

## **Trevor A. Branch**

BSc, BSc(Hons), MSc, University of Cape Town (1994, 1995, 1998)

PhD, University of Washington (2004)

### **Recent awards**

Fellow of the American Institute of Fishery Research Biologists, 2014, for distinguished achievement in the fields of fishery sciences.

Outstanding Researcher award for the College of the Environment, University of Washington, 2013. For “research or scholarship contributed within the past two years that has been or has the potential to be widely recognized by peers and whose achievements have had or may have a substantial impact of the profession, on research or the performance of others, or on society as a whole.”

Leopold Leadership Fellow, 2013, training mid-career researchers in “translating their knowledge to action and for catalyzing change to address the world’s most pressing environmental and sustainability challenges.”

Carl R. Sullivan Fishery Conservation Award, 2012, American Fisheries Society, for the Alaska Salmon Program. I was a research scientist working in the Program for four years.

Ecological Society of America 2011 Sustainability Science Award for the paper Worm et al. (2009) “Rebuilding Global Fisheries” published in *Science*. Awarded “for the peer reviewed paper published in the past five years that makes the greatest contribution to the emerging science of ecosystem and regional sustainability through the integration of ecological and social sciences.”

Young Investigator Award, 2004. Best oral presentation at the Fifth William R. and Lenore Mote Symposium.

Graduate Faculty Merit Award, PhD, 2004. For outstanding efforts by students who have achieved high scholastic standing, School of Aquatic and Fishery Sciences, University of Washington.

### **Papers published (62 papers, 943 pages, 27 first-authored)**

#### **Online (2)**

62. Melnychuk, M. C., T. E. Essington, T. A. Branch, S. S. Heppell, O. P. Jensen, J. S. Link, S. J. D. Martell, A. M. Parma, J. G. Pope, and A. D. M. Smith. 2015. Which design elements of individual quota fisheries help to achieve management objectives? *Fish and Fisheries* doi: 10.1111/faf.12094

61. Szuwalski, C. S., K. A. Vert-pre, A. E. Punt, T. A. Branch, and R. Hilborn. 2015. Examining common assumptions about recruitment: a meta-analysis of recruitment dynamics for worldwide marine fisheries. *Fish and Fisheries* doi:10.1111/faf.12083

#### **2015 (2)**

60. McClain, C. R., M. A. Balk, M. C. Benfield, T. A. Branch, C. Chen, J. Cosgrove, A. D. M. Dove, R. R. Helm, F. G. Hochberg, L. C. Gaskins, F. B. Lee, A. Marshall, S. E. McMurray, C. Schanche, S. N. Stone, and A. D. Thaler. 2015. Sizing ocean giants: patterns of intraspecific size variation in marine megafauna. *PeerJ* 2:e715.

59. Monnahan, C. C., T. A. Branch, and A. E. Punt. 2015. Do ship strikes threaten the recovery of endangered eastern North Pacific blue whales? *Marine Mammal Science* 31:279-297. doi: 10.1111/mms.12157.

#### **2014 (4)**

58. Hilborn, R., D. J. Hively, O. P. Jensen, and T. A. Branch. 2014. The dynamics of fish populations at low abundance and prospects for rebuilding and recovery. *ICES Journal of Marine Science* 71:2141-2151. doi:10.1093/icesjms/fsu035

57. Stachura, M. M., T. E. Essington, N. J. Mantua, A. B. Hollowed, M. A. Haltuch, P. D. Spencer, T. A. Branch, and M. J. Doyle. 2014. Linking Northeast Pacific recruitment synchrony to environmental variability. *Fisheries Oceanography* 23:389-408

