MARCEL HOLYOAK: CURRICULUM VITAE

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Education

1985-89	Imperial College, University of London, U.K. Bachelor of Science, with honors, in biology.
1990-92	Imperial College, University of London, U.K. Ph.D. in ecology. Dissertation title: 'The detection of density dependence in insect populations'.

Employment

1988	Research assistant, Imperial College at Silwood Park, U.K. (Integrated pest management).
1989	Graduate research assistant, Imperial College at Silwood Park, U.K. (Behavioral bioassays to investigate the effects of antifeedant compounds on aphid feeding).
1992-1994	Postdoctoral Researcher, NERC Centre for Population Biology, Imperial College at Silwood Park, U.K.
1994-1995	Postdoctoral Researcher, Center for Ecology, Evolution and Behavior, University of Kentucky.
1995-June 2000	Assistant Research Entomologist and Lecturer, Department of Entomology, University of California, Davis.
July 2000- June 2002	Assistant Professor in the Department of Environmental Science and Policy and College of Agricultural and Environmental Sciences at the University of California, Davis.
July 2002 June 2006	Associate Professor in the Department of Environmental Science and Policy and College of Agricultural and Environmental Sciences at the University of California, Davis.
JanJuly 2007	Research Fellow at Institute for Advanced Studies at the Hebrew University in Jerusalem, Israel, January-July 2007.
July 2006 onwards	Professor in the Department of Environmental Science and Policy and College of Agricultural and Environmental Sciences at the University of California, Davis.
July 2011 onwards	Vice-Chair Department of Environmental Science and Policy, University of California, Davis.

Grants and Contracts

- Holyoak, M. and S. P. Harrison. Multi-species metapopulation dynamics: experiments in a model systems. \$150,000 over 3 years from 1 Oct. 1996 (NSF: DEB-9629876).
- Holyoak, M. Development of an interim management plan for the threatened Valley Elderberry Longhorn Beetle in the American River Parkway. Contract from Sacramento Area Flood Control Authority (SAFCA). \$8068, 9/1/2001 to 3/31/2003.
- Holyoak, M. Valley Elderberry Longhorn Beetle Habitat Management Plan. Contract from Sacramento Area Flood Control Authority (SAFCA) for matching funds and a National Fish and Wildlife Foundation Challenge Grant. \$193,581 in 3 separate contracts in period 5/1/2002 to 9/31/2008.
- Holyoak, M. and A. Hastings. QEIB: Using phase dynamics and a model experimental system to understand the effects of extrinsic variability on predator and prey metapopulations. NSF–DEB 0213026 \$274,708, 7/1/2002 to 6/30/2005.
- Holyoak, M. QEIB: Island Biogeography and Metacommunity Dynamics of Food Webs—Theory and Experiments in a Model System. NSF–DEB 0414465. \$400,978 8/1/2004 to 7/31/2008.
- Holyoak, M. Monitoring Elderberry and VELB for the Arden Parallel Force Main Mitigation Site, The American River Parkway, Sacramento, CA. Contract with Sacramento County Regional Sanitation District. \$134,904, 1/1/2005 to 12/31/2009.
- Holyoak, M. Pruning and the Valley Elderberry Longhorn Beetle. Contract with CALTRANS. \$15,000, 6/15/2005 to 3/30/2006.
- Holyoak, M. Improving mitigation for the Valley Elderberry Longhorn Beetle. Contract with CALTRANS. \$110,400, 6/15/2005 to 6/30/2007.
- Holyoak, M. The effects of construction activities on Valley Elderberry Longhorn Beetle habitat. Contract with CALTRANS. \$309,047, 12/31/2005 to 12/30/2008.
- Karban, R. and Holyoak, M. LTREB Understanding Food Web Complexity by Linking Long-Term Data, Multiple Causes and a Spatial Approach. NSF-DEB 0639885. \$295,410, 01/30/2007 to 1/29/2012.
- Holyoak, M. Monitoring for the Valley Elderberry Longhorn Beetle. US Fish and Wildlife Service. 11/15/2007-11/15/2008, \$35,000.
- Holyoak, M. and Kelsey, T.R. An online population database for tricolored blackbird monitoring. California Department of Fish and Game funds routed through the Center for Population Biology at UC-Davis. 3/1/2008 to 6/30/2012, \$40,000.

