

**Shirley M. Baker, PhD**  
Professor

University of Florida  
School of Forest, Fisheries, and Geomatics Sciences  
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**EDUCATION:**

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|------|------------|---|
| 1994 | <b>PhD</b> | <b>Marine Science</b> , The College of William and Mary, Virginia Institute of Marine Science |
| 1988 | <b>MS</b>  | <b>Marine Biology</b> , University of Oregon, Oregon Institute of Marine Biology              |
| 1986 | <b>BS</b>  | <b>Biology</b> , Seattle Pacific University   |

**PROFESSIONAL POSITIONS:**

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|--------------|---|
| 2024-present | <b>Associate Director</b> , School of Forest, Fisheries, and Geomatics Sciences, Fisheries and Aquatic Sciences Program |
| 2021-2022    | <b>Associate Program Leader for Natural Resources Extension</b> , UF/IFAS Extension                                     |
| 2021-present | <b>Professor</b> , University of Florida, School of Forest, Fisheries, and Geomatics Sciences                           |
| 2008-2021    | <b>Associate Professor</b> , University of Florida, School of Forest, Fisheries, and Geomatics Sciences                 |
| 1999-2008    | <b>Assistant Professor</b> , UF Department of Fisheries and Aquatic Sciences  |
| 1996-1999    | <b>Postdoctoral Associate</b> , Department of Ecology and Evolution, State University of New York at Stony Brook        |
| 1993-1996    | <b>Visiting Assistant Professor</b> , Department of Biology, Macalester College   |

**AFFILIATIONS:**

- UF School of Natural Resources and the Environment
- UF Center for Coastal Solutions
- UF Water Institute
- UF Invasion Science Research Institute
- UF/IFAS Invasive Species Council
- Florida Sea Grant
- Florida Climate Institute
- Florida Atlantic University

**AWARDS:**

- 2022        **Long Publication – Bronze Award**, National Association of Natural Resource Extension Professionals  
Awarded to B.V. Iannone III, E.C. Bell, S. Carnevale, J.E. Hill, J.B. McConnell, M. Main, S.F. Enloe, S.A. Johnson, J.P. Cuda, **S.M. Baker**, and M Andreu for “Standardized Invasive Species Terminology”
- 2021        **Educator Award**, North American Colleges of Teachers of Agriculture
- 2021        **Long Publication – 2<sup>nd</sup> Place**, Florida Association of Natural Resource Extension Professionals  
Awarded to B.V. Iannone III, S. Carnevale, M. Main, J.E. Hill, J.B. McConnell, S.A. Johnson, S.F. Enloe, M Andreu, E.C. Bell, J.P. Cuda, **S.M. Baker** for “Invasive Species Terminology: Standardizing for Stakeholder Education”
- 2021        **Adaptive Teaching**, School of Forest, Fisheries, and Geomatics Sciences.  
Nominated by students to highlight members of the School who have gone above and beyond in adapting with new methods of teaching during COVID
- 2017-2018    **Undergraduate Faculty Advisor/Mentor of the Year**, University of Florida
- 2017-2018    **Advising Mentor of the Year Award**, UF College of Agricultural and Life Sciences
- 2016        **Cross-Campus Faculty Entrepreneur of the Year**, UF Center for Entrepreneurship and Innovation, Warrington College of Business
- 2016        **2015 Award for Supervising the Outstanding Fisheries and Aquatic Sciences Thesis**, UF SFRC Fisheries and Aquatic Sciences
- 2014        **Outstanding Faculty Award**, FAS Students United in the Research of Fisheries

- 2011            **Outstanding Faculty Award**, FAS Students United in the Research of Fisheries
- 2002            **The Sir Charles Maurice Yonge Award**, Malacological Society of London
- 2002            **Davis Productivity Award, Certificate of Commendation**, State of Florida

