

DR. CAMERON H. AINSWORTH

CURRICULUM VITAE

(To Sept 2013)

General

Position (April 2011-present):

Assistant professor, Biological Oceanography
College of Marine Science, University of South Florida
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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 (Professor Tony J. Pitcher)
- *B.S.* 1997. University of British Columbia. Department of Zoology.
Major: Marine Biology

Appointments

- Alfred P. Sloan Research Fellow 2013.
- April 2011-present. Assistant Professor, College of Marine Science. University of South Florida.
- September 2011 – present. Adjunct Faculty, Rosenstiel School of Marine and Atmospheric Science. University of Miami.
- June 2011-present. Associate Faculty, Fisheries Centre. University of British Columbia.
- November 2007-June 2011. Adjunct Faculty, Fisheries Centre. University of British Columbia.
- November 2007-March 2011. Post-doctoral Fellow. Northwest Fisheries Science Center (NOAA). Seattle, WA. Supervisor: Dr. Phil Levin
- April 2006 – October 2007. Post-doctoral Fellow. University of British Columbia Fisheries Centre. Vancouver, BC. Supervisor: Dr. Tony Pitcher
- December 2005-April 2006. Graduate Student Researcher. University of British Columbia Fisheries Centre. Vancouver, BC. Supervisor: Dr. Tony Pitcher
- August 2000 - May 2001. Research Assistant. Sea Around Us Project. University of British Columbia Fisheries Centre. Vancouver, BC. Supervisor: Dr. Daniel Pauly

Peer-reviewed publications

Periodicals

1. Levin, P., **Ainsworth, C.**, deReynier, Y., Dunsmore, R., Fogarty, M., Holsman, K., Howell, E., Kelble, C., Monaco, M., Oakes, S., Shuford, R., Werner, C. (*In press*). Integrated Ecosystem Assessment: Guidance for Implementation. ICES Journal of Marine Science.
2. 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 the Upper Gulf of California. PLoS ONE 8(5): e64085. doi:10.1371/journal.pone.0064085
3. Drexler M, **Ainsworth C.H.** 2013 Generalized Additive Models Used to Predict Species Abundance in the Gulf of Mexico: An Ecosystem Modeling Tool. PLoS ONE 8(5): e64458. doi:10.1371/journal.pone.0064458.
4. Pitcher, T.J., Lam, M., **Ainsworth, C.H.**, Martindale, A., Nakamura, K., Perry, I., Ward, T., 2013. Improvements to Rapfish: a rapid evaluation technique for fisheries integrating ecological and human dimensions. Journal of Fish Biology. Doi: 10.1111/jfb.12122.
5. Morzaria-Luna, H., **Ainsworth, C.H.**, Kaplan, I.C., Levin, P., Fulton, E., (2012). Exploring trade-offs between fisheries and conservation of the vaquita porpoise (*Phocoena sinus*) using an Atlantis ecosystem model. PLoS ONE 7(8): e42917. doi:10.1371/journal.pone.0042917
6. **Ainsworth, C.H.**, Morzaria-Luna, H., Kaplan, I.C., Levin, P., Fulton, E.A., Cudney-Bueno, R., Turk-Boyer, P., Torre, J., Danneman, G., Pfister, T., (2012). Effective ecosystem-based management must encourage regulatory compliance: A Gulf of California case study. Marine Policy, 36: 1275-1283.
7. Varkey, D., **Ainsworth, C.H.**, and Pitcher, T.J., (2012). Modelling reef fish population responses to fisheries restrictions in Marine Protected Areas in the Coral Triangle. Journal of Marine Biology, 2012. DOI: 10.1155/2012/721483.
8. **Ainsworth, C.H.**, Morzaria-Luna, H., Kaplan, I.C., Levin, P.S. and Fulton, E.A., (2012). Full compliance with harvest regulations yields ecological benefits: Northern Gulf of California case study. Journal of Applied Ecology, 49: 63-72.
9. **Ainsworth, C.H.**, Samhouri, J., Busch, D.S., Cheung, W., Dunne, J., and Okey, T. (2011) Potential impacts of climate change on Northeast Pacific marine foodwebs and fisheries. ICES Journal of Marine Science, 68(6): 1217-1229.
10. **Ainsworth, C.H.** (2011) Quantifying Species Abundance Trends in the Northern Gulf of California Using Local Ecological Knowledge. Marine and Coastal Fisheries, 3(1): 190-218.
11. Fulton, E.A., Link, J.S., Kaplan, I., Savina-Rolland, 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. Fish and Fisheries, 12(2): 171-188.

