

Francisco J. Escobedo

Assistant Professor / Extension Specialist
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EDUCATION

2004: Ph.D. Forest Resources Management, Environmental and Natural Resources Policy, State University of New York, College of Environmental Science and Forestry, Syracuse, New York, USA.

Dissertation: A cost-effective analysis of urban forest management effects on air quality improvement in Santiago, Chile.

Course concentrations: Urban and community forestry, environmental policy, resource economics.

1998: M.S. Watershed Management, The University of Arizona, Tucson, Arizona, USA.

Thesis: Fire frequency effects on fuel loading in pine-oak ecosystems of the Madrean Province.

Course concentrations: Watershed management, fire effects and management, water quality.

1994: B.S. Agriculture- Soil Science; Minor in Geology, New Mexico State University, Las Cruces, New Mexico, USA. National Student Exchange – Humboldt State University.

Course concentrations: Soil science and natural resources management.

AREAS OF SPECIALIZATION

- Urban and community forest management and planning
- Quantifying the ecosystem services, benefits, and costs of urban forests
- Mitigating the impacts of hurricanes, invasive plants, and urbanization on forests and human settlements

TEACHING

2011: University of Chile Faculty of Forest Sciences

- Instructor: Urban Ecology and Applications Post-Graduate short course

2007-2010: University of Florida, IFAS-School of Forest Resources and Conservation,

- Instructor: Urban Forestry, FOR 4090c (2007-2010)
- Instructor: Urban Forestry Applications, FOR 4670l (2009)
- Co-Instructor : Forestry Seminar FOR 6933 (2007-2008)

1999-2000: State University of New York, College of Environmental Science and Forestry, Faculty of Forest and Natural Resources Management:

- Graduate Teaching Assistant, Environmental Impact Analysis: Principles and Strategies
- Graduate Teaching Assistant, Soil and Water Conservation Policy
- Lab Instructor, Introduction to Soils

AFFILIATIONS

University of Florida, School of Natural Resources and Environment; University of Florida, Center for Latin American Studies; Ecological Society of America; Society of American Foresters; International Society of Arboriculture; Florida Urban Forestry Council; Southern Wildland Urban Interface Council; Association of Natural Resource Extension Professionals; Society of Municipal Arborists; University of Florida, Urban Forest Hurricane Recovery Program; i-Tree Academic Project

PROFESSIONAL EXPERIENCE

- 2006 - : Assistant Professor and Extension Specialist, Urban and Community Forestry, University of Florida, IFAS- School of Forest Resources and Conservation. Gainesville, FL
- 2004 -2006: Forest Soil Scientist and Air Resource Coordinator, USDA Forest Service, Arapaho and Roosevelt National Forests and Pawnee National Grassland, Supervisors Office. Fort Collins, CO
- 2000-2004: Forester, USDA Forest Service, Northeastern Research Station, Urban Forests, Human Health, and Environmental Quality Research Unit. Syracuse, NY
Detail and project assignments away from duty station included:
- 2003: Forester, San Bernardino National Forest, San Jacinto Ranger District. Idyllwild CA. (September-November, 2003)
 - 2001-2002: Project Assistant, University of Chile, Facultad de Ciencias Forestales, Dpto. Manejo de Recursos Forestales. Santiago, Chile. (January 2001, November 2001- April 2002)
 - 2000: Watershed Specialist, Burned Area Emergency Rehabilitation Team; Santa Fe National Forest, NM and Bitterroot National Forest, MT
- 1999-2000: Graduate Teaching Assistant, State University of New York, College of Environmental Science and Forestry, Faculty of Forest & Natural Resources Management. Syracuse NY
- 1998-1999: Soil Scientist, USDA Forest Service, Gila National Forest Supervisors Office. Silver City, NM
- 1996-1998: Soil Scientist, USDA Forest Service, Coronado National Forest Supervisors Office. Tucson, AZ
- 1994-1996: Soil Scientist, USDA Forest Service, Southwestern Regional Office- Terrestrial Ecosystem Survey Unit. Albuquerque, NM
- 1993: Biological Technician, USDA Forest Service, Tongass National Forest, Yakutat Ranger District. Yakutat, AK
- 1992: Agronomy Aid, New Mexico State University, Department of Agronomy and Horticulture. Las Cruces, NM
- 1991-1992: Student Trainee, USDA Forest Service, Southwestern Regional Office-Terrestrial Ecosystem Survey Unit. Albuquerque, NM. (January-August 1991 and May-August 1992)

1989-1990: Work Study-Technician / Emergency Firefighter, USDI Bureau of Land Management. Las Cruces, NM

HONORS, AWARDS

- 2010: International Union of Forest Research Organizations, Deputy Coordinator, Urban Forestry Research Group: 6.07.00
- 2010: Guest Editor, Southeastern Naturalist
- 2009: Southern Region Extension Forestry- Silver Award for extension program newsletter
- 2009: Florida Association of Natural Resource Extension Professionals 3rd place award for newsletter
- 2009: Review Board, Ciencia Forestal en México
- 2008: Editorial Board, Urban Forestry and Urban Greening
- 2006: USDA Forest Service Certificate of Merit: Washington Office- Policy Analysis Group, Greenhouse gas emission footprint protocol analysis.
- 2006: USDA Forest Service Certificate of Merit: Arapaho and Roosevelt National Forests, Front Range Fuel Treatment Partnership support and soil-air program leadership.
- 2005: USDA Forest Service Certificate of Merit: Arapaho and Roosevelt National Forests, Wildland-urban interface fuel and pine beetle mitigation project accomplishments.
- 2004: USDA Forest Service Certificate of Merit: San Bernardino National Forest, Mountain pine beetle control project proposal award.
- 2003: USDA Forest Service Certificate of Merit: San Bernardino National Forest, Community wildfire protection planning.
- 2001-2004: Graduate Tuition Scholarship. State University of New York- College of Environmental Science and Forestry
- 1996-1998: Graduate Tuition Scholarship. The University of Arizona
- 1996: USDA Forest Service, Extra Effort Award: Southwestern Region Terrestrial Ecosystem Survey Crew, inventory accomplishments.

