

## **CURRICULUM VITAE**

Raelynn Deaton  
Assistant Professor  
Department of Biological Sciences  
Sam Houston State University  
Box 2116, Huntsville, TX 77341

### **Biographical Information**

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### **Current and Recent Employment**

Assistant Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX. Fall 2008-Present. Chair, Dr. Todd Primm.  
Visiting Assistant Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX. Fall 2007-Spring 2008. Chair, Dr. Jerry Cook.  
Adjunct Professor, Department of Biological Sciences, Sam Houston State University, Huntsville, TX. Fall 2006-Spring 2007. Chair, Dr. Matt Rowe *and* Department of Zoology, University of Oklahoma, Norman, OK Fall 2006- Present. Chair, Dr. Bill Matthews.

### **Education**

Ph.D. Zoology, Department of Zoology, University of Oklahoma, Norman, OK, Fall 2006  
Major Advisor: Dr. Edie Marsh-Matthews  
Title: Mechanisms of sexual selection in a livebearing fish with a coercive mating system (Western mosquitofish: *Gambusia affinis*)  
M.S. Biology, Department of Biology, University of New Orleans, New Orleans, LA  
Major Advisor: Dr. Robert C. Cashner, Spring 2001  
Title: Effects of predation on substrate choice in the naked goby, *Gobiosoma bosc*.  
B.A. Biology, Department of Biology, Berea College, Berea, KY, Spring 1995

### **Research Interests**

Animal Behavior, Evolution, Behavioral and Evolutionary Ecology, Sexual Selection and Mating Systems, Fish Ecology and Conservation, Life History Evolution, Molecular Ecology, Population Genetics, Conservation Genetics.

### **Current research**

- Sexual conflict in livebearing fishes.
- Behavior, genetics, and life history of isolated populations of the Largespring Gambusia, *Gambusia geiseri*.
- Effects of parasites on life history and mating behavior in livebearing fish.
- Phenotypic plasticity in response to predators in mosquitofish.
- Population and conservation genetics.

## **Research Experience**

### **Research Fellow, University of Oklahoma Biological Station, Willis, Oklahoma.**

Female control over mating in the western mosquitofish, *G. affinis*. Summer, 2006. Dr. Lawrence Weider, Director.

### **Research in Molecular Biology and Genetics, University of Oklahoma, Department of Zoology and Oklahoma Biological Survey, Norman, Oklahoma.**

Population genetics of isolated populations of the large spring gambusia, *Gambusia geiseri*. Employed use of microsatellite DNA analysis to determine intra- and inter-population variation in *G. geiseri*. Fall 2002 – Present. Dr. Rich Broughton, Supervisor.

### **Graduate Student Research Assistantship, University of Oklahoma, Sam Noble Oklahoma Museum of Natural History and Department of Zoology, Norman, Oklahoma.**

Investigation of life history evolution and ecology of live-bearing fishes. Examined factors influencing matrotrophy (mother-to-embryo transfer of nutrients) in Poeciliid fishes. Fall 2001 – Summer 2004. Dr. Edie Marsh-Matthews, Supervisor.

### **Ichthyology Research. University of New Orleans Vertebrate Collection. Department of Biological Sciences. New Orleans, Louisiana.**

Field collections for the Lake Pontchartrain ichthyofaunal survey. Sampling methods included gill-netting, seining, and trawling. Identified and sorted museum specimens. January 1999 – August 2000. Dr. Robert Cashner, Supervisor.

### **Cetacean Research Intern. New England Whale Center, Gloucester, Massachusetts.**

Collected field behavioral data on cetacean species in the Gulf of Maine. August – December 1995. Mason T. Weinrich, Director.

## **Peer-Reviewed Publications**

\*undergraduate and +graduate students in my lab at time of submission

9. Edie Marsh-Matthews, **Raelynn Deaton**, and Melody Brooks. 2009. Survey of matrotrophy in lecithotrophic species. In *Viviparous Fishes II, the Proceedings of the III International Symposium on Viviparous Fishes* (in press, Ed. Mari Carmen Uribe and Harry Grier).