56. Monnahan, C. C., T. A. Branch, K. M. Stafford, Y. V. Ivashchenko, and E. M. Oleson. 2014. Estimating historical eastern North Pacific blue whale catches using spatial calling patterns. *PLOS ONE* 9:e98974. doi:10.1371/journal.pone.0098974
55. Double, M. C., V. Andrews-Goff, K. C. S. Jenner, M.-N. Jenner, S. M. Laverick, T. A. Branch, and N. J. Gales. 2014. Migratory movements of pygmy blue whales (*Balaenoptera musculus brevicauda*) between Australia and Indonesia as revealed by satellite telemetry. *PLOS ONE* 9:e93578. doi:10.1371/journal.pone.0093578
- 2013 (6)**
54. Samaran, F., K. M. Stafford, T. A. Branch, J. Gedamke, J.-Y. Royer, R. P. Dziak, and C. Guinet. 2013. Seasonal and geographic variation of southern blue whale subspecies in the Indian Ocean. *PLOS ONE* 8(8): e71561. doi:10.1371/journal.pone.0071561
53. Branch, T. A., A. S. Lobo, and S. W. Purcell. 2013. Opportunistic exploitation: an overlooked pathway to extinction. *Trends in Ecology and Evolution*. 28:409-413. doi: 10.1016/j.tree.2013.03.003
52. Branch, T. A., D. J. Hively, and R. Hilborn. 2013. Is the ocean food provision index biased? *Nature* 495:E5-E6. doi:10.1038/nature11974
51. Branch, T. A., B. M. DeJoseph, L. J. Ray, and C. A. Wagner. 2013. Impacts of ocean acidification on marine seafood. *Trends in Ecology and Evolution* 28: 178-186. doi: 10.1016/j.tree.2012.10.001
50. Branch, T. A. 2013. Citation patterns of a controversial and high-impact paper: Worm et al. (2006) "Impacts of biodiversity loss on ocean ecosystem services". *PLOS ONE* 8(2): e56723. doi: 10.1371/journal.pone.0056723
49. Hilborn, R. and T. A. Branch. 2013. Does catch reflect abundance? No, it is misleading. *Nature* 494:303-306. doi: 10.1038/494303a
- 2012 (12)**
48. Anderson, R. C., T. A. Branch, A. Alagiyawadu, R. Baldwin, and F. Marsac. 2012. Seasonal distribution, movements and taxonomic status of blue whales (*Balaenoptera musculus*) in the northern Indian Ocean. *Journal of Cetacean Research and Management* 12:203-218.
47. Worm, B. and T. A. Branch. 2012. The future of fish. *Trends in Ecology and Evolution*. 27:594-599. doi: 10.1016/j.tree.2012.07.005
46. Thorson, J. T., J. M. Cope, T. A. Branch, and O. P. Jensen. 2012. Spawning biomass reference points for exploited marine fishes, incorporating taxonomic and body size information. *Canadian Journal of Fisheries and Aquatic Sciences* 69:1556-1568. doi:10.1139/F2012-077
45. Anderson, S. C., T. A. Branch, D. Ricard, and H. K. Lotze. 2012. Assessing global marine fishery status with a revised dynamic catch-based method and stock-assessment reference points. *ICES Journal of Marine Science* 69:1491-1500. doi: 10.1093/icesjms/fss105
44. Gutiérrez, N. L., S. R. Valencia, T. A. Branch, D. J. Agnew, J. K. Baum, P. L. Bianchi, J. Cornejo-Donoso, C. Costello, O. Defeo, T. E. Essington, R. Hilborn, D. D. Hoggarth, A. E. Larsen, C. Nines, K. Sainsbury, R. L. Selden, S. Sistla, A. D. M. Smith, A. Stern-Pirlot, S. J. Teck, J. T. Thorson, and N. E. Williams. 2012. Eco-label conveys reliable information on fish stock health to seafood consumers. *PLoS ONE* 7(8):e43765. doi: 10.1371/journal.pone.0043765
43. Melnychuk, M. C., T. E. Essington, T. A. Branch, S. S. Heppell, O. P. Jensen, J. S. Link, S. J. D. Martell, A. M. Parma, J. G. Pope, and A. D. M. Smith. 2012. Can catch share fisheries better track management targets? *Fish and Fisheries* 13:267-290. doi: 10.1111/j.1467-2979.2011.00429.x
42. Essington, T. E., M. C. Melnychuk, T. A. Branch, S. S. Heppell, O. P. Jensen, J. S. Link, S. J. D. Martell, A. M. Parma, J. G. Pope, and A. D. M. Smith. 2012. Catch shares, fisheries, and ecological stewardship: a comparative analysis of resource responses to a rights-based policy instrument. *Conservation Letters* 5:186-195. doi: 10.1111/j.1755-263X.2012.00226.x
41. Branch, T. A. 2012. FAO's State of Fisheries and Aquaculture: correcting some misrepresentations by Pauly and Froese. *Marine Policy* 36:1191-1192. doi: 10.1016/j.marpol.2012.02.026
40. Thorson, J. T., T. A. Branch, and O. P. Jensen. 2012. Using model-based inference to evaluate global fisheries status from landings, location, and life history data. *Canadian Journal of Fisheries and Aquatic Sciences* 69:645-655. doi: 10.1139/F2012-016
39. Hilborn, R., I. J. Stewart, T. A. Branch, and O. P. Jensen. 2012. Defining trade-offs among conservation, profitability, and food security in the California Current bottom-trawl fishery. *Conservation Biology* 26:257-266. doi: 10.1111/j.1523-1739.2011.01800.x

