

V I T A

David J. Murphy

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Assistant Professor

Department of Geography

Educational Background:

Ph.D.	2010	Environmental Science	State University of New York Syracuse, NY
M.S.	2007	Environmental Science	State University of New York Syracuse, NY
B.S.	2003	Biology	College of Holy Cross Worcester, MA

Professional Experience

Teaching

Assistant Professor	2011-Present	Northern Illinois University
Adjunct Professor	2011 Spring	State University of New York
Middle School Math Teacher	2003-2004	Birch Wathen Lenos School

Research

Research Associate	2011-Present	Argonne National Laboratory
Post-Doctoral Research Associate	2011 Spring	State University of New York
Doctoral Dissertation Research	2007-2010	State University of New York

Publications and Other Professional Contributions:

Articles

Sell B, **Murphy D**, Hall, C. 2011. Energy Return on Energy Invested for Tight Gas Wells in the Appalachian Basin, United States of America. Sustainability. 3: 1986-2008.

- Pelletier N, Audsley E, Brodt S, Garnett T, Henriksson P, Kendall A, Kramer K, **Murphy D**, Nemecek T, Troell M. 2011. Energy Intensity of Agriculture and Food Systems. *Annual Review of Environment and Resources*, 36: 223-246.
- Murphy, D.J.** and Charles A.S. Hall. 2011. Energy return on investment, peak oil, and the end of economic growth in “Ecological Economics Reviews.” Robert Costanza, Karin Limburg & Ida Kubiszewski, Eds. *Ann. N.Y. Acad. Sci.* 1219: 52-72.
- Murphy, D.J.** and Charles A.S. Hall. 2011. Adjusting the economy to the new energy realities of the second half of the age of oil. *Ecological Modeling* (In Press).
- Murphy, D.J.** and Charles A.S. Hall. Order from Chaos: A Preliminary Protocol for Determining EROI for Fuels. *Sustainability* (In Press).
- Murphy, D.J.**, C.A.S. Hall, and Bobby Powers. 2011. New Perspectives on the Energy Return on Investment of Corn Based Ethanol. *Environment, Development and Sustainability*, 13(1) pp 179-202.
- Murphy, D.J.** and Charles A.S. Hall. 2010. Year in review: energy return on (energy) investment in “Ecological Economics Reviews.” Robert Costanza & Karin Limburg, Eds. *Ann. N.Y. Acad. Sci.* 1185: 102 – 118.
- Murphy, D.J.**, M.H.P. Hall, C.A.S. Hall, G. Heisler, S. Stehman, and Carlos Anselmi-Molina. 2009: The Relation Between Land-cover and the Urban Heat Island in Northeastern Puerto Rico. *International Journal of Climatology*, 31(8) pp 1222-1239.
- Hall, Charles A., Stephen Balogh, **David J. Murphy**. 2009. What is the Minimum EROI that a Sustainable Society Must Have? *Energies* 2(1) pp 25 – 47.

Non-peer-reviewed:

- Murphy, D.J.** Energy Transitions and the Next “Paradigmatic Image of the World,” 2010. February 15th, 2010 The Oil Drum (online).
- Murphy, D.J.** What Does Peak Oil Mean to You? January 20th, 2010. The Oil Drum: Net Energy (online).
- Murphy, D.J.** The Net Hubbert Curve: What does it Mean? June 22nd, 2009. The Oil Drum: Net Energy (online).
- Murphy, D.J.** Using Thermodynamics to (Re)Examine Environmental Kuznets Curves. May 11th, 2009. The Oil Drum: Net Energy (online).
- Murphy, D.J.** Further Evidence of the Influence of Energy on the U.S. Economy. April 16th, 2009. The Oil Drum: Net Energy (online).
- Murphy, D.J.** Some Thoughts on the Obama Energy Agenda from the Perspective of Net Energy. February 9th, 2009. The Oil Drum: Net Energy (online).
- Murphy, D.J.** The Effect of Natural Gradients on the Net Energy Profits from Corn Ethanol. January 13th, 2009. The Oil Drum: Net Energy (online).
- Murphy, D.J.** Implications of Energy Return on Investment, Peak Oil, and the concept of “Best First”. January 2nd, 2009. The Oil Drum: Net Energy (online).

