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A. EDUCATION AND EMPLOYMENT INFORMATION

1. Education

M.S., Geographic Techniques, Oregon State University, 1999.
Thesis title: Comparing intercell distance and cell wall midpoint criteria for discrete global grid systems.

B.A., Mathematics, The Colorado College, 1993.

2. Employment

1998 – present. Faculty Research Assistant (1998 – 2005), Senior Faculty Research Assistant I (2005 – present). Landscape Ecology, Modeling, Mapping, and Analysis (LEMMA) and Laboratory for Applications of Remote Sensing in Ecology (LARSE) teams. Department of Forest Ecosystems and Society, Oregon State University, Corvallis, OR. (Supervisors: Dr. Lisa Ganio (OSU) and Drs. Janet Ohmann, David Bell and Warren Cohen (USFS PNW Research Station)).

See candidate statement and position description.

2001 – 2009. Website Consultant, United States Regional Association of the International Association for Landscape Ecology.

- Design and maintain web pages for a 400-member academic association.
- Design online membership and payment processor application.
- Design and manage yearly meeting web sites including abstract submission and presentation organization.

1998 – 2001. Faculty Research Assistant. BigFoot project. Department of Forest Science, Oregon State University, Corvallis, OR. (Supervisor: Dr. David Turner).

- Enhance development of existing soil vegetation atmospheric transfer (SVAT) models for determining gross primary production, net primary production, and evapotranspiration at eddy co-variance flux tower locations.
- Design and develop software tools to diagnose and validate these models at site and landscape scales in support of the Moderate Resolution Imaging Spectroradiometer (MODIS) validation.
- Collaborate in the preparation of manuscripts, presentations and reports.

1997 – 1998. Graduate Teaching Assistant, Department of Geosciences, Oregon State University, Corvallis, OR. (Supervisors: Dr. A. Jon Kimerling, Dr. Dawn Wright)

- Assist with the following courses: Computer Assisted Cartography (GEO445/545), Map and Image Interpretation (GEO301), Geographic Information Systems and Science (GEO465/565).

1997 – 1998. GIS Contractor to Shoreline Solutions, Newport, OR.

- Compile, digitize and manage source data for a geographic information system to determine coastal flood hazards.

1996 – 1997. Graduate Research Assistant, Terra Cognita Laboratory, Department of Geosciences, Oregon State University, Corvallis, OR. (Supervisor: Dr. A. Jon Kimerling).

- Research discrete global grid systems in support of cooperative agreement CR-821672 between the United States Environmental Protection Agency and Oregon State University.

3. Areas of specialization

Predictive forest vegetation modeling and mapping
Spatial analysis and geographic information systems
Geospatial software development
Database design and programming
Cartography and geovisualization
Web design

B. TEACHING, ADVISING AND OTHER ASSIGNMENTS

1. Instructional summary

Credit courses

3. Gregory, MJ, JL Ohmann, and HM Roberts. 2014. Using nearest neighbors methods for regional-scale forest vegetation mapping. Guest lecture in GEO 565 - Geographic Information Systems and Science (Dr. Robert Kennedy): Corvallis, OR; November 2014.
2. Gregory, MJ. 2014. Using Python in support of the Physiological Principles Predicting Growth (3PG) model. Guest Lecture in FES 599 – Modeling Tree Ring Growth and Isotopic Variations with 3-PG (Dr. Christopher Still): Corvallis, OR; February 2014.
1. Gregory, MJ. 2009. Using the ArcGIS Python geoprocessor to assess site suitability. Guest Lecture in GEO 599 - GIS Programming Practicum (Dr. Tracy Kugler): Corvallis, OR; November 2009.

Non-credit courses and workshops

10. Gregory, MJ, JL Ohmann, HM Roberts, HSJ Zald, and EB Henderson. 2013. Recent advances and applications of nearest neighbors methods for regional-scale forest vegetation mapping in the Pacific Northwest, US. Presentation to the Research Experience for Teachers (RET) one-day workshop: HJ Andrews Experimental Forest; July 2013.

9. Grossmann, EB*, JL Ohmann, MJ Gregory, HK May. 2009. Bringing our best data into conservation and restoration planning. California Klamath-Siskiyou Fire Learning Network Workshop: Weaverville, CA; July 2009.
8. Grossmann, EB*, JL Ohmann, MJ Gregory, HK May. 2009. Regional vegetation mapping: Making sense of the methods. Workshop on remote sensing for land managers: Redding, CA; June 2009.
7. Grossmann, EB*, JL Ohmann, MJ Gregory, HK May. 2009. Regional vegetation - methods behind the maps: Gradient Nearest Neighbor and random forest modeling. Information Sharing Workshop, Bureau of Land Management: Salem, OR; April 2009.
6. Gregory, MJ*, JL Ohmann, TM Holt. 2008. GNNViz: Immersive and collaborative visualization for landscapes. The Nature Conservancy Climate Change Workshop: Portland, OR; April 2008.
5. Ohmann, JL*, KB Pierce Jr., EB Grossmann, MJ Gregory, HK May, TM Holt. 2006. Mapping current vegetation in the Pacific Coast States with GNN, CART, and other tricks. Workshop and field tour with NF, ODF, TNC, and R6: Sycan Marsh Research Station, OR; September 2006.
4. Pierce Jr., KB*, JL Ohmann, MJ Gregory, JS Fried. 2005. Regional vegetation mapping in support of risk assessment. Workshop on regional risk assessment methodologies. Organized by Western Wildlands Environmental Threat Assessment Center, USDA Forest Service: Portland, OR; September 2005.
3. Pierce Jr., KB*, JL Ohmann, MJ Gregory, JS Fried. 2005. Gradient Nearest Neighbor imputation mapping in support of risk assessment. Workshop for evaluating quantitative techniques for deriving national scale data for assessing and mapping risk; organized by Forest Health Technology Enterprise Team, Forest Health Protection, USDA Forest Service: Fort Collins, CO; July 2005.
2. Ohmann, JL*, KB Pierce Jr., MJ Gregory, MC Wimberly, JS Fried. 2004. A novel approach to regional fuel mapping: linking inventory plots with satellite imagery and GIS databases using the Gradient Nearest Neighbor method. Joint Fire Science Program Principal Investigator Workshop: Phoenix, AZ; April 2004.
1. Ohmann, JL*, KB Pierce Jr., MJ Gregory, MC Wimberly, JS Fried. 2003. A novel approach to regional fuel mapping: linking inventory plots with satellite imagery and GIS databases using the Gradient Nearest Neighbor method. Joint Fire Science Program Principal Investigator Workshop: Phoenix, AZ; March 2003.

C. SCHOLARSHIP AND CREATIVE ACTIVITY

1. Refereed publications

16. Bell, DM, MJ Gregory, JL Ohmann. 2015. Imputed forest structure uncertainty varies across elevational and longitudinal gradients in the western Cascade Mountains, Oregon, USA. *Forest Ecology and Management* 358:154-164.

