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EDUCATION

University of Notre Dame (UND)	Ph.D. Ecology, Evolution & Environmental Biology, 2000 Dissertation title: <i>Daphnia</i> in littoral zones: costs & benefits associated with diel horizontal migration; Advisor: D. M. Lodge
Loyola University Chicago (LUC)	B.S. in Biology with honors, <i>magna cum laude</i>, 1995 B.A. in English with honors, <i>magna cum laude</i>, 1995

EMPLOYMENT HISTORY

2013 – present	Professor, Department of Biology, Southwestern University (SU)
2009 - 2013	Associate Professor, SU Department of Biology
2003 – 2009	Assistant Professor, SU Department of Biology
2012 – present	Co-Chair, SU Environmental Studies Program
2006 - present	Co-Chair, SU Animal Behavior Program
08/01 – 7/03	Research and Teaching Fellow, Rhodes College (RC)
12/00 – 7/03	Postdoctoral Fellow, The Ohio State University
08/00 – 12/00	Visiting Assistant Professor in Biology & Teaching Associate for the Kaneb Center for Teaching and Learning, UND
08/99, 08/04	Invited Researcher, Netherlands Institute of Ecology, Centre for Limnology
1997 - 2002	Invited Researcher, National Environmental Research Institute, Silkeborg, DK

HONORS, LEADERSHIP ROLES & AWARDS

2014	Invited judge, International Chocolate Awards, New York City
2014 - now	Texas Academy of Science (TAS), Board of Directors
2013	Invited Senior Mentor, WEBS (http://advance.washington.edu/webs/)
2011 – 2013	Faculty Participant, National Science Foundation (NSF)-CCLI: Developing and Assessing Process Skills in Conservation Biology and Other Integrative Fields
2012	Invited Mentor representing faculty at small liberal arts colleges, ECODAS Symposium (http://cmore.soest.hawaii.edu/eco-das/index.htm)
2010 - 2012	Executive Officer, Researchers at Undergraduate Institutions Section, ESA
2010	Invited Opponent, Limnology Department, Lund University
2010	Joined Editorial Board of <i>Freshwater Biology</i> (invitation only)
2009 – 2013	Texas Academy of Sciences Past-President (12-13), President (11-12), President-Elect (10-11), Vice President (09-10), Fellow (08-09)
2009 - 2010	Guest Editor, <i>Hydrobiologia</i> , Proceedings 2008 International Shallow Lakes
2009	Invited Participant, AAAS Conference: Transforming Undergraduate Education in Biology: Mobilizing the Community for Change
2009	Panelist for IRES (International Research Experiences for Students), NSF
2008 - 2010	Selected as BEN (BioEdNet) Scholar, AAAS, Washington, D.C.
2008 – 2009	SU Partner of the Year, Georgetown Partners in Education
2004, 2005	Associated Colleges of the South (ACS) Environmental and Technology Fellow

2004	Invited participant (16 chosen from 70 applicants) for SEEK (Science Environment for Ecological Knowledge) workshop in Ecoinformatics
2003	Invited Panelist for Grant Review in Ecology, National Science Foundation
2001	Selected Participant (44 chosen from 180) in DIALOG IV in Bermuda
2000	The Kaneb Center Graduate Student Award for Excellence in Teaching
1998	Fulbright Scholar to Denmark
1997	UND Graduate Student Union Teaching Assistant of the Year Award
1995	Presidential Medal Recipient from the College of Arts and Sciences, LUC
1995 to now	<i>Phi Beta Kappa</i> , member

PUBLICATIONS – PEER-REVIEWED (* denotes undergraduate)

