

# Gordon A. Fox — Curriculum Vitae

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## Education

University of California, Davis, 1989-92. *NSF Postdoctoral Fellow, 1991-92*. Experimental quantitative genetics with desert annual plants. *Postdoctoral Research Associate 1989-90*. Theoretical ecology and population genetics, with Alan Hastings.  
University of Arizona, 1983-89. Ph.D., Ecology and Evolutionary Biology, 1989. Major professor: W. M. Schaffer. Dissertation title: Adaptation, history, and development in the evolution of a desert annual life history.  
Johns Hopkins University, 1980-83. Coursework in biology and mathematics.  
University of California, Berkeley, 1972-75. B.A. in History, 1975.  
Case Western Reserve University, 1970-71. History.

## Experience

### Professional appointments

University of South Florida. Professor, 2015-present. Associate Professor, 2005-2015. Assistant Professor, Department of Biology, 1999-2005. *Courses taught*: Principles of Ecology, Conservation Biology, Introduction to Environmental Science, Ecology of Plants, Vascular Plants.  
University of New Mexico. Adjunct Professor, 2016-present.  
San Diego State University. Research Assistant Professor, 1997-9; Lecturer and Research Associate, 1994-96. *Courses taught*: Conservation of wildlife, Ecology and human impacts on the environment, Genetics and evolution, Plant ecology.  
University of California, San Diego. Lecturer, 1994-9. *Courses taught*: Plant science, Introduction to plant sciences, Ecology field laboratory, Introduction to organismal and evolutionary biology.  
University of the South. Visiting Assistant Professor, 1993-94. *Courses taught*: Botany; Plant Ecology; Conservation Biology; Principles of Biology. Supervised independent studies in ecology, botany, dynamical systems.

### Predoctoral teaching positions

University of Arizona. Graduate teaching associate, 1983-88. *Lecturer*: Plant ecology, Introduction to ecology and evolution, Environmental biology. *Coordinator of teaching labs*: Introduction to ecology and evolution. *Lab assistant in*: Population interactions, Plant ecology, Genetics, Environmental biology, Organismic biology, Introduction to ecology and evolution.  
Baltimore Experimental High School. Teacher, 1979-80. History and English.  
Baltimore County Public Schools. Teacher, 1977-79. History.

### **Predocctoral research positions**

University of Arizona. Research assistant. Bacterial genetics (with Conrad Istock), 1988-89. Herbarium, 1987.

Johns Hopkins University School of Hygiene and Public Health. Research assistant. *Department of Population Dynamics, 1980-83*. Public health applications of reproductive medicine. *Department of Pathobiology, 1981-83*. Population biology of tiger salamanders (with C. J. Stine).

### **Awards and Honors**

Fellow, Stellenbosch Institute for Advanced Study, named 2014.

Outstanding Faculty Award, University of South Florida, 2014.

Fellow of the American Association for the Advancement of Science (AAAS), elected 2013.

Volunteer of the Year, Hypertrophic Cardiomyopathy Association, 2013.

NSF postdoctoral fellowship, awarded 1990.

William G. McGinnies Graduate Scholarship in Arid Lands Studies, awarded 1988.

B.A. degree with honors, University of California at Berkeley, 1975.

### **Funding**

NSF Grant No. DEB-1120330, 2011-2016. \$139,237 to G. A. Fox. Project title: "Collaborative research: Demographic heterogeneity in landscapes and communities."

NSF Grant No. DUE-0756847, 2008-2013. \$1,991,163 to K. Ramachandran, C. A. Beneteau, S. W. Campbell, G. A. Fox, A. Z. Grinshpan. Project title: "A STEP to grow in Science-Engineering-Mathematics undergraduate degrees."

NSF Grant No. DEB-0713866, 2007-2009. \$25,000 to G. A. Fox and C. K. Kelly. Project title: "SGER: Seeing the forest and the trees."

NSF Grant No. DEB-0614468, 2006-2009. \$207,418 to G. A. Fox. Project title: "Collaborative research: Demographic heterogeneity and its consequences."

Pinellas County Environmental Foundation. 2003-2005. \$26,650 to G. A. Fox. Project title: "Fire and the population dynamics of Catesby's Lily".