8. James Cureton\*, Jason Randall\*, and **Raelynn Deaton**. 2009. Density increases male homosexual behavior in the Western Mosquitofish, *Gambusia affinis*. (accepted, *The Southwestern Naturalist*).

7. Anna Buchman+, **Raelynn Deaton**, Chris Randle, Ted Brummel, Everett Wilson, and William Lutterschmidt. 2009. Isolation and characterization of eight polymorphic microsatellite loci for the three-toed box turtle (*Terrapene carolina triunguis*) and cross-amplification in other *Terrapene* species. (accepted, *Mol Ecol Resources*).

6. **Raelynn Deaton**. 2009. Effects of parasites on male mate choice in the western mosquitofish, *G. affinis* *Behavioral Processes* 80:1-6.

5. **Raelynn Deaton**. 2008. Use of microsatellite markers to determine male reproductive success in western mosquitofish, *Gambusia affinis* ***Behaviour*** 145:795-814.
4. **Raelynn Deaton**. 2008. Factors influencing male mating behavior in a coercive mating system. ***J Fish Biol*** 72(7): 1607–1615.
3. Edie Marsh-Matthews and **Raelynn Deaton**. 2006. Resources and offspring provisioning: A test of the Trexler & DeAngelis model for matrotrophy evolution. ***Ecology*** 87(12): 3014–3020.
2. Chad W. Hargrave, Raul Ramirez, Melody Brooks, Michael A. Eggleton, Katherine Sutherland, **Raelynn Deaton**, and Heather Gailbraith. 2006. Species-specific ecosystem effects enhance production of a primary consumer through indirect food web interactions. ***Freshwater Biology*** 51(10), 1901–1910.
1. Edie Marsh-Matthews, Melody Brooks, **Raelynn Deaton**, and Hui Tan. 2005. Effects of maternal and embryo characteristics on post-fertilization provisioning in fishes of the genus *Gambusia*. ***Oecologia*** 144 (1): 12-24.

#### ***In Review or Revision***

4. Rachel Martin<sup>\*</sup>, James Cureton<sup>\*</sup>, Chad Hargrave, and **Raelynn Deaton**. Who controls whom: Effects of female and male behaviors on female reproductive success in the Western Mosquitofish (*in review*, ***Behavioural Processes***).
3. James Cureton<sup>\*</sup>, Rachel Martin<sup>\*</sup> and **Raelynn Deaton**. Density and sex ratio affect male harassment and aggression in the livebearing Mosquitofish (*in revision for re-submission*, ***Behavioral Ecology and Sociobiology***).
2. Anna Buchman<sup>+</sup>, Ted Brummel, **Raelynn Deaton**, and William Lutterschmidt. Baseline population genetics and hybridization analysis of the box turtle *Terrapene carolina trianguis*. (*in review*, ***The Southwestern Naturalist***).
1. **Raelynn Deaton**. Effect of a parasitic nematode on reproductive life history in female mosquitofish, *Gambusia affinis*. (*in revision for re-submission*, ***Ecol Freshwater Fish***).

#### **Journals Reviewed For:**

Copeia  
 Biodiversity and Distributions  
 Southeastern Fishes Council Proceedings  
 The Southwestern Naturalist

#### **Grant Reviews:**

**Sigma Xi Student Grant Reviews**, November 2008.  
**Howard McCarley Student Grant Reviews**, Southwestern Association of Naturalists, April 2008.

