Curriculum Vitae

Steven L. Peck
Associate Professor
Department of Biology
401 Widtsoe Building
Brigham Young University
Provo, UT 84602-5255, USA
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Education

1997, Ph.D. in Biomathematics and Entomology
Advisors: Steve Ellner (Biomathematics), Fred Gould (Entomology) North Carolina State University
Dissertation: Spatial Patterns and Processes in the Evolution of Insecticide Resistance

1987, M.S. Environmental Biostatistics
University of North Carolina at Chapel Hill
Masters Research: Inter-species Competition in Island Biogeography

1986, B.S. Statistics-Computer Science
Minor: Zoology
Brigham Young University

Professional Experience

Currently 2008 On Sabbatical leave for one year with United Nations International Atomic Energy Agency (UN-IAEA) in Vienna, Austria working on computer simulation models of tsetse fly ecology and population genetics.

2006- Current Associate Professor, Department of Biology, Brigham Young University, Provo, UT 84602-5255
2000-2006: Assistant Professor, Department of Integrative Biology, Brigham Young University, Provo, UT 84602-5255
1997-1999: United States Department of Agriculture (USDA) / Agriculture Research Service (ARS), Pacific Basin Agricultural Research Center, Hilo, Hawaii
1993-1997: Research Faculty—Department of Plant Pathology, North Carolina State University, Insect Indicator Lead for the Agroecosystem Resource Group of the Environmental Monitoring and Assessment Program (EMAP), Raleigh North Carolina.
1990-1993: Statistician Research Faculty N.C. State University Department of Statistics Agroecosystem Resource Group of the Environmental Monitorining and Assessment Program (EMAP)
1988-1990, (1995-1997: consulting): Statistician, Duke University Medical Center, Department of Cardiology, Biostatistics Unit

Peer Review Publications

Froerer, K.L., S. L. Peck, G.T., McQuate, R. I. Vargas, D. O McInnis and E. B. Jang. (In Review) Long Distance Movement of *Bactrocera dorsalis* (Diptera: Tephritidae) in Puna, Hawaii: A Mark-Release-Recapture Study. *Journal of Economic Entomology*.

Bell, A. V., R. B. Rader, S. L. Peck, and Al Sih. In review. Predators and prey in space: How behavior, density, and resource distribution shape spatial associations. *Journal of Theoretical Biology*.

Belk, M.C.,L. J. Benson, J. Rasmussen and S. L. Peck. In Review. Hatchery-induced morphological variation in an endangered fish: a challenge for hatchaery-based recovery efforts. *Can. J. Fish. Aquat. Sci*.

K. M. Froerer, S. L. Peck, and G. T. McQuate. In Review. Evaluation of Readmission Ink as a marker for Dispersal Studies with Bactrocera dorsalis (Diptera: Tephritidae). *Entomologia Experimentalis et Applicata*

Peck. S.L. 2008. The hermeneutics of ecological simulation. *Biology & Philosophy*. 23 (3): 383-402

M.A. Caprio, N. Storer, M.S. Sisterson, S. L. Peck, and A.H.N. Maia. 2008. "Assessing the Risk of the Evolution of Resistance to Pesticides Using Spatially Complex Simulation Models." Global Pesticide Resistance in Arthropods. Ed. M.E. Whalon, D. Mota Sanchez,R.M. Hollingworth. Cambridge, MA: CABI Publishing,

Belk, M.C., Benson, L.J., Rasmussen, J., and Peck, S.L. 2008. "Hatchery-induced morphological variation in an endangered fish: a challenge for hatchaery-based recovery efforts." Can. J. Fish. Aquat. Sci. 65.3 (2): 401-408

McQuate, G. T., A. H. Bokonon-Ganta, and S. L. Peck. 2007. Background population biology and prospects for suppression of the solanaceous fruit fly, Bactrocera latifrons (Diptera: Tephritidae). *Proceedings of the Hawaiian Entomological Society.*

Handley, G., T. Ball, and S. L. Peck. 2006. *Sacred Stewardship: LDS Perspectives on the Environment.* Religious Studies Center Publication. Provo, UT.