FUNDED PROJECTS

Research

- Ecosystem Services of Forest Stewardship lands. 2009. Principle Investigator. Florida Division of Forestry. \$148,000. (Principle Investigator; PI)
- Spatial distribution of invasive horticultural woody plants in urban landscapes. 2009. USDA Tropical and Subtropical Research. \$117,520 (PI)
- San Juan Bay estuary watershed re-inventory and supplemental sampling. 2009. USDA Forest Service. \$28,000
- Urbanization effects, ecosystem structure, and function in Florida. 2007. Principle Investigator, USDA Forest Service, Southern Research Station. \$58,000
- Assessing Fuels Treatments in Florida's Wildland Urban Interface. 2007 UF School of Natural Resources and Environment. \$18,000. (Co-PI)
- The Benefits of Florida's Urban Forests to Environmental Quality. 2007. Florida Nursery Growers and Landscape Association. \$5,000.
- Riesgos para la biosfera en México: Evaluación de la vulnerabilidad de ecosistemas a las emisiones antropogénicas (*Risks to the mexican biosphere: Evaluation of ecosystem vulnerability to anthropogenic emissions*). Universidad Nacional Autónoma de México. 2007-2008. Project Advisor.
- Rapid assessment of the urban forest following a hurricane: damage and debris. 2006. Principle Investigator, USDA Forest Service and Southern Group of State Foresters. \$200,000

- UF Center for Latin American Studies Travel Award. 2006- \$1,000; 2009- \$850.
- Forest Health Protection Federal Lands Proposal; San Bernardino National Forest; high-value tree protection spraying project award. 2003. USDA Forest Service \$294,000.
- Development of an urban vegetation management system for air pollution control and municipal level decision-making (*Desarrollo de un Sistema de Gestión de la Vegetación Urbana con Fines de Descontaminación Atmosférica y de Apoyo a la Toma de Decisiones a Nivel Municipal*) 2000. Chilean Fondo de Fomento al Desarrollo Científico y Tecnológico. 2000. \$287,273 (Co-PI).

Extension

- Urban Forest Effects Model Adaptation, USDA Forest Service Southern Center for Urban Forestry. 2008. \$12,000
- Urban and community forestry needs assessment for Broward County, Florida FEI Extension Grant. 2008. \$5,000
- Urban forest education online modules, Florida FEI Extension Grant. 2008. \$2,850
- Storm Damage Assessment Protocol for Florida Hurricanes (PI). 2008, FDACS Division of Forestry \$30,450
- Extension in Natural Resources: Analyzing a cost effective framework for Spanish. 2007, UF School of Natural Resources and Environment. \$4,756
- Urban and community forestry needs assessment for Hillsborough County, Florida Urban Forest Hurricane Recovery Program. 2007. \$5,000
- UF/IFAS IPAT International Travel Award. 2006. \$900

REFREED PUBLICATIONS

Baumgardner, D., Varela, S., Escobedo, F., Chacalo, A., Ochoa, C. 2012. The role of a peri-urban forest on air quality improvement in the Mexico City Megalopolis. *Environmental Pollution*. Accepted.

Wyman, M., Escobedo, F., Stein, T., Orfanedes, M., Northrop, R. 2012. Community leader perceptions towards coastal urban forests and hurricanes in Florida. *Southern Journal of Applied Forestry*, Accepted.

Szantoi, Z, Malone S., Escobedo, F. Smith, S., B., Dewitt, B. 2012. A tool for rapid post-hurricane urban tree debris estimates using high resolution aerial imagery. *International Journal of Applied Earth Observations*. doi:10.1016/j.jag.2011.10.009.

Hagan, D., Dobbs, C., Timilsina, N., Escobedo, F., Toor, G., Andreu, M. 2012. Anthropogenic effects on the physical and chemical properties of subtropical coastal urban soils. *Soil Use and Management*. doi:10.1111/j.1475-2743.2011.00379.

Lawrence A., Escobedo, F., Staudhammer, C., Zipperer, W. 2012. Analyzing growth and mortality in a subtropical urban forest ecosystem. *Landscape and Urban Planning*, doi:10.1016/j.landurbplan.2011.10.004

Dobbs, C., Hernández, J., Escobedo, F. 2011. *Ecuaciones de biomasa aérea y área foliar basadas en métodos no destructivos para árboles urbanos de dos comunas de Chile Central* (Above ground biomass and leaf area models based on a non destructive method for urban trees of two communes in Central Chile). *Bosque* 32(3): 287 – 296.