## **Research Grants and Fellowships**

11. **Raelynn Deaton**. American University of Women Publication Fellowship. \$5,000 (submitted)
10. **Raelynn Deaton**. Direct and indirect effects of male coercion on female fitness in a livebearing coercive fish. Faculty Research Grant, Sam Houston State University, \$5,000 (submitted)
9. Chad Hargrave, **Raelynn Deaton** and Gary Garrett. Conservation status of Comanche Springs pupfish (*Cyprinodon elegans*) and Pecos gambusia (*Gambusia nobilis*) in the ciénegas of Balmorhea State Park, Texas Section 6 Grant through Texas Parks and Wildlife Department, \$28,482 (submitted)
8. Chad Hargrave, **Raelynn Deaton** and Gary Garrett. Population dynamic and food web structure of two endangered fish species in west Texas. Texas Parks and Wildlife Department \$2200, Fall 2008.
7. Chad Hargrave and **Raelynn Deaton**. Influence of local microhabitat characteristics on fish assemblage structure across water corridors in the Big Thicket National Preserve. Big Thicket ATBI Grant - \$5200.00. Summer 2008.
6. Chris Randall, Sibyl Buchelli, **Raelynn Deaton**, Anne Gaillard, Todd Primm. Genomics Educational Grant, Beckman Coulter, Inc., Bioresearch Division, *For acquisition of one or more GenomeLab CEQ™ Genetic Analysis System(s)*, Matching Funds, \$102,000, 2007.
5. Research Fellowship, University of Oklahoma Biological Station, Lake Texoma, Willis, Oklahoma. \$2500.00, Summer, 2006.
4. Adam's Memorial Research Scholarship, Department of Zoology, University of Oklahoma, \$5000.00, 2003-06.
3. McCarley Research Award, Southwestern Association of Naturalists, \$2000, 2004 and 2006.
2. Graduate Student Senate Research Award, University of Oklahoma, \$600, 2003-2005.
1. Roberrson Research Award, University of Oklahoma Graduate College, \$1000.00, 2004.

## **Students**

### ***Past Graduate Students:***

**Anna Buchman – M.S. Biology, Summer 2008. Sam Houston State University.**  
Development of microsatellite primers for investigating population genetics and potential hybridization between two species of Carolina box turtles. Co-advisor with Dr. Bill Lutterschmidt.

### ***Current Graduate Students:***

**James Cureton M.S. Biology, SHSU – Conservation genetics of ornate box turtles.**

**Chris Kroll M.S. Biology, SHSU – Sexual selection in livebearing fish.**

**Rachel Martin M.S. Biology, SHSU – Sexual selection in livebearing fish.**

**Stacy Stoops M.S. Biology, SHSU – Reproductive isolating mechanisms in isolated populations of mosquitofishes.**

### ***Graduate Student Committees***

**Angela Hawkins – M.S. Biology, SHSU - Genetics and evolution of parasitic plants. Advisor, Dr. Chris Randall.**

**Sophia Aguayo – M.S. Biolog, SHSU** – Nutritional patterns of extinct peoples using skeletal markers and pathologies. Advisor, Dr. Patrick Lewis.

***Current Undergraduate Students and Projects in Progress***

**Abby Marcotti - (BIO 495 Independent Research)** – Effects of male gonopodial morphology and male coercion on female fitness via physical damage to the female genital region using scanning electron microscopy.

**Samir Rosado (Undergraduate Research)** – Phenotypic plasticity in response to predators in two populations of the western mosquitofish. *In collaboration with Dr. Chad Hargrave.*

**Janalyn West – (BIO 495 Independent Research)** – Effects of male gonopodial morphology and male coercion on female fitness via physical damage to the female genital region using scanning electron microscopy.

**Sarah Sendelbach – (BIO 495 Independent Research)** – Sexual conflict in Western Mosquitofish – Effects of male coercion on female fitness. (via increased susceptibility to bacterial pathogens).

**Alexandria Titlow – (Undergraduate Research)** – Female choice for male gonopodial length in Western Mosquitofish *and* effects of male gonopodial length on male mating behavior and susceptibility to predation.

**Rick Lewis – (Undergraduate Research)** – Female choice for male gonopodial length in Western Mosquitofish *and* effects of male gonopodial length on male mating behavior and susceptibility to predation.

**Presentations at Professional Meetings** (First-authored only - \* undergraduate or + graduate student in my lab at time of presentation)

**Raelynn Deaton**, James Cureton<sup>+</sup>, and Rachel Martin<sup>+</sup>. Sex ratio and density affect male harassment and aggression in the livebearing Mosquitofish, *Gambusia affinis*.