Peck, S. L., G. T. McQuate, R. I. Vargas, D. C. Seager, H. C. Revis, E. B. Jang, D. O. McInnis. 2005. The movement of sterile male *Bactrocera cucurbitae* (Diptera: Tephritidae) in a Hawaiian agroecosystem. *Journal of Economic Entomology*. 98(5): 1539-1550

Mc Quate G. T., S. L. Peck, P. G. Barr, and C. D. Sylva. 2005. Comparative evaluation of Spinosad and Phloxine B as toxicant in protein baits for suppression of three fruit fly (Diptera: Tephritidae) species. *Journal of Economic Entomology* 98 (4): 1170-1178

Peck, S. L. 2004. Simulation as experiment: a philosophical reassessment for biological modeling. *Trends in Ecology and Evolution* 19 (10): 530-534

Peck, S. L. and G. T. McQuate. 2004. Ecological Aspects of *Bactrocera latifrons* (Diptera: Tephritidae) on Maui, Hawaii: movement and host preference. *Environmental Entomology* 33(6): 1722-1731

(many authors) Peck, S. L. 2004. Minutes FIFRA Scientific Advisory Panel Meeting: A Set of Scientific Issues Being Considered by the Environmental Protection Agency Regarding: Product Characterization, Human Health Risk, Ecological Risk, And Insect Resistance Management For Bacillus Thuringiensis (Bt) Cotton Products

June 8-10, 2004, Arlington, Virginia. U.S. *EPA SAP Report No. 2004-XX*

Storer N.P., S. L. Peck, F. Gould, J. W. Van Duyn and G. G. Kennedy. 2003. Spatial processes in the evolution of resistance in *Helicoverpa zea* (Lepidoptera: Noctuidae) to Bt transgenic corn and cotton in a mixed agroecosystem: a biology-rich stochastic simulation model. *Economic Entomology* 96(1): 156-172.

Storer N.P., S. L. Peck, F. Gould, J. W. Van Duyn and G. G. Kennedy. 2003 Sensitivity analysis of a spatially-explicit stochastic simulation model of the evolution of resistance in *Helicoverpa zea* (Lepidoptera: Noctuidae) to Bt transgenic corn and cotton. *Economic Entomology.* 96(1): 173-187

Peck, S.L. 2003. Randomness, contingency, and faith: Is there a science of subjectivity? *Zygon: Journal of Religion and Science.* 38(1):5-24

Peck, S. L. 2001. Antimicrobial and Insecticide Resistance Modeling: Is it time to start talking? *Trends in Microbiology*. 9(6):286-292.

Vargas, R.I., S.L. Peck, G.T. McQuate, C. G. Jackson, J.D. Stark and J.D. Armstrong. 2001. Potential for areawide integrated management of Mediterranean fruit fly with a braconid parasitoid and a novel bait spray. *Journal of Economic Entomology* 94 (4): 817-825

McQuate, G. T. and S. L. Peck. 2001. Suppression of Mediterranean fruit fly populations over mountainous areas through aerial phloxine B-Protein Bait Sprays: regional Medfly program in Guatemala. *In* Keng-Hong Tan (ed.) *Area-Wide Control of Fruit Flies and Other Insect Pests*.Penerbit Universiti Sains Malaysia. Penang

McQuate, G. T and S. L. Peck. 2001. Enhancement of attraction of male *Bactrocera latifrfons* to alpha-Ionol (Diptera: Tephritidae) by addition of a synergist, cade oil. Journal of Economic Entomology.

Peck, S. L. 2001. Ecological Modeling: A guide for the nonmodeler. *Conservation Biology in Practice* 2(3) : 36-39

Peck, S. L. 2000 A tutorial for understanding ecological modeling papers for the nonmodeler. *American Entomologist* 46(1):40-49.

Peck, S. L. and G. T. McQuate. 2000. Field Tests of malathion replacements spinosad and photoactive dyes for suppression of wild Mediterranean fruit fly (*Ceratitis capitata*) populations. *Journal of Economic Entomology* 93(2): 280-289.

Peck, S. L., S. Ellner, and F. Gould. 2000. Varying Migration and Deme Size, and the Feasibility of the Shifting Balance. *Evolution* 54 (1):324-327.

Alcantara-Licudine, J.P.; N. L. Bui, Q. X. Li, G. T. McQuate, S. L. Peck. 2000. Method for determination of xanthene dyes in guava fruits and its application in a field dissipation study. Journal of AOAC (Association of Official Analytical Chemists) International. 83(3): 563-568.