- Thompson, B., Escobedo, F., Staudhammer, C., Matyas, C., Youliang, Q. 2011. Modeling hurricane-caused urban forest debris in Houston Texas. *Landscape and Urban Planning*, 101:286-297.
- Escobedo, F., Kroeger, T., Wagner, J. 2011. Urban forests and pollution mitigation: Analyzing ecosystem services and disservices. *Environmental Pollution*, 159:2078-2087
- Staudhammer, C., Escobedo, F., Lawrence, A., Duryea, M., Merritt, M., Smith, P. 2011. Rapid assessment of change and hurricane impacts to Houston's urban forest structure. *Arboriculture and Urban Forestry*, 37:60-66.
- Dobbs, C., Escobedo, F., Zipperer W. 2011. A framework for developing urban forest ecosystem services and goods indicators. *Landscape and Urban Planning*, 99:196-206.
- Flock, J., Escobedo, F., Varela, S. Wald, C., Wade, J., 2011. Environmental justice implications of urban tree cover in Miami-Dade County, Florida. *Environmental Justice*, 4: 125-134.
- Wyman, M., Escobedo, F., Varela, S., Asuaje, C., Mayer, H., Swisher, M., Hermansen, A., 2011. *Extensión in Natural Resources: Analyzing extension needs of the Spanish-speaking community of Florida*. *Journal of Extension*, 49, Article 2FEA3.
- Abd-Elrahman, A.H., Thronhill, M.E., Andreu, M.G., and Escobedo, F. 2010. A community-based urban forest inventory using online mapping services and consumer-grade digital images. *International Journal of Applied Earth Observation and Geoinformation*, 12: 249-260
- Escobedo, F, Varela S, Zhao, M, Wagner J, Zipperer W. 2010. Analyzing the efficacy of subtropical urban forests in offsetting carbon emissions from cities. *Environmental Science and Policy*, 13:362-372.
- Zhao, M., Escobedo, F., Staudhammer, C., 2010. Spatial patterns of a subtropical, coastal urban forest: Implications for land tenure, hurricanes, and invasives. *Urban Forestry and Urban Greening*, 9(3): 205-214.
- Zhao, M., Kong, Z., Escobedo, F., Gao, J., 2010. Impacts of urban forests on offsetting carbon emissions from industrial energy consumption for Hangzhou, China. *Journal of Environmental Management*, 91(4): 807-813.
- Staudhammer, C., Escobedo, F., Luley, C., Bond, J., 2009. Patterns of urban tree debris from the 2004 and 2005 Florida hurricane season: A technical note. *Southern Journal of Applied Forestry*, 33(4): 193-196.
- Escobedo, F., Luley, C., Bond, J., Staudhammer, C., Bartel, C., 2009. A hurricane debris and damage assessment for Florida urban forests. *Arboriculture and Urban Forestry*, 35(2): 100-106.
- Escobedo, F., Nowak, D., 2009. Spatial heterogeneity and air pollution removal by an urban forest. *Landscape and Urban Planning*, 90: 102-110.
- Escobedo, F.J., Wagner, J., Nowak, D.J., de la Maza, C.L., Rodríguez, M., Crane, D., 2008. Analyzing the cost-effectiveness of Santiago, Chile's policy of using urban forests to improve air quality. *Journal of Environmental Management*, 86: 148-157.
- Escobedo, F., Chacalo, A., 2008. *Estimación preliminar de la descontaminación atmosférica por parte del arbolado urbano de la Ciudad de México* (A preliminary estimate of air pollution removal by Mexico City's urban forest). *Interciencia*, 33: 29-33.
- Escobedo, F.J., Nowak, D.J., Wagner, J., de la Maza, C.L., Rodríguez, M., Crane, D, Hernández, J., 2006. The socioeconomics and management of Santiago de Chile's public urban forests. *Urban Forestry and Urban Greening*, 4: 105-114.

De la Maza, C.L., Hernández, J., Bown, H., Rodríguez, M., Escobedo, F., 2002. Vegetation diversity in the Santiago de Chile urban ecosystem. *Arboricultural Journal*, 26: 347-357.

REPORTS, PROCEEDINGS, TECHNICAL PAPERS, ABSTRACTS

Escobedo, F., Pace, M., Mayer, H., Klein, J. 2011 Miami-Dade County's urban forests and their ecosystem services. University of Florida- IFAS, EDIS, FOR285 <http://edis.ifas.ufl.edu/fr347>

Hagan, D., Dobbs, C, Escobedo, F. 2010. Florida's Urban Soils: Underfoot Yet Overlooked. University of Florida- IFAS, EDIS FOR 271. <http://edis.ifas.ufl.edu/fr333>

Hagan, D., Escobedo, F., Toor, G., Mayer, H., Klein, J., Dobbs, C. 2010. Soil Bulk Density and Organic Matter in Urban Miami-Dade County, Florida. University of Florida- IFAS, EDIS SL 327. <http://edis.ifas.ufl.edu/ss537>

Hagan, D., Escobedo, F., Toor, G., Dobbs, C., Andreu, M. 2010. Key Physical and Chemical Properties of Tampa's Urban Soils. University of Florida- IFAS, EDIS SL 324. <http://edis.ifas.ufl.edu/ss536>

Hostetler M. and Escobedo F. 2010. What types of urban greenspace are better for carbon dioxide sequestration? University of Florida- IFAS, EDIS WEC 279. <http://edis.ifas.ufl.edu/uw324>

Thompson, B., Escobedo, F., Staudhammer, C., Bond, J., Luley, C. 2010. Urban Forests in Florida: Storm Damage Assessment Utility for Estimating Hurricane-Caused Tree Debris. University of Florida- IFAS, EDIS FOR 268. <http://edis.ifas.ufl.edu/fr330>

Escobedo, F, Varela[†], S., Staudhammer, C., Thompson, B. 2010. Southern Escambia County Florida's urban forests. University of Florida- IFAS, EDIS FOR 231. <http://edis.ifas.ufl.edu/fr293>

Escobedo, F., Northrop, R., Orfanedes, M., Iaconna, A., 2009. Comparison of community leader perceptions on urban forests in Florida. University of Florida- IFAS, EDIS FOR 230. <http://edis.ifas.ufl.edu/fr292>

Escobedo, F. and Seitz, J. 2009. The costs of managing an urban forest. University of Florida- IFAS, EDIS FOR 217. http://edis.ifas.ufl.edu/document_fr279

