

Curriculum Vitae (short version)*

Douglas O. Fuller
3226 Mary Street #17
Miami, FL 33133 USA
Tel: 207-446-1717
Email: dof Fuller@miami.edu

Education

PhD, Geography, University of Maryland, College Park, 1994.

MA, Ibero-American Studies, University of Wisconsin-Madison, 1988.

BS, Botany, University of Wisconsin-Madison, 1983.

Research Specializations

Applied remote sensing, biogeography, macro-ecology, health geography, vector-borne diseases

Teaching Expertise

Environmental remote sensing and other geospatial technologies, biophysical/environmental geography, regional geography, international development, biogeography

Certification

National Institutes of Health, Office of Extramural Research, Certificate on Protecting Human Research Participants, June 2010.

Professional Appointments

Administrative

Senior Associate Dean for Faculty Affairs and College Diversity, College of Arts and Sciences, University of Miami, July 2013-present

Interim Director, Latin American Studies Programs, College of Arts and Sciences, University of Miami, September 2015-present

Director, Academic Programs in International Studies, College of Arts and Sciences, University of Miami, July 2013-June 2015

Department Chair, Department of Geography and Regional Studies, University of Miami. Coral Gables, Florida; June 2007 - August 2013.

Academic

Professor, Department of Geography and Regional Studies, University of Miami, Coral Gables, Florida; June 2012-present.

Associate Professor, Department of Geography and Regional Studies, University of Miami, Coral Gables, Florida; July 2003-May 2012.

Assistant Professor, Geography and International Affairs, Department of Geography, George Washington University, Washington, DC, 1997-2003.

Graduate Teaching Assistant, Department of Geography, University of Maryland, College Park, 1989-1991.

Non-academic positions

Technical Advisor in Ecology, Centre de Suivi Ecologique, United Nations Development Programme; Dakar, Senegal. 1995-97.

Senior Program Officer, World Wildlife Fund-US, Asia and Pacific Programs, 1994-95.

Project Assistant, World Resources Institute, Washington, DC, 1988-89.

Staff Biologist, TRAFFIC(U.S.A.), Washington, DC, 1984-86.

Publications

Refereed journal articles (Google Scholar h-index = 23):

Dewald JR, **Fuller DO**, Müller GC, Beier JC (2016) A novel method for mapping village-scale outdoor resting microhabitats of the primary African malaria vector, *Anopheles gambiae*. *Malaria Journal* DOI: 10.1186/s12936-016-1534-9 in press.

Chen J, Huang J, Beier JC, Cantrell RC, Cosner C, **Fuller DO**, Zhang, G, Ruan S (2016) Modeling and control of local outbreaks of West Nile Virus in the United States. *Discrete and Continuous Dynamical Systems Series B* 21(8): 2423-2449.

Fuller DO, Alimi T, Herrera S, Beier JC, Quiñones ML (2016) Spatial association between malaria vector species richness and malaria in Colombia. *Acta Tropica* 158:197-200.

Alimi TO, **Fuller DO**, Herrera SV, Arevalo-Herrera M, Quiñones ML, Stoler JB, Beier JC (2016) A multi-criteria decision analysis approach to assessing malaria risk in northern South America. *BMC Public Health* 16:221.

Qualls WA, Naranjo DP, Subia MA, Ramon G, Cevallos V, Grijalva I, Gómez E, Arheart KL, **Fuller DO**, Beier JC (2016) Movement of *Aedes aegypti* following a sugar meal and its implication in the development of control strategies in Durán, Ecuador. *Journal of Vector Ecology* 41(2):1-8.

Barhoumi W, Qualls WA, Archer R, **Fuller DO**, Chelbi I, Cherni S, Derbali M, Arheart KL, Elyes Zhioua E, Beier JC (2015) Irrigation in the arid regions of Tunisia impacts the abundance and apparent density of sand fly vectors of *Leishmania infantum*. *Acta Tropica* 141:73-78.

