CURRICULUM VITAE 11 March 2025

#### Michael W. Binford

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#### **Education**

1980 Ph.D. Zoology (Limnology) and Geology (Geomorphology and Hydrology), Indiana University.

1975 M.S. Fishery Biology and Experimental Statistics, Louisiana St. University.

1973 B.S. Biology (Fisheries), Kansas State University

### **Professional Appointments**

Current Position: Emeritus Professor of Geography, University of Florida

2000 - Present Professor of Geography, University of Florida

2019-2024 Expert, Division of Biological Infrastructure, U.S. National Science Foundation.

2017-2019 Program Director, Division of Biological Infrastructure; Macrosystems Biology and NEON-Enabled Science and NEON Program, U.S. National Science Foundation.

2011-2016 Chair and Professor of Geography, University of Florida

2011 - Visiting Senior Scientist, J.W. Jones Ecological Research Center, Ichauway, GA

2002-2005 - University of Florida Research Foundation Professor

2000-2001 Robin and Jean Gibson Term Professor of Geography

1997 – 2000 Associate Professor of Geography, University of Florida (U.F. Tenure 1999)

1997 – Present Affiliate Associate Professor, then Professor, Land Use and Environmental Change Institute, School of Natural Resources and Environment, Center for Latin American Studies, Center for African Studies, University of Florida

1996 - 1997 Senior Research Fellow in Landscape Ecology, GSD, Harvard University.

1993-1994 Acting Program Director; MLA I and MLA II in Department of Landscape Architecture, Graduate School of Design, Harvard University

1991 - 1996 Associate Professor of Landscape Architecture in the Field of Landscape Ecology, Graduate School of Design, Harvard University.

1994-1997 Associate of the Harvard Forest

1986-1991 Assistant Professor of Landscape Architecture in the field of Landscape Ecology and Research Associate, Aga Khan Unit for Housing and Urbanization. Graduate School of Design, Harvard University.

1986 - 1990 Adjunct Assistant Curator, Florida State Museum.

1980 - 1986 - Research Associate. Florida State Museum and Department of Environmental Engineering Sciences, University of Florida;

#### **Academic Administration**

2011-2016 Chair and Professor of Geography, University of Florida

Managed budget and other departmental resources; managed faculty hiring and annual evaluation; managed tenure and promotion review; supervised office staff; monitored undergraduate and graduate curriculum; coordinated class scheduling; oversaw recruitment of graduate students; oversaw annual evaluation of graduate students; represented department to College and University administration and other academic and support units; communicated College and University policies and priorities to department faculty, staff, and students; created and maintained records regarding enrollment, personnel, budget allocations, and schedule; worked with faculty, staff, and students to create and enforce department policies and procedures; worked with graduate student representatives to maintain open channels of communication and ensure student representation in departmental decision making; mentored untenured faculty and graduate students; worked with staff of University of Florida Foundation to identify and pursue funding opportunities; evaluated and took efforts to maintain department morale and positive climate. Continued teaching, mentoring undergraduate and graduate students, and conducting research.

#### **Professional Organizations**

American Association for the Advancement of Science (Elected Fellow, 1994)

American Association of Geographers

American Geophysical Union

Ecological Society of America: Vice-Chair, Paleoecology Section 1983-1984, Chair,

Paleoecology Section 1984-1985; Member, Program Committee 1985-1986; Chair, Ad Hoc Committee on Travel Fellowships for Foreign Ecologists 1985-1986.

International Biogeography Society

Society of Sigma Xi

#### **Professional Service**

Expert, U.S. National Science Foundation Division of Biological Infrastructure. Oversight Committee for National Ecological Observatory Network and Macrosystems Biology and NEON-Enabled Science. 2019-2024.

Occasional referee and panel member for NASA (Land-Use/Land-Cover Change Program Panel; Carbon Science Panel; Interdisciplinary Science Panel); NSF (Macrosystems Biology and Early NEON Science Panel, Archaeology, Earth Sciences, Geography, Regional Science, Ecology Panel, International, Climate Dynamics, NSF/EPA Joint Watershed, and Ecosystems programs); journals: Proceedings of the U.S. National Academy of Sciences, Journal of Applied Ecology, Limnology and Oceanography, Journal of Paleolimnology, Ecology, Ecological Monographs, Biogeochemistry, Geology, the Journal of the Geological Society of America, Canadian Journal of Earth Sciences, Bulletin of the Geological Society of America, Professional Geographer, Applied Geography, Environmental Protection Agency, National Environment Research Council of the U.K.

Southeastern US Ecological Knowledge Partnership Steering Committee, Ecological Society of America, 2006-2007.

Board of Advisors, Journal of Paleolimnology, 1994 - 1998 Associate Editor, Journal of Paleolimnology, 1987- 1994.

## Department and University Service Including Interdisciplinary Leadership

Chair, Department of Geography; Merit and 3<sup>rd</sup>-year Review, and Colloquium Committees.

Member, Department of Geography, Steering Committee

Member, Department of Geography Diversity, Equity, and Inclusion (DEI) Committee 2020-

Member, Department of Geography Graduate Admissions and Awards Committee; 2017-2019

Member, College of Liberal Arts and Sciences Committee on Interdisciplinary Scholarship, 2016-2017

Member, CAIRES (Center for Adaptive Innovation, Resilience, Ethics, & Science) Advisory Board, University of Florida, 2015-2017

Member, Geospatial Information Task Force, University of Florida; 2014-2015

Member, Task Force on the Future of the School of Natural Resources and Environment. 2012-2013.