12. Li, L., **Ainsworth, C.H.** and Pitcher, T.J. (2010). Presence of harbor seals (*Phoca vitulina*) may increase exploitable fish biomass in the Strait of Georgia. *Progress in Oceanography*, 87(1-4): 235-241.
13. **Ainsworth, C.H.**, Kaplan, I.C., Levin, P.S. and Mangel, M. (2010) A statistical approach for estimating fish diet compositions from multiple data sources: Gulf of California case study. *Ecological Applications*, 20(8): 2188-2202.
14. **Ainsworth, C.H.**, and Pitcher, T.J. (2010). A bioeconomic optimization approach to marine ecosystem restoration: British Columbia case study. *Environmental Conservation*, 36(4): 301-311.
15. Samhour, J., Levin, P.S. and **Ainsworth, C.H.** (2010). Identifying thresholds for ecosystem-based management. *PLoS One* 5(1): e8907. DOI: 10.1371/journal.pone.008907
16. Pitcher, T.J. and **Ainsworth, C.H.** (2010). Resilience to Change in Two Coastal Communities: Using the Maximum Dexterity Fleet. *Marine Policy*, 34: 810-814.
17. Varkey, D. **Ainsworth, C.H.**, Pitcher, T.J., Goram, Y. and Sumaila, R., (2010). Illegal, Unreported and Unregulated Fisheries Catch in Raja Ampat Regency, Eastern Indonesia. *Marine Policy*, 34(2): 228-236.
18. **Ainsworth, C.H.**, Pitcher, T.J., Heymans, J.J., Vasconcellos, M. (2008). Reconstructing historical marine ecosystems using food web models: Northern British Columbia from Pre-European Contact to Present. *Ecological Modelling*, 216: 354-368.
19. **Ainsworth, C.H.**, Varkey, D.A. and Pitcher, T.J. (2008) Ecosystem simulations supporting Ecosystem Based Fisheries Management in the Coral Triangle, Indonesia. *Ecological Modelling*, 214: 361-374.
20. **Ainsworth, C.H.**, Pitcher, T.J. and Rotinsulu, C. (2008) Evidence of fishery depletions and shifting cognitive baselines in Eastern Indonesia. *Biological Conservation*, 141(3): 848-859. (*Featured article in Current Conservation*)
21. Grober-Dunsmore, R., Wooninck, L., Field, J., **Ainsworth, C.H.**, Beets, J.P., Berkeley, S., Bohnsack, J.A., Boulon, R., Brodeur, R. D., Brodziak, J., Crowder, L. Gleason, D. F., Hixon, M. A., Kaufman, L., Lindberg, B.L., Miller, M. L., Morgan, L and Wahle, C. (2007). Vertical Zoning in Marine Protected Areas: Ecological Considerations for Balancing Pelagic Fishing with Conservation of Benthic Communities. *Fisheries*, 33(12): 598-610.
22. **Ainsworth, C.H.** and Pitcher, T.J. (2006) Modifying Kempton's Species Diversity Index for use with Ecosystem Simulation Models. *Ecological Indicators*, 6(3):623-630.
23. **Ainsworth, C.H.** and Pitcher, T.J. (2005) Estimating Illegal, Unreported and Unregulated catch in British Columbia's Marine Fisheries. *Fisheries Research*, 75: 40-55.
24. **Ainsworth, C.H.** and Sumaila, U.R. (2005) Intergenerational valuation of fisheries resources can justify long-term conservation: a case study in Atlantic cod (*Gadus morhua*). *Canadian Journal of Fisheries and Aquatic Sciences*, 62: 1104-1110.

25. Sayer, M.D.J., Magill, S.H., Pitcher, T.J., Morissette, L. and **Ainsworth, C.H.** (2005) Simulation-Based Investigations of Fishery Changes as Influenced by the Scale and Design of Artificial Habitats. *Journal of Fish Biology*, 67(B): 218-243.

