

Daniel J. Gurdak

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PhD Candidate, SUNY College of Environmental Science and Forestry
1 Forestry Drive, Syracuse, NY 13210

EDUCATION

College of Environmental Science and Forestry, State University of New York, Syracuse, NY
PhD, Conservation Biology, Summer 2009-present (GPA 3.65)
Maxwell School of Syracuse University, Syracuse, NY
Masters of Public Administration, 2013
Oxford University Centre for the Environment, St. Edmund Hall, Oxford, UK
MSc, Biodiversity Conservation and Management, 2008
Herbert H. Lehman College, City University of New York, Bronx, NY
BA, Biology and BA, Environmental Science, 2007
Macaulay Honors College, *summa cum laude* (GPA 3.9)
Brooklyn Technical High School, Brooklyn, NY
Major: Technology and Liberal Arts; Senior thesis: "Biodiversity Loss"

AWARDS and HONORS

2014 Robert L. Burgess Graduate Scholarship in Ecology
2013 Wilford Dence Fellowship
award given by the Department of Environmental and Forest Biology (College of Environmental Science and Forestry; State University of New York, USA) to a graduate student who has demonstrated academic achievement and professional promise in broad areas of natural history, fish, and wildlife
2013 Society of Wetland Scientists Student Research Award
2013 Tropical Social Forestry Fund
award given by the Department of Forest and Natural Resource Management, College of Environmental Science and Forestry; State University of New York, USA
2011 IIE Fulbright Scholar
2010 Maurice and Annette Alexander Wetlands Research Award (\$1125 USD)
2009 NSF GK-12 STEM Fellowship
2008 Abbey-Santander Travel Award (£500 GBP)
2007 St Edmund Hall Brockhues Graduate Research Award, University of Oxford (£250 GBP)
2007 Rhodes Scholar Finalist
2007 The Kane Prize, Biology Department's Highest Graduating GPA
2007 Male Scholar Athlete of the Year, Lehman College
2006 Benjamin A. Gilman International Scholarship (\$5000 USD)
2006 Ranger Award, highest rank in Venture Scouts
2006 Charlie Greenberg Scholarship (\$1000 USD)
2003 Macaulay Honors College (2003-2007 tuition award)
2003 Eagle Scout; highest rank in Boy Scouts

RESEARCH GRANTS

Active

2013 \$20,000 Ecology, management, and conservation of Arapaima spp. in floodplains of the Lower Amazon; Research and outreach grant funded by the Boticario Foundation; Writer and Co-Principal Investigator: Daniel Gurdak
2013 \$25,000 Tracking arapaima to create sustainable reserves for inland fisheries in the Brazilian Amazon; Funded by National Geographic Society, Committee for Research and Exploration; Lead PI: Peter Klimely

Completed

2010 National Geographic Young Explorers Grant (\$5000 USD)
2009 DEFRA/FFI Flagship Species Fund Small Grant (£1875 GBP)
2010 Sigma Xi Grant-in-Aid of Research (\$1000 USD)

PUBLICATIONS

Peer reviewed:

- Gurdak DJ**, Aragão LEOC, Rozas-Dávila A, Huasco WH, Cabrera KG, Doughty C, Rios WF, Espejo JES, Metcalfe DB, Silman MR, Malhi Y. 2014. Assessing above-ground woody debris dynamics along a gradient of elevation in Amazonian cloud forests in Peru: balancing above-ground inputs and respiration outputs. *Plant Ecology & Diversity*, 7 (1-2):1–18.
- Barua M, **Gurdak DJ**, Ahmed RA, Tamuly J. 2012. Selecting flagships for invertebrate conservation. *Biodiversity and Conservation*. Available at: <http://www.springerlink.com/index/10.1007/s10531-012-0257-7>

In prep:

- Gurdak DJ**, Barua M. (in prep) Butterfly Conservation in a Rural Agricultural Matrix in Assam, India. Manuscript in preparation for submission to *Biodiversity and Conservation*.