38. Sremba, A. L., B. Hancock-Hanser, T. A. Branch, R. L. LeDuc, and C. S. Baker. 2012. Circumpolar diversity and geographic differentiation of mtDNA in the critically endangered Antarctic blue whale (*Balaenoptera musculus intermedia*). PLoS ONE 7(3):e32579. doi: 32510.31371/journal.pone.0032579.
36. Jensen, O.P., Branch, T.A., and Hilborn, R. 2012. Marine fisheries as ecological experiments. Theoretical Ecology 5:3-22. doi: 10.1007/s12080-011-0146-9

#### 2011 (7)

35. Branch, T. A. 2011. Humpback abundance south of 60°S from three complete circumpolar sets of surveys. Journal of Cetacean Research and Management (Special Issue) 3:53-69.
34. Williams, R., Krkošek, M., Ashe, E., Branch, T.A., Clark, S., Hammond, P.S., Hoyt, E., Noren, D.P., Rosen, D., and Winship, A. 2011. Competing conservation objectives for predators and prey: estimating killer whale prey requirements for Chinook salmon. PLoS ONE 6(11): e26738. doi: 26710.21371/journal.pone.0026738.
33. Froese, R., Branch, T.A., Proelß, A., Quaas, M., Sainsbury, K. & Zimmermann, C. 2011. Generic harvest control rules for European fisheries. Fish and Fisheries. 12:340-351. doi: 10.1111/j.1467-2979.2010.00387.x
32. Branch, T.A., Jensen, O.P., Ricard, D., Ye, Y. & Hilborn, R. 2011. Contrasting global trends in marine fishery status obtained from catches and from stock assessments. Conservation Biology. 25:777-786. doi: 10.1111/j.1523-1739.2011.01687.x
31. Williams, R., Hedley, S., Branch, T.A., Bravington, M., Zerbini, A.N., & Findlay, K. 2011. Chilean blue whales as a case study to illustrate methods to estimate abundance and evaluate conservation status of rare species. Conservation Biology. 25:526-535. doi: 10.1111/j.1523-1739.2011.01656.x.
30. Baker, M.R., Kendall, N.W., Branch, T.A., Schindler, D.E., and Quinn, T.P. 2011. Selection due to nonretention mortality in gillnet fisheries for salmon. Evolutionary Applications. 4:429-443. doi: 10.1111/j.1752-4571.2010.00154.x
29. Banobi, J.A., Branch, T.A. & Hilborn, R. 2011. Do rebuttals affect future science? EcoSphere. 2(3):art37. doi: 10.1890/ES10-00142.1

#### 2010 (5)

28. Branch, T.A., Watson, R., Fulton, E.A., Jennings, S., McGilliard, C.R., Pablico, G.T., Ricard, D., & Tracey, S.R. 2010. The trophic fingerprint of marine fisheries. Nature. 468:431-435. doi:10.1038/nature09528
27. Sethi, S.A., Branch, T.A., & Watson, R. 2010. Fishery development patterns are driven by profit but not trophic level. Proceedings of the National Academy of Science, U.S.A. 107: 12163-12167. doi: 10.1073/pnas.1003236107
26. Branch, T.A. & Hilborn, R. 2010. A general model for reconstructing salmon runs. Canadian Journal of Fisheries and Aquatic Sciences. 67:886-904. doi: 10.1139/F10-032
25. Branch, T.A. 2010. Reply to the comment by Francis on "Differences in predicted catch composition between two widely used catch equation formulations". Canadian Journal of Fisheries and Aquatic Sciences. 67: 766-768. doi:10.1139/F10-024
24. Holtgrieve, G.W., Schindler, D.E., Branch, T.A., & A'Mar, Z.T. 2010. Simultaneous quantification of aquatic ecosystem metabolism and reaeration using a Bayesian statistical model of oxygen dynamics. Limnology and Oceanography. 55:1047-1063. doi: 10.4319/lo.2010.55.3.1047