EPA STAR program, 2002-2005. \$135,276 to G. A. Fox. Project title: "Individual variability, environmental stressors, and sampling uncertainty in wildlife risk assessment."

US Fish and Wildlife Service/Joint Fire Sciences Program, 2001-2003. Contract No. 14481018101J011. \$81,709 to G. A. Fox. Project title: "Consequences and correlates of fire in wetlands."

NSF Grant No. DEB-0107465, 2001-2. \$36,952 to G. A. Fox. Project title: "Dispersal and local population dynamics following large-scale wildfire."

NSF Grant No. DEB-9806923, 1998-2003. Project title: "Demography and population dynamics of a fire-adapted tree species, *Pinus rigida*," J. Gurevitch and G. A. Fox, co-PI's. \$250,000 + 3 \$5,000 REU supplements.

University of South Florida Research and Creative Scholarship Award 1999, \$6,000.

NSF Grant No. DEB-9810414, 1998. Project title: "SGER: Comparative demography of desert plants following an unusual rainfall event," T. A. Ebert, G. A. Fox, and W. C. Oechel, co-PIs. \$18,000.

San Diego State University Research, Scholarship, and Creativity Award 1997 & 1998 to G. A. Fox, \$3,000 each.

NSF Grant No. BSR-9002330, 1990-92. Project title: "Quantitative genetics of adaptation and apparent 'constraint' in a desert annual," G. A. Fox, P.I. \$58,800.

## Professional Societies

American Association for the Advancement of Science; American Society of Naturalists; Botanical Society of America; Ecological Society of America; European Society for Evolutionary Biology; Evolutionary Demography Society; Sigma Xi; Society for Conservation Biology; Society for the Study of Evolution

## Papers presented

Botanical Society of America: 1989, 1987; California Population and Evolutionary Genetics Group, 1998, 1994-5, 1991; Ecological Society of America: 2008-11, 2003-6, 1996-2000, 1993-4, 1986-90; Ecological Society of Australia: 2007; European Society for Evolutionary Biology: 2013; Florida Ecological & Evolutionary Symposium, 2000; Guild of Rocky Mountain Population Biologists: 1988; Society for Conservation Biology 2001-2; Society for the Study of Evolution: 2010, 2000, 1997-8, 1991-5, 1988; Southwest Association of Biologists: 1988.

## Invited seminars

**2016:** Seminar at Instituto Argentino de Investigaciones de Zonas Aridas (Argentine Institute for Drylands Research), Mendoza, Argentina. (CONICET - Consejo Nacional de Investigaciones Científicas Y Técnicas); **2015:** Instituto de Ecología A.C. **2014:** Florida Atlantic University; Stellenbosch Institute for Advanced Studies; Ecological Risk Assessment Forum (USEPA); **2012:** University of Florida, Instituto de Ecología A.C. **2008:** University of Montana; **2003:** Archbold Biological Station; Joseph W. Jones Ecological Research Center; **2002:** Florida State University; **2001:** University of Florida; Florida International University; **1999:** San Francisco State University; **1998:** University of New Mexico, UC Irvine; **1997:** San Francisco State University, SUNY Stony Brook; **1995:** Arizona State University; **1994:** University of Sydney; **1993:** Emory University, University of Oregon, University of Pittsburgh; **1992:** Australian National University, University of New Orleans, University of Houston, University of Montana, Clemson University, Utah State University; **1991:** UC San Diego; **1990:** University of Chicago, University of Wisconsin - Milwaukee, California State University, San Bernardino; **1989:** Imperial College at Silwood Park, UK, University of Nevada, Las Vegas; **1987:** UC Davis.

## Invited panels and working groups

National Evolutionary Synthesis Center (NESCent), group on "Toward a general theory of biological invasions," 2009.

National Center for Ecological Analysis and Synthesis (NCEAS), working group on "A new synthesis of demography and dispersal," 2001-2002.

National Science Foundation: Advisory panel member: Ecology 2014; Population & Evolutionary Ecology 2004, 2016; Population Biology, 1998.

US Department of Agriculture: Advisory panel member: Biology of Weedy & Invasive Plants, 2000, 2001, 2005.