- Hayes, K.A, **R. L. Burks**, A. Castro-Vazquez, P. C. Darby, H. Heras, P. R. Martín, J.-W. Qiu, S. C. Thiengo, I. A. Vega, T. Wada, Y. Yusa, S. Burela, M. P. Cadierno, J. A. Cueto, F. A. Dellagnola, M. S. Dreon, M. V. Frassa, M. Giraud-Billoud, M. S. Godoy, S. Ituarte, E. Koch, K. Matsukura, M. Y. Pasquevich, C. Rodriguez, L. Saveanu, M. E. Seuffert, E. E. Strong, J. Sun, N. E. Tamburi, M. J. Tiecher, R. L. Turner, P. L. Valentine-Darby & R. H. Cowie. **2015**. Insights from an integrated view of the biology of apple snails (Caenogastropoda: Ampullariidae). *Malacologia* 58(1-2): 245-302.
- Burks, R. L.**, J. Bernatis, J. E. Byers, J. Carter, C. W. Martin, W. G. McDowell and J. van Dyke. **2015**. Not all apple snails are golden: A review of the identity, reproductive potential, distribution, biotic ecology and management of invasive *Pomacea maculata* in the southeastern United States. Invited and accepted for 2nd edition of *Global Advances in Ecology and Management of Golden Apple Snails*.
- Liebl, M.* , K. Roberts* , A. Mohammed* , M. Lowther* , E. Navaira* , A. Frankel* , S. Pukys and **R. L. Burks**. **2014**. Staying SMARt: Introduction and assessment of a one-on-one inquiry model to teach the scientific method to elementary school students. *Science Education and Civic Engagement: An International Journal* 6(1): 32-44. PDF: <http://d32ogomya1dw8.cloudfront.net/files/secej/winter14/smart.pdf>
- Kyle, C. H.* , A. Plantz* , T. Shelton and **R. L. Burks**. **2013**. Count your eggs before they invade: Identifying and quantifying egg clutches of two invasive apple snail species (*Pomacea*). *PLoS One* Open Access. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0077736>
- Kyle, C. H.* , A. W. Kropf and **R. L. Burks**. **2011**. Prime waterfront real estate: Apple snails choose wild taro for oviposition sites. *Current Zoology* 57(5): 630-641.
- Burks, R. L.**, S. A. Hensley* and C. H. Kyle*. **2011**. Quite the appetite: juvenile island apple snails (*Pomacea insularum*) survive consuming only exotic, invasive plants. *Journal of Molluscan Studies* 77(4): 423-428.
- Burks, R. L.**, C. H. Kyle* and M. K. Trawick*. **2010**. Pink Eggs and Snails: Field oviposition patterns indicate shallow aquatic systems susceptible to invasion by *Pomacea insularum*. *Hydrobiologia*, Shallow Lakes 2009 Special Volume 646: 243-251. DOI 10.1007/s10750-010-0167-1.
- Burks, R. L.** and M. M. Chumchal. **2009**. To Co-author or Not to Co-author: How to write, publish, and negotiate issues of authorship with undergraduate research students. *Sci. Signal.* 2 (94), tr3. [DOI: 10.1126/scisignal.294tr3] **PDF Available via RB website**

