierzega. 2015. Rapid genetic restoration of a keystone species exhibiting delayed demographic response. Molecular Ecology 24:6120-6133.
- 55. Rodgers, T. W., J. Giacalone, E. J. Heske, N. C. Pawlikowski, and R. L. Schooley. 2015. Communal latrines act as potentially important communication centers in ocelots *Leopardus pardalis*. Mammalian Biology 80:380-384.
- 54. Ahlers, A. A., L. A. Cotner, P. J. Wolff, M. A. Mitchell, E. J. Heske, and R. L. Schooley. 2015. Summer precipitation predicts the spatial distributions of semiaquatic mammals. PLoS ONE 10(8): e0135036. doi:10.1371/journal.pone.0135036
- 53. Beyer, S. E., C. A. Phillips, and R. L. Schooley. 2015. Canopy cover and drought influence the landscape epidemiology of an amphibian chytrid fungus. Ecosphere 6(5):art78. http://dx.doi.org/10.1890/ES14-00263.1.
- 52. Ahlers, A. A., M. A. Mitchell, J. P. Dubey, R. L. Schooley, and E. J. Heske. 2015. Risk factors for *Toxoplasma gondii* exposure in semiaquatic mammals in a freshwater ecosystem. Journal of Wildlife Diseases 51:488-492.
- 51. Rodgers, T. W., J. Giacalone, E. J. Heske, J. E. Janečka, P. A. Jansen, C. A. Phillips, and R. L. Schooley. 2015. Socio-spatial organization and kin structure in ocelots from integration of camera trapping and noninvasive genetics. Journal of Mammalogy 96:120-128.
- 50. Wolff, P. J, C. A. Taylor, E. J. Heske, and R. L. Schooley. 2015. Habitat selection by American mink during summer is related to hotspots of crayfish prey. Wildlife Biology 21:9-17.
- 49. Rodgers, T. W., J. Giacalone, E. J. Heske, J. E. Janečka, C. A. Phillips, and R. L. Schooley. 2014. Comparison of noninvasive genetics and camera trapping for estimating population density of ocelots (*Leopardus pardalis*) on Barro Colorado Island, Panama. Tropical Conservation Science 74:690-705.

