

October 2020

**Charles R. Randklev**

Research Scientist

Texas A&M Natural Resources Institute

Texas A&M AgriLife Research and Extension Center at Dallas

17360 Coit Rd, Dallas, TX 75252

Phone: 817-966-3235

Email: [crandklev@ag.tamu.edu](mailto:crandklev@ag.tamu.edu)

Center website: <https://dallas.tamu.edu/research/mussels/>

Lab website - <http://www.tamumussels.com>

**EXECUTIVE SUMMARY**

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Principal investigator for the Texas A&M Natural Resources Institute Aquatic Research Lab. Primary research is focused on understanding how endangered species are impacted by human activities. Recent research centers on freshwater unionid mussels, which are globally imperiled, to determine how they respond to changes in water quality and quantity with the goal of providing guidance to support their ecological needs and those of humans. Has 10 years of experience managing a large research lab comprised of students and staff, the latter includes research assistants and postdoctoral researchers, and have been successful in this effort (41 publications and ~\$4 million in external funding). Has experience in working with federal, state and non-profit stakeholders to inform legislative conservation actions and support conservation efforts.

**EDUCATION**

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2006-2011	<b>Ph.D.</b> , Biology, University of North Texas, Denton, Texas Dissertation: <i>The Ecology and Paleobiogeography of Freshwater Mussels (Family Unionidae) within selected Texas Rivers</i>
2002-2005	<b>B.S.</b> , Biology, The University of Texas at Arlington, Arlington, Texas

## **PROFESSIONAL EXPERIENCE**

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- 2012-present      **Research Scientist**, Natural Resources Institute, Texas  
A&M University, College Station, Texas
- 2018-present      **Adjunct Faculty**, Department of Wildlife & Fisheries, Texas  
A&M University, College Station, Texas.
- 2011-2012        **Research Associate**, Natural Resources Institute, Texas  
A&M University, College Station, Texas

## **RESEARCH AREAS**

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General: Population and Community Ecology; Aquatic Ecology; Conservation Biology; Restoration Ecology; Landscape Modeling

Specific: Population Monitoring and Status Assessments; Regulation of Populations and Community Structure; Environmental Flow Analyses; Physiological Testing to Determine Water Quality Tolerances; Life History Theory; Biodiversity and Conservation

## **PUBLICATIONS, PEER REVIEWED (\*indicates mentored student or staff)**

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41. **Randklev, C.R.**, S. Wolverson, N. Johnson, T. Popejoy, C.H. Smith, T.P. DuBose, C.R. Robertson, and J. Conley. The utility of zooarchaeological data to guide listing efforts for an imperiled mussel species (Bivalvia: Unionidae): *Pleurobema riddellii*. *Conservation Science and Practice*, forthcoming.
40. Khan, J.\* , J. Dudding, M. Hart, E. Tsakiris, and **C.R. Randklev**. Linking life history strategies and historical baseline information shows effects of altered flow regimes and impoundments on freshwater mussel assemblages. *Freshwater Biology*, forthcoming.
39. Inoue, K.\* , K. Cummings, J. Tiemann, T. Miller, and **C.R. Randklev**. A new species of *Popenaias*, Frierson, 1927, from the Gulf Coastal drainages of central Mexico (Bivalvia: Unionidae). *Zootaxa*, forthcoming.
38. Smith, C.\* , N. Johnson, K. Havlik, R. Doyle, and **C.R. Randklev**. Resolving species boundaries in the critically imperiled freshwater mussel species, *Fusconaia mitchelli* (Bivalvia: Unionidae). *Journal of Zoological Systematics and Evolutionary Research*, forthcoming.

