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| ***Christine Angelini*** | ***Curriculum Vitae*** |
| Assistant Professor  Environmental Engineering Sciences  University of Florida  c.angelini@ufl.edu | Weil 575H  P.O. Box 118525  Gainesville, FL 32611  Ph (office): 352-294-7815 |

**PROFESSIONAL APPOINTMENTS**

2014-present Assistant Professor, Environmental Engineering Sciences, University of Florida

**EDUCATION**

Ph.D Biology 2014, University of Florida

Dissertation title: “Foundation Species as Drivers of Ecosystem Structure, Multifunctionality, and Resilience”

Advisor: Brian R. Silliman

B.Sc. Marine Biology, Honors, 2007, Brown University

**AREAS OF SPECIALIZATION**

Community Ecology, Conservation Biology, Resilience of Coastal Ecosystems to Global Change, Biodiversity and Ecosystem Functioning, Coastal Restoration.

**EXTERNAL FUNDING**

NSF OCE, Facilities Improvement Grant, 2018-2020, co-PI, $238,987

Florida Fish & Wildlife Conservation Commission, 2018-2019, Lead PI, $2,836

Florida Fish & Wildlife Conservation Commission, 2018-2019, Lead PI, $64,383

NSF LTER Biological Oceanography, co-PI, 2019-2024, $6,450,000 ($169,984 to Angelini)

NSF CBET Environmental Engineering REU Supplement Award, Lead PI, 2018, $6,937

NSF CBET Environmental Engineering CAREER Award, Lead PI, 2017-2021, $502,862

NOAA NERR Science Collaborative, co-PI, 2018-2021, $677,000 ($53,176 to Angelini)

NOAA NCCOS Grant, co-PI, 2018-2021, $954,000 ($57,757 to Angelini)

NOAA NERR Science Collaborative Grant, Lead PI, 2016-2018, $721,477

NSF DEB Ecosystem Science Grant, Lead PI, 2015-2017, $149,521

NSF DEB Ecosystem Science REU Supplement, Lead PI, 2016, $6,000

NSF REU Supplement to NSF DEB EAGER, Lean PI, 2018, $6,937

Occidental Chemical Research Award, Lead PI, 2016-2017, $8,000

**PEER-REVIEWED PUBLICATIONS**

41. Silliman B.R., He Q., **Angelini C.,** Kirwan M., Renzi J., Smith C., Butler J., Osborne T., van de Koppel J. 2019. *In press.* Field experiments and meta-analysis reveal wetland vegetation as a crucial element in the coastal protection paradigm. **Current Biology**.

40. Gribben P., **Angelini C.,** Altieri A.H., Bishop M., Thomsen M. 2018. Facilitation cascades in marine ecosystems: a synthesis and future directions. *In press.* **Oceanography and Marine Biology: An Annual Review.**

39. Chalifour B., Hoogveld J.R.H., Derksen-Hooijberg M., Harris K., Uruena J., Sawyer W.G., van der Heide T., **Angelini C**. *In Press.* Simulated drought alters the spatial distribution, grazing activity, and functional morphology of a fungal-farming snail in southeastern US salt marshes. **Marine Ecology Progress Series.**

38. Marazzi L., Gaiser E., Zhai L., Sah J., Castenada-Moya E., **Angelini C.** *Accepted*. Why do we need to document and conserve foundation species in oligotrophic wetlands? **Water** 11(2): 1-29.

37. Johnson E.E., Medina M.D., Bersoza Hernandez A.C., Kusel G.A., BatzerA.N., **Angelini C.** 2019*.*Success of concrete and crab traps in enhancing eastern oyster recruitment and reef growth. **PeerJ** 7:e6488.

36. Derksen-Hooijberg M.*,* Hoogveld J.R.H., **Angelini** **C.,** Lamers L.P.M., Borst A., Smolders A., Harpenslager S.F.,Govers L.L. *P*, van der Heide T. *Accepted*. Repetitive drought episodes weaken a climate-buffering mutualism in salt marshes.**Journal of Ecology***.*

35. Derksen-Hooijberg M., van der Heide T., Lamers L.P.M., Borst A. *G*, Smolders A., Govers L.L. *G*, Hoogveld J. *G*, **Angelini C.**2018. Burrowing crabs weaken mutualism between foundation species. **Ecosystems.**http://doi.org/10.1007/s10021-018-0301-x.