- McAllister, M. M., R. L. Schooley, B. T. Bestelmeyer, J. M. Coffman, and B. J. Cosentino. 2014. Effects of grassland restoration efforts on mound-building ants in the Chihuahuan Desert. Journal of Arid Environments 111:79-83.
- 47. Cosentino, B. J., R. L. Schooley, B. T. Bestelmeyer, J. F. Kelly, and J. M. Coffman. 2014. Constraints and time lags for recovery of a keystone species (*Dipodomys spectabilis*) after landscape restoration. Landscape Ecology 29:665-675.
- 46. Coffman, J. M., B. T. Bestelmeyer, J. F. Kelly, T. F. Wright, and R. L. Schooley. 2014. Restoration practices have positive effects on breeding bird species of concern in the Chihuahuan Desert. Restoration Ecology 22:336-344.
- 45. Mulligan, M. P., Schooley R. L., and M. P. Ward. 2013. Effects of connectivity and regional dynamics on restoration of small mammal communities in Midwestern grasslands. Restoration Ecology 21:678-685.
- 44. Fredebaugh-Siller, S. L., C. D. Suski, Z. C. Zuckerman, and R. L. Schooley. 2013. Ecological correlates of stress for a habitat generalist in a biofuels landscape. Canadian Journal of Zoology 91:853-858.
- Cosentino B. J., R. L. Schooley, B. T. Bestelmeyer, and J. M. Coffman. 2013. Response of lizard community structure to desert grassland restoration mediated by a keystone rodent. Biodiversity and Conservation 22:921-935.
- 42. Duggan, J. M., E. J. Heske, and R. L. Schooley. 2012. Gap-crossing decisions by adult Franklin's ground squirrels in agricultural landscapes. Journal of Mammalogy 93:1231-1239.
- 41. Cosentino, B. J., C. A. Phillips, R. L. Schooley, W. H. Lowe, and M. R. Douglas. 2012. Linking extinctioncolonization dynamics to genetic structure in a salamander metapopulation. Proceedings of the Royal Society B 279:1575-1582.
- 40. Lehrer, E. W., R. L. Schooley, and J. K. Whittington. 2012. Survival and anti-predator behavior of woodchucks along an urban-agricultural gradient. Canadian Journal of Zoology 90:12-21.
- 39. Schooley, R. L., L. A. Cotner, A. A. Ahlers, E. J. Heske, and J. M. Levengood. 2012. Monitoring site occupancy for American mink in its native range. Journal of Wildlife Management 76:824-831.
- 38. Duggan, J. M., R. L. Schooley, and E. J. Heske. 2011. Modeling occupancy dynamics of a rare species, Franklin's ground squirrel, with limited data: are simple connectivity metrics adequate? Landscape Ecology 26:1477-1490.
- Cosentino, B. J., R. L. Schooley, and C. A. Phillips. 2011. Spatial connectivity moderates the effect of predatory fish on salamander metapopulation dynamics. Ecosphere 2(8):art95. doi: 10.1890/ES11-00111.1.
- 36. Schooley, R. L., and L. C. Branch. 2011. Habitat quality of source patches and connectivity in fragmented landscapes. Biodiversity and Conservation 20:1611-1623.
- 35. Cosentino, B. J., R. L. Schooley, and C. A. Phillips. 2011. Connectivity of agroecosystems: dispersal costs can vary among crops. Landscape Ecology 26:371-379.
- 34. Cotner, L. A., and R. L. Schooley. 2011. Habitat occupancy by riparian muskrats reveals tolerance to urbanization and invasive vegetation. Journal of Wildlife Management 75:1637-1645.
- 33. Duggan, J. M., E. J. Heske, R. L. Schooley, A. Hurt, and A. Whitelaw. 2011. Comparing detection dog and livetrapping surveys for a cryptic rodent. Journal of Wildlife Management 75:1209-1217.
- 32. Ahlers, A. A., M. A. Mitchell, R. L. Schooley, E. J. Heske, and J. M. Levengood. 2011. Hematologic and blood chemistry reference values for free-ranging muskrats (*Ondatra zibethicus*). Journal of Wildlife Diseases 47:685-689.
- 31. Ahlers, A. A., E. J. Heske, R. L. Schooley, and M. A. Mitchell. 2010. Home ranges and space use of muskrats *Ondatra zibethicus* in restricted linear habitats. Wildlife Biology 16:400-408.
- 30. Lehrer, E. W., and R. L. Schooley. 2010. Space use of woodchucks across an urbanization gradient within an agricultural landscape. Journal of Mammalogy 91:1342-1349.
- 29. Cosentino, B. J., R. L. Schooley, and C. A. Phillips. 2010. Wetland hydrology, area, and isolation influence spatial turnover of the painted turtle, *Chrysemys picta*. Landscape Ecology 25:1589-1600.
- Ahlers, A. A., R. L. Schooley, E. J. Heske, and M. A. Mitchell. 2010. Effects of flooding and riparian buffers on survival of muskrats across a flashiness gradient. Canadian Journal of Zoology 88:1011-1020.