## Professional service

**Ecology:** Associate editor, 2013-2016.

**Evolutionary Ecology Research:** Editor, 2004-.

**Ecological Society of America:** Grants and Fellowships Committee, 2013–, Plant Population Biology section, Chair, 2000–1, vice-chair, 1999–2000, secretary-treasurer, 1996–9, webmaster 1996–2009.

**Reviewer for scientific journals:** *Acta Oecol.*: 1996; *Am. J. Bot.*: 2011, 2010, 2006, 1997; *Amer. Midl. Nat.*: 2006, 2001, 1990; *Amer. Nat.*: 2017, 2016, 2015, 2013, 2012 (2), 2011, 2008, 2000, 1999(2), 1998 (3), 1997, 1996 (2), 1995 (2), 1994 (2), 1993 (2), 1992 (2), 1991, 1990; *Animal Conserv.*: 2005; *Arct. Antarct. Alp. Res.*: 2011; *Biol. Invas.*: 2015, 2012 (2), 2007, 2005; *Biol. J. Linn. Soc.*: 1993; *Can. J. Bot.*: 2001; *Cons. Ecol.*: 1998; *Ecography*: 2014; *Ecol.*: 2015; 2010; 2008 (2); 2006 (2), 2004, 2002 (2), 2001, 1999 (2), 1997, 1996, 1995 (2), 1994 (2), 1993 (2), 1992, 1990; *Ecol. Applic.*: 1998; *Ecol. Lett.*: 2017; 2016; 2010; 2009; 2007; 2006 (2); 2005; 2003 (2); 2001; *Ecol. Modeling*: 2003; *Ecol. Monogr.*: 2005; *Evolution*: 2003, 1998, 1997, 1996 1995, 1994, 1993 (2), 1992 (3); *Evol. Ecol. / Evol. Ecol. Res.*: 1999, 1996, 1994; *Florida Sci.*: 2000; *Genetics*: 1994, 1991; *Int. J. Plant Sci.*: 2012, 2005; *J. Ecol.*: 2015, 2013, 2012, 2010, 2009, 2006 (2); 1997, 1992; *J. Evol. Biol.*: 2006, 1993; *J. Math. Biol.*: 2001(2), 1999, 1995; *J. Theor. Biol.*: 2014, 2011, 2001, 1988; *J. Torr. Bot. Soc.*: 2006; *J. Veg. Sci./Plant Ecol.*: 2001, 1997, 1996; *Madroño*: 2001; *Math. and Comp. Modelling*: 2002; *Math. Biosci.*: 1996, 1994, 1990; *Methods Ecol. Evol.*: 2015, 2014; *Nature Comm.*: 2015; *New Phytol.*: 2006, 2003; *Oecol.*: 2016, 2014, 2012, 2003, 1997; *Oikos*: 2012, 2011, 2009, 1998; *Phil. Trans. R. Soc. B.*: 1997; *Phytopathol.*: 2004; *Plant Ecol.*: 2010, 1998; *Plant and Soil*: 2009; *Plant Syst. Evol.*: 2007; *PNAS*: 2012, 2008; *Proc. R. Soc. B*: 2004; *Southwest Nat.*: 2012; *Theor. Pop. Biol.*: 2005, 2002, 2001, 1996, 1995(2), 1992, 1991, 1990; *Trends Ecol. Evol.*: 2000.

**Reviewer for granting agencies:** Australian Research Council: 1997; NSF: 2015, 2014 (2), 2013 (2), 2012, 2011, 2010, 2009, 2008(2), 2006 (2), 2004, 2003, 2002 (2), 2000, 1999 (3), 1998 (2), 1997 (3), 1996 (2), 1993, 1992 (2), 1991; Norwegian Research Council: 2006 (4), 2005 (4); USDA: 2006.

**Reviewer for publishing houses:** Academic Press: 2004, 1998, 1996, 1995; Chapman and Hall: 1994, 1993; CRC Press: 1994; Princeton University Press: 2005; Sinauer Press: 1992; University of California Press: 2012; Wadsworth Press: 1999.

**Organized oral session organized :** Ecological Society of America, 2016 annual meeting, entitled "Landscape demography: heterogeneity across space and scale," coorganized with J. Gurevitch, N. Fowler, and C. Graham.

