

Kinsey N. Tedford

Department of Environmental Sciences
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EDUCATION

- 2018-present **Ph.D. Environmental Sciences (Ecology)**, University of Virginia, GPA 3.95
Advisor: Dr. Max Castorani
- 2018 **M.S. Biology**, University of Central Oklahoma, *with honors*; GPA 4.0
Advisor: Dr. David Bass
- 2015 **B.S. Biology**, University of Central Oklahoma; Overall GPA 3.64, Major GPA 4.0

RESEARCH EXPERIENCE

- 2018- present **Graduate Research Assistant**, Dept. of Environmental Sciences, University of Virginia, Virginia Coast Reserve Long Term Ecological Research (VCR LTER).
- 2015-18 **Graduate Research Assistant**, Dept. of Biology, University of Central Oklahoma.
- 2014-18 **Student Museum Curator**, University of Central Oklahoma Natural History Museum, Invertebrate Collection, Edmond, OK.
- 2016-17 **Research Assistant**, Cayman Islands Dept. of Environment, Grand Cayman, Cayman Islands. Mentors: Jane Haakonsson, Jessica Harvey, and Fred Burton
- 2014-15 **Research Assistant**, Dept. of Biology, University of Central Oklahoma.
- 2012 **Aquarist Intern**, Oklahoma City Zoo & Botanical Garden, Oklahoma City, OK.
Mentor: Amanda Fitzgerald (Fall).

AWARDS & RECOGNITIONS

- 2020 University of Virginia Dept. of Environmental Sciences Graduate Ecology Award (\$500)
- 2020 E.C. Hall Scholar Award, University of Central Oklahoma
- 2019 Coastal & Estuarine Research Federation Travel Award (\$150)
- 2018 University of Virginia Dept. of Environmental Sciences Travel Support Award (\$650)
- 2018 University of Central Oklahoma Outstanding Biology Graduate Student Award
- 2015 University of Central Oklahoma Dept. of Biology Lothar Hornuff Field Biology Award
- 2015 Sigma Xi Research Society Student Choice Award

PEER-REVIEWED PUBLICATIONS

- 2019 Bass, D. & **K.N. Tedford**. First report of a population of freshwater caridean shrimp *Macrobrachium carcinus* from an anchialine cave on Grand Cayman. *Caribbean Journal of Science.*, 49:293-294.
- 2018 Bass, D., Gaskin, B., & **Tedford, K.N.** Macroinvertebrate community structure and physicochemical conditions of a northwestern Oklahoma spring. *Proc. Okla. Acad. Sci.*, 98:6-13.
- 2017 Bass, D., Gaskin-Lack, & **Tedford, K.N.** Macroinvertebrate community structure and physicochemical conditions of a Desperado spring. *Proc. Okla. Acad. Sci.*, 97:41-46.
- 2015 **Tedford, K.N.** & D. Bass. Macroinvertebrate community structure and physicochemical conditions of a southeastern Oklahoma bog. *Proc. Okla. Acad. Sci.*, 95:96-103.
- 2015 Bass, D., **Tedford, K.N.**, Harlin, C.B., & Shelley, R.M. Additional distribution records of Scolopendromorph centipedes in Oklahoma. *Proc. Okla. Acad. Sci.*, 95:93-95.
- In prep* **Tedford, K.N.**, Haakonsson, J., & Bass, D. Coastal migration of the black land crab, *Gecarcinus ruricola*, on Grand Cayman Island (*target journal: J. of Crustacean Biology*).

REPORTS & THESES

- 2018 **Tedford, K.N.** Population structure and reproductive migration of land crabs on Grand Cayman Island. Master's Thesis. University of Central Oklahoma, Edmond, OK.

- 2018 **Tedford, K.N.** Land Crab Report on the Status of *C. guanhumi* and *G. ruricola* on Grand Cayman. Cayman Islands Dept. of Environment, Grand Cayman, Cayman Islands.