Hellkamp, A.S., J. M. Bay, C. L. Campbell, K. N. Easterling, D. A. Fiscus, G. R. Hess, B. F. McQuaid, M. J. Munster, G. L. Olson, S. L. Peck, S. R. Shafer, K. Sidik, and M. B. Tooley. 2000. Assessment of the condition of agricultural lands in six

mid-Atlantic states. *Journal of Environmental Quality* 29:795-804

Hess, G. R., C. L. Campbell, D. A. Fiscus, A. S. Hellkamp, B. F. McQuaid, M. J. Munster, S. L. Peck, and S. R. Shafer. 2000. A conceptual model and indicators for assessing the ecological condition of agricultural lands. *Journal of Environmental Quality* 29:728-737

Peck, S. L., F. Gould, and S. Ellner. 1999. The spread of resistance in spatially extended systems of transgenic cotton: Implications for the management of *Heliothis virescens* (Lepidoptera: Noctuidae). *Economic Entomology* 92:1-16.

Peck, S. L., S. Ellner, and F. Gould. 1998. A spatially explicit, stochastic model demonstrates the feasibility of Wright's shifting balance theory. *Evolution* 52:1834-1839.

Peck, S. L., C. L. Campbell, and B. McQuaid. 1998. Using ant species (Hymenoptera: Formicidae) as a biological indicator of agroecosystem condition. *Environmental Entomology* 27(5): 1102-1110.

McQuate, G. T., R. T. Cunningham, S. L Peck, and P. H. Moore. 1999. Suppressing oriental fruit fly populations with phloxine B-protein bait spays. *Pesticide Science* 55 (5): 574-576.

Anderson, N. D., H. S. Stubbs, S. L. Peck, and J. W. Slusher. 1999. Ants: Using Biological Indicators to Investigate Environmental Conditions (Monitoring the Environment Series). Carolina Biological Supply Company, Burlington, NC.

Christenson, R., M., S. Duh, K. Newby, E. Ohman, R. Califf, Granger, S. L. Peck, K. Pieper, P. Armstorng, H. Katus, and E. Topel for the GUSTO-IIa Investigators. 1998. Cardiac troponin T and cardiac troponin I: relative value in short-term risk stratification of patients with acute coronary syndromes. *Clinical Chemistry* 44(3):494-501.

Peck, S. L. and S. Ellner. 1997. The effect of economic thresholds and life history parameters on the evolution of pesticide resistance in a regional setting. *American Naturalist*, 149:44-65.

Peck, S. L. 1997. *Spatial Aspects of the Evolution of Pesticide Resistance: Models and Recommendations.* A dissertation submitted to the Graduate Faculty of North Carolina State University in partial fulfillment of the requirements for the Degree of Doctor of Philosophy: Departments of Biomathematics and Entomology. North Carolina State University. Raleigh, NC.

R. Christenson, Vollmer, R. Califf. S. L. Peck, M. O'Hanesian, Duh, E. Topel, K. Newby, and M. Ohman for the TAMI-7 Study Group. 1997. Assessment of coronary reperfusion after thrombolysis with a model combining myoglobin, creatine kinase-MB, and clinical variables. Circulation 96:1776-1782

Neher, D. A., S. L. Peck, J. O. Rawlings and C. L. Campbell. 1995. Measures of nematode community structure for an agroecosystem monitoring program and sources of variability among and within agricultural fields. *Plant and Soil*. 107:167-181.

Hawks, S. R., S. L. Peck and Lynn Smith. 1993. Impact to first aid education: occurrence

of emergency helping among college students. *Journal of Health Education*. 24(6):379. [15%]

Hawks, S. R. and S. L. Peck. 1992. Non-traditional teaching methods for emergency care education: student perceptions. *Journal of Health Education*. 23(1):39-44.

Hawks, S. R., S. L. Peck, and K. Vail-Smith. 1992. An educational test of health behavior models in relation to emergency helping. *Health Psychology*. 11(6):396-402.

Hellkamp, A. S., S.R. Shafer, C. L. Campbell, J.M. Bay, D.A. Fiscus, G.R. Hess, B.F. Mcquaid, M. J. Munster, G.L. Olson, S.L. Peck, K.N. Easterling, K. Sidik, and M.B. Tooley. 1998. Assessment of the condition of agricultural lands in five Mid-Atlantic states. *Environmental Monitoring and Assessment*. 51:317-324.