Book chapters

26. **Ainsworth, C.H.** and Pitcher, T.J. (2008) Back-to-the-Future in Northern British Columbia: Evaluating Historic Marine Ecosystems and Optimal Restorable Biomass as Restoration Goals for the Future. Pages 587-599 in Nielson J. (ed.) *Reconciling Fisheries with Conservation: Proceedings of the Fourth World Fisheries Congress*. American Fisheries Society, Bethesda, USA. [*document no. WFC-0100R*].
27. Pitcher, T.J. and **Ainsworth, C.H.** (2008) Back-to-the-Future: a candidate ecosystem-based solution to the fisheries problem. In Nielson J. (ed.) *Reconciling Fisheries with Conservation: Proceedings of the Fourth World Fisheries Congress*. American Fisheries Society, Bethesda, USA.
28. **Ainsworth, C.H.** and Pitcher, T.J. (2005) Using Local Ecological Knowledge in Ecosystem Models. Pages 289-304 in: G.H. Kruse, V.F. Gallucci, D.E. Hay, R.I. Perry, R.M. Peterman, T.C. Shirley, P.D. Spencer, B. Wilson, and D. Woodby (Eds.) *Fisheries assessment and management in data-limited situations*. Alaska Sea Grant College Program, University of Alaska Fairbanks. 948 pp.
29. **Ainsworth, C.H.** and Pitcher, T.J. (2005) Evaluating Marine Ecosystem Restoration Goals for Northern British Columbia. Pages 419-438 in: G.H. Kruse, V.F. Gallucci, D.E. Hay, R.I. Perry, R.M. Peterman, T.C. Shirley, P.D. Spencer, B. Wilson, and D. Woodby (Eds.) *Fisheries assessment and management in data-limited situations*. Alaska Sea Grant College Program, University of Alaska Fairbanks. 948 pp.
30. Pitcher, T.J., **Ainsworth, C.H.**, Buchary, E., Cheung, W., Forrest, R., Haggan, N., Lozano, H., Morato, T. and Morissette, L. (2005) Strategic Management of Marine Ecosystems using Whole-Ecosystem simulation Modelling: The 'Back to the Future' Policy Approach. In: E. Levner, I. Linkov, J. Proth (Eds.) *Strategic Management of Marine Ecosystems*. Springer, NATO Science Series: IV: Earth and Environmental Sciences 50: 199-258.
31. Pitcher, T.J., Heymans, J.J., **Ainsworth, C.H.**, Buchary, E.A., Sumaila, U.R. and Christensen, V. (2004) Opening the Lost Valley: Implementing a 'Back to the Future' Restoration Policy for Marine Ecosystems and their Fisheries. In: Knudsen, E.E., MacDonald, D.D. and Muirhead, J.K. (Eds.) *Sustainable Management of North American Fisheries*. American Fisheries Society Symposium 43: 165-193.

Funding obtained

- **PENDING:** Alfred P. Sloan Fellowship (\$50,000 USD) July 2013-June 2014
- **PENDING:** Gulf of Mexico Research Initiative – “Deep Sea to Coast Connectivity in the Eastern Gulf of Mexico (DEEP-C)” (\$48,193 USD) (August 2013-July 2015) (Co-Investigator).
- **ACTIVE:** Gulf of Mexico Research Initiative – “Center for Integrated Modeling and Analysis of the Gulf Ecosystem (C-IMAGE)” (\$150,000 USD) (December 2011 – November 2014) (Co-Investigator).
- **ACTIVE:** Florida Sea Grant (Principle Investigator) – “Spatial ecological modeling of the Gulf of Mexico supporting an Integrated Ecosystem Assessment” (\$124,864 USD) (September 2012-August 2014) (Principle Investigator)
- **COMPLETED:** Research Grant (contributing author), June - Aug 2009. California Current Model Exploratory Work. Department of Fisheries and Oceans. Government of Canada. (\$16,000 CAD)
- **COMPLETED:** Research Grant (contributing author). Evaluating the Human Dimensions of Fisheries. Martha Piper Research Fund. University of British Columbia (\$25,000 CAD)
- **COMPLETED:** Exploratory Workshop Grant (contributing author), May 2009. The Sea Ahead. Peter Wall Institute for Advanced Studies. University of British Columbia. (\$20,000 CAD)
- **COMPLETED:** University Graduate Fellowship, Sept 2004-April 2006. University of British Columbia. (\$32,000 CAD)
- **COMPLETED:** Research Grant (sole author), Feb - Mar 2004. The Darkside of Marine Fisheries: Quantifying Illegal, Unreported and Unregulated (IUU) Catch in British Columbia. Ministry of Water, Land and Air Protection (Canada). (\$3,000 CAD)
- **COMPLETED:** Research Grant (sole author), Feb 2003. WWF State of Species Database V 1.01. The Nature Audit. World Wildlife Fund Canada. (\$1,750 CAD)
- **COMPLETED:** Research Grant (sole author), Jan - Apr 2003. Spatial Investigations for the Gwaii Hanaas National Marine Conservation Area. World Wildlife Fund Canada. (\$5,000 CAD)
- **COMPLETED:** Provincial Scholarship, Sept 1992 - April 1993. British Columbia. (\$2,000 CAD)
- **COMPLETED:** Passport to Education, Sept 1992 - April 1993. British Columbia. (\$800 CAD)

