Alexander B. Orfinger Assistant Professor of Biology Department of Life Science Dalton State College Sequoya Hall 228 650 College Dr. Dalton, GA, USA 30720 aorfinger@daltonstate.edu Cell: (386) 290 – 2505 Office: (706) 712 – 8223

Education

2023: Ph.D. in Entomology and Nematology, University of Florida / Florida A&M University

2017: M.S. in Biology, University of Central Florida

2013: B.S. in Biology with University Honors, University of Central Florida

Peer- Reviewed Publications_(*Denotes High School Co-Author)

34. **Orfinger**, **A.B.** (2023). Taxonomic Revision of the *Polycentropus confusus* Species Group (Trichoptera: Polycentropodidae). *Journal of Natural History*, 57(41-44): 1825-1916. 10.1080/00222933.2023.2271609

33. Rasmussen, A.K., & **Orfinger, A.B.** (2023). A Versatile and Economical Method for Collecting Macroinvertebrates Using Hester-Dendy Multiplate Samplers. *Environmental Monitoring and Assessment*, 195(1453): 1-7. https://doi.org/10.1007/s10661-023-12058-z

32. **Orfinger, A.B.**, Houghton, D.C., & Robinson, J.L. (2023). Aquatic Insect Ecology in a Changing World. *Frontiers in Ecology and Evolution*, 11(1282196): 1-3. 10.3389/fevo.2023.1282196

31. Orfinger, A.B., Hix, R.L., & Rasmussen, A.K. (2023). Larval Taxonomy of Eastern Nearctic *Polycentropus* sensu stricto (Trichoptera: Polycentropodidae). *Freshwater Science*, 42(2): 176–189. https://doi.org/10.1086/725339 *Featured on Issue Cover.*

30. Metcalf, A.N., Kurthen, A.L., Freedman, J., & **Orfinger, A.B.** (2022). The Grand Caddis Hatch Of JASM 2022: Trichoptera Natural History Observations At The Joint Aquatic Sciences Meeting In Grand Rapids, Michigan (USA). *Limnology and Oceanography Bulletin*, 1-6. https://doi.org/10.1002/lob.10521

29. Orfinger, A.B., Hix, R.L., Gerth, W.J., & Rasmussen, A.K. (2022). Larval Taxonomy Of Western Nearctic *Polycentropus sensu stricto* (Trichoptera: Polycentropodidae), With Comments On The Identification Of Immature Nearctic *Polycentropus sensu lato. The Pan-Pacific Entomologist*, 98(4): 225-261. 10.3956/2022-98.4.245

28. Lai, Q.T., Tuan, V.A., Dieu, D.K., **Orfinger, A.B.**, Ly, N.M., Ha, N.T., & T.T., Giang, T.T. (2022). Reproductive And Growth Parameters Of The Razor Clam, *Cultellus maximus* (Gmelin, 1791), In Southern Vietnam. *Ocean Science Journal*, 1-11. https://doi.org/10.1007/s12601-022-00089-5

27. **Orfinger, A.B.** (2022). Redescription And Transfer Of *Holocentropus timesis* (Denning) New Combination (Trichoptera: Polycentropodidae). *Proceedings of the Entomological Society of Washington*, 124(1): 98-107. https://doi.org/10.4289/0013-8797.124.1.98

26. Zamani, A., Dal Pos, D., Fric,, T., **Orfinger, A.B.**, Scherz, M.D., Bartoňová, A.S., & Gante, Z.F. (2022). The Future Of Zoological Taxonomy Is Integrative, Not Minimalist. *Systematics and Biodiversity*, 20(1): 1-14. https://dx.doi.org/10.1080/14772000.2022.2063964 25. **Orfinger, A. B.**, Morse, J.C., & Hix, R.L. (2022). Associating Life Stages and Sexes of Nearctic *Polycentropus* Curtis, 1835 (Trichoptera: Polycentropodidae) Using Mitochondrial DNA Barcoding. *Ecology and Evolution*, 12(e8741): 1-18. doi: https://doi.org/10.1002/ece3.8741

24. Etnier, D.A., Bauer, B.H., Green, M.W., & **Orfinger, A.B.** (2022). Larval Description of the Northern Caddisfly, *Limnephilus sackeni* Banks, 1930 (Trichoptera: Limnephilidae). *Aquatic Insects*, 1-11. doi: 10.1080/01650424.2022.2046780