Meyer, J. R. , C. L. Campbell, T. J. Moser, G. R. Hess, J. O. Rawlings, S. L. Peck, and W. W. Heck. 1992. Indicators of the ecological status of agroecosystems. *In Ecological Indicators volume 1*. ed. D. H. Mckenzie, D. D. Hyatt and V. J. McDonald. Elsevier Applied Science London and New York.

Sevilla, D.C., N.B. Wagner, R. Pegnes, S.L. Peck, E.M. Mikat, R.E. Ideker, G. Hutchings, K.A. Reimer, D. B. Hackel, and R. H. Selvester. 1992. Correlation of the complete version of the Selvester QRS scoring system with quantitative anotomic findings for multiple left ventricular myocardial infarcts. *American Journal of Cardiology* 69(5):465-469.

Clemmensen, P., E.M Ohman, D. C. Sevilla, S. L. Peck, N. B. Wagner, P. S. Quigley, P. Grande, K. L. Lee and G. S. Wagner. 1990. Changes in standard electrocardiographic ST-segment elevation predictive of successful reperfusion in acute myocardial Infarction. *The American Journal of Cardiology*. 66:1407-1411.

Harrell, F. E., S. E. Marcus, P. M. Layde, S.K. Broste, E.F. Cook, D. P. Wagner, L.H. Muhlbaier, and S.L. Peck. 1990. Statistical methods in SUPPORT. *Journal of Clinical Epidemiology* 43 Supplement:89S-98S.

Hawks, S. R., S. L. Peck, B. Hafen & K. Karren. 1990. Rating stress in EMS: A Responder Survey. *Journal of Emergency Medical Services*. 15 (9):55-57. [15%]

Sevilla, C. D., N. Wagner, R. White, S. L. Peck, R. Ideker, D. Hackel, K. Reimer, R. Selvester, G. Wagner. 1990. Anatomic validation of electrocardiographic estimation of the size of acute or healed myocardial Infarcts. *The American Journal of Cardiology*. 65:1301-1307.

Book Reviews

Peck, S. L. In Press. Review of Stauffer—*Contemporary Bayesian and Frequentist Statistical Research Methods for Natural Resource Scientists*. *Ecology.*

Peck, S. L. 1999. Review of Gurney, W. S. C., and R. M. Nesbet. 1998. Ecological dynamics. Oxford University Press, NY. Reviewed in *Ecology* 80:728-729.

Peck, S. L. 1999. Review of "Turchin, P. 1998. Quantitative analysis of movement: measuring and modeling population redistribution in animals and plants. Sinauer Associates, Sunderland, Massachusetts." Reviewed in *Ecology* 80:1451-1452.

Other Publications

Peck, S. L. (2008) Science Suffers when getting a grant becomes the goal. (Commentary). *Chronicle of Higher Education*. Oct. 10th, 2008

Peck, S. L. 2003. *The Gift of the King's Jeweler: a novel*. (fiction) Covenant Communications. American Fork Utah.

Peck, S. L. 2001. The flaw in the Lord Harrington Scenario. (fiction) *H.M.S. Beagle*. BioMedNet online Magazine. $300 award.

Peck, S. L. 1995. We are all connected. *Newsweek* August 28, 1995.

Peck, S. L. 1995. Water, Mud and Insects. *The Friend* (Children's magazine). May 1995.

Heck, W. W., C. L. Campbell, A. L. Finkner, C. M. Hayes, G. R. Hess, J. R. Meyer, M. J. Munster, D. Neher, S. L. Peck, J. O. Rawlings, C. N. Smith, M. B. Tooley. 1993. *Agroecosystem 1992 Pilot Project Plan*. EPA/620/R-93/010.

Peck, S. L., J. O. Rawlings and A. L. Finkner. 1992. A Comparison of sampling design options for EMAP -Agroecosystems. *American Statistical Association 1991 Proceedings of the Section on Survey Research Methods.* pp. 191-195.

Heck. W.W., C. L. Campbell, R. P. Breckenridge, G. E. Byers, A. L. Finkner, G. R. Hess, J. R. Meyer, T. J. Moser, S. L. Peck, J. O. Rawlings, and C. N. Smith. 1991. *Environmental Monitoring and Assessment Program (EMAP)- Agroecosystem Monitoring and Research Strategy*. EPA/600/4-91/013.