37. Khan, J.\*, J. Dudding, M. Hart, C.R. Robertson, R. Lopez, and **C.R. Randklev**. Upper thermal limits of freshwater mussels (Bivalvia: Unionidae) from the Guadalupe River, Texas: linking flow and thermal tolerances of freshwater mussel species from the southwestern United States. *Freshwater Biology*, forthcoming.
36. Tiemann, J.S., K. Inoue, J.A. Rodriguez-Pineda, M. Hart, K.S. Cummings, and **C.R. Randklev**. Status of freshwater mussels (Unionidae) of the Rio Conchos Basin, Chihuahua, Mexico. *Southwestern Association of Naturalists*, forthcoming.
35. Dudding, J. \*, M. Hart, J. Khan, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2020. Reproductive life history of two imperiled and one widely distributed freshwater mussel species from the southwestern United States: *Cyclonaias necki* (Guadalupe Orb), *Fusconaia mitchelli* (False Spike), and *Cyclonaias pustulosa* (Pimpleback). *Freshwater Science* 39: 156-168.
34. Inoue, K. \*, J.L. Harris, C.R. Robertson, N.A. Johnson, and **C.R. Randklev**. 2020. A comprehensive approach uncovers hidden diversity in freshwater mussels (Bivalvia: Unionidae) with the description of a novel species. *Cladistics* 36: 88-113.
33. **Randklev, C.R.**, M.A. Hart, J. Khan, E.T. Tsakiris, and C.R. Robertson. 2019. Hydraulic requirements of freshwater mussels (Unionidae): two case studies from the Brazos and Trinity rivers of the Western Gulf Coastal Plain region of south-central USA. *Ecosphere*, DOI: 10.1002/ecs2.2975.
32. Smith, C.H. \*, N.A. Johnson, K. Inoue, R.A. Doyle, and **C.R. Randklev**. 2019. Integrative taxonomy reveals cryptic speciation in freshwater mussels (Bivalvia: Unionidae: *Potamilus*). *Systematics and Biodiversity*, DOI: 10.1080/14772000.2019.1607615.
31. Khan, J. \*, M. Hart, J. Dudding, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2019. Evaluating the upper thermal limits of glochidia for select freshwater mussels species (Bivalvia: Unionidae) in central and east Texas and the implications for their conservation. *Aquatic Conservation: Marine and Freshwater Ecosystems* 8: 1202-1215.
30. Dudding, J. \*, M. Hart, J. Khan, C.R. Robertson, R. Lopez, and **C.R. Randklev**. 2019. Host fish association of two highly imperiled mussel species from the southwestern United States: *Cyclonaias necki* (Guadalupe Orb) and *Fusconaia mitchelli* (False Spike). *Freshwater Mollusk Biology and Conservation* 22: 12-19.

29. Hart, M.A.\*, T.D. Miller, and **C.R. Randklev**. 2019. Salinity tolerance of a rare and endangered unionid mussel, *Popenaias popeii* (Texas Hornshell) and its implications for conservation and water management. *Ecotoxicology and Environmental Safety* 170: 1-8.
28. **Randklev, C.R.**, E.T. Tsakiris, M.S. Johnson, T. Popejoy, M.A. Hart, J. Khan, D. Geeslin, and C.R. Robertson. 2018. The effect of dewatering on freshwater mussel (Unionidae) community structure and the implications for conservation and water policy: A case study from a spring-fed stream in the Southwestern United States. *Global Ecology and Conservation*, DOI: 10.1016/j.gecco.2018.e00456.
27. Johnson, N.A., C.H. Smith, J.M. Pfeiffer, **C.R. Randklev**, J.D. Williams, and J.D. Austin. 2018. Integrative taxonomy resolves taxonomic uncertainty for freshwater mussels being considered for protection under the U.S. Endangered Species Act. *Scientific Reports*, DOI:10.1038/s41598-018-33806-z.
26. Popejoy, T.\*, **C.R. Randklev**, T. Neeson, and C. Vaughn. 2018. Prioritizing sites for conservation based on similarity to historical baselines and feasibility of protection. *Conservation Biology* 32: 1118-1127.
25. Pieri, A.M.\*, K. Inoue, N.A. Johnson, C. Smith, J.L. Harris, C.R. Robertson, and **C.R. Randklev**. 2018. Molecular and morphometric analyses reveal cryptic diversity within freshwater mussels (Bivalvia: Unionidae) of the western Gulf coastal drainages of the United States. *Biological Journal of the Linnean Society* 124: 261-277.
24. Hess, M.C.\*, K. Inoue, E. Tsakiris, M. Hart, J. Morton, J. Dudding, C. Robertson, and **C.R. Randklev**. 2018. Misidentification rates of sex for *Lampsilis teres*, yellow sandshell, and its implications for mussel conservation. *PLOS ONE*, <https://doi.org/10.1371/journal.pone.0197107>.
23. **Randklev, C.R.**, T. Miller, M. Hart, J. Morton, N.A. Johnson, K. Skow, K. Inoue, E.T. Tsakiris, S. Oetker, R. Smith, C. Robertson, and R. Lopez. 2018. A semi-arid river in distress: contributing factors and recovery solutions for three imperiled freshwater mussels (Family Unionidae) endemic to the Rio Grande Basin in North America. *STOTEN* 631-632: 733-744.
22. Inoue, K.\*, D.M. Hayes, J.L. Harris, N.A. Johnson, C.L. Morrison, M.S. Eackles, T.M. King, J.W. Jones, E.M. Hallerman, A.D. Christian, and **C.R. Randklev**. 2018. The Pleurobemini (Bivalvia: Unionida) revisited: molecular species delineation using a mitochondrial DNA gene reveals multiple conspecifics and undescribed species. *Invertebrate Systematics* 32: 689-702.