**CURRENT SERVICE:**

- 2023-present **Member**, Technical Advisory Group: Guana Tolomato Matanzas National Estuarine Research Reserve
- 2023-present **Member**, Big Bend Estuary Restoration Team (regional)
- 2021-present **Member**, *Pycnopodia* Recovery Working Group (International)
- 2021-present **Lead**, *Bulimulus* spp Snail Working Group (national)
- 2020-present **Member**, Mentoring Committees, UF/IFAS, 5 faculty
- 2020-present **Member**, Graduate Curriculum Committee, Fisheries and Aquatic Sciences Program, School of Forest, Fisheries and Geomatics Sciences
- 2016-present **Faculty Co-Advisor**, UF Marine Biology Club
- 2016-present **Member**, Diversity, Inclusion, and Equity Committee, UF School of Forest, Fisheries, and Geomatics Sciences
- 2012-present **Member or Chair**, Peer Observation for Teaching Assessment committees, College of Agricultural and Life Sciences, 5 faculty
- 2008-present **Member**, Undergraduate Programs Committee, UF School of Forest, Fisheries, and Geomatics Sciences

**CURRENT COURSES:**

**FAS 4932/6154 Marine Adaptations/Aquatic Invertebrate Ecological Physiology**

This course examines and compares the physiological adaptations of marine, coastal, and estuarine invertebrates to environmental conditions. The processes examined span several levels of organization, from ecological and organismal to cellular and molecular. Examples are drawn from rocky intertidal, salt marsh, coral reef, and deep-sea habitats, among others. Undergraduate, graduate, and graduate online sections. Fall semesters, 3 credits.

### **FNR 6668 Natural Resources in a Changing Climate**

This course explores conservation and management tools and their vulnerabilities to global climate change, how practitioners can implement them in new ways to maintain or increase their effectiveness, options for integrating the needs of humans and natural resources, and how governance mechanisms can be improved to support adaptation efforts. Graduate and graduate online sections. Spring semesters, 3 credits.

### **Regular guest lectures:**

AEC 3065 **Issues in Agricultural and Life Sciences**

FAS4932/FAS5015 **Aquaculture I**

FAS6932 **Aquaculture II**

FAS 4932/6932 **Invasion Ecology of Aquatic Animals**

FAS6256/VEM5912 **Fish and Aquatic Invertebrate Histology**

VME4013/VME6011/VEM5372 **Aquatic Wildlife Health Issues**

### **SCHOLARSHIP OF TEACHING:**

- 2023      **Author**, “Leadership in Managing Natural Resources for Ecosystem Services and Resilience: The Case of Estero Bay.” UF Global Education Lab  
<https://www.globaleducationlab.org/portfolio/baker2/>
- 2021      **Selected Presenter**, “Student-Selected Projects Enhance Engagement and Learning for Non-Traditional Graduate Students. North American Colleges of Teachers of Agriculture
- 2020      **Invited Presenter**, “Connecting to Nature and 360° Science Communication in the UF/IFAS Austin Cary Forest.” CALS Teaching Enhancement Symposium
- 2019      **Invited Panelist**, “Bringing Global Perspectives to Your On-Campus Course.” UF Center for Teaching Excellence
- 2018      **Forum Moderator**, “Successful Student Field Experiences: Courses and Research – A participatory panel discussion on enhancing student field experiences ... without losing your cool.” IFAS Inaugural Research Forum
- 2016      **Invited Panelist**, “The View from Outside a B School: Experiences in Teaching and Developing Entrepreneurship Courses.” The Experiential Classroom No. XVII. UF Center for Entrepreneurship & Innovation

- 2016      **Nominated Presenter**, “Student Engagement with VoiceThread.” Spring Interface 2016: Tips, Tricks, and Timesavers. UF Office of Faculty Development and Teaching Excellence
- 2013      **Co-Author**, “Tilapia Aquaculture in Belize; Impacts of Climate Change.” UF Global Education Lab <http://www.globaleducationlab.org/index.shtml>
- 2012      **Co-Author**, “Fisheries Science Careers; Working Towards Sustainable Fisheries.” UF Global Education Lab <http://www.globaleducationlab.org/index.shtml>

