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CURRICULUM VITAE

Nicholas J. Gotelli

PERSONAL INFORMATION

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EDUCATION

Florida State University, 1982 - 1985; Ph.D., December 1985 Advisor: D. Simberloff

Florida State University 1980 - 1982; M.S. June 1982 Advisor: L.G. Abele
University of California, Berkeley, 1976 - 1980; B.A. 1980 Phi Beta Kappa

POST-GRADUATE APPOINTMENTS

2008-2010. Adjunct Professor, Xishuangbanna Tropical Botanical Garden,
Chinese Academy of Sciences

2000- present. Full Professor, Department of Biology, University of Vermont

1995 - 2000. Associate Professor, Department of Biology, University of Vermont

1992-1994. Assistant Professor, Department of Biology, University of Vermont

1988 - 1992. Assistant Professor, Department of Zoology, University of
Oklahoma

1987 - 1988. Post-doctoral Associate, Department of Biology, Colorado State
University

1985 - 1987. Lecturer, Department of Organismic and Evolutionary Biology,
Harvard University

RESEARCH INTERESTS

Community ecology

Responses of populations and communities to altered nutrient regimes

Biogeography and island biology

Demography and extinction risk

Null models and species co-occurrence patterns

TEACHING INTERESTS

Theoretical, Community, Population, Experimental Ecology

Ecological Modeling

Biostatistics

Biogeography

Invertebrate Zoology

TEACHING/RESEARCH AWARDS

Fulbright Fellow 1993
Dean's Lecturer 1997
University Scholar 2005

PEER-REVIEWED JOURNAL PUBLICATIONS

IN PRESS

Maestre, F.T., J.L. Quero, N.J. Gotelli, et al. (50 additional authors). Plant species richness and ecosystem multifunctionality in global drylands. **Science**.

Colwell, R.K., A. Chao, N.J. Gotelli, S.-Y. Lin, C.X. Mau, R.L. Chazdon, and J.T. Longino. Models and estimators linking individual-based and sample-based rarefaction, extrapolation and comparison of samples. **Journal of Plant Ecology**.

Gotelli, N.J. and W. Ulrich. Statistical challenges in null model analysis. **Oikos**.

Gotelli, N.J., W. Ulrich, and F.T. Maestre. Randomization tests for quantifying species importance to ecosystem function. **Methods in Ecology and Evolution**.

Gotelli, N.J., Chao, A., R.K. Colwell, W.-H. Hwang, and G.R. Graves. Specimen-based modeling, stopping rules, and the extinction of the ivory-billed woodpecker. **Conservation Biology** (Featured in *The Economist*).

Baiser, B., N.J. Gotelli, H.L. Buckley, T.E. Miller, and A.M. Ellison. Geographic variation in network structure of a Nearctic aquatic food web. **Global Ecology and Biogeography**.

2011

Pelini, S. L., F.P. Bowles, A.M. Ellison, N.J. Gotelli, N.J. Sanders, and R.R. Dunn. 2011. Heating up the forest: open-top chamber warming manipulation of arthropod communities at Harvard and Duke Forests. **Methods in Ecology and Evolution** 2: 534-540.

Pelini, S. L., M. Boudreau, N. McCoy, A. M. Ellison, N. J. Gotelli, N. J. Sanders, and R. R. Dunn. 2011. Effects of short-term warming on low and high latitude forest ant communities. **Ecosphere** 2: art62.

Gotelli, N.J. and W. Ulrich. 2011. Over-reporting bias in null model analysis: a reponse to Fayle and Manica (2010). **Ecological Modelling** 222: 1337-1339.

Wittman, S.E. and N.J. Gotelli. 2011. Predicting community structure of ground-foraging ant assemblages with Markov models of behavioral dominance. **Oecologia** 166: 207-219.

Jules, E.S., A.M. Ellison, N.J. Gotelli, S. Lillie, G.A. Meindl, N.J. Sanders, and A.N. Young. 2011. Influence of fire on a rare serpentine plant assemblage: a 5-year study of *Darlingtonia* fens. **American Journal of Botany** 98: 801-811.

Gotelli, N.J., A.M. Ellison, N.J. Sanders, and R.R. Dunn. 2011. Counting ants (Hymenoptera: Formicidae): biodiversity sampling and statistical analysis for myrmecologists. **Myrmecological News** 15: 13-19.

- Gotelli, N.J., A.M. Smith, A.M. Ellison, and B.A. Ballif. 2011. Proteomic characterization of the major arthropod associates of the carnivorous pitcher plant *Sarracenia purpurea*. **Proteomics** 11: 2354-2358.
- Jenkins, C.N., N.J. Sanders, A.N. Andersen, X. Arnan, C.A. Bruhl, X. Cerda, A.M. Ellison, B.L. Fisher, M.C. Fitzpatrick, N.J. Gotelli, A.D. Gove, B. Guenard, J.E. Lattke, J.P. Lessard, T.P. McGlynn, S.B. Menke, C.L. Parr, S.M. Philpott, H.L. Vasconcelos, M.D. Weiser, and R.R. Dunn. 2011. Global diversity in light of climate change: the case of ants. **Diversity and Distributions** 17: 652-662.
- Hart, E.M. and N.J. Gotelli. 2011. The effect of climate change on density-dependent population dynamics of aquatic invertebrates. **Oikos** 120: 1227-1234.