21. Popejoy, T.\*, S. Wolverton, L. Nagaoka, and **C.R. Randklev**. 2018. An interpretive framework for assessing freshwater mussel taxonomic abundances in zooarchaeological faunas. *Quaternary International* 427: 36-46.
20. Tsakiris, E.T.\*, **C.R. Randklev**, A. Blair, M. Fisher, and K. Conway. 2017. Effects of translocation on survival and growth of freshwater mussels within a West Gulf Coastal Plain river system. *Aquatic Conservation: Marine and Freshwater Ecosystems* 27: 1240-1250.
19. Wolverton, S., and **C.R. Randklev**. 2016. Archaeological data indicate a broader late Holocene distribution of the sandbank pocketbook (Unionidae: *Lampsilis satura*, Lea 1852) in Texas. *American Malacological Bulletin* 34: 133-137.
18. Tsakiris, E.T.\*, **C.R. Randklev**, K.W. Conway. 2016. Effectiveness of a nonlethal method to quantify gamete production in freshwater mussels. *Freshwater Science* 35: 958-973.
17. Tsakiris, E.T.\*, and **C.R. Randklev**. 2016. Structural changes in freshwater mussel (Bivalve: Unionidae) assemblages downstream of Lake Somerville, Texas. *American Midland Naturalist* 175: 120-127.
16. Pfeiffer, J.M., N.A. Johnson, **C.R. Randklev**, R.G. Howells, and J.D. Williams. 2016. Generic reclassification and species boundaries in the rediscovered freshwater mussel *Fusconaia mitchelli* (Simpson in Dall, 1896). *Conservation Genetics* 17: 279-292.
15. **Randklev, C.R.**, N. Ford, S. Wolverton, J.H. Kennedy, C.R. Robertson, K. Mayes, and D. Ford. 2016. The Influence of stream discontinuity and life history strategy on mussel community structure: a case study from the Sabine River, Texas. *Hydrobiologia* 770: 173-191.
14. **Randklev, C.R.**, H.H. Wang, J.E. Groce, W.E. Grant, S. Robertson, and R.N. Wilkins. 2015. Land use relationships for a rare freshwater mussels species (Family: Unionidae) endemic to central Texas. *Journal of Fish and Wildlife Management* 6: 327-337.
13. Sowards, B.\*, E.T. Tsakiris, M. Libson, and **C.R. Randklev**. 2013. Recent collection of a false spike (*Quadrula mitchelli*) in the San Saba River, Texas, with comments on habitat use. *Walkerana* 16: 63-67.
12. **Randklev, C.R.**, J. Skorupski, B.J. Lundeen, and E.T. Tsakiris. 2013. New distributional records for four rare freshwater mussel species (Family: Unionidae) in southwestern Louisiana. *The Southwestern Naturalist* 58: 268-273.