9. **Burks, R. L. 2009.** A Kernel of Truth: Microwave popcorn makes it easier to teach basic statistics. *The L&O Bulletin* 18(2): 36-40. **PDF Available via RB website**
10. Kyle, C. H.,* M. K. Trawick,* J. P. McDonough* and **R. L. Burks. 2009.** Population dynamics of an established reproducing population of the invasive apple snail (*Pomacea insularum*) in suburban southeast Houston, Texas. *Texas Journal of Science* 61(4): 1-5.
11. Barnes, M.A.* , R. K. Marfurt*, J. J. Hand and **R. L. Burks. 2008.** Fecundity of the exotic applesnail, *Pomacea insularum*. *The Journal of the North American Benthological Society* 28(3): 738-745 (with color photo).
12. Youens, A. K.* and **R. L. Burks. 2008.** Comparing applesnails with oranges: the need to standardize measuring techniques when studying *Pomacea*. *Aquatic Ecology* 42(4): 679-684. **DOI:** 10.1007/s10452-007-9140-0.
13. Boland, B.* , M. Meerhoff, C. Fosalba, N. Mazzeo, M. Barnes* and **R. L. Burks. 2008.** Juvenile snails, adult appetites: Contrasting resource consumption between two species of applesnails (*Pomacea*). *Journal of Molluscan Studies* 74(1): 47-54. [DOI: 10.1093/mollus/eym045.]
14. **Burks, R. L.** and L. Boles. **2007.** Evolution of the Chocolate Bar: A creative approach to teaching phylogenetic relationships within evolutionary biology. *The American Biology Teacher* 69(4): 229-237.
15. **Burks, R. L.,** G. Mulderij, E. Gross, I. Jones, L. Jacobsen, E. Van Donk, and E. Jeppesen. **2006.** Chapter 3 - Center stage: The Crucial Role of Macrophytes in Regulating Trophic Interactions in Shallow Lake Wetlands. Pages 37-59 in R. Bobbink, B. Beltman, J. T. A. Verhoeven, and D. F. Whigham (eds) *Wetlands: Functioning, Biodiversity Conservation, and Restoration*. Ecological Studies, Volume 191, Springer-Verlag Berlin Heidelberg.
16. R. G. Howells, L. E. Burlakova, A. Y. Karatayev, R K. Marfurt* , and **R. L. Burks. 2006.** Chapter 5 - Native and introduced Ampullaridae in North America: History, status and ecology. Pages 73-112 in R. C Joshi (ed) *Global Advances in Ecology and Management of Golden Apple Snails*. Philippine Rice Research Institute (PhilRice), Philippines.
17. Lindquister, G., **R. L. Burks,** and C. R. Jaslow. **2005.** Developing information fluency in introductory biology students in the context of an investigative laboratory. *Cell Biology Education* 4: 58-96.
18. Tuchman, N. C., **R. L. Burks,** C. A. Call, and J. J. Smarrelli. **2004.** Flow rate and vertical position influence ingestion rates of colonial zebra mussels (*Dreissena polymorpha*). *Freshwater Biology* 49: 191-198.
19. **Burks, R. L.** and D. M. Lodge. **2002.** Cued in: advances and opportunities in freshwater chemical ecology. *Journal of Chemical Ecology*. 28(10): 1881- 1897.
20. **Burks, R. L.,** N. C. Tuchman, C. A. Call, and J. E. Marsden. **2002.** Colonial aggregations: the effect of spatial position on zebra mussel responses to interstitial water quality. *Journal of the North American Benthological Society* 21(1): 64-75.
21. **Burks, R. L.,** D. M. Lodge, E. Jeppesen and T. L. Lauridsen. **2002.** Diel horizontal migration of zooplankton: costs and benefits of inhabiting littoral zones. *Freshwater Biology* 47: 343-366.
22. **Burks, R. L.,** E. Jeppesen and D. M. Lodge. **2001.** Pelagic prey and benthic predators: impact of odonate predation on *Daphnia* among complex structure. *Journal of the North American Benthological Society* 20(4): 683-696.

23. Burks, R. L., E. Jeppesen and D. M. Lodge. **2001**. Littoral zone structures as *Daphnia* refugia against fish predation. *Limnology and Oceanography* 46(2): 230-237.
24. Burks, R. L., E. Jeppesen and D. M. Lodge. **2000**. Macrophyte and fish chemicals suppress *Daphnia* growth and alter life history traits. *Oikos* 88(1): 139-147.
25. Lauridsen, T. L., E. Jeppesen, S.F. Mitchell, D. M. Lodge and R. L. Burks. **1999**. Horizontal distribution of zooplankton in lakes with contrasting fish densities and nutrient levels. *Hydrobiologia* 408/409: 241-250.

PUBLICATIONS – NOT PEER-REVIEWED (* denotes undergraduate)

26. Burks, R. L., A. Miller* and A. Hill*. 2014 CABI Compendium project on *Pomacea maculata*. Draft posted & under review (Not traditional peer-review): <http://www.cabi.org/isc/datasheet/116486>
27. Burks, R. L. **2012**. One McBug Burger Please: Eating insects in ecology class to contextualize climate change discussion. EcoEd, <http://ecoed.esa.org/index.php?P=FullRecord&ID=383>.
28. Meerhoff, M., M. Beklioglu, R. Burks, F. García-Rodríguez, N. Mazzeo and B. Moss. **2010**. Shallow Lakes: Preface. *Hydrobiologia* DOI 10.1007/s10750-010-0247-2.
29. Burks, R. L. **2007**. Math for Wiser Decisions (a review of Rockwood's *Introduction to Population Ecology*). *BioScience* 57(3): 288-289.