In-press Publications

In Review: Karban, R., T. Mata, P. Grof-Tisza, G. Crutsinger, M. Holyoak. 2013? Non-trophic effects of litter reduce ant predation and determine caterpillar survival and distribution. Oikos?

Peer-Reviewed Publications (in reverse chronological order)

See <u>http://www.researcherid.com/rid/C-3475-2009</u> for a summary of publications and citations.

- 69. Karban, R; P. Grof-Tisza, J.L. Maron and **M. Holyoak**. 2012. The importance of host plant limitation for caterpillars of the Arctiid moth (*Platyprepia virginalis*) varies spatially. *Ecology* 93:2216-2226.
- Karban, R; P. Grof-Tisza, and M. Holyoak. 2012. Facilitation of Tiger Moths by Outbreaking Tussock Moths That Share the Same Host Plants. *Journal of Animal Ecology* 81:1095-1102.
- 67. Mata, TM, NM Haddad, and **M Holyoak**. 2013. How invader traits interact with resident communities and resource availability to determine invasion success. *Oikos* 122:149-160.
- 66. **Holyoak, M.**, Kneitel, J.M. Metacommunities. In Hastings, A.M. and Gross, L. Sourcebook in Theoretical Ecology. University of California Press.
- 65. Altermatt, F. and **M. Holyoak**. 2012. Spatial clustering of habitat structure effects patterns of community composition and diversity. *Ecology* 93:1125-1133.
- 64. Reeves, M. K., M. Perdue, G. D. Blakemore, D. J. Rinella, and **M. Holyoak**. 2011. Twice as easy to catch? A toxicant and a predator cue cause additive reductions in larval amphibian activity. Ecosphere **2**:art72.
- 63. Altermatt, F., A. Bieger, F. Carrara, A. Rinaldo, and M. Holyoak. 2011. Effects of Connectivity and Recurrent Local Disturbances on Community Structure and Population Density in Experimental Metacommunities. PLoS ONE 6:e19525.
- Altermatt, F., S. Schreiber, and M. Holyoak. 2011. Interactive effects of disturbance and dispersal directionality on species richness and composition in metacommunities. Ecology 92:859-870.
- Reeves, M. K., P. Jensen, C. L. Dolph, M. Holyoak, and K. A. Trust. 2010. Multiple stressors and the cause of amphibian abnormalities. Ecological Monographs 80:423-440.
- Holyoak, M., T. Talley, and S. Hogle. 2010. The effectiveness of US mitigation and monitoring practices for the threatened Valley elderberry longhorn beetle. Journal of Insect Conservation. DOI: 10.1007/s10841-009-9223-4.
- 59. Hornberger, M. I., S. N. Luoma, M. L. Johnson, and **M. Holyoak**. 2009. Influence of remediation in a mine-impacted river: metal trends over large spatial and temporal scales. Ecological Applications 19:1522-1535.
- Davies, K. F., M. Holyoak, K. A. Preston, V. A. Offeman, and Q. Lum. 2009. Factors controlling community structure in heterogeneous metacommunities. Journal of Animal Ecology 78:937-944.
- 57. Vaghti, M., M. Holyoak, A. Williams, T. Talley, A. Fremier, and S. Greco. 2009. Understanding the Ecology of Blue Elderberry to Inform Landscape Restoration in Semiarid River Corridors. Environmental Management 43:28-37.
- Holyoak, M., R. Casagrandi, R. Nathan, E. Revilla, and O. Spiegel. 2008. Trends and missing parts in the study of movement ecology. Proceedings of the National Academy of Sciences 105:19060-19065.