- Lehrer, E. W., S. L. Fredebaugh, R. L. Schooley, and N. E. Mateus-Pinilla. 2010. Prevalence of antibodies to *Toxoplasma gondii* in woodchucks across an urban-rural gradient. Journal of Wildlife Diseases 46:977-980.
- 26. Schooley, R. L., and L. C. Branch. 2009. Enhancing the area-isolation paradigm: habitat heterogeneity and metapopulation dynamics of a rare wetland mammal. Ecological Applications 19:1708-1722.
- 25. Schooley, R. L., and L. C. Branch. 2007. Spatial heterogeneity in habitat quality and cross-scale interactions in metapopulations. Ecosystems 10:846-853 (Invited paper for special feature).
- 24. Schooley, R. L. 2006. Spatial heterogeneity and characteristic scales of species-habitat relationships. BioScience 56:533-537.
- 23. Schooley, R. L., and L. C. Branch. 2006. Space use by round-tailed muskrats in isolated wetlands. Journal of Mammalogy 87:495-500.
- 22. Schooley, R. L., and L. C. Branch. 2005. Survey techniques for determining occupancy of isolated wetlands by round-tailed muskrats. Southeastern Naturalist 4:745-756.
- 21. Schooley, R. L., and J. A. Wiens. 2005. Spatial ecology of cactus bugs: area constraints and patch connectivity. Ecology 86:1627-1639.
- 20. Schooley, R. L., and L. C. Branch. 2005. Limited perceptual range and anemotaxis in marsh rice rats *Oryzomys palustris*. Acta Theriologica 50:59-66.
- 19. Schooley, R. L., and J. A. Wiens. 2004. Movements of cactus bugs: patch transfers, matrix resistance, and edge permeability. Landscape Ecology 19:801-810.
- 18. Olden, J. D., R. L. Schooley, J. B. Monroe, and N. L. Poff. 2004. Context-dependent perceptual ranges and their relevance to animal movements in landscapes. Journal of Animal Ecology 73:1190-1194.
- 17. Schooley, R. L., and J. A. Wiens. 2003. Finding habitat patches and directional connectivity. Oikos 102:559-570.
- Schooley, R. L., and J. A. Wiens. 2003. Spatial patterns, density dependence, and demography in the harvester ant, *Pogonomyrmex rugosus*, in semiarid grasslands. Journal of Arid Environments 53:183-196.
- 15. Schooley, R. L., and J. A. Wiens. 2001. Dispersion of kangaroo rat mounds at multiple scales in New Mexico, USA. Landscape Ecology 16:267-277.
- 14. Schooley, R. L., B. T. Bestelmeyer, and J. F. Kelly. 2000. Influence of small-scale disturbances by kangaroo rats on Chihuahuan Desert ants. Oecologia 125:142-149.
- 13. Schooley, R. L., and B. T. Bestelmeyer. 2000. Movements during colony founding by queens of the honey ant (*Myrmecocystus mimicus* Wheeler). American Midland Naturalist 144:439-444.
- 12. Bestelmeyer, B. T., and R. L. Schooley. 1999. The ants of the southern Sonoran desert: community structure and the role of trees. Biodiversity and Conservation 8:643-657.
- 11. Van Horne, B., R. L. Schooley, and P. B. Sharpe. 1998. Influence of habitat, sex, age and drought on the diet of Townsend's ground squirrels. Journal of Mammalogy 79:521-537.
- Van Horne, B., G. S. Olson, R. L. Schooley, J. G. Corn, and K. P. Burnham. 1997. Effects of drought and prolonged winter on Townsend's ground squirrel demography in shrubsteppe habitats. Ecological Monographs 67:295-315.
- 9. Wiens, J. A., R. L. Schooley, and R. D. Weeks, Jr. 1997. Patchy landscapes and animal movements: do beetles percolate? Oikos 78:257-264.
- Van Horne, B., R. L. Schooley, S. T. Knick, G. S. Olson, and K. P. Burnham. 1997. Use of burrow entrances to indicate densities of Townsend's ground squirrels. Journal of Wildlife Management 61:93-102.
- Schooley, R. L., P. B. Sharpe, and B. Van Horne. 1996. Can shrub cover increase predation risk for a desert rodent? Canadian Journal of Zoology 74:157-163.
- Schooley, R. L. 1994. Annual variation in habitat selection: patterns concealed by pooled data. Journal of Wildlife Management 58:367-374.
- 5. Schooley, R. L., C. R. McLaughlin, G. J. Matula, Jr., and W. B. Krohn. 1994. Denning chronology of female black bears: effects of food, weather, and reproduction. Journal of Mammalogy 75:466-477.
- 4. Schooley, R. L., C. R. McLaughlin, W. B. Krohn, and G. J. Matula, Jr. 1994. Spatiotemporal patterns of

macrohabitat use by female black bears during fall. Ursus 9:339-348.

- 3. Schooley, R. L., B. Van Horne, and K. P. Burnham. 1993. Passive integrated transponders for marking freeranging Townsend's ground squirrels. Journal of Mammalogy 74:480-484.
- Agler, B. A., R. L. Schooley, S. E. Frohock, S. K. Katona, and I. E. Seipt. 1993. Reproduction of photographically identified fin whales, *Balaenoptera physalus*, from the Gulf of Maine. Journal of Mammalogy 74:577-587.
- 1. Schooley, R. L., and C. R. McLaughlin. 1992. Observer variability in classifying forested habitat from aircraft. Northeast Wildlife 49:10-16.