Escobedo, F., Seitz, J., Zipperer, W., 2009. Air pollution removal and temperature reduction by Gainesville's urban forest. University of Florida- IFAS, EDIS FOR 216. http://edis.ifas.ufl.edu/document_fr278

Escobedo, F., Seitz, J., Zipperer, W., 2009. Gainesville's urban forest structure and composition. University of Florida- IFAS, EDIS FOR 214. http://edis.ifas.ufl.edu/document_fr276

Escobedo, F., Seitz, J., Zipperer, W., 2009. Gainesville's urban forest canopy cover. University of Florida- IFAS, EDIS FOR 215. http://edis.ifas.ufl.edu/document_fr277

Escobedo, F., Seitz, J., Zipperer, W., 2009. The effect of Gainesville's urban trees on energy use of residential buildings. University of Florida- IFAS, EDIS FOR 211. http://edis.ifas.ufl.edu/document_fr273

- Escobedo, F., Seitz, J., Zipperer, W., 2009. Carbon sequestration and storage by Gainesville's urban forest. University of Florida- IFAS, EDIS FOR 210. http://edis.ifas.ufl.edu/document_fr272
- Seitz, J. And Escobedo, F., 2009. Urban trees and allergies in north Florida. University of Florida- IFAS, EDIS FOR 206. http://edis.ifas.ufl.edu/document_fr268
- Seitz J. And Escobedo, F., 2008. Urban forests in Florida: Trees control stormwater runoff and improve water quality. University of Florida- IFAS, EDIS FR239. http://edis.ifas.ufl.edu/document_fr239
- Escobedo, F., Seitz, J., Northrop, R., Moon, M., 2008. Community leaders' perceptions on urban forests in Hillsborough County, Florida. University of Florida- IFAS, EDIS FOR194 http://edis.ifas.ufl.edu/document_fr255
- Seitz, J., Monroe, M., Escobedo, F., 2008. Urban forest resources for teaching youth. University of Florida- IFAS, EDIS FOR 172. http://edis.ifas.ufl.edu/document_fr231
- Escobedo, F. And Andreu, M., 2008. A community guide to urban forest inventories. University of Florida- IFAS, EDIS FOR 173/FR232. http://edis.ifas.ufl.edu/document_fr232
- Escobedo, FJ, Duryea, M., Staudhammer, C., Smith, S., Dewitt, B., Osorio, L.F., Szantsoi, Z., Thompson, B. 2008. Rapid Assessment of Urban Forest Landscapes Following a Hurricane: Damage and Debris. Proceedings of the IUFRO 8.01.02 International Conference. Landscape Ecology and Forest Management. Challenges and Solutions. Chengdu, China. September 16 – 22, 2008., 74-75.
- Escobedo F. 2008. Integrating Urban Forestry, Ecology, and Policy to Improve Air Quality: A Comparative Case Study of Two Latin America Cities. Proceedings of the IUFRO 8.01.02 International Conference. Landscape Ecology and Forest Management. Challenges and Solutions. Chengdu, China. September 16 – 22, 2008., 75-76.
- Szantsoi, Z., F. Escobedo, C. Dobbs, and S. Smith. 2008. Rapid methods for estimating and monitoring tree cover change in Florida urban forests: The role of hurricanes and urbanization. In Proceedings of the 6th Southern Forestry and Natural Resources GIS Conference, eds. P. Bettinger, K. Merry, S. Fei, J. Drake, N. Nibbelink, and J. Hepinstall, 93-104.
- Escobedo F. 2007. Urban Forests in Florida: Do they reduce air pollution?. University of Florida- IFAS, EDIS FOR 128/FR184. http://edis.ifas.ufl.edu/document_fr184
- Escobedo F., Northrop, R., and Zipperer, W., 2007. Developing an urban forest management plan for hurricane-prone communities. University of Florida- IFAS, EDIS FOR 121/FR176. http://edis.ifas.ufl.edu/document_fr176
- Mayer H, T. Trump and F. Escobedo. 2007. Tree damage and restoration following Hurricanes Katrina and Wilma at Miami Metrozoo. Florida State Horticulture Society Proceedings Vol 120, p. 320-322.
- Northrop R., F. Escobedo, J Seitz and T. Stein. 2007. An Urban Forestry Needs Assessment for Rapidly Urbanizing Florida – Assessing community perceptions and attitudes towards urban and urbanizing forests. Emerging Issues along the Urban/Rural Interface 2: Linking land use science and Society. Proceedings p .180-181

