

ROMI L. BURKS

CURRICULUM VITA

Department of Biology, Southwestern University, 1001 E. University Ave., Georgetown, TX 78626
tel: 512.863.1280 | e-mail: burksr@southwestern.edu | Twitter: @ProfRomi | website: <http://www.profromi.com>

EDUCATION

University of Notre Dame (UND)

Ph.D. Ecology, Evolution & Environmental Biology, 2000

Dissertation title: *Daphnia* in littoral zones: costs & benefits associated with diel horizontal migration;
Advisor: D. M. Lodge

Loyola University Chicago (LUC)

B.S. in Biology with honors, magna cum laude, 1995

B.A. in English with honors, magna cum laude, 1995

POSITIONS HELD

2017 – present Chairperson, Department of Biology, Southwestern University (SU)
2013 – present Professor, SU Department of Biology
2009 – 2013 Associate Professor, SU Department of Biology
2003 – 2009 Assistant Professor, SU Department of Biology
08/01 – 7/03 Research and Teaching Fellow, Rhodes College (RC)
12/00 – 7/03 Postdoctoral Fellow, The Ohio State University

HONORS, LEADERSHIP ROLES & AWARDS

2020 London Program Faculty
2019 Ms. Homecoming Faculty Honor, SU
2019 Chair, SU Sustainability Committee
2019 Integrated Learning Fellow, SU
2017 Judge, Good Food Awards, Chocolate
2017 SU Senior Faculty Award for Excellence in Scholarship and Creative Works
2016 Invited judge, World Finals, International Chocolate Awards, London
2014 Texas Academy of Science, Board of Directors, Development Committee Chairperson
2013 Invited Senior Mentor, WEBS Symposium (<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
2010 Joined Editorial Board of *Freshwater Biology* (invitation only)
2009 – 2013 Texas Academy of Sciences Past-President (12-13), President (11-12), President-Elect (10-11), Vice President (09-10), Awards Committee Chair; 2009 Texas Academy of Sciences Fellow
2009 – 2010 Guest Editor, *Hydrobiologia*, Proceedings 2008 International Shallow Lakes
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 - *Phi Beta Kappa*, member

PUBLICATIONS – PEER-REVIEWED UNLESS NOTED (* denotes undergraduate)

An * indicates an undergraduate co-author at the time at which the research occurred.

1. Glasheen, P. M.*, S. R. Campos*, R. L. Burks and K. A. Hayes. 2020. First evidence of introgressive hybridization of apple snails (*Pomacea* spp.) in a native range. *Journal of Molluscan Studies*. Accepted (Click on PDF), [doi:10.1093/mollus/eyz035](https://doi.org/10.1093/mollus/eyz035).
2. Emery, N., A. Hunt, R. Burks, M. Duffy, C. Scoffoni, and A. Swei. 2019. Students as ecologists: Strategies for successful mentorship of undergraduate researchers. *Ecology and Evolution*: <https://rdcu.be/btaia>.

3. Sterling, E. J, **R. L. Burks**, J. Linder, T. Langen, D. S. Fernandez, D. Ruby, and N. Bynum. 2018A – C (3 publications. A) Why is biodiversity important? An oral communication exercise; B) Selecting areas for conservation: an oral communication exercise; C) Sharpen your oral communication skills! Lessons in Conservation 8:10–20. Available from <http://www.amnh.org/our-research/center-for-biodiversity-conservation/resources-and-publications/lessons-in-conservation/lessons-in-conservation-volume-viii>
4. Perez, K. P., V. G. Gamboa, C. M. Schneider* and **R. L. Burks**. 2017. Resaca supports invasive apple snails (*Pomacea maculata*, Perry, 1810; Caenogastropoda: Ampullariidae) within the Rio Grande Valley, Texas. *CheckList* 13(3): <https://doi.org/10.15560/13.3.2134>
5. Glasheen, P. M.*, C. Clavo, M. Meerhoff, K. A. Hayes and **R. L. Burks**. 2017. Survival, recovery, and reproduction of apple snails (*Pomacea* spp.) following exposure to drought conditions. *Freshwater Science* 36(2): 316 - 324.
6. **Burks, R. L.**, J. Bernatis, J. E. Byers, J. Carter, C. W. Martin, W. G. McDowell and J. van Dyke. 2017. Identity, reproductive potential, distribution, ecology and management of invasive *Pomacea maculata* in the southern United States. Pages 293-334. 2nd edition of Global Advances in Ecology and Management of Golden Apple Snails.
7. Sterling, E., A. Bravo, A. Porzecanski, **R. Burks**, J. Linder, T. A. Langen, D. S. Fernandez, D. Ruby and N. Bynum. 2016. Think before (and after) you speak: Practice and self-reflection build student confidence and bolster performance in oral communication skills in ecology and conservation biology classes. *Journal of College Science Teaching* 45(6): 87-99.
8. **Burks, R. L.**, A. Miller* and A. Hill*. 2016. CABI Compendium project on *Pomacea maculata*. (Not traditional peer-review): <http://www.cabi.org/isc/datasheet/116486>
9. Perez, B. J.*, A. H. Segrest*, S. R. Campos*, R. L. Minton and **R. L. Burks**. 2016. First record of Japanese Mystery Snail *Cipangopaludina*, *CheckList* 12(5): <http://dx.doi.org/10.15560/12.5.1973>
10. 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.
11. 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. <http://d320gogqmya1dw8.cloudfront.net/files/seceij/winter14/smart.pdf>
12. 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*). *PLoSOne* Open Access. <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0077736>
13. **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>.
14. 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.
15. **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.
16. **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.
17. 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. **NOT PEER REVIEWED.**
18. **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.
19. **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.
20. 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.

