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General

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Education

- x 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.

7. ~~*Morzaria~~

- limited fisheries: How reliable are Ecopath with Ecosim models without historical series fitting? *Journal of Great Lakes Research*, 46(2): 414-428.
18. Perryman, H.A., Tarnecki, J.H., Grüss, A., Babcock, E.A., Sagarese, S.R., Ainsworth, C.H. and Gray DiLeone, A.H. 2020. A revised diet matrix to improve the parameterization of a West Florida Shelf Ecopath model for understanding harmful algal bloom impacts. *Ecological Modelling*, 416:18.
 19. Surma, S., Christensen, V., Kumar, R., Ainsworth, C., Pitcher, T.J. 2019. High resolution models reveal. 2019. High

- Interpolation and Extrapolation. *Frontiers in Marine Science* 31 January 2018. <https://doi.org/10.3389/fmars.2018.00016>
29. Olsen, E., Kaplan, I.C., Ainsworth, C.H., Fay, G., Gaichas, S., Gamble, R., Girardin, R., Hansen, C., Ihde, T.F., Morzaria, H., Johnson, K.F., Savin, P., Holland, M., Townsend, H., Weijerman, M., Fulton, E., and Link, J.S. 2018. Ocean futures as explored using a worldwide suite of ecosystem models. *Frontiers in Marine Science*, 01 March 2018 | <https://doi.org/10.3389/fmars.2018.00064>.
 30. *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
 31. *Bumbeer, J., da Rocha R.M., Bornatowski, H., de Castro Robert, M., Ainsworth, C. 2017. Predicting impacts of lionfish (*Pterois volitans*) invasion in a coastal ecosystem of southern Brazil. *Biological Invasions*. <https://doi.org/10.1007/s10530-017-1625-8>
 32. *Suprenand, P., and Ainsworth, C.H. 2017. Trophodynamic effects of climate change induced alterations to primary production along the Western Antarctic Peninsula. *Marine Ecology Progress Series*, 569: 37-54.
 33. Grüss, A., Rose, K.A., Simons, J., Ainsworth, C.H., Babcock, E.A., Chagaris, D.D., de Mutsert, K., Froeschke, J., Himchak, P., Kaplan, I.C., O'Farrell, H. and Zetina Rejon, M.J. 2017. Recommendations on the use of ecosystem modeling for informing ecosystem-based fisheries management and restoration outcomes in the Gulf of Mexico. *Marine and Coastal Fisheries*, 9: 291-295.
 34. Eddy TD, Lotze HK, Fulton EA, Coll MA, Ainsworth C.H., Araújo JN, Bulman C, Bundy A, Christensen V, Field J, Gribble N, Hasan M, Mackinson S, Townsend H. 2017. Ecosystem effects of invertebrate fisheries. *Fish and Fisheries*. 18: 40-53.
 35. *Masi, M.D., Ainsworth, C.H., Jones, D.L. 2017. Using a Gulf of Mexico Atlantis model to evaluate ecological indicators for sensitivity to fishing mortality and robustness to observation error. *Ecological Indicators*, 74: 516-525.
 36. Chacin, D.H., Switzer, T.S., Ainsworth, C.H., Stallings, C.S. 2016. Long-term analysis of spatio-temporal patterns in population dynamics and demography of juvenile Pinfish (*Lagodon rhomboides*). *Estuarine Coast and Shelf Science*, 183(2016): 52-61.
 37. Grüss, A., Sagarese, S.R., Drexler, M., Babcock, E., Chagaris, D., Ainsworth, C.H., Penta, B., deRada, S. 2016. Improving the spatial allocation of functional group biomasses in spatially explicit ecosystem models: insights from the Gulf of Mexico. *Bulletin of Marine Science*, 4: 473-496.
 38. *Dornberger, L.,