Peck, S. L. 1988. A Discrete Event Simulation Of Macarthur-Wilson Equilibrium Theory In Island Biogeography. Masters Paper For Fulfilling The Requirements For A Master Of Science Degree In Biostatistics At The University Of North Carolina At Chapel Hill.

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Presentations and Posters

Invited talk: Peck, S. L., J. Odenbaugh. Ecological Boundaries: Whose?. Edges & Boundaries of Biological Objects Workshop: Ecosystems. Department of Philosophy, University of Utah, Salt Lake City.

Invited talk: Peck, S. L. 2007. The Hermeneutics of Ecological Simulation. UFZ Centre for Environmental Research AND Max-Planck-Gesellschaf zur Förderung der Wissenschaften. Leipzig, Germany. Feb. 2007.

Charles A. G., S L. Peck, D. Onstad. 2006. Entomological Society of America Annual Meeting. Indianapolis, Indiana 12 Dec. 2006.

Peck, S. L. 2005. The Management of Insect Resistance to Transgenic Crops in Small Hectare Metapopulations. Fifth Asia-Pacific Congress of Entomology. Jeju Korea. October.

Peck, S. L., A. Bell and R. Vargas. 2005. Wide area control of Bactrocera cucurbitae: A mathematical model of wide area suppression. Hawaiian Entomological Society,

2005 Pacific Entomology Conference. April. 2005.

Peck, S. L. 2004. An ecologist's view of LDS culture and the current environmental crisis. Symposium: Our Stewardship: Perspectives on Nature. Brigham Young University, February 27-28.

Invited talk: Peck, S. L. 2004. Development and management of insect resistance against transgenic plants. Korea Conference on Innovative Science and Technology-2004-GM Crops and Foods: Potential Safety and Environmental Impact. November 9-12, 2004. Korean Federation of Science and Technology Societies (KOFST). Gyeongju, Korea.

Invited talk: Peck, S. L. Grant T. McQuate, Roger Vargas, Don McInnis, Eric Jang, Hannah Revis. 2004. Confronting models with data. Annual Fruit Fly Areawide Pest Management Progress Review and Conference. April 26-28, Honolulu, Hawaii.

Invited Talk: Peck, S. L. 2004. Modeling Resistance issues in model comparison. Resistance Management Modeling Workshop. Held May 11-12, 2004 in Cincinnati, Ohio

Bell, A. R. (undergraduate student) and S. L. Peck. 2004. Colony behavior in *Tetramorium caespitum*. Entomology Society of America Annual Meeting, November 14-17, Salt Lake City, Utah

Bell, Adrian V., S. L. Peck, and Roger I. Vargas. 2004. Delay equation modeling of fruit fly area-wide control. Entomology Society Meetings, Entomology Society of America Annual Meeting, November 14-17, Salt Lake City, Utah

Peck S. L. 2003. The spread of antibiotic resistance in a spatially structured hierarchy of metapopulations. European Society for Evolutionary Biology 9th Congress, Leeds, Aug. 18-24.

Peck, S. L., Craig Seager, Grant T. McQuate, Roger Vargas, Don McInnis, Eric Jang. 2003. Movement of Melon Fly Bactrocera cucurbitae. Pacific Entomology Conference, Hawaiian Entomological Society, Feb. 19-20.

Peck S.L. 2002. Invited Speaker all expenses paid. Form on Infectious Diseases: Resistance. Feb. 6-7. National Academy of Sciences: The role of modeling in managing antibiotic resistant organisms.

Peck. S. L. 2001 Invited symposium panel discussant. "Studies in antibiotic resistance and insecticide resistance: commonalties, differences, and new directions." North Central Weed Science Society. December 13, in Milwaukee, WI.

Peck, S. L. 2000. Invited. A computer simulation model of the movement and population dynamics of the Malaysian fruit fly (Bactrocera latifrons): Implications for Management. Exotic Fruit Fly Research Symposium. September 10-12, Riverside California.

Peck, S. L. and G. T. McQuate. 2000. The invasion of the solanaceous fruit fly on the island of Maui: An example of an invasion cascade. Ecology Society of America 85th Annual Meeting, August 6-10 Snowbird, Utah.

Peck, S. L. and G. T. McQuate. 1999. The comparison of three pesticides used to control Mediterranean fruit fly infestations. Pacific Entomology Conference. Honolulu, HI. February 22-23, 1999.