23. Zamani, A., Fric, Z.F., Gante, H.F., Hokins, T., **Orfinger, A.B.**, Scherz, M.D., Bartoňová, A.S., & Dal Pos, D. (2022). DNA Barcodes On Their Own Are Not Enough to Describe a Species. *Systematic Entomology*, 1-5. doi: https://doi.org/10.1111/syen.12538

22. **Orfinger, A.B.**, De Jong, G.D. (2021). The First Record of the Jumping Bristletail *Pedetontus gershneri* Allen 1995 (Microcoryphia: Machilidae) from Alabama, USA Significantly Extends its Known Range. *Insecta Mundi*, 0894: 1-4.

21. **Orfinger, A.B.**, Moulton, J.K. (2021). *Polycentropus aileenae* n. sp. (Trichoptera: Polycentropodidae), a Caddisfly Species From The Eastern Nearctic, With New State Records for Members Of The *Polycentropus confusus* Species Group. *Zootaxa*, 4996(2): 353–362. doi: https://doi.org/10.11646/zootaxa.4996.2.9

20. Orfinger, A.B., Rasmussen, A.K. & Hix, R.L. (2021). *Sternotherus minor* (Loggerhead Musk Turtle): Mortality. *Herpetological Review*, 52(1): 132.

19. **Orfinger, A.B.**, Rasmussen, A.K. & Hix, R.L. (2021). Multilocus BOLD Dataset for Nearctic Polycentropodidae (Trichoptera): Metadata. *Freshwater Metadata Journal*, 51: 1-6. doi: https://doi.org/10.15504/fmj.2021.51

18. **Orfinger, A.B.** (2020) A Preliminary Molecular Assessment Of The Taxonomic Validity Of *Hexagenia orlando* Traver, 1931 (Ephemeroptera: Ephemeridae). *Genetics & Applications*, 4(2): 30-37. doi: 10.31383/ga.vol4iss1pp30-37

17. **Orfinger, A.B.** (2020) Diversity Beyond Insects in Entomology and Allied Disciplines. *Journal of Insect Science*, 20(5): 4; 1–2. doi: 10.1093/jisesa/ieaa093

16. **Orfinger, A.B.**, Etnier, D.A. (2020). *Polycentropus dinkinsorum* (Trichoptera: Polycentropodidae), A Newly Described Caddisfly Species From The Southern Appalachian Mountains, USA. *Zootaxa*, 4853(1): 126–132. doi: https://doi.org/10.11646/zootaxa.4853.1.8

15. Lai, Q.T., **Orfinger, A.B.**, Tran, T.T., & Nguyen, K.L. (2020). Distribution Of Suckermouth Armored Catfishes (*Pterygoplichthys* spp.) Along A Salinity Gradient In Co Chien and Ham Luong Rivers, Mekong Delta, Vietnam. *Asian Fisheries Science*, 30(2020): 300–306. doi: https://doi.org/10.33997/j.afs.2020.33.3.011

14. Samways, M.J., Barton, P.S., Birkhofer, K., Chichorro, F., Deacon, C., Fartmann, T., Fukushima, C.S., Gaigher, R., Habel, J.C., Hallmann, C.A., Hill, M.J., Hochkirch, A., Kaila, L., Kwak, M.L., Maes, D., Mammola, S., Ari Noriega, J., **Orfinger, A.B.**, Pedraza, F., Pryke, J.S., Roque, F.O., Settele, J., Simaika, J.P., Stork, N.E., Suhling, F., Vorster, C. & Cardoso, P. (2020) Solutions For Humanity On How To Conserve Insects. *Biological Conservation*, 242: doi: https://doi.org/10.1016/j.biocon.2020.108427 *Featured in numerous major news outlets*.

