

MATTHEW H. LANGHOLTZ

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QUALIFICATIONS

Forest biomass experience including evaluation of the economic availability of woody biomass resources; management, analysis and reporting of forest biomass studies. Proficient in ArcGIS, Pathfinder Office, ArcView, GPS, TCruise, SoloField, Reference Manager, EndNote, Access and other Microsoft applications. Fluent in English, Spanish, and Guaraní. Active PDA user.

OBJECTIVE: A position contributing to sustainable natural resource use.

EDUCATION

- Ph.D., *Economic and Environmental Analysis of Tree Crops on Marginal Lands in Florida*, School of Forest Resources and Conservation, University of Florida, December, 2005.
- Masters of Forestry, SFRC, University of Florida, August, 2000.
- B.S. Forestry, Oklahoma State University, May, 1994.

EXPERIENCE

Project Director – April 2007-Present

BioResource Management, Gainesville, FL.

- Assess the economic availability of biomass for bioenergy projects.
- Grant writing.
- Assist with the development of bioenergy projects.

Postdoctoral Research Associate – 2005-March 2007

University of Florida, Gainesville, FL.

- Developed biomass resource supply curves for 28 communities in the southeast US to assess the economic availability of wood for electricity generation in support of “Wood to Energy: A Training Program to Utilize Interface Fuels for Bioenergy”, funded by US DOE and USDA Biomass Research and Development Initiative.
- Co-taught graduate level forest economics course: Forest Valuation.
- Prepared and submitted grant “Demonstration and Market Feasibility of Forest Bioenergy Systems in Florida” with a budget of over \$900,000 to the Florida Department of Environmental Protection.
- Produced a decision support system to assess the economic viability of short rotation woody crops in collaboration with the Florida Institute of Phosphate Research.
- Applied the Multi-Product Sub-Regional Timber Supply Model to project softwood removals and inventories for Florida.

Phytoremediation Lab Manager and Graduate Student - 1999-2005

University of Florida, Gainesville, FL.

- Supervised the establishment and maintenance of three forestry research sites in Florida for the Biomass Program, School of Forest Resources and Conservation, University of Florida, to assess the feasibility of short-rotation woody crops to phytoremediate reclaimed water and reclaim mined lands.
- Managed lab accounts, data files, and employees.

Forest Inventory and Marking Technician - 1998**W.M. Beaty & Associates, Inc., Susanville, CA.**

- Conducted systematic forest sampling (cruising) to gather stand data needed for forest management.
- Worked on marking crew, marking trees to be harvested or left according to forest management objectives.

Environment Sector Coordinator - 1997-1998**Peace Corps, Asunción, Paraguay**

- Provided technical and personal support to over 40 agroforestry extension agents and environmental educators.
- Trained new agroforestry extension volunteers in nursery management, tree plantation establishment, and stand maintenance.
- Organized in-service training seminars for agroforestry extension volunteers and Paraguayan counterparts.
- Supported agroforestry extension agents and farmers in the field providing technical recommendations related to forest enrichment, soil conservation, and crop diversification.
- Acted as liaison for field extension agents to Paraguayan government agencies. Performed various administrative functions supporting the Environment Sector Director including report writing, data compilation, and project plan review.

SEPA Co-Founder - 1997**Ecoforestry for Farmers (SEPA), Paraguay**

- Co-founded SEPA, a farmer-to-farmer agroforestry extension NGO in Paraguay.
- Directed the establishment of woodlot management demonstration plots at SEPA in rural Paraguay.

Agroforestry Field Extension Agent - 1994-1996**Peace Corps, Rural Paraguay**

- Provided intensive training to seven farm families successfully establishing innovative agroforestry systems that served as models for farm families in other communities.
- Promoted sustainable soil use practices by introducing vegetative barriers, contour planting, crop rotation, and cover crops for local farm families resulting in enabling them to improve land productivity and self-sufficiency.
- Initiated reforestation projects with four farm families enabling them to produce annual crops and meet their needs for firewood and saw logs.
- Established a forest enrichment and regeneration project involving stand thinning, intercropping in the residual stand with corn, pineapples, banana, squash, and yerba, and managing both artificial and natural regeneration of high-value native timber species.

COMPUTER SKILLS

- Operating System: Windows
- GIS Software: ArcGIS (including extensions), ArcView 3.x
- Other Software: MS Office (Word, Excel, Power Point, Outlook, Access), Pathfinder, MathCad, TCruise, Solofield, Reference Manager

TRAINING

- GPS Mapping for GIS with Pathfinder Office
- Landmark Systems Real Time Inventory Including SoloField and TCruise

PROFESSIONAL ASSOCIATIONS

- Society of American Foresters
- Florida Forestry Association

LANGUAGES

- English (native).
- Spanish (fluent).
- Guaraní (fluent).