Peck, S. L. and G. T. McQuate. 1999. Control of Mediterranean fruit flies using bait sprays of spinosad and phloxine B: Possible malathion alternatives for fruit fly control programs. Poster abstract, p. 55 in Proceedings of the 3rd Meeting of the Working Group on Fruit Flies of the Western Hemisphere, 4 - 9 July, 1999, Guatemala City, Guatemala.

Peck, S. L. 1998. A spatially explicit stochastic model demonstrates the feasibility of Wright's shifting balance theory. Pacific Branch Meeting of the Entomological Society of America. June 22-24, 1998.

Peck, S. L. 1998. Theoretical population biology, evolutionary ecology, chaos and other ignored considerations in fruit fly action programs. Poster at The Fifth International Symposium on Fruit flies of Economic Importance. Penang, Malaysia, June 1-5, 1998.

Peck, S. L., G. T. McQuate, R. T. Cunningham and N. J. Liquido. 1998. Field tests of the effectiveness of xanthene dye bait sprays in the control of two species of Tephritid fruit flies. Poster at The Fifth International Symposium on Fruit flies of Economic Importance. Penang, Malaysia, June 1-5, 1998.

McQuate, G. T. and S. L. Peck. 1998. Suppression of Mediterranean fruit fly populations over mountainous areas through aerial phloxine B-protein bait sprays: Regional Medfly program in Guatemala (MOSCAMED-Guatemala, USDA-APHIS-PPQ, USDA ARS. Poster at The Fifth International Symposium on Fruit flies of Economic Importance. Penang, Malaysia, June 1-5, 1998.

McQuate, G. T. and S. L. Peck. 1998. Mortality of Mediterranean fruit flies following feeding on phloxine B - Protein baits, with and without uranine, and subsequent exposure to a range of different light intensities. Poster at The Fifth International Symposium on Fruit flies of Economic Importance. Penang, Malaysia, June 1-5, 1998.

Peck, S. L. 1996. The spread of resistance in spatially extended systems of transgenic crops. Entomology Society of America Meetings. Louisville, KY, Dec 8-12 1996.

Peck, S. L. 1995. Using ants as an indicator of agroecosystem condition. Presented at the EMAP Science Symposium. research Triangle Park, NC, 7-9 March 1995.

Peck, S. L. 1994. Spatial aspects of the population biology of insecticide resistant alleles in large inhomogeneous regions: a 2D cellular automata model. Presented at the Entomological Society of America Annual Meeting, Knoxville, TN, Aug 7-11, 1994.

Neher, D. A. and S. L Peck. 1994. Measures of nematode community structure for a national monitoring program and sources of variability among and within agricultural fields. Poster. Symposium on Biodiversity View points and Current Research. University of North Carolina, chapel Hill, 29 January 1994.

Peck, S. L. 1994. the use of insects in ecological monitoring. Symposium on the results of recent Research in Ecological Monitoring and Assessment. Research Triangle Park, NC, April 12-14 1994.

Hellkamp A., G. Hess, M. Munster, S. L. Peck and C. L. Campbell. 1994. EMAP-Agroecosystems: Designing a Report Card for U. S. Agroecosystem Health. Poster. 1st International Symposium on Ecosystem Health and Medicine. Ottawa, Ontario, 19-23 June 1994.

Neher, D. A., J. O. Rawlings and S. L. Peck. 1993. Measures of nematode community structure for a national monitoring program and sources of variability among and within agricultural fields. Poster. Conference of the Soil Ecology Society. Lansing, Michigan, 3-6 May 1993.

Peck, S. L. 1993. Using insects as indicators of the environmental health of agroecosystems on a regional and national level. Poster presented at the Ecological Society of America, Madison, Wisconsin. 31 Jul- 4 Aug, 1993.

Bailey, B., S. Ellner, A. R. Gallant, D. Nychka and S. L. Peck. 1993. Local Lyapunov exponents: predictability depends on where you are. Presented by B. Bailey at the Joint Statistical Meetings of the American Statistical Association, San Francisco California, August 8-12, 1993.

Peck, S. L. 1993. The use of insects for monitoring the condition of the nation's agroecosystem in EMAP. Presented at the Entomological Society of America Annual Meeting, Indianapolis Indiana, Dec 12-16, 1993.