*At: Great Plains Limnology Conference and Oklahoma-Texas Aquatics Research Group, Univ. of Oklahoma Biological Station, Willis, TX, September 2008; Poster.*

**Raelynn Deaton** and Stephanie Schweig<sup>+</sup>. Factors influencing female choice in the Western Mosquitofish, *Gambusia affinis*.

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Poster.*

**Raelynn Deaton** and Jason Randall<sup>\*</sup>. Effects of temperature and male body size on male mating behavior in the Western Mosquitofish, *Gambusia affinis*.

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Oral.*

**Raelynn Deaton**, Chad W. Hargrave, and Ricky Cothran. Female control over mating in the coercive livebearing fish, *Gambusia affinis*.

*At: Southwestern Association of Naturalists, Tarleton State University, Stephenville, TX, April 2007; Oral.*

*At: Third European Conference for Poeciliid Biologists, Chioggia, Italy, March 2008; Oral.*

**Raelynn Deaton** and Edie Marsh-Matthews. Do big boys always win? Male body size affects reproductive success in a livebearing fish.

*At: Behavior and Evolution, University of Oklahoma Biological Station, Willis, Oklahoma, March 2006; Oral.*

*At: Graduate College Research and Endeavors Poster Symposium, Graduate College, University of Oklahoma, March, 2006; Poster (1<sup>st</sup> Place, Science).*

*At: Southwestern Association of Naturalists, Colima, Mexico, April, 2006; Oral (Wilk's Award Winner – Best Student Paper).*

**Raelynn Deaton**, David Lame, Edie Marsh-Matthews, Paulette Reneau, and Rich Broughton. Genetic divergence among isolated populations of the spring-dwelling fish, *Gambusia geiseri*.

*At: American Society of Ichthyologists and Herpetologists, Norman, Oklahoma, July 2004; Oral.*

*At: Oklahoma Texas Aquatics Research Group, Univ. Oklahoma Biological Station, Willis, Oklahoma, October, 2005; Oral.*

**Raelynn Deaton** and Edie Marsh-Matthews. A closer look at the *Gambusia* mating system: Factors influencing male choice.

*At: Southwestern Association of Naturalists, Sam Houston State University, Huntsville, Texas, April 2005; Oral.*

**Raelynn Deaton**, Edie Marsh-Matthews, and Melody Brooks. Effects of parasites on mating behavior of the Western Mosquitofish, *Gambusia affinis*.

*At: Graduate Student Poster Symposium, Graduate College, University of Oklahoma, April 2003; Poster.*

*At: Association of Southwestern Naturalists, Norman, Oklahoma, April 2003; Oral.*

*At: Animal Behavior Society, Boise, Idaho, July 2003; Poster*

*At: First European Conference for Poeciliid Biologists, Zurich, Switzerland, December 2003; Oral.*

*At: Southwestern Association of Parasitologists, University of Oklahoma Biological Station, Lake Texoma, Willis, TX; Oral.*

**Raelynn Deaton**, Edie Marsh-Matthews, and Melody Brooks. Effects of food availability on embryo mass and body condition in a livebearing fish.

*At: Ecological Society of America, Savannah, Georgia, August 2003; Oral.*

**Raelynn Deaton**, Chad W. Hargrave, Raul Ramirez, Melody Brooks, Michael A. Eggleton, Katherine Sutherland, and Heather Gailbraith. Species-specific ecosystem effects enhance production of a primary consumer through indirect food web interactions.

*At: Oklahoma Academy of Sciences, Oklahoma City, Oklahoma, October 2002; Oral.*

**Raelynn Deaton**, Melody Brooks, and Edie Marsh-Matthews. Diet history influences cannibalism and reproductive life history in the Western Mosquitofish, *Gambusia affinis*.

*At: Great Plains Limnology Conference, University of Oklahoma Biological Station, September 2002; Oral.*

*At: Association of Southwestern Naturalists, Norman, Oklahoma, April 2003; Poster.*

**Raelynn Deaton**, Melody Brooks, and Edie Marsh-Matthews. Offspring size variation in the largespring gambusia, *Gambusia geiseri*.