Member, Faculty Advisory Committee, University of Florida Water Institute 2012-2015 Member, Faculty Advisory Committee, Center for Remote Sensing, University of Florida 2009—present.

Member, Special Advisory Committee to the President, search for CLAS dean, 2007-2008.

Chair: Search Committee for Assistant/Associate Professor of Medical Geography, 2009-2010, Environmental Health Geographer/joint appointment with Emerging Pathogens Institute, UF 2007-2008; Assistant Professor of Economic Geography with Environmental Emphasis, 2005-2006; Climatology Assistant Professor, AY 2004-2005, Land-Use/Land-Cover Change Associate or Assistant Professor 2000-2001.

Member, Search Committee for UF Sociology and Criminology & Law Department Chair (2012-2013),

Various Years: Mentorship Committee for Dr. Moulay Anwar Sounny-Slitine, Assistant Instructional Professor in Geography, Dr. Kevin Ash, Assistant Professor of Geography, Dr. Yujie Hu, Assistant Professor of Geography, Dr. Katherine Serafin, Assistant Professor of Geography, Dr. Corene Matyas, Assistant Professor of Geography, Dr. Brian Child, Associate Professor of African Studies and Geography, Dr. Youliang Qiu, Assistant Research Scientist in Geography, Dr. Sabine Grunwald, Assistant Professor of Soil and Water Science, Dr. Graeme Cumming, Assistant Professor of Wildlife Ecology and Conservation, Dr. Jane Southworth, Assistant Professor of Geography.

Chair, College of Liberal Arts and Science Committee on Ecology and Environment, 2002-2005 Chair, School of Natural Resources and Environment Faculty Advisory Committee, 2004-2006 Vice-Chair, Board of Directors; UF Interdisciplinary Concentration in Geographic Information Systems 2002 - 2014

Chair 2002-2007, Member 2007-present, Ad-Hoc University of Florida Committee Pursuing National Science Foundation/National Ecological Observatory Network program funding Chair 2006-2007 and Member, College of Liberal Arts and Sciences Tenure and Promotion committee, 2004-2006

Member, Search committee for College of Agriculture and Life Sciences Academic Dean 2003-2004.

- Chair 2002-2003 and Member, College of Liberal Arts and Sciences Curriculum Committee, 2000-2002.
- Member, Search committee for Director of the Water Institute
- Member, Board of Directors, Katharine Ordway Preserve, 1999-2002
- Member, University of Florida Committee on Interdisciplinary Graduate Degree Programs in Environmental Science.
- Member 1992-1993, Harvard University Environmental Science and Public Policy Program development committee.

# **Graduate Students Supervised Ph.D. Students**

- Di Yang, 2019. Forest Mosaics: Spatial Forest Management Patterns from Stands to Regional Scales in Southeastern U.S. Coastal Plain and Piedmont. University of Florida. Currently Assistant Professor, University of Florida. <a href="mailto:yangdi1031@ufl.edu">yangdi1031@ufl.edu</a>
- Carolyn Staub, 2015. Hydrologic Processes on Small Islands: Linkages between Climate, Human Activity and Water Availability in Mauritius. University of Florida. Currently Senior Climate Adaptation and Resilience Specialist, Abt Associates, UF, Washington, DC.
- Narcisa Pricope, 2011. Using Remote Sensing to Create Indicators of Ecosystem Variability in a Semi-Arid Savanna Watershed in the Kavango-Zambezi Region of Southern Africa. University of Florida. Currently Associate Vice President for Research and Professor of Geosciences, Mississippi State University. <a href="mailto:npricope@research.msstate.edu">npricope@research.msstate.edu</a>
- Andrea Gaughan, 2011. Variability and Change in a Dryland System: Climate-Land Interaction in the Okavango-Kwando-Zambezi Catchment of Southern Africa. University of Florida. Currently Associate Professor of Geography and Geosciences, University of Louisville. <a href="mailto:ae.gaughan@louisville.edu">ae.gaughan@louisville.edu</a>
- Risa Patarasuk, 2011. Longitudinal analysis of road network development and land-cover dynamics in Lop Buri Province, Thailand, 1989-2006. University of Florida. Currently GIS Analyst, Alachua County Environmental Protection Department, Gainesville, FL.
- Kari MacLauchlin (co-chair). 2011. Development of a Market for Transferable Fishing Privileges in the Florida Spiny Lobster Commercial Fishery. University of Florida. Currently Fisheries Economist, South Atlantic Fishery Management Council. North Charleston, SC. <a href="Mailto:Kari.Maclauchlin@safmc.net">Kari.Maclauchlin@safmc.net</a>
- Luke Rostant (co-chair). 2011. The efficacy of community-based monitoring in Namibia, the event book system. University of Florida. Currently Lecturer in Ecology, University of The West Indies, St. Augustine, Trinidad and Tobago. <a href="mailto:luke.rostant@sta.uwi.edu">luke.rostant@sta.uwi.edu</a>
- Tracey Van Holt, 2009. Influence of landscape change on the nearshore fisheries in southern Chile. University of Florida. Currently Research Associate Professor, New York University Stern Center for Sustainable Business.
- Alisa Coffin, 2009. Road network development and landscape dynamics in the Santa Fe River Watershed, north-central Florida, 1975 to 2005. University of Florida. Currently Research