15. Bell, DM, MJ Gregory, HM Roberts, RJ Davis, JL Ohmann. 2015. How sampling and scale limit accuracy assessment of vegetation maps: a comment on Loehle et al. 2015. *Forest Ecology and Management* 358:361-364.
14. Meigs, G, RE Kennedy, AN Gray, MJ Gregory. 2015. Spatiotemporal dynamics of recent mountain pine beetle and western spruce budworm outbreaks across the Pacific Northwest Region, USA. *Forest Ecology and Management* 339:71-86.
13. Henderson, EB, JL Ohmann, MJ Gregory, HM Roberts, HSJ Zald. 2014. Species distribution modelling for plant communities: stacked single species or multivariate modelling approaches? *Applied Vegetation Science* 17:516-527.
12. Ohmann, JL, MJ Gregory, HM Roberts. 2014. Scale considerations for integrating forest inventory plot data and satellite image data for regional forest mapping. *Remote Sensing of Environment* 151: 3-15.
11. Zald, HSJ, JL Ohmann, HM Roberts, MJ Gregory, EB Henderson, R McGaughey, J Braaten. 2014. Influence of lidar, Landsat imagery, disturbance history, plot location accuracy, and plot size on accuracy of imputation maps of forest composition and structure. *Remote Sensing of Environment* 143:26-38.
10. Ohmann, JL, MJ Gregory, HM Roberts, WB Cohen, RE Kennedy, Z Yang. 2012. Mapping change of older forest with nearest-neighbor imputation and Landsat time-series. *Forest Ecology and Management* 272:13-25.
9. Ohmann, JL, MJ Gregory, EB Henderson, HM Roberts. 2011. Mapping gradients of community composition with nearest-neighbour imputation: extending plot data for landscape analysis. *Journal of Vegetation Science* 22(4):660-676.
8. Pierce Jr., KB, JL Ohmann, MC Wimberly, MJ Gregory, JS Fried. 2009. Mapping wildland fuels and forest structure for land management: a comparison of nearest-neighbor imputation and other methods. *Canadian Journal of Forest Research* 39(10): 1901-1916.
7. Gregory, MJ, AJ Kimerling, D White, K Sahr. 2008. A comparison of intercell distance and cell wall midpoint criteria for discrete global grid systems. *Computers, Environment and Urban Systems* 32(3): 188-203.
6. Kennedy, RSH, TA Spies, MJ Gregory. 2007. Relationships of dead wood patterns with biophysical characteristics and ownership according to scale in Coastal Oregon, USA. *Landscape Ecology* 23(1): 55-68. (*I provided data summaries from our integrated plot database.*) # of citations = 19
5. Ohmann, JL, MJ Gregory, TA Spies. 2007. Influence of environment, disturbance, and ownership on forest vegetation of Coastal Oregon. *Ecological Applications* 17: 18-33.
4. Turner, DP, S Ollinger, ML Smith, O Krankina, MJ Gregory. 2004. Scaling net primary production to a MODIS footprint in support of Earth Observing System product validation. *International Journal of Remote Sensing* 25: 1961-1979.

3. Turner, DP, S Urbanski, D Bremer, SC Wofsy, T Meyers, ST Gower, MJ Gregory. 2003. A cross-biome comparison of light use efficiency for gross primary production. *Global Change Biology* 9: 383-395.
2. Ohmann, JL and MJ Gregory. 2002. Predictive mapping of forest composition and structure with direct gradient analysis and nearest-neighbor imputation in coastal Oregon, U.S.A. *Canadian Journal of Forest Research* 32: 725-741.
1. Turner, DP, ST Gower, WB Cohen, MJ Gregory, TK Maersperger. 2002. Effects of spatial variability in light use efficiency on satellite-based NPP monitoring. *Remote Sensing of Environment* 80: 397-405.

2. *Non-refereed publications and reports*

General Technical Reports

2. Davis, RJ, JL Ohmann, RE Kennedy, WB Cohen, MJ Gregory, Z Yang, HM Roberts, AN Gray, TA Spies. In press. Northwest Forest Plan – The First 20 Years: Status and Trends of Late-successional and Old-growth Forests. Pacific Northwest Research Station, USDA Forest Service, Portland, OR.
1. Moeur, M, JL Ohmann, RE Kennedy, WB Cohen, Z Yang, MJ Gregory, HM Roberts, M Fiorella. 2011. Northwest Forest Plan -- status and trends of late-successional and old-growth forests from 1994 to 2008. PNW-GTR-853, Pacific Northwest Research Station, USDA Forest Service, Portland, OR.

Other Reports and Publications

12. Grossmann, EB, JL Ohmann, J Kagan, HK May, MJ Gregory. 2010. Mapping ecological systems with a random forest model: tradeoffs between errors and bias. *USGS Gap Analysis Bulletin*, No. 17; February 2010; pp 16-22.
11. Grossmann, EB, JL Ohmann, MJ Gregory, HK May. 2009. Nationwide Forest Imputation Study (NaFIS) - Western Team final report. Final Report of the Nationwide Forest Imputation Study (NaFIS).
10. Grossmann, EB, J Kagan, JL Ohmann, HK May, MJ Gregory, C Tobalske. 2008. Final report on land cover mapping methods, map zones 2 and 7, Pacific Northwest ReGAP. Institute for Natural Resources, Oregon State University, Corvallis, OR.
9. Kagan, J, JL Ohmann, MJ Gregory, C Tobalske. 2008. Land cover map for map zones 8 and 9 developed from SAGEMAP, GNN, and SWReGAP: A pilot for NWGAP. *USGS Gap Analysis Bulletin*, No. 15; February 2008; pp 15-19.
8. Holt, TM, MJ Gregory, JL Ohmann. 2007. GNNViz User Guide. Appendix 1 of the JFSP Final Report; Project 05-4-1-12.
7. Ohmann, JL, MJ Gregory, TM Holt. 2007. Innovative, 3-D, interactive, and immersive techniques for visualizing, querying, and understanding regional maps of forest vegetation,