- 55. Nathan, R., W. M. Getz, E. Revilla, M. Holyoak, R. Kadmon, D. Saltz, and P. E. Smouse. 2008. A movement ecology paradigm for unifying organismal movement research. Proceedings of the National Academy of Sciences 105:19052-19059. Selected as a "must read" on Faculty of 1000: "This paper introduces an important Special Feature of articles on the movement of organisms across landscapes. The entire series is worth reading for all ecologists. This paper sets out the idea of movement ecology as a paradigm with the idea that parallels exist across a wide range of types of organism."
- 54. **Holyoak, M**. and T. M. Mata. 2008. Metacommunities. Pages 2313-2318 *in* J. Sven Erik and F. Brian, editors. Encyclopedia of Ecology. Academic Press, Oxford.
- Holyoak, M. 2008. Ecological Indicators: Connectance and Connectivity. Pages 737-743 in J. Sven Erik and F. Brian, editors. Encyclopedia of Ecology. Academic Press, Oxford, UK.
- 52. Koch-Munz, M. and **M. Holyoak**. 2008. An evaluation of the effects of soil characteristics on mitigation and restoration involving blue elderberry, *Sambucus mexicana*. *Environmental Management*, 42: 49-65.
- 51. Schlesinger, M., P. Manly, and **M. Holyoak**. 2008. Distinguishing stressors acting on landbird communities in an urbanizing environment. *Ecology*, 89: 2302-2314.
- 50. **Holyoak, M.** and M. Koch-Munz. 2008. The effects of site conditions and mitigation practices on success of establishing the Valley elderberry longhorn beetle and its host plant blue elderberry. *Environmental Management*, 42: 444-457.
- Haddad, N. M., M. Holyoak, T. M. Mata, K. F. Davies, B. A. Melbourne, and K. Preston. 2008. Species' traits predict the effects of disturbance and productivity on diversity. *Ecology Letters* 11:348-356.
- 48. Talley, T. S., E. Fleishman, **M. Holyoak**, D. D. Murphy, and A. Ballard 2007. Rethinking a rare-species conservation strategy in an urban landscape: The case of the valley elderberry longhorn beetle. Biological Conservation 135:21-32.
- 47. Melbourne, B. A., H. V. Cornell, K. F. Davies, C. J. Dugaw, S. Elmendorf, A. L. Freestone, R. J. Hall, S. Harrison, A. Hastings, M. Holland, **M. Holyoak**, J. Lambrinos, K. Moore, and H. Yokomizo 2007. Invasion in a heterogeneous world: resistance, coexistence or hostile takeover? Ecology Letters 10:77-94.
- 46. Talley, D. M., Huxel G.R., and **M. Holyoak** 2006. Connectivity at the land-water interface. Pages 97-129 in K. Crooks and M. Sanjayan, editors. Connectivity conservation. Cambridge University Press, Cambridge, U.K.
- 45. Ellis, A. M., L. P. Lounibos, and **M. Holyoak**. 2006. Evaluating the long-term metacommunity dynamics of tree hole mosquitoes. Ecology 87:2582-2590.
- Holyoak, M., M. Loreau, D. R. Strong. 2006. Neutral Community Ecology. Introduction to Special Feature and Special Feature edited by the same authors. Ecology 87: 1368-1369.
- 43. **Holyoak, M**. and M. Loreau. 2006. Reconciling empirical ecology with neutral community models. Ecology 87: 1370-1377.
- Talley Theresa S., M. Holyoak, D. A. Piechnik. 2006. The effects of road dust on the federally threatened valley elderberry longhorn beetle. Environmental Management 37: 647-658.