13. Cardoso, P., Barton, P.S., Birkhofer, K., Chichorro, F., Deacon, C., Fartmann, T., Fukushima, C.S., Gaigher, R., Habel, J.C., Hallmann, C.A., Hill, M.J., Hochkirch, A., Kwak, M.L., Mammola, S., Ari Noriega, J., **Orfinger, A.B.**, Pedraza, F., Pryke, J.S., Roque, F.O., Settele, J., Simaika, J.P., Stork, N.E., Suhling, F., Vorster, C., Samways, M.J. (2020) Scientists' Warning To Humanity On Insect Extinctions. *Biological Conservation*, 242: doi: https://doi.org/10.1016/j.biocon.2020.108426

Featured in numerous major news outlets.

12. Orfinger, A.B. (2019). Transfer Of *Polycentropus harpi* Moulton and Stewart To *Plectrocnemia harpi* (Moulton and Stewart) New Combination (Trichoptera: Polycentropodidae). *Insecta Mundi*, 0718: 1-2.

11. **Orfinger, A.B.**, Lai, Q.T., & Chabot, R.M. (2019). Effects Of Nonnative Fishes On Commercial Seine Fisheries: Evidence From A Long-Term Data Set. *Water*, 11(6): 1-11. doi: 10.3390/w11061165

10. **Orfinger, A.B.**, & Lucky, A. (2019). Giant Burrowing Mayfly, *Hexagenia limbata* (Serville, 1829) (Insecta: Ephemeroptera: Ephemeroidea: Ephemeridae), UF/IFAS Extension, EDIS Featured Creatures, EENY-726: 1-4.

9. Orfinger, A.B., Helsel, D., & Breeding, S.F. (2018). Longevity Of The Barred Owl, *Strix varia* Barton, 1799 In Captivity. *The Wilson Journal of Ornithology*, 130(4): 1009-1010. https://doi.org/10.1676/17-00014.1 *Featured in Audubon Magazine*.

8. **Orfinger, A.B.**, Kelly, S.L. & Woller, D.A. (2018). Flower-Feeding By Two Species Of Mydas Fly (Diptera: Mydidae) In Florida, With Notes On Tree-Form *Licania michauxii* (Gopher Apple). *Southeastern Naturalist*, 17(2): N19-N27. *Featured on Issue Cover*.

7. Orfinger, A.B. (2018). Anolis sagrei (Brown Anole): Ophiophagy. Herpetological Review, 49(1): 116.

6. Bernt, M.J., Crampton, W.G.R., **Orfinger, A.B.**, & Albert, J.S. (2018). *Melanosternarchus amaru*, A New Genus And Species Of Deep-Channel Electric Knifefish (Apteronotidae, Gymnotiformes) From The Amazon Basin. *Zootaxa*, 4378(4): 451-479. https://doi.org/10.11646/zootaxa.4378.4.1

5. **Orfinger, A.B.**, & Goodding, D.D. (2018). The Global Invasion Of The Suckermouth Armored Catfish Genus *Pterygoplichthys* (Siluriformes: Loricariidae): Annotated List Of Species, Distributional Summary, And Assessment Of Impacts. *Zoological Studies*, 57(7): 1-16. doi:10.6620/ZS.2018.57-07. *Featured in Amazonas Magazine.*

4. **Orfinger, A.B.**, & Kelly, S.L. (2017). *Tachyporus nitidulus* (Fabricius, 1781) (Coleoptera, Staphylinidae, Tachyporinae): First Record From The State Of Florida, USA. *Check List*, 13(6): 921–923. https://doi.org/10.15560/13.6.921

3. **Orfinger, A.B.**, Cogen, T.B.*, Irons, G.R.*, Kabilan, K.V.*, Molligoda, B.*, Moody, A.L.*, Wisdo, J.F.*, & Phillips, K.F. (2017). Preliminary Study Of Pan Trapping In Longleaf Pine Flatwoods In Central Florida, USA. *Midsouth Entomologist*, 10(1): 24-27.

2. **Orfinger, A.B.** (2015). Evolution As Opinion Versus Fact: A False Dichotomy With True Consequences. *The Journal of the Evolutionary Studies Consortium*, 7(1): 13-20.

1. **Orfinger, A.B.** (2015). Selected Population Characteristics Of The Non-Native Catfish *Hoplosternum littorale* (Hancock, 1828) In Central Florida, USA. *International Journal of Aquatic Biology*, 3(4): 258-262.