- Escobedo F. and H. Mayer. 2007. What is the relationship between air pollution and trees in Florida? / *¿Qué pasa con la contaminación del aire y los árboles en la Florida?*. Florida Arborist. 10(1) 14-15.
- Escobedo F. and H. Mayer. 2006. A tool for managing and advocating the urban forest: The new i-Tree software / *Una herramienta para manejar y promocionar el bosque urbano: El Nuevo programa i-Tree*. Florida Arborist 9(4) 6-17.
- Escobedo, F. 2006. USDA Forest Service's Voluntary Reporting of a Green House Gas Footprint under the DOE-EIA 1605(b) Program. Final report submitted to the USDA FS, Washington Office, Research & Development- Policy Analysis Group.
- De la Maza, C.L., M. Rodríguez, J. Hernández, M.T. Serra, P. Gutierrez, F. Escobedo, D. Nowak, M. Prendez, J. Araya and M.T. Varnero. 2005. *Silvicultura Urbana: Vegetación urbana como factor de descontaminación* (Urban silviculture: Urban vegetation as a pollution removal factor). Chile Forestal 313, 46-49.
- Escobedo, F., C.L. de la Maza, J. Wagner, D.J. Nowak, M. Rodríguez and D.E. Crane. 2005. Using urban forest management as an air quality improvement policy in Santiago, Chile. Proceedings – Book of Summaries: 8th IUFRO European Forum on Urban Forestry. 16.
- Escobedo, F. J. Hernández, C.L. de la Maza, M. Rodríguez, D. Nowak and D. Crane. 2004. *Determinando los efectos del arbolado urbano sobre la calidad de aire* (Determining the effects of urban forests on air quality). In: Publicaciones Misceláneas Nº 5, Facultad de Ciencias Forestales, U. de Chile. Seminario Internacional: Funciones y Valores del Arbolado Urbano, 19-25.
- Escobedo, F., J. Hernández, C.L. de la Maza, M. Rodríguez; D. Nowak and D. Crane. 2004. *El arbolado urbano de Santiago de Chile* (Santiago, Chile's urban forests). In: Publicaciones Misceláneas Nº 5, Facultad de Ciencias Forestales, U. de Chile. Seminario Internacional: Funciones y Valores del Arbolado Urbano, 50-54.
- Hernández, J., F. Escobedo, V. Pizarro, and C.L. de la Maza. 2004. *Diagnóstico de la gestión municipal del arbolado urbano público en la ciudad de Santiago* (Municipal urban forest management in the city of Santiago). In: Publicaciones Misceláneas Nº 5, Facultad de Ciencias Forestales, U. de Chile. Seminario Internacional: Funciones y Valores del Arbolado Urbano, 141-164.
- Nowak D.J., D. Crane, J.T. Walton, J. Stevens, F. Escobedo, G. Heisler, R. Hoehn, C. Luley, J. Bond, G. Ina, M. Binkley, L. Tian, J. Zhou, T. Endreney, J. Wang and C. Post. 2003. A Tool for Assessing Urban Forest Structure, Functions and Benefits. Eds: Kollin C., Conference Proceedings, 2003 National Urban Forest Conference, American Forests, 69-71.
- Nowak, D.J., D.E. Crane and F.J. Escobedo. 2003. Assessing the Effects of Urban Tree Planting on Air Quality in the Brooklyn-Queens Expressway Area. Final Report submitted to the Brooklyn Queens Expressway Landscape Enhancement Project. USDA Forest Service, Northeastern Research Station.
- Escobedo, F.J., D.J. Nowak and D.E. Crane. 2003. Santiago's Urban Forests. Final Report submitted to the University of Chile, Faculty of Forest Sciences, FONDEF D00I 1078. USDA Forest Service, Northeastern Research Station.

Escobedo, F.J., Ffolliott, P., Gottfried, G., Garza, and F., 2001. Fire frequency effects on fuel loadings in pine-oak forests of the Madrean Province. RMRS-RN-10. Fort Collins CO, USDA Forest Service Rocky Mountain Research Station 6p.

Several soil, fuels, and air analyses specialist reports filed for National Environmental Policy Act – Environmental Assessments and Categorical Exclusions: Coronado, San Bernardino, and Arapaho and Roosevelt National Forests 1997-1998 and 2003-2006.

JOURNAL/BOOK REVIEWS

- 2010: Environmental Pollution, Landscape and Urban Planning, Journal of Environmental Management, Urban Forestry and Urban Greening
- 2009: Urban Forestry and Urban Greening, Landscape and Urban Planning, University of Chicago Press, Southern Journal of Applied Forestry
- 2008: Atmospheric Environment, Arboriculture and Urban Forestry, Landscape and Urban Planning, Urban Forestry and Urban Greening, USFS Tropical Community Tree Guide
- 2007: Forest Ecology and Management, Journal of Forestry, Landscape and Urban Planning, Urban Ecosystems
- 2006: Urban Forestry and Urban Greening
- 2002: Urban Ecosystems

INVITED SPEAKER, PAPERS PRESENTED, PANELS, POSTERS

- 2011: Timilsina, N., Escobedo, F., Abd-Elrahman, A., Cropper, W.P., Delphin, S. and Lambert, S., 2011. A framework for mapping carbon storage hot spots and determining optimal forest structure and management regime characteristics. Poster presented at the Ecological Society of America Annual Meeting, Austin TX, August 12.
- 2010: Integrating ecosystem adaptability science, ecosystem services, and policies to mitigate urbanization and climate change effects. Second International Forum for Adaptability Science, Tohoku University, Sendai, Japan, December 3.
- 2010: Urban ecosystem services and responses to climate change. International Course on Urban Responses to Climate Change: Politics, Strategies and Instruments for Latin America and Caribbean. Inter-American Institute for Global Change Research and the United Nations Economic Commission for Latin America and Caribbean, Santiago, Chile, November 4.
- 2010: Escobedo F. The efficacy of trees in improving urban environmental quality: The pros and cons. Invited plenary speaker. Urban Environmental Pollution: Overcoming Obstacles to Sustainability and Quality of Life. Boston, MA. June 23.
- 2010: Wyman, M, and Escobedo, F. Analyzing Natural Resources Extension for Spanish Speakers: A Perspective from Florida. Poster at the 8th Biennial Conference on University Education in Natural Resources, Virginia Tech, March 25, 2010. Blacksburg, VA.
- 2009: Dobbs, C and Escobedo, F. Indicators for assessing ecosystem services and goods. World Forestry Congress, October 24, 2009, Buenos Aires, Argentina.
- 2009: Tools for protecting and restoring community watersheds from urbanization and wildfire. (Invited) Protecting Urban Watersheds- Side Event organized by USDA Forest Service & UN-Food and Agricultural Organization.. World Forestry Congress, October 22, 2009, Buenos Aires, Argentina.
- 2009: Northrop, R., Escobedo, F., Seitz, J., Orfanedes, M.. Assessing Community Leader Perceptions and Attitudes towards Urban and Urbanizing Forests. Proceedings from the 2009 Society of