2010

- Gotelli, N.J., G.R. Graves, and C. Rahbek. 2010. Macroecological signals of species interactions in the Danish avifauna. **Proceedings of the National Academy of Sciences, U.S.A.** 107: 530-535. [Science Perspectives by Brian McGill]
- Gotelli, N.J., R.M. Dorazio, A.M. Ellison, and G.D. Grossman. 2010. Detecting temporal trends in species assemblages with bootstrapping procedures and hierarchical models. **Philosophical Transactions of the Royal Society B** 365:3621-3631.
- Ulrich, W. and N.J. Gotelli. 2010. Null model analysis of species associations using abundance data. **Ecology** 91:3384-3397.
- Gotelli, N.J. and W. Ulrich. 2010. The empirical Bayes approach as a tool to identify non-random species associations. **Oecologia** 162:463-477.
- Wittman, S.E., N.J. Sanders, A.M. Ellison, E.S. Jules, J.S. Ratchford, and N.J. Gotelli. 2010. Species interactions and thermal constraints on ant community structure. **Oikos** 119:551-559.
- Buckley, H.L., T.E. Miller, A.M. Ellison, and N.J. Gotelli. 2010. Local- to continental-scale variation in the richness and composition of an aquatic food web. **Global Ecology and Biogeography** 19:711-723.
- Weiser, M.D., N.J. Sanders, D. Agosti, A.N. Andersen, A.M. Ellison, B.L. Fisher, H. Gibb, N.J. Gotelli, A.D. Gove, K. Gross, B. Guenard, M. Janda, M. Kaspari, J-P. Lessard, J.T. Longino, J.D. Majer, S.B. Mencke, T.P. McGlynn, C.L. Parr, S.M. Philpott, J. Retana, A.V. Saurez, H.L. Vasconcelos, S.P. Yanoviak, and R.R. Dunn. 2010. Canopy and litter ant assemblages share similar climate-species density relationships. **Biology Letters** 6:769-772.

2009

- Chao, A., R.K. Colwell, C.W. Lin, and N.J. Gotelli. 2009. Sufficient sampling for asymptotic minimum species richness estimators. **Ecology** 90:1125-1133.
- Colwell, R.K., N.J. Gotelli, C. Rahbek, G.L. Entsminger, C. Farrell, and G.R. Graves. 2009. Peaks, plateaus, canyons, and craters: the complex geometry of simple mid-domain effect models. **Evolutionary Ecology Research** 11:355-370.

- Dunn, R. R., D. Agosti, A. N. Andersen, X. Arnan, C. A. Bruhl, X. Cerda, A. M. Ellison, B. L. Fisher, M. C. Fitzpatrick, H. Gibb, N. J. Gotelli, A. D. Gove, B. Guenard, M. Janda, M. Kaspari, E. J. Laurent, J. P. Lessard, J. T. Longino, J. D. Majer, S. B. Menke, T. P. McGlynn, C. L. Parr, S. M. Philpott, M. Pfeiffer, J. Retana, A. V. Suarez, H. L. Vasconcelos, M. D. Weiser, and N. J. Sanders. 2009. Climatic drivers of hemispheric asymmetry in global patterns of ant species richness. **Ecology Letters** 12:324-333.
- Ellison, A.M. and N.J. Gotelli. 2009. Energetics and the evolution of carnivorous plants: Darwin's 'most wonderful plants in the world'. **Journal of Experimental Botany** 60:19-42.
- Gotelli, N. J., M. J. Anderson, H. T. Arita, A. Chao, R. K. Colwell, S. R. Connolly, D. J. Currie, R. R. Dunn, G. R. Graves, J. L. Green, J. A. Grytnes, Y. H. Jiang, W. Jetz, S. K. Lyons, C. M. McCain, A. E. Magurran, C. Rahbek, T. Rangel, J. Soberon, C. O. Webb, and M. R. Willig. 2009. Patterns and causes of species richness: a general simulation model for macroecology. **Ecology Letters** 12:873-886.
- Lessard, J.P., J.A. Fordyce, N.J. Gotelli, and N.J. Sanders. 2009. Invasive ants alter the phylogenetic structure of ant communities. **Ecology** 90:2664-2669.
- Ulrich, W., M. Almeida-Neto, and N.J. Gotelli. 2009. A consumer's guide to nestedness analysis. **Oikos** 118: 3-17.

2008

- Butler, J.L., N.J. Gotelli, and A.M. Ellison. 2008. Linking the brown and green: Nutrient transformation and fate in the *Sarracenia* microecosystem. **Ecology** 89:898-904.
- Gotelli, N.J., P.J. Mouser, S.P. Hudman, S.E. Morales, D.S. Ross, and A.M. Ellison. 2008. Geographic variation in nutrient availability, stoichiometry, and metal concentrations of plants and pore-water in ombrotrophic bogs in New England, USA. **Wetlands** 28:827-840.
- Gruner, D.S., N.J. Gotelli, J.P. Price, and R.H. Cowie. 2008. Does species richness drive speciation? A reassessment with the Hawaiian biota. **Ecography** 31:279-285.
- Healy, C., N.J. Gotelli, and C. Potvin. 2008. Partitioning the effects of biodiversity and environmental heterogeneity for productivity and mortality in a tropical tree plantation. **Journal of Ecology** 96:903-913.
- Potvin, C. and N.J. Gotelli. 2008. Biodiversity enhances individual performance but does not affect survivorship in tropical trees. **Ecology Letters** 11:217-223. [Science *Editor's Choice* by Andrew Sugden]

2007

- Dunn, R.R., N.J. Sanders, M.C. Fitzpatrick, E. Laurent, J.-P. Lessard, D. Agosti, A. Andersen, C. Bruhl, X. Cerda, A.M. Ellison, B. Fisher, H. Gibb, N. Gotelli, A. Gove, B. Guenard, M. Janda, M. Kaspari, J.T. Longino, J. Majer, T.G. McGlynn, S. Menke, C. Parr, S. Philpott, M. Pfeiffer, J. Retana, A. Suarez, and H. Vasconcelos. 2007. Global ant biodiversity and