EXTERNAL FUNDING

2012	National Science Foundation Research Opportunity Award, \$19,815 (R. Cowie)
2011-2015	National Science Foundation International Research Experience for Students IRES-AMPLIFIED (\$72,075 to SU; \$77,877 match to Univ. Hawaii)
2010-2011	Sam Taylor Fund, United Methodist, \$2000, stable isotope analysis
2010	National Science Foundation, IRES Planning Grant (\$18,670)
2007-2008	Sam Taylor Fund, United Methodist, \$2000, lab improvements
2001	The Ohio State University Postdoctoral Fellowship
1999-2000	National Science Foundation Fellowship (Graduate Research Training)
08/1999	Netherlands Institute of Ecology, Centre for Limnology, @ \$400
07/1999	American Scandinavian Foundation Research Grant, \$3,000
1998-1999	Fulbright Fellowship for Study in Denmark (DK), \$11,000
1999-2000	National Science Foundation Graduate Research Training Grant; \$2000

UNIVERSITY-SUPPORTED PROFESSIONAL ACTIVITY IN THE PAST 5 YEARS

- 2015: HHMI Faculty-Student Collaboration (~\$12,000); Mellon Foundation Support for Environmental Studies (~\$5000)
- 2014: HHMI Faculty-Student Collaboration (~\$16,750): HHMI Pedagogical Project (\$2500); \$400 Non-competitive; Competitive Faculty Development (\$5000).
- 2013: HHMI Faculty-Student Collaboration (\$14,445); \$1400 Non-competitive; \$1000 supplies for molecular project through Faculty Competitive Professional Development
- 2012: Faculty-Student Collaborative Projects Funding (\$6400); \$1400 Non-competitive
- 2011: Competitive Professional Development Funding (\$4300); \$1400 Non-competitive
- 2010: Faculty-Student Collaborative Projects (\$15,455); Competitive Professional Development Funding (\$3260); \$1400 Non-competitive

EXTERNAL GRANTS FUNDED BY UNDERGRADUATES

- **Beeman:** 2015 Sigma Xi Grants-in-Aid (**\$400 awarded**)
- **Savrick:** 2014 Sigma Xi Grants-in-Aid (**\$500 awarded**)
- **Day:** 2012 Texas Academy of Sciences Research Award (**Funded for \$1000**)
- **Plantz:** 2010 Sigma Xi Grants-in-Aid (**\$800 awarded**); 2011 Texas Academy of Sciences Research Award (**Funded for \$1500**)
- **Stanzer:** 2009 Sigma Xi Grants-in-Aid (**\$400 awarded**)
- **Kyle and McDonough:** 2008 Texas Academy of Sciences Research Award (**Funded for \$1000**); student collaborators for Mundy Faculty Fellowship (**Funded for ~\$9000**)
- **Barnes/Boland:** 2006 Texas Academy of Sciences Research Award (**Funded for \$750 each**)

CURRENT UNDERGRADUATE RESEARCH PROJECTS

Carson Savrick '15: Origin of established *Pomacea* across southeastern US

Paul Glasheen '16: Hybridization potential of *Pomacea* in native range of Uruguay

Sofia Campos '16: Phylogenetics and phylogeography of *Pomacea* spp. in Uruguay

Averi Segrest '16: Behavioral impacts of attached invasive bivalves on apple snails

Carissa Bishop '17: Phylogeography of *Pomacea megastoma* in Uruguay

Sarah Wilting '17: Impact of acidification on sensory response in *Pomacea megastoma*

Ryan Beeman '17: Morphometrics of different life history stages of *Pomacea maculata*

Previous students: 25 (5 Ph.Ds, 2 MDs, 1 JD, 3 MS, 1 Peace Corps, 3 currently medical school)

SELECTED INVITED PLENARY OR TUTORIAL ADDRESSES

- **R. L. Burks.** October 2010. Everything I needed to know about BIO2010 I learned from snails. Plenary Address. Association of College and University Biology Educators. Lourdes College, Sylvania, Ohio.
- **R. L. Burks.** December 2008. If every species is a magic well, what can we learn from them? Plenary, IX Jornadas De Zoologia del Uruguay, Facultad de Ciencias, Montevideo, UR.
- **R. L. Burks.** May 2002. Littorally complex: linkages between structural, chemical, and behavioural food web interactions in littoral zones. 2002 International Shallow Lakes Meeting, Balatonfured, Hungary.