21. 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.
22. 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.
23. 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.
24. **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.
25. Burks, R. L. 2007. Math for Wiser Decisions (a review of Rockwood's *Introduction to Population Ecology*). *BioScience* 57(3): 288-289. **EDITOR-REVIEWED BOOK REVIEW.**
26. **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.
27. R. G. Howells, L. E. Burlakova, A. Y. Karatayev, R. K. Marfurt*, and **R. L. Burks**. 2006. Chapter 5 - Native and introduced Ampullariidae 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.
28. 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.
29. 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.
30. **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.
31. **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.
32. **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.
33. **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.
34. **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.
35. **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.
36. 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.

FUNDING

2018	Sam Taylor Fund, United Methodist, \$1400, molecular ecology
2015	Sam Taylor Fund, United Methodist, \$1700, molecular ecology
2012	National Science Foundation, Research Opportunity Award, \$19,815 (via 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)
2009	HEB Community Partnership (3 allotments of \$300 each) and Sprouts (\$50)
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 + salary

PEDAGOGICAL INTERESTS

- Examining the integration between teaching and research
- Encouraging critical thinking analysis through hands-on activities with graphing and statistics
- Understanding and improving the mentoring process
- Inquiry-based teaching and learning

MENTORING EXPERIENCE (i.e. UNDERGRADUATE RESEARCHERS)

Current teams of undergraduate researchers and associated projects:

01/2020 – present	Fiona Burmeister-Morton , sophomore, project TBD
01/2019 – present	Esther Nyaberi , Kaitlin Galassini (2019 SCOPE), juniors, microplastics and eDNA
03/2018 – present	Nicole Kelly , (2018 SCOPE), mysterysnails
03/2018 – present	Shellsea Miller , Lauren Muskara (2018 SCOPE), seniors, field eDNA

Past SU Students (with at least two semesters of research or summer work):

05/2017 – 05/2019	Hannah Winkler '19 , Identity of Chinese and Japanese mysterysnails through 16S
01/2016 - 05/2019	Madison Granier '19 (2016 HHMI SCOPE), senior, eDNA and apple snails
08/2016 – 08/2018	Shannon Walsh '18 , senior, Identity of Chinese and Japanese mysterysnails via COI, Employed as medical scribe
08/2016 – 05/2017	Hugo Cepeda '18 , learning molecular techniques
03/2015 – 06/2017	Carissa Bishop '17 , (2015 HHMI SCOPE), Screening for <i>Angiostrongylus cantonensis</i> in native apple snails, Employed in biotech lab
11/2013 – 12/2016	Sofia Campos '16 , (2014/2016 HHMI SCOPE summer student), Phylogenetics and phylogeography of <i>Pomacea</i> spp. in Uruguay, Employed at wellness center
08/2015 – 05/2016	Bianca Perez '16 , Japanese mysterysnail identification, State Biologist, West Virginia
07/2014 – 05/2016	Paul Glasheen '16 , Honors Student, Hybridization potential of <i>Pomacea</i> spp. in native range of Uruguay, Accepted 2017 into medical school at U. Colorado Denver
11/2013 – 05/2015	Averi Segrest '16 , SU AB Major, Native apple snails and invasive bivalves, Self-employed businesswoman
11/2013 – 01/2016	Ryan Beeman '17 , SU Math Major, Modelling and morphometrics of apple snails
03/2015 – 10/2015	Sarah Wilting '17 , SU Biology Major (2015 HHMI), acidification and apple snails
01/2013 – 05/2015	Carson Savrick, '15 (BS Biology) Origin of established <i>Pomacea</i> across southeastern US, Accepted 2017 into medical school at UT Medical - Houston
11/2013 – 05/2015	Allie Watts '15 , (AB capstone; 2014 HHMI); Chemical cue responses to predators by hatchling <i>Pomacea maculata</i> , Employed environmental non-profit
03/2013 – 01/2015	Amy Miller '16 (Jr. Yr. Work; 2013 HHMI & 13-14 UR) Genetic, anatomical and ecological work on <i>Felipponea</i>
08/2013 – 05/2014	Rebecca Petro '14 (BA Biology & Art), Pink Eggs I Am (Science and Art Communication using apple snails)
06/2013 – 05/2014	Amber Cochran '14 (BS Biology), Hatchling apple snail growth and survival; focus <i>P. megastoma</i>
05/2013 – 03/2014	Alex Petrucci '16 , GIS Project with <i>Pomacea</i> , PhD student in neuroscience
03/2013 - 08/2013	Alexandria Hill '13 (BS Biology); Turtle predation on hatchlings; Pharmacist
09/2011 – 05/2014	Jonathan Miley '14 (BA Biology); Molecular ecology of <i>Pomacea</i>