GRANTS & FELLOWSHIPS

Active

- 2020-21 The Explorers Club Washington Group, Exploration and Field Research Grant. “Restoring and sustaining Virginia’s oyster reefs: spatial drivers of oyster populations across multiple spatial scales.” (\$1,554)
- 2019-21 Virginia Sea Grant, Graduate Research Fellowship. “Restoring and sustaining Virginia’s oyster reefs: spatial drivers of oyster populations across multiple scales.” (\$81,557)

Completed

- 2019 Dept. of Environmental Sciences, University of Virginia, Graduate Academic Review Committee Exploratory Research Award. “Restoring and sustaining Virginia’s oyster reefs: spatial drivers of oyster populations across multiple scales.” (\$1,245)
- 2016-17 Research, Creative & Scholarly Activities Grant, University of Central Oklahoma. “Population structure and shell selection of *Coenobita clypeatus* on Grand Cayman.” (\$1,555)
- 2015-16 Research, Creative & Scholarly Activities Grant, University of Central Oklahoma. “Distribution patterns and reproductive migration of land crabs on a small tropical island.” (\$1,555)
- 2015 Sigma Xi Club Student Research Grant, University of Central Oklahoma. “Preliminary studies of Cayman land crabs.” (\$200)
- 2014-15 Research, Creative & Scholarly Activities Grant, University of Central Oklahoma. “An ecological survey of a freshwater bog in south-central Oklahoma.” (\$1,390)

SCHOLARSHIPS

- 2014-18 Joe Ernest Vaughn Endowed Scholarship for Biosciences & Conservation
- 2015-18 Dr. Margaret W. Hamilton Endowed Scholarship
- 2014-18 University of Central Oklahoma Biology Tuition Waiver
- 2016-17 University of Central Oklahoma Legacy Master’s Scholarship
- 2014-15 Marvin Mays Endowed Scholarship
- 2010-14 Quad Graphics Windhover Scholarship

TEACHING & MENTORSHIP

- 2018-19 **Graduate Teaching Assistant**, Dept. of Environmental Sciences, University of Virginia. Fundamentals of Ecology Lab Fall 2018, Spring 2019
- 2015-18 **Graduate Teaching Assistant**, Dept. of Biology, University of Central Oklahoma. General Biology Lab Spring 2016, Fall 2017, Spring 2018 (Instructor of Record)
Marine Ecology Lab Spring 2016, Spring 2018
Invertebrate Zoology Lab Fall 2015, Fall 2016, Fall 2017
Freshwater Ecology Lab Spring 2017

Undergraduate students mentored in research

- 2018-20 University of Virginia, 6 students (E. Daly, E. Bieri, S. Cheng, S. Rosenberg, S. Lakshman, and E. Eareckson)
- 2015-18 University of Central Oklahoma, 3 students (J. McDonald, G. Rucci, and B. Easton)

PRESENTATIONS (AS LEAD AUTHOR)

- 2020 Tedford, K.N., S. Rosenberg, M.C.N. Castorani. *Restoring Virginia’s oyster reefs: environmental controls on oyster recruitment and survival across spatial scales*. Virginia Sea Grant Graduate Research Symposium, Richmond, VA.
- 2019 Tedford, K.N. & M.C.N. Castorani. *Restoring Virginia’s oyster reefs: environmental Controls on oyster recruitment, growth, and survival across spatial scales*. Coastal & Estuarine Research Federation, Mobile, AL.