11. **Randklev, C.R.**, E.T. Tsakiris, M.S. Johnson, J. Skorupski, L.E. Burlakova , J. Groce, and N. Wilkins. 2013. Is False Spike, *Quadrula mitchelli* (Bivalvia: Unionidae), extinct? First account of a very-recently deceased individual in over thirty years. *The Southwestern Naturalist* 58: 247-259.
10. **Randklev, C.R.**, M.S. Johnson, E.T. Tsakiris, J. Groce, and N. Wilkins. 2013. Status of the freshwater mussel (Family: Unionidae) fauna in the mainstem of the Leon River, Texas. *Aquatic Conservation: Marine and Freshwater Ecosystems* 23: 390-404.
9. Johnson, M.S.\*, P.D. Caccavale, **C.R. Randklev**, and J.R. Gibson. 2012. New and confirmed fish hosts for the threatened freshwater mussel *Lampsilis bracteata* (Gould, 1855), the Texas fatmucket. *The Nautilus* 126: 148-149.
8. **Randklev, C.R.**, and B. Lundeen. 2012. Prehistoric Biogeography and Conservation Status of Threatened Freshwater Mussels (Mollusca: Unionidae) in the Upper Trinity River Drainage, Texas. In *Conservation Biology and Applied Zooarchaeology*, edited by S. Wolverton and R.L. Lyman, pp. 68-91. The University Of Arizona Press, Tucson.
7. Peacock, E., **C.R. Randklev**, S. Wolverton, R.A. Palmer, and S. Zaleski. 2012. Innocence before Guilt: The 'Cultural Filter' and the Applied Potential of Zooarchaeological Data. *Ecological Applications* 22: 1446-1459.
6. **Randklev, C.R.**, M.S. Johnson, E.T. Tsakiris, S. Rogers-Oetker, K.J. Roe, S. McMurray, C. Robertson, J. Groce, and N. Wilkins. 2012. False Spike, *Quadrula mitchelli* (Bivalvia: Unionidae) is not extinct: first account of a live population in over 30 years. *American Malacological Bulletin* 30: 327-328.
5. Wolverton, S., **C.R. Randklev**, and A. Barker. 2011. Ethnobiology as a Bridge between Science and Ethics: An Applied Paleozoological Perspective. Pages 115-132 in *Ethnobiology*. E. Anderson, editor. Wiley-Blackwell.
4. **Randklev, C.R.**, S. Wolverton, B.J. Lundeen, and J.H. Kennedy. 2010. A paleozoological perspective on unionid (Mollusca: Unionidae) zoogeography in the upper Trinity River basin. *Ecological Applications* 20: 2359-2368.
3. **Randklev, C.R.**, B.J. Lundeen, R.G. Howells, and J.H. Kennedy. 2010. Habitat preference and first account of a living population of Texas Fawnsfoot, *Truncilla macrodon* (Bivalvia: Unionidae) [I. Lea, 1859] in the Brazos River. *The Southwestern Naturalist* 55: 297-298.
2. Wolverton, S., **C.R. Randklev**, and J.H. Kennedy. 2010. A conceptual model for freshwater shellfish (family: Unionidae) remain preservation in zooarchaeological assemblages. *Journal of Archaeological Science* 37: 164-173.

1. **Randklev, C.R.**, S. Wolverton, and J.H. Kennedy. 2009. A Biometric Technique for Assessing Prehistoric Freshwater Mussel Population Dynamics (Family: Unionidae) in North Texas. *Journal of Archaeological Science* 36: 205-213.

### **WORKS IN PROGRESS (\*indicates mentored student or staff)**

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Hart, M.H.\*, M. Fisher, and **C.R. Randklev**. A cautionary tale about conserving mussels using translocation: a case study from two river basins in central Texas. *Aquatic Conservation: Marine and Freshwater Ecosystems*, in review.

Goldsmith, A.M.\*, F. Jaber, H. Ahmari, and **C.R. Randklev**. Clearing up cloudy waters: a review of sedimentation impacts to unionid freshwater mussels. *Environmental Reviews*, in review.

Goldsmith, A.M.\*, J. Khan, C.R. Robertson, R. Lopez, and **C.R. Randklev**. Using upper thermal limits of *Lampsilis bracteata* (Texas Fatmucket) from the North Llano and San Saba rivers, Texas, to inform water management practices in the Edwards Plateau, in preparation.

Kiser, A.\*, J. Khan, R. Lopez, and **C.R. Randklev**. The effect of hydrologic change on threatened and endangered mussel species in east Texas, in preparation.

Smith, C.H.\*, N.A. Johnson, C.R. Robertson, R.D. Doyle, and **C.R. Randklev**. Establishing management units for conservation efforts of Heelsplitters in Texas (Bivalvia: Unionida: *Potamilus*), in preparation.