09/2009 – 08/2013	Allyson Plantz (BA Biology & Art); Egg predation by riparian predators & reproduction of <i>P. megastoma</i> ; TCEQ; Employed non-profit.
04/2010 – 12/2012	Tracy Day (BA Biology, Music minor, Paideia Scholar); Establishing trophic position of <i>P. maculata</i> ; Employed, Georgetown, TX
01/2011 – 05/2012	Katie Gibson (BA Animal Behavior; Minor Environmental Studies; Paideia Scholar) Putting on Mussel: Apple snail interactions with <i>Limnoperna</i> ; <i>Ph.D. student U. Georgia</i>
01/2011 – 05/2012	Kevin Burge (BA Biology; Minor Comp. Sci), pH impacts on hatchling apple snails
01/2009 – 05/2011	Megan (Rice) Shelton (BS Biology; 2011 Biology Student of the Year) Disturbing environments: post-hatching survival of apple snails; <i>Medical Resident</i>
04/2008 – 05/2010	Matthew Trawick (BA Environmental Studies; Minor Biology), Hatchling survival success versus water stress; MS in Public Policy, Texas Tech; <i>JD University of Michigan: Lawyer, Environmental Protection Agency</i>
08/2008 – 05/2010	Olivia Stanzer (BS Biology), Persistence of pink: ecological role of ovorubin protein; <i>PhD, Physical Therapy</i>
04/2009 – 08/2010	Alexis Kropf '12 (BA Biology, 2012 Biology Student of the Year, BA Anthropology), Relationship of fecundity & female snail size; <i>Physician, UT Southwestern</i>
08/2008 – 05/2009	Scott Manusov (BS Biology) Natural and induced aggregation patterns in <i>P. insularum</i> . <i>Chemistry Lab technician and Science Tutor.</i>
04/2007 – 05/2009	James McDonough (BS Biology), Field oviposition in <i>P. insularum</i> ; <i>MD Resident</i>
01/2007 – 05/2009	Colin Kyle (BS Biology), Honors Student , Oviposition behavior of <i>P. insularum</i> (now <i>P. maculata</i>). <i>Ph.D. 2015 University of Chicago: Current: Game Development</i>
08/2006 – 5/2008	Sarah Hensley (BS Biology), Juvenile consumption of exotic plants. <i>Ph.D. 2014 University of Massachusetts at Amherst: AP High School Teacher.</i>
04/2006 – 05/2007	Abby Youens (BA Biology), Growing at a Snail's Pace: Juvenile growth patterns. <i>Completed M.S. Public Health at UTHSC Houston; MD Resident.</i>
08/2004 – 05/2007	Brandon Boland (BS Biology, Paideia Scholar), Understanding mechanisms behind food choice in the channelled apple snails. <i>Ph.D. 2015 University of Chicago: Current Postdoctoral Researcher.</i>
05/2005 – 06/2006	Matthew Barnes (BA Biology), Honors Student , The Snail and the Egg: understanding the egg-hatchling transition in apple snails. <i>Ph.D. 2013 University of Notre Dame; Faculty, Texas Tech.</i>
08/2004 – 05/2005	Cathy Duong (BA Biology, Paideia Scholar), Temperature and chemical cues influences on diel horizontal migration of <i>Daphnia</i> . <i>Employed at corporate real estate firm working with tenants.</i>
08/2003 – 05/2005	Rebecca Marfurt (BA Environmental Studies), Life history and ecological impacts of the exotic channelled apple snail, <i>Pomacea "canaliculata (now P. insularum)."</i> <i>M.S. Aquatic Ecology at Texas State. OK DEQ and now environmental consultant</i>
08/2003 – 08/2005	Austin Hill (BS Biology). Dual effects of pesticides and chemical cues on <i>Daphnia</i> growth and reproduction. <i>Finished M.S. at Texas State.</i>

RECENT (LAST 5 YEARS) EXTERNAL GRANTS FUNDED BY UNDERGRADUATES

- **Walsh & Winkler:** 2018 3rd place Texas Academy of Sciences Research Award (**Funded for \$1000**)
- **Granier:** 2017 2nd place Texas Academy of Sciences Research Award (**Funded for \$1500**)
- **Bishop:** 2016 Sigma Xi Grants-in-Aid (**\$500 awarded**)
- **Beeman:** 2015 Sigma Xi Grants-in-Aid (**\$400 awarded; \$285 returned; project did not materialize**)