**Symposium organized:** Ecological Society of America, 2008 annual meeting, entitled "Environmental fluctuation, temporal dynamics, and ecological processes," coorganized with C. K. Kelly.

**Symposium organized:** Ecological Society of America, 1996 annual meeting, entitled "Timing is everything: new perspectives on the ecology and evolution of flowering phenology," co-organized with E. E. Lyons.

**University of Queensland:** External Ph.D. examiner, 2011.

**University of Sydney:** External Ph.D. examiner, 2015.

## Public service

Discussion board moderator, Hypertrophic Cardiomyopathy Association, 2007–present.

Faculty advisor for Adventures in Supercomputing program, Grundy County High School, TN, 1993–4.

Faculty advisor for Scientific Sewanee (student poster session sponsored by Sigma Xi), University of the South, 1993–4.

## Current graduate students and committees

Erin Feichtinger (Ph.D. student), Major professor

Jamie Gluvna (Ph.D. student), Major professor  
Shannon Grogan (M.S. student),  
Carolyn Cheatham Rhodes (M.S. student), Major professor  
Marta Robertson (Ph.D. student)  
Samuel Wright (M.S. student), Major professor

## Past students and committees

Mariano Alvarez. Ph.D. 2016  
Shannon Ansley. M.S. 2006. Major professor  
Brian Badgley. Ph.D. 2009.  
Amanda Baker. M.S. 2007.  
Mark Barrett. Ph.D. 2005.  
Sarah Barry, M.S. 2011. Major professor  
Celina Bellanceau. M.S. 2007.  
Kerry Bohl. Ph.D. 2013.  
Robbin Capers. M.S. 2010.  
Eva Chase Ph.D. awarded posthumously, 2013.  
Adam Emerick M.S. 2015.  
Tammy Foster. M.S. 2002. Co-major professor.  
Tammy Foster Ph.D. 2014. Major professor  
Christy Foust Ph.D. 2015.  
Gwen Gregory Ph.D. student, Major professor  
Brian Halstead. Ph.D. 2008.  
Monica Hamberg M.S. 2012. Major professor  
Anna Hathaway M.S. 2012.  
Brad Hauch M.S. 2011.  
Ken Hayes. M.S. 2003.  
Bill Hentges. M.S. 2014.  
Gabe Herrick. Ph.D. 2011. Major professor  
David Jennings. Ph.D. 2011  
Heather Jezorek. Ph.D. 2011  
Phoebe Koch. M.S. 2008.  
Ralph Leighty. Ph.D. 2009.  
Maria del Pilar Lopera Blair (Ph.D. student 2007-14), Major professor  
Alison Meyers. Ph.D. 2010.  
Jennifer Peterson Ph.D. 2013.  
Robert Mrykalo. M.S. 2005, Department of Environmental Science & Policy.  
Teresa Piacenza. M.S. 2008. Major professor.  
Jennifer Rhora. M.S. 2005.  
Susan Riedl. M.S. 2006.  
Travis Robbins. Ph.D. 2010.  
Anne Schmidt. M.S. 2005.  
Sarah Smiley. M.S. 2010.  
Kara Teague. M.S. 2003, Department of Environmental Science & Policy. Major professor.  
Pamela Tingiris ESP Ph.D. program  
Pauline Wanjugi, Ph.D. 2013.

Samantha Wilber, M.S. 2015.  
Rebecca Windsor, M.S. 2017. Major professor.

## Bibliography

### Books:

- Fox, G. A., S. Negrete-Yankelevitch, and V. J. Sosa, eds. 2015. *Ecological statistics: contemporary theory and application*. Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199672547.001.0001
- Kelly, C. K., M. G. Bowler, and G. A. Fox, eds. *Temporal niche dynamics and ecological process*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139048170
- Gurevitch, J., S. M. Scheiner, and G. A. Fox. 2006. *The ecology of plants*, 2nd ed. Sinauer Press, Sunderland, MA.
- Gurevitch, J., S. M. Scheiner, and G. A. Fox. 2002. *The ecology of plants*. Sinauer Press, Sunderland, MA.