*At: Southwestern Association of Naturalists, Cuernavaca, Mexico, April, 2002; Poster.*

*At: American Society of Ichthyologists and Herpetologists, Kansas City, Kansas, July, 2002; Poster.*

**Raelynn Deaton**. Effects of predation on substrate choice of the Naked Goby, *Gobiosoma bosc*, under field and laboratory conditions.

*At: American Society of Ichthyologists and Herpetologists. La Paz, Mexico, June 2000; Oral.*

*At: Ecology and Evolutionary Ethology of Fishes. Athens, Georgia, May 2000; Oral.*

*At: Southwestern Association of Naturalists. Denton, Texas, April 2000; Oral.*

*At: Association of Southeastern Biologists. Chattanooga, Tennessee, April 2000; Poster.*

*At: University of Houston, Graduate Student Science Symposium. Houston, Texas, April 2000; Poster.*

*At: Gulf Coast Research Laboratory Graduate Student Symposium, University of Southern Mississippi, February 2000; Poster.*

### **Student Presentations at Professional Meetings** (\* undergraduate or + graduate student in my lab at time of presentation)

Anna Buchman<sup>+</sup>, **Raelynn Deaton**, Ted Brummel, Everett Wilson, and William Lutterschmidt. Isolation and characterization of microsatellite loci in two box turtle species.

*At: Society for Integrative and Comparative Biology. San Antonio, TX, January 2008; Poster.*

*At: Texas Academy of Science. Corpus Christi, TX. March 2008; Poster.*

James C. Cureton II<sup>+</sup>, Chris Kroll<sup>+</sup>, Liz Lamb<sup>\*</sup>, Jacob Landis<sup>\*</sup>, Rick Lewis<sup>\*</sup>, Samir Rosado<sup>\*</sup>, Sarah Sendelbach<sup>\*</sup>, Alexandria Titlow<sup>\*</sup>, Stacy Stoops<sup>\*</sup>, and **Raelynn Deaton**. An analysis of time and environmental conditions on peak mating behavior in the Western Mosquitofish (Poeciliidae).

*At: Great Plains Limnology Conference and Oklahoma-Texas Aquatics Research Group, Univ. of Oklahoma Biological Station, Willis, TX, September 2008; Oral.*

James Cureton<sup>\*</sup>, Anna Buchman<sup>+</sup>, and **Raelynn Deaton**. Microsatellite primer development for the Largespring Gambusia, *Gambusia geiseri*.

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Poster.*

*At: Desert Fishes Council, Cuatro Cienegas, Mexico, November 2008; Poster.*

James Cureton<sup>+</sup>, Rachel Martin<sup>+</sup> and **Raelynn Deaton**. Sex ratio and density affect male harassment and aggression in the livebearing Mosquitofish, *Gambusia affinis*.

*At: Desert Fishes Council, Cuatro Cienegas, Mexico, November 2008; Oral.*

Chris Kroll<sup>\*</sup>, Wes Farris<sup>\*</sup>, and **Raelynn Deaton**. Does female resistance interact with male size to affect male mating success?

*At: Texas Academy of Science, Corpus Chrisit, TX. March 2008; Oral.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Oral.*

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Oral.*

Rick Lewis<sup>\*</sup>, Chad Hargrave<sup>\*</sup>, Chris Kroll<sup>\*</sup>, Rachel Martin<sup>\*</sup>, Samir Rosado<sup>\*</sup>, Landis Shoemaker<sup>\*</sup>, Pamela Vasquez<sup>\*</sup>, Janalyn West<sup>\*</sup>, and **Raelynn Deaton**.

*At: Desert Fishes Council, Cuatro Cienigas, Mexico, November 2008; Oral.*

Abigail Marcotte<sup>\*</sup>, Janalyn West<sup>\*</sup>, and **Raelynn Deaton**. A methodology for assessing physical damage to female Mosquitofish caused by male coercive mating, using scanning electron microscopy.