- 41. **Holyoak**, **M**., and S. P. Lawler. 2005. The contribution of laboratory experiments on protists to understanding population and metapopulation dynamics. Advances in Ecological Research 37:245-271.
- 40. **Holyoak, M.**, M. A. Leibold, and R. D. Holt, editors. 2005. Metacommunities: Spatial Dynamics and Ecological Communities. University of Chicago Press, Chicago, IL. Includes five chapters with Holyoak as a lead or coauthor (listed separately below, numbers 35-39) and four introductory or summary sections. The book was independently peer reviewed by the press and separately by the subject editors.
- Holyoak, M., M. A. Leibold, N. M. Mouquet, R. D. Holt, and M. F. Hoopes. 2005. Metacommunities: A framework for large-scale community ecology. Pages 1-31 *in* M. Holyoak, M. A. Leibold, and R. D. Holt, editors. Metacommunities: spatial dynamics and ecological communities. University of Chicago Press, Chicago, IL.
- Hoopes, M. F., R. D. Holt, and M. Holyoak. 2005. The effects of spatial processes on two species interactions. Pages 35-67 in M. Holyoak, M. A. Leibold, and R. D. Holt, editors. Metacommunities: spatial dynamics and ecological communities. University of Chicago Press, Chicago, IL.
- Chase, J. M., P. Amarasekare, K. Cottenie, A. Gonzalez, R. D. Holt, M. Holyoak, M. F. Hoopes, M. A. Leibold, M. Loreau, N. Mouquet, J. B. Shurin, and D. Tilman. 2005. Competing theories for competitive metacommunities. Pages 335-354 *in* M. Holyoak, M. A. Leibold, and R. D. Holt, editors. Metacommunities: spatial dynamics and ecological communities. University of Chicago Press, Chicago, IL.
- Leibold, M. A., R. D. Holt, and M. Holyoak. 2005. Adaptive and coadaptive dynamics in metacommunities: Tracking environmental change at different spatial scales. Pages 439-464 *in* M. Holyoak, M. A. Leibold, and R. D. Holt, editors. Metacommunities: spatial dynamics and ecological communities. University of Chicago Press, Chicago, IL.
- 35. Holt, R. D., M. Holyoak, and M. A. Leibold. 2005. Future directions in metacommunity ecology. Pages 465-490 in M. Holyoak, M. A. Leibold, and R. D. Holt, editors. Metacommunities: spatial dynamics and ecological communities. University of Chicago Press, Chicago, IL.
- 34. Amarasekare, P., M. F. Hoopes, N. Mouquet, and **M. Holyoak**. 2004. Mechanisms of coexistence in competitive metacommunities. The American Naturalist **164**: 310-326.
- 33. Leibold, M. A., M. Holyoak, N. Mouquet, P. Amarasekare, J. M. Chase, M. F. Hoopes, R. D. Holt, J. B. Shurin, R. Law, D. Tilman, M. Loreau, and A. Gonzalez. 2004. The metacommunity concept: a framework for multi-scale community ecology. Ecology Letters 7: 601-613.
- 32. Huxel G.R., M. Holyoak, T.S. Talley, and S. Collinge. 2003 Perspectives on the recovery of the threatened Valley Elderberry Longhorn Beetle. In: *California Riparian Systems: Habitat and Floodplain Processes, Management, and Restoration.* (ed. Faber, P.M.), pp. 457-462. Riparian Habitat Joint Venture, Picklewood Press, Mill Valley, CA.
- 31. Bolker, B., **M. Holyoak**, V. Krivan, L. Rowe, and O. Schmitz. 2003. Connecting theoretical and empirical studies of trait-mediated interactions. Ecology 84:1101-1114.
- 30. Donahue, M. J., **M. Holyoak**, and C. Feng. 2003. Patterns of dispersal and dynamics among habitat patches varying in quality. The American Naturalist 162:302-317.