#### **PROFESSIONAL DEVELOPMENT OF TEACHING:**

- 2019-2020      **POLA Fellow**, Preparing Organizational Leaders in Agriculture through Innovative Leadership Case Studies Contextualized in Agricultural Disasters, USDA/NIFA
- 2019      **Roche Teaching Scholar**, UF College of Agricultural and Life Sciences (CALs)
- 2014-2017      **Entrepreneurship Faculty Fellow**, UF Center for Entrepreneurship and Innovation, Warrington College of Business.
- 2014      **Invited Participant**, The Experiential Classroom No. XV: Becoming a Great Entrepreneurship Educator. UF Center for Entrepreneurship & Innovation.
- 2012-2013      **Selected Participant**, Teaching Locally, Engaging Globally: Increasing Undergraduates’ Knowledge of the International Dimensions of Climate Change, Food Security, and Childhood Obesity. USDA-NIFA Higher Education Challenge Grant.

#### **STUDENT AND POSTDOCTORAL MENTORSHIP:**

##### **Postdoctoral projects directed:**

Suprenand, Paul. 2013-2015. Developing a decision-support tool for the management of clam farms on the FL Gulf Coast.

Bergquist, Derk. 2002-2004. CLAMMRS: Clam lease assessment, management, and modeling using remote sensing.

##### **Dissertation projects directed:**

Perez, Kristie. Active. Role of shellfish in nitrogen cycling in the Guana Estuary.

Black, Ken. 2021. Quantification of nitrogen removal by shellfish aquaculture.

Schuman, Carrie. 2018. Ecosystem service provision by the Eastern oyster, *Crassostrea virginica*, within the St. Augustine region of Florida.

**Masters projects directed:**

Gillett, Bethan. Active. Use of ponds to teach agriculture for K-6.

Gonzalez-Bonilla, Derek. Active. Impacts of Anthropogenic Sound on Bivalve Behavior.

Drake, Marissa. 2021. Marine Baitfish Aquaculture in Florida – Evaluation and Business Plan.

Simonetti, Julia. 2015. Economic analysis of a small urban aquaponics system.

Broderick, Melissa. 2012. Determination of temperature thresholds for the northern hard clam, and evaluation of backcrossed F1 hybrids (*Mercenaria mercenaria* X *Mercenaria campechiensis*).

Weber, Kerry. 2008. Effect of temperature on the metabolic rate of diploid and triploid *Mercenaria mercenaria*.

Hoover, Elise. 2007. Effects of temperature, salinity, and dissolved oxygen on survival of triploid and diploid hard clams, *Mercenaria mercenaria*.

McCoy, Ayana. 2005. Examination of *Mercenaria mercenaria* as a host for *Perkinsus marinus*.

Beals, Carla. 2004. Clearance rates and particle selectivity in the hard clam, *Mercenaria mercenaria*, from warm water habitats.

Herb, Heather. 2001. A systematic review of the shallow-water octopuses (Cephalopoda, Octopodidae) of the Fiji Islands.

**Masters projects co-directed:**

Love, Gabrielle. 2021. Population-level and community level consequences of habitat-mediated density-dependent mortality: Finfish response to oyster population collapse.

Alo, Micah. 2005. Survivorship, growth, and pigmentation responses of the marine ornamental invertebrate *Tridacna maxima* to varied irradiance levels in two different culture systems.

**Other graduate mentorship:**

**Chair**, 22 Masters of Fisheries and Aquatic Sciences (MFAS, non-thesis, technical paper)

**Member**, 31 PhD committees

**Member**, 21 MS committees

**Member**, 31 non-thesis committees

**Other undergraduate mentorship:**

**Mentor**, 6 interns, UF IFAS Undergraduate Research Internship Program

**Mentor**, 4 interns, Florida Sea Grant Summer Internship Program

**Faculty Sponsor**, 13 pledges, Fraternity of Alpha Zeta

**Mentor**, 2 students, UF University Minority Mentoring Program

**Advisor**, 1 student, Undergraduate Scholar's Program

**Advisor**, 3 students, CALS 4+1 Program

**PEER-REVIEWED JOURNAL ARTICLES:**

Krebs, C.L., J. Loizzo, C.P. Barnett, and **S. Baker**. *In press*. Climate change cyber activism: A visual communication content analysis of youth activist Greta Thunberg's Instagram. *International Journal of the Arts, Humanities and Social Sciences*.