RECENT (LAST 5 YEARS) EXTERNAL AWARDS EARNED BY UNDERGRADUATES

- **2020:** Lauren Muskara (**\$250**), Kaitlin Galassini (**\$150**), and Esther Nyaberi (**\$50**), Best undergraduate presentations, Texas Conservation Symposium, Georgetown, TX
- **2017:** Madison Granier '19, Best Oral Presentation in Section; University of Texas Molecular Biosciences
- **2017:** Sofia Campos '16, 2nd Best Poster Overall; Best Poster Presentation in Systematics and Evolution Section; Texas Academy of Sciences; \$200 presented

- **2017: Madison Granier '19**, Best Oral Presentation in Conservation Ecology Section; Texas Academy of Sciences; \$50 presented
- **2017: Carissa Bishop '17**, Best Oral Presentation in Freshwater Ecology Section; Texas Academy of Sciences; \$50 presented
- **2017: Carissa Bishop '17, Sofia Campos '16, Shannon Walsh '18 and Hugo Cepeda '18**, Undergraduate Poster Award in Science Education Section; Texas Academy of Sciences; \$50 presented
- **2016: Carissa Bishop '17**, Best Poster Presentation in Freshwater Ecology Section; Texas Academy of Sciences; \$50 presented
- **2016: Victoria Gamboa '19** (undergraduate at UTRGV), Best Poster Presentation in Systematics and Evolutionary Biology Section; Texas Academy of Sciences; \$50 presented
- **2015: Carson Savrick '15**, Best Oral Presentation in Freshwater Ecology Section; Texas Academy of Sciences; \$50 presented
- **2015: Averi Segrest '16**, Travel Grant (\$785) to Society for Freshwater Science as part of Instars Program.

COURSES TAUGHT AT SOUTHWESTERN (in approximate frequency taught)

- Biology Capstone – Biodiversity (2020); Invasion (2018)
- The Science of Chocolate (May Term)
- Paideia Seminar – The Anthropocene (team-taught; M. Johnson)
- Conservation Biology (Spring)
- Biodiversity (Every Fall; 36+ sections); Now Living Systems
- Methods in Ecology and Evolution (Every Spring)
- Ecology (alternate Spring; sections – see syllabus links on webpage or below)
 - Burks, R. L. 2012. Campus Ecology at Southwestern University
 - <http://ecoed.esa.org/index.php?P=FullRecord&ID=438>
- First Year Seminar: Dark Chocolate: Science and Culture (Fall when possible)
- Invertebrate Ecology/Biology (Every other Spring)
- Introduction to Animal Behavior
- Writing About Science (May Term 2012)
- Wetland Ecology and Policy (cross-listed with Environmental Studies)

Taught but now rotated out of sequence:

- Paideia Seminar (6 semesters)
- Senior Seminar: Aquatic Invasive Species
- Environmental Science (POK)
- First Year Seminar Wet N' Wild: Wetland Science in a Changing Landscape

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, Uruguay.
- **R. L. Burks.** November 2008. If every species is a magic well, how do we get to the bottom of biodiversity issues in shallow lakes. Tutorial: Invasive Species and Diversity. 2008 International Shallow Lakes Meeting, Punta del Este, Uruguay.
- **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.

EXAMPLE NATIONAL OR INTERNATIONAL CONFERENCE PRESENTATIONS – LAST 3 YEARS

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.,** Muskara, L. E.*, S. E. Miller*, K. Galassini*, E. Nyaberi*, and M.A. Barnes. December 2019. Genetic ABCs – COI to eDNA: Using barcoding Ids to develop application for species detections of nonnative apple snails from water

- samples. Oral presentation. Triennial (3rd) Congress of the Argentinean Malacological Society. Bahia Blanca, Argentina.
- Muskara, L. E.*, S. E. Miller*, M. A. Barnes, and **R. L. Burks**. May 2019. A snail out of water: Hitting the target on primer optimization for apple snails. Poster Presentation, Society for Freshwater Science, Salt Lake City, UT.
 - **Burks, R. L.** August 2018. Wait, wait, don't leave me: How to maintain research productivity with undergraduates after they graduates. Special Session: Students as Ecologists. INSPIRE Talk, Ecological Society of America, New Orleans. LA.
 - **Burks, R. L.**, S. R. Campos*, P. M. Glasheen*, C. A. Bishop*, A. H. Segrest*, C. Calvo, M. Meerhoff, F. Scarabino, A. E. Röhrdanz, C. Clavijo and K. A. Hayes. 2017. Overlapping and overlooked: *Pomacea* species distribution, diversity and hybridization in Uruguay. Ampullariidae Symposium, XCLAMA 10th meeting de la Asociación Latinoamericana de Malacología (ALM). Piriapolis, UR.
 - Meerhoff, M., C. Clavo and **R. L. Burks**. 2017. Moluscos en aguas calientes: cómo el Cambio Climático puede afectar a los moluscos y qué sabemos ya. *Pomacea* species distribution, diversity and hybridization in Uruguay. Ampullariidae Symposium, XCLAMA 10th meeting de la Asociación Latinoamericana de Malacología (ALM). Piriapolis, UR.
 - Clavo, C., R. L. Burks and M. Meerhoff. 2017. Desempeño de *P. canaliculata* frente a distintos escenarios ambientales: una aproximación experimental. *Pomacea* species distribution, diversity and hybridization in Uruguay. Ampullariidae Symposium, XCLAMA 10th meeting de la Asociación Latinoamericana de Malacología (ALM). Piriapolis, UR.
 - **Burks, R. L.** June 2017. Putting your lab classes (and resources) to work for you: An example of a molecular ecology course research module. Special Session: Scholarship of Teaching and Learning in Freshwater Science. Society for Freshwater Science, Raleigh, NC.