Technical Reports/ Other publications:

- Stewart AM, Bowman K, Buckley S, Byrne E, Graves M, **Gurdak DJ**, Landis C, Patterson N, Rivera Y, Song P, Spiese J, Taylor D, Werner N (2010) A research Guide for Students and Teachers. Second edition. *The Research Foundation of the State University of New York*.
- Barua M, **Gurdak DJ** (2009) The 2008 Elephant Census: Total Count vs. Subsampling Blocks. In Talukdar BN (ed), *Elephants in Assam*. Wildlife Wing, Assam Forest Dept. 143-152

RESEARCH EXPERIENCE

- Arapaima Conservation and Management** 2009- present
SUNY College for Environmental Science and Forestry, Syracuse, NY
- Interdisciplinary ecological research of arapaima conservation and management in Brazil through ecological field studies; conducted preliminary growth analysis.
- Butterfly Research and Outreach** 2008-2011
Butterfly Northeast, Assam, India
- Collaborated with local butterfly interest/enthusiast group to study butterfly communities across a human-dominated landscape; butterfly conservation outreach & education.
- Carbon Dynamics in the Tropics, Peru** Summer 2008
Oxford University Centre for the Environment; Ecosystem Dynamics Lab
- Analyzed stocks and respiration of an understudied component of tropical carbon dynamics in the Andes to make prediction about the influence of a changing climate.
- Tropical Rainforest Studies, Australia** Spring 2008
School for Field Studies (SFS), Australia, Study Abroad
- Conducted bird surveys, vegetation surveys, restoration projects, and GIS Research in Mabi rainforest with a team of students and faculty during a semester.
- Diet of tessellated darters, Bronx River** Fall 2006-Spring 2007
Laboratory for Marine and Estuarine Research (LaMER)
- Excised the stomach content of tessellated darters, *E. olmstedii*, collected along the Bronx River to determine dietary niche breadth.
- Ecology, Evolution, and Conservation in Ecuador and the Galapagos** Winter 2006
Galapagos Institute for the Arts and Sciences (GAIAS), Study Abroad
- Conducted introductory field research on lava lizard behavior and learned about the conservation of the archipelago.

WORK and TEACHING EXPERIENCE

- Teaching Assistant** Fall 2010- Spring 2013
SUNY College for Environmental Science and Forestry, Syracuse, NY
- Teach laboratory component of Geographic Information Technology and Ichthyology.
- National Science Foundation GK-12 Teaching Fellow** Summer 2009-Fall 2010
SUNY College for Environmental Science and Forestry, Syracuse, NY
- Co-teach undergraduate-level "global environment" course; focus on research.
- Coordinator of Alumni Relations** December 2008-June 2009
Macaulay Honors College, City University of New York, New York, NY

- Organized and coordinated Alumni events. Provided new opportunities and benefits to develop alumni network. Worked on databases, communications, and fundraising.

Research Assistant, Carbon Dynamics September 2008-Nov 2008
Oxford University Centre for the Environment; Ecosystem Dynamics Lab, Oxford, UK

- Worked with team of researchers to establish long-term plots in Oxford University's permanent forest for analysis and research of carbon dynamics in temperate forest.

Assistant High Adventure Director 2005-2007 (summer intensive)
Ten Mile River Scout Camps, Boy Scouts of America; Narrowsburg, NY

- Conducted staff training and organized, supervised, and coordinated backpacking, climbing, wilderness survival, and river trek high adventure programs.

Wilderness Guide, Climbing Instructor 2002-2007 (summer intensive)
Ten Mile River Scout Camps, Boy Scouts of America; Narrowsburg, NY

- Guided weeklong hiking and canoe trips with attention to camping skills, wilderness survival and natural history; conducted week long climbing and rappelling lessons.

SERVICE, OUTREACH, AND CAMPUS ACTIVITIES

ESF Science Core, Coordinator 2010-2011

- Pair former NSF GK12 fellows with graduate students on campus to serve as mentors and train a network graduate student volunteers to engage K-12 classrooms with science and research.

Eagle Scout Service Project, Advisor (*Boy Scouts of America*) Spring 2009

- Supervised the planning and implementation of a scout's eagle project: a used battery collection drive and outreach program for proper battery disposal.

Assistant Scout Master (*Boy Scouts of America*) 2003 - 2009

- Worked with community youth to teach leadership, first aid, outdoor, and scout skills.

Oxford University, St. Edmund Hall Rowing Crew Fall 2007 - Spring 2008

- St. Edmund Hall first boat (Hilary term), awarded blades

Study Abroad Fair October 2006

- Coordinated Lehman College's first annual study abroad fair.

Lehman College Track Team Fall 2003 - Spring 2007

Captain Fall 2006 - Spring 2007

Student Senator (Lehman College Senate) Fall 2003 - Spring 2007

- Responsible for discussing and reviewing issues regarding the college and sitting in and voting on decisions made by standing committees.