- biogeography - a new database and its possibilities. **Myrmecological News** 10: 77-83.
- Ellison, A.M., S. Record, A. Arguello, and N.J. Gotelli. 2007. Rapid inventory of the ant assemblage in a temperate hardwood forest: Species composition and assessment of sampling methods. **Environmental Entomology** 36:766-775.
- Hudman, S.P. and N.J. Gotelli. 2007. Intra- and intersexual selection on male body size are complimentary in the fathead minnow (*Pimephales promelas*). **Behaviour** 144:1065-1086.
- Rahbek, C., N. J. Gotelli, R. K. Colwell, G. L. Entsminger, T. F. L. V. B. Rangel, and G. R. Graves. 2007. Predicting continental patterns of bird species richness with spatially explicit models. **Proceedings of the Royal Society B** 274: 165-174. (supplemental material) [Science *Editor's Choice* by Andrew Sugden]
- Sanders, N.J., N.J. Gotelli, S.E. Wittman, J.S. Ratchford, A.M. Ellison, and E.S. Jules. 2007. Assembly rules of ground-foraging ant assemblages are contingent on disturbance, habitat and spatial scale. **Journal of Biogeography** 34:1632-1641.
- Ulrich, W. and N.J. Gotelli. 2007a. Disentangling community patterns of nestedness and species co-occurrence. **Oikos** 116:2053-2061.
- Ulrich, W. and N.J. Gotelli. 2007b. Null model analysis of species nestedness patterns. **Ecology** 88:1824-1831.

2006

- Gotelli, N. J., and A. M. Ellison. 2006. Food-web models predict species abundance in response to habitat change. **PLoS Biology** 44: e324. (supplemental material) [Science *Editor's Choice* by Andrew Sugden; Nature *News & Views* by Jonathan Shurin]
- Gotelli, N. J. and A. M. Ellison. 2006. Forecasting extinction risk with non-stationary matrix models. **Ecological Applications** 16: 51-61.
- Gotelli, N. J. and B. J. McGill. 2006. Null versus neutral models: what's the difference?. **Ecography** 29: 793-800.
- Morales, S. E., Mouser, P. J., Ward, N., Hudman, S. P., Gotelli, N. J., and T. A. Lewis. 2006. Comparison of bacterial composition and diversity in New England *Sphagnum* bogs using Terminal Restriction Fragment Length Polymorphism (T-RFLP). **Microbial Ecology** 52: 34-44.

2005

- Farrell-Gray, C.C. and N.J. Gotelli. 2005. Allometric exponents support a $\frac{3}{4}$ power scaling law. **Ecology** 86: 2083-2087.
- Wakefield, A.E., N.J. Gotelli, S.E. Wittman, and A.M. Ellison. 2005. Prey addition alters nutrient stoichiometry of the carnivorous plant *Sarracenia purpurea*. **Ecology** 86: 1737-1743.
- Dixon, P.M., A.M. Ellison, and N.J. Gotelli. Improving the precision of estimates of the frequency of rare events. 2005. **Ecology** 86: 1143-1123.
- Ratchford, J. S., S.E. Wittman, E.S. Jules, A.M. Ellison, N.J. Gotelli, and N.J. Sanders. 2005. The effects of fire, local environment, and time on ant

- assemblages in fens and forests. **Diversity and Distributions** 11: 487-497.
- Colwell, R.K., C. Rahbek, and N.J. Gotelli. 2005. The mid-domain effect: there's a baby in the bathwater. **American Naturalist** 166: E149-E154.
- 2004
- Gotelli, N.J. 2004. A taxonomic wish-list for community ecology. **Transactions of the Royal Society of London B** 359: 585-597.
- Colwell, R.K. C. Rahbek, and N.J. Gotelli. 2004. The mid-domain effect and species richness patterns: what have we learned so far? **American Naturalist** 163: E1-E23.
- Ellison, A.M., H.L. Buckley, T.E. Miller, and N.J. Gotelli. 2004. Morphological variation in *Sarracenia purpurea* (Sarraceniaceae): geographic, environmental, and taxonomic correlates. **American Journal of Botany** 91: 1930-1935.
- Mouser, P.J., W. Cully Hession, D.M. Rizzo, and N.J. Gotelli. 2004. Hydrology and geostatistics of a Vermont, USA kettlehole peatland. **Journal of Hydrology** 301: 1-17.
- 2003
- Arnett, A.E. and N.J. Gotelli. 2003. Bergmann's Rule in larval ant lions: testing the starvation resistance hypothesis. **Ecological Entomology** 28: 645-650.
- Buckley, H.L., T.E. Miller, A.M. Ellison, and N.J. Gotelli. 2003. Reverse latitudinal trends in species richness of pitcher-plant food webs. **Ecology Letters** 6: 825-829.
- McCabe, D.J. and N.J. Gotelli. 2003. Caddisfly diapause aggregations facilitate benthic invertebrate colonization. **Journal of Animal Ecology** 72: 1015-1026.
- Gotelli, N.J. and G.L. Entsminger. 2003. Swap algorithms in null model analysis. **Ecology** 84: 532-535.
- Sanders, N.J., N.J. Gotelli, N.E. Heller, and D.M. Gordon. 2003. Community disassembly by an invasive species. **Proceedings of the National Academy of Sciences, U.S.A.** 100: 532-535.
- Ellison, A. M., N. J. Gotelli, J.S. Brewer, J. Kniitel, T.E. Miller, L. Cochran-Stafira, A.C. Worley, and R. Zamora. 2003. Carnivorous plants as model ecological systems. **Advances in Ecological Research** 33: 1-74.
- 2002
- Gotelli, N.J. and A.M. Ellison. 2002. Assembly rules for New England ant assemblages. **Oikos** 99: 591-599.
- Gotelli, N.J. and A.M. Ellison. 2002. Nitrogen deposition and extinction risk in the northern pitcher plant, *Sarracenia purpurea*. **Ecology** 83: 2758-2765.
- Gotelli, N.J. and D.J. McCabe. 2002. Species co-occurrence: a meta-analysis of J.M. Diamond's assembly rules model. **Ecology** 83: 2091-2096.