Category 2: CONTRIBUTED PAPERS AT NATIONAL OR REGIONAL CONFERENCE – LAST 3 YEARS

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

- **Burks, R. L.** 2020. Looking at and beyond the horizon: Studying non-native apple snails in Texas and diversity across the globe. Oral Presentation. Texas Conservation Symposium, Georgetown, TX.
- Muskara, L. M.*, S. Miller*, **R. L. Burks** and M. A. Barnes. 2020. Indicating invasion with eDNA: Detecting apple snails along Oyster Creek. Oral Presentation. Texas Conservation Symposium, Georgetown, TX.
- Galassini, K., E. Nyaberi*, **R. L. Burks** and M. A. Barnes. 2020. Old school or new school: Comparing the efficiency of eDNA sampling by hand and with the ANDe™ eDNA backpack. Texas Conservation Symposium, Georgetown, TX.
- Nyaberi, E.*, K. Galassini* **R. L. Burks** and M. A. Barnes. 2020. Effect of the degradation of eDNA in the presence of microplastics. Texas Conservation Symposium, Georgetown, TX.

Previous:

- Winkler, H.*, N. Kelly*, S. Odell*, S. Walsh*, **R. L. Burks** and R. L. Minton. 2019. Unraveling the mystery: Genetic identification of nonnative Asian Mysterysnails, *Cipangopaludina chinensis* and *C. japonica*. Oral Presentation, Texas Academy of Science, Freshwater Science, Howard Payne University, Brownwood, TX.
- Muskara, L. E.*, S. E. Miller*, M. A. Barnes, and **R. L. Burks**. 2019. A snail out of water: Apple snail detection along Oyster Creek (Missouri City/Sugar Land, TX). Oral Presentation, Texas Academy of Science, Freshwater Science, Howard Payne University, Brownwood, TX.
- Kelly, N.*, S. Odell*, H. Winkler*, S. Walsh*, **R. L. Burks** and R. L. Minton. 2019. Highway to shell: Troubleshooting methods of genetic detection and identification in two invasive species, *Cipangopaludina chinensis* and *C. japonica*. Poster Presentation, Texas Academy of Science, Freshwater Science, Howard Payne University, Brownwood, TX.
- Miller, S. E.*, L. E. Muskara*, M. A. Barnes, and **R. L. Burks**. 2019. Bullseye! Hitting the target on primer optimization. Poster Presentation, Texas Academy of Science, Freshwater Science, Howard Payne University, Brownwood, TX.
- Granier, M., M. A. Barnes and **R. L. Burks**. 2018. Following the curve: Environmental DNA accumulation and degradation rates using apple snails. Oral Presentation, Texas Academy of Science, Freshwater Science, Midland College, Midland, TX.
- Walsh, S., and **R. L. Burks**. 2018. Unraveling the mystery: Species determination and distribution patterns of two Asian mystery snail species (*Cipangopaludina japonica* and *C. chinensis*). Oral Presentation, Texas Academy of Science, Freshwater Science, Midland College, Midland, TX.
- Perez, K. P., V. G. Gamboa, C. M. Schneider* and **R. L. Burks**. 2017. Abandoned but not forgotten: Resaca supports invasive apple snails (*Pomacea maculata*, Perry, 1810; Caenogastropoda: Ampullariidae) within the Rio Grande Valley, Texas. Platform presentation. Freshwater Mollusk Conservation Society, Cleveland, OH.
- Bishop, C. A.* and **R. L. Burks**. 2017. Applying Band-Aids: Challenges associated with molecular detection of *Angiostrongylus cantonensis* infection within Uruguayan and Brazilian apple snails. Oral Presentation, Texas Academy of Science, Freshwater Science, University of Mary Hardin Baylor, Belton, TX.
- Bishop, C. A.*, S. R. Campos*, S. Walsh*, H. Cepada* and **R. L. Burks**. 2017. Innovating molecular art: Communicating

the true cost of science through repurposed materials. Poster Presentation, Texas Academy of Science, Science Education, University of Mary Hardin Baylor, Belton, TX.

- Campos, S. R.*, C. Clavo, M. Meerhoff, K. A. Hayes and **R. L. Burks**. 2017. Cryptic yet curiously common: Population genetic structure and diversity of a cryptic *Pomacea* sp. and its better known congeneric *P. canaliculata*. Poster Presentation, Texas Academy of Science, Systematics and Evolution, University of Mary Hardin Baylor, Belton, TX.
- Granier, M., M. A. Barnes and **R. L. Burks**. 2017. Snail slime in real time: qPCR detection of environmental DNA using apple snails. Oral Presentation, Texas Academy of Science, Conservation Biology, University of Mary Hardin Baylor, Belton, TX.