#### 2009 (4)

23. Branch, T.A., Mikhalev, Y.A. & Kato, H. 2009. Separating pygmy and Antarctic blue whales using long-forgotten ovarian data. Marine Mammal Science. 25: 833-854. doi: 10.1111/j.1748-7692.2009.00292.x
22. Worm, B., Hilborn R., Baum, J.K., Branch, T.A., Collie, J.S., Costello, C., Fogarty, M.J., Fulton, E.A., Hutchings, J.A., Jennings, S., Jensen, O.P., Lotze, H.K., Mace, P.M., McClanahan, T.R., Minto, C., Palumbi, S.R., Parma, A.M., Ricard, D., Rosenberg, A.A., Watson, R. & Zeller, D. 2009. Rebuilding global fisheries. Science. 325: 578-585. doi: 10.1126/science.1173146
21. Branch, T.A. 2009a. How do individual transferable quotas affect marine ecosystems? Fish and Fisheries. 10: 39-57. doi: 10.1111/j.1467-2979.2008.00294.x
20. Branch, T.A. 2009b. Differences in predicted catch composition between two widely used catch equation formulations. Canadian Journal of Fisheries and Aquatic Sciences. 66: 126-132. doi:10.1139/F08-196

#### 2008 (3)

19. Branch, T.A. 2008. Not all fisheries will be collapsed in 2048. *Marine Policy*. 32: 38-39. doi: 10.1016/j.marpol.2007.04.001
18. Branch, T.A. & Mikhalev, Y.A. 2008. Regional differences in length at sexual maturity for female blue whales based on recovered Soviet whaling data. *Marine Mammal Science*. 24: 690-703. doi: 10.1111/j.1748-7692.2008.00214.x
17. Branch, T.A. & Hilborn, R. 2008. Matching catches to quotas in a multispecies trawl fishery: targeting and avoidance behavior under individual transferable quotas. *Canadian Journal of Fisheries and Aquatic Sciences*. 65: 1435-1446. doi: 10.1139/F08-065
- 2007 (3)**
16. Branch, T.A. 2007. Abundance of Antarctic blue whales south of 60°S from three complete circumpolar sets of surveys. *Journal of Cetacean Research and Management*. 9: 253-262.
15. Branch, T. A., E.M.N. Abubaker, S. Mkango, and D.S. Butterworth. 2007. Separating southern blue whale subspecies based on length frequencies of sexually mature females. *Marine Mammal Science*. 23: 803-833. doi: 10.1111/j.1748-7692.2007.00137.x
14. Branch, T.A., K.M. Stafford, D.M. Palacios, C. Allison, J.L. Bannister, C.L.K. Burton, E. Cabrera, C.A. Carlson, B. Galletti Vernazzani, P.C. Gill, R. Hucke-Gaete, K.C.S. Jenner, M.-N.M. Jenner, K. Matsuoka, Y.A. Mikhalev, T. Miyashita, M.G. Morrice, S. Nishiwaki, V.J. Sturrock, D. Tormosov, R.C. Anderson, A.N. Baker, P.B. Best, P. Borsa, R.L. Brownell Jr, S. Childerhouse, K.P. Findlay, T. Gerrodette, A.D. Ilangakoon, M. Joergensen, B. Kahn, D.K. Ljungblad, B. Maughan, R.D. McCauley, S. McKay, T.F. Norris, Oman Whale and Dolphin Research Group, S. Rankin, F. Samaran, D. Thiele, K. Van Waerebeek, and R.M. Warneke. 2007. Past and present distribution, densities and movements of blue whales *Balaenoptera musculus* in the Southern Hemisphere and northern Indian Ocean. *Mammal Review*. 37: 116-175. doi: 10.1111/j.1365-2907.2007.00106.x
- 2006 (4)**
13. Branch, T.A. 2006. Discards and revenues in multispecies groundfish trawl fisheries managed by trip limits on the U.S. west coast and by ITQs in British Columbia. *Bulletin of Marine Science*. 78: 669-690.
12. Branch, T.A., Hilborn, R., Haynie, A.C., Fay, G., Flynn, L., Griffiths, J., Marshall, K.N., Randall, J.K., Scheuerell, J.M., Ward, E.J., & Young, M. 2006. Fleet dynamics and fishermen behavior: lessons for fisheries managers. *Canadian Journal of Fisheries and Aquatic Sciences*. 63: 1647-1668. doi: 10.1139/F06-072
11. Branch, T.A., Rutherford, K., & Hilborn, R. 2006. Replacing trip limits with individual transferable quotas: implications for discarding. *Marine Policy*. 30: 281-292. doi: 10.1016/j.marpol.2004.12.003
10. Branch, T.A. & Williams, T.M. 2006. Legacy of industrial whaling: could killer whales be responsible for declines in Southern Hemisphere sea lions, elephant seals and minke whales? Pages 262-278 in: *Whales, Whaling and Ocean Ecosystems*, ed. J.A. Estes, D.P. DeMaster, R.L. Brownell Jr., D.F. Doak, and T.M. Williams. University of California Press, Berkeley, California.
- 2005 (2)**
9. Branch, T.A., Hilborn, R., & Bogazzi, E. 2005. Escaping the tyranny of the grid: a more realistic way of defining fishing opportunities. *Canadian Journal of Fisheries and Aquatic Sciences*. 62:631-642. doi: 10.1139/F04-232
8. Minte-Vera, C.V., Branch, T.A., Stewart, I.J. & Dorn, M.W. 2005. Practical presentation of meta-analysis results: avoiding the double use of data in future applications. *Canadian Journal of Fisheries and Aquatic Sciences*. 62: 925-929. doi: 10.1139/F04-245
- 2004 (1)**
7. Branch, T.A., Matsuoka, K., Miyashita, T. 2004. Evidence for increases in Antarctic blue whales based on Bayesian modelling. *Marine Mammal Science*. 20: 726-754.
- 2003 (1)**
6. Hilborn, R., Branch, T.A., Ernst, E., Magnusson, A., Minte-Vera, C.V., Scheuerell, M.D., & Valero, J.L. 2003. State of the world's fisheries. *Annual Review of Environment and Resources*. 28: 359-399. doi: 10.1146/annurev.energy.28.050302.105509
- 2002 (1)**
5. Pulfrich, A. & Branch, T.A. 2002. Population dynamics and potential yield of three species of giant winkles in the Western Cape, South Africa. *South African Journal of Marine Science*. 24: 161-183.
- 2001 (3)**