- 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.
42. Ainsworth, C.H. 2016. British Columbia Marine Fisheries Catch Reconstruction: 1873 to 2011. *BC Studies*, 188: 81-90.
 43. Ainsworth, C.H., and Walters, C.J. 2015. Ten common mistakes made in Ecopath with Ecosim modelling. *Ecological Modelling*, 308: 1-17.
 44. *Suprenand, P., Ainsworth, C.H. and Jones, D. 2015. Strategic assessment of fisheries independent monitoring programs in the Gulf of Mexico. *PLoS ONE* 10(4): e0120929.
 45. Grüss, A. Schirripa, M.J., Chagaris, D., Drexler, M., Simons, J., Verley, P., Sidiq, Y. Karnauskas, M., Olivero-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.
 46. Ainsworth, C.H. and Mumby, P. 2014. Coralgal phase shifts alter fish communities and reduce fisheries production. *Global Change Biology*, 21(1): 165-172.
 47. 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., Sadovy de Mitcheson, 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.
 48. Grüss A, Drexler M., Ainsworth, C.H., 2014. Using delta generalized additive models to produce distribution maps for spatially explicit ecosystem models. *Fisheries Research*, 157: 1-11.
 49. *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.
 50. L.H., i., elble, 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. 2014. Guidance for implementation of integrated ecosystem assessments: a US perspective. *ICES Journal of Marine Science*, doi:10.1093/icesjms/fst112.
 51. Morzarior diet8 <</MCID-af 16.45 un6 ()]TJ93- Td (51.)TCf (s)5.7 (/)-5.4 (fs)5.7 (t)-5.4 (112.)]

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options for adaptation. Chapter 14 in Florida's Climate: Changes, Variations & Impacts.

Top 5 cited papers	Citations
Fulton, E.A., Link, J.S., Kaplan, I., Saviello, M., Johnson, P., Ainsworth, C.H., Horne, P., Gorton, R., Gamble, R.J., Smith, A.D.M. and Smith, D.C. 2011. Lessons in Modelling and Management of Marine Ecosystems: The Atlantis Experience. <i>Fish and Fisheries</i> , 12(2): 173-183.	624
Ainsworth, C.H., Samhuri, J., Busch, D.S., Cheung, W., Dunne, J., and Oke T. 2011 Potential impacts of climate change on Northeast Pacific marine foodwebs and fisheries. <i>ICES Journal of Marine Science</i> , 68(6): 1221-1229.	233
Ainsworth, C.H., Pitcher, T.J. and Rotinsulu, C. 2008 Evidence of fishery depletions and shifting cognitive baselines in Eastern Indonesia. <i>Biological Conservation</i> , 141(3): 848-859. (Featured article in <i>Current Conservation Science</i>) Sale, P.F., Agardy, T., Ainsworth, C.H., Feist, B.E., Bell, J.E. & Jones	185

Curriculum Vitae | Cameron Ainsworth

9/1/2015- 8/31/2017	Characterizing trophic interactions on the Texas coastal shelf to support Integrated Ecosystem Assessments	Marine Fisheries Initiative Gulf Research Initiative	NOAA	\$171,171	Co-PI
1/1/2018- 6/30/2020	Center for the Integrated Modeling and Analysis of the Gulf Ecosystem	Gulf Research Initiative	GRI	\$194,764	Co-PI
2/1/2019 2/1/2022	Using ecosystem modeling to understand the impacts of seagrass restoration and	Centers of Excellence	Treasury	\$308,279	PI
9/1/2019					