### Papers:

- Hui, C., G. A. Fox, and J. Gurevitch. 2017. Scaling up demography: Consequences for population volatility and growth from landscape portfolios. In review, *PNAS*.
- Kendall, B. E., G. A. Fox, and J. Stover. 2017. Boldness-aggression syndromes can reduce population density: behavior and demographic heterogeneity. bioRxiv 073262; doi: <http://dx.doi.org/10.1101/073262>; In press, *Behavioral Ecology*.
- Fox, G. A., S. Campbell, A. Grinshpan, X. Xu, J. Holcomb, C. Bénéteau, J. E. Lewis, and K. Ramachandran. 2017. Implementing projects in calculus on a large scale at the University of South Florida. In review, *Journal of STEM Education*.
- Scheiner, S. M., and G. A. Fox. 2017. A hierarchy of hypotheses or a network of models. In J. M. Jeschke and T. Heger, eds.: *Invasion biology – hypotheses and evidence*. Wallingford, UK: CABI Publishing.
- Fox, G. A., and S. M. Scheiner. 2017. The demography of fitness: life histories and their evolution. In S. M. Scheiner and D. P. Mindell, eds.: *The theory of evolution*. Chicago, University of Chicago Press.
- Frank, S. A., and G. A. Fox. 2017. The inductive theory of natural selection. In S. M. Scheiner and D. P. Mindell, eds.: *The theory of evolution*. Chicago, University of Chicago Press.
- Brown, T.-R. W., Low-Décarie, E., Pillsbury, R. W., Fox, G. A., and Scott, K. T. 2017. The effects of elevated atmospheric CO<sub>2</sub> on freshwater periphyton in a temperate stream. *Hydrobiologia*. doi:10.1007/s10750-017-3108-4
- Gurevitch, J., G. A. Fox, N. L. Fowler, and C. H. Graham. 2016. Landscape demography: population change and its drivers across spatial scales. *Quarterly Review of Biology* 91: 459-485.
- Wanjugi, P., G. A. Fox, and V. Harwood. 2016. The interplay between predation, competition, and nutrient levels influences the survival of *Escherichia coli* in aquatic environments. *Microbial Ecology*. doi:10.1007/s00248-016-0825-6
- Menning, K. J., B. B. Menon, G. A. Fox, and K. T. Scott. 2016. Dissolved inorganic carbon uptake in *Thiomicrospira crunogena* XCL-2 is  $\Delta_p$ - and ATP-sensitive and enhances RuBisCO-mediated carbon fixation. *Archives of Microbiology* 198: 149-159. doi:10.1007/s00203-015-1172-6
- Bénéteau, C., G. Fox, X. Xu, J. E. Lewis, K. Ramachandran, and S. Campbell, and J. Holcomb. 2016. Peer-led guided inquiry in calculus at the University of South Florida. *Journal of STEM Education* 17: 5-13.