4. Branch, T.A. 2001. A review of orange roughy (*Hoplostethus atlanticus*) fisheries, estimation methods, biology and stock structure. In: *A Decade of Namibian Fisheries Science*. Payne, A.I.L., S.C. Pillar and R.J.M. Crawford (Eds). South African Journal of Marine Science. 23: 181-203.
3. Branch, T.A. & Butterworth, D.S. 2001a. Southern Hemisphere minke whales: standardised abundance estimates from the 1978/79 to 1997/98 IDCR-SOWER surveys. *Journal of Cetacean Research and Management*. 3: 143-174.
2. Branch, T.A. & Butterworth, D.S. 2001b. Estimates of abundance south of 60°S for cetacean species sighted frequently on the 1978/79 to 1997/98 IWC/IDCR-SOWER sighting surveys. *Journal of Cetacean Research and Management*. 3: 251-270.

#### 1999 (1)

1. Spinks A.C., Branch, T.A., Croeser, S., Bennett, N.C., & Jarvis, J.U.M. 1999. Foraging in wild and captive colonies of the common mole-rat *Cryptomys hottentotus hottentotus* (Rodentia: Bathyergidae). *Journal of Zoology*. 249: 143-152.

### Publications by supervised graduate\* students or postdoctoral\*\* scholars

7. Hurtado-Ferro, F., C. S. Szuwalski, J. L. Valero, S. C. Anderson, C. J. Cunningham, K. F. Johnson, R. Licandeo, C. R. McGilliard, C. C. Monnahan\*, M. L. Muradian\*, K. Ono, K. A. Vert-Pre, A. R. Whitten, and A. E. Punt. 2015. Looking in the rear-view mirror: bias and retrospective patterns in integrated, age-structured stock assessment models. *ICES Journal of Marine Science* 72:99-110.
6. Johnson, K. F., C. C. Monnahan\*, C. R. McGilliard, K. A. Vert-pre, S. C. Anderson, C. J. Cunningham, F. Hurtado-Ferro, R. R. Licandeo, M. L. Muradian\*, K. Ono, C. S. Szuwalski, J. L. Valero, A. R. Whitten, and A. E. Punt. 2015. Time-varying natural mortality in fisheries stock assessment models: identifying a default approach. *ICES Journal of Marine Science* 72:137-150.
5. Ono, K., R. Licandeo, M. L. Muradian\*, C. J. Cunningham, S. C. Anderson, F. Hurtado-Ferro, K. F. Johnson, C. R. McGilliard, C. C. Monnahan\*, C. S. Szuwalski, J. Valero, K. A. Vert-Pre, A. R. Whitten, and A. E. Punt. 2015. The importance of length and age composition data in statistical age-structured models for marine species. *ICES Journal of Marine Science* 72: 31-43.
4. Monnahan, C. C., T. A. Branch, and A. E. Punt. 2015. Do ship strikes threaten the recovery of endangered eastern North Pacific blue whales? *Marine Mammal Science* 31:279-297.
3. Monnahan\*, C. C., T. A. Branch, K. M. Stafford, Y. V. Ivashchenko, and E. M. Oleson. 2014. Estimating historical eastern North Pacific blue whale catches using spatial calling patterns. *PLOS ONE* 9:e98974. doi:10.1371/journal.pone.0098974
2. Baker\*\*, M. R. and A. B. Hollowed. 2014. Delineating ecological regions in marine systems: Integrating physical structure and community composition to inform spatial management in the eastern Bering Sea. *Deep-Sea Research II* 109: 215-240.
1. Anderson, S. C., C. C. Monnahan\*, K. F. Johnson, K. Ono, and J. Valero. 2014. ss3sim: an R package for fisheries stock assessment simulation with Stock Synthesis. *PLOS ONE* 9:e92725. doi: 10.1371/journal.pone.0092725