Student accolades and awards

- Southern Kingfish Association Fellowship. Recipient: A. Gray, M.Sc. 2012-2013 (\$10,000 USD). University of South Florida (Academic supervisor)
- Aylesworth Scholarship. Recipient: M. Masi, Ph.D. 2012-2013 (\$12,000 USD)
- Fish Florida Scholarship, Recipient: A. Gray, M.Sc. 2012-2013 (\$2,500 USD). University of South Florida (Academic supervisor)
- Von Rosenstiel Fellowship. Recipient: A. Gray, M.Sc. 2011-2012 (\$10,000 USD). University of South Florida (Academic supervisor)

- NOAA Marine Resource Assessment Fellowship. Recipient: M. Drexler, Ph.D. 2011-2012 (\$33,000 USD). University of South Florida (Academic supervisor)

Teaching experience

Supervision

- *Major academic advisor:* Michael Drexler (PhD, 2011-present). Topic: Long-term impacts from the Deepwater Horizon oil spill in the Gulf of Mexico examined using the Atlantis ecosystem model.
- *Major academic advisor:* Alisha Gray (M.Sc, 2011-present). Topic: The influence of fisheries on red tide frequency and severity on the West Florida Shelf examined using Ecopath with Ecosim.
- *Major academic advisor:* Michelle Masi (PhD, 2012-present). Topic: Integrated Ecosystem Assessment (IEA) for the Gulf of Mexico using the Atlantis ecosystem model.
- *Major academic advisor:* Lindsey Dornberger (PhD, 2012-present). Topic: Long-term impacts of the Deepwater Horizon oil spill in the Northeastern Gulf of Mexico examined using the Atlantis ecosystem model.
- *Academic committee member:* Current students: H. Perryman (PhD, University of Miami), M. Nutall, (PhD, University of Miami), D. Chacin (PhD, University of South Florida), L. Li (PhD, University of British Columbia). Former students: D. Varkey (PhD, University of British Columbia).
- *Research project supervisor:* Stacy Bohovsky (MA, USF School of Global Sustainability, 2012); Michael Estebahn (BE, USF Civil and Environmental Engineering, 2012)

Courses taught

- *Lecturer*, Fall 2012. Population dynamics and fisheries. OCE6934.641F12. USF College of Marine Science (3 credits).
- *Lecturer*, Fall 2011. Fisheries ecology reading course. OCE6934.640F11. USF College of Marine Science. (1 credit)
- *Guest Lecturer*, Nov 2011 and Nov 2012. OCE2001.608F12. Introduction to Oceanography. University of South Florida. Instructor: Kent Fanning
- *Guest Lecturer*, Oct 2011 and Oct 2012. OCB 6050.607F12. Fish Biology. University of South Florida. Instructor: Ernst Peebles.
- *Lecturer*, June 2010. Atlantis training course (4 days) NOAA-SEFSC. Galveston, TX
- *Lecturer*, Nov 2009. Atlantis training course (4 days) CICESE. Ensenada, Mexico
- *Lecturer*, Sept 2009. Atlantis training course (3 days) NOAA-NWFSC. Seattle, WA
- *Guest Lecturer*, May 2008. BIOL 325. Ecosystem modelling approaches and applications. Western Washington University. Instructor: Peter Kiffney.
- *Guest Lecturer*, Oct. 2007. EOSC 478. Restoration ecology: Department of Earth and Ocean Sciences. University of British Columbia. Instructor: Evgeny Pakhomov
- *Guest Lecturer*, Nov. 2006. FISH 501. Bioeconomic restoration modelling. Department of Resource Management and Environmental Studies. University of British Columbia. Instructor: Villy Christensen
- *Lecturer*, Nov 2005. Ecopath with Ecosim training course (5 days). University of British Columbia Fisheries Centre. Vancouver, Canada.