- Gotelli, N.J. and A.M. Ellison. 2002. Biogeography at a regional scale: determinants of ant species density in New England bogs and forests. **Ecology** 83: 1604-1609.
- Ellison, A.M. and N.J. Gotelli. 2002. Nitrogen availability alters the expression of carnivory in the northern pitcher plant, *Sarracenia purpurea*. **Proceedings of the National Academy of Sciences, U.S.A.** 99: 4409-4412.
- Gotelli, N.J. and K. Rohde. 2002. Co-occurrence of ectoparasites of marine fishes: a null model analysis. **Ecology Letters** 5: 86-94.
- Ellison, A.M., E.J. Farnsworth, and N.J. Gotelli. 2002. Ant diversity in pitcher-plant bogs of Massachusetts. **Northeastern Naturalist** 9: 267-284.

2001

- Gotelli, N.J. and G.L. Entsminger. 2001. Swap and fill algorithms in null model analysis: rethinking the Knight's Tour. **Oecologia** 129:281-291.
- Gotelli, N.J. 2001. Research frontiers in null model analysis. **Global Ecology and Biogeography** 10: 337-343.
- Ellison, A.M. and N.J. Gotelli. 2001. Evolutionary ecology of carnivorous plants. **Trends in Ecology and Evolution** 16: 623-629.
- Gotelli, N.J. and R.K. Colwell. 2001. Quantifying biodiversity: procedures and pitfalls in the measurement and comparison of species richness. **Ecology Letters** 4: 379-391.
- Albrecht, M. and N.J. Gotelli. 2001. Spatial and temporal niche partitioning in grassland ants. **Oecologia** 126: 134-141.
- Arnett A.M. and N.J. Gotelli. 2001. Pit-building decisions of larval ant lions: effects of laval age, temperature, food and population source. **Journal of Insect Behavior** 14:89-97.

1991-2000

- Gotelli, N.J. and A.E. Arnett. 2000. Biogeographic effects of red fire ant invasion. **Ecology Letters** 3: 257-261. (**Science news commentary**)
- Gotelli, N.J. 2000. Null model analysis of species co-occurrence patterns. **Ecology** 81: 2606-2621.
- McCabe, D.C. and N.J. Gotelli. 2000. Effects of disturbance frequency, intensity, and area on stream macroinvertebrate communities. **Oecologia** 124: 270-279.
- Arnett, A.E. and N.J. Gotelli. 2000. Geographic variation in body size of the ant lion *Myrmeleon immaculatus*: evolutionary implications of Bergmann's Rule. **Evolution** 53: 1180-1188.
- Gotelli, N.J. and C.M. Taylor. 1999. Testing metapopulation models with stream-fish assemblages. **Evolutionary Ecology Research** 1: 835-845.
- Gotelli, N.J. and C.M. Taylor. 1999. Testing macroecology models with stream-fish assemblages. **Evolutionary Ecology Research** 1: 847-858.
- Arnett, A.E. and N.J. Gotelli. 1999. Bergmann's Rule in the ant lion *Myrmeleon immaculatus* DeGeer (Neuroptera: Myrmeleontidae): geographic variation in body size and heterozygosity. **Journal of Biogeography** 26: 275-284.
- Gotelli, N.J. 1997. Competition and coexistence of larval ant lions. **Ecology** 78: 1761-1773.

- Gotelli, N.J., N.J. Buckley, and J.A. Wiens. 1997. Co-occurrence of Australian land birds: Diamond's assembly rules revisited. **Oikos** 80: 311-324.
- Moore, J. and N.J. Gotelli. 1996. Evolutionary patterns of altered behavior and susceptibility in parasitized hosts. **Evolution** 50: 807-819.
- Gotelli, N.J. 1996. Ant community structure: effects of predatory ant lions. **Ecology** 77: 630-638.
- Taylor, C.M. and N.J. Gotelli. 1994. The macroecology of *Cyprinella*: correlates of phylogeny, body size, and geographic range. **The American Naturalist** 144: 549-569.
- Moore, J., M. Freehling, and N.J. Gotelli. 1994. Altered behaviour in two blattid cockroaches infected with *Moniliformis moniliformis* (Acanthocephala). **Journal of Parasitology** 80: 220-223.
- Gotelli, N.J. and W.G. Kelley. 1993. A general model of metapopulation dynamics. **Oikos** 68: 36-44.
- Gotelli, N.J. 1993. Antlion zones: causes of high-density predator aggregations. **Ecology** 74: 226-237.
- Graves, G.R. and N.J. Gotelli. 1993. Assembly of avian mixed species flocks in Amazonia. **Proceedings of the National Academy of Sciences, U.S.A.** 90: 1388-1391.
- Gotelli, N.J. and H.R. Spivey. 1992. Male parasitism and intrasexual competition in a burrowing barnacle. **Oecologia** 91: 474-480.
- Gotelli, N.J. and J. Moore. 1992. Altered host behaviour in a cockroach-acanthocephalan association. **Animal Behaviour** 43: 949-959.
- Allely, Z., J. Moore, and N.J. Gotelli. 1992. *Moniliformis moniliformis* has no effect on some behaviors of the cockroach *Diploptera punctata*. **Journal of Parasitology** 78: 524-526.
- Moore, J. and N.J. Gotelli. 1992. *Moniliformis moniliformis* increases cryptic behaviors in the cockroach host *Supella longipalpa*. **Journal of Parasitology** 78: 49-53.
- Gotelli, N.J. 1991. Metapopulation models: the propagule rain, the rescue effect, and the core-satellite hypothesis. **The American Naturalist** 138: 768-776.
- Gotelli, N.J. 1991. Demographic models for *Leptogorgia virgulata*, a shallow-water gorgonian. **Ecology** 72: 457-467.
- Gotelli, N.J. and W.H. Bossert. 1991. Ecological character displacement in a variable environment. **Theoretical Population Biology** 39: 49-62.
- Gotelli, N.J. and M. Pyron. 1991. Life history variation in North American freshwater minnows: effects of latitude and phylogeny. **Oikos** 62: 30-40.
- 1982-1990
- Gotelli, N.J. 1990. Stochastic models of gregarious larval settlement. **Ophelia** 32: 95-108.
- Gotelli, N.J. and G.R. Graves. 1990. Body size and the occurrence of avian species on land-bridge islands. **Journal of Biogeography** 17: 315-325.
- Gotelli, N.J. 1988. Determinants of recruitment, juvenile growth and spatial distribution of a shallow-water gorgonian. **Ecology** 69: 157-166.
- Young, C.M. and N.J. Gotelli. 1988. Larval predation by barnacles: effects on patch colonization in a shallow subtidal community. **Ecology** 69: 624-634.