### **NON-REFEREED ARTICLES (\*indicates mentored student or staff)**

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Howells, R.G., **C.R. Randklev**, and N. Ford. 2017. Accuracy of freshwater mussel identification: results from a study in Texas. *American Conchologist* 45: 9-17.

Boseman, B.\*, B. Christie, M. Hart, J. Morton, and **C. Randklev**. 2015. Hosts confirmed for *Potamilus amphichaenus* and *Potamilus metnecktayi*. *Ellipsaria* 17: 15-16.

**Randklev, C.R.**, E.T. Tsakiris, R.G. Howells, J. Groce, M.S. Johnson, J. Bergmann, C. Robertson, A. Blair, B. Littrell, and N. Johnson. 2013. Distribution of extant populations of *Quadrula mitchelli* (false spike). *Ellipsaria* 15: 18-21.

**Howells, R.G.**, C.R. Randklev, and N.B. Ford. 2012. Taxonomic status of pigtoe unionids in Texas. *Ellipsaria* 14: 11-15.

**Randklev, C.R.**, M.S. Johnson, E.T. Tsakiris, S. Rogers-Oetker, K.J. Roe, S. McMurray, C. Robertson, J. Groce, and N. Wilkins. 2011. First account of a living population of False Spike, *Quadrula mitchelli* (Bivalvia: Unionidae), in the Guadalupe River, Texas. *Ellipsaria* 13: 17-19.

Howells, R.G., **C.R. Randklev**, and M.S. Johnson. 2011. Mantle flap variation in Texas Fatmucket (*Lampsilis bracteata*). *Ellipsaria* 13:14-16.

**Randklev, C.R.**, B.J. Lundeen, and J.H. Kennedy. 2007. A survey of freshwater mussels (Family Unionidae) at Lake Nocona, Montague County, Texas. *Ellipsaria* 8: 8.

### **GRANTS AND FUNDING RECEIVED (\$4,114,305 in total)**

- 2020 A survey and assessment of freshwater mussels considered for listing under the Endangered Species Act in select river systems in East Texas and Louisiana. **PI:** U.S. Fish & Wildlife Service. Amount \$20,000.
- 2020 Texas Hornshell, *Popenaias popeii*, in the Black River, New Mexico: field and laboratory studies of sublethal thermal and hypoxia stress. **PI:** Center of Excellence – CEHMM. Amount \$57,644.
- 2020 Assessing the phylogenetic relationships and species boundaries of the genus *Truncilla* (Family: Unionidae) in Texas. **PI:** Texas Parks and Wildlife. Amount \$98,914.
- 2020 Host fish use, reproduction and propagation potential of 2 east Texas threatened mussel species. **PI:** Texas Parks and Wildlife. Amount \$153,848.
- 2020 Examining trematode prevalence at mussel biodiversity hotspots throughout the state. **PI:** Texas Parks and Wildlife. Amount \$76,927.
- 2020 Examining the conservation status of freshwater mussels in Texas. **PI:** Texas Parks and Wildlife. Amount \$123,070.
- 2019 Determining downstream ecological impacts of sediment derived from bridge construction. **PI:** Texas Department of Transportation. Amount \$74,700.



- 2018 Habitat utilization of *Popenaias popeii* (Texas Hornshell) in the Devils River. **PI:** The Nature Conservancy. Amount \$46,000.
- 2018 Freshwater mussel survey for five of the seven lakes within the Trinity Regional Project as of the dewatering actions, North Texas. **PI:** Army Corps of Engineers. Amount \$125,000.
- 2018 Freshwater mussel occupancy surveys and translocation. **PI:** Texas Department of Transportation. Amount \$120,000.
- 2018 Influence of thermal tolerance on population performance of rare and common freshwater mussel species in central and east Texas. **PI:** Texas Parks and Wildlife. Amount \$120,180.
- 2018 Thermal tolerance of *Popenaias popeii* from the Rio Grande, Texas. **PI:** Texas Parks and Wildlife. Amount \$124,303.
- 2018 Assessment and review of mussel-hydrologic relationships for mussels in east Texas. **PI:** U.S. Fish & Wildlife Service. Amount \$50,000.
- 2018 Development of a genetics focused guidance document on captive propagation and case study using a rare central Texas mussel, *Lampsilis bracteata* (Texas Fatmucket). **PI:** U.S. Fish & Wildlife Service. Amount \$125,000.
- 2017 Evaluating the efficacy of mussel relocation in Texas with in-situ field studies and the development of a Texas mussel database. **PI:** Texas Department of Transportation. Amount \$380,000.
- 2017 A survey and assessment of taxonomy, phylogeny and population genetics of critically endangered freshwater mussels in east Texas to assess their conservation status. **PI:** U.S. Fish & Wildlife Service. Amount \$90,000.
- 2017 A survey of the freshwater mussels in select Mexican Gulf Coastal drainages to assess the status of the critically endangered, *Popenaias popeii* (Lea, 1857) (Family Unionidae). **PI:** U.S. Fish & Wildlife Service. Amount \$140,000.
- 2017 Rapid risk assessment: freshwater mussels of the Brazos River Basin. **Co-PI:** Brazos River Authority. Amount \$407,885.
- 2016 Evaluating the conservation status of Texas hornshell and other mussels in the Pecos and Devils Rivers. **PI:** Comptroller of Texas. Amount \$73,000.