34. Borst A., Verberk W.C.E.P., **Angelini C.,** Schotanus J., Wolters W., Christianen M.J.A., van der Zee E.M., Derksen-Hooijberg M., van der Heide T. 2018. Foundation species enhance food web complexity through non-trophic facilitation.***PLoS ONE****.* http://doi.org/10.1371/journal.pone.0199152.

33. Gribben P., **Angelini C.,** Altieri A.H., Bishop M., Thomsen M. 2018. Facilitation cascades in marine ecosystems: a synthesis and future directions. **Oceanography and Marine Biology: An Annual Review.**

32. Fahey C., **Angelini C.,** Flory S.L. 2018. Interactive effects of grass invasion and chronic drought on plant communities. **Ecology*.***http://doi.org/10/1002/ecy.2536.

31. Crotty S.M., Sharp S.J., Bersoza A.C., Prince K., Johnson E., Cronk K., **Angelini C.** 2018*.* Foundation species patch configuration mediates biodiversity, stability, and multifunctionality. **Ecology Letters*.*** DOI: 10.1111/ele1316.

30. Bersoza, A.C. *G*, Brumbaugh R., Grizzle R., Luckenbach M., Peterson C.H., Angelini C. Restoring the Eastern oyster: how much progress has been made in 53 years of effort?  2018. **Frontiers in Ecology and Evolution**. http://doi.org/10.1002/fee.1935

29. Herbert D. *G*, Astrom E. *G*, Bersoza A.C. *G*, Batzer A. *U*, McGovern P., Angelini C., Wasman S., Dix N., Sheremet A. 2018. Mitigating erosional effects induced by boat wakes with living shorelines. **Sustainability** 10(2):436.

28. Angelini C., van Montfrans S.G., Hensel M.J.S. *G*, He Q. *P*, Silliman B.R. 2018*.* The importance of an underestimated grazer under climate change: How crab density, consumer competition and physical stress affect salt marsh resilience*.* **Oecologia***.*

27. Crotty S.M. *G*, Angelini C., Bertness M.D. 2017. Multiple stressors and the potential for synergistic loss of New England salt marshes. **PloS ONE** 12 (8), e0183058.

26. Thomsen M., Altieri A.H., Angelini C., Bishop M.J., Gribben P.E., Lear G. He Q., Schiel D.R., Silliman B.R., South P.M., Watson D.M., Wernberg T., Zotz, G. 2018. Secondary foundation species enhance biodiversity. **Nature Ecology and Evolution**. DOI: 10.1038/s

25. Hooijberg-Derksen M. *G*, Angelini C., Lamers L.P.M., Borst A. *G*, Hoogveld J.R.H. *G*, de Paoli H. *G*, van de Koppel J., Silliman B.R., van der Heide T. 2018. Mutualistic interactions amplify salt marsh restoration success. **Journal of Applied Ecology** 1-10. DOI: 10.1111/1365-2664.12960.

24. Persico, E.P. *U*, Sharp S.J. *G*, Angelini C. 2017. Feral hog disturbance alters carbon dynamics in southeastern US salt marshes. **Marine Ecology Progress Series** 580: 57-68.

23. Pettengill T.M. *U*, Crotty S.M. *G*, Angelini C., Bertness M.D. 2017. A natural history model of New England salt marsh die-off.  **Oecologia** 186(3): 621-632.

22. Langston, A.G, Angelini C., Kaplan D.L. 2017. Biotic and abiotic controls of

the northern range expansion of black mangrove (Avicenna germinans). **Hydrobiologia.**

1. Alba C., Fahey C., NeSmith J., Angelini C., Flory SL. 2017. Testing the interactive effects of drought and plant invasions on ecosystem structure and function using complementary common garden and field experiments. **Ecology and Evolution.**
2. Angelini C., Griffin J.N., van de Koppel J., Derksen-Hooijberg M., Lamers L.P.M., Smolders A.J., van der Heide T., Silliman B.R. 2016. A keystone mutualism underpins resilience of a coastal ecosystem to drought. **Nature Communications** 12473,DOI: 10.1038/ncomms 12473.