Peck, S. L., J. O. Rawlings and A. L. Finkner. 1991. Sampling design issues in ecological monitoring for EMAP-Agroecosystems. Presented at the Annual Meeting of the Ecological Society of America, San Antonio Texas Aug. 4-8, 1991.

Peck, S. L., J. O. Rawlings and A. L. Finkner. 1991. Sampling design options for EMAP-Agroecosystems. Presented at the American Statistical Association meetings. Atlanta, 18-22 August 1991.

Consulting

1995-1997	Statistical Consultant. Duke University Medical Center Department of Cardiology. Durham, N.C. USA. General statistical consultant including experimental design and data analysis.
1998	Entomology. Programa Mosca del Mediterraneo. USDA-APHIS Guatemala. Consulted on using Phloxine B sprays in U.S. sponsored Mediterranean fruit fly-free zone on Guatemala-Mexico boarder and sterile insect resistance management.
1999	Entomology. United Nations International Atomic Energy Agency. Bangkok Thailand. Advised on the use of Phloxine B in controlling patchy populations of *Bactrocera dorsalis* (Oriental Fruit Fly) in rural Thai fruit orchards.
2001	Entomology. Tam Dao National Park Vietnam. Consulted on the development of an EarthWatch grant to use butterflies as an indicator of environmental health.
2004	U.S. EPA FIFRA Scientific Advisory Panel (FIFRA SAP) product characterization, human health risk, ecological risk, and insect resistance

management for Bacillus thuringiensis (Bt) cotton products

2005 Biotechnology Risk Assessment Research Grants Program panel USDA, CSREES Washington, D.C. on June 21-23, 2005

2006 EPA Scientific Advisory Panel Report SAP Minutes No. 2006-04 Evaluation of the Resistance Risks from Using 100% Bollgard and Bollgard II Cotton as Part of a Pink Bollworm Eradication Program in the State of Arizona.

Professional Affiliations

1993-present Ecological Society of America
1993-2001 Entomology Society of America (currently lapsed)
1997-present Society for the Study of Evolution
1996-present Sigma Xi, The Scientific Research Society
1998-present Hawaiian Entomology Society
2000-present Institute for the Study of Religion and Science
2000-present American Association fo the Advancement of Science
2002-present Philosophy of Science Association

Professional Development Activities

1996 Preparing the Professorate $1000.00, North Carolina State University
May 1 - May12, 2000. BYU Faculty Development Series, Spring Seminar.
May 15 - May 19, 2000. Teaching Writing in the Disciplines, Brigham Young University
Oct 1 - Oct 4, 2000. Short course on mathematical and biological complexity. Awarded $751.00 by organizing committee to cover transportation, lodging, food, and materials. University of Tennessee, Knoxville.

May 2001 General Education Conference, Brigham Young University
Jan. 2001 Publish Don't Perish Scholarly Writing Workshop, Brigham Young University
Jan. 2002 Publish Don't Perish Scholarly Writing Workshop, Brigham Young University

Teaching Assignments

Semester/year	course	Enrollment	Student Evaluations Course / Teacher (max)
N.C. State			
Ecology 517		15	none available
Duke			
Population Ecology (Env 216) Graduate Course		40	3.6/3.8 (5)
Chinese Academy of Science			
Summer 2000 Graduate Ecology (in Kunming, China)		8	none available
BYU			
Fall 2000	Environmental Biology (Bio 150)	52	5.4/5.4 (7)
Winter 2001	Ecology (Zool. 350)	92	4.1/5.1 (7)
Winter 2001	Ecology (Zool. 350) night	20	5.3/6.0 (7)
Winter 2001	Metapopoulation Ecology (Zool. 549R)	12	Not evaluated
Fall 2001	Environmental Biology	46	5.9/6.1 (7)
Fall 2001	Theoretical Ecology (1/4)	12	Not evaluated
Winter 2002	Ecology (Zool. 350)	75	Did not finish (sickness)
Fall 2002	Environmental Biology (Bio 150)	54	6.3/6.5 (8)