- 2015 Host fish use of three rare central Texas mussel species. **PI:** Texas Parks and Wildlife. Amount: \$207,361.
- 2015 Mussel data collection in the middle Trinity River. **PI:** Texas Parks and Wildlife. Amount: \$65,000.
- 2015 Cost effective mitigation strategy for state listed freshwater mussels. **PI:** Texas Department of Transportation. Amount: \$63,866.
- 2014 Endangered Species Research Projects for Freshwater Mussels. **PI:** Taskforce on Economic Growth and Endangered Species. Amount: \$637,628.
- 2014 Assessing the conservation status of native freshwater mussels (Family: Unionidae) in the Trinity River basin. **PI:** Texas Parks and Wildlife. Amount: \$119,198.
- 2013 Freshwater mussel ID workshop & certification. **PI:** Comptroller of Texas. Amount: \$46,132.
- 2013 Assessing the conservation status of rare endemic mussel species (Family: Unionidae) in the lower Guadalupe River, Texas. **PI:** Texas Parks and Wildlife. Amount: \$101,272.
- 2013 Mussel relocation study at Rowlett Creek, upper Trinity River drainage. **PI:** North Texas Municipal Water District. Amount: \$12,310.
- 2012 Freshwater mussel survey of the lower Sabine River. **PI:** Texas Parks and Wildlife. Amount: \$50,600.
- 2012 Freshwater mussel and benthic macroinvertebrate data collection in the lower Brazos River. **PI:** Texas Parks and Wildlife. Amount: \$27,770.
- 2012 Freshwater mussel survey of the lower Brazos River. **PI:** Texas Water Development Board. Amount: \$80,000.
- 2012 Relocation of a freshwater mussel population from Co Rd. 340 San Saba River, Texas. **PI:** Texas Department of Transportation. Amount: \$96,239.

- 2011 Developing predictive models for the occurrence of rare and threatened mussel species in Texas. **PI:** Texas Department of Transportation. Amount: \$399,299.
- 2011 Relocation of a mussel population from the San Saba River, Texas: **PI:** U.S. Fish & Wildlife Service. Amount: \$20,000.
- 2010 Zooarchaeological analysis of mussel remains from selected rock-shelters near Belton Lake. **PI:** AMEC Earth & Environmental, Inc. Amount: \$3,500.
- 2010 Summary of unpublished records for candidate mussel species from four museums in north central Texas. **PI:** Save our Springs Alliance. Amount: \$5,000.

## **INVITED SEMINARS**

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**Randklev, C.R.** 2016. Conservation and research priorities for endangered freshwater mussel species in central and west Texas. Department of Biology, Tarleton State University, Texas.

**Randklev, C.R.** 2016. Conservation of endangered endemic freshwater mussel species in central and west Texas. Department of Geography, University of North Texas, Texas.

**Randklev, C.R.**, and R. Lopez. 2015. Mussel Research and Conservation Priorities. Taskforce on Endangered Species, Austin, Texas.

**Randklev, C.R.** 2012. Freshwater mussel research in the Brazos River basin: Highlights, conservation implications, and future directions. Texas Master Naturalists – Brazos Valley Chapter, Blinn College, Texas.