*At: Texas Academy of Science, Corpus Chrisit, TX. March 2008; Poster.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Poster.*

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Poster.*

Rachel Martin<sup>\*</sup>, James Cureton<sup>\*</sup>, Kevin Hudson<sup>\*</sup>, and **Raelynn Deaton**. Who controls whom: Investigating female control over male mating and her own reproductive success in the Western Mosquitofish.

*At: Texas Academy of Science, Corpus Chrisit, TX. March 2008; Oral.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Poster.*

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Oral.*

*At: Great Plains Limnology Conference and Oklahoma-Texas Aquatics Research Group, Univ. of Oklahoma Biological Station, Willis, TX, September 2008; Oral.*

*At: Desert Fishes Council, Cuatro Cienigas, Mexico, November 2008; Oral.*

Chase Pedersen<sup>\*</sup>, Todd Primm, and **Raelynn Deaton**. Does coercive mating by male Western Mosquitofish increase female susceptibility to microbial pathogens?

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Poster.*

Jason Randall<sup>\*</sup> and **Raelynn Deaton**. Effects of temperature and male body size on male mating behavior in the Western Mosquitofish.

*At: Texas Academy of Science, Corpus Chrisit, TX. March 2008; Oral.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Poster.*

Andres Palencia<sup>\*</sup>, Samir Rosado<sup>\*</sup>, **Raelynn Deaton** and Chad Hargrave. Predator-induced phenotypic plasticity in the Western Mosquitofish.

*At: Texas Academy of Science, Corpus Christi, TX, March 2008; Oral.*

Samir Rosado<sup>\*</sup>, Andres Palencia<sup>\*</sup>, **Raelynn Deaton** and Chad Hargrave. Predator-induced phenotypic plasticity in the Western Mosquitofish.

*At: Great Plains Limnology Conference and Oklahoma-Texas Aquatics Research Group, Univ. of Oklahoma Biological Station, Willis, TX, September 2008; Oral.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Poster.*

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Oral.*

Stephanie Schweig<sup>+</sup>, Kevin Hudson<sup>\*</sup>, and **Raelynn Deaton**. Factors influencing female choice in the Western Mosquitofish.

*At: Texas Academy of Science, Corpus Christit, TX. March 2008; Oral.*

Stacy Stoops<sup>\*</sup> and **Raelynn Deaton**. Morphological variation in the gonopodium in livebearing fishes of the genus *Gambusia*.

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Poster.*

Stacy Stoops<sup>\*</sup>, Kevin Hudson<sup>\*</sup>, and **Raelynn Deaton**. Effects of operational sex ratio and density on female foraging in the Western Mosquitofish.

*At: Texas Academy of Science, Corpus Christi, TX, March 2008; Oral.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Poster.*

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Oral.*

Janalyn West<sup>\*</sup>, Abigail Marcotte<sup>\*</sup>, and **Raelynn Deaton**. Direct effects of male harassment on female physical condition in the Western Mosquitofish, *Gambusia affinis*.

*At: Texas Academy of Science, Corpus Christi, TX, March 2008; Oral.*

*At: Third European Conference for Poeciliid Biologist, Chioggia, Italy, March 2008; Poster.*

*At: Southwestern Association of Naturalists, Memphis, TN, April 2008; Oral.*

### **Invited Seminars**

**Raelynn Deaton**. Battle *between* or *within* the sexes? Sexual conflict in a livebearing fish with a coercive mating system.

*At: Sam Houston State University, Department of Biology, Huntsville, Texas, Fall 2008.*

*At: University of New Orleans, New Orleans, LA, Fall 2008.*

**Raelynn Deaton**. From cow pastures to lake islands: the ecology, evolution, and behavior of Lake Texoma's cattle egret population.

*5. At: Eagle Quest, Texoma West End Association, Gordonville, Texas, November 2006.*

[A nonprofit annual event held to educate the general public on the ecology and conservation of Lake Texoma and its inhabitants].