- *Lecturer*, Sept 2005. Ecopath with Ecosim training course (4 days). Scottish Association for Marine Science. Oban, Scotland, UK.

Post-doctoral studies

- Post-Doctoral Researcher, Nov 2007 – March 2011. Atlantis Ecosystem Modelling. Northwest Fisheries Science Centre. National Oceanic and Atmospheric Administration (NOAA). Seattle, WA. PI: Dr. Phillip Levin. (Project value: \$401,549 USD)
- Post-Doctoral Researcher, Dec 2005 - Oct 2007. Birds Head Seascape Ecosystem Based Management Project in Papua, Indonesia. David and Lucile Packard Foundation. UBC Fisheries Centre. Vancouver, B.C. PI: Dr. Tony J. Pitcher. (Project value: \$140,000 CAD)

Selected training courses

- Seattle, WA. July 2010. Error Estimation in Trophic Modelling. Alaska Fisheries Science Center (NOAA) (Dr. Kerim Aydin)
- Seattle, WA. Nov. 2008. Data Analysis using Regression and Multilevel / Hierarchical models. Northwest Fisheries Science Center (NOAA) (Dr. Eli Holmes)
- February 2008. Biogeochemical modelling tools. DFO Pacific Biological Station, Nanaimo, Canada
- Vancouver, BC. Dec. 2007. Bayesian Decision Analysis. University of British Columbia. (Dr. Murdoch McAlistair)
- Annapolis, MD. Aug. 2006. Ecopath with Ecosim VB .net programming course. Chesapeake Research Consortium. (Dr. Villy Christensen)
- Vancouver, BC. Dec. 2002. Programming in Visual Basic with special reference to Fisheries Science. University of British Columbia Fisheries Centre. (Dr. Steve Martell)
- Vancouver, BC. Feb. 2001. Scientific Writing Course. University of British Columbia Fisheries Centre.

Consultancies

- Consultant, Nov 2005. Benthic-Pelagic Linkages in MPA Design: A workshop to explore the application of science to vertical zoning approaches. National Oceanic and Atmospheric Administration. Monterey, CA. Nov 15-16, 2005.
- Consultant, May 2005. Guidelines for Assessment of Small-Scale/Data-Deficient Fisheries Case Study Workshop. Marine Stewardship Council. Rosenstiel School of Marine Science, University of Miami. May 2-5, 2005.
- Consultant, Mar 2005. Assessing Socio-Economic Impacts of SARA listings using Dynamic Stock Assessment Models. Department of Fisheries and Oceans. Vancouver, BC. Canada. March 22-23, 2005.
- Consultant, Jan 2004. North Coast Marine Workshop. Golder Associates. Burnaby, Canada.

Current research interests

I am an Assistant Professor at the University of South Florida College of Marine Science. My laboratory is involved in ecological modelling of the Gulf of Mexico using Atlantis and Ecopath with Ecosim modelling software. My main interest is to study how disturbances, such as from the Deepwater Horizon oil spill, affect higher trophic levels and fisheries through bottom-up and top-down processes. Through my collaborations with NOAA, I am helping to provide next-generation ecosystem modelling tools for use in the Integrated Ecosystem Assessment (IEA) program.

In a previous position as a Post-doctoral Associate at the Northwest Fisheries Science Center (NOAA) in Seattle I was responsible for modelling and field studies in the Gulf of California (Mexico). I designed and directed trawl surveys, community interviews, fish gut content analysis, and biometric studies. These formed the basis of an Atlantis ecosystem model of the Gulf of California used for ecosystem-based management (EBM) policy exploration. In my previous Post-doctoral position at the University of British Columbia Fisheries Centre I coordinated ecosystem studies in Papua, Indonesia. I designed various Ecopath with Ecosim and Ecospace models, coordinated field research projects and developed a new simulation tool, EcoLocator, for spatial analysis of coral reef communities.

My PhD thesis used ecosystem modelling to design and test optimal restoration strategies for northern British Columbia that would return marine biodiversity and fisheries yields to historic levels. Through this work I coordinated stakeholder workshops, conducted fisher interviews, and developed numerous routines for Ecopath with Ecosim modelling software. I received first class standing and my thesis was selected by the Resource Management Department at UBC for submission to the NSERC Doctoral Thesis Award competition.