- American Foresters National Convention, Opportunities in a Forested World. October 1, 2009, Orlando, FL.
- 2009: Northrop, R. Andreu, M., Escobedo, F., Zipperer, W. Florida's Emerging Urban Forests: Implications for Science, Management and Policy. Proceedings from the 2009 Society of American Foresters National Convention, Opportunities in a Forested World. October 1, 2009, Orlando FL.
- 2009: Escobedo, F., Staudhammer, C. Szantsoi, Z., Smith, S., Duryea, M., Dewitt, B. Rapid Assessment of Urban Forest Damage Following Hurricanes. Proceedings from the 2009 Society of American Foresters National Convention, Opportunities in a Forested World. October 1, 2009, Orlando FL.
- 2009: Staudhammer, C., Escobedo, F., Zhao, M., 2009. Patterns of invasive woody trees in a tropical urban forest: Implications for land management and ecosystem services. Poster presented at the Ecological Society of America Annual Meeting, Albuquerque, NM, August 7, 2009.
- 2009: The State of Florida's Urban Forests. (Invited) Trees Florida 2009, Conference and Trade Show. June 15, 2009.
- 2009: Asuaje, C., Wyman, M., Escobedo, F., Mayer, H., Swisher, M., Delgado, A., 2009. Natural Resources: Analyzing Extension Needs of Spanish-speakers in Florida. Paper presented at the Florida State Horticulture Society and the Soil and Crop Science Society of Florida Annual Meeting, Jacksonville, Florida. June 8, 2009.
- 2008: Escobedo, F., 2008. The environmental and economic assets of urban forests. (Invited) Food and Agricultural Organization of the United Nations. International Meeting – Trees Connecting People: In Action Together. Bogotá, Colombia, 29 July to 1 August 2008.
- 2008: Escobedo F, Andreu M, Zipperer W., and Northrop R. Ecosystem Services and Value of Florida's Urban Forests A Conference on Ecosystem Services: Using Science for Decision Making in Dynamic Systems. Naples, Florida. December 9, 2008.
- 2008: Andreu M., Northrop R., Friedman M., Escobedo F., Zipperer W. An Analysis of the Urbanizing Forests of the Tampa Bay Watershed along the Urban to Rural Continuum. A Conference on Ecosystem Services: Using Science for Decision Making in Dynamic Systems. Naples, Florida. December 10, 2008.
- 2008: Lawrence A, Escobedo F., and Staudhammer C. Analysis of Biomass Equations for Common Urban Trees in Gainesville, FL. A Conference on Ecosystem Services: Using Science for Decision Making in Dynamic Systems. Naples, Florida. December 11, 2008.
- 2008: Dobbs C and Escobedo F. Urban Forest Ecosystem Services Indicators Based on Soil, Vegetation and Air Characteristics for the City of Gainesville and Tampa. A Conference on Ecosystem Services: Using Science for Decision Making in Dynamic Systems. Naples, Florida. December 11, 2008.
- 2008: Escobedo F. Integrating Urban Forestry, Ecology, and Policy to Improve Air Quality: A Comparative Case Study of Two Latin America Cities. IUFRO 8.01.02 International Conference. Landscape Ecology and Forest Management. Challenges and Solutions. Chengdu, China. September 18, 2008
- 2008: Szantoi Z., Escobedo F., Dobbs C., Smith S. Assessing Urban Tree Cover Dynamics in South Florida: Impact from Hurricanes and Urban Encroachment. Poster. 2008. Northwest Florida GIS Users Group, Quarterly meeting. Destin. Sept. 17, 2008.
- 2008: The Benefits of Trees in Florida- We have the data, We have the tools, Go sell it!. Trees Florida 2008. Weston, FL June 7, 2008.
- 2008: Urban ecosystem function: The role of spatial heterogeneity, scale, and site-specific allometrics. Escobedo F, Dobbs C. And W. Zipperer. 2008 Ecological Society of America Annual Meeting, Milwaukee, Wisconsin, August 3-8, 2008.
- 2008: Communities at the Edge: Mapping Fuels Mitigation Treatments in Florida's Wildland-Urban Interface III. International Symposium on Fire Economics, Planning and Policy: Common

