DR. CAMERON H. AINSWORTH

Curriculum Vitae

General

Associate Professor, Fisheries Oceanography
College of Marine Science, University of South Florida
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Google Scholar: https10

Education

- Ph.D. 2006. University of British Columbia. Fisheries Centre. Department of Resource Management and Environmental Studies. Title of dissertation: **Strategic Marine Ecosystem Restoration in Northern British Columbia** (Advisor: Professor Tony J. Pitcher)
- B.S. 1997. University of British Columbia. Department of Zoology. Major: Marine Biology

Work history

- June 2017-Present. Associate Professor, College of Marine Science. University of South Florida
- April 2011-June 2017. Assistant Professor, College of MarineJ. Pitcher
    - December 2005-April 2006. Graduate Student Researcher. University of British Columbia Fisheries Centre. Vancouver, BC. Supervisor: Dr. Tony J. Pitcher
    - August 2000 - May 2001. Research Assistant. Sea Around Us Project. University of British Columbia Fisheries Centre. Vancouver, BC. Supervisor: Dr. Daniel Pauly

Other appointments

- June 2018-present. Council Member. Ecosystem Science and Statistical Committee of the Gulf of Mexico Fisheries Management Council.
- May 2018-Present. Member. United Nations Pool of Experts. Division for Ocean Affairs and the Law of the Sea. Secretariat for the Regular Process for Global Reporting and

- September 2011 – present. Adjunct Faculty, Rosenstiel School of Marine and Atmospheric Science. University of Miami.
- June 2011-2013. Associate Faculty, Fisheries Centre. University of British Columbia.
- November 2007-June 2011. Adjunct Professor, Fisheries Centre. University of British Columbia.
- American Association for the Advancement of Science, Member
- American Fisheries Society, Member

Recognition

- (Nominated) University of Miami Rosenstiel Award (2016)
- Alfred P. Sloan Fellowship (2013-2014) for early-career scientists.
- Outstanding Faculty Award (2014), University of South Florida

Publications

Citations per year – Google Scholar
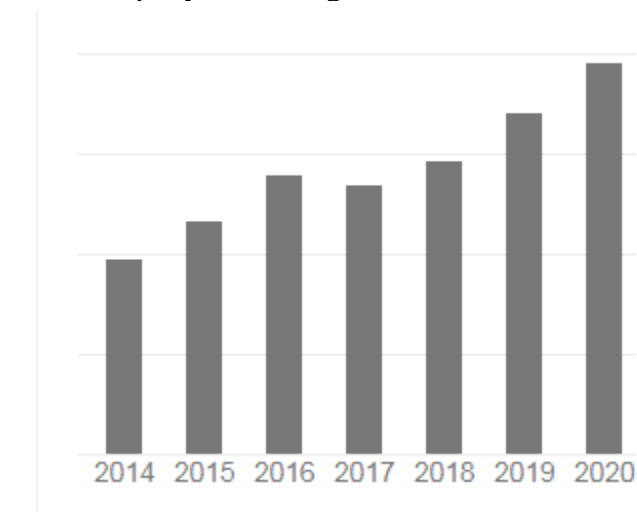
	All	Since 2015
Citations	3457	1973
h-index	30	24
i10-index	68	45
Total peer reviewed	75	42
Papers per year	5.0	8.0

Peer-reviewed articles

*Student or staff as lead author

1. Lewis, K.A., Rose, K.A., De Mutsert, K., Sable, S., Ainsworth, C., Brady, D., Townsend, H., in review. Using multiple ecological models to inform environmental decision making. Frontiers in Marine Science
2. Rohal, M., Ainsworth, C.H., Lupher, B., Montagna, P.A., Paris-Limouzy, C., Suprenand, P.M., Yoskowitz, D., Perlin, N.2020. The Effect of the Deepwater Horizon Oil Spill on Ecosystem Services in the Northern Gulf of Mexico. Environmental Modelling and Software. (in press)
3. Natugonza, V., **Ainsworth, C.H.**, Sturludóttir, E., Musinguzi, L., Ogutu-Ohwayo, R., Tomasson, T., Nyamweya, C., Stefansson, G., 2020. Simulating trade-offs between