**Raelynn Deaton**. Tales of a livebearing fish: A closer look at the *Gambusia* mating system.

*At: Sam Houston State University, Department of Biology, Huntsville, Texas, Fall 2006 (Job Interview Seminar)*

*At: Texas A&M, Department of Biology, College Station, Texas, Spring 2006.*

*At: University of Oklahoma, Department of Zoology, Norman, Oklahoma, Spring 2006 (Dissertation Exit Seminar)*

*At: Texas State University, Department of Biology, San Marcos, Texas, Spring 2005.*

**Raelynn Deaton**. Sex, parasites, and cannibalism, Oh My! Factors influencing mate choice and reproductive life history in livebearing fishes of the genus *Gambusia*.

*At: Berea College, Department of Biology, Berea, Kentucky, Spring 2003*

## **Teaching Experience**

**Conservation Genetics (BIO 595).** Graduate Level Course. Fall 2008. Sam Houston State University. Department of Biology. Chair, Dr. Todd Primm. *Course developed by R. Deaton*

**Human Anatomy Lecture (BIO 245).** Spring 2007 - Present. Sam Houston State University, Department of Biology. Chair, Dr. Todd Primm.

**Contemporary Biology Lecture (BIO 134).** Fall 2006 and Fall 2007. Sam Houston State University, Department of Biology. Chair, Dr. Todd Primm.

**Contemporary Issues in Biology Online (BIO 1003).** Fall 2006 – Fall 2007. University of Oklahoma, Department of Zoology. Chair, Dr. Bill Matthews. *Taught as adjunct faculty.*

**Contemporary Biology Online (BIO 134).** Fall 2006 – Summer 2008. Sam Houston State University, Department of Biology. Chair, Dr. Todd Primm.

**Honor's Integrated Science (HON 162).** Spring 2007, Spring 2008. Sam Houston State University, Honor's College, Director, Dr. Gene Young.

**Human Biology (BIO 341) and Human Anatomy (BIO 245) Lab Coordinator.** Spring 2007 - Present. Sam Houston State University, Department of Biology. Chair, Dr. Jerry Cook.

**Human Biology Lecture (BIO 341).** Spring 2007. Sam Houston State University, Department of Biology. Chair, Dr. Todd Primm.

**Introductory Zoology Lecture (BIO 162).** Fall, 2006. Sam Houston State University, Department of Biology. Chair, Dr. Todd Primm.

**Human Mate Choice: An Evolutionary Perspective (ZOO 4970/PSY 4920).** August 2006. University of Oklahoma, Summer Intersession. Departments of Zoology and Psychology. Chairs, Dr. Bill Matthews (ZOO) and Dr. George Mendoza (PSY). *Course developed by R. Deaton.*

**Introductory Zoology Lecture (ZOO 1114).** Fall 2005 – Spring 2006. University of Oklahoma, Department of Zoology. Chair, Dr. Bill Matthews.

**Graduate Student Teaching Assistantship.** Fall 2004 – Spring 2005. University of Oklahoma, Department of Zoology. Course: Concepts in Biology Lab (Biology Course for Non-majors). Dr. Marielle Hoefnagels, Supervisor.

**Human Anatomy Laboratory Instructor.** Fall 2000. Lexington Community College, Department of Biological Sciences and Health Technologies. Tammy Liles, Supervisor.

**Graduate Teaching Assistant.** Fall 1998 – Spring 2000, University of New Orleans, Department of Biological Sciences. Course: Form and Function Lab. Dr. Kathy Burt-Utley, Supervisor.

**Graduate Teaching Assistant.** Summer 2000. University of New Orleans, Department of Biological Sciences. Course: Biodiversity Lab. Dr. Kathy Burt-Utley, Supervisor.

### **Honors, Scholarships and Awards**

1<sup>st</sup> Place (Science), OU Graduate Student Research and Endeavors Poster Symposium, Spring 2006.

Wilk's Award (Best Graduate Student Presentation). Southwestern Association of Naturalists.

Colima, Mexico, April 2006.

Thompson Award for Teaching Excellence, Department of Zoology, University of Oklahoma, \$500, Spring 2006.