OTHER INVITED LECTURES AND PRESENTATIONS – LAST 5 YEARS

- ▲ **Burks, R. L.** Cacao Biodiversity 101. Northwest Chocolate Festival. November 2019.
- ▲ **Burks, R.L.** Worth every pound? Why to invest in Fine Chocolate. Corinthia Hotel, London, and Brighton Chocolate Festival, United Kingdom. October 2019.
- ▲ **Burks, R. L.** Is there a genetically engineered future for chocolate?. Northwest Chocolate Festival. Nov. 2018.
- ▲ **Burks, R. L.** Delicious Science. New England Chocolate Festival. October 2018.
- ▲ **Burks, R. L.** The Future of Chocolate. Dallas Chocolate Festival. September 2018..
- ▲ **Burks, R. L.** Tackling the chocolate wall. Dallas Chocolate Festival. September 2017.
- ▲ **Burks, R. L.** Fermentology and Chocolate with SRSly Chocolate. The Thinkery. February 2017.
- ▲ **Burks, R. L.** Origins, Artisans and Special Beans: Trends in the US Bean. Midland Country Club. September 2016.
- ▲ **Burks, R. L.** The Academic Side of Chocolate. University of Houston Clear Lake. April 2016.
- ▲ **Burks, R. L.** Liberally Applied Chocolate: Arts & Science. Northwest Chocolate Festival, Seattle. October 2015.
- ▲ **Burks, R. L.** Revenge of the Chocolate Nerds. Dallas Chocolate Conference. September 2015.
- ▲ **Burks, R. L.** The science of chocolate. Art.Science.Gallery. February 2015.

UNIVERSITY SERVICE:

2017 – current	Biology Department Chairperson
2017 – current	Sustainability Committee (Chair in 2019-2020)
2015 – current	Institutional Animal Care and Use Committee
2010 – current	Environmental Studies Committee (2012-2017 Co-Chair)
2002 – current	<i>Phi Beta Kappa</i> Committee, 2010-2011 President

Previous:

2018	Search, Sustainability Coordinator 2012 – 2015	Library Committee
2016	Internal Budget Review Task Force	
2013 – 2017?	Civic Engagement Advisory Board	
2012 – 2014?	Gender Equity Task Force	
2011 – 2013	Internal Awards Committee	
Fall 2011	Homecoming: Classes without Quizzes	
2010, 2011	Search Committee Member, Environmental Studies Tenure-Track position	
2009	Search Committee Member, Environmental Studies ACS/Mellon Postdoc	
Jan 2008	Road Scholar, San Antonio	
Nov 2007	Homecoming Lecture: The Wonders of Chocolate for Development Event	
2007 - 2009	Budget Advisory Committee	
2007	Search Committee Mathematics, Outside Member	
2006 - 2009	Natural Sciences Division Secretary	
2006 - 2007	Integrated Marketing and Advisory Board	
2005 - 2007	Cullen Faculty Development Committee	
2005 - 2008	Intercultural Perspective Committee	
2004 – 2014	Animal Behavior Committee	
2002 - 2006	Environmental Studies Program Committee (completed 5-year review)	

DEPARTMENTAL SERVICE - Southwestern University

- Webmaster for Department sites
- Creator and Publisher of *BioScope*, Biology Department newsletter (29 issues as of 12/19)
 - Links: <http://www.southwestern.edu/live/files/5570-bioscopefall16-082316lpdf>

COMMUNITY SERVICE

- SMARTeams Outreach Program, Georgetown (Spring 2007 -present)
- Organized Fleming Science Lecture – November 2013
- Friends of the Fine Arts, Lecture – Four scientific reasons why we love chocolate (2/14/13)
- Free School, Chocolate 101
- Biology Alumni Advisory Board, Loyola University Chicago (November 2007 – present)
- Professional Mentor for Meg Fencil, 5th yr graduate student from UT Marine Science Institute (07/2007-05/2008)
- Question & Answer Session, Liberal Phrases: Language lessons from life on the tenure track at a small liberal arts college (Oct. 2006, University of Notre Dame)
- Guest lecture on Biodiversity and Texas, Houston-Tillotsen (Oct. 2005)
- DIALOG Panel, Careers within and beyond Academia, Salt Lake City, Utah (Feb. 2005)
- Member, Biology Action Team, Williamson County, TX (appointed Spring 2005)
- Mentor, Georgetown High School Senior Capstone (Spring 2004)
- Panelist, How to Land an Academic Job, University of Texas, August 2003
- Results Analyst, Information Fluency Survey for General Biology Curriculum, Summer 2002,
 - Associated Colleges of the South Grant (PI = G. Lindquister)

EDITORIAL RESPONSIBILITIES:

- 2012 – current, *Freshwater Biology* (Editorial Board)
- 2010 – 2017, *The American Midland Naturalist* (Associate Editor)