- Gotelli, N.J. and D. Simberloff. 1987. The distribution and abundance of tallgrass prairie plants: a test of the core-satellite hypothesis. **The American Naturalist** 130: 18-35.
- Gotelli, N.J. 1987. Spatial and temporal patterns of reproduction, larval settlement, and recruitment of the compound ascidian *Aplidium stellatum*. **Marine Biology** 94: 45-51.
- Gotelli, N.J., F.G. Lewis, and C.M. Young. 1987. Body-size differences in a colonizing amphipod-mollusc assemblage. **Oecologia** 72: 104-108
- Gotelli, N.J., S.L. Gilchrist, and L.G. Abele. 1985. The population biology of *Trapezia* spp. and other coral-associated decapods. **Marine Ecology Progress Series** 21: 89-98.
- Simberloff, D. and N. Gotelli. 1984. Effects of insularization on plant species richness in the prairie-forest ecotone. **Biological Conservation** 29: 63-80.
- Boecklen, W.J. and N.J. Gotelli. 1984. Island biogeographic theory and conservation practice: species-area or specious-area relationships? **Biological Conservation** 29: 90-111.
- Graves, G.R. and N.J. Gotelli. 1983. Neotropical land-bridge avifaunas: new approaches to null hypotheses in biogeography. **Oikos** 41: 322-333.
- Gotelli, N.J. and L.G. Abele. 1983. Community patterns of coral-associated decapods. **Marine Ecology Progress Series** 13: 131-139.
- Gotelli, N.J. and L.G. Abele. 1982. Statistical distributions of West Indian land bird families. **Journal of Biogeography** 9: 421-435.

BOOK CHAPTERS

- Dorazio, R. M., N. J. Gotelli, and A. M. Ellison. 2011. Modern methods of estimating biodiversity from presence-absence surveys. To appear in: G. Venora, O. Grillo, and J Lopez-Pujol, editors. Biodiversity. InTech.
- Gotelli, N.J. and R.K. Colwell. 2010. Estimating species richness. pp. 39-54 in: *Biological Diversity: Frontiers In Measurement And Assessment*. A.E. Magurran and B.J. McGill (eds.). Oxford University Press, Oxford. 345 pp.
- Gotelli, N.J. 2004. Assembly Rules. pp. 1027-1035 in: *Foundations of Biogeography: Classic Papers with Commentaries*. M.V. Lomolino, D.F. Sax, and J.H. Brown (eds.). University of Chicago Press, Chicago. 1291 pp.
- Moore, J.K. and N.J. Gotelli. 1990. A phylogenetic perspective on the evolution of altered host behaviours: a critical look at the manipulation hypothesis. pp. 193-233 in: *Parasitism And Host Behaviour*. C.J. Barnard and J.M. Behnke (eds.). Taylor and Francis, Limited.
- Simberloff, D. and N. Gotelli. 1983. Refuge design and ecological theory: lessons for prairie and forest conservation. pp. 66-71 in: *Proceedings of the Eighth International Prairie Conference*. R. Brewer (ed). Western Michigan University.

AUTHORED BOOKS AND SOFTWARE

- Ellison, A.M., N.J. Gotelli, E.J. Farnsworth, and G. Alpert. **A Field Guide to the Ants of New England**. Yale University Press (in press)
- Gotelli, N.J. 2008. **A Primer of Ecology**. Sinauer Associates, Inc., Sunderland, MA. 4th edition. [used by > 50,000 students at > 100 colleges and universities; translated into Portuguese]
- Gotelli, N.J. and A.M. Ellison. 2004. **A Primer of Ecological Statistics**. Sinauer Associates, Inc.
- Gotelli, N.J. and G.R. Graves. 1996. **Null Models in Ecology**. Smithsonian Institution Press, Washington, D.C.
- Gotelli, N.J., G.L. Entsminger, C. Rahbek, R.K. Colwell, and G.R. Graves 2007. **BioGeoSim: Biogeography software for ecologists. Version 1.0**. Acquired Intelligence, Inc., Kesey-Bear.
- Gotelli, N.J. and G.L. Entsminger. 2000. **EcoSim. Null Models Software for Ecology**. Acquired Intelligence, Inc., Kesey-Bear.

BOOK REVIEWS, COMMENTARIES, & SCIENCE FICTION

- Gotelli, N.J. 2009. How to respond to requests to debate creationists. (submitted by P.Z. Myers). **American Atheist** 47: 10-11.
- Farnsworth, E., A.M. Ellison, and N.J. Gotelli. 2009. EvoSoap. **Nature** 458:938-938. ["Futures" fiction column in *Nature*]
- Hochberg, M.E., J.M. Chase, N.J. Gotelli, A. Hastings, and S. Naeem. 2009. The tragedy of the reviewer commons. **Ecology Letters** 12: 2-4.
- Gotelli, N.J. 2008. Perspectives in biogeography: Hypothesis testing, curve fitting, and data mining in macroecology. **International Biogeography Society Newsletter** 6: 1-7.
- Hochberg, M.E. and N.J. Gotelli. 2005. An invasions special issue. **TREE** 20: 211.
- Taper, M.L. and S.R. Lele (eds). 2005. *The nature of scientific evidence: statistical, philosophical, and empirical considerations*. **EcoScience** 12: 149-150.
- Scott, J.M., P.J. Heglund, M.L. Morrison, et al. 2003. *Predicting species occurrences: issues of accuracy and scale*. **Auk** 120: 1199-1200.
- Vandermeer, J.H. and D.E. Goldberg. 2003. *Population ecology: first principles*. **Quarterly Review of Biology** 78: 499.
- Gotelli, N.J. 2002. Biodiversity in the scales. **Nature** 419: 575-576.
- Gotelli, N.J. 1999. How do communities come together? **Science** 286: 1684-1685.
- Resetarits, W.J., Jr., and J. Bernardo. 1999. *Experimental ecology: issues and perspectives*. **Bioscience** 49: 829-830.
- Maurer, B.A. 1999. *Untangling ecological complexity: the macroscopic perspective*. **American Zoologist** 24.
- den Boer, P.J. and J. Reddingius. 1998. *Regulation and stabilization paradigms in population ecology*. **Ecology** 79: 354-355.
- Iversen, E.S. 1997. *Living marine resources: their utilization and management*. **Quarterly Review of Biology** 72: 91.