- fuels, and fire risk. Final Report to the Governing Board, Joint Fire Science Program, Project 05-4-1-12.
6. Kagan, J, JL Ohmann, MJ Gregory, C Tobalske, JC Hak, JS Fried. 2006. Final report on land cover mapping methods, map zones 8 and 9, Pacific Northwest ReGAP. Institute for Natural Resources, Oregon State University, Corvallis, OR.
 5. Ohmann, JL, MC Wimberly, JS Fried, KB Pierce Jr., MJ Gregory. 2005. A novel approach to regional fuel mapping: linking inventory plots with satellite imagery and GIS databases using the Gradient Nearest Neighbor method. Final report to the Governing Board, Joint Fire Science Program; Project 01-1-4-09.
 4. Wimberly, MC, JL Ohmann, KB Pierce Jr., MJ Gregory, JS Fried. 2003. A multivariate approach to mapping forest vegetation and fuels using GIS databases, satellite imagery, and forest inventory plots. Proceedings of the Second International Wildland Fire Ecology and Fire Management Congress. Orlando, FL; 16-20 November 2003. American Meteorological Society.
 3. Turner, DP and MJ Gregory. 2001. Interannual Variability at AGRO, 1970-1999. Report published on the BigFoot project website (<http://www.fsl.orst.edu/larse/bigfoot/reports/agrohrv.pdf>)
 2. Turner, DP and MJ Gregory. 2001. AGRO Meteorological Products in support of BigFoot modeling. Report published on the BigFoot project website (<http://www.fsl.orst.edu/larse/bigfoot/reports/agromet.pdf>)
 1. Turner, DP and MJ Gregory. 2001. GPP/NPP Products for the AGRO site for the year 2000. Report published on the BigFoot project website (<http://www.fsl.orst.edu/larse/bigfoot/reports/agronppgpp00.pdf>)

3. Presentations

() denotes presenter*

Invited conference presentations

16. Gregory, MJ, Y Zhiqiang, DM Bell, WB Cohen, SP Healey, JL Ohmann, HM Roberts. 2016. Cloud-based computation for accelerating change detection and vegetation mapping at regional to national scales. Google Earth Engine Users Summit: Mountain View, CA; June 2016.
15. Kennedy, RE*, JL Ohmann, V Kane, SL Powell, Z Yang, J Braaten, MJ Gregory, HM Roberts, J Lutz, R Riemann, BT Wilson. 2013. Regional-scale monitoring of biomass in wooded lands through integration of satellite, plot, and airborne data. North American Carbon Program Fourth Annual Meeting: Albuquerque, NM; February 2013.
14. Ohmann, JL*, MJ Gregory, HM Roberts, RE Kennedy, Z Yang, J Braaten, SL Powell, WB Cohen, V Kane, J Lutz. 2012. Mapping change in live and dead forest biomass with Landsat

- time-series, remeasured plots, and nearest-neighbor imputation. ForestSAT 2012: Corvallis, OR; September 2012.
13. Powell, SL*, RE Kennedy, JL Ohmann, WB Cohen, MJ Gregory, HM Roberts, V Kane, J Lutz. 2012. Comparison of biomass allometric approaches for regional scale carbon mapping. ForestSAT 2012: Corvallis, OR; September 2012.
 12. Ohmann, JL*, MJ Gregory, HM Roberts, RE Kennedy, Z Yang, M Moeur, WB Cohen. 2011. Landscape context for density management: implications of land ownership and ecological gradients. Conference on state-of-the-art in west-side forest management: Corvallis, OR; October 2011.
 11. Ohmann, JL*, MJ Gregory, HM Roberts, RE Kennedy, WB Cohen, Z Yang, M Moeur. 2011. Spatial monitoring of older forest and habitat for the Northwest Forest Plan. National FIA Users Group Meeting: Sacramento, CA; March 2011.
 10. Ohmann, JL*, MJ Gregory, HM Roberts, RE Kennedy, WB Cohen, Z Yang, M Moeur. 2010. Spatial monitoring of late-successional forest habitat over large regions with nearest-neighbor imputation. XXIII International Union of Forest Research Organizations (IUFRO): Seoul, South Korea; August 2010.
 9. Ohmann, JL*, MJ Gregory, HK May, EB Grossmann. 2010. Nearest neighbor mapping of vegetation gradients for landscape analysis and planning. 53rd International Symposium of the International Association for Vegetation Science: Ensenada, Mexico; April 2010.
 8. Gregory, MJ*, JL Ohmann, EB Grossmann, HK May. 2008. Spatial scaling effects of inventory reference data on nearest neighbor model predictions. Forest Inventory and Analysis Symposium: Park City, UT; October 2008.
 7. Grossmann, EB*, JL Ohmann, MJ Gregory, HK May. 2008. Is the World a Gradient, or a Hierarchy of Thresholds? Imputing Forest Composition and Structure Variables in the Pacific Northwest. Forest Inventory and Analysis Symposium: Park City, UT; October 2008.
 6. Grossmann, EB*, JL Ohmann, J Kagan, KB Pierce Jr., HK May, MJ Gregory. 2007. Models for ecological systems map building: random forest and gradient nearest neighbor. Which one works best?. National GAP Analysis Program Conference: Asheville, NC; September 2007.
 5. Ohmann, JL*, MJ Gregory and TM Holt. 2006. Innovative, 3-D, interactive, and immersive techniques for visualizing, querying, and understanding regional maps of forest vegetation, fuels, and fire risk. Special presentation to the Joint Fire Science Program Principal Board: Missoula, MT; September 2006.
 4. Ohmann, JL*, JS Fried, KB Pierce Jr., MJ Gregory, MC Wimberly. 2006. Mapping forest vegetation and fuels with Gradient Nearest Neighbor imputation. Yosemite Fire Science Symposium: Yosemite National Park, CA; May 2006.
 3. Pierce Jr., KB*, MC Wimberly, JL Ohmann, MJ Gregory, JS Fried. 2005. What is the probability that I-30 runs through Fort Worth? Incorporating uncertainty into map use. Annual meeting of the Society of American Foresters: Fort Worth, TX; October 2005.

2. Ohmann, JL*, MJ Gregory, TA Spies. 2003. Linking field plot, satellite imagery, and environmental data to assess regional patterns of vegetation biodiversity. Annual meeting of the Society of American Foresters: Buffalo, NY; October 2003.
1. Ohmann, JL*, MJ Gregory, JE Gray. 1999. Linking satellite, plot, and environmental data to map patterns of species composition across Pacific Northwest forests. Special session at annual meeting of the American Society of Photogrammetry and Remote Sensing: Portland, OR; May 1999.