- Kreuder, C., J.A.K. Mazet, G.D. Bossart, T.E. Carpenter, M. Holyoak, M.S. Elie and S. Wright. 2002. Clinicopathologic features of suspected brevecotoxicosis in double-crested cormorants (*Phalacrocorax auritus*) along the Florida Gulf coast. *Journal of Zoo and Wildlife Medicine*, 33, 8-15.
- 28. Dingle, H., and **M. Holyoak**. 2001. The evolutionary ecology of animal movement. *In*: Evolutionary ecology: Concepts and case studies *eds.* C.W. Fox, D.A. Roff and D.J. Fairbairn. Oxford University Press, Oxford, U.K.
- 27. Collinge, S.K., **M. Holyoak**, C.B. Barr, and J.T. Marty. 2001. Riparian habitat fragmentation and population persistence of the threatened valley elderberry longhorn beetle in central California. *Biological Conservation*, 100, 103-113.
- 26. Holyoak, M. 2000. Effects of nutrient enrichment on predator-prey metapopulation dynamics. *Journal of Animal Ecology*, 69, 985-997.
- 25. Holyoak, M. 2000. Habitat subdivision causes changes in food web structure. *Ecology Letters*, 3 (6), 509-515.
- 24. **Holyoak, M.**, S.P. Lawler, and P.H. Crowley. 2000. Predicting extinction: Progress with an individual-based model of protozoan predators and prey. *Ecology* 81, 3312–3329.
- 23. Amezcua, A.B., and **M. Holyoak.** 2000. Empirical evidence for predator-prey source-sink dynamics. *Ecology*, 81(11), 3087-3098.
- 22. Holyoak, M. 2000. Habitat patch arrangement and metapopulation persistence of predators and prey. *The American Naturalist*, 156 (4), 378-389.
- Holyoak, M. 2000. Comparing parasitoid-dominated food webs with other food webs: problems and future promises. Pages 184-197 *in*: Parasitoid Population Biology *eds*. M.E. Hochberg and A.R. Ives. Princeton University Press, Princeton, N.J.
- 20. Holyoak, M., and C. Ray. 1999. A roadmap for metapopulation research. *Ecology Letters*, 2, 273-275.
- 19. Lawler, S.P., D. Dritz, T. Strange, and **M. Holyoak.** 1999. Effects of introduced mosquitofish and bullfrogs on a threatened frog. *Conservation Biology*, 13, 613-622.
- 18. Holyoak, M., and S. Sachdev. 1998. Omnivory and the stability of simple food webs. *Oecologia*, 117, 413-419.
- 17. Hawkins, B.A., and **M. Holyoak.** 1998. Transcontinental crashes of insect populations? *The American Naturalist* 152, 480-484.
- 16. Yela, J.L., and **M. Holyoak.** 1997. Effects of moonlight and environmental factors on light and bait trap catches of noctuid moths (Lepidoptera: Noctuidae). *Environmental Entomology* 26, 1283-1290.
- 15. Holyoak, M., V. Jarosik, and I. Novak. 1997. Weather-induced changes in moth activity bias measurement of long-term population dynamics from light trap samples. *Entomol. Exp. Appl.* 83, 329-335.
- 14. Holyoak, M., and S.P. Lawler. 1996. Persistence of an extinction-prone predator-prey interaction through metapopulation dynamics. *Ecology* 77, 1867-1879.
- 13. Holyoak, M., and S.P. Lawler. 1996. The role of dispersal in predator-prey metapopulation dynamics. *Journal of Animal Ecology* 65, 640-652.

- 12. Holyoak, M., and S.R. Baillie. 1996. Factors influencing detection of density dependence in British birds: I. Population trends. *Oecologia* 108, 47-53.
- 11. **Holyoak, M.**, and S.R. Baillie. 1996. Factors influencing detection of density dependence in British birds: II. Longevity and population variability. *Oecologia* 108, 54-63.
- 10. Holyoak, M. 1994. Comment: appropriate time-scales for identifying lags in density dependent processes. *Journal of Animal Ecology* 63, 479-483.
- 9. Holyoak, M. 1994. Identifying delayed density dependence in time series data. *Oikos* 70, 296-304.
- 8. Seddon, M.B., and **M. Holyoak.** 1994. *Pupoides coenopictus* (Hutton, 1834) new to Tunisia. *Journal of Conchology* 35, 89.
- Holyoak, M., and J.H. Lawton. 1993. Comment arising from a paper by Wolda and Dennis: using and interpreting the results of tests for density dependence. *Oecologia* 95, 592-594.
- 6. Holyoak, M. 1993. The frequency of detection of density dependence in insect orders. *Ecological Entomology* 18, 339-347.
- 5. Holyoak, M. 1993. New insights into testing for density dependence. Oecologia 93, 435-444.
- 4. Holyoak, M., and P.H. Crowley. 1993. Avoiding erroneously high levels of detection in combinations of semi-independent tests. *Oecologia* 95, 103-114.
- 3. Holyoak, M., and J.H. Lawton. 1992. Detection of density dependence from annual censuses of bracken-feeding insects. *Oecologia* 91, 425-430.
- 2. Hardie, J., **M. Holyoak**, N.J. Taylor, and D.C. Griffiths. 1992. The combination of electronic monitoring and video-assisted observations of plant penetration by aphids and behavioural effects of polygodial. *Entomol. Exp. Appl.* 62, 223-239.
- 1. Hardie, J., **M. Holyoak**, J. Nicholas, S.F. Nottingham, J.A. Picket, J.A., L.J. Wadhams, and C.M. Woodcock. 1990. Aphid sex pheromone components: age-dependent release by females and species-specific male response. *Chemoecology* 1, 63-68.