Graduate Student Senate Travel Award, University of Oklahoma, \$600, 2003-2005.

University of Oklahoma Graduate College Travel Award, \$500.00, 2003.

Saunders's Memorial Scholarship, Department of Biology, University of New Orleans, \$500.00, 2001. (Award for Outstanding Graduate Student and Teaching).

Graduate Student Association Travel Award, University of New Orleans, \$600.00, Spring 2000.

Kentucky Colonel's Service Recognition Award, Spring 1998.

### **Professional Memberships**

Association for Environmental Studies and Sciences, Member

Sigma Xi – Full Member

European Poeciliid Biologists, Member

Texas Academy of Sciences, Member

Ecological Society of America, Member

Society for the Study of Animal Behavior, Member

Southwestern Association of Naturalists, Member

Society for the Study of Evolution, Member

American Society of Ichthyologists and Herpetologists, Member

### **Service, Outreach, and Continuing Education**

**Co-advisor, Tri-Beta**, Sam Houston State University, Fall 2008 – Present.

**Advisor, Texas Academy of Sciences Sam Houston State Chapter**, Spring 2009 – Present.

**Section Chair, Vice President, Aquatic Sciences**, Texas Academy of Sciences, Spring 2009.

**Poster Judge**, Southwestern Association of Naturalists. April 2007, April 2008.

**Display Showcase. Livebearing Fishes of the World. SHSU Department of Biological Sciences, Sam Houston State University.** Funds donated by Office of Research and Special Programs, Dr. Jerry Cook, Vice President, Sam Houston State University. Summer 2008 – Present.

**Sam Houston State University All-Girl Cheerleading Coach.** Fall 2006-Summer 2008.

**Research Experience for Undergraduates (REU). Department of Biological Sciences, Sam Houston State University, Huntsville, Texas.**

Mentor undergraduates from other universities in biological research. Dr. Diane Neudorf and Dr. Bill Lutterschmidt, Directors. Summers 2007 and 2008.

Past REU students:

Kevin Hudson, Bloomsburg University, Summer 2007

Jacob Landis, University of Kansas, Summer 2008

Elizabeth Lamb, Miami University, Summer 2008

**Scientist, Summer Institute for Mid-Level Science Teachers. Sam Noble Oklahoma Museum of Natural History, Norman, Oklahoma.**

Conducted scientific investigations with elementary and junior high teachers. Led teachers through scientific experiments to promote scientific inquiry a better understanding of the process of science. Summer 2004 and 2005. Dr. Wendy Gram, Head of Education, Sam Nobel Oklahoma Museum of Natural History.

**United States Peace Corps Volunteer. Papua New Guinea, South Pacific.**

Established a university extension center assisting students in attaining high school equivalency. Taught math and English via correspondence for grades 10, 11, and 12. Developed curriculum for and taught grades 7 and 8 math in a provincial high school. April 1996 – September 1997.

**AmeriCorps Volunteer. Housing Counselor. Berea, Kentucky.**

Aided low-income families in Eastern and Southeastern Kentucky in the process of home ownership. Explained legal documents and mortgage process to families. Worked with attorneys and held loan closing for clients. Engaged in various service projects across Kentucky with other AmeriCorps members. October 1997 - July 1998.

**References**

Dr. Richard Broughton  
Assistant Professor of Biology  
Department of Zoology  
Oklahoma Biological Survey  
111 E. Chesapeake Street  
Norman, Oklahoma 73019  
(405) 325 – 5357  
[rbroughton@ou.edu](mailto:rbroughton@ou.edu)

Dr. Robert Cashner  
Dean of Graduate College *and*  
Vice Chancellor of Research  
AD 205  
University of New Orleans  
New Orleans, Louisiana 70148  
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[rcashner@uno.edu](mailto:rcashner@uno.edu)

Dr. Edie Marsh-Matthews  
Associate Professor of Zoology  
Department of Zoology *and*  
Curator of Ichthyology  
Sam Noble Museum of Natural History  
2401 Chautauqua Avenue  
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Dr. Matthew Rowe  
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