Volunteered conference presentations

53. Kennedy, RE, J Hughes, N Neeti, T Larrue, MJ Gregory, HM Roberts, JL Ohmann, V Kane, J Kane, S Hooper, P Nelson, WB Cohen, Z Yang. 2016. Toward a comprehensive landscape vegetation monitoring framework. European Geosciences Union General Assembly: Vienna, Austria; April 2016.
52. Gregory, MJ, Y Zhiqiang, DM Bell, WB Cohen, SP Healey, JL Ohmann, HM Roberts. 2015. Cloud-based computation for accelerating change detection and vegetation mapping at regional to national scales. Forest Inventory and Analysis Science Symposium: Portland, OR; December 2015.
51. Bell, DM*, JL Ohmann, MJ Gregory, HM Roberts. 2015. Impacts of imputation uncertainty and scaling on the estimation of forest attributes in a western Oregon, USA landscape. Ninth International Association of Landscape Ecology World Congress, Portland, OR; July 2015. (oral)
50. Kennedy, RE*, Z Yang, J Braaten, WB Cohen, JL Ohmann, MJ Gregory, HM Roberts, G Meigs, P Nelson, E Pfaff. 2012. Life-histories from Landsat: algorithmic approaches to distilling Earth's recent ecological dynamics. American Geophysical Union: San Francisco, CA; December 2012. (oral)
49. Roberts, HM*, JL Ohmann, MJ Gregory, EB Henderson. 2012. Gradient nearest neighbor forest vegetation maps for landscape analysis and planning. ForestSAT 2012: Corvallis, OR; September 2012. (poster)
48. Zald, HSJ*, JL Ohmann, HM Roberts, R McGaughey, MJ Gregory, RE Kennedy. 2012. Influence of inventory plot and Landsat imagery positional accuracies on nearest-neighbor (NN) imputation maps of vegetation composition and structure. ForestSAT 2012: Corvallis, OR; September 2012. (poster)
47. Henderson, EB*, JL Ohmann, MJ Gregory, HM Roberts, HSJ Zald. 2012. All for one or one for all? Mapping many species individually versus simultaneously with random forest. Ecological Society of America Annual Conference: Portland, OR; August 2012. (oral)
46. Ohmann, JL*, MJ Gregory, HM Roberts, RE Kennedy, WB Cohen, Z Yang, M Moeur, M Fiorella. 2012. Mapping change of older forest with permanent plots, Landsat time series, and nearest-neighbor imputation. Ecological Society of America Annual Conference: Portland, OR; August 2012. (poster)

45. Gregory, MJ*, JL Ohmann, HM Roberts, R Riemann. 2011. Nearest neighbor vegetation maps for landscape analysis and conservation planning: are they good enough, and how will I know? US Regional Association of the International Association of Landscape Ecology Annual Meeting: Portland, OR; April 2011. (poster)
44. Ohmann, JL*, MJ Gregory, HM Roberts, RE Kennedy, WB Cohen, Z Yang, M Moeur, M Fiorella. 2011. Spatial monitoring of forest landscape dynamics with permanent plots, Landsat time-series and nearest-neighbor imputation. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Portland, OR; April 2011. (poster)
43. Roberts, HM*, JL Ohmann, MJ Gregory, EB Henderson. 2011. Gradient nearest neighbor forest vegetation maps for landscape analysis and planning. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Portland, OR; April 2011. (poster)
42. Roberts, HM*, JL Ohmann, MJ Gregory, EB Grossmann. 2010. Nearest-neighbor forest vegetation maps from FIA plots and geospatial data for landscape analysis and planning in the Pacific Northwest (and beyond). Forest Inventory and Analysis Symposium: Knoxville, TN; October 2010. (poster)
41. Gregory, MJ*, EB Grossmann, JL Ohmann, HM Roberts. 2010. The Nationwide Forest Imputation Study (NaFIS): Challenges, results and recommendations from the western United States. Forest Inventory and Analysis Science Symposium: Knoxville, TN; October 2010. (oral)
40. Grossmann, EB*, JL Ohmann, HK May, MJ Gregory. 2009. Mapping mountain hemlock and pinpointing ponderosa pine: Imputation mapping species distributions in Western Oregon. North American Forest Ecology Workshop: Logan, UT; June 2009. (poster)
39. Ohmann, JL*, MJ Gregory, HK May, EB Grossmann, RE Kennedy, WB Cohen, Z Yang, E Pfaff, M Moeur. 2009. Spatial monitoring of disturbance and late-successional forest dynamics in the Pacific Northwest. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Snowbird, UT; April 2009. (poster)
38. Grossmann, EB*, JL Ohmann, MJ Gregory, HK May. 2009. Gradients or hierarchies? Which assumptions make a better map? US Regional Association of the International Association of Landscape Ecology Annual Meeting: Snowbird, UT; April 2009. (oral)
37. Ohmann, JL*, M Moeur, M Hemstrom, T Burcsu, J Merzenich, MJ Gregory, HK May, EB Grossmann. 2008. Integrating forest inventory data, vegetation maps, and models of vegetation dynamics to support landscape analysis and planning: the IMAP story. Forest Inventory and Analysis Symposium: Park City, UT; October 2008. (oral)
36. Grossmann, EB*, JL Ohmann, J Kagan, MJ Gregory, HK May. 2008. Context-dependent hierarchy of plant community predictors from the Oregon Coast Range to the eastern slopes of the Cascade Mountains. Ecological Society of America Annual Meeting: Milwaukee, WI; August 2008. (poster)

35. Gregory, MJ*, JL Ohmann, TM Holt. 2008. An application of computer gaming technology to visualize, query, and understand forest landscapes. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Madison, WI; April 2008. (poster)
34. Ohmann, JL*, MJ Gregory, JD Kline, RJ Alig, HK May, EB Grossmann. 2008. Implications of social and ecological gradients for conservation planning in large, multi-ownership, forested landscapes. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Madison, WI; April 2008. (poster)
33. Grossmann, EB*, JL Ohmann, J Kagan, KB Pierce Jr., HK May, MJ Gregory. 2008. Random forests and nearest neighbors: Methods for mapping the West Cascades of Oregon. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Madison, WI; April 2008. (oral)
32. Grossmann, EB*, JL Ohmann, J Kagan, KB Pierce Jr., HK May, MJ Gregory. 2007. A tale of two techniques: Gradient Nearest Neighbor and random forest for mapping ecological systems in Oregon's Western Cascades. North American Forest Ecology Workshop: Vancouver, BC; June 2007. (poster)
31. Gregory, MJ*, JL Ohmann, BC McComb. 2006. Sensitivity of wildlife habitat capability models to spatial resolution of underlying mapped vegetation data. 2006 Nearest Neighbors Workshop - Meeting in the Middle: Minneapolis, MN; August 2006. (oral)
30. Ohmann, JL*, MJ Gregory, KB Pierce Jr., TM Holt, HK May. 2006. Mapping forest species and plant communities with Gradient Nearest Neighbor imputation. 2006 Nearest Neighbors Workshop - Meeting in the Middle: Minneapolis, MN; August 2006. (oral)
29. Fried, JS*, JL Ohmann, MC Wimberly, KB Pierce Jr., MJ Gregory. 2006. Tapping the forest inventory for spatially continuous estimates of fuels and fire potential: the GNNFire approach. First Fire Behavior and Fuels Conference: Fuels Management - how to measure success: Portland, OR; March 2006. (poster)
28. Ohmann, JL*, MJ Gregory, KB Pierce Jr., MC Wimberly, JS Fried. 2005. A novel approach to regional fuel mapping: linking inventory plots with satellite imagery and GIS databases using the Gradient Nearest Neighbor method. Poster presented at Joint Fire Science Program Principal Investigator Workshop: San Diego, CA; November 2005. (poster)
27. Ohmann, JL*, MJ Gregory, KB Pierce Jr., MC Wimberly, JS Fried. 2005. Mapping forest vegetation and fuels with Gradient Nearest Neighbor imputation in three western ecoregions. JFSP Annual Meeting: San Diego, CA; October 2005. (poster)
26. Gregory, MJ*, KB Pierce Jr., JL Ohmann. 2005. Gradient Nearest Neighbor imputation for local scale basal area mapping: FIA 2005 Symposium interpolation contest. Seventh Annual Forest Inventory and Analysis Science Symposium: Portland, ME; October 2005. (oral)
25. Fried, JS*, JL Ohmann, KB Pierce Jr., MC Wimberly, MJ Gregory. 2005. A mid-scale approach to mapping forest fuel and fire hazards at the wildland-urban interface by imputation and