**Randklev, C.R.** 2011. The dam truth about mussels: a case study of the effects of impoundment on unionid mussels in the lower Sabine River basin. Department of Biological Sciences, University of Texas at Tyler, Texas.

## **WORKSHOPS PRESENTED**

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**Randklev, C.R.**, C.R. Robertson, and G. Pandolfi. Co-Instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mollusk Society. San Marcos, Texas. August 2018.

**Randklev, C.R.** and C.R. Robertson. Co-Instructor for a freshwater mussel workshop identification and conservation. Sponsored by the Texas Chapter of the American Fisheries Society. College Station, Texas. January 2018.

**Randklev, C.R.**, C.R. Robertson, and N. Ford. Co-Instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mollusk Society. Beaumont, Texas. August 2017.

**Randklev, C.R.** Instructor for a freshwater mussel identification workshop. Sponsored by the Natural Resources Conservation Service. College Station, Texas. October 2015.

**Randklev, C.R.**, C.R. Robertson, N. Ford, T.M. Miller, and M. May. Co-instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mollusk Society. Seagoville, Texas. August 2015.

**Randklev, C.R.** Instructor for an introductory class on unionid mussels. Sponsored by the Texas Chapter of the Wildlife Society. Junction, Texas. July 2015.

**Randklev, C.R.**, N. Ford, R.G. Howells, and M. May. Co-instructor for a freshwater mussel identification workshop. Sponsored by the Interagency Task Force on Economic Growth and Endangered Species. Junction, Texas. August 2013.

## **PRESENTATIONS AND PROFESSIONAL MEETINGS**

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Contributing factors and recovery solutions for three imperiled freshwater mussels (Family Unionidae) endemic to the Rio Grande basin in North America. *Presented at the 51st Annual Desert Fishes Council Meeting, November 2019.*

Hydraulic requirements of freshwater mussels (Unionidae) and a conceptual framework for predicting how they respond to high flows. *Presented at the 11<sup>th</sup> Biennial FMCS Meeting, April 2019.*

A semi-arid river in distress: contributing factors and recovery solutions for three imperiled freshwater mussels (Family Unionidae) endemic to the Rio Grande basin in North America. *Presented at the 2018 Annual Meeting of the Texas Chapter American Fisheries Society, January 2018.*

Assessing the conservation status of freshwater mussels in the Rio Grande, Texas. *Presented at the 10<sup>th</sup> Biennial FMCS Meeting, April 2017.*

Freshwater mussel research in central and west Texas: highlights, conservation implications and future directions. *Presented at the 53<sup>rd</sup> Annual Meeting of the Texas Chapter of The Wildlife Society, February 2017.*

The effects of large dams on downstream mussel populations. Presented at the 4<sup>th</sup> Biennial Texas Mollusk Symposium, August 2016.

Distribution, abundance, and habitat use by freshwater mussels in the lower Sabine River, Texas. *Poster presented at the 9<sup>th</sup> Biennial FMCS Symposium and the 71<sup>st</sup> Annual UMRCC Meeting, April 2015.*

Mussel micro- and mesohabitat associations for the middle Brazos River basin. *Presented at the 3<sup>rd</sup> Biennial Texas Mollusk Symposium, August 2014.*

The influence of land use and spatial scale on the distribution of an imperiled freshwater mussel (Family: Unionidae), *Quadrula houstonensis*, Smooth Pimpleback, in the Leon River, Texas. *Presented at the 2<sup>nd</sup> Biennial Texas Mollusk Symposium, March 2013.*

Freshwater mussel research in central Texas: highlights, conservation implications and future directions. *Presented at the 1<sup>st</sup> Biennial Texas Mussel Symposium, March 2012.*

Freshwater mussels (Family Unionidae) in the lower Sabin River basin: a case study of the effects of impoundments on downstream mussel communities. *Poster presented at the 58<sup>th</sup> Annual Meeting of the Southwestern Association of Naturalists, April 2011.*

Prehistoric biogeography and conservation status of threatened freshwater mussels (Mollusca: Unionidae) in the upper Trinity River drainage. *Presented at the Society of Ethnobiology 33<sup>rd</sup> Annual Conference, May 2010.*

A Taphonomic Perspective on the Late Holocene Biogeography of Freshwater Mussels in North Texas. *Poster presented at the 94<sup>th</sup> Annual Meeting of the Ecological Society of America, August 2009.*