- Ecologist, Southeast Watershed Research Station, U.S. Department of Agriculture, Tifton, GA. <u>Alisa.coffin@usda.gov</u>
- Janet Puhalla (co-chair), 2009. Land Use and Agricultural Intensification in Mugandu Wetland, Kabale District, Uganda. University of Florida. Currently Lecturer of Geography, SUNY Plattsburgh, New York. jpuha001@plattsburgh.edu
- Chris Baynard. 2008. Ecological footprint of energy development in eastern Venezuela's heavy oil belt. University of Florida. Currently Associate Professor of Economics and Geography, University of North Florida, Jacksonville. <a href="mailto:cbaynard@unf.edu">cbaynard@unf.edu</a>
- Lin Cassidy, 2007. Linking Social-Ecological Systems and Land-Use Land-Cover Change through a Complex Adaptive Systems Approach: A Cross-Border Study of Sisaket, Thailand and Ordar Mean Chey, Cambodia. University of Florida. Independent Consultant and Adjunct Associate Professor, Okavango Research Institute, Maun, Botswana; <a href="mailto:lincassidyconsulting@gmail.com">lincassidyconsulting@gmail.com</a>
- Andrea Chavez, 2009. Public Policy and Spatial Variation in Land Use and Land Cover in the Southeastern Peruvian Amazon. Currently Assistant Scientist, Center for Latin American Studies, University of Florida. <a href="mailto:achavez@ufl.edu">achavez@ufl.edu</a>
- Andrés Guhl, 2004. Coffee and landscape change in the Colombian countryside 1970-2002. University of Florida. Currently Associate Professor, Universidad de los Andes, Bogotá, Colombia. aguhl@uniandes.edu.co
- Kristin Conway, 2004. Human use of two species of river turtles (*Podocnemis* spp.) in lowland eastern Bolivia. University of Florida. Currently Professor and Department Chair of Geography and Anthropology, California Polytechnic Pomona. <a href="mailto:kconwaygomez@cpp.edu">kconwaygomez@cpp.edu</a>
- Justine Delahunty, 2002. Religion, war, and changing landscapes: an historical and ecological account of the yew tree (*Taxus baccata* 1.) in Ireland. University of Florida. Currently Associate Professor of Environmental, Geographical, and Geological Sciences, Bloomsburg University, Bloomsburg, PA. <a href="mailto:tdelahun@bloomu.edu">tdelahun@bloomu.edu</a>
- Ryan Jensen, 2000. Measurement, comparison, and use of remotely derived Leaf Area Index predictors. University of Florida. Currently Professor and former Chair, Geography, Brigham Young University, Provo, UT. rjensen@byu.edu
- Kristina Hill, 1997. The representation of categorical ambiguity: a comparison of fuzzy, probabilistic, Boolean, and index approaches in suitability analysis. Harvard University. Currently Associate Professor of Landscape Architecture & Environmental Planning and Design, U. California, Berkeley, Berkeley, CA. kzhill@berkeley.edu

#### M.S. and M.A. Students

- Joe Andreoli, 2022. Predicting the potential geographic distributions of three invasive non-native cichlids in Florida with climate change, Thesis, University of Florida.
- Morgan Ridler, 2017. Land-Cover Change Influenced by an Altered Flooding Regime of the Tonle Sap Lake in the Floodplain of Siem Reap and Battambang Provinces, Cambodia. Thesis, University of Florida.

- Carolyn Staub, 2011. Elephant Browsing in Majete Wildlife Reserve, South Western Malawi. University of Florida.
- Matthew Graham, 2010. Assessing Burn History, Fire Severity, and Mapping Fuels Mitigation Treatments in the Wildland Urban Interface of North Central Florida. University of Florida.
- Kelly Gleason, 2010. Elevational Gradient Resembles Latitudinal Gradient of Global Language Distributions. University of Florida.
- Lucy Magembe, 2007. Transformation of valley-bottom cultivation and its effects on Tanzanian wetlands: a case study of Ndembera wetland area in Iringa region. University of Florida.
- Andrea Gaughan, 2006. Spatial and temporal land-cover transformation in the Angkor basin: a changing landscape in Cambodia, 1989-2005. University of Florida.
- Kristi Capobianco, 2005. Excavation site prediction using high resolution satellite imagery and GIS data development of archaeological deposits for En Bas Saline, Haiti University of Florida.
- Paul Sjoberg, 2004. Modeling coastal forest decline: an investigation at Seahorse Key, Florida. University of Florida.
- Justin Saarinen, 2004. Storm runoff due to land-use and land-cover change: simulating hydrological response to alternative futures in a Southern California watershed. University of Florida.