### Thesis and dissertation

- Branch, T.A. 1998. Assessment and adaptive management of orange roughy off southern Africa. M.Sc. thesis, University of Cape Town. 204 pp.
- Branch, T.A. 2004. The influence of individual transferable quotas on discarding and fishing behaviour in multispecies fisheries. Ph.D. dissertation, University of Washington. 171pp.

### Editorials and popular articles (6)

6. Gordon, I. J., D. M. Evans, T. W. J. Garner, T. Katzner, M. E. Gompper, R. Altwegg, T. A. Branch, J. A. Johnson, and N. Pettorelli. 2014. Enhancing communication between conservation biologists and conservation practitioners: Letter from the Conservation Front Line. *Animal Conservation* 17:1-2. doi:10.1111/acv.12097
5. Katzner, T., J. A. Johnson, D. M. Evans, T. W. J. Garner, M. E. Gompper, R. Altwegg, T. A. Branch, I. J. Gordon, and N. Pettorelli. 2013. Challenges and opportunities for animal conservation from renewable energy development. *Animal Conservation* 16:367-369. doi:10.1111/acv.12067.

4. Pettorelli, N., D. M. Evans, T. W. J. Garner, T. Katzner, M. E. Gompper, R. Altwegg, T. A. Branch, J. A. Johnson, K. Acevedo-Whitehouse, L. DaVolls, R. Rantanen, and I. J. Gordon. 2013. Addressing gender imbalances in *Animal Conservation*. *Animal Conservation* 16:131-133. doi:10.1111/acv.12032.
3. Purcell, S., T. A. Branch, A. S. Lobo. 2013. How to hunt a species to extinction. *The Conversation*. 30 May 2013. <http://theconversation.com/how-to-hunt-a-species-to-extinction-13629>
2. Branch, T.A., Austin, J.D., Acevedo-Whitehouse, K., Gordon, I.J., Gompper, M.E., Katzner, T.E., and Pettorelli, N. 2012. Fisheries conservation and management: finding consensus in the midst of competing paradigms. *Animal Conservation* 15:1-3. doi: 10.1111/j.1469-1795.2011.00502.
1. Branch, T.A. 2011. How should we measure fishing impacts on marine food webs? *Cool Green Science*, the conservation blog of The Nature Conservancy. 14 March 2011. <http://blog.nature.org/2011/03/mean-trophic-level-trevor-branch-daniel-pauly-fish-catch-fisheries/>