A Taphonomic model of interspecific differential preservation of freshwater mussel (Family Unionidae) fauna. *Poster presented at the 74<sup>rd</sup> Annual Meeting of the Society for American Archaeology, March 2009.*

Spatial Turnover and Extirpations: Paleozoological Implications of Archaeological Unionid Remains from the Western Upper Trinity River, North Texas. *Poster presented at the 56<sup>th</sup> Annual Meeting of the North American Benthological Society, May 2008.*

Ecological Turnover and Extirpations: Paleozoological Implications of Archaeological Unionid Remains from the Western Upper Trinity River, North Texas. *Presented at the 55<sup>th</sup> Annual Meeting of the Southwestern Association of Naturalists, April 2008.*

A Biometric Technique for Assessing Prehistoric Freshwater Mussel Population Dynamics (Family: Unionidae) in North Texas. *Poster presented at the 73rd Annual Meeting of the Society for American Archaeology, March 2008.*

Conservation Implications of Prehistoric Unionids Found in the Upper Trinity River drainage. *Poster presented at the 54th Annual Meeting of the Southwestern Association of Naturalists, April 2007.*

Prehistoric Biogeography: Conservation Implications of Two Unionids in the Western Upper Trinity River Drainage. *Poster presented at the Society of Ethnobiology 30<sup>th</sup> Annual Conference, March 2007.*

## **GRADUATE COMMITTEES**

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Alex Kiser, Texas A&M University (PhD: In progress)

**Dissertation:** *Evaluating the impact of flow and land use changes on mussel distributions throughout Texas*

Donnovan Patterson, Texas A&M University (PhD: In progress)

**Dissertation:** *Life-history and propagation potential of two rare mussel species in Texas*

Amanda Goldsmith, Texas A&M University (MS: In progress)

**Thesis:** *Thermal tolerance and water management implications of two rare central Texas mussel species*

Mike DeMoulied, Texas A&M University (MS: In progress)

**Thesis:** TBD.

Jack Dudding, Texas A&M University (MS: 2019)

**Thesis:** *Host fish use and reproductive life history of three rare central Texas mussel species*

Jennifer Morton (Khan), Texas A&M University (MS: 2018)

**Thesis:** *Thermal tolerances of select threatened mussel species from central Texas*

Eric Tsakiris, Texas A&M University (PhD: 2016)

**Dissertation:** *Reproductive ecology in conservation management of freshwater mussels (Bivalvia: Unionidae): relocation, non-invasive techniques, and environmental cues*

Traci Popejoy, University of North Texas (MS: 2015)

**Thesis:** *Zooarchaeology and biogeography of freshwater mussels in the Leon River during the late Holocene*

## **INVITED PANELS AND BOARDS**

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2019-present Texas A&M University – Commerce, Biological & Environmental Sciences Department (BESC) Advisory Board

2018-present Texas Parks & Wildlife Freshwater Fisheries Advisory Committee, Austin TX.

## **PROFESSIONAL SERVICES**

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2017-present Member/reviewer of USFWS recovery plan development for *Popenaias popeii*, Texas Hornshell.

2017-present Texas AgriLife Animal Care and Use Committee

2017-2019 Chair of Planning Committee for the 11<sup>th</sup> Biennial Symposium of the Freshwater Mollusk Conservation Society, April 14<sup>th</sup> - April 18<sup>th</sup>, San Antonio, Texas

## **SERVICE AS REVIEWER (MULTIPLE TIMES FOR MANY JOURNALS)**

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*American Fisheries Society*  
*American Malacological Bulletin*  
*Biosphere*  
*Canadian Journal of Zoology*  
*Ecological Engineering*  
*Environmental Management*  
*Environmental Modeling*  
*Freshwater Biology*  
*Freshwater Mollusk Biology and Conservation*  
*Freshwater Science*  
*Hydrobiologia*  
*Journal of Archaeological Science*  
*Journal of Fish and Wildlife Management*

*Nautilus*  
*STOTEN*  
*The Southeastern Naturalist*  
*Texas Journal of Science*

**PROFESSIONAL AFFILIATIONS**

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Freshwater Mollusk Conservation Society  
Texas Chapter American Fisheries Society  
Society for Freshwater Science  
American Fisheries Society