#### **Grants and Contracts:**

- **Binford, M.W.** (PI) Intergovernmental Personnel Act Support for Program Officer Appointment to U.S. National Science Foundation. \$422,343. 7/09/2017-7/09-2019.
- **Binford, M.W. Binford, M.W.** (institutional PI) Collaborative Research: MSB-FRA: The future of US forest function under changing climate, disturbance, and forest management. National Science Foundation, Macrosystems and Early NEON Science Program. \$417,148, 8/1/2017 7/31/2023. Awarded August 2017. Removed as PI while working at NSF. Reinstated as PI August 2019.
- **Binford, M.W.** (institutional PI) Collaborative Research: Building forest management into Earth system modeling: Scaling from stand to continent. National Science Foundation, Macrosystems Biology Program; EF 1241860. \$274,523. 1 April 2013 31 May 2016.
- Southworth, J. (PI), G. Kiker, Y. Qiu, R. Munoz-Carpena, P.R. Waylen, **M.W. Binford**, E. Keys, B. Child (all Co-Is). Understanding and predicting the impact of climate variability and climate change on land use and land cover change via socio-economic institutions in Southern Africa. NASA Land-Use/Land-Cover Change Program. 1 May 2009 30 June 2012. \$870,000.
- **Binford, M.W.** (PI) and N. Pricope<sup>1</sup> (Co-I). Doctoral Dissertation Research: Using Remote Sensing to Create Indicators of Socio-Ecological System Resilience in Savannas of the Kavango-Zambezi Region of Southern Africa. National Science foundation BCS- 0824720. 15 Aug 2008 31 July 2010. \$11,996.
- Hayes, J.P., D.J. Levey, M. Monroe, **M.W. Binford**. R.D. Holt. Planning Grant for the Ordway-Swisher Biological Station. National Science Foundation. 1 September 2008 31 August 2009. 20,807 (collaborative grant with UF faculty from Wildlife Ecology and Conservation, Zoology, and Forest Resources and Conservation)

- Goldman, A. (PI), B. Child (co-I), **M.W. Binford** (co-I). Collaborative Research: Parks as Agents of Social and Environmental Change in Eastern and South Africa. Human and Social Dynamics Program, National Science Foundation. 1 September 2006 28 February 2013. \$398,113.
- Martin, T.A. (PI), G. Starr, W.P. Cropper, H.L. Gholz, and **M.W. Binford** (co-Is). Reducing carbon cycle uncertainties in pine forests in the southeastern U.S. Coastal Plain. U.S. Department of Energy, National Institute of Climatic Change Research (NICCR). \$374,999 for 3 years.
- Keys, E., C.J. Matyas, D.M. Brommer, **M.W. Binford**, P.G. Dixon. Crop and Forest Losses Due to Hurricane Dean. National Science Foundation, Small Grants for Exploratory Research, 1 September 2007 31 August 2008. \$9,000.
- **Binford, M.W.** (PI), P.R. Waylen, J.W. Jones, and J.A. Southworth. Economic Growth, Social Inequality, and Environmental Change in Thailand and Cambodia. SES-HSD Agents of Change Program, National Science Foundation, 15 September 2004-15 February 2008, \$217,349. Subcontract to A. Kolata and R. Townsend, University of Chicago, National Opinion Research Center.
- Zarin, D., P.I. and 28 others, including **M.W. Binford**. Working Forests in the Tropics, National Science Foundation, IGERT program. \$2,330,689, 1 July 2002 to 30 June 2007.
- Goldman, A., M.W. Binford, C.A. Chapman, L.J. Chapman, J. Southworth. Collaborative Research: Consequences of Parks for Land Use, Livelihood Diversification, and Biodiversity in East Africa. Geography and Regional Science Program, National Science Foundation. 1 April 2004 30 March 2006. \$166,200.
- **Binford, M.W.**, P.I.; J. Delahunty, co-I. Yew (*Taxus baccata* L.) population dynamics in Youghal, County Cork, Ireland: Cultural and climatological influences; 6,000 BP to present National Science Foundation, Geography and Regional Science Program, Dissertation Improvement Grants. \$10,000. 1 July 2001 31 December 2002.
- van Holt, T. and **M.W. Binford**, P.I. Twenty years of land-cover and land-use change effects on nearshore marine resources in southern Chile. NASA Earth Systems Science Fellowship. January 2004 December 2006, \$24,000/yr, annually renewable.
- **Binford, M.W.**, P.I., Hydrological Aspects of Alternative Futures for the Context Region of the Marine Corps Base, Camp Pendleton. Subcontract to the Desert Research Institute SERDP Project. \$69,161. Jan 2001 September 2002.
- **Binford, M.W.**, P.I. Environmental Risk, Land-Use and Land-Cover Change, and Incomegrowth Inequities in Thailand, 1975-2000. UF College of Liberal Arts and Sciences Research Awards Program. \$16,000. July 2001-June 2002.
- **Binford, M.W.**, P.I. From Tower to Region: Integration of Patch-Size NEE Using Experimental and Modeling Footprint Analysis. Subcontract to NIGEC award to Monique LeClerc, University of Georgia. \$73,000. September 2000 Sept 2003.
- **Binford, M.W.**, P.I., K. Conway, co-I. Human Use and Potential Conservation of River Turtles (*Podocnemis* sp.) in Eastern Lowland Bolivia. National Science Foundation, Geography and Regional Science Program, Dissertation Improvement Grants. \$10,000. 1 July 2000 31 June 2001.
- **Binford, M.W.**, P.I., H.L. Gholz, S.E. Smith, and G.Barnes (co-investigators). Land-Use and Land-Cover Change: Decadal-Scale Dynamics of Land Ownership, and Carbon Storage Patterns in the Southeastern Lower Coastal Plain Region of the U.S. National Aeronautics