- 2019 Tedford, K.N. & M.C.N. Castorani. *Restoring Virginia's oyster reefs: environmental controls on oyster recruitment, growth, and survival across spatial scales*. Western Society of Naturalists, Ensenada, MX.
- 2018 Tedford, K.N., E. Daly, & M.C.N. Castorani. *Spatial patterns of consumer communities across a restored seagrass landscape*. Western Society of Naturalists, Seattle, WA.
- 2018 Tedford, K.N. & D. Bass. *Coastal migration of the black land crab (Gecarcinus ruricola) on Grand Cayman*. UCO Three Minute Thesis (3MT), Edmond, OK.
- 2018 Tedford, K.N. & D. Bass. *Coastal migration of the black land crab (Gecarcinus ruricola) on Grand Cayman*. Oklahoma Research Day, Alva, OK.
- 2018 Tedford, K.N. & D. Bass. *Coastal migration of the black land crab (Gecarcinus ruricola) on Grand Cayman*. AAAS Annual Meeting, Austin, TX.
- 2018 Tedford, K. & D. Bass. *Coastal migration of the black land crab (Gecarcinus ruricola) on Grand Cayman*. Annual Meeting of the Oklahoma Academy of Science, Claremore, OK.
- 2017 Tedford, K.N. & D. Bass. *Coastal migration of Gecarcinus ruricola on Grand Cayman*. Cayman Islands Dept. of Environment, Grand Cayman, Cayman Islands.
- 2017 Tedford, K.N. & D. Bass. *Population structure and reproductive migration of land crabs on Grand Cayman*. Oklahoma Research Day, Enid, OK.
- 2016 Tedford, K.N. & D. Bass. *Grand Cayman land crabs*. University of Central Oklahoma Tri-Beta Biology Club, Edmond, OK.
- 2016 Tedford, K.N. & D. Bass. *Preliminary results of 2016 Grand Cayman land crabs investigation*. Cayman Islands Dept. of Environment, Grand Cayman, Cayman Islands.
- 2016 Tedford, K.N. & D. Bass. *Population structure and reproductive migration of land crabs on a small tropical island*. University of Central Oklahoma Tri-Beta Biology Club, Edmond, OK.
- 2016 Tedford, K.N. & D. Bass. *Population structure and reproductive migration of land crabs (Brachyura: Gecarcinidae) on a small tropical island*. Oklahoma Research Day, Alva, OK.
- 2015 Tedford, K.N. & D. Bass. *A student's journey from an Oklahoma bog to a tropical island*. Featured Student Research at University of Central Oklahoma College of Mathematics & Science Donors Appreciation Dinner, Edmond, OK.
- 2015 Tedford, K.N. & D. Bass. *Macroinvertebrate community structure and physicochemical conditions of a southeastern Oklahoma bog*. Annual Meeting of the Oklahoma Academy of Science, Oklahoma City, OK.
- 2015 Tedford, K.N. & D. Bass. *Macroinvertebrate ecology of a southeastern Oklahoma quaking bog*. Sigma Xi Student Research Conference, Kansas City, MO.
- 2015 Tedford, K.N. & D. Bass. *An ecological survey of a freshwater bog in south-central Oklahoma*. Oklahoma Research Day, Tahlequah, OK.

PROFESSIONAL SERVICE

- 2020 **Graduate Representative**, VCR LTER.
- 2019-20 **Social Chair**, Dept. of Environmental Sciences, University of Virginia, Charlottesville, VA.
- 2019 **Moderator**, Coastal & Estuarine Research Federation Meeting, Mobile, AL. (Nov.).
- 2019 **Undergraduate Presentation Judge**, Coastal & Estuarine Research Federation Meeting, Mobile, AL. (Nov.).
- 2019 **Prospective Student Ambassador**, Dept. of Environmental Sciences' Prospective Graduate Student Weekend, University of Virginia, Charlottesville, VA. (Feb.-Mar.).
- 2016-18 **Contributing Editor**, *1890: A Journal of Undergraduate Research*, University of Central Oklahoma, Edmond, OK.
- 2016-18 **Volunteer Judge**, Central Regional Science and Engineer Fair, Edmond, OK.
- 2014-17 **Registration Assistant**, Oklahoma Academy of Science, OK.
- 2017 **Field Technician**, Cayman Islands Dept. of Environment, Grand Cayman, Cayman Islands (Dec.).

- 2015 **Participant**, University of Central Oklahoma Alternative Spring Break, Padre Island Sea Turtle Recovery Program, Corpus Christi, TX. (Mar.).
- 2012-14 **Volunteer**, Oklahoma City Zoo & Botanical Garden, Oklahoma City, OK.
- 2014 **Participant**, University of Central Oklahoma Alternative Spring Break, Grand Canyon Environmental Project Program, Flagstaff, AZ. (Mar.).
- 2013 **Volunteer Research Assistant**, Dept. of Biology, University of Central Oklahoma, Edmond, OK.