- Jiang, J, **Fuller DO**, Teh, SY, Koh, HL, DeAngelis, DL, Sternberg LSL (2015) Bistability of mangrove forests and competition with fresh water plants. *Agricultural and Forest Meteorology* 213:283-290.
- Samson DM, Archer R, Qualls, WA, Alimi TO, Arheart KK, **Fuller DO** (2015) Environmental Assessment of Mosquito Ecology in Northern Haiti. *Journal of Vector Ecology* 40:46-58.
- Alimi, TO, **Fuller DO**, Qualls WA, Herrera SV, Arevalo-Herrera M, Quinones ML, Lacerda MVG, Beier JC (2015) Predicting potential ranges of primary malaria vectors and malaria in northern South America based on projected changes in climate, land cover and human population. *Parasites & Vectors* 8:431.
- Alimi TO, **Fuller DO**, Quinones ML, Xue R-D, Herrea SV, Arevalo-Herrea M, Ulrich JN, Qualls WA, Beier JC (2015) Prospects and recommendations for risk mapping to improve strategies for effective malaria control interventions in Latin America. *Malaria Journal* 14:519.
- WM Monteiro, Val, FA, Siqueira, AM, Franca, GP, Sampaio VS, Melo GC, de Almeida ACG, Brito M, Peixoto HM, **Fuller DO**, Bassat Q, Romero GAS, Oliveira MRF, Lacerda MVG (2014) G6PD deficiency in Latin America: prevalence, variants and implications for malaria elimination. *Memórias do Instituto Oswaldo Cruz* 1-16:2014.
- Fuller DO**, Troyo A, Alimi T, Beier JC (2014) Participatory Risk Mapping of Malaria Vector Exposure in Northern South America using Environmental and Population Data. *Applied Geography* 48:1-7.
- Conley AK, **Fuller DO**, Hadad N, Hassan AN, Gad AM, Beier JC (2014) Modeling the distribution of the West Nile and Rift Valley Fever vector *Culex pipiens* in arid and semi-arid regions of the Middle East and North Africa. *Parasites & Vectors* 7:289.
- Chang AY, **Fuller DO**, Carrasquillo O, Beier JC (2014) Social justice, climate change, and dengue. *Health and Human Rights* 16:93-104.
- Fuller DO**, Wang Y (2014) Recent trends in satellite vegetation index observations indicate decreasing vegetation biomass in the southeastern saline Everglades wetlands. *Wetlands* 34:67-77.
- Fuller DO**, Miettinen J, Meijaard E (2013) Deforestation, degradation, and forest regrowth in Indonesia's protected areas from 2000-2013. *Indonesian Journal of Conservation* 2:1-13.
- Barr JG, Engel V, Fuentes JD, **Fuller DO**, Kwon H (2013) Satellite-based estimates of light-use efficiency in a subtropical mangrove forest equipped with CO2 eddy covariance. *Biogeosciences* 10:2145-2158.
- Fuller DO**, Parenti MS, Hassan AN, Beier JC (2012). Linking land cover and species distribution models to project potential ranges of malaria vectors: an example using *Anopheles arabiensis* in Sudan and Upper Egypt. *Malaria Journal* 11:264.
- Fuller DO**, Ahumada M, Quiñones ML, Herrera S, Beier JC (2012). Near-present and future distribution of *Anopheles albimanus* in Mesoamerica and the Caribbean Basin modeled with climate and topographic data. *International Journal of Health Geographics* 11:13.
- Fuller DO**, Parenti MS, Gad A, Beier JC (2012). Land cover in Upper Egypt assessed using regional and global land cover products derived from MODIS imagery. *Remote Sensing Letters* 3: 171-180.
- Herrera S, Quiñones ML., Quintero JP, Corredor, V, **Fuller DO**, Mateus JC, Calzada JE, Gutierrez JB, Llanos A, Soto E, Menendez C, Wuk, Y, Alonso P, Carrasquilla G, Galinski M, Beier JC, Arevalo-Herrera M (2012). Prospects for malaria elimination in non-Amazonian regions of Latin America. *Acta Tropica* 121: 315-323.

LeComber S., Rossmo K, Hassan A, **Fuller DO**, Beier JC (2011). Geographic profiling as a novel spatial tool for targeting infectious disease control. *International Journal of Health Geographics* 10:35 doi:10.1186/1476-072X-10-35.

Fuller DO, Hardiono M, Meijaard E (2011) Deforestation projections for carbon-rich peat swamp forests of Central Kalimantan, Indonesia. *Environmental Management* 48:436-447.

Wang X, **Fuller DO**, Sternberg LSL, Miralles F (2011) Foliar nutrient accumulation in subtropical tree islands: A new chemohydrodynamic link between satellite vegetation indices and foliar $\delta^{15}\text{N}$ values. *Remote Sensing of Environment* 115: 923-930, doi:10.1016/j.rse.2010.11.019.

Fuller DO, Meijaard E, Christy L, Jessup TC (2010) Mapping threats to biodiversity within ecoregions: an example from East Kalimantan, Indonesia. *Applied Geography* 30: 416-425.