15. *Morzaria-Luna, H., **Ainsworth, C.H**., Tarnecki, J., and Grüss, A., 2018. Diet composition uncertainty determines impacts on fisheries following an oil spill. Ecosystem Services, 33: 187-198.
16. **Ainsworth, C.H.**, Paris, C., Perlin, N., Dornberger, L.N., Patterson, W., Chancellor, E., Murawski, S., Hollander, D., Daly, K., Romero, I., Coleman, F., Perryman, H. 2018. Impacts of the Deepwater Horizon oil spill evaluated using an end-to-end ecosystem model. PLoS One. 2018 Jan 25;13(1):e0190840. doi: 10.1371/journal.pone.0190840.
17. Olsen, E., Kaplan, I.C., **Ainsworth, C.H.**, Fay, G., Gaichas, S., Gamble, R., Girardin, R., Hansen, C., Ihde, T.F., Morzaria-Luna, H., Johnson, K.F., Savina-Rolland, M., Townsend, H., Weijerman, M., Fulton, E., and Link, J.S. 2018. Ocean futures as explored using a worldwide suite of ecosystem models. Front. Mar. Sci., 01 March 2018 | https://doi.org/10.3389/fmars.2018.00064.
18. Gruss, A., Drexler, M.D., **Ainsworth, C.H.**, Babcock, E.A., Tarnecki, J.H. and Love, M.S. 2018 Producing Distribution Maps for a Spatially-Explicit Ecosystem Model Using Large Monitoring and Environmental Databases and a Combination of Interpolation and Extrapolation. Front. Mar. Sci., 31 January 2018. https://doi.org/10.3389/fmars.2018.00016
19. *Masi, M., **Ainsworth, C.H.**, Kaplan, I.K., Schirripa, M.J. 2018. Inter-specific interactions may influence reef fish management strategies in the Gulf of Mexico. Marine and Coastal Fisheries, 10(1): 24-39. DOI: 10.1002/mcf2.10001
20.   -

27. *Dornberger, L., **Ainsworth, C.H.**, Gosnell, S. and Coleman, F. 2016. Developing a polycyclic aromatic hydrocarbon exposure dose-response model for fish health and growth. Marine Pollution Bulletin, 109(1): 259-266.

28. Wijerman, M., Link, J.S., Fulton, E.A., Olsen, E., Townsend, H., Gaichas, S., Hansen, C., Skern-Mauritzen, M., Kaplan, I.C., Gamble, R., Fay, G., Savina, M., **Ainsworth, C.H.**, Van Putten, I., Gorton, R., Brainard, R.E., and Hutton, T. 2016. Atlantis ecosystem model summit: report from a workshop. Ecological Modelling, 335: 35-38.

29. *Tarnecki, J., Wallace, A., Simons, J.D. and **Ainsworth, C.H.** (2016). Progression of a Gulf of Mexico Food Web Supporting Atlantis Ecosystem Model Development. Fisheries Research, 179: 237-250.

30. Grüss, A., Schirripa, M.J., Chagaris, D., Velez, L., Shin, Y-J., Verley, P., Oliveros-Ramos, R. and **Ainsworth, C.H.,** (2016). Estimating natural mortality rates and simulating fishing scenarios for Gulf of Mexico red grouper (Epinephelus morio) using the ecosystem model OSMOSE-WFS. Journal of Marine Systems, 154(B): 264-279.

31. **Ainsworth, C.H.** (2016). British Columbia Marine Fisheries Catch Reconstruction: 1873 to 2011. BC Studies, 188: 81-90.

32. **Ainsworth, C.H.**, and Walters, C.J. (2015). Ten common mistakes made in Ecopath with Ecosim modelling. Ecological Modelling, 308: 14-17.

33. *Suprenand, P., **Ainsworth, C.H.** and Jones, D. (2015). Strategic assessment of fisheries independent monitoring programs in the Gulf of Mexico. PLoS One. DOI: 10.1371/journal.pone.0120929.