Community service and hobbies

I am a member of the Gulf of Mexico Fishery Management Council's Ecosystem Science and Statistical Committee and a member of the SEDAR (Southeast Data Assessment and Review) ecosystem working group for the gag grouper stock assessment. I am involved in 3 student academic committees, and am active in peer-review and evaluation of scientific articles and funding proposals for various bodies. At the USF College of Marine Science I am a member on the following faculty committees: the Marine Resource Assessment Program committee, the Information Technology committee, and the Undergraduate Education committee.

I sat on the board of directors in 2006/2007 for a non-profit marine research group, the Pacific Marine Analysis and Research Association (PacMARA), of which I was a founding member. The organization was created to help facilitate scientific data sharing and foster marine and environmental research in British Columbia through workshops and collaborative projects. I facilitated entry of USF into the Ecopath with Ecosim Research Consortium. During my graduate degree, I was a member of AquaLink, an association of marine ecology graduate students who organize student workshops and

publications. I helped coordinate the Fisheries and Marine Ecosystems (FAME) Annual Student Conference and other projects. As a PhD student, I was invited by my department to give a presentation to His Royal Highness Prince Phillip during the Golden Jubilee visit to UBC by Her Majesty Queen Elizabeth II. The presentation provided His Highness with a brief overview of marine ecosystem research current at UBC. In my undergraduate years, I was President of the Vancouver School of Theology Residents Association in 93/94, and Vice-President in 92/93. I served as a deck-hand on a commercial salmon gillnetter operating in northern British Columbia for the 1993 fishing season. My hobbies include skiing and astronomy.

Article reviews since 2006 (# of articles)

Ecological Modelling (12)	Estuarine, Coastal and Shelf Science (1)
Marine Ecology Progress Series (12)	Fisheries Research (1)
Fish and Fisheries (11)	Hawaii Sea Grant (1)
CAMEO (NOAA/NSF) (4)	Hydrobiologia (1)
ICES Journal of Marine Science (3)	Marine Environmental Research (1)
American Fisheries Society Books (1).	North American Journal of Fisheries Management (1)
Aquatic Living Resources (1)	New Zealand Journal of Marine and Freshwater Research (1)
Biological Conservation (2)	Progress in Oceanography (1)
Bulletin of Marine Science (2)	R Journal (1)
Conservation Biology (2)	Ecosystems (1)
CT NY Sea Grant (1)	Ecological Applications (3) (subject editor) (1)
Florida Sea Grant (2)	PhD Theses: Internal examiner (1); External examiner (2)

Selected presentations

- Queen Charlotte City, BC. November 2012. Northern BC models. Parks Canada.
- Monterey, CA. May 2012. Restoring the Gulf of California. Hopkins Marine Station. Stanford University
- Gainesville, FL. Sept 2012. Ecosystem Modelling in the Gulf of Mexico. University of Florida
- St. Petersburg, FL. July 2012. Atlantis Modelling of the Gulf of Mexico. NOAA Southeast Regional Office.
- Miami, FL. Sept. 2011. In a perfect world: imagining full compliance with fisheries regulations in the Sea of Cortez. RSMAS University of Miami (Invited speaker).
- Monterey, CA. August 2011. Role of ecosystem modelling in NOAA's Integrated Ecosystem Analysis. Southwest Fisheries Science Centre (Pacific Grove)