Lieurance, D., S. Canavan, D.C. Behringer, A.E. Kendig, C.R. Minter, L.S. Riesinger, C.M. Ramagosa, S.L. Flory, J.L. Lockwood, P.J. Anderson, **S.M. Baker**, J. Bojko, K.E. Bowers, K. Canavan, K. Carruthers, W.M. Daniel, D.R. Gordon, J.E. Hill, J.G. Howeth, B.V. Iannone III, L. Jennings, L.A. Gettys, E.M. Kariuki, J.M. Kunzer, H.D. Laughinghouse IV, N.E. Mandrak, S. McCann, T. Morawo, C.R. Morningstar, M. Neilson, T. Petri, I.A. Pfingsen, R.H. Reed, L.W. Waters, and C. Wanamaker. 2023. Identifying invasive species threats, pathways, and impacts to improve biosecurity. *Ecosphere* 2023;14:e4711.

Bennett, H., M. Griffin, R. Francis-Floyd, **S. Baker**, A. Camus, C. Pelton, and J. Dill-Okubo. 2023. *Vibrio harveyi* in a Caribbean spiny Lobster (*Panulirus argus*) with hepatopancreas necrosis. *Veterinary Pathology* 60(5): 618-623.

Bai, J., **S.M. Baker**, R.M. Goodrich-Schneider, N. Montazeri, and P.J. Sarnoski. 2021. Development of a rapid colorimetric strip method for determination of volatile bases in mahi-mahi and tuna. *Journal of Food Science* 86: 2398-2409.

Iannone, B. V., III, S. Carnevale, M. Main, J. E. Hill, J. B. McConnel, S. A. Johnson, S.F. Enloe, M. Andreu, E. C. Bell, J. P. Cuda, and **S. M. Baker**. 2020. Invasive species terminology: Standardizing for stakeholder education. *Journal of Extension* 58(3): v58-3a3.

Baker, P., and **S.M. Baker**. 2019. Carbon mineralization associated with aquaculture of the northern quahog *Mercenaria mercenaria*. *Journal of Shellfish Research* 38: 519-527.

Bai, J., **S.M. Baker**, R.M. Goodrich-Schneider, N. Montazeri and P.J. Sarnoski. 2019. Aroma profile characterization of mahi-mahi and tuna for determining spoilage using purge and trap gas chromatography-mass spectrometry. *Journal of Food Science* doi: 10.1111/1750-3841.14478

Bai, J., G.L. Baker, **S.M. Baker**, R.M. Goodrich Schneider, N. Montazeri, and P.J. Sarnoski. 2019. Simultaneous determination of amino acids and biogenic amines in tuna and mahi-mahi by reversed-phase ultra-high performance liquid chromatography. *Journal of Aquatic Food Product Technology* 28: 848-860.

Martony, M., D. Pouder, R. Yanong, Y. Kiryu, J.H. Landsberg, R. Isaza, T. Waltzek, N.I. Stacy, R. Giglio, **S. Baker** and R. Francis-Floyd. 2018. Establishing a diagnostic technique for coelomocentesis in the long-spined sea urchin *Diadema antillarum*. *Journal of Aquatic Animal Health* 30: 325-331. DOI: 10.1002/aah.10043

Rogers, A., J.-F. Hamel, **S.M. Baker**, and A. Mercier. The 2009-2016 Belize sea cucumber fishery: Resource use patterns, management strategies and socioeconomic impacts. *Regional Studies in Marine Science* 22: 9-20.