Courses taught

Instructor of record

- x Fall (2012, 2014, 2016, 2018, 2020, 2022) Population dynamics and fisheries. OCE6934.641 University of South Florida (3 credits).
- x Fall (2013, 2015, 2017, 2019, 2021, 2023). Marine ecosystem modeling. OCE6934.641. University of South Florida (3 credits).
- x Fall (2020, 2022) Biological Oceanography. University of South Florida (Guest Lecture)
- x Fall (2019) Applied Methods in Fisheries Science. University of South Florida (1 credit)
- x Fall (2017) Management Strategy Evaluation short course. ICES 2017 Annual Science Meeting.
- x Spring (2016) R Code. OCE 6934.640. University of South Florida (1 credit).
- x Fall (2011). Fisheries ecology reading course OCE6934.640. University of South Florida. (1cr)
- x Fall (2011, 2012, 2013, 2014, 2015). Fish Biology. OCB 6050.607. University of South Florida. Instructor: Ernst Peebles.
- x June(2010) Atlantis training course (4 days) NOAA/SEFSC. Galveston, TX
- x Dec(2019) Ecopath with Ecosim Intro (3 days) Ecopath35. USF CMS St. Petersburg, FL.
- x Nov (2009) Atlantis training course (4 days) CICESE. Ensenada, Mexico
- x Sept(2009) Atlantis training course (3 days) NOAA/NWFSC. Seattle, WA
- x Nov (2005) Scottish Association for Marine Science. Oban, Scotland

Guest Lecturer

- x Fall (2015; 2019), Marine Resource Remote Sensing. OCE6934.636. University of South Florida. Instructor: Chuanmin Hu.
- x Fall (2016) OCE 6934 Applied Phytoplankton Ecology. Instructor: Kendra Daly
- x Fall (2011, 2012) Introduction to Oceanography. OCE2001.608. University of South Florida. Instructor: Kent Fanning
- x Fall (2013; 2018; 2023)

Curriculum Vitae | Cameron Ainsworth

- x Fall 2005. Ecopath with Ecosim training course (4 days). Scottish Association for Marine Science. Oban, Scotland, UK
- x OCE6971.641 Thesis: Masters 2012 Present
- x OCE6972.641 Directed Research 2012 Present
- x OCE7980.641 Dissertation: Doctoral 2013-0.4551n2.6

Service

Panels and committees

- x (2023) Effects of Climate Change on the World's Oceans ECCWO5. 17-21 April 2023, Bergen, Norway. Session Convener (W4); A global ensemble of comparable marine ecosystem models to project climate risk to species and human communities. <https://meetings.pices.int/meetings/international/2023/ec5/program>
- x (2020) NOAA Ocean Acidification Program review panel
- x (2018-2021) Gulf of Mexico Fishery Management Council Ecosystem Science and Statistical Committee
- x (2016) NOAA Sea Grant Population and Ecosystem Dynamics Fellowship review panel.
- x (2015-2017) NCEAS Working Group (Exxon Valdez impacts, Gulf of Alaska)
- x (2015) GFMC Fishery Ecosystem Plan Technical Working Group.
- x (2015) COCA FY14 Climate impacts on fish proposal review panel, NOAA. Silver Springs, MD.
- x (2014-2015) ViceChair, Gulf of Mexico Fishery Management Council's Ecosystem Science and Statistical Committee
- x (2012-2014) Gulf of Mexico Fishery Management Council's Ecosystem Science and Statistical Committee
- x (2013) SEDAR 33 (Southeast Data Assessment and Review) ecosystem working group for the gag grouper stock assessment.

University committees

- x (2020-present) CMS Admissions committee
- x (2020-present) USF Library Council
- x (2019-present) CMS Space Committee
- x (2016-present) USF Council on Technology for Instruction and Research
- x (2015-present) CMS Curriculum Committee.
- x (2011-present) CMS Marine Resource Assessment Program Committee, Chair
- x (2011-present) CMS Faculty Search Committees (various)
- x (2011-present) CMS Information Technology Committee
- x (2017-2019) CMS Faculty Evaluation Committee
- x (2011-2014) CMS Seminar Committee.
- x (2012) CMS Undergraduate Education Committee
- x (2013) CMS MRA Certificate Program Committee, Chair

Other

- x (2015, 2017, 2019) Session Organizer, GOMRI Symposium
- x (2014) Subject editor, Ecological Applications
- x (2012-Present) Ecopath with Ecosim Research Consortium member.
- x (2006-2007) Founding member, Pacific Marine Analysis and Research Association (PacMARA).
- x (2006) AquaLink Graduate Student Association.