Fuller DO, Troyo A, Calderón-Arguedas O, Beier JC (2010) Dengue vector (*Aedes aegypti*) larval habitats in an urban environment of Costa Rica analysed with ASTER and QuickBird imagery. *International Journal of Remote Sensing* 31:3-11.

Fuller DO, Troyo A, Beier JC (2009) ENSO and vegetation dynamics as predictors of dengue fever cases in Costa Rica. *Environmental Research Letters* 4:014011.

Troyo A, **Fuller, DO**, Calderón-Arguedas O., Solano ME, Beier JC (2009) Urban structure and dengue fever in Puntarenas, Costa Rica. *Singapore Journal of Tropical Geography* 30:265-282.

Troyo A, Calderón-Arguedas O, **Fuller DO**, Solano ME, Avendaño A, Arheart KL, Chadee DD, Beier JC (2008) Seasonal profiles of *Aedes aegypti* (Diptera: Culicidae) larval habitats in an urban area of Costa Rica with a history of mosquito control. *Journal of Vector Ecology* 33:76-88.

Troyo A, **Fuller DO**, Calderón-Arguedas O, Beier JC (2008) A geographical sampling method for surveys of mosquito larvae in an urban area using high-resolution satellite imagery. *Journal of Vector Ecology* 33: 1-7.

Fuller, DO, Roy Chowdhury R (2006) Editorial: Monitoring and Modelling Tropical Deforestation. *Singapore Journal of Tropical Geography* 27:1-3.

Fuller, DO (2006) Tropical forest monitoring and remote sensing: A new era of transparency in forest governance? *Singapore Journal of Tropical Geography* 27:15-29.

Fuller, DO, Murphy KJ (2006) The ENSO-fire dynamic in insular Southeast Asia. *Climatic Change* 74: 435-455.

Fuller, DO (2005) Remote detection of invasive *Melaleuca* trees (*Melaleuca quinquenervia*) in South Florida using multispectral IKONOS imagery. *International Journal of Remote Sensing* 26:1057-1063.

Fuller DO, Jessup TC, Salim A (2004) Forest loss in Kalimantan, Indonesia since the 1997-1998 El Niño event. *Conservation Biology* 18:249-254.

Fuller DO, Williamson RA, Jeffe M (2003) IKONOS imagery for mapping transportation infrastructure. *International Journal of Remote Sensing* 24:4625-4626.

Fuller DO, Jeffe M, Williamson RA, James D (2003) Multi-criteria evaluation of safety and risks along transportation corridors on the Hopi Indian Reservation. *Applied Geography* 23:177-188.

Fuller DO (2003) MODIS data used to study 2002 fires in Kalimantan, Indonesia. *Eos, Transactions of the American Geophysical Union* 84:189, 192.

Fuller DO, Ottke C. (2002) Land cover, rainfall, and land-surface albedo in West Africa. *Climatic Change* 54: 181-204.

Fuller DO (2001) Forest fragmentation in Loudoun County, Virginia evaluated with multitemporal Landsat imagery. *Landscape Ecology* 16:627-642.

Fuller DO, Fulk M (2001) Burned area in Kalimantan, Indonesia mapped with NOAA-AVHRR and Landsat TM imagery. *International Journal of Remote Sensing* 22:691-697.

Fuller DO (2000) Satellite remote sensing of biomass burning using optical and thermal sensors. *Progress in Physical Geography* 24:543-561.

Fuller DO, Fulk M (2000) Comparison of NOAA-AVHRR and DMSP-OLS for operational fire monitoring in Kalimantan, Indonesia. *International Journal of Remote Sensing* 21:181-187.

Fuller DO (1999) Canopy phenology of some mopane and miombo woodlands in eastern Zambia. *Global Ecology and Biogeography* 8:199-210.

Fuller DO (1998). Trends in NDVI time series and their relation to rangeland and crop production in Senegal, 1987-1993. *International Journal of Remote Sensing* 19:2013-2018.

Fuller DO, Prince SD, Astle WL (1997). The influence of canopy strata on remotely sensed observations of savanna-woodlands. *International Journal of Remote Sensing* 18:2985-3009.

Fuller DO, Prince SD (1996). Rainfall and foliar dynamics in tropical southern Africa: potential impacts of global climatic change on savanna vegetation. *Climatic Change* 33:69-96.