PROFESSIONAL MEMBERSHIPS

- 2017 – present, Freshwater Mollusk Conservation Society
- 2013 – present, American Association of University Professors (AAUP), member
- 2009 – present, *American Association for the Advancement of Science*, member
- 2005 – present, *Sigma Xi* Research Society, elected member
- 2004 – present, Texas Academy of Sciences member
 - 2012, Past-President
 - 2011, President
 - 2010, President-Elect
 - 2009, Vice President
 - 2007, Chair for Marine and Freshwater Section
 - 2006, Vice-Chairperson for Marine and Freshwater Ecology Section
- 1997 – present, Ecological Society of America (ESA) member
 - 2010-2011, RUI Section Chair
- 1992 – present, Society for Freshwater Science (formerly NABS) member:
 - Mentor for graduate students
 - 2006, Appointed Sponsorship Committee (2007-2009 Chair)
 - 2002, International Profile Committee
 - 2001, Organized Student Presentation Judging
 - 2001-present, Student Presentation Judge (orals and posters)
 - 1999, Appointed member of the NABS Long-Range Planning Committee
 - 1998 – 1999 Chairperson, NABS Graduate Resources Committee (GRC)
 - 1996 – 1997 NABS Endowment Festivities Coordinator

- 1996 Co-founder, NABS GRC to address student concerns, 3 year member
- 2004 – 2007, National Association of Biology Teachers member
- 1997 – 2008, American Society of Limnology and Oceanography:
 - 2005-2007, Meetings Committee
 - 2001-present, Student Poster Judge
 - 1997 – 1999 ASLO Endowment Committee Member
- 2002 – 2004, American Institute of Biological Sciences member
- 2001 – 2003, Council for Undergraduate Research (CUR) member
- 2001 – 2003, Tennessee Academy of Sciences (TAS) member
- 1999 – 2003, Association of Women in Science (AWIS) member
- 1999 – 2002, American Scandinavian Foundation (ASF) member
- 1999 – 2002, Fulbright Alumni Association member

REVIEWER ACTIVITIES (JOURNALS)- *Acta Oecologia, Animal Behaviour, Annals of Applied Biology (new), Aquatic Botany, Aquaculture, Aquatic Invasions, Biological Invasions, Bioinvasion Records, Biological Bulletin, BioScience, Diversity and Distributions, Fresenius Environmental Bulletin, Archiv für Hydrobiologia, Canadian Journal of Fisheries and Aquatic Sciences, CUR Quarterly, Ecology, Ecological Research, Ethology, Freshwater Biology, Frontiers in Ecology and Evolution, Functional Ecology, Hydrobiologia, Invertebrate Reproduction and Development, Journal of Chemical Ecology, Journal of Ecology, Journal of Ethology, Journal of Herpetology, Journal of Experimental Marine Biology and Ecology, Journal of Experimental Agriculture, Journal of Limnology (new), Journal of the North American Benthological Society/Journal of Freshwater Science, Journal of Pest Management (new), Limnetica, Limnology and Oceanography, Malacologia, Marine & Freshwater Research, PeerJ, PLOS One, Scientific Reports, Southeastern Naturalist, Studies on Neotropical Fauna and Environmental, Tropical Biology, Turkish Journal of Zoology, Wetlands*

REVIEWER ACTIVITIES (GRANTS)-*Ecology Program, National Science Foundation, Estonia Research Foundation, and US Fish and Wildlife Service, Polish Research Service (new); PEDAGOGICAL - John Wiley & Son, Current Contents, Pearson (Campus Ecology), Sinauer Publishing (Cain's Ecology), ETS, McGraw Hill (Brooker's Biology); PUBLISHING COMPANIES: University of Chicago Press*

REPRESENTATIVE MEDIA COVERAGE – General Publicity: Who's Who at Southwestern:

<http://www.southwestern.edu/whoswho-archive/0507fac.html> and [12/05](#)

Teaching:

- 02/14/2019: Bloomberg News - <https://www.bloomberg.com/news/audio/2018-02-14/bloomberg-markets-burks-on-wonders-of-chocolate>
- 07/16/2014: SU Students study chocolate – *Williamson County Sun*
- 08/15/2014: Twitter as a Teaching Tool
 - <http://www.southwestern.edu/live/news/9845-twitter-as-a-teaching-tool>
- 05/29/2012: Experiment with Science Writing
 - <http://www.southwestern.edu/live/news/6853-experimenting-with-science-writing>
- 06/15/2011: Insects on the Menu (about entomophagy in Invertebrate Ecology course)
 - <http://southwestern.edu/live/news/5281-insects-on-the-menu>
- 09/16/2010: Snacking on Homework (about using microwave popcorn to teach statistics)
 - <http://www.southwestern.edu/newsroom/story.php?type=news&id=3233>
- 11/22/08: SU Website: Thanksgiving in Uruguay (about research trip to South America)
 - <http://www.southwestern.edu/newsroom/story.php?id=431>
- 09/22/08: Fox 7 News Austin: Sweetest subject in the world (about FYS chocolate course)
 - <http://www.myfoxaustin.com/myfox/pages/Home/Detail;jsessionid=24626082306F4770C64C58B92DFC4FD1?contentId=7483726&version=1&locale=EN-US&layoutCode=VSTY&pageId=1.1.1&sflg=1>
- 08/01/08: AAAS Story about BEN Scholars
 - <http://www.aaas.org/news/releases/2008/073oben.shtml>
- 07/09/08: BEN Scholar Bio:
 - <http://www.biosciencednet.org/portal/about/benScholarsBios2008.php>