- Grenfell, B.T. and A.P. Dobson. 1996. *Ecology of infectious diseases in natural populations*. **C Quarterly Review of Biology** 71: 436.
- Brown, J.H. 1996. *Macroecology*. **The Condor** 98: 669-670.
- Edwards, P.J., R.M. May, and N.R. Webb (eds). 1994. *Large-scale ecology and conservation biology*. **Conservation Biology** 9: 468-469.
- Power, D.M. 1993. Current ornithology, volume 10. **Ecology** 75: 1194.
- Perrins, C.M., J.-D. Lebreton, and G.J.M. Hirons (eds). 1991. *Bird population studies: relevance to conservation and management*. **Ecology** 73: 1931-1932.
- Bakus, G. 1990. *Quantitative ecology and marine biology*. **Quarterly Review of Biology** 67: 382.

EXTERNAL FUNDING

- 2012-2015. National Science Foundation. Dimensions in Biodiversity: Collaborative Research: The climate cascade: functional and evolutionary consequences of climatic change on species, trait, and genetic diversity in a temperate ant community. (Total award: \$1,997,320. UVM component: \$687,559; UVM Biology Co-PIs: Sara Helms Cahan, Bryan Ballif)
- 2009-2011. National Science Foundation. 0909359. Dissertation Research: Evolutionary Responses of *Daphnia* to Climate Change in Vernal Ponds. \$10,000. Co-PI, Ted Hart.
- 2008-2011. Department of Energy. Impacts of elevated temperature on ant species, communities and ecological roles at two temperate forests in eastern North America. (UVM Component \$383,778). Co-PIs Rob Dunn, Nate Sanders, Aaron Ellison.
- 2006-2010. National Science Foundation. Moths, ants, and carnivorous plants: the spatial dimension of species interactions. \$645,000. UVM component: \$60,000. Co-PI Aaron Ellison.
- 2006-2008. National Center for Ecological Analysis and Synthesis (NCEAS). Working Group: Modeling Species Richness. Co-PIs Robert Colwell, Carsten Rahbek
- 2003-2006. National Science Foundation. Effects of nutrient stress on a co-evolved food web. \$350,000. UVM component: \$26,000. Co-PI, Aaron Ellison.
- 2003-2004. National Science Foundation. SGER: RUI: Collaborative. Mechanisms of community re-assembly after a catastrophic fire. \$100,000. UVM component: \$13,000. Co-PIs: Nate Sanders, Eric Jules, Aaron Ellison.
- 2000-2002. National Science Foundation (Education and Human Resources). Development of a multidisciplinary research culture in environmental science and engineering at the University of Vermont. \$300,000. Co-PI, Chris Allen.
- 2000-2002. National Science Foundation. Biocomplexity Incubation Activity: A synthetic approach to phytotelmata communities. \$92,034. Co-PIs: Tom Miller, Aaron Ellison.
- 2001-2004. National Science Foundation. EcoSim: Null models software for ecologists. \$282,000.

- 2000-2002. Environmental Protection Agency. The role of natural vs. anthropogenic factors in assessing ecological risk in agricultural watersheds. \$537,266. Co-PIs Mary Watzin, Jim Hoffmann.
- 1998-2003. National Science Foundation. Inquiline communities in changeable pitchers: do nutrients link community assembly to dynamic habitats? \$200,000. UVM component \$50,000. Co-PI Aaron Ellison.
- 1998-2000. National Science Foundation. EcoSim: Null models software for ecologists. \$232,000.
- 1997-1999. National Science Foundation. DEB-9615708. Behavioral strategies of sit-and-wait foragers: models of ant lion foraging. \$110,000. Co-PI, N. Buckley.
- 1997-1998. National Science Foundation. DEB-9615708. Dissertation Research: Geographic variation in life history traits of the ant lion, *Myrmeleon immaculatus*. \$8000. Co-PI, Amy Arnett.
- 1996-1997. National Science Foundation. BIR-9612109. EcoSim: A Proposal for Null Models Software. \$50,000.
1993. Fulbright Foundation. The Evolution of Altered Host Behavior. Research Award, University of Oxford, Great Britain.
- 1992-1995. National Science Foundation BSR-9118962. Antlion Zones: Consequences of High-Density Predator Aggregations. \$144,000.
- 1989-1991. National Science Foundation BSR-8817495. The Evolution of Altered Behaviors in Parasitized Animals: A Cockroach-Acanthocephalan Model. \$81,000. Co-Pi with J. Moore.