- Foster, T. E., P. A. Schmalzer, and G. A. Fox. 2015. Seasonal climate and its differential impact on growth of co-occurring species. *European Journal of Forest Research* 134: 497–510.
- Fox, G. A. 2015. What you don't know can hurt you: censored and truncated data in ecological research. Pp. 106–130 in Fox, G. A., S. Negrete-Yankelevitch, and V. J. Sosa, eds. *Ecological statistics: contemporary theory and application*. Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199672547.001.0001
- Negrete-Yankelevich, S., and G. A. Fox. 2015. Spatial variation and linear modeling of ecological data. Pp. 252–284 in Fox, G. A., S. Negrete-Yankelevitch, and V. J. Sosa, eds. *Ecological statistics: contemporary theory and application*. Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199672547.001.0001
- Lajeunesse, M. A., and G. A. Fox. 2015. Statistical approaches to the problem of phylogenetically correlated data. Pp. 286–308 in Fox, G. A., S. Negrete-Yankelevitch, and V. J. Sosa, eds. *Ecological statistics: contemporary theory and application*. Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780199672547.003.0012
- Weis, A. E., E. Nardone, and G. A. Fox. 2014. The strength of assortative mating for flowering date and its basis in individual variation in flowering schedule. *Journal of Evolutionary Biology* 27: 2138–2151.
- Foster, T. E., P. A. Schmalzer, and G. A. Fox. 2014. Timing matters: the seasonal effect of drought on tree growth. *Journal of the Torrey Botanical Society* 141: 225–241.
- Kelly, C. K., M. G. Bowler, G. A. Fox, A. Solís-Magallanes, J. M. Ramos Tapia, P. Lopera Blair, J. N. Williams, and J. Joy. (2013). What temporal processes in trees tell us about competition, community structure and speciation. Pp. 41–81 in C. K. Kelly, M. G. Bowler, and G. A. Fox, eds. *Temporal niche dynamics and ecological process*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9781139048170.004
- Schwinning, S., G. A. Fox, and C. K. Kelly. 2013. Temporal niches, ecosystem function, and climate change. Pp. 165–188 in C. K. Kelly, M. G. Bowler, and G. A. Fox, eds. *Temporal niche dynamics and ecological process*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139048170.009
- Kelly, C. K., M. G. Bowler, and G. A. Fox. 2013. Introduction. Pp. 1–7 in C. K. Kelly, M. G. Bowler, and G. A. Fox, eds. *Temporal niche dynamics and ecological process*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139048170.001
- Fox, G. A., M. G. Bowler, and C. K. Kelly. 2013. Concluding remarks. Pp. 309–320 in C. K. Kelly, M. G. Bowler, and G. A. Fox, eds. *Temporal niche dynamics and ecological process*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781139048170.015
- Herrick, G. I., and G. A. Fox. 2013. Sampling stochasticity leads to overestimation of extinction risk in population viability analysis. *Conservation Letters* 6: 238–246. doi:10.1111/j.1755-263X.2012.00305.x
- Herrick, G. I., and G. A. Fox. 2012. Assessing fitness of dormancy from reproductive values of dormant plants. *Evolutionary Ecology Research* 13: 779–795.
- Haymes, K. L., and G. A. Fox. 2012. Variation among individuals in cone production in *Pinus palustris* Mill. (Pinaceae). *American Journal of Botany* 99: 1–6. doi:10.3732/ajb.1100339
- Stover, J., B. E. Kendall, and G. A. Fox. 2012. Demographic heterogeneity impacts density-dependent population dynamics. *Theoretical Ecology* 5: 297–309. doi:10.1007/s12080-011-0129-x
- Fox, G. A., B. E. Kendall, and S. Schwinning. 2012. Environmental heterogeneity and plant biology. Pp. 258–263 in A. M. Hastings and L. Gross, eds.: *Encyclopedia of Theoretical Ecology*. Berkeley, University of California Press.
- Kendall, B. E., G. A. Fox, M. Fujiwara, and T. Nogeire. 2011. Demographic heterogeneity, cohort