SELECT NATIONAL OR INTERNATIONAL CONFERENCE PRESENTATIONS

Category 1: INVITED PAPERS OR SPECIAL SESSIONS (* denotes undergraduate author, oral presentation unless otherwise noted, underline represents presenting author if not R. L. Burks)

- **Burks, R. L.,** C. Savrick*, A. D. Cochran*, A. L. Plantz*, R. Beeman* and K. A. Hayes. December 2014. Not all apple snails are invasive: Fecundity, life history, identity and distribution of native *Pomacea megastoma* in Uruguay. Invited oral presentation, in Ampullariidae, 3rd Uruguayan Congress of Zoology.
- Hayes, K. A. and R. L. Burks. December 2014. Systematics, biogeography and conservation of apple snails (Caenogastropoda: Ampullariidae) of the Río de la Plata Basin. Invited oral presentation, Ampullariidae, 3rd Uruguayan Congress of Zoology.
- **Burks, R. L.,** A. L. Plantz*, M. E. Rice* and T. V. Day*. August 2011. Living on the edge:

Potential fates of apple snail (*Pomacea insularum*) eggs laid on emergent vegetation in riparian areas. Special Session: "Pair Power." Ecological Society of America, Austin, TX.

- **Burks, R. L.**, O. D. Stanzer*, M. E. Rice*, A. L. Plantz*, A. W. Kropf* and C. H. Kyle*. November 2010. Synthesizing studies of the island apple snail (*Pomacea insularum*) egg clutches to reveal ecological insights. Invited oral presentation. 4th International POMACEA Meeting. Tucuman, Argentina.
- Kyle, C. H.*, J. P. McDonough* and **R. L. Burks**. November 2008. Location, location, location: oviposition preferences of the exotic, invasive apple snail, *Pomacea insularum*. Poster presentation, 2008 International Shallow Lakes

Category 2: RECENT SELECT CONTRIBUTED PAPERS AT NATIONAL/REGIONAL CONFERENCE

(* denotes undergraduate author, underline indicates presenting author if not R. L. Burks)

- Segrest, A.*, C. Clavijo, K. A. Hayes and **R. L. Burks**. 2015. Sex despite the cost: Attachment of *Limnoperna fortunei* (Dunker, 1857) alters apple snail activities in native *Pomacea* species (Lamarck, 1822). Poster Presentation. Society for Freshwater Science, Milwaukee, WI.
- Campos, L. S.*, C. Clavijo, F. Scarabino, **R. L. Burks** and K. A. Hayes. 2015. A tale of two species: Comparative phylogeography and genetic diversity of *Pomacea canaliculata* and a putative cryptic congeneric in the Rio de la Plata Basin. Oral Presentation, TAS, Systematics and Evolutionary Biology, University of Incarnate Word, San Antonio, TX.
- Savrick, C.*, **R. L. Burks** and K. A. Hayes. 2015. Spread of invasive *Pomacea maculata*, Perry, 1810 (Ampullariidae) in the southeastern United States. Oral Presentation, TAS, Freshwater Science, University of Incarnate Word, San Antonio, TX.
- Cochran, A. D.* and **R. L. Burks**. 2014. Why bigger may not always be better: a comparison of hatchling development of two apple snail species, *Pomacea maculata* and *Pomacea megastoma*. Oral Presentation, TAS, Freshwater Science, Texas A&M Galveston, TX.
- Petro, R.* 2014. Pink Eggs I am: The making of a clutch deposit informing the public about the invasive apple snail (*Pomacea maculata*). Oral Presentation, TAS, Science Education, Texas A&M Galveston, TX.
- Plantz, A. L.*, C. Clavijo, A. Röhrdanz, K. Gibson*, F. Scarabino and **R. L. Burks**. 2013. The apple doesn't fall far from the tree: Reproductive characterization of the newly renamed apple snail, *Pomacea megastoma*. Oral Presentation, Texas Academy of Science, Schreiner University, Kerrville, TX.

EDITORIAL RESPONSIBILITIES: *Freshwater Biology* (Editorial Board); *The American Midland Naturalist* (Associate Editor)

PROFESSIONAL MEMBERSHIPS: AAUP, AAAS, SIGMA XI, ESA, SFS, TAS

MEDIA: November 2013: International researchers

- <http://www.southwestern.edu/live/news/8789-international-researchers>
- Gallery: <http://www.southwestern.edu/live/galleries/656-international-researchers>