### Minor papers (12)

- Worm, B., Fogarty, M.J., Baum, J.K., Branch, T.A., Collie, J.S., Costello, C., Fulton, E.A., Hilborn, R., Hutchings, J.A., Jennings, S., Jensen, O.P., Lotze, H.K., Mace, P.M., McClanahan, T.R., Minto, C., Palumbi, S.R., Parma, A.M., Ricard, D., Rosenberg, A.A., Watson, R. & Zeller, D. 2010. Response to E-letter from S. Zhou. *Science*. <http://www.sciencemag.org/cgi/eletters/325/5940/578#13027>
- Branch, T.A. 2006. Report of the Scientific Committee, Annex H. Appendix 3: Comparison of SOWER CPIII abundance estimates for humpback whales in Area IV with JARPA abundance estimates. *Journal of Cetacean Research and Management (Suppl.)*, 8: 166-167.
- Branch, T.A. 2005. Report of the Scientific Committee, Annex G. Appendix 4: Combining estimates from the third circumpolar set of surveys. *Journal of Cetacean Research and Management (Suppl.)*, 7: 231-233.
- Branch, T.A. 2004a. Report of the Scientific Committee, Annex H. Appendix 4: Previous analyses estimating the impacts of factors in Appendix 2 on estimates of abundance and rates of increase (ROI) of Antarctic (true) blue whales from IDCR/SOWER surveys. *Journal of Cetacean Research and Management (Suppl.)*, 6: 255-256.
- Branch, T.A. 2004b. Report of the Scientific Committee, Annex H. Appendix 2: Plausible increase rates for Antarctic (true) blue whales. *Journal of Cetacean Research and Management (Suppl.)*, 6: 254.
- Branch, T.A. 2004c. Report of the Scientific Committee, Annex H. Appendix 5: Summary of evidence for increases in Antarctic (true) blue whales. *Journal of Cetacean Research and Management (Suppl.)*, 6: 256-258.
- Branch, T.A. & Ensor, P. 2004. Report of the Scientific Committee, Annex G. Appendix 5. Combining estimates from the third circumpolar set of surveys. *Journal of Cetacean Research and Management (Suppl.)*, 6: 239-240.
- Branch, T.A., Matsuoka, K., Burt, M.L. & Rademeyer, R.A. 2004. Report of the Scientific Committee, Annex G. Appendix 7. Regions for estimating additional variance from IDCR/SOWER surveys. *Journal of Cetacean Research and Management (Suppl.)*, 6: 241-242.
- Branch, T.A. 2003. Report of the Scientific Committee, Annex G. Appendix 3: Updated circumpolar abundance estimates for Southern Hemisphere minke whales including results from the 1998/99 to 2000/01 IDCR-SOWER surveys. *Journal of Cetacean Research and Management (Suppl.)*, 5: 271-275.
- Branch, T.A. & Rademeyer, R.A. 2003. Report of the Scientific Committee, Annex G. Appendix 11. Blue whale estimates from the IDCR-SOWER surveys: Updated comparisons including results from the 1998/99 to 2000/01 surveys. *Journal of Cetacean Research and Management (Suppl.)*, 5: 291-292.
- Branch, T.A. & Butterworth, D.S. 2002. Report of the Scientific Committee, Annex G, Appendix 14: Comparable estimates for six cetacean species based on IDCR/SOWER surveys. *Journal of Cetacean Research and Management (Suppl.)*, 4: 228-229.
- Branch, T.A. & Ensor, P. 2001. Report of the Scientific Committee, Annex G. Appendix 8: Recommended species code changes for minke and blue whale sightings for analysis of IDCR-SOWER surveys. *Journal of Cetacean Research and Management (Suppl.)*, 3: 200-203.

### Assessment documents (50 total, 42 first-authored)

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- Branch, T.A. & Butterworth, D.S. 2006a. Assessment of the East Greenland-Iceland fin whale population using a four-area model. Joint NAMMCO/IWC scientific workshop on the catch history, stock structure and abundance of North Atlantic fin whales, Reykjavik, Iceland, 23-26 March 2006. *SC/14/FW/23* and *SC/M06/FW23*. 33 pp.
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- Branch, T.A. & Butterworth, D.S. 2000a. Estimates of abundance for nine frequently sighted cetacean species based on the 1978/79 to 1997/98 IWC/IDCR-SOWER sighting surveys. *International Whaling Commission document SC/52/O30*. 7 pp.
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### **Software packages**

- Branch, T.A., Kirkwood, G., Nicholson, S. & B. Lawlor. (1998-2000) Yield Software. MRAG Ltd, London. Approximately 700 pages of Visual Basic code. Contact: g.p.kirkwood@ic.ac.uk.
- Branch, T.A. and N.J. Sands. 2001. Risk Assessment And Viability Analysis Procedure 2.0.0 (RAVAP). National Oceanic and Atmospheric Administration, Seattle, Washington, USA. Approximately 60 pages Visual Basic code, converted from RAVAP 1.0 written in BASIC. Contact: Norma.Sands@noaa.gov.
- Branch, T.A. 2002. GetLikelihood 2.1.1. Program that works with Coleraine (all versions) to produce likelihood profiles for one, two or three estimated parameters in the model. Contact: tbranch@u.washington.edu. Approximately 33 pages of Visual Basic code.
- Branch, T.A. 2003. NiceADM 3.0. Program to run AD Model Builder™ executables from Windows, especially Markov Chain Monte Carlo runs. Contact: tbranch@u.washington.edu. Approximately 30 pages of Visual Basic code.
- Branch, T.A. & R. Hilborn. 2008. SYRAH 1.0.8: Salmon Yield Reconstruction Apportioning Harvest. ADMB code.