Dole, T., S. Koltun, **S.M. Baker**, R.M. Goodrich-Schneider, M.R. Marshall and P.J. Sarnoski. 2017. Colorimetric evaluation of mahi-mahi and tuna for biogenic amines. *Journal of Food Product Technology*. 26:7, 781-789, DOI: 10.1080/10498850.2017.1297879

Dole, T., S. Koltun, **S.M. Baker**, R.M. Goodrich-Schneider, M.R. Marshall and P.J. Sarnoski. 2016. The matrix effect of tuna and mahi-mahi on biogenic amine detection. *Journal of Food and Health Science* 2(3): 74-81.

Arnold, T.E., M. Brenner, J.H. Curtis, A. Dutton, **S.M. Baker**, J.H. Escobar, and C.A. Ortega. 2014. Application of stable isotopes ( $\delta^{18}\text{O}$ ) to determine growth patterns of the invasive gastropod *Pomacea maculata* in Florida lakes. *Florida Scientist* 77: 126-143.

Lopeztegui-Castillo, A., **S.M. Baker**, Y. Garcés-Rodríguez, R. Castelo-Báez, N. Castro-Graña and A. Artilles-Valor. 2014. Spatial and temporal patterns of the nonnative green mussel *Perna viridis* in Cienfuegos Bay, Cuba. *Journal of Shellfish Research* 33: 273-278.

McFarland, K., **S. Baker**, P. Baker, M. Rybovich and A K. Volety. 2014. Temperature, salinity, and aerial exposure tolerance of the invasive mussel, *Perna viridis*, in estuarine habitats: Implications



for spread and competition with native oysters, *Crassostrea virginica*. Estuaries and Coasts  
**Published online:** 25 October. PDF 10 pages.

Baker, P., J.S. Fajans and **S.M. Baker**. 2012. Habitat dominance of a nonindigenous tropical bivalve, *Perna viridis* (Linnaeus, 1758), in a subtropical estuary in the Gulf of Mexico. Journal of Molluscan Studies 78: 28-33.

Riley, L.W., **S.M. Baker** and E.J. Phlips. 2010. A new device for use in crushing rigid biomass and geological materials prior to compositional analysis. Journal of Paleolimnology 44: 737-739.

Baker, P., F. Zimmanck and **S.M. Baker**. 2010. Feeding rates of an introduced freshwater gastropod *Pomacea insularum* on native nonindigenous aquatic plants in Florida. Journal of Molluscan Studies 76: 138-143.

Riley, L., **S.M. Baker**, and E. Phlips. 2010. Self-adhesive wire markers for bivalve tag and recapture studies. American Malacological Bulletin 28: 183-184.

Joyner-Matos, J., J. Andrzejewski L. Briggs, **S.M. Baker**, C.A. Downs, and D. Julian. 2009. Assessment of cellular and functional biomarkers in bivalves exposed to ecologically relevant abiotic stressors. Journal of Aquatic Animal Health 21: 104-116.

Phlips, E.J., **S.M. Baker**, K. Black, and N. Dix. 2008. Effects of hard clam (*Mercenaria mercenaria*) high density culture on water quality in a shallow semi-restricted bay. Florida Scientist 71: 330-340.

**Baker, S.M.** and D.J. Hornbach. 2008. Zebra mussels (*Dreissena polymorpha*) attached to native mussels (Unionidae) or inanimate substrates: Comparison of physiological rates and biochemical composition. American Midland Naturalist 160: 20-28.

Steigerwalt, N.M., C.E. Cichra and **S.M. Baker**. 2008. Composition and distribution of aquatic invertebrate communities on snags in a north central Florida, USA, spring-fed stream. Florida Scientist 71: 273-286.

Baker, P., J.D. Austin, B.W. Bowen, and **S.M. Baker**. 2008. Range-wide population structure and history of the northern quahog (*Merceneria merceneria*) inferred from mitochondrial DNA sequence data. ICES Journal of Marine Science 65: 155-163.

