

**Charles R. Randklev**

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**EDUCATION**

- 2006-2011      **Ph.D.**, Biology, University of North Texas, Denton, Texas  
Dissertation: *The Ecology and Paleobiogeography of Freshwater Mussels (Family Unionidae) within selected Texas Rivers*  
Advisors: Dr. James H. Kennedy and Dr. Steve Wolverton
- 2002-2005      **B.S.**, Biology, The University of Texas at Arlington, Arlington, Texas

**PROFESSIONAL APPOINTMENTS**

- 2012-present      **Research Scientist**, Texas A&M Natural Resources Institute (formerly Institute of Renewable Natural Resources), Texas A&M University, College Station, Texas
- 2011-2012      **Research Associate**, Institute of Renewable Natural Resources, Texas A&M University, College Station, Texas

**PUBLICATIONS, PEER REVIEWED (\*indicates mentored graduate student)**

22. Tsakiris, E.T.\*, **C.R. Randklev**, A. Blair, M. Fisher, and K. Conway. Effects of translocation on survival and growth of freshwater mussels within a West Gulf Coastal Plain river system. *Aquatic Conservation: Marine and Freshwater Ecosystems*, forthcoming.
21. Popejoy, T\*, **C.R. Randklev**, S. Wolverton, and L. Nagaoka. Conservation implications of late Holocene freshwater mussel remains of the Leon River in central Texas. *Hydrobiologia* – Online Early DOI: [doi:10.1007/s10750-016-3041-y](https://doi.org/10.1007/s10750-016-3041-y).

20. Popejoy, T\*., S. Wolverton, L. Nagaoka, and **C.R. Randklev**. An interpretive framework for assessing freshwater mussel taxonomic abundances in zooarchaeological faunas. *Quaternary International* – Online Early DOI: 10.1016/j.quaint.2015.09.101.
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. 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 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 (including manuscripts submitted, in review, in revision, and in preparation; \* indicates mentored graduate student)**

Tsakiris, E.T\*, **C.R. Randklev**, A. Blair, M. Fisher, and K.W. Conway. Trait-dependent effects of translocation on performance of freshwater mussels: implications of phenotypic variation among populations. *Diversity and Distributions*, in review.

Tsakiris, E.T\*, **C.R. Randklev**, M. Johnson, J.A.M. Bergmann. Status and mesohabitat use of freshwater mussels in a degraded aquatic system: San Saba River, Texas. For submission to *Aquatic Conservation: Marine and Freshwater Ecosystems*, in preparation.

**NON-REFEREED ARTICLES (\*indicates mentored student)**

**Randklev, C.R.**, E.T. Tsakiris\*, R.G. Howells, J. Groce, M.S. Johnson, J. Bergmann, C. Robertson, A. Blari, 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 (\$1,754,684 in total)**

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: \$60,000.

- 2015 Mussel data collection in the middle Trinity River. **PI:** Texas Parks and Wildlife. Amount: \$60,000.
- 2015 Cost effective mitigation strategy for state listed freshwater mussels. **PI:** Texas Department of Transportation. Amount: \$20,000.
- 2014 Endangered Species Research Projects for Freshwater Mussels. **PI:** Taskforce on Economic Growth and Endangered Species. Amount: \$599,928.
- 2014 Assessing the conservation status of native freshwater mussels (Family: Unionidae) in the Trinity River basin. **PI:** Texas Parks and Wildlife. Amount: \$119,243.
- 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: \$55,000.
- 2012 Freshwater mussel and benthic macroinvertebrate data collection in the lower Brazos River. **PI:** Texas Parks and Wildlife. Amount: \$30,000.
- 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: \$70,000.
- 2011 Developing predictive models for the occurrence of rare and threatened mussel species in Texas. **CO-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**

**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**

**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. Robertson, N. Ford, T.M. Miller, and M. May. Co-instructor for a freshwater mussel identification workshop. Sponsored by the Texas Freshwater Mussel 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**

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 94th 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 74rd 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.*

## **TEACHING EXPERIENCE**

2006-2009            **Graduate Teaching Assistant**, Environmental Science Lab, Department of Biology, University of North Texas, Denton, Texas

2007                    **Graduate Teaching Assistant**, Quantitative Techniques, Department of Geography, University of North Texas, Denton, Texas

## **RESEARCH EXPERIENCE**

2006-2011            **Graduate Research Assistant**, Department of Biology, University of North Texas, Denton, Texas

2004-2005            **Undergraduate Research Assistant**, Department of Biology, The University of Texas at Arlington, Arlington, Texas



## **CURRENT GRADUATE COMMITTEES**

Jack Dudding, Texas A&M University (MS)

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

Jennifer Morton, Texas A&M University (MS)

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

## **PAST GRADUATE COMMITTEES**

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*

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

*American Fisheries Society*

*American Malacological Bulletin*

*Biosphere*

*Canadian Journal of Zoology*

*Ecological Engineering*

*Environmental Management*

*Environmental Modeling*

*Hydrobiologia*

*Journal of Archaeological Science*

*Journal of Fish and Wildlife Management*

*Nautilus*

*The Southeastern Naturalist*

*Texas Journal of Science*

## **SCHOLARSHIPS, AWARDS, AND HONORS**

2010            Awarded "Outstanding Teaching Assistant" (\$300.00), in the Department of Biological Sciences, University of North Texas, Denton, Texas

- 2008           Invited to be a student keynote speaker at the 55th Annual Meeting of the Southwestern Association of Naturalists, Memphis, Tennessee
- 2008           Student Award for best Presentation (\$200.00), University of North Texas Graduate Student Research Day, Denton, Texas
- 2007           Student Award for best poster (\$150.00), 54th Annual Meeting of the Southwestern Association of Naturalists, Stephenville, Texas.

## **PROFESSIONAL MEMBERSHIPS AND ACTIVITIES**

- 2008-present       **Member**, Society for Freshwater Science
- 2006-present       **Member**, Freshwater Mollusk Conservation Society
- 2006-present       **Member**, Southwestern Association of Naturalists

## **REFERENCES**

Dr. Steve Wolverton  
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