### **User manuals**

- Branch, T.A. 2001. To insanity and beyond: a simpler guide to DESS 3.0. Prepared for the Scientific Committee of the International Whaling Commission, London, UK, July 2001. 28 pp.

### **Editorial positions**

- Associate editor for Animal Conservation (2010-2014).  
 Editor for Animal Conservation (2012-present)

### **Committee membership**

- Independent member of the Scientific Review Group on Pacific Hake/Whiting 2014-present.  
 Consultant, Commission for the Conservation of Southern Bluefin Tuna, 2004-06, 2008-11, 2013-present.  
 Invited participant, Scientific Committee of the International Whaling Commission, 2000-08.  
 Ad hoc groundfish trawl individual quota analytical team, Pacific Fishery Management Council, 2004.  
 Middle depths working group, New Zealand, 2003.  
 Deep water working group, New Zealand, 2002.  
 Deep water working group, Namibia, 1996-98.  
 Deep water working group, South Africa, 1996-7.

## **National and international service (selected)**

Testified before US Senate subcommittee, January 2014.

Independent member of the Scientific Review Group on Pacific Hake/Whiting 2014-present.

Consultant, Commission for the Conservation of Southern Bluefin Tuna, 2004-06, 2008-11, 2013-present.

Invited participant, Scientific Committee of the International Whaling Commission, 2000-08.

Invited participant in three NCEAS groups.

Invited participant to French Center for Synthesis and Analysis of Biodiversity group.

## **School, college and university service (selected)**

Served on the RASC admissions committee 2010-2013.

Served on the Curriculum Committee 2013-present.

Faculty member of iPOC IGERT program.

Active faculty member of QERM and CQS.

Served on search committee for the Future of Ice, 2014, two new faculty positions in the College of the Environment shared among ESS, Oceanography, SAFS, Atmospheric Sciences.

Served on review panels for IGERT program (2011, 2014); National Sea Grant population dynamics fellowships (2011, 2013); College Awards Committee (2014).

## **Graduate students**

I supervise or co-supervise 5 graduate students and have served on 27 graduate student committees in SAFS, QERM, one in Oceanography, and one at Simon Fraser University.

## **Presentations**

I have given 15 external presentations, including an invited keynote at the annual ICES science conference, talks at other international conferences, talks at the University of Fairbanks in Juneau, UC Santa Cruz, University of British Columbia, and two presentations at the NWFSC Monster Seminar Jam.

## **Outreach**

### **News reports**

A sample of traditional media reports is listed below that discuss my recent research:

<http://www.onthemedial.org/story/215340-scientific-retractions-rise/>

<http://www.abc.net.au/worldtoday/content/2014/s3982509.htm>

[http://www.washingtonpost.com/blogs/wonkblog/wp/2013/10/29/just-how-badly-are-we-overfishing-the-ocean/?Post+generic=%3Ftid%3Dsm\\_twitter\\_washingtonpost](http://www.washingtonpost.com/blogs/wonkblog/wp/2013/10/29/just-how-badly-are-we-overfishing-the-ocean/?Post+generic=%3Ftid%3Dsm_twitter_washingtonpost)

### **Website listing highly cited fisheries papers**

I maintain a website (<https://sites.google.com/a/uw.edu/most-cited-fisheries/>) with a variety of categories to do with highly cited fisheries papers:

- (1) most highly cited fisheries papers, books, and databases of all time
- (2) most highly cited models used in fisheries
- (3) ten papers most cited in the years 2011, 2012, 2013, 2014 (updated weekly)
- (4) fisheries scientists with the greatest contribution to highly cited papers
- (5) under-appreciated fisheries papers
- (6) 10 must-read fisheries papers published in each year 2005-2014
- (7) lists of papers underlying the nine biggest controversies in fisheries

Over the past 12 months alone, this website has received 7519 page views from 2350 unique visitors.

### **Social media outreach**

I run two Twitter accounts, @TrevorABranch posts tweets about fisheries science, faculty life, and general research questions; @BlueWhaleNews posts tweets about new scientific findings related to blue whales around the world.

**Reviewing papers**

Since 2005, 107 reviews for 47 different journals.