- and Space Administration, Office of Earth Science, Land Use/Land Cover Change Program. \$350,000; 1 May 2000 31 December 2003.
- **Binford, M.W.**, P.I. Aerial Photograph Library Management and Database Services. St. Johns River Water Management District. June 1998 January 2002. \$91,855 (four contracts).
- **Binford, M.W.**, P.I., K. Conway, co-I. Human Use and Potential Conservation of River Turtles (*Podocnemis* sp.) in Eastern Lowland Bolivia. InterAmerican Foundation, \$3,580. 1 May 2000 31 Aug 2000.
- **Binford, M.W.**, P.I. Geographic Information System as a Tool For Community Land Use Planning In Acre, Brazil. Inter-American Foundation (MALAS Student Fellowship for Karla Rocha). \$3,915. June 1999-December 1999.
- **Binford, M.W.** (PI). Contrasting Landscape Dynamics in the Guaporé River Basin, Bolivia and Brazil. UF College of Liberal Arts and Sciences Research Awards Program. \$8,000, 1 April 1998 31 December 1998.
- **Binford, M.W.**, P.I. The University of Florida Laboratory for Advanced Applications of Remote Sensing and GIS Integration and Analysis to Regional and Global Environmental Assessments. Science Division of the Office of Mission to Planet Earth. \$108,952 (\$94,952 from NASA, \$14,000 University of Florida Matching Funds). 1 October 1997 30 November 1999.
- **Binford, M.W.**, P.I. Human-Climate Interactions in the Lake Titicaca Basin of Bolivia U.S. National Oceanic and Atmospheric Agency, Office of Global Programs. \$206,538. 1 May 1995 30 April 1999.
- Steinitz, Carl, P.I., **Michael W. Binford** and Stephen Ervin, Co-Investigators. Alternative Future Roles for Camp Pendleton, California, in the Maintenance of Biodiversity. Environmental Protection Agency, \$466,886. 1 August 1994 31 July 1997.
- Foster, David, P.I. and **Michael W. Binford**, Co-Investigator. Regional Vegetation Response to Human Disturbance in Central New England. U.S. National Science Foundation, Ecology Program., \$225,000, July 1994 30 June 1997.
- M.W. Binford, P.I. Collaborative Research: Human-Environment Interactions in the Bolivian Altiplano: Climate, Limnology and Tiwanaku Agroecosystems. U.S. National Science Foundation. \$145,372. 1 August 1992-28 February 1995.
- M.W. Binford, P.I. Survey of Lakes and Lake Sediments to be used for Studies in Urban Paleolimnology. Milton Fund Grant, Harvard University, \$6000. January-December 1992.
- **M.W. Binford**, P.I. The Impacts of Traditional and Modern Agriculture on Land-Inland Water Ecotones in the Central Andes. U.S. Man and the Biosphere Program, Department of State. \$48,000. 2 October 1989 31 September 1990.
- M.W. Binford. P.I. Paleolimnological Studies of Tiwanaku Ecosystems. Subcontract to National Science Foundation grant BNS-8607541 to University of Illinois-Chicago, Department of Anthropology, Alan Kolata, P.I., The Technology and Organization of Agricultural Production in the Tiwanaku State, \$7,652.74. February 1987-December 1987.
- M.W. Binford, P.I., Duncan Patten, Co-P.I. Travel Fellowships for Foreign Ecologists to Attend the 1986 ESA/INTECOL Meeting. National Science Foundation. BSR-8608199, \$25,000. July 1986-December 1986.

#### **Grants and Contracts (continued):**

- M.W. Binford. P.I. Paleoecological Investigation of Recent Lake Acidification: Uncertainty Analysis of Pb-210 Dating Models. Part of Subcontract to T.L. Crisman and R.W. Bienert from Indiana University Contract (D. Whitehead and D. Charles, Co-P.I.'s). Electric Power Research Institute. \$26,000. July 1985-December 1986.
- **M. W. Binford**, P.I., and E.S. Deevey, co-P.I. National Science Foundation. Historical Factors in West Indian Ecology and Biogeography: Late Pleistocene and Holocene Environments in Haiti. BSR-8500548. \$31,520. April 1985 October 1986.