19. van der Zee E., Angelini C., Govers L.L., Christianen M., Altieri A.H., van der Reijden K., Silliman B.R., van de Koppel J., van der Geest M., van Gils J., van der Veer H., Piersma T., de Ruiter P., Olff H., van der Heide T. 2016. Non-trophic facilitation as a primary driver of food webs. **Proceedings of the Royal Society B** 283: 20152326.

1. Sharp, SJ., Angelini C. 2016. Whether disturbances alter salt marsh soil structure dramatically affects *Spartina alterniflora* recolonization rate.**Ecosphere** 7(11): e01540.
2. Angelini C, van der Heide T, Griffin JN, Morton JP, Derksen-Hooijberg M, Lamers LPM, Smolders AJ, Silliman BR. Foundation species, biodiversity hotspots, and the landscape-scale multifunctionality of a coastal ecosystem. **Proceedings of the Royal Society B***.* DOI:10.1098/rspb.2015.0421.
3. Davidson A., Griffin J.N., Angelini C., Coleman F., Atkins R.L., Silliman B.R. 2015. Non-consumptive predator effects intensify grazer-plant interactions by driving vertical habitat shifts. **Marine Ecology Progress Series**537: 49-58.
4. Angelini C, Briggs KL. 2015. Spillover of secondary foundation species regulates community structure and accelerates decomposition in oak savannas. **Ecosystems** 18(5): 780-791.
5. Atkins R, Griffin JN, Angelini C, O’Connor M, Silliman BR. 2015. Consumer- plant interaction strength: importance of body size, density and metabolic biomass. **Oikos** 124(10): 1274-1281.
6. Silliman B.R., Modzer T., Angelini C., Brundage J.E., Esselink P., Bakker J.P., Gedan K.B., van de Koppel J., Baldwin A.H. 2014. Livestock as a potential biocontrol agent for an invasive wetland plant. **PeerJ** e567.
7. Angelini C., Silliman B. R. 2014. Secondary foundation species as drivers of biodiversity and trophic structure: evidence from a tree-epiphyte system. **Ecology** 95(1): 185-196*.*

11. Silliman B. R., McCoy M.D., Angelini C., Griffin J. N., Holt R.D., van de Koppel J. 2013. Consumer fronts, spatial processes and ecosystem structure, stability and resilience. **Annual Review of Ecology, Evolution, and Systematics**44: 503-538.

1. Altieri A.H., Bertness M.D., Cloverdale T.C., Herrmann N.C., Angelini, C. 2012*.* A trophic cascade triggers collapse of a salt marsh ecosystem with intensive recreational fishing. **Ecology** 93(6):1402-1410.
2. Silliman B.R., Angelini C. 2012. Trophic cascades in diverse plant ecosystems. **Nature Knowledge and Education** 9(3): 3.
3. Angelini C., Silliman B.R. 2012. Patch size-dependent recovery of salt marshes from massive community die-off. **Ecology** 93 (1): 101-110.
4. Angelini C., Altieri A.H., Silliman B.R., Bertness M.D. 2011. Interactions among foundation species and their consequence for community organization, biodiversity and conservation. **BioScience** 61:782- 789.

1. Holdredge C., Bertness M.D. 2010. Litter legacy increases the competitive advantage of *Phragmites australis* in New England wetlands. **Biological Invasions**. DOI 10.1007/s10530-010-9836-2.
2. Holdredge C., Bertness M.D., von Wettberg E.D., Silliman B.R. 2010. Nutrient enrichment enhances hidden differences in phenotype to drive a cryptic plant invasion. **Oikos** 119: 1776-1784.
3. Holdredge C., Bertness M.D., Herrmann N.C., Gedan K.B. 2010. Fiddler crab control of cordgrass primary production in sandy substrates. **Marine Ecology Progress Series** 399: 253-259.
4. Bertness M.D., Holdredge C., Altieri A.H. 2009. Substrate mediates consumer control of cordgrass. **Ecology** 90(8): 2108-2117. 131-139.
5. Holdredge C., Bertness M.D., Altieri A.H. 2009. Role of crab herbivory in die-off of New England salt marshes. **Conservation Biology** 23(3): 672-679.
6. Bertness M.D., Crain C.M., Holdredge C., Sala N. 2007. Eutrophication and consumer control of New England salt marsh primary production. **Conservation Biology** 22(1): 131-139.