- modeling of inventory plot data. Seventh Annual Forest Inventory and Analysis Science Symposium: Portland, ME; October 2005. (oral)
24. Gregory, MJ*, A Kimerling, D White, K Sahr. 2004. Evaluating desirable geometric characteristics of discrete global grid systems: revisiting the Goodchild criteria. Second International Conference on Discrete Global Grids: Ashland, OR; October 2004. (oral)
 23. Pierce Jr. *, KB, JL Ohmann, MJ Gregory, MC Wimberly, JS Fried. 2004. Mapping forests of the Pacific Northwest: structure, species and uncertainty. Ecological Society of America Annual Meeting: Portland, OR; August 2004. (poster)
 22. Wimberly, MC*, C Avery, JL Ohmann, KB Pierce Jr., MJ Gregory, JS Fried. 2004. Landscape connectivity and the potential for catastrophic fire in forested landscapes. Ecological Society of America Annual Meeting: Portland, OR; August 2004. (poster)
 21. Gregory, MJ*, JL Ohmann. 2004. Spatial modeling of regional vegetation using field plots and geospatial information: a software framework for the Gradient Nearest Neighbor method. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Las Vegas, NV; April 2004. (poster)
 20. Wimberly, MC*, C Avery, JL Ohmann, KB Pierce Jr., MJ Gregory, JS Fried. 2004. Influences of landscape structure, drought, and wind on crown fire spread in forest landscapes. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Las Vegas, NV; April 2004. (oral)
 19. Pierce Jr., KB*, JL Ohmann, MJ Gregory. 2004. Assessing spatial uncertainty in landscape vegetation maps created with imputation procedures. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Las Vegas, NV; April 2004. (oral)
 18. Wimberly, MC*, JL Ohmann, KB Pierce Jr., MJ Gregory, JS Fried. 2003. A multivariate approach to mapping forest vegetation and fuels using GIS databases, satellite imagery, and forest inventory plots. Fifth Symposium on Fire and Forest Meteorology and 2nd International Wildland Fire Ecology and Fire Management Congress: Orlando, FL; November 2003. (oral)
 17. Hicks, WT*, ME Harmon, JL Ohmann, MJ Gregory, B McCune, SD Berryman, E Martin, L Geiser. 2003. Mapping the abundance and activity of two symbiotic nitrogen fixers in western Oregon. North American Forest Ecology Workshop: Corvallis, OR; June 2003. (poster)
 16. Ohmann, JL*, TA Spies, MJ Gregory, KN Johnson. 2003. Distribution of vegetation biodiversity across a continuum of land ownership and management emphasis in coastal Oregon. North American Forest Ecology Workshop: Corvallis, OR; June 2003. (poster)
 15. Ohmann, JL*, KB Pierce Jr., MJ Gregory, S Danskin, MC Wimberly, JS Fried. 2003. Mapping live and dead forest fuels at the ecoregion scale in coastal Oregon with Landsat imagery and forest inventory plots. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Banff, AB; April 2003. (oral)

14. Turner, DP*, S Ollinger, ML Smith, O Krankina, MJ Gregory. 2002. Scaling net primary production to a MODIS footprint in support of Earth Observing System product validation. Ecological Society of America Annual Meeting: Tucson, AZ; August 2002. (poster)
13. Ohmann, JL*, TA Spies, MJ Gregory, KN Johnson. 2002. Distribution of vegetation biodiversity across a continuum of land ownership and management emphasis in coastal Oregon. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Lincoln, NE; April 2002. (poster)
12. Ohmann, JL*, MJ Gregory. 2001. How does spatial resolution affect Gradient Nearest Neighbor vegetation maps? Symposium: A landmark assessment of Oregon's forest sustainability: Corvallis, OR; October 2001. (poster)
11. Ohmann, JL*, MJ Gregory. 2001. Predictive mapping of forest composition and structure using direct gradient analysis and nearest-neighbor imputation. Symposium: A landmark assessment of Oregon's forest sustainability: Corvallis, OR; October 2001. (poster)
10. Ohmann, JL*, MJ Gregory. 2001. Predictive mapping of forest composition and structure using direct gradient analysis and nearest-neighbor imputation. North American Forest Ecology Workshop: Duluth, MN; June 2001. (poster)
9. Turner, DP*, ST Gower, SC Wofsy, AK Knapp, T Meyers, MJ Gregory. 2001. A cross-biome comparison of vegetation light use efficiency. Global Change Open Science Conference: Amsterdam, Netherlands; June 2001. (poster)
8. Hudak, AT*, MJ Gregory, JL Ohmann, M Moeur, MA Lefsky, WB Cohen. 2001. Comparison of two methods for mapping forest structure from inventory plot and environmental data in Western Oregon. US Regional Association of the International Association of Landscape Ecology Annual Meeting: Tempe, AZ; April 2001. (poster)
7. Ohmann, JL*, MJ Gregory. 2001. How does spatial resolution affect Gradient Nearest Neighbor vegetation maps? US Regional Association of the International Association of Landscape Ecology: Tempe, AZ; April 2001. (poster)
6. Hudak, AT*, MJ Gregory, JL Ohmann, M Moeur, MA Lefsky, WB Cohen. 2000. Predictive mapping of tree species basal areas from forest inventory and environmental data: a comparison of two models. Ecological Society of America Annual Meeting: Snowbird, UT; August 2000. (poster)
5. Ohmann, JL*, MJ Gregory. 2000. Predictive mapping of forest composition and structure using direct gradient analysis and nearest-neighbor imputation. Ecological Society of America Annual Meeting: Snowbird, UT; August 2000. (poster)
4. Turner, DP*, ST Gower, WB Cohen, MJ Gregory, TK Maersperger. 2000. Spatial heterogeneity in vegetation light use efficiency over an agricultural landscape in central Illinois. Ecological Society of America Annual Meeting: Snowbird, UT; August 2000. (poster)

3. Gregory, MJ*, A Kimerling, D White, K Sahr. 2000. Comparing intercell distance and cell wall midpoint criteria for discrete global grid systems. First International Conference on Discrete Global Grids: Santa Barbara, CA; March 2000. (oral)
2. Ohmann, JL*, MJ Gregory. 1999. A Nearest Neighbor Method for Mapping Forest Composition in the Oregon Coastal Province. Oregon's Forests at the Millennium: What Might the Future Hold?: Corvallis, OR; September 1999. (poster)
1. Turner, DP*, MJ Gregory, BE Law, PM Anthoni, PE Thornton. 1999. Validating modeled gross primary production and evapotranspiration using eddy covariance flux measurements. Ecological Society of America Annual Meeting: Spokane, WA; August 1999. (poster)