- Problems and Approaches. Graham, M., L. Kobziar, and F. Escobedo. Poster. April 29 – May 2, Carolina, Puerto Rico.
- 2007: An overview of the i-Tree software suite. Trees Florida 2007. Innsbrook, FL June 11, 12, 2007.
- 2007: The benefits and costs of Florida's urban forests. Trees Florida 2007. Innsbrook, FL June 11, 12, 2007.
- 2007: Tree damage and restoration following Hurricanes Katrina and Wilma at Miami Metrozoo. Florida State Horticulture Society & the Soil and Crop Science Society of Florida Annual Meeting, Co-Presenter. Palm Beach, Florida. June 4.
- 2007: Variability of urban forest ecosystem services along a Chilean urban gradient. Emerging Issues along the Urban/Rural Interface II. Atlanta, Georgia. April 10
- 2007: An urban forestry needs assessment in rapidly urbanizing Florida (Co-presenter). Emerging Issues along the Urban/Rural Interface II. Atlanta, Georgia. April 11.
- 2005: Using urban forest management as an air quality improvement policy in Santiago, Chile. 8th IUFRO European Forum on Urban Forestry. Celje, Slovenia. May 10
- 2005: Panelist. External Advisory Committee: Assessment of Public Knowledge, Values, and Attitudes toward Biodiversity and Sustainable Forestry Project. National Commission on Science for Sustainable Forestry and Colorado State University. Fort Collins, CO. April 22
- 2004: Panelist. Advancing the Fundamental Sciences Conference: A USDA Forest Service National Conference for Physical Scientists. San Diego, CA. October 21
- 2002: *Manejo del Arbolado Urbano*. Instituto de Silvicultura, Universidad Austral de Chile. Valdivia, Chile. December 3
- 2002: *Beneficios del arbolado urbano*. Corporación Nacional Forestal de Chile- Región Metropolitana. Santiago de Chile. November 25
- 2002: *El Arbolado Urbano de Santiago de Chile & Efectos del Arbolado Urbano Sobre la Calidad del Aire: Caso Santiago de Chile*. Seminario Internacional: Funciones y Valores Del Arbolado Urbano (Values and Functions of the Urban Forest). Universidad de Chile. Santiago de Chile. November 21 & 22
- 2002: *Formas de Arborização no Chile & Desenvolvimento de um sistema de gestão de vegetação urbana com fins a descomntaminação atmosférica e apoio a tomada de decisões a nível municipal – uma experiência no Chile*. VI Congresso Brasileiro de Arborização Urbana (6th Brazilian Congress on Urban Forestry). Goiânia-GO, Brazil. November 5 & 8

EXTENSION ACTIVITIES

- 2011: Urban forest management and risk assessment workshop. Co-organized with the University of Concepción and Chilean Association of Occupational Hazards. Santiago, Chile May 24-25.
- 2011: Presentation for the Southwest Florida Tree Progress Seminar Series, "Carbon sequestration and the role of trees". Lee County UF IFAS Extension. Fort Myers, FL. February 12.
- 2010: Keynote speaker at the 4th Annual Miami-Dade County Tree Summit: Fostering partnerships for a healthy regional urban forest. Miami-Dade County Community Image Advisory Board, North Miami, FL., June 25.
- 2010: University of New Hampshire Cooperative Extension's i-Tree Workshop, Portsmouth NH, June 16th.
- 2010: Arboriculture Society of Michigan's i-Tree Training Workshop. Auburn Hills, MI, June 9-10th.
- 2010: Florida Urban Forestry Council's Urban Forestry Workshop 2010 Florida Native Plant Society's Conference. Tallahassee, FL., May 23, 2010.
- 2009: Florida Urban Forestry Council's i-Tree Training Workshop Series. November 17-18 Miami, FL; November 19-20, Ft Lauderdale; December 1-2, St. Augustine, FL.

- 2009: Meeting of the Tampa Bay Watershed Forest Working Group- presented a talk entitled, “Assessing Community Leader Perceptions and Attitudes Towards Urban and Urbanizing Forests”. August 19th.
- 2009: Contribute regular Spanish/English Urban Forestry articles for the Florida Arborist quarterly Newsletter <http://www.floridaisa.org/news.php>
- 2009: Florida’s Urban and Urbanizing Forests Newsletter: <http://www.sfrc.ufl.edu/urbanforestry/Newsletter/newsletter.html>
- 2008: Tree canopy in Miami-Dade County: What we’ve got and why it matters. John G Gifford Arboretum – University of Miami, Miami FL. November 5.
- 2008: Broward County Urban Forest Effects Training & Workshop, Davie, FL, June 24-25th.
- 2008: Florida i-Tree Training Workshop, Plant City, FL, Jan 24-25.
- 2007: Florida Chapter ISA Gold Coast Series. What is an urban forest and how are they managed. Ft Lauderdale FL. December 12.
- 2007: Urban Forestry High School Outreach Program: AD Harris High School urban forestry education program in Panama City, FL. October 28-29.
- 2007: Florida Trees are Cool PSA: Spanish TV Public Service Announcements for Florida Urban Forestry Council. October 6. <http://www.treesarecool.com/Television.html>
- 2007: New England i-Tree Training Workshop, Hartford CT, September 25-27.
- 2007: *Árboles y Huracanes* Workshop. Miami-Dade County Extension Service and University of Florida IFAS. Homestead, Florida July 20.
- 2007: *Fuegos en Florida*: Spanish translations for the University of Florida School of Forest Resources and Conservation’s “Fire in Florida” series of short radio spots highlighting aspects of fire in Florida.
- 2007: Trees and Hurricanes: Prevention, Response and Recovery- Workshop Series. Tallahassee, Jacksonville, Fort Lauderdale, Fort Meyers, Orlando, and Tampa Florida. June 26, 27 and July 19 and 20 and August 7th.
- 2007: Research in Urban Forestry. Florida Division of Forestry and Keep Manatee Beautiful- Urban Forestry Workshop. Bradenton, FL. January 18.
- 2006: Using the i-Tree tool in Florida’s urban forests. Urban Forest Inventory Symposium. University of Florida- IFAS. Plant City, FL. December 14
- 2006: Urban Forest Resources in Florida. Cooling our Communities Workshop: Combating the Urban Heat Island Effect in Miami-Dade County. Miami-Dade County & ICLEI. Miami, FL. October 30.

INTERNATIONAL ACTIVITIES

- 2011: Organized and presented: Urban forest management and natural disaster training workshop: University of Concepcion and IUFRO- Chile. May-26-27th.
- 2011: Climate Change and Ecosystem Services: An International Collaboration to Explore the Role of Urban Forests in Mitigating Climate Change Effects. NIFA International Science and Education Grant- University of Florida and Shanghai Normal University. \$145,000 (Pending).
- 2010: Natural Sciences and Engineering Research Council of Canada: Strategic project grants reviewer.
- 2010: On-going research: Sustaining ecosystem services in Chongming Island and carbon dynamics of Hangzhou China’s urban forests in collaboration with Shanghai Normal University; Ecosystem services and air pollution removal in the Popocatepetl-Iztacchiatl National Park in collaboration with Universidad Autonoma de México.