#### **Book Chapters**

- Schooley, R. L., and B. J. Cosentino. 2018. Metapopulation Dynamics of Wetland Species. Pages 141-147 In C. M. Finlayson et al. (Eds.), The Wetland Book: Structure and Function, Management and Methods. Springer, Dordretch.
- Cosentino, B. J., and R. L. Schooley. 2018. Dispersal and Wetland Fragmentation. Pages 105-111 *In* C. M. Finlayson et al. (Eds.), The Wetland Book: Structure and Function, Management and Methods. Springer, Dordretch.

#### **Conference Proceedings**

Schooley, R. L., and L. C. Branch. 2006. Spatial distribution of round-tailed muskrats on dry prairie wetlands: untangling historical landscapes and current land use. Pages 216-218 In Noss, R.F., ed. Land of Fire and Water: The Florida Dry Prairie Ecosystem. Proceedings of the Florida Dry Prairie Conference.

## **Competitive Extramural Funding**

- 2020. Peters, D. P. C. (Schooley is one twelve co-PIs). LTER: Long-term research at the Jornada Basin LTER (LTER VII). NSF, LTER. \$4,508,000
- 2018. Peters, D. P. C. (Schooley is one twelve co-PIs). LTER: Long-term research at the Jornada Basin LTER (LTER VII). NSF, LTER. \$2,354,000
- 2016. Schooley, R. L., B. T. Bestelmeyer, B. B. Cutts, and B. J. Cosentino. Spatial congruence between biodiversity and other ecosystem services across scales in a managed landscape mosaic. USDA, National Institute of Food and Agriculture, Agroecosystem Management. \$440,000.
- 2016. Schooley, R. L., and B. J. Cosentino. *Geomys bursarius* in Illinois: Distribution and co-occurrence with badgers, movements and survival, and spatial genetic structure. Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$380,000.
- 2013. Ward, M. P., R. L. Schooley, T. J. Benson, and J. D. Brawn. Evaluation of SAFE (State Acres for Wildlife Enhancement) and the development of the Farmland & Prairie Campaign. Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$1,408,000.
- 2012. Peters, D. P. C. (Schooley is one ten co-PIs). LTER: Long-term research at the Jornada Basin LTER (LTER VI). NSF, LTER. \$5,880,000
- 2011. Schooley, R. L., L. W. Lehrer, S. B. Magle, and E. V. Lonsdorf. Movements, habitat use, and survival of translocated woodchucks. Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$90,000.
- 2010. Schooley, R. L., J. F. Kelly, B. T. Bestelmeyer, J. D. Brawn, and S. V. Bestelmeyer. Targeting restoration of desert grasslands to maximize biodiversity responses at landscape scales. USDA, National Institute of Food and Agriculture, Managed Ecosystems. \$499,776.
- 2009. Schooley, R. L., E. J. Heske, and M. A. Mitchell. Movements and habitat use of American mink in an agricultural landscape. State Furbearer Fund, Illinois Department of Natural Resources. \$174,000.
- 2009 Ward, M. P., R. L. Schooley, and J. D. Brawn. Grassland bird monitoring: evaluation of SAFE (State Acres for Wildlife Enhancement). Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$562,000.
- 2008. Schooley, R. L., E. J. Heske, and J. M. Duggan. Developing effective survey and habitat evaluation

procedures for Franklin's ground squirrels. Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$75,000.