## **Publications (\* student)**

- Karimi, Hazhir, Michael Binford, William Kleindl, Gregory Starr, Bailey A. Murphy, Ankur R. Desai, Chiung-Shiuan Fu, Michael C. Dietze, and Christina Staudhammer. 2025. "Drivers of Forest Productivity in Two Regions of the United States: Relative Impacts of Management and Environmental Variables." *Journal of Environmental Management* 374 (February):124040. https://doi.org/10.1016/j.jenvman.2025.124040.
- Amanambu, Amobichukwu Chukwudi\*, Joann Mossa, Katherine A. Serafin, and Michael Binford. 2024. "Hydrological Drought and Floodplain Disconnectivity: Quantifying Flow Thresholds in a Large Coastal Plain River." *Hydrological Sciences Journal* 69 (16): 2436–54. https://doi.org/10.1080/02626667.2024.2410908.
- Shaikh, Sabina, Alan L Kolata, Jonathan Johnson, Michael W Binford. 2023. Home and Away: Drivers and Perceptions of Migration Among Urban Migrants and Their Rural Families in the Lower Mekong River Basin of Cambodia. Migration and Development 12:13-48. <a href="https://doi.org/10.1177/21632324231194763">https://doi.org/10.1177/21632324231194763</a>
- Yang, Di\*, Chiung-Shiuan Fu, Hannah Victoria Herrero, Jane Southworth, and Michael Binford. 2023. "Linking Forest Management to Surrounding Lands: A Citizen-Based Approach towards the Regional Understanding of Land-Use Transitions." *Frontiers in Remote Sensing* 4. https://www.frontiersin.org/articles/10.3389/frsen.2023.1197523.
- Kaddoura, Y. O., Wilkinson, B., Merrick, T., Barnes, G., Duffy, K., Broadbent, E., Abd-Elrahman, A., Binford, M., & Richardson, A. D. 2022. Georeferencing oblique PhenoCam imagery. ISPRS Journal of Photogrammetry and Remote Sensing, 190, 301–321. https://doi.org/10.1016/j.isprsjprs.2022.05.012
- Felkner, J. S., Lee, H., Shaikh, S., Kolata, A., & Binford, M. 2022. The interrelated impacts of credit access, market access and forest proximity on livelihood strategies in Cambodia. *World Development*, 155, 105795. https://doi.org/10.1016/j.worlddev.2021.105795
- Shaikh, Sabina and Kolata, Alan and Johnson, Jonathan and **Binford, Michael**, 2021. Home and Away: Drivers and Perceptions of Migration Among Urban Migrants and their Rural Families in the Lower Mekong River Basin of Cambodia. Available at SSRN: https://ssrn.com/abstract=3914359 or http://dx.doi.org/10.2139/ssrn.3914359
- Felkner, J. S., Shaikh, S., Hara, K., Kolata, A., **Binford, M**., Arias, M. E., Chen, L., Elliott, V., Maher, S., Ward, J., Perez-Felkner, L., & Duprey, A. 2020. A Scientific Research Agenda for Water Sustainability in the Mekong (SSRN Scholarly Paper ID 3763132). Social Science Research Network. <a href="https://doi.org/10.2139/ssrn.3763132">https://doi.org/10.2139/ssrn.3763132</a>

- Marsik, Matthew, Caroline G. Staub, William J. Kleindl, Jaclyn M. Hall, Chiung-Shiuan Fu, Di Yang, Forrest R. Stevens, and Michael W. Binford. 2018. "Regional-Scale Management Maps for Forested Areas of the Southeastern United States and the US Pacific Northwest." *Scientific Data* 5 (August): 180165. https://doi.org/10.1038/sdata.2018.165.
- Kleindl, W., P. Stoy, **M. Binford**, A. Desai, M. Dietze, C. Schultz, G. Starr, C. Staudhammer, D. Wood. 2018. Toward a social-ecological theory of forest macrosystems for improved ecosystem management. Forests **2018**, 9(4), 200; <a href="https://doi.org/10.3390/f9040200">https://doi.org/10.3390/f9040200</a>
- Van Holt, T., **M.W. Binford**, K.M. Portier, and R. Vergera. 2016. A stand of trees does not a forest make: Tree plantations and forest transitions. Land Use Policy 56:147-157.
- Bailey, K.M.\*, R.A. McCleery, **M.W. Binford**, and C. Zweig. 2016. Land-cover change within and around protected areas in a biodiversity hotspot. Journal of Land Use Science. **DOI:**10.1080/1747423X.2015.1086905.
- Rosenmeier, M.F.\*, M. Brenner, D.A. Hodell, J.B. Martin, J.H. Curtis, **M.W. Binford**. 2016. A model of the 4000-year paleohydrology (δ<sup>18</sup>O) record from Lake Salpetén, Guatemala. Global and Planetary Change. doi:10.1016/j.gloplacha.2015.07.006.
- Pricope, N.G., A.E. Gaughan, J.D. All, **M.W. Binford**, and L.P. Rutina. 2015. Spatio-temporal analysis of vegetation dynamics in relation to shifting inundation and fire regimes: Disentangling environmental variability from Land Management Decisions in a Southern African Transboundary Watershed. *Land* 4(3):627-655
- Becknell, J.M., Ankur Desai, Michael Dietze, Gregory Starr, Jerry Franklin, Afshin Pourmokhtarian, Jaclyn Hall, Paul Stoy, Paul Duffy, **M.W. Binford**, Christina Staudhammer. 2015. Assessing interactions among changing climate, forest management, and disturbance in macrosystems. *Bioscience*. 65:263-274.
- Hall, J.M., C.G. Staub, M.P. Marsik, F.R. Stevens, **M.W. Binford**. 2015. Scaling categorical spatial data for Earth systems models. Global Change Biology 21:1-3.
- Pricope, N.G.\*, **M.W. Binford**, J.D. All. 2014. Disentangling environmental variability from land management decisions in changing semi-arid savannas of southern Africa. Photogrammetric Engineering and Remote Sensing 80:1005-1013.
- Goldman, A., J. Hall., **M.W. Binford**, and J. Hartter. 2013. Environmental protection and affection in East Africa. Ethics, Policy & Environment 16:270-272.
- Cassidy, L.\*, J. Southworth, C. Gibbes, and **M.W. Binford**. 2013. Beyond classifications: combining continuous and discrete approaches to land cover change analyses within the Lower Mekong River Region. *Applied Geography*. Vol. 39:26-45.
- Staub, C.G.\*, **Binford, M.W.** & Stevens, F.R., 2013. Elephant herbivory in Majete Wildlife Reserve, Malawi. *African Journal of Ecology*, DOI:10.1111/aje.12064.
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- **Binford, M.W.** 1987. A Primer on Water Quality and Water Quality Management for Planners and Designers. Aga Khan Program for Islamic Art and Architecture at Harvard University and the Massachusetts Institute of Technology, Monograph Series. 154 pages.
- **Binford, M.W.** 1986. <sup>210</sup>Pb Dates and their associated uncertainties for PIRLA cores. Unpublished Report Series, Electric Power Research Institute. 72 pages.
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- **Binford, M.W.** 1984. Dating lake sediment cores with <sup>210</sup>Pb. in S.A. Norton (ed.). Paleolimnological Analysis of The Impact of Acidic Precipitation and Related Pollutants on Lake Ecosystems. Proceedings of E.P.A. workshop. 22-24 May, 1984, Rockport Maine.
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- Deevey, E.S., Mark Brenner, **M.W. Binford**. 1983. Paleolimnology of the Petén lake district, Guatemala: III. Late Pleistocene and Gamblian environments of the Maya area. *Hydrobiologia* 103:211-216.
- **Binford, M.W.** 1983 Paleolimnology of the Petén lake district, Guatemala: I. Erosion and deposition of inorganic sediment as inferred from granulometry. *Hydrobiologia* 103:199-203.
- **Binford, M.W.** 1983. Ecological history of Lake Valencia, Venezuela: Interpretation of animal microfossils and some chemical, physical, and geological features. *Ecological Monographs* 52:307-333 (Monograph)
- Bradbury, J.P., B. Leyden, M. Salgado-Labouriau, W.M. Lewis, Jr., C. Schubert, M.W. Binford, D.G. Frey, D.R. Whitehead, F.H. Weibezahn. 1981. Late Quaternary environmental history of Lake Valencia, Venezuela. *Science*. 214:1299-1305.
- **Binford, M.W.** 1978. Copepoda and Cladocera communities in a river-swamp system. *Verh. Internat. Verein. Limnol.* 20:2524-2530.