Invited seminars

17. Gregory, MJ*, HM Roberts, DM Bell, JL Ohmann. 2015. Nearest neighbors methods for regional-scale forest vegetation mapping in the western USA. Conservation Biology Institute: Corvallis, OR; August 2015.
16. Roberts, HM*, JL Ohmann, MJ Gregory, HSJ Zald. 2014. Gradient Nearest Neighbor method for forest vegetation mapping. USDA Forest Service Region 6 Lunch and Learn Webinar Series: Corvallis, OR; June 2014.
15. Gregory, MJ*, JL Ohmann, HM Roberts, HSJ Zald, EB Henderson. 2013. Recent advances and applications of nearest neighbors methods for regional-scale forest vegetation mapping in the Pacific Northwest, USA. Landcare Research Seminar: Lincoln, New Zealand; February 2013.
14. Zald, HSJ*, JL Ohmann, HM Roberts, MJ Gregory, EB Henderson, R McGaughey, RE Kennedy, J Braaten, M Simpson. 2013. Incorporating LiDAR and Landsat disturbance history into nearest neighbor mapping of vegetation composition and structure. USFS Region 6 office for Monitoring Inventory Mapping and LiDAR (MIML) working group: Portland, OR; February 2013.
13. Gregory, MJ*, JL Ohmann, TM Holt. 2008. Seeing data with GIS: from paper maps to immersive visualizations. Kids' Keynote address to GIS Day: Corvallis, OR; November 2008.
12. Gregory, MJ*, JL Ohmann, HK May, EB Grossmann, KB Pierce Jr., TM Holt, JS Fried. 2008. Recent advances and applications of nearest neighbors methods for regional-scale forest vegetation modeling. Department of Forest Science Seminar: Corvallis, OR; April 2008.
11. Ohmann, JL*, MJ Gregory, HK May, EB Grossmann. 2008. Gradient Nearest Neighbor (GNN) maps of forest vegetation: accuracy assessment and uncertainty. Interagency Mapping and Assessment Project (IMAP) Users' Group: Portland, OR; February 2008.
10. Ohmann, JL*, KB Pierce Jr., EB Grossmann, MJ Gregory, HK May, TM Holt. 2007. Seeing the forest and the trees: harnessing GIS to map forests of the Pacific Northwest. Keynote address to GIS Day: Corvallis, OR; November 2007.

9. Ohmann, JL*, KB Pierce Jr., EB Grossmann, MJ Gregory, HK May, TM Holt. 2007. Current Vegetation Mapping in Western Oregon. Presented at: USFS Klamath Falls Ranger District: Klamath Falls, OR; June 2007.
8. Gregory, MJ*. 2007. How to Stay on Campus Forever: A Career Path Through Geography, Forestry, and Technology. Department of Geosciences Spring Seminar: Corvallis, OR; May 2007.
7. Holt, TM* and MJ Gregory*. 2006. Demonstration of the GNNViz application. COF Centennial Open House, Corvallis, OR; November 2006.
6. Ohmann, JL*, KB Pierce Jr., MJ Gregory, JS Fried. 2005. Gradient Nearest Neighbor imputation based on FIA plots - useful tool or lying with maps? Seminar at Forestry Sciences Lab: Portland, OR; August 2005.
5. Gregory, MJ*, JL Ohmann. 2004. Spatial modeling of regional vegetation using field plots and geospatial information: a software framework for the Gradient Nearest Neighbor method. College of Forestry Spatial Data Management Group: Corvallis, OR; April 2004.
4. Ohmann, JL*, MJ Gregory, TA Spies. 2003. Predictive vegetation mapping and current vegetation biodiversity in coastal Oregon. Botany and Plant Pathology Departmental seminar: Corvallis, OR; February 2003
3. Ohmann, JL*, MJ Gregory. 2002. Predictive mapping of forest composition and structure with direct gradient analysis and nearest-neighbor imputation (the Gradient Nearest Neighbor method). Focus session at the Joint Meeting of Fourth Annual Forest Inventory and Analysis Science Symposium and the Southern Forest Mensurationists: New Orleans, LA; November 2002.
2. Ohmann, JL*, TA Spies, MJ Gregory, KN Johnson. 2002. Vegetation biodiversity in coastal Oregon forests. A Multi-ownership Assessment of Forests and Watersheds of the Oregon Coast Range. Presented as part of an all-day symposium of invited stakeholders and landowners. Organized by the Coastal Landscape Analysis and Modeling Study (CLAMS): Corvallis, OR; June 2002.
1. Gregory, MJ*, JL Ohmann. 2000. Predictive mapping of forest composition and structure using the Gradient Nearest Neighbor Method. Willamette Valley GIS Users Group: Corvallis, OR; November 2000.

Training Presentations

8. Gregory, MJ*. 2014. Introduction to Python for open source geospatial applications. Presentation to the Spatial Data Management Group: Corvallis, OR; May 2014.
7. Gregory, MJ*. 2013. An introduction to Mapbox tools and software. Presentation to the Spatial Data Management Group: Corvallis, OR; July 2013.
6. Gregory, MJ*. 2013. An introduction to Mapbox tools and software. Presentation to the OSU Cartography and Geovisualization Group: Corvallis, OR; May 2013.

5. Gregory, MJ*. 2010. Using Python tools in ArcGIS and open source geospatial libraries. Presentation to the OSU student chapter of the American Society for Photogrammetry and Remote Sensing: Corvallis, OR; June 2010.
4. Gregory, MJ*. 2008. Incorporating your data into Google Maps and Google Earth. Presentation to the Spatial Data Management Group: Corvallis, OR; February 2008.
3. Gregory, MJ*. 2007. Revision control using Subversion and TortoiseSVN. Presentation to the SDMG geoprogramming group: Corvallis, OR; October 2007.
2. Gregory, MJ*. 2006. Mapping current vegetation in the Pacific Coast states with Gradient Nearest Neighbor imputation. Department of Forest Science Remote Sensing Seminar: Corvallis, OR; October 2006.
1. Gregory, MJ*. 2004. Using ArcObjects within ArcGIS 8. Presentation to the Spatial Data Management Group: Corvallis, OR; July 2007.

4. Grants and Contracts

Grants

1. Ohmann, JL, MJ Gregory and TM Holt. 2005. Innovative, 3-D, Interactive, and Immersive Techniques for Visualizing, Querying, and Understanding Regional Maps of Forest Vegetation, Fuels, and Fire Risk. Two years. Joint Fire Science Program. Grant support: \$254,489. (Joint Venture Agreement for \$202,636 to Ganio, LM and MJ Gregory).