Bergquist, D.C., D. Heuberger, L.N. Sturmer and **S.M. Baker**. 2008. Continuous water quality monitoring for the hard clam industry in Florida, USA. Environmental Monitoring and Assessment 148: 409-419.

McCoy, A., **S.M. Baker** and A.C. Wright. 2007. Investigation of *Perkinsus spp.* in aquacultured hard clams (*Mercenaria mercenaria*) from the Florida Gulf Coast. Journal of Shellfish Research 26: 1029-1033.

Baker, P., J.S. Fajans, W.S. Arnold, D.A. Ingrao, D.C. Marelli and **S.M. Baker**. 2007. Range and dispersal of a tropical marine invader, the green mussel, *Perna viridis*, in subtropical waters of the southeastern United States. *Journal of Shellfish Research* 26: 345-355.

Brenner, M., J.M. Smoak, D.A. Leeper, M. Streubert and **S. Baker**. 2007. Radium-226 accumulation in Florida freshwater mussels. *Limnology and Oceanography* 52: 1614-1623.

Mitchem, E., J.S. Fajans and **S.M. Baker**. 2007. Contrasting responses of two native crustacean predators to non-indigenous prey, the green mussel, *Perna viridis*. *Florida Scientist* 70: 180-188.

Bergquist, D.C., J.A. Hale, P. Baker and **S.M. Baker**. 2006. Development of ecosystem indicators for the Suwannee River Estuary: Oyster reef habitat along a salinity gradient. *Estuaries and Coasts* 29: 353-360.

**Baker, S.M.**, P.K. Baker, D. Heuberger and L.N. Sturmer. 2005. Short-term effects of rapid salinity reduction on seed clams. *Journal of Shellfish Research* 24: 29-34.

Barber, B.J., J.S. Fajans, **S.M. Baker** and P.K. Baker. 2005. Gametogenesis in the non-native green mussel, *Perna viridis*, and the native scorched mussel, *Brachidontes exustus*, in Tampa Bay, Florida. *Journal of Shellfish Research* 24: 1087-1095.

**Baker, S.M.** and D.K. Padilla. 2004. New frontiers in functional morphology of molluscs: A tribute to Drs. Vera Fretter and Ruth Turner. *American Malacological Bulletin* 18: 121-127.

**Baker, S.M.** and J.S. Levinton. 2003. Selective feeding by three native North American freshwater mussels implies food competition with zebra mussels. *Hydrobiologia* 505: 97-105.

**Baker, S.M.** and D.J. Hornbach. 2001. Seasonal metabolism and biochemical composition of two unionid mussels, *Actinonaias ligamentina* and *Amblema plicata*. *Journal of Molluscan Studies* 67: 407-416.

**Baker, S.M.** and D.J. Hornbach. 2000. Physiological status and biochemical composition of a natural population of unionid mussels (*Amblema plicata*) infested by zebra mussels (*Dreissena polymorpha*). *American Midland Naturalist* 143: 443-452.

**Baker, S.M.**, J.S. Levinton and J.E. Ward. 2000. Particle transport in the zebra mussel, *Dreissena polymorpha* (Pallas). *Biological Bulletin* 199: 116-125.

**Baker, S.M.**, J.S. Levinton, J.P. Kurdziel and S.E. Shumway. 1998. Selective feeding and biodeposition by zebra mussels and their relation to changes in phytoplankton composition and seston load. *Journal of Shellfish Research* 17: 1207-1213.

**Baker, S.M.** and D.J. Hornbach. 1997. Acute physiological effects of zebra mussel (*Dreissena polymorpha*) infestation on two unionid mussels, *Actinonaias ligamentina* and *Amblema plicata*. Canadian Journal of Fisheries and Aquatic Sciences 54: 512-519.