## **Book and Software Reviews**

- **Binford, M.W.** 2008. Review of Pilkey, O.H. and L. Pilkey-Jarvis. Useless Arithmetic: Why Environmental Scientists Can't Predict the Future. *Florida Geographer*.
- **Binford, M.W.** 1997. IDRISI 2.0 for Windows. First Impressions, *Geo Info Systems*. September.
- **Binford, M.W.** 1990. Review of R.B. Davis (ed.) Paleolimnology and the Reconstruction of Ancient Environments. Kluwer Academic Publishers. *Quarterly Review of Biology* 65:493.
- **Binford, M.W.** 1984. Review of Chapra, S.C. and K.H. Reckhow. Engineering Approaches to Lake Management. *American Scientist*. 72:503-504

#### **Professional and Academic Honors**

Who's Who in America, 2008-

Center for Khmer Studies, Senior Research Fellow 2006-2007

University of Florida Research Foundation Professor, 2002-2005.

Robin and Jean Gibson Term Professor in Geography, Academic Year 2000-2001

College Award for "Continuing Meritorious Contributions to Undergraduate Research, 1998-1999." College of Liberal Arts and Sciences, University of Florida.

American Society of Landscape Architects, 1997 Merit Award for the *Project Landscape Planning, Biodiversity and Landscape Planning: Alternative Futures for the Region of Camp Pendleton, California.* (M.W. Binford, co-Investigator and co-Author).

Who's Who in Science and Engineering, 1991-

Who's Who in the East, 1996-

Nominated by Harvard University for Pew Charitable Trusts Fellowship in Conservation and Environment. 1994

Fellow, American Association for the Advancement of Science, Elected 1993 Society of Sigma Xi, Scientific Honorary Society

## **Invited Seminars and Workshops (2010 - 2021)**

- Starr, G., C.L. Staudhammer, **M. Binford**, P. Stoy, H. W. Loescher. 2020. Land-Atmosphere Interactions in the Southeastern United States: Challenges and Opportunities for Research. Department of Energy ARM/ARS Faculty and PI Meeting. June 22-26. Virtual Meeting.
- **Binford, M.W**. 2021. History and Future of the Macrosystems Biology Program at NSF. Macrosystems Biology and NEON-Enabled Science Principal Investigators' Annual Meeting. Virtual Meeting.
- **Binford, M.W.** Macrosystems Biology, the Convergence of Geography and Biology, Keynote Address for 2nd Annual Symposium: Collaborations in Biodiversity Research, UF Biodiversity Institute, University of Florida, Gainesville, FL, May 7, 2018.
- **Binford, M.W.** Across Scales from mm to Mm and Hours to Millennia: Zooplankton to Macrosystems through Paleolimnology. U.S. National Science Foundation, Division of Biological Infrastructure and Division of Environmental Biology. Invited Seminar March 8, 2017.