- 2008. Brawn, J. D., M. P. Ward, and R. L. Schooley. Monitoring wildlife on lands designated by "State Acres for Wildlife Enhancement." Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$50,000.
- 2008. Schooley, R. L., J. M. Levengood, J. E. Diffendorfer, and E. J. Heske. Survey techniques and site occupancy for riparian mink in Illinois. State Furbearer Fund, Illinois Department of Natural Resources. \$10,500.
- 2008. Cosentino, B. J., C. A. Phillips, and R. L. Schooley. Wetland occupancy and landscape connectivity for Blanding's and western painted turtles in the Green River Valley. \$5,000. Illinois Wildlife Preservation Funds, Illinois Department of Natural Resources.
- 2007. Schooley, R. L., J. M. Levengood, J. E. Diffendorfer, and E. J. Heske. Recruitment, mortality, and site occupancy for riparian muskrats: effects of flow regime and landscape context. Federal Aid in Wildlife Restoration, US Fish and Wildlife Service. \$50,000.
- 2006. Schooley, R. L. Hierarchical Bayesian model for a management metapopulation of endangered redcockaded woodpeckers. US Department of Defense. \$37,733 (sub-award).
- 2003. Schooley, R. L., and L. C. Branch. Wetlands assessment in a landscape context on Avon Park Air Force Range. U.S. Department of Defense. \$68,997.

## **Competitive Internal Funding**

- 2011. Schooley, R. L., J. D. Brawn, and P. J. Weatherhead. Effects of biofuels production on biodiversity and landscape connectivity. Energy Biosciences Institute. \$314,346.
- 2011. Schooley, R. L. Role of forests in landscape epidemiology of amphibian chytrid fungus. McIntire-Stennis Funds, Department of Natural Resources and Environmental Sciences, University of Illinois. \$62,100.

## **Professional Activities**

Associate Editor: Journal of Mammalogy (2017-2020)

Editorial Board: Landscape Ecology (2009-2017)

*Journal Reviewer:* American Midland Naturalist, Behavioral Ecology and Sociobiology, Behaviour, Canadian Journal of Fisheries and Aquatic Sciences, Canadian Journal of Zoology, Condor, Diversity and Distributions, Ecography, Ecological Applications, Ecology, Ecology and Evolution, Ecosphere, Ecosystems, Functional Ecology, Frontiers in Conservation Science, Herpetological Review, Journal of Animal Ecology, Journal of Applied Ecology, Journal of Arid Environments, Journal of Mammalogy, Journal of Tropical Ecology, Journal of Urban Ecology, Journal of Wildlife Management, Landscape Ecology, Landscape and Urban Planning, Northeast Wildlife, PeerJ, Proceedings of the Royal Society B, Oecologia, Oikos, PloS ONE, Rangelands, Restoration Ecology, Scientific Reports, Southeastern Naturalist, Ursus, Western North American Naturalist, Wetlands, Wildlife Research

*Grant Reviewer:* National Science Foundation (DEB, CAREER), Israel Science Foundation, Department of Defense – SERDP, M. J. Murdock Charitable Trust, Global Drylands Center

*Society Member:* Ecological Society of America, International Association for Landscape Ecology, American Society of Mammalogists, The Wildlife Society.

Committee Member: Grant-in-Aids, American Society of Mammalogists (2010-2019).

Committee Member: Illinois State Furbearer Committee (2009-present).

*Local Organizing Committee Member:* International Association for Landscape Ecology, Fifth World Congress, Snowmass Village, CO, 1999.

## Awards

2016. Award of Professional Excellence. Department of Wildlife, Fisheries, and Conservation Biology. University of Maine. In recognition of outstanding and long-term contributions to the wildlife profession and the conservation of natural resources.