- 07/02/07 SU Website: Biology professor selected to participate in national program:
 - <http://www.southwestern.edu/cgi-bin/newsroom/article.cgi?id=92>
- 12/06/07: SU Website: Class uses chocolate to help students learn about topics from advertising to evolution:
 - <http://www.southwestern.edu/cgi-bin/newsroom/article.cgi?id=55>
- 12/30/07: *The Houston Chronicle*: "A course that's coated in chocolate"
 - <http://www.chron.com/dispatch/story.mpl/metropolitan/5410714.html>
 - Also carried by *The Austin American Statesman* as "Southwestern professor finds a calling in chocolate."
- 2/14/08: New 8 Austin: Professor shares chocolate and knowledge
 - http://www.news8austin.com/content/your_news_your_neighbors/default.asp?ArID=200541
- 3/21/08: *The Chronicle of Higher Education – Syllabus*: In This Course, the Main Dish is Chocolate
 - <http://chronicle.com/temp/email2.php?id=jHW2SFhy6CmgDYynM2KWZvgv5vw3Bmwb>
- 4/14/08: Professor to cook up chocolate standard for education
 - http://www.mywesttexas.com/articles/2008/04/14/news/top_stories/education_foundation_sunday.prt

Research:

- February 2014: Environmental Studies Scholar Profile
 - <http://www.southwestern.edu/live/news/8962-dr-romi-l-burks>
- November 2013: International researchers
 - <http://www.southwestern.edu/live/news/8789-international-researchers>
 - Gallery: <http://www.southwestern.edu/live/galleries/656-international-researchers>
- June 2013: Alex Hill of Wichita Falls Conducting Biological Research at Southwestern
 - <http://readme.readmedia.com/Alex-Hill-of-Wichita-Falls-Conducting-Biology-Research-at-Southwestern-University-this-Summer/6758598>
- February 2013: Southwestern University Students, Faculty Members Presenting at TAS
 - <http://www.southwestern.edu/live/news/7771-southwestern-students-faculty-members-presenting>
- January 2012: Research that Hits Home
 - <http://www.southwestern.edu/live/news/6414-research-that-hits-home>
- September 2011: Southwestern Professor Receives \$72,000 National Science Foundation Grant
 - <http://www.southwestern.edu/live/news/5684-southwestern-professor-receives-72000-national>
- March 2011: Student Spotlight: Allyson Plantz
 - "SU sophomore on the trail of an elusive snail" *The Williamson County Sun*, 03/09/11
- March 2011: Finding Art in Biology (Profile of Research Student, Allyson Plantz)
 - <http://www.southwestern.edu/live/news/4501-finding-art-in-biology>
- November 2010: Biology Professor Receives National Science Foundation Grant
 - <http://www.southwestern.edu/live/news/3571-biology-professor-receives-national-science>
- November 2009: Lab students awarded creativity grant
 - <http://www.southwestern.edu/newsroom/story.php?id=1736>
- February 2009: Highlighted on new blog about apple snails
 - <http://snailbusters.wordpress.com/2009/03/04/collaborative-research-with-students/>
- May and December 2006, Filmed for Texas Parks and Wildlife show;
 - Documentary premiering on TV show March 9th 2008
 - See segment at: <http://www.southwestern.edu/~burksr/test/research/>
- 01/18/06: *The Williamson County Sun*; "Sizable snails lure SU Prof, student to Uruguay"
- Southwestern University Student, Professor To Spend Holidays Conducting Research In Uruguay
 - <http://www.southwestern.edu/newsroom/news/051205.html>

Outreach:

- 10/03/19: "Romi Burks, Ms. Homecoming 2019"
 - <https://www.southwestern.edu/live/news/13611-romi-burks-ms-homecoming-2019>
- 11/18/17: "SMARteams celebrates its 20th semester at Southwestern"
 - <http://www.southwestern.edu/live/news/11621-smartteams-celebrates-its-20th-semester-at/academics/news.php>
- 06/17/12: "Georgetown-Based Foundation Endows Math and Science Mentoring Program"
 - <http://www.southwestern.edu/live/news/6894-georgetownbased-foundation-endows-math-and-science>
- 04/01/09: SU Webpage "Thinking SMARt"
 - <http://www.southwestern.edu/newsroom/story.php?id=1082>
- 04/26/07: *The Williamson County Sun*, "Results of Pairings: No Doubt, they're SMARt"