Book Chapters

Fuller DO (2002). Environmental Remote Sensing of the South China Sea. In *Cooperative Monitoring for the South China Sea: Using Satellite Imagery to Mitigate the Spratly Islands Disputes*, edited by J. C. Baker and D. G. Wiencek, Praeger, Greenwood Publishing Group, Westport, Connecticut, pp. 147

Anderson AH, **Fuller DO**, Kane, R. (1999). Socioeconomic and biophysical factors related to bush-fires in Senegal. In: P.O. Adeniyi (ed.), *Geo-Information Technology Applications for Resource and Environmental Management in Africa*, AARSE Publications, The Netherlands, pp. 23-29.

Fuller DO, Prince SD (1996). Regional-scale foliar phenology in tropical Southern Africa: An application of the Fast Fourier Transform to time series of satellite imagery. In S. Azzali, and M. Menenti, editors, *Fourier Analysis of Temporal NDVI in the Southern African and American Continents*. Winand Staring Centre for Integrated Land, Soil and Water Research, Wageningen (The Netherlands) pp.113-132.

Book Reviews

Fuller DO (2006). The Physical Geography of Southeast Asia. *Annals Association of American Geographers* 96: 448-450.

Fuller DO (2000). The fallacy of popular wisdom in African wildlife management. *Conservation Biology* 14: 586-587.

Selected Popular Writings

Fuller DO (1989). Black bears find an unlikely protector. *New Scientist* 30 September 1989.

Fuller DO (1989). Fungi hold the key to healthy orchids. *New Scientist* 3 June 1989.

Fuller DO (1988). Eucalypts fuel the furnaces of Brazil's steelworks. *New Scientist* 18 February 1988.

Extramural Awards, Grants, and Contracts

Catholic University of Guayaquil/Government of Ecuador. "Vector control in Guayaquil communities." Amount: \$1.08M (Qualls, PI). Duration: October 2014-October 2017. Effort: 5% per year.

National Institutes of Health. "R56: Landscape Molecular Epidemiology for Malaria Elimination." Amount: \$50,800. Role: Principal Investigator. Duration: September 2014-August 2016. Effort: 1.0 mo/yr.

The National Institutes of Health. "Outdoor resting and sugar-feeding behaviors of African Malaria Vectors." Amount: \$2.6 million. Role: Co-Investigator (J.C. Beier, PI). Duration: March 2013-February 2018. Effort: 1.0 mo/yr.

The National Institutes of Health. "Environmental Changes and Mosquito-borne Diseases in Arid Environments." Amount: \$2.37 million. Role: Investigator (J.C. Beier, PI). Duration: July 2010-June 2014. Effort: 2.0 mo/yr.

German Space Agency, DLR, TSX data grant, "Habitat Identification of Malaria Vectors: Northern South America and the Caribbean." Amount (in kind): 800,000 Euros. Role: Principal Investigator. Duration: December 2011-December 2014.

AusAID, Reference Emissions Level (REL), "Modelling and Workshop Design for Land Managers in Kapuas District, Central Kalimantan, Indonesia." Amount: AUD 29,500. Role: Principal Investigator. Duration: Nov. 2011-June 2012. Effort: 1.5 mo/yr.

Fulbright Scholarship, Brazil, "Climate-based prediction of dengue fever outbreaks in Manaus, Brazil." Amount: \$15,500. Role: Fulbright Scholar. Duration: July 2011-August 2012.

The National Institutes of Health. "Latin American Center for Malaria Research and Control." Amount: \$627,000 (direct costs). Role: Investigator (J.C. Beier, PI). Duration: July 2010-June 2017. Effort: 1 mo/yr.

National Aeronautics and Space Administration. "WaterSCAPES: Science of Coupled Aquatic Ecosystems in Ecosystems from Space. Role: Co-Principal Investigator (S. Wdowinski, PI), Amount: \$749,639. Duration: January 2009 - December 2013. Effort: 0.75 mo/yr.

Government of Costa Rica. Determinación de la distribución espacial de hábitats larvales de *Aedes aegypti* según la estructura urbana utilizando sistemas de información geográfica y sensores remotos de muy alta resolución. (A. Troyo, PI). Role: Collaborator. Amount: \$10,000. Duration: April 2009-March 2010.

The National Institutes of Health. "InterVector: Vector-borne Diseases in Urban Environments." Role: Investigator (J. Beier, PI), Funding: National Institutes of Health, Amount: \$1.2 million. Duration: August 2004-July 2007. Effort: 1 mo/yr.

The Nature Conservancy. “Mapping forest cover in East Kalimantan: An evaluation of conservation effectiveness at TNC portfolio sites.” Role: Principal Investigator, Funding: The Nature Conservancy, Amount: \$2,700, Duration: December 2004-February 2005.