PROFESSIONAL DEVELOPMENT

- 2019 **Invited Panelist**, “Making an impact: Lessons from collaborative science”, The Nature Conservancy NatureNet Science Symposium, Charlottesville, VA.
- 2019 **Invited Attendee**, Alda Alda Science Communication Workshop, VIMS, Gloucester Point, VA.
- 2017 **Invited Attendee**, AAAS Catalyzing Advocacy in Science and Engineering Workshop, Washington D.C.

SCIENTIFIC OUTREACH & COMMUNICATION

- 2020 Virtual Teacher’s Workshop on Oyster Habitat Restoration, The Nature Conservancy’s Virginia Coast Reserve.
- 2020 VCR LTER Outreach Event, Coastal Research Center, Oyster, VA.
- 2019 Migrate? What if you can’t move?! *Eastern Shore* Newsletter, 41:42.
- 2019 VCR LTER Outreach Event, At Altitude Gallery, Cape Charles, VA.
- 2018 Coastal migration of the black land crab (*Gecarcinus ruricola*) on Grand Cayman Island. Cayman Islands Dept. of Environment *Flicker* Newsletter, 37:5-8.
- 2017 Crabtivating creatures! Cayman Islands Dept. of Environment *Flicker* Newsletter, 31:7-9.
- 2015 Land crab study to commence on Grand Cayman. Cayman Islands Dept. of Environment *Flicker* Newsletter, 21:2-4.

PROFESSIONAL SOCIETIES

Sigma Xi Research Society, The Western Society of Naturalists, Coastal and Estuarine Research Federation, American Association for the Advancement of Science (AAAS), and Beta Beta Beta Biological Honor Society (Psi Mu Chapter).

CERTIFICATIONS

- 2018 CPR Certification, American Heart Association
- 2018 First Aid Certification, American Red Cross
- 2018 Virginia Boater Education Certification
- 2018 IACUC Safety Training
- 2012 PADI Open Water, Advanced Open Water Diver, and Rescue Diver Certifications (>200 dives)

RESEARCH SKILLS

Capture & collection: mist net (bats), Sherman live trap (small rodents); seine, hook & line (fish); hand-capture (iguanas, land crabs); crab pots (blue crabs); pitfall traps, D-ring dip net, kick net, Surber net, petite ponar bottom grab, berlese funnel, Van Dorn water bottle, sediment cores (infauna), throw traps (epifauna) (macroinvertebrates, largely aquatic)

Sampling: standard biological parameter measurements (birds, small mammals, iguanas, fish, macroinvertebrates, plants) and water quality

Devices/equipment: Trimble R10 GNSS, Emlid RTK GNSS Reach RS+, compass, clinometer, increment borer (tree cores), anemometer, secchi disc, spectrophotometer, remote camera systems (GoPro), operation of outboard boats (<20ft), data loggers (HOBO, RBR)

Software: R & RStudio, Github, ImageJ, QGIS, Slack, HOBOWare

REFERENCES

- Max Castorani, Ph.D. Assistant Professor, Dept. of Environmental Sciences, University of Virginia, Charlottesville, VA
434-243-4949, castorani@virginia.edu
- David Bass, Ph.D. Professor of Biology & Curator of Invertebrates, Dept. of Biology, University of Central Oklahoma, Edmond, OK
405-974-2722, dbass@uco.edu
- Cora Johnston, Ph.D. Site Director, Coastal Research Center
(Virginia Coast Reserve Long Term Ecological Research),
Cape Charles, VA
757-331-1246, caj2dr@virginia.edu
- Jane Haakonsson, M.S. Terrestrial Research Officer II, Cayman Islands Dept. of Environment, Grand Cayman, KY1-1002, Cayman Islands
345-949-8469, Jane.Haakonsson@gov.ky