Cell Phone Drive (at Lehman and in neighborhood) Fall 2005- Spring 2006

- Collected over 500 cell phones and donated them to a charitable organization.

Eagle Scout Service project Spring 2003

- Conducted a clothing drive for Casa Promesa, a residential health care facility for people with AIDS or other HIV-related illnesses (collected over 3000 lbs of clothing)

PROFESSIONAL AFFILIATIONS

Sociedade Brasileira de Ictiologia (Brazilian Society of Ichthyology) 2014

The Explorers Club, Term Member 2013

National Eagle Scout Association 2013

Ecological Society of America 2010

Sigma Xi 2007

Scientific research society.

Phi Beta Kappa 2006

Oldest undergraduate liberal arts honor society in the U.S.

PRESENTATIONS

Vasconcelos CAA, Silva LVF, **Gurdak DJ**, Silva PB, Sousa EMO. "Influência dos parâmetros físico-químicos da água sobre a frequência de respiração aérea do pirarucu (*Arapaima cf. gigas*) cultivado no Oeste do Pará." XIV Congresso Brasileiro de Limnologia. Bonito, MS, Brazil. 2013.

- Gurdak DJ**, Arantes C, Castello L, Queiroz HL. "Effect of Annual Flood Variability and Drought Cycles on Arapaima Growth in the Brazilian Amazon." Oral Presentation. Ecological Society of America. Minneapolis, MN. 2013
- Gurdak DJ**. "Identifying geographic gaps between arapaima management and research." Web presentation. Sigma Xi Student Research Showcase. 2013
- Gurdak DJ**, Arantes C, Castello L, Queiroz HL. "Effect of Annual Flood Variability and Drought Cycles on Arapaima Growth in the Brazilian Amazon." Oral Presentation, XIX Encontro Brasileiro de Ictiologia. Manaus, PA. February, 2011.
- Gurdak DJ**, Barua, M. "Butterflies and Invertebrate Conservation in Assam, India." Short Talk, Student Conference on Conservation Science, New York, NY. November, 2010.
- Gurdak DJ**, Beal R. "GK-12 at SUNY ESF: Past, Current, and Future Activities- Sustaining activities beyond funding." Oral Presentation, *Ecological Society of American Annual Conference*. Pittsburgh, PA. August, 2010.
- Buckley S, Landis C, Spiese J, Bowman K, Byrne E, Graves M, **Gurdak DJ**, Song P, Taylor D, Leopold DJ (PI), Beal R (Co-PI), Spuches C (Co-PI), Majanen T. "Fostering the next generation of scientists." Poster, *National Science Foundation GK-12 Annual Conference*. Washington, DC. March 2010.
- Gurdak DJ**, Barua M, Butterfly Northeast. "Chasing Butterflies and Catching Interest: Butterfly Research in Assam, India, and its Application in Education and Outreach," Poster, NSF GK12 Research Poster Presentation. NSF headquarters, Arlington, VA. March, 2010.
- Gurdak DJ**, Curran TJ, Freeman AND, Allenby J, Schlothman M, Brown RL. "Disturbance patterns in Tropical Rainforest Fragments: Implications for Biodiversity." Poster, Summer School in Ecology and Biodiversity, Mammal Research Institute, Poland. June, 2008.
- Gurdak DJ**, Curran TJ, Freeman AND, Allenby J, Schlothman M, Brown RL. "Disturbance patterns in Tropical Rainforest Fragments on the Atherton Tablelands in Queensland Australia." Poster, Student Conference on Conservation Science, Cambridge, UK. March, 2008.
- Gurdak DJ**, Rachlin JW. "Dietary niche breadth of *Etheostoma olmstedii* Collected at Stations along the Bronx River." Poster, Sigma Xi Annual Meeting and Induction, Lehman College, Bronx, NY. May, 2007.

OTHER SKILLS

Languages (ILR proficiency level)

- English: Level 5– Native proficiency
- Portuguese: Level 4 – Full professional proficiency
- Polish: Level 3 – Professional working proficiency
- Spanish: Level 2 – Limited working proficiency

IT Skills

- Proficient in ArcInfo and ArcGIS with experience in remote sensing. CUNY Lehman College Certificate in Geographical Information Science, 2007.
- Statistics: Proficient in JMP software with extensive experience in SPSS and R.
- Extensive experience using Microsoft and Adobe Creative Suite.