## **Invited Seminars:**

- 2019. Shrub encroachment, landscape restoration, and wildlife responses in the Chihuahuan Desert. Malpai Borderlands Science Conference, Rodeo, NM.
- 2017. Shrub encroachment and desert rodent communities: energetic compensation, productivity pulses, and coretransient dynamics. New Mexico State University, Las Cruces, NM.
- 2015. Integrating habitat heterogeneity into metapopulation approaches across scales. International Association of Landscape Ecology World Congress. Portland, OR.
- 2013. Habitat heterogeneity and biodiversity conservation: from desert grassland restoration to Midwest biofuel landscapes. Lincoln Park Zoo, Chicago, IL.
- 2011. Habitat fragmentation, landscape connectivity, and biodiversity restoration. New Mexico State University and Jornada Long-Term Ecological Research Program, Las Cruces, NM.
- 2008. Occupancy estimation for American mink: walking surveys, rafts, and imperfect detection. Midwest Fish and Wildlife Conference, Columbus, OH.
- 2006. Habitat heterogeneity, landscape connectivity, and metapopulations: upgrading the area-isolation paradigm. Program in Ecology and Evolutionary Biology, University of Illinois at Urbana-Champaign.
- 2005. Distribution of species in fragmented landscapes: integrating metapopulation dynamics and landscape ecology. Department of Zoology and Physiology, University of Wyoming, Laramie, Wyoming.
- 2005. Distribution of species in fragmented landscapes: integrating metapopulation dynamics and landscape ecology. Department of Biology, New Mexico State University, Las Cruces, New Mexico.
- 2004. Animal distributions in fragmented landscapes: beyond simple patch-matrix views. Department of Entomology and Wildlife Ecology, University of Delaware, Newark, DE.
- 2004. Patch occupancy and spatial turnover of round-tailed muskrats: classical metapopulation dynamics? University of Florida, Gainesville, FL.
- 2004. Distribution and ecology of round-tailed muskrats (*Neofiber alleni*) in a dry prairie landscape. Florida Dry Prairie Conference, Sebring, FL.

#### **Representative Contributed Presentations (since 2013)**

- Andreoni, K., R. Schooley, B. Bestelmeyer, and C. Wagnon. 2022. Invasive oryx and encroaching shrubs: implications for landscape change in the Chihuahuan Desert. American Society of Mammalogists, Tucson, AZ.
- Alexander, N., B. Cosentino, and R. Schooley. 2022. Genetic structure and persisting genetic-environmental associations for a fossorial rodent (*Geomys bursarius*). American Society of Mammalogists, Tucson, AZ.
- Wagnon, C., and R. Schooley. 2022. Shrub encroachment alters trophic interactions in a canid-lagomorph community in the Chihuahuan Desert. American Society of Mammalogists, Tucson, AZ.
- Alexander, N., B. Cosentino, and R. Schooley. 2021. Testing the niche reduction hypothesis for a fossorial species experiencing agricultural intensification. International Association of Landscape Ecology—North America. Reno, NV (Virtual).
- Wagnon, C. J., R. Schooley, B. Cosentino, and B. Bestelmeyer. 2019. Shrub encroachment alters the landscape of fear for lagomorphs in the Chihuahuan Desert. American Fisheries Society and The Wildlife Society Joint Annual Conference. Reno, NV.
- Dinan, M., B. Cutts, B. Bestelmeyer, R. Schooley, and B. Cosentino. 2019. Uniting management and societal goals: Identifying cultural ecosystem services to inform grassland restoration. Ecological Society of

America Annual Meeting, Louisville, KY.