- **Binford, M.W.** Macrosystems Biology: Forest Management and Vegetation Dynamics in the Southeastern U.S. Coastal Plain and Piedmont. J.W. Jones Ecological Research Center, Ichauway, GA. 3 May 2013. Invited Seminar
- **Binford, M.W.** and S. Bohlman. Land Use and Forest Process Related to Dams. Invited presentation to International Symposium: Water, Forests and People: Towards Integrative Research on Dams, Natural Resources and Society in the Amazon. 23-25 January 2012. University of Florida, Gainesville.
- **Michael W. Binford**, Grenville Barnes, Henry Gholz. 2011. Linking regional carbon storage to land-ownership changes in the southeastern United States. Poster Presentation, NASA Land-cover/land-use change Science Team Meeting, March 28-30, 2011, Adelphi, MD. National Meeting.
- **Binford, M.W.** Special Lecture: Geospatial Technologies in Health Management; CDHAM Course On Health Management, Uniformed Health Services University, Rockville, MD; 21 August 2011.
- **Binford, M.W.** Land Ownership and Carbon Storage in Industrial Forests of the Southeastern US Coastal Plain. Invited seminar, J.W. Jones Ecological Research Center, Ichauway, GA. 4 August 2011.
- **Binford, M.W**. and S. Bohlman. Land Use and Forest Process Related to Dams. Invited presentation to International Symposium: Water, Forests and People: Towards Integrative Research on Dams, Natural Resources and Society in the Amazon. 23-25 January 2012. University of Florida, Gainesville.
- **Binford, M.W.** 2010. Retrospective and Prospective Perspectives on Natural and Anthropogenic Climate Change: A Primer and a Prospectus. World Universities Congress: "What should be the new aims and responsibilities of universities within the framework of global issues?" Çanakkale Onsekiz Mart University, Turkey, Oct. 20-24, 2010; Session Theme: Understanding and preventing global climate change.

## Contributed Abstracts and Papers Presented at Meetings (2010 - 2021)

- **M.W. Binford**, 2018. Macrosystems Biology and Early NEON Science, a part of Geographers at NSF in honor of Bill Easterling, Geographer and Assistant Director of Geosciences Directorate, New Orleans, LA. April 10-14, 2018.
- Fu, C. S., \*Yang, D., & **Binford, M**. (2018). The role and impact of land ownership on forest disturbance in the Southeastern United States. *AGU Fall Meeting Abstracts*, *51*. <a href="http://adsabs.harvard.edu/abs/2018AGUFM.B51J2090F">http://adsabs.harvard.edu/abs/2018AGUFM.B51J2090F</a>
- Staudhammer, C. L., **Binford, M**., Desai, A. R., Dietze, M., Duffy, P., Fu, C. S., Kleindl, W., Rollinson, C., Schultz, C., Starr, G., Marsik, M., Stoy, P. C., & \*Yang, D. (2018). The Future of US Forest Function Under Changing Climate, Disturbance, and Forest Management. *AGU Fall Meeting Abstracts*, *53*. http://adsabs.harvard.edu/abs/2018AGUFM.B53A..04S
- \*Yang, D., Fu, C. S., & Binford, M. (2018). Design and Implementation of a Citizen-based Regional Land-Use Mapping Strategy Linking Forest Management to Surrounding Lands. *AGU Fall Meeting Abstracts*, 22. <a href="http://adsabs.harvard.edu/abs/2018AGUFMIN22B..04Y">http://adsabs.harvard.edu/abs/2018AGUFMIN22B..04Y</a>
- Marsik, M., M.W. Binford, C-S Fu, D. Yang, C. Staub, J. Hall. 2016. Mapping forest management at regional scales in the southeast U.S. Annual Meeting of the Association of American Geographers, San Fancisco, CA. March 29-April 2, 2016.
- \*Yang, D., Hall, J., Fu, C. S., & **Binford, M.** W. (2015). Estimating Forest Management Units from Road Network Maps in the Southeastern U.S. *AGU Fall Meeting Abstracts*, *33*, GC33B-1278. San Francisco, CA, 14-18 Dec 2015. (Poster)
- M.W. Binford<sup>1</sup>, Jaclyn Hall, John Felkner, Alan Kolata, Matti Kummu, Sabina Shaikh, Sampling riparian villages in Cambodia's Mekong River-Tonle Sap floodplains to study potential effects of

- climate change and upstream hydropower development. 2014 Annual Meeting of the Association of American Geographers, Tampa, FL.
- Hall, J., **M.W. Binford**, B.M. Condon, H.M. Gholz, G. Barnes. 2014. The influence of prices on timber harvests and carbon storage on a landscape scale in the southeastern United States. 2014 Annual Meeting of the Association of American Geographers, Tampa, FL.
- **Binford, M.W.** and C.G. Staub. 2013. Forest management and vegetation dynamics in the southeastern U.S. coastal plain and piedmont. 2013 Annual Meeting of the Association of American Geographers,
- **Binford, M.W.**, Grenville Barnes, Henry Gholz. 2011. Linking regional carbon storage to land-ownership changes in the southeastern United States. Poster Presentation, NASA Land-cover/land-use change Science Team Meeting, March 28-30, 2011, Adelphi, MD. National Meeting.
- **Binford, Michael W**., T. McCabe, P. Leslie, A. Goldman. 2010. Remote Sensing approaches to spatial and temporal dynamics of defensive agriculture in the greater ecosystem of Tarangire National Park, Tanzania. 2010 Annual Meeting of the Association of American Geographers, Washington, D.C.

## **Foreign Language Competency**

Spanish -2.5 (4 = near native, 1 = beginner) German – reading only