Florida Department of Health. “Development of new web-based GIS visualization tools for the Florida Cancer Data System.” Role: Project supervisor. Amount: \$35,000. Duration: July 2004-June 2005.

The Nature Conservancy. “GIS-based, ecoregional threats analysis for East Kalimantan, Indonesia.” Role: Principal Investigator. Funding agency: The Nature Conservancy. Amount: \$9,350. Duration: January-May 2003.

Loudoun County, Virginia. “Loudoun County Environmental Indicators Project.” Role: Co-Principal Investigator (D.C. McGrath, PI). Funding Agency: The Virginia Environmental Endowment and other donors. Amount: \$305,000 (est.). Duration: 1998-2002. Effort: 1 mo/yr.

US Department of Transportation. “National Consortium on Remote Sensing and Transportation.” Role: Collaborator (R. Williamson, PI). Subcontract from the University of New Mexico. Amount: \$360,000 (est.). Duration: March 2000-2003. Effort: 1 mo/yr.

WWF Indonesia. “Fire in Nusa Tenggara, Past and Present: A satellite-based assessment.” Role: Principal Investigator. Amount: \$5,950. Duration: June – September 2000.

WWF Indonesia. “Remote sensing and Mapping of Fires in Indonesia: Phase II.” Role: Principal Investigator. Funding Agency: Yayasan WWF Indonesia. Amount \$13,120. Duration: July 1999 – June 2000.

WWF Indonesia. “Remote Sensing and Mapping of Fires in Indonesia: 1997-98.” Role: Principal Investigator. Subcontract from Clark University, Amount: \$18,327. Duration: October 1998 – June 1999.

WWF Indonesia. “Analysis of Causes and Impacts of Forest Fires and Haze in Indonesia.” Role: Principal Investigator. Funding Agency: Yayasan WWF Indonesia Amount: \$3,300. Duration: January – June 1998.

National Science Foundation. “Doctoral Dissertation Improvement Award.” Role: Doctoral Student (S.D. Prince, Faculty Advisor). Funding Agency: The National Science Foundation Amount: \$9,100. Duration: October 1992 – October 1993.

National Aeronautics and Space Administration. “NASA Global Change Ph.D. Fellowship Program.” Role: Doctoral Student (S.D. Prince, Faculty Advisor). Amount: \$44,000. Duration: September 1991-August 1993.

WWF-US. “Conservation of Medicinal Plants in the Eastern United States.” Role: PI. Amount: \$9,400. Duration: May 1990-June 1991.

Intramural Funding and Awards

Interdisciplinary Research Development Initiative. University of Miami. Project Title: Dengue in the Americas. Source: University of Miami Miller School of Medicine. Amount: \$100,000; Duration: May 2009-April 2010; Role: Co-Principal Investigator.

Summer Award in the Natural Sciences and Engineering. Project Title: Wildfires in South Florida: Effects of Land Cover and Use on Fire Distribution; Source: UM Research Council; Amount: \$9,500; Duration: May-August 2005; Role: Principal Investigator.

Center for Ecosystem Science and Policy Seed Grant. Source: CESP, University of Miami; Amount: \$25,000; Duration: June-September 2004; Role: Co-Investigator.

Growing season duration and the urban heat island. University Facilitating Fund (UFF), The George Washington University. Amount: \$12,105. 2003-2004.

Development of New Courses in Global Studies. Elliot School of International Affairs, The George Washington University. Amount: \$3,500. Summer 2001.

Release Time for Research Award. The George Washington University. Spring Semester 2001.

Junior Scholar Incentive Award. The George Washington University. Amount: \$5,000. Summer 2000.

Mapping Land Degradation West Africa with Satellite Remote Sensing. University Facilitating Fund (UFF), The George Washington University. Amount: \$7,358.99. 1999-2000.

Vilas Graduate Fellowship. The University of Wisconsin – Madison. Amount: \$1,500. Fall Semester 1987.

Editorial Appointments

Editorial Board Member, *Applied Geography* (January 2012-December 2015)

International Advisory Board, *Singapore Journal of Tropical Geography* (May 2005-present)

Guest Editor, Special Issue on Remote Sensing of Tropical Deforestation, *Singapore Journal of Tropical Geography* (publication March 2006).

Foreign Language Skills

French (Good), Portuguese (Good), Spanish (Basic)

*Complete List of Published Conference Abstracts, Technical Reports, Current and Former Graduate Students, Extramural Service, Detailed Teaching Experience, and References available upon request.