Book Chapters

- Hall, C., T.A. Volk, J. Townsend, M. Serapiglia, **D. Murphy**, G. Ofezu, B. Powers, A. Quaye. Energy return on investment of current and alternative liquid fuel sources and their implications for wildlife science. *Peak Oil, Economic Growth, and Wildlife Conservation*. Island Press. (In press)
- Waide, R., M. Angeles, J.E. Gonzalez, C.A.S. Hall, A. Lugo, **D.J. Murphy**, J.R. Ortiz-Zayas, N.D. Ramirez. Factors influencing the changing climate of the Luquillo Mountains, Puerto Rico. *Ecological Bulletins*. (In Press).

Papers Read at Professional Meetings

- Murphy, D.J.** Peak Oil and Energy Return on Investment: The End of Economic Growth. 9th Annual Conference of the International Association for the Study of Peak Oil and Gas, Brussels, Belgium. April 27th-29th 2011.
- Murphy, D.J.** The Energy Return on Investment Threshold and the Growth of Renewable Energy. Annual Conference of the United States Association for the Study of Peak Oil and Gas, Washington, D.C. November 2-5th 2011.
- Murphy, D.J.** EROI, Insidious Feedbacks, and the End of Economic Growth. *Sustainable Use of Renewable Energy (SURE) conference*. Syracuse, New York, November 2010.
- Murphy, D.J.** EROI, Insidious Feedbacks, and the End of Economic Growth. *Sixth Annual Conference of the Association for the Study of Peak Oil (ASPO)*. Washington, D.C. October 2010.
- Murphy, D.J.** EROI, Insidious Feedbacks, and the End of Economic Growth. *MassMutual Financial Group, Actuarial Gathering*, Chicopee, MA, September 2010.
- Murphy, D.J.** EROI, Peak Oil, Alternative Energy, and Economic Growth. *Wendell Town Meeting*, Wendell, MA, May 2010.
- Murphy, D.J.** Recent Applications of Energy Return on Investment. *Fifth Annual Conference of the Association for the Study of Peak Oil (ASPO)*. Denver, Colorado. October 2009.
- Murphy, D.J.** The Relation Between Land-Cover and the Urban Heat Island in Northeastern Puerto Rico. *7th Symposium on the Urban Climate, American Meteorological Society*. San Diego, California. September 2007.
- Murphy, D.J.** Energy Return on Investment: In Theory and Application. *2nd Annual Conference on Biophysical Economics*. Syracuse, New York. October 2009.

Other

Contributor: The Oil Drum 2008 – present.

- Write bi-monthly articles on all issues related to Net Energy.
- Collaborate with contributing authors on and edits other posts related to Net Energy
- Participate in a daily correspondence about current event energy issues.

David J. Murphy

- Contribute articles to the Institute for the Study of Energy and Our Future, the non-profit associated with The Oil Drum

Professionally Oriented Public Service Activities:

Memberships

Member, Association for the Study of Peak Oil and Gas

Member, International Society of Ecological Economics

Other Professionally Significant Achievements:

Fellowships and Awards

2010 Recipient of the Excellence and Graduate Student Research Award (selected #1 of over 500 graduate students)

2010 Graduate Teaching Fellow in Renewable Energy (stipend \$5,000, tuition \$4,185)

2007-2010 Graduate Research Fellow funded through the National Science Foundation Long-Term Ecological Research network (\$14,400 per year, tuition \$4,185)

2007 Graduate Teaching Fellow in Energy Systems (stipend \$5,000, tuition \$4,185)

2006 Graduate Research Fellow funded through the National Science Foundation Long-Term Ecological Research network (stipend \$12,000, tuition \$4,185)

2004-2005 Graduate Teaching Fellow in Urban Ecology (stipend \$5,000 per semester, tuition \$4,185)

University Service:

Library Representative, Department of Geography, 2011-Present

Search Committee Member, Joint ENVS/BIOS Faculty Position

Teaching Obligations:

Fall 2011

ENVS 304 – Environmental Law, Policy and Economics

GEOG 453 – Environmental Management