Other Publications

1. Gerth, W.J., Giersch, J., Kerst, C., Lee, J., Metcalfe, A.N., **Orfinger, A.B.**, Ruiter, T., Wevers, M.J., & Wisseman, R. (2023). Dave Ernest Ruiter – In Memoriam. *The Pan-Pacific Entomologist*, 99(1): 1-21. https://doi.org/10.3956/2022-99.1.1

Grants / Other Funding (Total: \$409,671.33)

2023: Dalton State College Title III HSI STEM CUREs Grant titled "The Effects of Water Source on Brine Shrimp (*Artemia* sp.) Longevity" -- \$1,398.01

2023: Dalton State College Title III HSI STEM Grant titled "Larval taxonomy of the net-spinning caddisfly *Cernotina truncona* Ross, 1947 (Trichoptera: Polycentropodidae)" -- \$6,704.49

2023: (Co-PI) USDA NIFA Capacity Building Grant 2022-09676 for project titled "Evaluating the Utility of DNA Metabarcoding Methods in Water Quality Biomonitoring Protocols to Assess Stream Health" -- \$299,593

2023: (Co-PI) Florida Department of Environmental Protection Contract for production of a new edition of the "Identification Manual for the Caddisfly (Trichoptera) Larvae of Florida" -- \$75,355

- 2022: University of Florida Office of Research Graduate Travel Award -- \$400
- 2022: Dr. James Davidson Graduate Travel Grant -- \$650
- 2022: American Water Resources Association, Florida W.V. Storch Award -- \$1,500
- 2022: University of Florida IFAS Travel Grant -- \$250
- 2022: Georgia Entomological Society PhD Entomology Scholarship -- \$500
- 2022: Society for Freshwater Science Board Travel Award -- \$500
- 2022: Society for Freshwater Science General Endowment Fund -- \$1,000
- 2021: University of Florida Graduate Student Council Travel Grant -- \$350
- 2021: Society for Freshwater Science Conference Registration Award -- \$30
- 2021: Dr. Marjorie Hoy Endowment Fund -- \$6,000
- 2020: UF Entomology and Nematology Nan-Yao and Jill Su Scholarship -- \$1,500
- 2020: UF College of Agricultural and Life Sciences A.S. Herlong, Sr. Fund -- \$2,000
- 2020: Center for Systematic Entomology Taxonomy Grant -- \$500
- 2019: Harvard Museum of Comparative Zoology Ernst Mayr Travel Grant -- \$1,000
- 2019: Capelouto Foundation Endowment Fund -- \$800
- 2019: UF College of Agricultural and Life Sciences A.S. Herlong, Sr. Fund -- \$2,000
- 2019: Fly Fishers International LaFontaine Aquatic Entomology Grant -- \$2,949.65
- 2019: University of Florida Open Access Publishing Fund -- \$1,436.36
- **2019**: Society for Freshwater Science Systematics Fund -- \$1000
- 2018: Highlands Biological Station Course Scholarship -- \$300
- 2016: UCF Department of Biology Travel Award -- \$400
- 2015: Fisheries Society of the British Isles Small Research Grant -- \$1,254.82
- 2014: UCF Graduate Presentation Fellowship -- \$300

Other Awards

2023: Entomological Society of America John Henry Comstock Award

Academic Service and Appointments Held_

Ongoing: Referee for: Annals of the Entomological Society of America, Aquatic Ecology, Aquatic Insects, Aquatic Invasions, Check List, Contributions to Entomology, Journal of Fish Biology, Neotropical Biology and Conservation, Neotropical Entomology, The Great Lakes Entomologist, Zootaxa

2022 – **2023**: Topic Coordinator and Guest Editor of Special Issue of *Frontiers in Ecology and Evolution* entitled "Aquatic Insect Ecology in a Changing World"

2022: Chair of Biodiversity and Conservation Session, 17th Trichoptera Symposium in Lunz am See, Austria

2019 - Present: Research Associate, Florida State Collection of Arthropods

2018 - 2023: Executive Committee Graduate Student Representative - Florida Association of Aquatic Biologists

2018 - 2019: Executive Board Secretary - UF Graduate Student Council

2017 - 2018: Assistant Editor - Check List - the journal of biodiversity data

2014-2015: Secretary - Biology Graduate Student Association at UCF

Invited and Contributed Presentations (And Associated Awards)