**Baker, S.M.** and R. Mann. 1994. Feeding ability during settlement and metamorphosis in the oyster *Crassostrea virginica* and the effects of hypoxia on post-settlement ingestion rates. Journal of Experimental Marine Biology and Ecology 181: 239-253

**Baker, S.M.** and R. Mann. 1994. Description of metamorphic phases in the oyster *Crassostrea virginica* and effects of hypoxia on metamorphosis. Marine Ecology Progress Series 104: 91-99.

**Baker, S.M.** and N.B. Terwilliger. 1993. Hemoglobin structure and function in the rat-tailed sea cucumber, *Paracaudina chilensis*. Biological Bulletin 185: 115-122.

**Baker, S.M.** and R. Mann. 1992. Effects of hypoxia and anoxia on larval settlement, juvenile growth, and juvenile survival of the oyster *Crassostrea virginica*. Biological Bulletin 182: 265-269.

#### **BOOK CHAPTERS:**

**Baker, S.M.** and J. Dill-Okubo. *In Press*. Gonadal Neoplasia. *In Bivalve Diseases*. R. Smolowitz (ed). Elsevier.

Lorenzen, K., C. Ainsworth, **S. Baker**, L. Barbieri, E. Camp, J. Dotson, and S. Lester. 2017. Climate Change Impacts on Florida's Fisheries and Aquaculture Sectors and Options for Mitigation. *In Florida's Climate; Changes, Variations, & Impacts*. E.P. Chassignet, J.W. Jones, V. Misra, and J. Obeyseker (eds). Florida Climate Institute, Gainesville. Pages 427-456.

Anderson, J.A., **S.M. Baker**, G.L. Graham, M.G. Haby, S.G. Hall, L. Swann, W.C. Walton and C.A. Wilson. 2013. Effects of Climate Change on Fisheries and Aquaculture in the Southeast USA. *In Climate of the Southeast United States: Variability, Change, Impacts, and Vulnerability*. K.T. Ingram, K. Dow, L. Carter, and J. Anderson (eds). Island Press, Washington DC. Pages 190-209.

Levinton, J.S., J.E. Ward, S.E. Shumway, and **S.M. Baker**. 2001. Feeding Processes of Bivalves: Connecting the Gut to the Ecosystem. *In Organism-Sediment Interactions*. S. Woodin (ed). University of South Carolina Press, Columbia, South Carolina. Pages 385-400.

#### **SELECTED EXTENSION PUBLICATIONS AND CREATIVE WORKS:**

*EDIS is the Electronic Data Information Source of UF/IFAS Extension. Publications are peer-reviewed and maintained for free distribution on the web. <https://edis.ifas.ufl.edu/>*

Donnarumma, L., J. Henry, S. Krueger, L. Krinsky, **S. Baker**, J. Patterson. *In press*. Ocean acidification: Effects on sponges. Electronic Data Information source (EDIS), UF/IFAS Extension.