INVITED SEMINARS, PLENARY TALKS, SYMPOSIA, WORKSHOPS

- Distinguished Ecologist, Utah State University, April 2012
- Invited panel speaker, NCEAS anniversary meeting, Santa Barbara, March 2012
- Paleobiology Working Group, Smithsonian Institution, February 2012
- University of Massachusetts, Amherst, April 2011
- Michigan State University, Lansing, April 2011
- Louisiana State University, Baton Rouge, March 2011
- Plenary Speaker, Biology Symposium,. Universidad Autonoma Metropolitana, Mexico City, February 2011
- Royal Society, Kavli Institute, London, October 2010
- Royal Society, "Biodiversity in a Changing World", London, October 2010
- Cornell University, Ithaca, March 2010
- Boston University, Boston, February 2010
- University of Central Florida, Orlando, January 2010
- NIMBioS Binary Matrices Workshop, Knoxville, December 2009
- Plenary Speaker, International Symposium on Quantitative Ecology & 2nd Taiwan-Japan Ecology Workshop, Taipei, October 2009
- Universidad Rey Juan Carlos, Mostoles, June 2009
- NIMBioS Binary Matrices Workshop, Knoxville, May 2009
- University of Vermont, Burlington November 2008
- Plenary Speaker, 18th Italian Ecological Congress, Parma, September 2008
- Xishuangbanna Tropical Botanical Garden, May 2008
- Chinese Academy of Sciences, Kunming, May 2008
- University of Rhode Island, Providence, April 2008

Plenary Speaker, 9th Ecological Integration Symposium, Texas A & M, College Station, March 2008
Duke University, Durham, September 2007
Bowdoin College, Brunswick, September 2007
University of Arizona, Tucson, April 2007
Iowa State University, Ames, April 2007
Dartmouth College, Hanover, February 2007
Plenary Speaker: Macroecology Symposium, Institute For Climate Research, Potsdam, Germany, August 2006
ESA Symposium, Assembly Rules, Memphis, August 2006
NorthWoods Stewardship Center, East Charleston, May 2006
University of Tennessee, Knoxville, April 2006
University of Colorado, Boulder, March 2006
University of Nevada, Reno, December 2005
University of Uppsala, Sweden, April 2005
University of California, Davis, January 2005
Yale University, New Haven, January 2005
University of North Carolina, Chapel Hill, December 2004
McGill University, Montreal, November 2004
University of Montreal, Montreal, April 2004
University of Mississippi, Starkeville, April 2004
Yale University, New Haven, January 2004
NSF Workshop: Statistical methods for ecologists, Jackson, December 2003
Plenary Speaker, Venezuelan Ecological Society, Margarita, October 2003
University of Connecticut, Storrs, April 2003
Wake Forest University, January 2003
Williams College, MA, November 2002
University of Quebec, Trois Riveries, October 2002
NCEAS Working Group: Productivity-diversity relationships, Santa Barbara, August 2002
Utah State University, Logan, November 2001
University of Washington, Seattle, May 2001
Cornell University, Ithaca, April 2001
Modeling Workshop, Oregon State University, Corvallis March 2001
Texas A & M, Arlington, March 2001
Biocomplexity Workshop, Tallahassee, January 2001
University of Delaware, December 2000
NCEAS Workshop, Biogeography, September 2000
ESA Symposium, Snowbird, Carnivorous Plants, August 2000
University of Toronto, Toronto, April 2000
University of California, Santa Barbara, January 2000
Catholica University, Santiago, Chile November 1999
Las Cruces Marine Laboratory, Las Cruces, Chile, November 1999
Plenary Speaker: Chilean Biological Society Symposium, Santiago, Chile November 1999
University of Wisconsin, Madison, October 1999
Middlebury College, Middlebury, September 1999
University of Nebraska, Lincoln, April 1999

Complex Systems Conference, Nashua, NH, October 1998
Endangered Species Conference, McGill University, October 1998
University of Minnesota, Duluth, September 1998
INTECOL Symposium, Florence, Species Interactions, July 1998
McGill University, Montreal, March 1998
SUNY Stony Brook, New York, December 1997
Florida State University, Tallahassee, May 1997
University of California, Santa Cruz, April 1997
University of California, Davis, April 1997
University of New Hampshire, Portsmouth, March 1997
Tufts University, Medford, February 1997
University of Missouri, St. Louis, January 1997
Rocky Mountain Biological Laboratory, August 1996
Bodega Bay Marine Laboratory, June 1996
Mt. Holyoke College, Holyoke, April 1996
University of Maryland, Baltimore, March 1996
University of Southwestern Louisiana, Lafayette, November 1994
University of Connecticut, Storrs, October 1994
University of Oxford, May 1993
University of Oxford, April 1993
University of Oxford, March 1993
Imperial College, Silwood Park, April 1993
University of Vermont, Burlington, February 1993
NSF Symposium, Nested Subsets, Chicago Field Museum, April 1992
University of Vermont, Burlington, March 1992
Entomological Society of America, Baltimore, December 1992
University of Michigan, December 1991
University of Kansas, November 1991
Los Angeles County Museum of Natural History, May 1991
Scripps Institute of Oceanography, May 1991
New Mexico State University, April 1991
Entomological Society of America, New Orleans, December 1990
University of California, Berkeley, December 1990
ESA Symposium, Snowbird, Host-Parasite Ecology, August 1990
University of Arkansas, Fayetteville, September 1989
Harvard University, Cambridge, March 1989
Harbor Branch Oceanographic Institute, Ft. Pierce, February 1989
University of Oklahoma, Norman, March 1988, March 1991
Louisiana State University, Baton Rouge, February 1988
San Jose State University, San Jose, February 1988
Colorado State University, Ft. Collins, October 1987
Colorado State University, Ft. Collins, March 1987
Boston University, Boston, September 1986
Wood's Hole Oceanographic Institution, Woods Hole, June 1986
Harvard University, Cambridge, May 1986
The Nature Conservancy, Boston, January 1986
Northeastern University, Nahant, December 1985
Harvard University, Cambridge, November 1985

Hopkins Marine Station, June 1983
University of California, Berkeley, June 1983
Florida State University, Tallahassee, September 1982
University of California, Berkeley, December 1981

EDITORSHIIPS AND MAJOR COMMITTEES

Deputy Editor-In-Chief, Journal of Biogeography (2010 – present)
Board of Editors, Myrmecological News (2010 – present)
Board of Editors, Scientific Reports (2010 – present; open access *Nature* publications group)
Board of Editors, Ecology (2001 – present)