- selection and population growth. *Ecology* 92:1985–1993. doi:10.1890/11-0079.1
- Kelly, C. K., S. J. Blundell, M. G. Bowler, G. A. Fox, P. A. Harvey, M. R. Lomas, and I. F. Woodward. 2011. The statistical mechanics of community assembly and species distribution. *New Phytologist* 191:819–827. doi:10.1111/j.1469-8137.2011.03721.x
- Scheiner, S. M., A. Chiarucci, G. A. Fox, M. R. Helmus, D. J. McGlenn, and M. R. Willig. 2011. The underpinnings of the relationship of species richness with space and time. *Ecological Monographs* 81: 195–213. doi: 10.1890/10-1426.1
- Sommers, K. P., M. Elswick, G. I. Herrick, and G. A. Fox. 2011. Inferring microhabitat preferences of *Lilium catesbaei* (Liliaceae). *American Journal of Botany* 98: 819–828. doi:10.3732/ajb.1000250
- Scott, K. M., G. Fox, and P. R. Girguis. 2011. Measuring isotope fractionation by autotrophic microorganisms and enzymes. Pages 281–299 in A. C. Rosenzweig and S. W. Ragsdale, eds: *Methods in Enzymology*, Vol. 494. Academic Press, Burlington, MA. doi:10.1016/B978-0-12-385112-3.00014-7
- Gurevitch, J., G. A. Fox, G. Wardle, Inderjit, and D. Taub. 2011. Emergent insights from the synthesis of conceptual frameworks for biological invasions. *Ecology Letters* 14: 407–418. doi:10.1111/j.1461-0248.2011.01594.x
- Fox, G.A., S. M. Scheiner, and M. Willig. 2011. Theory of ecological gradients. In S. M. Scheiner and M. Willig, eds.: *Theory of ecology*. University of Chicago Press.
- Ford, C. R., E. S. Minor, and G. A. Fox. 2010. Long-term effects of fire and fire-return interval on population structure and growth of longleaf pine (*Pinus palustris* Mill.) *Canadian Journal of Forest Research* 40:1410–1420. doi:10.1139/X10-080
- Levine, A. D., G. Fox and V.J. Harwood. 2009. Collecting, Exploring, Interpreting, and Presenting Microbiological Data Associated with Reclaimed Water Systems. Report 04-012-01. Water Environment Research Foundation, Alexandria, VA.
- Fox, G. A. 2008. Discrete analysis (matrix models). In *MacMillan Encyclopedia of the Life Sciences*. Online: <http://www.els.net> .
- Fang, W., D. L. Taub, G. A. Fox, R. M. Landis, and J. Gurevitch. 2006. Sources of variation in growth, form, and survival in dwarf and normal-stature pitch pines, *Pinus rigida* (Pinaceae) in long-term transplant experiments. *American Journal of Botany* 93: 1125–1133. doi: 10.3732/ajb.93.8.1125
- Fox, G. A., B. E. Kendall, J. Fitzpatrick, and G. Woolfenden. 2006. Consequences of heterogeneity in survival in a population of Florida scrub-jays. *Journal of Animal Ecology* 75: 921–927. doi: 10.1111/j.1365-2656.2006.01110.x
- Fox, G. A. 2005. Population viability and extinction risk of heterogeneous populations. *Ecology* 86: 1191–1198.
- Landis, R. M., J. Gurevitch, F. Wei, D. Taub, and G. A. Fox. 2005. Pattern and variation in *Pinus rigida* demography after fire in the Long Island, NY pine barrens. *Journal of Ecology* 93: 607–617. doi: 10.1111/j.1365-2745.2005.00996.x
- Kendall, B. E., and G. A. Fox. 2003. Unstructured individual variation and demographic stochasticity. *Conservation Biology* 17: 1170–1172.
- Fox, G. A., and A. Hastings. 2003. Limiting relationships between selection and recombination. *Bulletin of Mathematical Biology* 65: 129–141. doi:10.1006/bulm.2002.0324
- Fox, G. A. 2003. Assortative mating and plant phenology: evolutionary and practical consequences. *Evolutionary Ecology Research* 5: 1–18.
- Kendall, B., and G. A. Fox. 2002. Individual variability reduces demographic stochasticity. *Conservation Biology* 16:109–116.
- Fox, G. A., and B. E. Kendall. 2002. Demographic stochasticity and the variance reduction effect.