34. Grüss, A. Schirripa, M.J., Chagaris, D., Drexler, M., Simons, J., Verley, P., Shin, Y-J., Karnauskas, M., Oliveros-Ramos, R., **Ainsworth, C.H.** (2015). Evaluation of the trophic structure of the West Florida Shelf in the 2000s using the ecosystem model OSMOSE. Journal of Marine Systems, 144: 30-47.

35. **Ainsworth, C.H.** and Mumby, P. (2014). Coral-algal phase shifts alter fish communities and reduce fisheries production. Global Change Biology, 21(1): 165-172.

36. Sale, P.F., Agardy, T., **Ainsworth, C.H.**, Feist, B.E., Bell, J.D., Christie, P., Hoegh-Guldberg, O., Mumby, P.J., Feary, D.A., Saunders, M.I., Daw, T.M., Foale, S.J., Levin, P.S., Lindeman, K.C., Lorenzen, K., Pomeroy, R.S., Allison, E.H., Bradbury, R.H., Corrin, J., Edwards, A.J., Obura, D.O., Sadovy de Micheson, Y.J., Samoilys, M.A. and Sheppard, C.R.C. (2014). Transforming Management of Tropical Coastal Seas to Cope with Challenges of the 21st Century. Marine Pollution Bulletin, 85(1): 8-23.

37. Grüss A, Drexler M., **Ainsworth, C.H.**, (2014). Using delta generalized additive models to produce distribution maps for spatially explicit ecosystem models. Fisheries Research, 159: 11–24

38. *Masi, M., **Ainsworth, C.H.** and Chagaris, D. (2014). A probabilistic representation of fish diet compositions from multiple data sources: a Gulf of Mexico case study. Ecological Modelling, 284(2014): 60–74.

39. Levin, P.S., Kelble, C.R., Shuford, R.L., **Ainsworth, C.H.**, deReynier, Y., Dunsmore, R., Fogarty, M.J., Holsman, K., Howell, E.A., Monaco, M.E., Oakes, S.A. and Werner, F. (2013). Guidance for implementation of integrated ecosystem assessments: a US perspective. ICES Journal of Marine Science, doi:10.1093/icesjms/fst112.

40. Morzaria-Luna H.N., **Ainsworth C.H.**, Kaplan I.C., Levin P.S., Fulton E.A. (2013). Indirect Effects of Conservation Policies on the Coupled Human-Natural Ecosystem of

Teaching statement

Teaching goals

1. Encourage critical thinking by introducing students to the epistemological elements that differentiate science from other disciplines: falsifiability, the value of converging evidence, the tentative nature of hypotheses and the durability of well-supported theory.
2. Promote students' long-term professional growth by helping them to develop professional networks
3. Provide students with a robust technical education in quantitative marine science.
4. Support continuing education for professional stock assessment scientists

Courses taught

Instructor of record

- Fall (2012, 2014, 2016, 2018). Population dynamics and fisheries. OCE6934.641. University of South Florida (3 credits).
- Fall (2013, 2015, 2017, 2019). Marine ecosystem modeling. OCE6934.641. University of South Florida (3 credits).
- Fall (2019) Applied Methods in Fisheries Science. University of South Florida (1 credit)
- Fall (2017) Management Strategy Evaluation short course. ICES 2017 Annual Science Meeting.
- Spring (2016) R Code. OCE 6934.640. University of South Florida (1 credit).
- Fall (2011). Fisheries ecology reading course. OCE6934.640. University of South Florida. (1cr)
- Fall (2011, 2012, 2013, 2014, 2015). Fish Biology. OCB 6050.607. University of South Florida. Instructor: Ernst Peebles.
- June 2010. Atlantis training course (4 days) NOAA-SEFSC. Galveston, TX
- Dec 2019. Ecopath with Ecosim Intro (3 days) Ecopath35. USF CMS St. Petersburg, FL.
- Nov 2009. Atlantis training course (4 days) CICESE. Ensenada, Mexico
- Sept 2009. Atlantis training course (3 days) NOAA-NWFSC. Seattle, WA
- 2005 Scottish Association for Marine Science. Oban, Scotland