Contracts

7. Ganio, LM and MJ Gregory. 2016. Multidecadal Forest Vegetation and Change Assessment over Regional Landscapes. Five years. Joint Venture Agreement with USDA Forest Service. Contract support: \$262,889.
6. Ganio, LM and MJ Gregory. 2012. Spatial Monitoring of Forest Conditions over Regional Landscapes. Five years. Joint Venture Agreement with USDA Forest Service. Contract support: \$710,098.
5. Ganio, LM and MJ Gregory. 2012. Integrated, observation-based carbon monitoring for wooded ecosystems in Washington, Oregon, and California. Two years. Sub-award with Boston University. Contract support: \$122,083.
4. Ganio, LM and MJ Gregory. 2009. Concepts and Tools for Predictive Vegetation Mapping to Monitor and Project Forest and Landscape Change. Five years. Joint Venture Agreement with USDA Forest Service. Contract support: \$411,906.
3. Ganio, LM and MJ Gregory. 2006. Predictive Vegetation Mapping and Landscape Modeling in Support of Conservation, Natural Resources, and Land-Use Planning in the Pacific Northwest. Five years. Joint Venture Agreement with USDA Forest Service. Contract support: \$646,792.

2. Ganio, LM and MJ Gregory. 2004. Analysis of Regional Variability in Forest Vegetation. Five years. Joint Venture Agreement with USDA Forest Service. Contract support: \$509,207.
1. Ganio, LM and MJ Gregory. 2000. Spatial Analysis of Variability in Forest Composition and Structure among Ownership and Land Allocations in the Oregon Coastal Province. Five years. Joint Venture Agreement with USDA Forest Service. Contract support: \$114,429.

5. Authored software

(Note: This section represents some major works of research software over my tenure. Typically, software is designed to answer project specific research questions, although I have tried to showcase software projects here that have applicability to the broader research community. All software is free and open source and is delivered to clients either as source code or executables.)

3. Gregory, MJ, HM Roberts, JL Ohmann. 2015. Pynnmap - a software framework for the Gradient Nearest Neighbor method.

Overview: Pynnmap is a software framework for creating spatially explicit surfaces of predicted vegetation from multivariate models, including automated accuracy assessment and report generation.

Language/Libraries: Python, C++, scientific python stack

Platform: Windows (eventually cross-platform)

Development Time: 4 years

Website: <https://github.com/lemma-osu/pynnmap>

GNN applies direct gradient analysis and nearest-neighbor imputation to ascribe detailed ground attributes of vegetation to each pixel in a digital landscape map. To do this, GNN integrates vegetation measurements from regional grids of field plots, mapped environmental data, and Landsat TM imagery. In the resulting vegetation map, multiple vegetation attributes are represented as continuous variables that can be classified and queried to address a variety of objectives. Pynnmap is our latest release of software for running GNN models, which I have periodically improved since 1998. The framework currently is configured to work with a variety of ordination techniques, spatial formats, and spatial domains (e.g., point, list, window). Since 2005, we have thoroughly redesigned the software – 1) moved to predominantly Python-based code and packages and 2) designed the system such that other users could run GNN with their own data. Working closely with Heather Roberts (SFRA, Forest Ecosystems and Society) on design and development, we use this system to create GNN models and automate accuracy assessment and report generation for all of Washington, Oregon and California from 1985 – 2012. We are in the process of making this software platform more accessible to other users by rigorously testing and documenting its functionality. *(I designed and developed early releases of the software until 2006, at which point I co-led design and development of the software with Heather Roberts. Ohmann provided feedback on software functionality.)*

2. Gregory, MJ, Z Yang, N Gorelick. 2015. Python, Java and Javascript ports of Vegetation Change Tracker (VCT).

Overview: Software to replicate the functionality of the VCT change detection algorithm

specialized for use in the Landscape Change Monitoring System (LCMS).

Language/Libraries: Python, Java, Javascript

Platform: Cross-platform, Google Earth Engine

Development Time: 1 year

Website: <https://github.com/c11/lcms>

LCMS is a pilot project that incorporates forest change detection information (disturbance, stress, and recovery) from multiple leading algorithms and uses this information in a machine learning context to produce change detection layers with lower rates of omission and commission. VCT is a nationally recognized change detection algorithm developed by Chengquan Huang (University of Maryland) and is thus part of the LCMS project. In order to produce a consistent library of all algorithms, we ported VCT from C to Python. Now, through a partnership with Google Earth Engine, we are again porting the original VCT code to a hybrid of Java and Javascript. The code will become part of the Google Earth Engine library and is available to any researcher on the platform. This allows researchers to create change detection maps across the timeframe of the Landsat archive (1984 – present). *(I ported the VCT code from C into Python and then again into Java with the collaboration of Yang and Gorelick.)*

1. Holt, TM, MJ Gregory, JL Ohmann. 2007. GNNViz software.

Overview: The GNNViz software uses a game engine to drive immersive visualization of GNN model output.

Language/Libraries: C++, Delta3D

Platform: Windows

Development Time: 1 year

Website: <http://lemma.forestry.oregonstate.edu/projects/gnnviz>

The goal of the GNNViz project was to create realistic and immersive visualizations of vegetation model data. We modified an open-source game engine (Delta3D) to allow visualization of our GNN data, with realistic rendering of terrain and components of the forest vegetation (e.g. conifers, broadleaves, snags). We created the visualization environment for our three GNNFire study areas and developed an application that is extensible to other thematic information and geographic locations. We created a tool for visualizing and browsing spatial information that is unique from GIS -- a hybrid experience between GIS, Google Earth, and a computer game. We believe this platform holds promise for future visualizations and simulations. *(I co-lead the design of the Delta3D code modification, wrote modules for input of spatial data into the visualization environment, and contributed user interface elements within the game.)*

6. **Data products, relational databases and spatial catalogs**

3. Ohmann, JL, MJ Gregory, HM Roberts. 2006 – present. Gradient Nearest Neighbor (GNN) digital maps and linked database of forest vegetation attributes with metadata, data dictionary, and accuracy assessment reports. These GNN models represent the main data product of the LEMMA team from 2006 onward. We have served many versions of GNN maps based on project specifications over this period and currently are distributing maps spanning Washington, Oregon and California for model years 1985-2012 in support of