Curriculum Vitae | Cameron Ainsworth

- x St. Andrews, New Brunswick. Sept 2009. Trophodynamic ecosystem modeling: test bed for ecosystem-based fisheries management approaches. St. Andrews Biological Station. Invited. (Oral presentation).
- x Vancouver, BC. May 2009. Oceans Past II. History of Marine Animal populations. Census of Marine Life (Session chair) (Oral presentation).
- x Sarasota, FL. November 2008. Spatial Ecosystem Modelling of the Upper Gulf of California. Mote International Symposium. (Poster presentation).
- x Guaymas, Mexico. March 2008. Atlantis Ecosystem Modelling of the Gulf of California. CIBNOR. Invited. (Oral presentation).
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Technical publications

- 1.

13. Sagarese, S.R., Gray, A.M., Ainsworth, C.H., Chagaris, D.D., Mahmoudi, B., 2015. Red tide mortality on red grouper (*Epinephelus morio*) between 1980 and 2009 on the West Florida Shelf. SEDAR 42 Working Paper. SEDAR, North Charleston, SC. 12 pp.
14. Grüss, A., Schirripa, M.J., Chagaris, D., Verley, P., Shin, Y.-J., Velez, L., Ainsworth, C. H., Sagarese, S. R., and Karnauskas, M. 2014. Evaluation of the natural mortality rates of red grouper (*Epinephelus morio*) in the West Florida Shelf ecosystem using the individual-based, multispecies model OSMOSE-WFS. SEDAR 42 Working Paper. SEDAR, North Charleston, SC. 70 pp.
15. Gray, A., Ainsworth, C, Chagaris, D. and Mahmoudi, B., 2013. Red tide mortality on gag grouper 1980-2009. Working paper. SEDAR 33. SEDAR, North Charleston, SC. 44 pp
16. 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, multispecies model OSMOSE-WFS. SEDAR33AW22. SEDAR, North Charleston, SC. 44 pp
17. 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 Report. 31pp.
18. Kaplan, I.C., Horne, P.J., Levin, P.S., Ainsworth, C.H., Samhoury, J.F., Busch, S., Cheung, W., Dunne, J., Okey, T., Merrick, B., Fulton, E.A., 2011. The evaluation of management strategies. NOAA Technical Memorandum. NMFS FSC, 109: 14-218.
19. Ainsworth, C.H., Kaplan, I.C., Levin, P.S., Cudney-Bueno, R., Fulton, E.A., Mangel, M., Turk-Boyer, P., Torre, J., Parra-Sierra, A. and Morzaria-Luna, H. 2011. Atlantis model development for the Northern Gulf of California. U.S. Dept. Commer., NOAA Tech. Memo. NMF-110, 293p. Available: http://www.nwfsc.noaa.gov/assets/25/7784_08012011_125850_AtlantisModelTM110WebFinal.pdf
20. Ainsworth, C.H., Kaplan, I.C., Levin, P.S. and Mangel, M. 2009. Diet compositions of fish species in the Northern Gulf of California. Integrative Marine Ecology. In Morzaria-Luna, H (ed.) Publication for the PANGAS project. Available: ainsworth@usf.edu.
21. Ainsworth, C.H., Varkey, D., and Pitcher, T.J., 2008. Ecosystem Simulation Models of Raja Ampat, Indonesia, in Support of Ecosystem Based Fisheries Management. Pages 3 124 in: Bailey, M. and Pitcher, T.J. (Eds.) Ecological and Economic Analyses of Marine Ecosystems in the Bird's Head Seascape, Papua, Indonesia: II. Fisheries Centre Research Reports 16(1): 186 pp. 186 pp. I (bl)11.3 (s)5.6 (of)TJ T* [(Ra)oc.

