

Mevin B. Hooten

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Work Address:

Department of Mathematics and Statistics
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- Employment:** UTAH STATE UNIVERSITY, Logan, UT 2006-
- Assistant Professor of Statistics, Department of Mathematics and Statistics
 - Faculty Associate, Ecology Center
 - Adjunct Faculty, Department of Wildland Resources
- Education:** UNIVERSITY OF MISSOURI, Columbia, MO 2006
- Ph.D. Statistics Advisor: Christopher K. Wikle
 - Dissertation Topic: Hierarchical spatio-temporal models for ecological processes
- UNIVERSITY OF MISSOURI, Columbia, MO 2001
- M.S. Forest Ecology Advisor: David R. Larsen
 - Thesis Topic: Modeling the spatial distribution of ground flora
- KANSAS STATE UNIVERSITY, Manhattan, KS 1999
- B.S. Natural Resource Management Advisor: Mark Morgan
 - Minor in Wildlife Biology

Selected Publications: [USU Student](#), [USU Collaborator](#)

Nippert, J.B., M.B. Hooten, D.R. Sandquist, and J.K. Ward. (2009). A model for predicting El Nino events using tree-ring cellulose del18O. *Journal of Geophysical Research – Biogeosciences*. In Press.

Hooten, M.B. and C.K. Wikle. (2009). Statistical agent-based models for discrete spatio-temporal systems. *Journal of the American Statistical Association*. In Press.

[Larsen, R.T.](#), [J.A. Bissonette](#), T.F. Flinders, M.B. Hooten, and [T.L. Wilson](#). (2009). Summer spatial patterning of chukars in relation to free water in Western Utah. *Landscape Ecology*. DOI: 10.1007/s10980-009-9407-z.

Hooten, M.B. (2009). The State of Spatial and Spatio-Temporal Statistical Modeling. In: Predictive Modeling in Landscape Ecology. Drew A., F. Huettman, and Y. Wiersma (eds). *In: Predictive Modeling in Landscape Ecology*. In Press.

Hooten, M.B., C.K. Wikle, L.D. Carlile, R. Warner, and D. Pitts (2009). Hierarchical population models for the red-cockaded woodpecker. Rich, T.D., M. C. Arizmendi, D. Demarest and C. Thompson (eds). *Tundra to Tropics: Connecting Birds, Habitats and People*. Proceedings of the 4th International Partners in Flight Conference, 13-16 February 2008. McAllen, TX. University of Texas-Pan American Press. Edinburg, TX. In Press.

[Cangelosi, A.R.](#) and M.B. Hooten. (2009). Models for bounded systems with continuous dynamics. *Biometrics*. **65**: 850-856.

Hooten, M.B., C.K. Wikle, S. Sheriff, and J. Rushin. (2009). Optimal spatio-temporal hybrid sampling designs for ecological monitoring. *Journal of Vegetation Science*, **20**: 639-649.

Mock, K., C. Rowe, M.B. Hooten, A.J. DeWoody, and V.D. Hipkins. (2008). Clonal dynamics in western North American aspen (*Populus tremuloides*). *Molecular Ecology*, **17**: 4827-4844.

Hooten, M. B. and C.K. Wikle. (2008). A hierarchical Bayesian non-linear spatio-temporal model for the spread of invasive species with application to the Eurasian Collared-Dove. *Environmental and Ecological Statistics*, **15**(1): 59-70. DOI: 10.1007/s10651-007-0040-1.

Arab, A., M.B. Hooten, and C.K. Wikle (2007). Hierarchical Spatial Models. *In: Encyclopedia of Geographical Information Science*. Springer.

Hooten, M.B., C.K. Wikle, R.M. Dorazio, and J.A. Royle. (2007). Hierarchical spatio-temporal matrix models for characterizing invasions. *Biometrics*, **63**: 558-567.

He, H.S., D.C. Dey, X. Fan, M.B. Hooten, J. Kabric, C.K. Wikle, and Z. Fan. (2007). Mapping pre-European settlement vegetation using a hierarchical Bayesian model and GIS. *Plant Ecology*, **191**: 85-94.

Hooten, M.B. and C.K. Wikle. (2007). Shifts in the spatio-temporal growth dynamics of shortleaf pine. *Environmental and Ecological Statistics*, **14**(3): 207-227.

Wikle, C.K. and M.B. Hooten (2006). Hierarchical Bayesian spatio-temporal models for population spread. Clark, J.S. and A. Gelfand (eds). *In: Applications of Computational Statistics in the Environmental Sciences: Hierarchical Bayes and MCMC Methods*. Oxford University Press.

Hooten, M. B., Larsen, D.R., and C.K. Wikle. (2003). Predicting the spatial distribution of ground flora on large domains using a hierarchical Bayesian model. *Landscape Ecology*, **18**: 487-502.

Teaching Experience:

Utah State University, Dept. of Mathematics and Statistics, Logan, UT.	2006-
<ul style="list-style-type: none"> ▪ Applied Spatial Statistics (STAT 5410/6410, Fall 2006, 2007, 2008, 2009) ▪ Statistics for Scientists (STAT 3000, Spring 2007, 2009, Fall 2007, 2008) ▪ Scientific Statistical Modeling: Directed Readings (STAT 6950, Spring 2007) ▪ Bayesian Statistics (STAT 6740, Spring 2008, 2010) ▪ Linear Regression and Time-Series (STAT 5100, Fall 2009) 	
University of Missouri, Statistics Dept., Columbia, MO.	2002-04
Graduate Instructor	
<ul style="list-style-type: none"> • Statistical Methods for Agriculture Graduate Students (STAT 207) • Probability and Statistics for Business Students (STAT 150) 	
Graduate Lecturer	
<ul style="list-style-type: none"> • Data Analysis for Graduate Students in Statistics (STAT 414) 	
University of Missouri, Forestry Dept., Columbia, MO.	1999-01
Graduate Lecturer	
<ul style="list-style-type: none"> • Biometrics • Geographic Information Systems • Photogrammetry • Remote Sensing 	

Graduate Students (Current):

• James Odei (PhD-Statistics), Advisor .	2009
• Glenda Yenni (PhD-Biology, MS-Statistics), Com. Member and Advisor .	2009
• Beth Ross (PhD-Wildland Resources, MS-Statistics), Co-Advisor (w/ Dave Koons)	2009
• Martha Garlick (PhD-App. Math), Co-Advisor (w/ Jim Powell)	2009
• Ephraim Hanks (MS-Statistics), Advisor .	2009
• Jess Anderson (MS-Statistics), Advisor .	2009
• Xiao Xiao (PhD-Biology, MS-Statistics), Com. Member and Advisor	2009

- Kit Wheeler (MS-Statistics), **Advisor.** 2009
- Aldo Compagnoni (PhD-Wildland Resources) 2009
- Tammy L. Wilson (PhD-Wildland Resources), Com. Member. 2009
- Pat Terletsky (PhD-Wildland Resources), Com. Member. 2009
- Alexander Hernandez (PhD-Wildland Resources), Com. Member. 2009
- Drew Rayburn (PhD-Wildland Resources), Com. Member. 2009
- Christy Meredith (PhD-Wildland Resources), Com. Member. 2009
- John Lowry (PhD-Wildland Resources), Com. Member. 2009

**Graduate
Students (Graduated):**

- Amanda R. Cangelosi (MS-Statistics), **Advisor.** 2008
- Darl D. Flake (MS-Statistics), **Advisor.** 2008
- Amanda Bakian (MS-Statistics), Com. Member. 2008
- Randy Larsen (PhD-Wildland Resources), Com. Member. 2008