Non Peer-Reviewed Publications

- Holyoak, M. and N. Espuno, N. 2012. Virtual Issue of *Ecology Letters* for the Ecological Society of America Annual Meeting: "Preserving and Sustaining Ecosystems in the Face of Anthropogenic Change." This consists of a new introduction and a compilation of already-published articles. http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291461-0248/homepage/virtual issue.htm
- 11. **Holyoak, M.** 2011. Virtual Issue of *Ecology Letters* for "The ecology, conservation and management of forests." This consists of a new introduction and a compilation of already-published articles to commemorate the UN International Year of Forests. http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291461-0248/homepage/virtual_issue.htm
- 10. Holyoak, M., 2011. Editorial: The growth of Ecology Letters, and scope of the journal. Ecology Letters 14: 81.

- Holyoak, M. and N. Espuno, N. 2010. Virtual Issue of *Ecology Letters* for "Year of Biodiversity, September 2010." This consists of a new introduction and a compilation of already-published articles. http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN%291461-0248/homepage/virtual_issue.htm
- 8. Aubrey, D. P. and **M. Holyoak**. 2010. Targeting journals and covering letters. *Frontiers in Ecology and the Environment* 8:161-162.
- McPeek, M. A., D. L. DeAngelis, R. G. Shaw, A. J. Moore, M. D. Rausher, D. R. Strong, A. M. Ellison, L. Barrett, L. Rieseberg, M. D. Breed, J. Sullivan, C. W. Osenberg, M. Holyoak, and M. A. Elgar. 2009. The golden rule of reviewing. *The American Naturalist* 173:E155-E158
- 6. Holyoak, M. 2009. Editorial. Ecology Letters 12:1.
- Holyoak, M. 2008. Book Review: Diverse perspectives on how to unite quantitative scaling patterns and mechanisms for biodiversity. Scaling biodiversity editedy D. Storch, P. A. Marquet, and J.H. Brown (2007). *Ecology* 89:2364-2365.
- Talley, T. S., D. Wright, and M. Holyoak. 2006. Assistance with the 5-Year Review of the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). United States Fish and Wildlife Service, Sacramento. http://www.fws.gov/sacramento/es/documents/VELB_5yr_review_Talley_etal.pdf
- 3. **Holyoak, M.** 2003. Book Review: Turchin P. 2003. Complex Population Dynamics: A Theoretical/Empirical Synthesis. *Integrative and Comparative Biology* 43:479-479.
- Holyoak, M. 2002. Book Review. Gardner, Robert H., W. Michael Kemp, Victor S. Kennedy, and John E. Petersen, editors. 2001. Scaling relations in experimental ecology. Columbia University Press, New York, New York. *Ecology*, 83(5), 1471-1472.
- 1. Holyoak, M. 1998. Book Review. Population Dynamics in Ecological Space and Time. Olin E. Rhodes, Jr., Ronald K. Chesser, and Michael H. Smith (eds). The University of Chicago Press, 1996. *American Scientist* 86, 88.

Reviews of Holyoak et al. 2005. Metacommunities: spatial dynamics and ecological communities. University of Chicago Press, Chicago, IL.

- Bruun, H. H. 2006. Holyoak, M., M. A. Leibold & R. D. Holt (Eds.), 2005. Metacommunities: Spatial Dynamics and Ecological Communities. University of Chicago Press, xi + 513 p., 15 x 23 cm, softcover, US\$38.00, ISBN 0-22635064-9. *Ecoscience* **13**:563-564.
- Driscoll, D. A. 2006. Metacommunities: Spatial Dynamics and Ecological Communities. *Austral Ecology* **31**:910-911.
- Fuller, M. M. 2006. In a World of Diversity, a Search for Unity. *Ecology* 87:2681-2682.
- Gaston, K. J. 2006. Book Reviews. Metacommunities: Spatial Dynamics and Ecological Communities Edited by Marcel Holyoak, Matthew A. Leibold and Robert D. Holt xi + 513 pp., 23 x 15 x 3 cm, ISBN 0 226 35064 paperback, US\$ 38.00/GB£ 24.00, Chicago, IL, USA: The University of Chicago Press, 2005. *Environmental Conservation* 33:175-176.
- Gross, M. 2006. Book Review: Metacommunities: Spatial dynamics and ecological communities by Marcel Holyoak, Mathew A. Lebiold and Robert D. Holt. *History and Philosophy of the Life Sciences* 28:111-112.