PUBLICATIONS

- **Langholtz, M.**, Carter, D., Rockwood, D., Alavalapati, J. R. R., 2009. The Influence of CO₂ Mitigation Incentives on Profitability of Eucalyptus Production on Clay Settling Areas in Florida. *Biomass and Bioenergy*. 33(5), pp. 785-792.
- **Langholtz, M.**, Carter, D., Rockwood, D., Alavalapati, J. R. R., 2007. The Economic Feasibility of Reclaiming Phosphate Mined Lands With Short-Rotation Woody Crops in Florida. *Journal of Forest Economics*. 12, pp. 237-249.
- **Langholtz, M.**, Carter, D., and Schroeder, R., (In Review) The Economic Availability of Woody Biomass, in *Wood to Energy: Utilizing Interface Fuels for Bioenergy*, USDA Forest Service GTR-xxx.
- **Langholtz, M.**, Carter, D., Marsik, M., and Schroeder, R., 2006. Application of ArcGIS Network Analyst to Assess the Economic Availability of Renewable Biomass for Energy, *ArcUser*, Vol. 9, No. 4, October-December Edition, pp. 22-25. Online at <http://www.esri.com/news/arcuser/1006/biomass1of2.html>.
- Rockwood, D., Carter, D., **Langholtz, M.**, Stricker, J., 2006. Eucalyptus and Populus Short Rotation Woody Crops for Phosphate Mined Lands in Florida USA. *Biomass and Bioenergy*. 30, 8, pp. 728-734.
- **Langholtz, M.**, Carter, D., Rockwood, D. L., Alavalapati, J. R. R., Green, A., 2005. Effect of Dendroremediation Incentives on the Profitability of Short-Rotation Woody Cropping of *Eucalyptus grandis*. *Forest Policy and Economics*. 7, 5, pp. 806-817.
- **Langholtz, M.**, 2005, Economic and Environmental Analysis of Tree Crops on Marginal Lands in Florida. 1-155, PhD Dissertation, School of Forest Resources and Conservation, University of Florida.
- Hodges, A., Degner, R., Carter, D., Stevens, T., **Langholtz, M.**, Morgan, K., 2005. Market Enhancement for Small Diameter Timber in Florida. University of Florida, IFAS.
- Smith, W., Hermansen, A., Najafi, F., Rockwood, D., **Langholtz, M.**, Toros, A., "Multidisciplinary Academic Demonstration of a Biomass Alliance with Natural Gas" Proc (2004) ICEE conf. Gainesville FL.
- Breuer, N., **Langholtz, M.**, *Using Seasonal Climate Variability Forecasts to Plan Forest Plantation Establishment*, Florida Cooperative Extension Service Document ABE354, 2004.
- Map project: Location of 174 Farms in the New York City Greenmarket Foodshed. 2005.
- Victor, C., Downs, M., **Langholtz, M.**, Mugisha, A., Sandals, S., Shriar, A., Veach, D., 1999. Potential Use of Long Range Climate Forecast by Agricultural Extension Agents in Florida. Staff Paper 99-9. Department of Food Resources and Economics, University of Florida, Gainesville, FL.

PRESENTATIONS

- July 11th, 2008: "Woody biomass at the southern wildland-urban interface: the wood to energy outreach program" at: 14th International Symposium on Society and Resource Management, Burlington, VT.

- June 17th, 2008: "Economic availability of biomass resources" at: Forest Stewardship Videoconference: Survive the Changes - Greenbelt Update and New Market Opportunities for Landowners.
- June 4th, 2008: "Transportation of Woody Biomass" at: Northeast Texas Woody Bioenergy Symposium, Jefferson, TX.
- September 11th, 2007: "Local Biomass Supply Curve Construction", "Sustainable Production of Woody Biomass", and "Biomass Transportation Issues" at the Woody Biomass Outreach Training in Atlanta, Georgia.
- **Langholtz, M.**, Carter, D., Biomass Resource Supply Curves for SE US Communities. Southern Forest Economics Workshop. Knoxville, TN. May, 2006.
- Tamang, B., Rockwood, D. L., **Langholtz, M.**, Maehr, E., Becker, B., Segrest, S., 2005. Vegetation and Soil Quality Changes Associated with Reclaiming Phosphate-Mine Clay Settling Areas with Fast Growing Trees. Tampa, FL, Proc. 32nd Annual Conference on Ecosystem Restoration and Creation.
- Smith, W., Green, A., Najafi, F., Rockwood, D., **Langholtz, M.**, Toros, A., Multidisciplinary Academic Demonstration of a Biomass Alliance with Natural Gas" Proc (2004) ICEE conf. Gainesville FL.
- Co-presenter, Working Forests in the Tropics, Gainesville, FL, February 14th, 2005.
- Presenter, *Evaluating Environmental Economics of Short-Rotation Woody Crops in Florida*, Wildland Urban Interface Forum, St. Augustine, FL, May 2004.
- Presenter, *Phytoremediation for Biofuels*, UF Energy Colloquium, November 1st 2004.
- Co-presenter, Graduate Student Forum, Gainesville, FL, March, 2001.
- Co-presenter, International Symposium on Silvopastoral Systems, Costa Rica, April 2001.

AWARDS

- Outstanding Teaching Assistant of the Year 2002-2003, Forest Mensuration, School of Forest Resources and Conservation, University of Florida.
- University of Florida Alumni Fellowship, 2002.
- Co-presenter, Working Forests in the Tropics, Gainesville, FL, February 14th, 2005.
- Finalist, World Bank Development Marketplace, Washington D.C., April 2000.
- Honorable Discharge, US Army, Infantry, 2000.
- Eagle Scout.

*References available upon request.