

JAMES FOX FACULTY BIOGRAPHICAL SKETCH

(a) Professional Preparation

University of Dayton	Civil Engineering	B.S. 2001
Washington State University	Environmental Engineering	M.S. 2002
University of Iowa	Civil Engineering	PhD 2005

(b) Appointments

Professor, University of Kentucky, July 2015 – Present

Associate Professor, University of Kentucky, July 2011 – June 2015

Assistant Professor, University of Kentucky, August 2005 – June 2011

(c) Recent Publications (students underlined)

1. Al-Aamery, N. and Fox, J. F. (2016). Evaluation of Climate Modeling Factors Impacting the Variance of Streamflow, *Journal of Hydrology*, 542: 125-142.
2. Fox, J.F. and Ford, W.I. (2016). Impact of landscape disturbance on the quality of terrestrial sediment carbon in temperate streams, *J of Hydrology*, 540:1030-1042.
3. Fox, J.F. (2016). Prediction of the Clogging Profile Using the Apparent Porosity and Momentum-Impulse, *Journal of Hydraulic Engineering*, 142(11):06016016, pp. 1-10.
4. Huston, D. and Fox, J.F. (2016). Momentum-Impulse Model of Fine Sand Clogging Depth in Gravel Streambeds for Turbulent Open Channel Flow, *Journal of Hydraulic Engineering ASCE*, 2016, 142(2): 04015055: 1-13.
5. Chattopadhyay, S., Agouridis, C., Fox, J.F. (2016). Sediment fingerprinting, Cooperative Extension Service, University of Kentucky College of Agriculture, Food and Environment, AEN-128.
6. Ford, W.I., Fox, J.F., Pollock, E., Rowe, H., Chakraborty, S. (2015). Testing assumptions for nitrogen transformations in a low gradient agricultural stream, *Journal of Hydrology*, 10.1016/j.jhydrol.2015.05.062, 527: 908–922.
7. Stewart, R.L. and Fox, J.F. (2015). Role of macroturbulence to sustain turbulent energy in decelerating flows over a gravel bed, *Geomorphology*, 248 (2015) 147–160.
8. Ford, W.I. and Fox, J.F. (2015). Isotope-based Fluvial Organic Carbon (*ISOFLOC*) Model: Model Formulation, Sensitivity and Evaluation, *Water Resources Research AGU*, 10.1002/2015WR016999.
9. Huston, D. and Fox, J.F. (2015). Clogging of fine sediment within gravel substrates: dimensional analysis and macro-analysis of experiments in hydraulic flumes, *Journal of Hydraulic Engineering ASCE*, 04015015.
10. Rienzi, E.A., Matocha, C.J., Grove, J.H., Wendroth, O., Fox, J.F. (2015) Enrichment ratio of poorly crystallized iron mobilized with clay/silt-sized particles released via interrill erosion. *Catena*, 124 (2015) 130–137.
11. Ford, W.I., Fox, J.F. and Rowe, H. (2015). Impact of extreme hydrologic disturbance upon the sediment carbon quality in agriculturally-impacted temperate stream. *Ecohydrology*, 8(3):438-449, DOI: 10.1002/eco.1514.
12. Fox, J.F. and Martin, D.K. (2015). Sediment fingerprinting for calibrating a soil erosion and sediment yield model in mixed land use watersheds. *Journal of Hydrologic Engineering ASCE*, 20, SPECIAL ISSUE: Soil Erosion and Sediment Yield Modeling, C4014002.

(d) Synergistic Activities

- Initiated a research initiative to develop experimental watersheds and watershed instrumentation networks in Kentucky involving six institutions and 26 scientists.
- Renovated two flumes to perform fluid turbulence research, and currently constructing a new hydraulic flume for calibration of inexpensive velocity and turbidity sensors.
- Recipient of 15 teaching and mentoring awards from the Department of Civil Engineering, College of Engineering, and Provost at the University of Kentucky.
- Taught an experimental class focusing on turbulence and sediment transport in rivers for graduate students. Course is now part of the civil engineering graduate curriculum.
- Taught an experimental class focused on watershed processes, modeling and associated environmental issues. Course is now part of the graduate curriculum.
- Associate Editor for Journal of Hydraulic Engineering ASCE. Reviewer for over 25 peer reviewed journals. Reviewer for NSF and NOAA proposals.

(e) Collaborators & Other Affiliations

- Collaborators and Co-Editors:
Behera, Pruneet, University of District of Columbia
Blumenthal, Mayah University of Louisville
Brion, Gail, University of Kentucky
Bryson, Sebastian, University of Kentucky
Campbell, Elliott, University of California-Merced
Grove, John, University of Kentucky
Harnett, Cindy, University of Louisville
Hendricks, Susan, Murray State University
Hopf, Kyle, University of Louisville
Jones, Alice, Eastern Kentucky University
Kucera, Barbara, University of Kentucky
Matocha, Chris, University of Kentucky
Ormsbee, Lindell, University of Kentucky
Patrick, Amos, University of Iowa
Rowe, Harry, University of Texas
Rienzi, Eduardo, University of Kentucky
Schueler, Kristy, University of Louisville
Strom, Kyle, University of Houston
Teegavarapu, Ramesh, Florida Atlantic University
Viswanathan, Chandra, Purdue University
White, David, Murray State University
Wilkinson, Marsh, University of Kentucky
- Graduate and Postdoctoral Advisors: Thanos A. N. Papanicolaou, IIHR-Hydroscience & Engineering, University of Iowa
- Thesis Advisor and Postgraduate-Scholar Sponsor (All at University of Kentucky unless specified): Peter Acton, Brian Belcher, Charles Davis, William Ford, Davis Huston, Thomas Lawrence, Darren Martin, Joseph Russo, Michelle Sliter, Robert Stewart, Tien Mun Yee.