Guest Lecturer

- Fall (2015; 2019) Marine Resource Remote Sensing. OCE6934.636. University of South Florida. Instructor: Chuanmin Hu.
- Fall (2016) OCE 6934 Applied Phytoplankton Ecology. Instructor: Kendra Daly
- Fall (2011, 2012) Introduction to Oceanography. OCE2001.608. University of South Florida. Instructor: Kent Fanning
- Fall (2013; 2018) OCE6934.628 Dynamics of Marine Ecosystems. Instructor: Mark Luther & Kendra Daly.
- Spring (2012) OCE 6934.640 Fish Biology. Instructor: Chris Stallings.
- Fall (2011-2019) Biological Oceanography OCB6050.615. Instructor: Ernst Peebles.

- Spring 2008. Ecosystem modelling approaches and applications. BIOL 325. Western Washington University. Instructor: Peter Kiffney.
- Fall 2007. Restoration ecology: Department of Earth and Ocean Sciences. EOSC 478. University of British Columbia. Instructor: Evgeny Pakhomov
- Fall 2006. FISH 501. Bioeconomic restoration modelling. Department of Resource Management and Environmental Studies. University of British Columbia. Instructor: Villy Christensen
- Fall 2005. Ecopath with Ecosim training course (5 days). University of British Columbia Fisheries Centre. Vancouver, Canada.
- Fall 2005. Ecopath with Ecosim training course (4 days). Scottish Association for Marine Science. Oban, Scotland, UK. OCE6971.641 Thesis: Masters 2012-Present
- OCE6972.641 Directed Research 20y (2)]TJ0 Tc 0 Tw 89.6230 Td(-)Tj- Dresent

Service

Panels and committees

- (2020) NOAA Ocean Acidification Program review panel
- (2018-Present) Gulf of Mexico Fishery Management Council Ecosystem Science and Statistical Committee
- (2016) NOAA Sea Grant Population and Ecosystem Dynamics Fellowship review panel.
- (2015-2017) NCEAS Working Group (Exxon Valdez impacts, Gulf of Alaska)
- (2015) GFMC Fishery Ecosystem Plan Technical Working Group.
- (2015) COCA FY14 Climate impacts on fish proposal review panel, NOAA. Silver Springs, MD.
- (2014-2015) Vice-Chair, Gulf of Mexico Fishery Management Council's Ecosystem

- **Honolulu, HI.** February 2014. Ecosystem modelling in the Gulf of Mexico supporting an integrated ecosystem assessment. Ocean Science Meeting (Oral presentation)
- **Honolulu, HI.** February 2014. Implementation of new spatial forcing functions in the Atlantis modeling framework to accurately represent oil spill impacts in the Gulf of Mexico. Ocean Science Meeting (Poster presentation) (Presenter: L. Dornberger)
- **Mobile, AL.** January 2014. Development of an Atlantis ecosystem model to study food web impacts of DWHOS. Gulf of Mexico Oil Spill and Ecosystem Science Conference. (Oral presentation)
- **Mobile, AL.** January 2014. Implementation of new spatial forming functions in the Atlantis modeling framework to accurately represent oil spill impacts in the GoM. Gulf of Mexico Oil Spill & Ecosystem Science Conference. (Poster presentation) (Presenter: L. Dornberger).
- **Mobile, AL.** January 2014. Modeling population connectivity, larval drift, and cumulative contaminate exposure mortality in the GoM. Gulf of Mexico Oil Spill & Ecosystem Science Conference. (Poster presentation) (Presenter: M. Drexler)
- **La Coruna, Spain**. September 2014. The use of zero inflated generalized addive models to predict aggregate functional group distributions for the Gulf of Mexico. ICES Annual Science Conference (Oral presentation) (Presenter: M. Drexler)
- **Merida, Mexico.** December 2013. Diet study to support Integrated Ecosystem Assessment. Fisheries Diet Data Compilation and Research: Toward an Integrated Ecosystem Assessment in the Gulf of Mexico (CINVESTAV).
- **NPR interview.** October, 2013. Program "Living On Earth with Steve Curwood". National radio environmental news and information program. Re: oil spill research.
- **New Orleans, LA.** Feb 2013. Development of an1obeNP an1obeNP an1obeNP an1obeNP an1o67 (t)-1.7 (i)-1.7 (