- Melkani, S., N. Manirakiza, **S.M. Baker**, and J.H. Bhadha. 2023. Current and emerging protocols for carbon measurement in agricultural soils. SS721. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/SS721>
- Donnelly, H., A. Smyth, **S. Baker**, L. Reynolds, and A. Collins. 2023. How do oysters remove nitrogen? SS711. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/SS711>
- Baker, S.M. 2022. Webinar: *Bulimulus "sporadicus,"* Training Module Series, UF Invasive Species Council, UF/IFAS Extension.
- Love, G., **S. Baker**, and E.V. Camp. 2021. Oyster-predator dynamics and climate change. FA228. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/FA228>
- Iannone, B.V. III, E.C. Bell, S. Carnevale, J.E. Hill, J. McConnell, M. Martin, S.F. Enloe, S.A. Johnson, J.P. Cuda, **S.M. Baker**, and M. Andreu. 2021. Standardized invasive species terminology for effective outreach education. FR439. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/FR439>
- Francis-Floyd, R., J. Landsberg, R. Yanong, Y. Kiryu, **S. Baker**, D. Poudel, W. Sharp, G. Delgado, N. Stacy, T. Waltzek, H. Walden, R. Smolowitz, and G. Beck. 2020. Diagnostic methods for the comprehensive health assessment of the long-spined sea urchin, *Diadema antillarum*. VM 244. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/vm244> .
- Yang, H., L. Sturmer and **S. Baker**. 2016. Molluscan shellfish aquaculture and production. FA191. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/FA191>
- Sturmer, L., **S. Baker**, K. Grogan, and S. Larkin. 2015. Green clams: Estimating the value of environmental benefits (ecosystem services) generated by the hard clam aquaculture industry of Florida. Extension website. <https://shellfish.ifas.ufl.edu/environmental-benefits/>
- Sturmer, L., **S. Baker**, K. Grogan, and S. Larkin. 2015. Florida Clam Farm Benefits Calculator. Interactive web tool. <https://shellfish.ifas.ufl.edu/farm-benefits-calculator/>
- Dix, N., E. Phlips, **S. Baker**, S. Badylak, L. Sturmer and K. Hulen. 2010. What do Clams Eat? Interactive website. . [http://shellfish.ifas.ufl.edu/clams\\_eat/](http://shellfish.ifas.ufl.edu/clams_eat/)
- Sturmer, L.N., J.M. Nuñez, R.L. Creswell, and **S.M. Baker**. 2009. The potential of blood ark and ponderous ark aquaculture in Florida; Results of spawning, larval rearing, nursery and growout trials. Florida Sea Grant College Program, TP-169. 75 pp.
- Weber, K., E. Hoover, L. Sturmer and **S. Baker**. 2009. The role of dissolved oxygen in hard clam aquaculture. FA152. Electronic Data Information source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/FA152>

**Baker, S.**, E. Hoover, and L. Sturmer. 2007. The role of salinity in hard clam aquaculture. Electronic Data Information Source (EDIS), UF/IFAS Extension. FA 128. 10 pp. <https://edis.ifas.ufl.edu/publication/FA128>

Fajans, J., L. Sturmer, **S. Baker**, K. Hulen and E. Cassiano. 2007. What's in the Clam Bag? Interactive website. <http://shellfish.ifas.ufl.edu/clambag/>

Weber, K, L. Sturmer, E. Hoover and **S. Baker**. 2007. The role of water temperature in hard clam aquaculture. FA151. Electronic Data Information Source (EDIS), UF/IFAS Extension. <https://edis.ifas.ufl.edu/publication/FA151>

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**Baker, S.**, D. Petty, R. Francis-Floyd, R. Yanong and L. Sturmer. 2006. Introduction to infectious diseases in hard clams. Electronic Data Information Source (EDIS), UF/IFAS Extension. FA 125. 7 pp. <https://edis.ifas.ufl.edu/publication/FA125>

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#### **CURRENT GRANTS:**

**South Florida Water Management District**, 2024, \$6240, FY24 Wading Bird and Waterfowl Prey Analysis, **PI**

**Florida Sea Grant**, 2024, \$14,741, Shellfish Aquaculture in Florida: A Workshop to Identify Emerging Opportunities for Expanding Aquaculture Research and Extension, **Co-PI**

**Florida Sea Grant**, 2023-2024, \$25,000, 2023 Graduate Student Coastal and Ocean Fellowship Competition, **Co-PI**

**Florida Sea Grant**, 2023-2024, \$10,000, Impacts of Anthropogenic Sound on Bivalve Behavior, **PI**

**National Estuarine Research Reserve System Science Collaborative**, 2022-2024, \$99,988, Using Collaborative Open Science Tools to Improve Engagement with the Ecology of the Guana River Estuary, **Co-Technical Lead**

**National Estuarine Research Reserve System Science Collaborative**, 2020-2024, \$594,966, The Current and Potential Role of Shellfish in Improving Water Quality Along a Gradient of Contaminants, Nutrients, and Salinity in the Guana River, **Co-PI**

**MEMBERSHIPS**

American Association for the Advancement of Science

Florida Aquaculture Association

Fraternity of Alpha Zeta

National Aquaculture Association

National Shellfisheries Association