- Ecology* 83:1928-1934.
- Fox, G. A. 2001. Failure time analysis: studying times-to-events and rates at which events occur. Pages 253-289 in S. M. Scheiner and J. Gurevitch, eds.: *Design and analysis of ecological experiments*, 2nd ed. Oxford University Press, Oxford, UK.
- Fox, G. A., and J. Gurevitch. 2000. Population numbers count! Tools for near-term demographic analysis. *American Naturalist* 156: 242-256.
- Fox, G. A. 1999. Reproductive strategies. In *MacMillan Encyclopedia of the Life Sciences*. Online: <http://www.els.net>.
- Kendall, B., and G. A. Fox. 1998. The impact of spatial structure on population dynamics: analysis of the coupled logistic map. *Theoretical Population Biology* 54:11-37.
- Schwinning, S., and G. A. Fox. 1995. Competitive symmetry and its consequences for plant population dynamics. *Oikos* 72:422-432.
- Hastings, A., and G. A. Fox. 1995. Optimization as a technique of studying population genetic equations. Pages 18-26 in W. Banzhaf and F. H. Eeckman, eds. *Evolution and biocomputation: computational models of evolution*. Berlin: Springer-Verlag (Lecture Notes in Computer Science 899).
- Ferrière, R., and G. A. Fox. 1995. Chaos and evolution. *Trends in Ecology and Evolution* 10:480-485.
- Fox, G. A., A. S. Evans, and C. Keefer. 1995. Phenotypic consequences of forcing germination: a problem for experimental design. *American Journal of Botany* 82:1264-1270.
- Fox, G. A. 1993. Failure time analysis: emergence, flowering, survivorship, and other waiting times. Pages 253-289 in S. M. Scheiner and J. Gurevitch, eds.: *Design and analysis of ecological experiments*. Chapman and Hall, London.
- Fox, G. A. 1993. Demographic stochasticity and life history evolution. *Evolutionary Ecology* 7: 1-14.
- Belsky, J. A., W. P. Carson, C. L. Jensen, and G. A. Fox. 1993. Overcompensation by plants: herbivore optimization or red herring? *Evolutionary Ecology* 7: 109-121.
- Fox, G. A., and C. K. Kelly. 1993. Plant phenology: selection and neutrality [letter]. *Trends in Ecology and Evolution* 8: 34-35.
- Fox, G. A., and A. M. Hastings. 1992. Inferring selective history from multilocus data sets: Wright meets the Hamiltonian. *Genetics* 132: 277-288.
- Fox, G. A. 1992. Annual plant life histories and the paradigm of energy allocation. *Evolutionary Ecology* 6: 482-499.
- Fox, G. A. 1992. The effect of time-varying mortality and carbon assimilation on models of carbon allocation in annual plants. *Evolutionary Ecology* 6: 500-518.
- Fox, G. A. 1992. Life history traits in desert annuals: adaptation and constraint. *Evolutionary Trends in Plants* 6: 25-31.
- Fox, G. A. 1990. Perennation and the persistence of annual life histories. *American Naturalist* 135: 829-840.
- Fox, G. A. 1990. Components of flowering time variation in a desert annual. *Evolution* 44: 1404-1423.
- Fox, G. A. 1990. Drought and the evolution of flowering time in desert annuals. *American Journal of Botany* 77: 1508-1518.
- Fox, G. A. 1989. Life tables and statistical inferences. *Bulletin of the Ecological Society of America* 70: 229-230.
- Fox, G. A. 1989. Consequences of flowering time in a desert annual: adaptation and history. *Ecology* 70: 1294-1306.

### **Book reviews**

- Fox, G. A. 2011. Biodiversity for nonscientists. Review: J. Silvertown, ed. Fragile web: what next for nature? *Ecology* 92:2318-2319.
- Fox, G. A. 2008. Playing to a tough crowd. Review: L.L. Rockwood. Introduction to Population Ecology. *Conservation Biology* 22: 225-226.
- Fox, G. A. 2003. Book review: *Monitoring plant and animal populations* (C. L. Elzinga, et al.). *Quarterly Review of Biology* 78:503-4.
- Fox, G. A. 1997. Book review: *Plant ecology* (M. Crawley, ed.) *Trends in Plant Sciences* 3:72.
- Fox, G. A. 1996. Book review: *Plant allometry* (K. Niklas). *Bulletin of Mathematical Biology*.
- Fox, G. A. 1991. Book review: *Applied mathematical ecology* (S. A. Levin, T. G. Hallam, and L. J. Gross, eds.). *Bulletin of Mathematical Biology* 54: 687-689.
- Schaffer, W. M., and G. A. Fox. 1989. Book review: *Plant strategies and the dynamics and structure of plant communities* (D. Tilman). *Bulletin of Mathematical Biology* 53: 409-411.

### **Monographs in the Population Reports series**

- Sherris, J. S., S. Moore, and G. A. Fox. 1984. New developments in vaginal contraception. *Population Reports*, Series H, No. 7. Baltimore, The Johns Hopkins University. 35 pp.
- Sherris, J. S., and G. A. Fox. 1983. Infertility and sexually transmitted diseases: a public health challenge. *Population Reports*, Series L, No. 4. Baltimore, The Johns Hopkins University. 40 pp.
- McCann, M. F., L. S. Liskin, P. T. Piotrow, W. Rinehart, and G. A. Fox. 1981. Breast-feeding, fertility, and family planning. *Population Reports*, Series J, No. 24. Baltimore, The Johns Hopkins University. 52 pp.
- Liskin, L. S., and G. A. Fox. 1981. Periodic abstinence: how well do new approaches work? *Population Reports*, Series I, No. 3. Baltimore, The Johns Hopkins University. 40 pp.