- Paine, R. T. 2006. Metacommunities. Spatial Dynamics and Ecological Communities. Marcel Holyoak, Mathew A. Leibold, and Robert D. Holt, editors. *Integrative and Comparative Biology*. 46:347.
- Pergl, J. 2007. M. Holyoak, M.A. Leibold, and R.D. Holt: Metacommunities: Spatial Dynamics and Ecological Communities. Book Review. *Folia Geobotanica* **42**:222.
- Urban, M. C. 2006. Conservation beyond Community. Conservation Biology 20:1330-1332.

Graduate Students and Postdocs Trained

- Michele Buckhorn. PhD The effects of marine protected areas and fisheries on leopard grouper (a large fish species) in Baja, Mexico. Coadvised by Peter Moyle.Oct 2002 to January 2009. Postdoctoral researcher at UC-Davis.
- K. Jun Bando, PhD about the population ecology and genetics of sea grasses and *Spartina*. Coadvised by Don Strong. Oct. 2000 to Sept. 2005. Works for US State Dept. in Washington DC.
- Kendi F. Davies. Postdoctoral Researcher (Project Scientist). Jan 2005 December 2006. Faculty at University of Colorado, Boulder, CO.
- Melanie Gogol-Prokurat. PhD. Effects of disturbance on the metapopulation dynamics and responses to fragmentation of rare plant species. Oct. 2003 to June 2009. Works for California Dept. of Fish and Game.
- Kim Preston. MSc by examination. Oct. 2003 to Sept. 2010.
- Mari Reeves. PhD. Causes of amphibian deformities in Alaska. January 2009 to December 2011.
- Matthew Schlesinger. PhD. Effects of urbanization and fragmentation on bird communities in urban forest plots in Lake Tahoe, California. Oct. 2001 to February 2007. Works for The Nature Conservancy in New York State.
- Jennifer (Jenna) Shinen. PhD. Community effects of an invasive intertidal mussel species. Oct 2002 to September 2007. Coadvised by Stephen Morgan. Postdoc in Chile.
- Drew Talley. Postdoctoral Researcher and affiliated professional researcher. Jan 2002 to 2005. Faculty, University of San Diego, San Diego, CA.
- Theresa S. Talley. PhD about the population and landscape ecology of the threatened Valley Elderberry Longhorn Beetle. Oct. 2000 to Sept. 2005. Instructor, University of San Diego.
- Quenby Lum. PhD candidate. Studying the effects of soil and ecosystem processes on responses of serpentine plant communities to burning. Oct. 2000, left Fall 2012 with expectation that PhD would be awarded if dissertation was completed. Coadvised by William Horwath.
- Tawny Mata. PhD candidate. Invasive species and metacommunity dynamics. Oct 2005, degree awarded 2012.
- Emil Aalto. PhD candidate. Project to be decided. Oct 2007, degree expected 2013.
- Cory Overton. PhD candidate. Conservation and ecology Clapper Rails. September 2009, degree expected 2014. Co-advised by Don Strong.
- Patrick Grof-Tisza. PhD candidate. Spatial population ecology and movement of a moth, *Platyprepia virginalis*. Oct 2008, degree expected 2013. Coadvised by Rick Karban.
- Sacha Heath, PhD candidate. October 2011, degree expected 2016.