- Northwest Forest Plan Effectiveness Monitoring and the Carbon Monitoring in Western States (CMONster) projects. These data are openly and freely available and we have over 400 registered users of LEMMA data products. Available for download at: <http://lemma.forestry.oregonstate.edu/data>. *(Roberts and I would process the GNN models and run quality control tests and Ohmann would check the output for ecological consistency and detect outliers. Roberts and I shared duties for mosaicking, packaging and distributing the products via the website.)*
2. Roberts, HM, MJ Gregory, JL Ohmann, DM Bell. 2006 – present. An integrated relational database for over 150,000 forest inventory plots across Washington, Oregon, and California for LEMMA modeling and mapping. This database has compiled information from many source databases including Forest Inventory and Analysis, USDA Forest Service Regions 5 and 6, and Bureau of Land Management. These data are normalized into a consistent format across data sources such that forested plots are easily used in a modeling context. The database includes dozens of views, stored procedures, and triggers (ie. programming logic) to scale inventory data from recorded piece-level information to stand-level attributes, which become potential mapped variables in the GNN method. The database is fully documented, includes an online data dictionary, and is updated every year to include new inventory plots. We have fulfilled nearly 200 requests for plot information to various users since 2006. *(I created early versions of these databases, typically in MS Access. With Roberts becoming the lead database administrator since 2006, I have counseled on plot inventory design calculations, given guidance on database design, and written web interfaces to the database.)*
 1. Gregory MJ, HM Roberts, JL Ohmann. 2006 – present. Raster catalog for over 100 datasets used as explanatory variables in LEMMA modeling and mapping. This catalog represents a set of variables that may influence forest vegetation patterns across Washington, Oregon and California. Rasters represent climate, topography, Landsat TM, and other important co-variates used in GNN modeling. All rasters are processed to 30m cells, projected to USGS National Albers, and cover the same three-state extent. The catalog includes extensive processing notes on raster derivation and is made available to other researchers and land managers. Since 2006, we have fulfilled over 50 requests for data within our catalog. *(I lead production of the GIS rasters that are used in GNN modeling, assembling products from source data, documenting production steps, and ensuring consistency among rasters.)*

D. SERVICE

1. University, college and department service

University

- Masters of Science Graduate Committee (James Eynard) in College of Earth, Ocean, and Atmospheric Sciences, OSU. Thesis title: Evaluating the Effectiveness of Illuminated and Shadowed Contour Lines, 2015.
- Co-organizer of OSU GIS Day/GPS activities, 2003 – 2007
- Designed Global Positioning Systems (GPS) curricula for primary and secondary school students in Corvallis in support of GIS Day, 2002 – 2005.
- Organized speaker for GIS Day keynote address (Stuart Allan), 2003.

College

- Provided advice to Forestry Computing Resources staff for setting up GIS and Python software for computing laboratories, 2013 – present.
- Member on College Forests GIS technician search committee (Abby Kirkaldie), 2015.
- Consulted with College Forests to help design geodatabase for forest research activities, 2014.
- Consultant, College of Forestry GIS/Remote Sensing helpdesk, 1999 – present.
- Co-led (with Heather Roberts) the technology arm of the Forest Science Research Support Faculty (RSF) committee and helped created the initial online database of RSF skills, interests and availability, 2009.

Department

- Co-chair on two search committees (Tim Holt (SFRA), Heather Roberts (FRA)) and committee member on four others (Michael Guzy (research associate), Dave Ritts (FRA), Ron Beloin (FRA), Emilie Grossmann (research associate)) for the Department of Forest Science/Forest Ecosystems and Society, 2001 – 2008.
- Department of Forest Science website improvement committee, 2004.

2. Service to the profession

- Campus liaison, Environmental Systems Research Institute (Esri) for Virtual Campus training and technical support, 2003 – present.
- Primary administrator, OSU's Esri Development Center Program, 2009 – 2012.
- Co-leader, College of Forestry Spatial Data Management Group (SDMG), 2003 – present.
- Organized speakers for SDMG group (David Bell, John Bolte, Jim Graham, Tim Holt, Berhard Jenny, Helen Jenny, Dylan Keon, Jonathan Thompson, Denis White), 2001 – present.
- Webmaster, US Regional Association of the International Association for Landscape Ecology (US-IALE), 2002 – 2009.
- Co-leader and co-founder, SDMG geoprogramming group, 2007 – 2009.
- Co-leader and co-founder, OSU cooperative learning group on programming, 2003 – 2004.
- Member of US-IALE, 2004, 2008 – 2009.

3. Service to the public (professionally related)

- Co-organizer and member, Corvallis Open Street Mapping Group, 2012 – 2014.
- Member, Maptime Corvallis, 2014 – present.
- Presenter, Story map of British Columbia, Franklin School, Corvallis, 2013.
- Presenter, Google Earth Treasure Hunt, Geography night at Franklin School, Corvallis, 2010.

4. Service to the public (non-professionally related)

- At-large board member for Corvallis Community Children's Center (OSU contractor for childcare), 2006 – 2009.

E. AWARDS AND RECOGNITION

1. National and International Awards

- 2010. National Director's Award (Director of Quantitative Sciences) for FIA Excellence for FY 2009 to Janet Ohmann, Matt Gregory, and Heather Roberts (LEMMA Team), "recognized for their successful completion of consistent, detailed maps of forest vegetation for Oregon, Washington and most of California based on models developed by the Team using FIA and remote sensing data."
- 2005. First place, interpolation contest for local-scale basal area mapping for: Gregory, MJ, KB Pierce Jr., JL Ohmann. 2005. Gradient Nearest Neighbor imputation for local scale basal area mapping. Seventh Annual Forest Inventory and Analysis Science Symposium; Portland, ME.

2. State and Regional Awards

- 2011. Science Findings Award, PNW Research Station, recognizing the finest research currently produced by the Station and its partners, for "Keeping tabs on older forests: satellites, statistics, and boots on the ground," with Warren Cohen. Science Findings 138. (<http://www.fs.fed.us/pnw/sciencef/scifi138.pdf>). *(I am listed as collaborator).*
- 2004. Science Findings Award, PNW Research Station, recognizing the finest research currently produced by the Station and its partners, for "Forest Biodiversity Policies: Where are they leading us? Are we going where we expect to go?" Submitted by Thomas Spies for five CLAMS team members. Science Findings 76. (<http://www.fs.fed.us/pnw/sciencef/scifi76.pdf>) *(I am listed as collaborator).*
- 2003. Science Findings Award, PNW Research Station, recognizing the finest research currently produced by the Station and its partners, for Gradient Nearest Neighbor method for predictive vegetation mapping and biological diversity characterization in coastal Oregon forests. Science Findings 56. (<http://www.fs.fed.us/pnw/sciencef/scifi56.pdf>) *(I am listed as principal collaborator).*
- 2002. Science Findings Award, PNW Research Station, recognizing the finest research currently produced by the Station and its partners, for interdisciplinary landscape analyses by the ~25-member CLAMS Team. Science Findings 45. (<http://www.fs.fed.us/pnw/sciencef/scifi45.pdf>) *(I am listed as one of 25 members of the CLAMS team).*

3. University and Community Awards

- 2011. Dean's Award for Outstanding Achievement – Faculty Research Assistant. Recognized for "selfless commitment to the betterment of all, and your dedicated time and expertise in the development of solutions to challenging research questions."
- 2001. Certificate of Recognition for outstanding contributions to CLAMS for Gradient Nearest Neighbor model.

- 1998. Outstanding Teaching Assistant. Department of Geography. Oregon State University.