23. Varkey, D., Pitcher, T.J. and Ainsworth, C.H., 2008. Ecosystem Based Management: the Influence of a Project in Raja Ampat, Papua Indonesia. Pages 177-186 in: Bailey, M. and Pitcher, T.J. (Eds.) Ecological and Economic Analyses of Marine Ecosystems in the Bird's Head Seascape, Papua, Indonesia: II. Fisheries Centre Research Reports 16(1): 186 pp
24. Ainsworth, C.H. and Varkey, D., 2008. Collaborative EBM Project in Indonesia Bears Fruit. Fishbytes 13(6): 1-2.
25. Ainsworth, C.H., Varkey, D. and Pitcher, T.J. 2007. Ecosystem simulation models of Raja Ampat, Indonesia in Support of Ecosystem Based Fisheries Management. Final technical report for the Birds Head Seascape Ecosystem Based Management Project. University of British Columbia Fisheries Centre. December 2007, 111 pp. Available: ainsworth@usf.edu.
26. Ainsworth, C.H., Varkey, D. and Pitcher, T.J. 2007. Ecosystem simulation models for the Bird's Head Seascape, Papua, fitted to data. Page 172-6 in: Pitcher, T.J., Ainsworth C.H. and Bailey, M. (Eds.) Ecological and Economic Analyses of Marine Ecosystems in the Birds Hed Seascape, Papua, Indonesia. Fisheries Centre Research Reports 15(5): 182 pp.
27. Alcock, E., Harris, D., Ings, D., Kennedy, J., Mackie, Q., Murray, G., Neis, B., Pitcher, T.J., Haggan, N., Ainsworth, C.H., Sumaila, R., Rogers, K., Ryan, D., Vodden, K. and Whelan, J. 2007 A Social Ecological History of Canada's Fisheries. Chapter 2 in: Ommer, R. (Ed.) with the Coasts Under Stress Team, Coasts Under Stress. Restructuring and the Social Ecological Health. McGill-Queens University Press. Montreal.
28. Baker, K., Davis, R., Haedrich, D., Hamilton, L., Pitcher, T.J., Heymans, S., Sumaila, R., Ainsworth, C.H., Vodden, K. and Wroblewski, J. 2007. New Options for Governance I: Marine and Coastal Waters. Chapter 14 in: Ommer, R. (Ed.) with the Coasts Under Stress Team, Coasts Under Stress. Restructuring and the Social Ecological Health. McGill-Queens University Press. Montreal.
29. Ainsworth, C.H. and Pitcher, T.J. 200587 (o7)4 (n)6 (inu3 0.7 (y).3 (a75 06 (s)11.6 (U)Td ()).3 28.

34. Ainsworth, C.H. and Dingerson, L. 2005. Results from the Panel Discussion: Priority Areas for Research Identified at the Fourth World Fisheries Congress. In: Chuenpagdee, R. and Bundy, A. (Eds.) Innovation and Outlook in Fisheries: an Assessment of the Research Presented at the Fourth World Fisheries Congress. Fisheries Centre Research Reports 13(2):67-70.
35. Ainsworth, C.H. and Pitcher, T.J. 2004. The Dark Side of BC Marine Fisheries: Estimating Illegal, Unreported and Unregulated Catch. State of Environment Reporting. Internal Report. Ministry of Water, Land and Air Protection. 44 pp.
36. Ainsworth, C.H. 2004. Spatial Investigations for the Gwaii Haanas National Marine Conservation Area. Internal Report. World Wildlife Fund Canada. 29 pp.
37. Ainsworth, C.H. 2004. Estimating the Effects of 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): 45-47.
38. Ainsworth, C.H., Heymans, S. and Pitcher, T.J. 2004. Policy Search Methods for Back to the Future. In: T. Pitcher (Ed.) Back to the Future: Adv