- 2009: Steering Committee Participant for Food and Agricultural Organization of the United Nations- Development of guidelines for urban and peri-urban forestry management for municipalities. Rome, Italy. January 27-28.
- 2008: Contributor: International Meeting – Trees Connecting People: In Action Together. Meeting Proceedings. Bogotá, Colombia, July 2008. Food and Agricultural Organization of the United Nations, Urban and Peri-urban Forestry Working. Paper No. 1. Rome.
http://km.fao.org/fileadmin/user_upload/urbanforestry/docs/Bogota/Proccedings_UPF_Bogota_without_photo_final_01.pdf
- 2008: Session Coordinator- Tools and Technology in Landscape Studies. Landscape Ecology and Forest Management. Challenges and Solutions, International Union of Forest Research Organizations Conference. Chengdu, China. September 18.
- 2007: Submitted full proposal: Risks to the Mexican Biosphere. Comisión Nacional de Ciencia y Tecnología. Collaborated with Darrel Baumgardner- Universidad Autónoma de México and Alicia Chacalo – Universidad Autónoma Metropolitana. US\$160,304 (Funded).
 - o Research site visit, Mexico City. Darrell Baumgardner- Universidad Autónoma de México, and Alicia Chacalo- Universidad Autónoma Metropolitana. May 2007 and March 2009.
- 2007: MS Committee: Miriam Ibarra, *Colegio de Postgraduados*, Puebla Mexico. Thesis; Tree cover change and urbanization in Puebla, Mexico. May 2007-present.
- 2006-present: International collaborations:
 - o Hosted Dr. Min Zhao from the World Forest Institute & Shanghai Normal University, China in my lab during May-July 2008.
 - o Dr. Jun Gao - Shanghai Normal University, China 2008.
 - o Dr. Alicia Chacalo - Universidad Autónoma Metropolitana, Mexico May, 2008.
 - o *Colegio de Postgraduados*, Puebla, Mexico, May 2007;
 - o Manuel Rodriguez - University of Chile. March, 2007.
 - o Dr. Pablo Donoso - Universidad Austral de Chile. October, 2006.
 - o Faculty of Forest Sciences, University of Chile in Santiago, Chile, December 2006;
 - o Institute of Silviculture, Universidad Austral de Chile in Valdivia, Chile, December 2006.

NEWS

- 2004: Quoted, “*La vegetación de Santiago también descontamina* (Santiago’s vegetation also removes pollutants)” Sostentable.Cl: El Portal del Medio Ambiente. January 16
- 2003: Interviewed for radio news article, “Bark Beetles to Blame for Fires” by Tamara Keith, KQED’s The California Report. November 3
- 2002: Interviewed and quoted, “*Aire Capitalino: Potenciarán aspiradora natural de polución*, (The Capitol’s Air: Making possible a natural vacuum for pollution)” by Lilian Duery A. *El Mercurio* Santiago de Chile. December 2
- 2002: Subject of article, “*Arborização pode reduzir gastos publicos*, (Urban greening can reduce public costs)” *O Popular*- Goiânia, Brazil. November 6

UNIVERSITY GOVERNANCE AND SERVICE

- 2009: University of Florida SFRC, Faculty Advisory Committee
- 2008: University of Florida, Minority Mentor
- 2007: University of Florida, SFRC Seminar and Undergraduate Programming Committee
- 2007: University of Florida, Campus Urban Forester Selection and Interview Committee

- 2006: Center for Latin American Studies Education Linkages task force
- 2006: UF SFRC Undergraduate curriculum revision for urban forestry option
- 2006: Dallas Townsend Extension Professional Award selection committee

CONFERENCES AND PROFESSIONAL TRAINING

- 2011: Society of Ecological Restoration
- 2008: A Conference on Ecosystem Services: Using Science for Decision Making in Dynamic Systems
- 2008: Developing Survey Instruments and Questionnaires
- 2008: Short Course on Geostatistical Analysis of Environmental Data
- 2007: Hydric Soils: Specialized training for wetland scientists
- 2007: Trees Florida 2007: Restoring the Urban forests: post-hurricane strategies.
- 2007: ISA Florida Chapter, Tree Risk Assessment Workshop
- 2007: University of Florida Extension Symposium
- 2006: 5th ANREP, Natural resources Extension Professional Conference
- 2006: University of Florida Teaching Symposium
- 2006: i-Tree Train the Trainer Workshop
- 2006: 3rd International Fire Ecology & Management Congress
- 2005: NEPA: Cumulative Effects Analysis - Documentation and Project Management
- 2005: Regional Economic Analysis
- 2005: Federal Acquisition Regulation- Contracting Officer Representative
- 2005: 1900-1 Forest Plan Implementation
- 2004: Water Erosion Prediction Project (FSWEPP) model
- 2004-2005: ARCVIEW, ARCGIS
- 1999: Para-Archeologist Training
- 1999: Stream Corridor Restoration
- 1999: Supervisory Concepts and Techniques
- 1996: Burned Area Emergency Rehabilitation Techniques
- 1996: Watershed/Stream Assessment
- 1995-1999: NWCG; Intermediate Fire Behavior, Field Observer, Wildfire Power Saws, Inter-Agency Helicopter Training, Portable pumps & water use, Incident Command System
- 1995: Plant Identification and Taxonomy
- 1994: Habitat Type and Potential Natural Vegetation Classification