Professional Activities and Awards

- Editor-in-chief for *Ecology Letters* December 2008 onwards.
- Member of Board of Directors July 2012-July 2014, and previously a member of the Executive Committee for an NSF-funded international group promoting data archiving: DRYAD <u>http://datadryad.org/</u> January 2010-July 2012.
- Member of the editorial board for *Ecology* February 2004 to July 2008
- Member of the editorial board of *The American Naturalist* July 2005 to August 2008.
- Member of the editorial board of *Ecology Letters*, July 2002 to April 2007, and Acting Editorin-chief and Associate editor at various times between August and December 2008.
- Sub-editor for *Antenna*, the magazine of the Royal Entomological Society of London, 1991-1994.
- Member of "Faculty of 1000" (<u>http://www.f1000biology.com/</u>), January 2006 to August 2008. Published by BioMed Central, Faculty of 1000 Biology is an online research tool that highlights the most interesting papers in biology, based on the recommendations of over 1000 leading scientists worldwide.
- Research Fellow and member of a working group on "Movement Ecology" at the Institute for Advanced Studies at the Hebrew University in Jerusalem, Israel, January-July 2007.
- Member of two working groups at the National Center for Ecological Analysis and Synthesis at Santa Barbara, CA:
 - NCEAS Working Group Member "The Meta-Community Concept: A Framework for Large Scale Community Ecology?" Led by Mathew Leibold (U. of Chicago). 2002-2005
 - NCEAS Working Group Member "The Role of Individual-Scale Processes in Community-Level Dynamics: What are the Dynamically Relevant Organizational Scales for Predicting Community Dynamics?" Led by Oswald Schmitz of Yale University. 2000-2001
- Recipient of "Ecology Professor of the Year", May 2001, June 2002, and June 2006, a prize awarded annually "In honor of an outstanding professor that donated extra time, energy and enthusiasm to the Graduate Group in Ecology and its students at the University of California at Davis". This Graduate Group in Ecology includes approximately 130 professors and 250 graduate students.
- University of California at Davis, major committees and administrative duties:
 - Chair of campus (Academic Senate's) Committee on Courses of Instruction 2008-2011. This committee oversees the review of all courses at UC-Davis.
 - Master Advisor for Environmental Biology and Management Major 2002-2010, and for Environmental Science and Management Major 2007 onwards.
 - Vice-Chair, Department of Environmental Science and Policy, Fall 2011 onwards.
- Awarded The Murray Prize for Insect Physiology for the best undergraduate research project in entomology, Imperial College, University of London (1989).
- Awarded Bingzhi Forum Professorship for 2012 by Institute of Zoology at Chinese Academy of Sciences in Beijing, China. Awarded in recognition of contributions to the Bingzhi Forum (lecture) and contributions to the institute.

Professional Activities and Awards (cont.)

- External examiner for a Ph.D. candidate in Ecology, University of Helsinki, Finland (Feb. 1996), University of Miami, FL. (January 2003), Dartmouth College, NH (April 2004), and Linkoping University, Sweden (Dec. 2009). Thesis committee member of MSc student at California State University, Chico (September 2009).
- Reviewer of manuscripts for The American Naturalist, The Auk, Behavioral Ecology, Biological Conservation, Biology Letters, Bulletin of Entomological Research, Conservation Biology, Conservation Ecology, Ecological Entomology, Ecological Modelling, Ecology, Ecology Letters, Entomologia Experimentalis et Applicata, Environmental Entomology, European Journal of Entomology, Experimental and Applied Acarology, Journal of Animal Ecology, Nature, Oecologia, Oikos, Proceedings of the U.S. National Academy of Sciences, Proceedings of the Royal Society of London (Biological Sciences), Quarterly Review of Biology, Science, and Theoretical Population Biology. Ad-hoc editor for Ecology 2001-2004.
- Reviewer of undergraduate ecology texts for Blackwell, Oxford University Press, Elsevier and Sinauer.
- Member of the British Ecological Society, Ecological Society of America, and Union of Concerned Scientists.
- Member of NSF Panel in Evolutionary and Population Ecology during Fall 2004, and Spring 2006 and 2007, and Doctoral Dissertation Improvement Grant panel during Spring 2003. Reviewer of grant applications for The National Science Foundation, The National Geographical Society, The Natural Environment Research Council, U.K., the Czech Academy of Sciences, The Royal Society of London, Faculty of Science at Göteborg University, Sweden, and The Royal Society of New Zealand.
- Member of NSF Division of Environmental Biology's (DEB) Committee of Visitors advisory meeting 21-23 June 2006. The COV is a panel of 12 that gives feedback to NSF about how best to direct research resources. The program involves a comprehensive review of the success of DEB in funding research in ecology, evolution and systematics, and the business practices used by the programs. A public report came from this evaluation.
- Invited participant in "Forum" on NPR station KQED in San Francisco discussing the Endangered Species Act, its effectiveness, and some of the amendments proposed. February 15th 2006.
- In 2007 I undertook a five-year review of the listing status of the federally threatened Valley Elderberry Longhorn Beetle for US Fish and Wildlife Service, led by Theresa Talley, a postdoctoral researcher in my lab and David Wright. <u>http://www.fws.gov/sacramento/es/documents/VELB_5yr_review_Talley_etal.pdf</u>. In fall 2012 I participated in a review of the FWS proposed delisting rule for the valley elderberry longhorn beetle as one of four external (non-FWS) reviewers.