- Sendai, Japan. December 2010. Tools for modelling marine food webs and fisheries. Tohoku University (Invited speaker).
- St. Andrews, New Brunswick. Sept 2009. Trophodynamic ecosystem modeling: test bed for ecosystem-based fisheries management approaches. St. Andrews Biological Station
- Vancouver, BC. May 2009. Oceans Past II. History of Marine Animal populations. Census of Marine Life (Session chair)
- Sarasota, Florida. November 2008. Spatial Ecosystem Modelling of the Upper Gulf of California. Mote International Symposium.
- Guaymas, Mexico. March 2008. Atlantis Ecosystem Modelling of the Gulf of California. CIBNOR (Invited speaker).
- Santa Cruz, CA. Oct. 2006. Ecosystem-Based Management in the Marine Environment: Case Studies and Moving Forward. Santa Cruz, CA. TNC and the David and Lucille Packard Foundation.
- Kolberg, Denmark. Oct. 2005. Ecosystem Restoration in Northern British Columbia. Oceans Past: History of Marine Animal Populations (Census of Marine Life).
- Barcelona, Spain. Sept. 2005. Constructing Ecosystem Models of the Past. History of Marine Animal Populations (Census of Marine Life).
- Aberdeen, UK. Sept. 2005. A Whole Ecosystem Approach to Marine Restoration: Optimal Strategies for Northern British Columbia. ICES Annual Science Conference.
- Anchorage, AK. Oct. 2003. Evaluating Marine Ecosystem Restoration Goals for Northern British Columbia. Fisheries Assessment and Management in Data-Limited Situations. Alaska Sea Grant College Program.
- Nice, France. Oct. 2003. Developing Restoration Strategies and Responsible Harvest Plans for the Marine Ecosystem of Northern British Columbia. Strategic Management of Marine Ecosystems workshop. NATO.
- Rome, Italy. Oct. 2003. Evaluating Ecosystem Restoration Goals for BC. Food and Agricultural Organization. (Invited speaker).
- Quebec City, QB. Aug. 2003. Back to the Future in Newfoundland. American Fisheries Society Annual Meeting.
- La Paz, Mexico. Nov. 2002. Using Local Environmental Knowledge to Improve Ecosystem models of Northern BC. CICIMAR (Invited speaker)
- St. Johns, NFLD. Sept. 2002. Opening the Lost Valley: Evaluating Options for Restoration. Coasts Under Stress.

Technical publications

1. **Ainsworth, C.** (in press). British Columbia Marine Fisheries Catch Reconstruction: 1873 to 2011. University of British Columbia, Vancouver. Fisheries Centre Research Reports.
2. Kaplan, I.C., Horne, P.J., Levin, P.S., **Ainsworth, C.H.**, Samhouri, 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-NWFSC, 109: 141-218.
3. Adamack, A.T., Mason, D.M., **Ainsworth, C.H.** and Drexler, M. (2011). Development of an Atlantis Ecosystem-Based Model for the Louisiana-Texas Continental Shelf. International Conference. Poster presentation. Coastal and Estuarine Research Federation. Daytona Beach, FL. November 2011.

4. **Ainsworth, C.H.**, Kaplan, I.C., Levin, P.S., Cudney-Bueno, R., Fulton, E.A., Mangel, M., Turk-Boyer, P., Torre, J., Pares-Sierra, A. and Morzaria-Luna, H. (2011). Atlantis model development for the Northern Gulf of California. U.S. Dept. Commer., NOAA Tech. Memo. NMFS-NWFSC-110, 293p. Available: http://www.nwfsc.noaa.gov/assets/25/7784_08012011_125850_AtlantisModelTM110WebFinal.pdf
5. **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: Cameron.ainsworth@noaa.gov
6. **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.
7. **Ainsworth, C.H.**, (2008). EcoLocator User's Guide. Pages 179-186 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
8. Varkey, D., Pitcher, T.J. and **Ainsworth, C.H.**, (2008). Ecosystem Based Management: the Influence of a Project in Raja Ampat, Papua Indonesia. Pages 171-177 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
9. **Ainsworth, C.H.** and Varkey, D., (2008). Collaborative EBM Project in Indonesia Bears Fruit. Fishbytes 13(6): 1-2.
10. **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. [Contact: t.pitcher@fisheries.ubc.ca].
11. **Ainsworth, C.H.**, Varkey, D. and Pitcher, T.J. (2007) Ecosystem simulation models for the Bird's Head Seascape, Papua, fitted to data. Pages 6–172 in: Pitcher, T.J., Ainsworth C.H. and Bailey, M. (Eds.) Ecological and Economic Analyses of Marine Ecosystems in the Birds Head Seascape, Papua, Indonesia. Fisheries Centre Research Reports 15(5): 182 pp.
12. Haggan, N., **Ainsworth, C.H.**, Pitcher, T.J., Sumaila, U.R. and Heymans, J. (2008) Où Sont les Poissons d'Antan? Restoring Past Ecosystems: Policy Trade-offs for Resilience and Food Security for Coastal Communities. Pages 51-74 in: C. Parrish, N. Turner and S. Solberg (Eds.) Resetting the Kitchen Table: Food Security, Culture, Health and Resilience in Coastal Communities. Nova Science Publishing. Hauppauge, NY: Nova Science Publishing.

13. **Ainsworth, C.H.** and Pitcher, T.J. (2006) Ecosystem Restoration in Northern British Columbia. Oceans Past: Multidisciplinary Perspectives on the History of Animal Populations. International Conference. Oral presentation. Kolding, Denmark. October 2005.
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