2023: Guest lecture in Research Methods in Biology, BIOL3100, at Dalton state College, Dalton, GA: "DNA Barcoding to Identify Animals – From Species Discovery to Food Quality"

2023: Guest lecture in Principles of Environmental Entomology, ENY2570, at Florida A&M University, Tallahassee, FL: "Aquatic Insects as Bioindicators"

2023: Talk at the 2023 Southeastern Branch Meeting of the Entomological Society of America, Little Rock, AR: "Updates to the Taxonomy of Nearctic *Polycentropus* Curtis, 1835 (Trichoptera: Polycentropodidae)"

2023: Invited seminar presented at the University of Mississippi Department of Biology, Oxford, MS: "Teaching Lessons: My experience with and thoughts on teaching general biology in higher education"

2022: Poster at 2022 AbbVie Florida A&M University Student Research Forum: "Resolving Larval Taxonomy of Nearctic Net-Spinning Caddisflies (Trichoptera: Polycentropodidae) to Ultimately Support Freshwater Bioassessment Protocols" *Awarded First Place -- Graduate Student Presentation*

2022: Talk at the 17th Trichoptera Symposium in Lunz am See, Austria: "Progress in the Taxonomy of Nearctic *Polycentropus* Curtis, 1835 (Trichoptera: Polycentropodidae)"

2022: Talk at the Joint Aquatic Sciences Meeting in Grand Rapids, MI: "Integrative Larval Taxonomy of Nearctic *Polycentropus* Curtis, 1835 (Trichoptera: Polycentropodidae)"

2022: Invited seminar presented at Illinois Natural History Survey, Urbana-Champaign, IL: "Standing on the shoulders of an INHS giant: continuing work on Nearctic caddisfly systematics"

2022: Talk at Association of 1890 Research Directors (ARD) Research Symposium 2022 in Atlanta, GA: "Elucidating Larval Taxonomy of Nearctic Caddisflies to Ultimately Assist in Freshwater Bioassessment Protocols"

2022: Co-led (with Dr Andrew Rasmussen) an invited Trichoptera taxonomic workshop at the 2022 Association of Mid-Atlantic Aquatic Biologists Virtual Meeting

2022: Talk at 2022 HBCU Agricultural Student Conference (Virtual): "Improved Larval Taxonomy of Nearctic Net-Spinning Caddisflies (Trichoptera: Polycentropodidae) to Ultimately Enhance Resolution of Freshwater Bioassessment" *Awarded First Place -- Graduate Student Oral Presentation*

2021: Talk at 2021 Entomological Society of America (ESA) Meeting, Denver, CO: "Integrative Taxonomy of the Neglected Life Stages of Nearctic *Polycentropus* (Trichoptera: Polycentropodidae)"

2021: Talk at 2021 Florida Association of Aquatic Biologists (FAB) Annual Meeting, Cedar Key, FL: "It's Not All About Males: Association and Taxonomy of Larvae and Females of Nearctic *Polycentropus* Curtis 1835 (Trichoptera: Polycentropodidae)" *Awarded Best Graduate Student Oral Presentation*

2021: Poster Presentation at 2021 Society for Freshwater Science (SFS) Annual Meeting (Virtual): "Progress in the Larval Taxonomy of Nearctic *Polycentropus sensu stricto* (Trichoptera: Polycentropodidae)"

2020: Talk at 2020 Florida Association of Aquatic Biologists (FAB) Annual Meeting (Virtual): "Systematics of the Nearctic *Polycentropus sensu stricto* (Trichoptera: Polycentropodidae): Early Results and Ongoing Directions" *Awarded Best Graduate Student Oral Presentation*

2019: Talk at 2019 Florida Association of Aquatic Biologists (FAB) Annual Meeting, Eastpoint, FL: "Systematics of the Eastern North American *Polycentropus sensu stricto* (Trichoptera: Polycentropodidae): a Proposal" *Awarded Best Graduate Student Oral Presentation*

2019: Poster Presentation at 2019 Florida Association of Aquatic Biologists (FAB) Annual Meeting, Eastpoint, FL: "Trophic Resource Partitioning of Electric Knifefishes (Teleostei: Gymnotiformes) of the Upper Amazon Basin"