- Schooley, R. L., C. J Wagnon, and B. T. Bestelmeyer. 2018. Shrub encroachment, landscape restoration, and intraguild predation in the Chihuahuan Desert. American Society of Mammalogists, Manhattan, KS.
- Cosentino, B. J., R. L. Schooley, and B. T. Bestelmeyer. 2018. Understanding the relationship of lizard communities to desert grassland restoration with a landscape-scale experiment. North American Congress for Conservation Biology, Toronto.
- Schooley, R. L., and B. T. Bestelmeyer. 2016. Bottom-up pulses and desert rodent dynamics across shrublandgrassland ecotones. American Society of Mammalogists, Minneapolis, MN.
- Nawrocki, J. A., R. L. Schooley, and M. P. Ward. 2016. Dangerous misperceptions: eastern cottontail survival in an agroecosystem. American Society of Mammalogists, Minneapolis, MN.
- Lehrer, E. W., R. L. Schooley, J. M. Nevis, R. J. Kilgour, P. J. Wolff, and S. B. Magle. 2016. Translocation as a solution to human-wildlife conflict: survival and movements of translocated, nuisance woodchucks in the greater Chicago area. Society for Conservation Biology, Madison, WI.
- Lehrer, E. W., R. L. Schooley, S. B. Magle, and J. M. Nevis. 2015. Effects of translocation on survival and movements of nuisance woodchucks (*Marmota monax*). International Urban Wildlife Conference, Chicago, IL.
- Cosentino, B. J., R. L. Schooley, B. T. Bestelmeyer, A. J. McCarthy, and K. Sierzega. 2014. Landscape restoration supports genetic connectivity among populations of a keystone species. Ecological Society of America, Sacramento, CA.
- DaVanon, K. A., L. Howard, B. T. Bestelmeyer, K. E. Mabry, and R. L. Schooley. 2014. The effects of urbanization on state change mediated by predator-prey interactions. Ecological Society of America, Sacramento, CA.
- Nawrocki, J. A., R. L. Schooley, and M. P. Ward. 2014. Perceived versus real predation risk of eastern cottontails in a dynamic agroecosystem. The Wildlife Society Annual Conference, Pittsburgh, PA.
- Schooley, R. L., S. Fredebaugh-Siller, C. Suski, and Z. Zuckerman. 2013. Small mammals in a biofuels landscape: community patterns and stress responses. International Mammalogical Congress, Belfast, Northern Ireland.
- Cosentino, B. J., R. L. Schooley, B. T. Bestelmeyer, and J. Coffman. 2013. Local and landscape-scale constraints on the response of a keystone rodent to habitat restoration. International Mammalogical Congress, Belfast, Northern Ireland.
- Ahlers, A. A., P. Wolff, E. J. Heske, and R. L. Schooley. 2013. Summer precipitation predicts spatial distributions of semiaquatic mammals: implications for climate change. International Mammalogical Congress, Belfast, Northern Ireland.
- Rodger, T., J. Giacalone, R. L. Schooley, and E. J. Heske. 2013. Noninvasive genetics versus camera trapping: estimating population density of an elusive carnivore *Leopardus pardalis*. International Mammalogical Congress, Belfast, Northern Ireland.
- Lehrer, E. W., R. L. Schooley, S. B. Magle, R. J. Kilgour, and J. Nevis. 2013. Post-release movements and survival of translocated, nuisance woodchucks in the Chicago metropolitan area. The Wildlife Society Annual Conference, Milwaukee, WI.

## Service at University of Illinois

#### Department of Natural Resources and Environmental Sciences (NRES)

- 2016-2019 Courses and Curriculum Committee
- 2017 Search Committee, Faculty position in Social Dimensions of the Environment
- 2012-2016 Teaching Coordinator, Chair of Courses and Curriculum Committee
- 2012-2017 Promotion and Tenure Committee
- 2011-2019 Departmental Faculty Advisory Committee
- 2014 Search Committee, Faculty position in Stream Ecology

2009-2011	Chair, IT Committee
2009-2011	Facilities and Services Committee
2007-2009	Courses and Curriculum Committee
2007	Search Committee, Faculty position in Landscape Spatial Analysis and Management
2006	Search Committee, Faculty position in Applied Landscape Ecology
2007	Unit Leader, Campus Charitable Fund Drive
2005-2007	Graduate Admissions and Policy Committee
2005-present	Undergraduate Curriculum Advisor, NRES, Fish and Wildlife Conservation Concentration (10-
	25 students per year)
2006-2015	Lead Faculty Advisor, University of Illinois Student Chapter of the Wildlife Society

# College of Agricultural, Consumer, and Environmental Sciences (ACES)

2022	Search Committee, Assistant Dean, Marketing and Communications
2021	Search Committee, Assistant Dean, Extension, Natural Resources, Environment and Energy
2020	Chair, Search Committee, Assistant Dean, Extension, NREE
2018-2019	Research Policy Committee
2017	Selection Committee, Team Award for Excellence
2016	Search Committee, Associate Dean for Academic Programs
2015-2016	Executive Committee
2015-2017	Undergraduate Education Policy Committee, Executive Committee Liaison
2015	Chair, Selection Committee for Teaching and Advising Awards
2013-2016	Academy of Teaching Excellence
2012-2016	Courses and Curriculum Committee
2010-2012	Research Policy Committee

2010-2012 Research Policy Committee

# Campus

2021-2022	Search Committee, Executive Director, Prairie Research Institute
2011-present	Committee on Natural Areas, Office of the Vice Chancellor for Research
2015-2019	Advisory Board, Office of Undergraduate Research
2014	Search Committee, Wildlife Ecologist, National Great Rivers Research and Education
	Center
2006-2009	Steering Committee; Program in Ecology, Evolution, and Conservation Biology