- **Santa Cruz, CA.** Oct. 2006. Ecosystem-

15. Grüss, A., M.J. Shirripa, D. Chagaris, M.D. Drexler, J. Simons, P. Verley, Y.-J. Shin, R. Oliveros-Ramos, M. Karnauskas, and **C.H. Ainsworth.** 2013. Natural mortality rates and diet patterns of gag grouper (*Mycteroperca microlepis*) in the West Florida Shelf ecosystem in the 2000s: Insights from the individual-based, multi-species model OSMOSE-WFS. SEDAR33-AW22. SEDAR, North Charleston, SC. 44 pp

16. Levin, P., **Ainsworth, C.H.**, deReynier, Y., Dunsmore, R., Fogarty, M., Holsman, K., Howell, E., Kelble, C., Monaco, M., Oakes, S., Shuford, R. and Werner, C. 2012. Integrated Ecosystem Assessment: Guidance for Implementation. Internal NMFS

36. **Ainsworth, C.H.** 2004. Estimating the Effects of Prey-predator Vulnerability Settings on Ecosim's Dynamic Function. In: T. Pitcher (Ed.) Back to the Future: Advances in Methodology for Modelling and Evaluating Past Ecosystems as Future Policy Goals. Fisheries Centre Research Reports 12(1): 45-47Ainsworth, C.H.   ,rr (Ed.

48. **Ainsworth, C.H.** 2002. Can we split the Ecosim fisheries by license type? In: T. Pitcher, M. Power and L. Wood (Eds.) Restoring the Past to Salvage the Future: Report on a Community Participation Workshop in Prince Rupert, BC. Fisheries Centre Research Reports 10(7): 36-37.

49. **Ainsworth, C.H.** 2002. Rapporteur's Report on Plenary Discussions. In: T. Pitcher, M. Power and L. Wood (Eds.) Restoring the Past to Salvage the Future: Report on a Community Participation Workshop in Prince Rupert, BC. Fisheries Centre Research Reports 10(7): 41-42.

50. Buchary, E., Heymans, S. and **Ainsworth, C.H.** 2002. Final Discussion on the Models of Northern BC. In: T. Pitcher, M. Power and L. Wood (Eds.) Restoring the Past to Salvage the Future: Report on a Community Participation Workshop in Prince Rupert, BC. Fisheries Centre Research Reports 10(7): 47-48.

51. **Ainsworth, C.H.**, Heymans, S., Pitcher, T.J. and Vasconcellos, M. (Eds.) 2002. Ecosystem Models of Northern British Columbia for the Time Periods 2000, 1950, 1900 and 1750. Fisheries Centre Research Reports 10(4): 41 pp.

52. **Ainsworth, C.H.** 2001. Electronic Database of British Columbia Fisheries Catches. Fishbytes 7(4).

53. **Ainsworth, C.H.** 2001. How Does Your Information Compare with Scientific Estimates? Institutional Conference. Poster presentation. Community Input Workshop. Back to the Future: policy consultation and simulations. Prince Rupert, BC, Canada. Coasts Under Stress MCRI. December 2001.

54. **Ainsworth, C.H.**, Ferriss, B., Leblond, E. and Guenette, S. 2001. The Bay of Biscay, France: 1998 and 1970 Models. In: S. Guenette, V. Christensen and D. Pauly (Eds.) Fisheries Impacts on North Atlantic Ecosystems: Models and Analyses. Fisheries Centre Research Reports 9(4): 271-313.

References

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