**BOOK CHAPTERS**

1. Bertness, MD, Silliman BR, Holdredge C. Shoreline development and the future of New England salt marsh landscapes. in B. R. Silliman, T. Grosholtz, and M. D. Bertness, editors. 2009.Human Impacts in Salt Marshes: A Global Perspective. UC Press.

**INVITED PRESENTATIONS**

1. *Drought, mussels, and the resilience of salt marshes,* Department of Aquatic Ecology and Environmental Biology,Radboud University Nijmegen, The Netherlands, 2013.
2. *Patch-dependent recovery of massively disturbed salt marshes.* Georgia Department of Natural Resources, Darien, GA, 2013
3. *Interactions among foundation species and their consequences for ecosystem structure, function, and resilience.* Brown University, Providence, RI, November 2015
4. *Foundations species as drivers of biodiversity, multifunctionality, food webs and resilience.* Valdosta State University, Valdosta, GA, October 2016.
5. *Foundation species as drivers of biodiversity and resilience*, Marine Sciences, University of Georgia, February 2017
6. *Keystone species enhance salt marsh resilience to climate change*, Department of Biology, University of New Brunswick, Canada, April 2018
7. *Integrating ecology into restoration engineering,* Civil and Environmental Engineering, University of South Florida, April 2018
8. *Resilience and Restoration of Coastal Ecosystems in a Changing Climate*, University of Florida “Evenings at Whitney” Distinguished Lecture Series, March 2019
9. *Resilience and Restoration of Coastal Ecosystems in a Changing Climate*, University of Central Florida, Department of Biology, March 2019

**RECOGNITIONS AND AWARDS**

NSF CAREER Award, 2017

Biology Outstanding Graduate Teaching Award, University of Florida, 2013

Biology Graduate Student Best Paper Award, University of Florida, 2012

Biology Graduate Student Service Award, University of Florida, 2011

James Kidwell Prize, Outstanding Research in Biology, Brown University, 2007

**TEACHING EXPERIENCE**

Ecological Engineering, Lecturer, current Environmental Engineering Sciences, UF

Advanced Environmental Planning and Design, current, Environmental Engineering Sciences, UF

Coastal Systems, Lecturer, current, Environmental Engineering Sciences, UF

Tropical Marine Ecology, Teaching Assistant, 2009-13, Department of Biology, UF

General Ecology, Teaching Assistant 2012, Department of Biology, UF:

**MENTORING**

Past Undergraduates (H= Honors Thesis): Nicolas Hermann (H), Daniel MacCombie (H), Kelsey Lane (H), Timothy Savage (H), Jacqueline Babb (H), Emma Knight, Kristin Briggs (H), Rebecca Atkins (H), Michael Arvin, Eric Monaco, Robert McNulty, Nicole Soomdat (H), Marice Lopez, Katheryne Cronk (H=Honors thesis), Emily Persico, Audrey Batzer, Greg Kusel, Bridget Chalifour (H), Samual Hagman, Emma Johnson (H), Wesley Lewis, Gabe Somabarra, Daniel Gallagher, Gillian Palino

Current Undergraduates: Alexa Cetta, Orlando Cordero, Hallie Fischman (H), Alexandra Rubin (H), Michelle Taubler (H), Savannah Peltrau, Jamie Rogers

Former Graduate Students Sean Sharp (PhD 2018, now a PostDoc at University of Michigan), Ada Bersoza Hernandez(MSc. 2018, now teaching high school science in Mexico)

Current Graduate Students: Kimberley Prince (PhD, UF), Sinead Crotty (PhD, UF), Stefano Barchiesi (PhD, UF), Sydney Williamsn (PhD, UF), Lauren Brisley (PhD, UF)

Visiting International Students: Marlous Hooyiberg (PhD, Radboud University, co-advised), Annieke Borst (PhD, Radbound University, co-advised), Jasper Hoogveld (MSc., Radbound University, co-advised), Laura Govers (PhD, Radboud University, collaborator), Kate Davidson (Swansea University, collaborator), Davide Battisti (Swansea University, collaborator), Matt Joyce (Swansea University, collaborator), Greg Favish (University of Groningen, collaborator), Ralph Temmick (Radboud University, collaborator)