E.O. Wilson Award Committee Chair, ASN (2003-2005)
Local Hosting Committee ESA Montreal Meeting (2005)
NCEAS Science Advisory Board (2002 – 2005)
Board of Editors, Oikos (2004-2009)
Board of Editors, Journal of Biogeography (2004 – 2010)
Associate Editor, Ecology Letters (2002 – 2008)
Board of Editors, Biodiversity Letters (1992 - 1997)
Board of Editors, The American Naturalist (1994 - 1998)
Mercer Awards Committee Member, ESA (1997 - 1999)
Mercer Awards Committee Chair, ESA (1999 - 2001)

REVIEWING

Journal Reviewing:

Acta Oecologia, American Journal of Botany, The American Naturalist, Animal Behaviour, The Auk, Australian Journal of Ecology, Biodiversity Letters, Biotropica, Behavioral Ecology, Biological Conservation, Bioscience, Canadian Journal of Fisheries and Aquatic Sciences, Cladistics, Conservation Ecology, Copeia, Coral Reefs, Ecology, Ecology Letters, Diversity and Distributions, Ecological Applications, Ecological Entomology, Ecological Monographs, European Journal of Entomology, Evolution, Evolutionary Ecology (ad hoc editor), Hydrobiologia, Journal of Biogeography, Journal of Ecology, Journal of Insect Behavior, Journal of Parasitology, Journal of Theoretical Biology, Journal of Vegetation Science, Limnology & Oceanography, Marine Ecology Progress Series, Nature, Oecologia, Oikos, Science, Southeastern Naturalist (ad hoc editor), Theoretical Population Biology, Trends in Ecology and Evolution (ad hoc editor), Vegetatio

Proposal Reviewing:

National Science Foundation (Ecology, Population Biology, Behavior Panels); National Geographic Society

NSF PANEL SERVICE

Ecology Panel (Fall 1995 - Spring 1998)
Integrated Challenges Panel (Spring 1999 - Spring 2001)

UNIVERSITY, COLLEGE AND DEPARTMENTAL SERVICE

OSP Hiring Committee 1998
Curriculum Committee 1992
Committee on Retention of Majors 1992
Search Committee, Evolutionary Ecologist 1993
Search Committee, Signal Transduction 1993, 1994
Search Committee, Community Ecologist (Botany Department) 1993
Faculty Volunteer, Undergraduate Orientation 1994
Co-Director, Environmental Studies Program 1995-Present
Advisory Council 1995
Director, Biology Department Graduate Program 1995-2000
Search Committee Chair, Evolutionary Biologist, 2003
TRI Spires Committee 2009

GRADUATE STUDENTS

Marc Albrecht, Ph.D., 1996. University of Oklahoma, Insect Community Ecology.
Current position: Assistant Professor, Department of Biology, University of Nebraska at Kearney.

Amy Arnett, Ph.D., 1998. University of Vermont, Insect Life History Evolution.
Current position: Associate Professor, Department of Biology, Unity College, Maine.

Jerry Johnson, Ph.D., 1999. University of Vermont, Fish Life History Evolution.
Current position: Associate Professor, Brigham Young University.

Declan McCabe, Ph.D., 1999. University of Vermont, Insect Community Ecology.
Current position: Associate Professor, Department of Biology, Saint Michael's College.

Amy Wakefield, MS., 2004. University of Vermont. Plant Ecology. Current position: State Biologist, Vermont.

Stephen Hudman, Ph.D., 2005. University of Vermont. Current position: Tenure-track Assistant Professor, Truman State College.

Kate Farrell, MS., 2006. University of Vermont, Theoretical Ecology. Current position: High school teacher, Vermont.

Sarah Wittman, Ph.D., 2007. University of Vermont. Inquiline Ecology. Current position: Post-doctoral Associate, Smithsonian Institution.

Ted Hart, Ph.D., 2010. University of Vermont. Climate Change, Aquatic Ecology.
Current position: Post-doctoral Associate, University of Vancouver

Allyson Degrassi, Ph.D. (current). University of Vermont, small mammal ecology.

Cristian Dambros, Ph.D. (current). University of Vermont, rain forest termite community structure.

POST-DOCTORAL ASSOCIATES

Dr. Neil Buckley, 1997. Current Position: Tenure-track Assistant Professor, Department of Biology, SUNY Plattsburg

Dr. Shannon Pelini. 2009 - present.

Dr. Irma Nieto 2009 – 2010

INTERNATIONAL VISITORS

Irma Nieto, National University of Mexico, May 2009-2010
Raul Valdes, Museo Nacional de Ciencias Naturales, June-August 2009
Fernando Maestre Gil, Universidad Rey Juan Carlos, June-August 2007,
2011
Giorgio Mancinelli, University of Lecce, December 2007
Michael Borregaard, University of Copenhagen, October-December 2007

GRADUATE STUDENT COMMITTEES

University of Oklahoma

Sherry Johnston, Zoology, M.S.	David Certain, Zoology, M.S.
Matt Winston, Zoology, Ph.D.	Chris Taylor, Zoology, Ph.D.
Matt Craig, Zoology, Ph.D.	Bruce Stewart, Zoology, Ph.D.

University of Vermont

Christine Staats, Zoology, M.S.	Tracy Erwin, Wildlife, M.S.
Jeffrey Myers, Field Naturalist, M.S.	Jim Boone, Entomology, M.S.
David Kirtchel, Botany, Ph.D.	Amy Sheldon, Wildlife, M.S.
Amy Seidl, Biology, Ph.D.	Becky Irwin, Biology, Ph.D.
Deirdre Joy, Biology, Ph.D.	Kristian Omland, Biology, M.S.
Shannon Morrison, Botany, Ph.D.	Laura Hill, Biology, Ph.D.
Jake Riley, Natural Resources, M.S.	
Mason Cline, Natural Resources, M.S.	
Paul Simonin, Natural Resources, M.S.	

Other Institutions

Grace Suerat, University of Missouri, St. Louis Ph.D.
Pablo Inchausti, SUNY, Stony Brook, Ph.D.
Pedro Peres-Neto, University of Toronto, Toronto Ph.D.
Tom Romdal, University of Copenhagen, Copenhagen Ph.D.