Fall 2002	Honors Natural Science (Hon. 344)	3	7.7/7.7 (8)
Winter 2003	Ecology (Zool. 350)	100	6.5/6.8 (8)
Fall 2003	Environmental Biology (Bio. 150)	44	6.4/6.8 (8)
Winter 2004	Directed Research--Mentoring (Bio. 494)	3	7.7/7.7 (8)
Winter 2004	Honors Natural Science (Hon. 344)	7	7.4/7.6 (8)
Winter 2004	Expermental Sys. Eco (InBio. 656)	7	6.8/7.3 (8)
Fall 2004	Environmental Biology (Bio. 150)	40	6.9/7.6 (8)
Fall 2004	Directed Research--Mentoring (Bio. 494)	4	7.5/7.7 (8)
Winter 2005	Hist. & Phil. Biology (InBio 470)	18	7.3/7.4 (8)
Spring 2005	Directed Research--Mentoring (Bio. 494)	2	6.5/6/5 (8)
Spring 2005	Ecology (Biology 350)	23	6.7/7.5 (8)
Fall 2005	Ecology (Biology 350) team taught	160	6.0/5.8 (8)
Fall 2005	Phil. Biology (InBio 470) team taught	8	7.0/7.2 (8)
Winter 2006	Honors Environment/Rel. (344R)	18	6.8/7.3 (8)
Winter 2006	InBio 656 Ecology	8	7.0/8.0 (8)
Winter 2007	Phil. Biology	21	7.4/7.6 (8)
Fall 2007	Phil. Biology	8	7.7/7.7 (8)

Student Mentoring

50 Undergraduates in lab
21 Graduate student committees
2 Master's theses (Karen Foerer, Adrian Bell)

Academic Support

Jan, 2003. General Education Enhancement. $500 for Biology 150.

July, 2001. Honors. $950 to develop a class on the Philosophy of Consciousness.

Research Support

2007. UN-IAEA Sabbatical Leave Cooperative Research Grant $41,000.

2007 USDA-Pacific Basin Agricultural Research Center-supplement $15,000. Bacterial movement studies in Puna, HI

2006 USDA- Pacific Basin Agricultural Research Center. $20,000. Bacterial movement studies in Puna, HI

2006- Understanding Complex Modeling for Resistance Management. $20,000. US-EPA

2005-2009. USDA- Pacific Basin Agricultural Research Center-supplimentt. $20,00. Understanding the movement of Bactrocera dorsalis from mark-release-recapture studies and theoretical modeling studies: Enhancing wide-area control interventions.

August, 2002 USDA- Pacific Basin Agricultural Research Center. $18,000. Title: *Modeling the agricultural, biological, and spatial-geographic aspects of wide area fruit fly control in Hawaii*. Enhancement award.

August 2002-2003. June Sucker Recovery Program, M. C. Belk and S. Peck. Development of a life-stage model for June sucker.

January, 2002, Kennedy Center. $2,500. Travel to attend conference in South Africa (note: due to illness monies have not been used for this grant yet)

September, 2001. USDA- Pacific Basin Agricultural Research Center. $42,000.
Title: *Modeling the agricultural, biological, and spatial-geographic aspects of wide area fruit fly control in Hawaii*. Five Years Renewable.
PI: Steven L. Peck

May 1, 2001. $12,765 Sant Endowment. Ant biodiversity and spatial distribution in the Great Basin: toward developing ants as an indicator of habitat change.
PI: Steven L. Peck

August 3, 2001. $4727. Religious Studies Center. Natural Stewardship: Why we should care for the earth. LDS perspectives on the Environment.

August 31, 2001. $1500 Kennedy Center. Working in Tam Dao National Park, Vietnam.

April 6, 2000. $3000. Kennedy Center. 1 Year.
Title: Developing a program for Understanding Antibiotic Resistance in China.
PI: Steven L. Peck and Steven R. Hawks.

May 6, 2000. $6000. Awarded through Academic Vice Presidents Office for Undergraduate Research.
Title: Developing a laboratory strain of ants.

Awards

1998 Lucus Research Award. Department of Biomathematics. $200.00.
(Awarded to the best Dissertation or Thesis from the Biomathematics Department in 1997)

1999 Certificate of Merit USDA, Agriculture Research Service. $2000. For successful management and execution of the malathion-suredy-spinosad comparison tests assigned by ARS National Program Staff.

Service & Committees

Department
Zoology Department: 2000-2001, Biology Department PDC committee

Collage
2001 Collage Scholarship Committee

University
2000-Present Faculty Advisor for the Student Environmental Science Journal: Borrowed Earth

Community
Board of Director for Ground Swell a community based environmental organization.
Advisor for 16-18 year old scouts.