2016: Guest lecture in Aquatic Ecology, PCB3442, at the University of Central Florida, Orlando, FL: "Trophic Ecology: Tools and Examples"

2015: Poster Presentation at 2015 Society of Integrative and Comparative Biology Annual Meeting, West Palm Beach, FL: "Assessing the condition of the invasive catfish *Hoplosternum littorale* (Hancock, 1828) in peninsular Florida". Abstract published in *Integrative and Comparative Biology*, Vol. 55, pp. E309

Other Research Experience

2018 – Present: Funded by USDA to complete aquatic invertebrate faunal survey of the Upper St. Marks River Basin, Florida.

2014 - 2017: National Science Foundation (NSF) Grant Participant: Aquatic Faunal Survey of the Lower Amazon

2013 - 2017: Graduate Researcher in Crampton Lab

2010 - 2013: Undergraduate Research Assistant in Crampton Lab, University of Central Florida, Orlando, FL. Conducted a project on caudal filament regeneration in Neotropical electric fishes

2011: Conducted a six-month study on bat house colonization at the University of Central Florida under Alaina Bernard, Assistant Director of UCF Landscape and Natural Resources

2008: Jesus College, University of Cambridge Department of Zoology, Cambridge, UK under Dr. James Gilbert. "Sexual Selection in Humans: A Unique Investigation Of Human Mate Preference"

2008: Conducted an independent study titled "A Proteomic Comparison of Two Allopatric Populations of Blue Crabs, *Callinectes sapidus*" under the mentorship of Dr. Andrea White

Teaching Experience and Relevant Job History

2020 - 2023: Graduate Teaching Assistant for Consequences of Biological Invasions (ALS4162/ALS6935), University of Florida

2021: Graduate Teaching Assistant for Introduction to Agricultural Sciences (AGG2004), Florida A&M University

2017 - 2018: Adjunct Professor, Department of Sciences, Valencia College, Orlando, Florida, USA

2017 - 2018: Zoo Teacher - Central Florida Zoo and Botanical Gardens

2016 - 2017: Instructor of Record for Ecology Lab (PCB3044L), University of Central Florida

2015 - 2018: Learning Specialist II - Biology I, Biology II, Human Anatomy & Physiology, and Microbiology tutor employed by Valencia College, Orlando, FL

2014 - 2015, 2017: Graduate Teaching Assistant for Biology II (BSC2011), University of Central Florida

2015: Graduate Teaching Assistant for Biology I (BSC2010) and Biology II (BSC2011), University of Central Florida

2014: Graduate Teaching Assistant for Biology II (BSC2011) and Aquatic Ecology (PCB3442), University of Central Florida

2013: Graduate Teaching Assistant for Biology 1 (BSC2010), University of Central Florida

2012: ICubed Participant

-Was funded by the NSF and Workforce Central Florida to collaborate with a visual arts student in order to artistically represent my undergraduate research via a graphic poster.

2010 - 2013: Undergraduate Research Assistant in Crampton Lab, Biology Department, University of Central Florida

Outreach

2022: Presented an invited talk to the general public hosted by Friends of Lake Jackson titled "Aquatic Insects of Florida" at Lake Jackson Community Center, Tallahassee, Florida

2020 - 2023: Various outreach events involving entomology presentations to grade school students via FAMU Entomology and UF Entomology and Nematology

2019: Various outreach events involving entomology presentations to grade school students with the Entomology and Nematology Student Organization of UF

2017: Instructor for BIOTEC (*Biology Integrated Orlando Training and Enrichment Camp*) -- Ecology Section and Animal Behavior Section

2014 - 2017: Various outreach events involving entomology presentations to Orange County, FL, elementary schools with the Entomological Society of Central Florida

2014: Guest lecture presented to Knights for Wildlife and Marine Conservation, titled "Alien Hybrid Swarms: Hybridization and resulting fitness of invasive *Pterygoplichthys* species in Florida"

Professional Memberships

Center for Systematic Entomology (CSE) Entomological Collections Network (ECN) Entomological Society of America (ESA) Entomological Society of Washington (ESW) Florida Association of Aquatic Biologists (FAB) Georgia Entomological Society (GES) Society for Freshwater Science (SFS)