

Bradley P. Harris

Phone: (907) 564-8802

Email: bharris@alaskapacific.edu

Website: www.alaskafastlab.org

EDUCATION

Ph.D. *Fisheries Oceanography*. University of Massachusetts - School of Marine Sciences. 2011
M.Sc. *Fisheries Oceanography*. University of Massachusetts - School of Marine Sciences. 2006
B.Sc. *Wildlife and Fisheries Science*. Texas A&M University. 1999

PROFESSIONAL EMPLOYMENT

2011 - Present *Director*: Fisheries, Aquatic Science & Technology (FAST) Lab, Alaska Pacific University
2011 - Present *Associate Professor*: Alaska Pacific University
2016 - Present *Honorary Fellow*: Ulster University, Northern Ireland, UK
2012 - Present *Adjunct Professor*: School of Marine Sciences, University of Massachusetts
2007 - 2011 *Research Associate*, Dept. Fisheries Oceanography, University of Massachusetts - Dartmouth
2001 - 2007 *Program Manager*, Dept. Fisheries Oceanography, University of Massachusetts - Dartmouth
2000 *Captain*, Oil Spill Response Vessel *Harrison Bay*, Alaska Clean Seas
1995 - 2000 *Boat Officer*, Research Vessel *Pandalus*, Alaska Department of Fish and Game
1991 - 1995 *Commercial Fisherman*, Pink Salmon Purse Seine Fishery, Prince William Sound, Alaska; Sockeye Salmon Set Net Fishery, Upper Cook Inlet, Alaska

PROFESSIONAL SERVICE

2017 - Present *Member*: North Pacific Research Board – Science Panel
2016 - Present *Member*: Bering Sea Fishery Ecosystem Plan Team, North Pacific Fisheries Management Council
2014 - Present *Member*: Scientific and Statistical Committee, North Pacific Fisheries Management Council
2013 - Present *Member*: Working Group on Scallop Assessment, International Council for Exploration of the Sea
2013 - Present *Member*: Working Group on Fishing Technology and Fish Behavior, International Council for Exploration of the Sea / Food and Agriculture Organization

PEER-REVIEWED PUBLICATIONS (*student author)

Wolf N., **Harris B.**, Richard N., Sethi S.A., Lomac-MacNair K., Parker L. *In Press*. Seasonal distribution of Cook Inlet Beluga whales (*Delphinaptera leucas*) from high frequency aerial survey data. *Wildlife Society Bulletin*.

Pendleton R.M., Standley C.R., Higgs A.L., Kenney G.H., Sullivan P.J., Sethi S.A., and **Harris B.P.**, *In Press*. Acoustic telemetry and benthic habitat mapping informs the spatial ecology of Shortnose Sturgeon in the Hudson River, NY, USA. *Transactions of the American Fisheries Society*.

*Calvert, J., McGonigle, C., Sethi, S.A., **Harris, B.P.**, Quinn, R., and Grabowski, J. 2018. Dynamic occupancy modelling of temperate marine fish in area-based closures. *Ecology and Evolution*. 10.1002/ece3.4493

Harris, B.P., Webster, S.R., Wolf, N., Gregg, J.L., Hershberger, P.K. 2018. Ichthyophonous in sport-caught groundfishes from southcentral Alaska. *Diseases of Aquatic Organisms*. 128: 169–173.

Harris, B.P., Adams, C.F. and Stokesbury K.D.E. 2018. Sea scallops exhibit strong local spatiotemporal structure associated with seabed stability and high flows. *Ecosphere*. 9(3):e02133. 10.1002/ecs2.213

*Neises, V., Cornick, L., **Harris, B.P.**, and Zeligs, J. 2017. Examining the Metabolic Cost of Otariid Foraging Under Varying Conditions. *Journal of Experimental Marine Biology and Ecology*. 486: 352–357

- *Nimick A.M., and **Harris B.P.** 2016. Essential Fish Habitat Regulation in the United States: Lessons for High Latitudes? In: Alfredsson G. et al. eds. The Yearbook of Polar Law Vol. 8. Brill Nijhoff. Pp. 266-278
- Stokesbury, K.D.E., O'Keefe, C.E. and **Harris, B.P.** 2016. Fisheries - sea scallop (*Placopecten magellanicus*). In: Shumway, S., ed. Scallops: Biology, Ecology and Aquaculture. Elsevier Press. 3rd Edition
- *Verna, D. and **Harris, B.P.** 2016. Review of United States ballast water management policy and associated implications for Alaska. Marine Policy. 70: 13-21
- *Verna, D.E., **Harris, B.P.**, Holzer, K.K., and Minton, M.S. 2016. Ballast-borne marine invasive species: exploring the risk to coastal Alaska, USA. Management of Biological Invasions. 7(2): 199–211
- Kaiser M.J., Hilborn R., Jennings S., Amaroso R., Andersen M., Balliet K., Barratt E., Bergstad O.A., Bishop S., Bostrom J.L., Boyd C., Bruce E.A., Burden M., Carey C., Clermont J., Collie J.S., Delahunty A., Dixon J., Eayrs S., Edwards N., Fujita R., Gauvin J., Gleason M., **Harris B.P.**, He P., Hiddink J.G., Hughes K.M., Inostroza M., Kenny A., Kritzer J., Kuntzsch V., Lasta M., Lopez I., Loveridge C., Lynch D., Masters J., Mazor T., McConnaughey R.A., Moenne M., Neat F., Nimick A.M., Olsen A., Parker D., Parma A., Penney C., Pierce D., Pitcher R., Pol M., Richardson E., Rijnsdorp A.D., Rilatt S., Rodmell D.P., Rose C., Sethi S.A., Short K., Suuronen P., Taylor E., Wallace S., Webb L., Wickham E., Wilding S.R., Wilson A., Winger P., and Sutherland W.J. 2015. Prioritisation of knowledge needs to achieve best practices for bottom-trawling in relation to seabed habitats. Fish and Fisheries. 17(3): 637–663
- Grabowski, J. H., Bachman, M., Demarest, C., Eayrs, S., **Harris, B.P.**, Malkoski, V., Packer, D., and Stevenson, D. 2014. Assessing the vulnerability of marine benthos to fishing gear impacts. Reviews in Fisheries Science. 22(2): 142–155
- Harris, B.P.**, Cowles, G. W., and Stokesbury, K.D.E. 2012. Surficial sediment stability on Georges Bank in the Great South Channel and on eastern Nantucket Shoals. Continental Shelf Research 49(2012): 65–72
- McGuire, C.J. and **Harris, B.P.** 2012. Systems thinking applied to U.S. federal fisheries management: Law and policy considerations. Natural Resources & Environment, 26(3): 3 – 6
- Stokesbury, K.D.E., Baker, E.P., **Harris, B.P.**, and Rheault, R.B. 2011. Environmental impacts related to mechanical harvest of cultured shellfish. In: Shumway, S., ed. Shellfish Aquaculture and the Environment. Wiley-Blackwell. Pp. 247 – 263
- Stokesbury, K.D.E., Carey, J.D., **Harris, B.P.**, and O'Keefe, C.E. 2011. Discard mortality played a major role in the loss of 10 billion juvenile scallops in the Mid-Atlantic Bight: Reply to Hart & Shank (2011). Marine Ecology Progress Series. 43: 299-302
- Stokesbury, K.D.E., Carey, J.D., **Harris, B.P.**, and O'Keefe, C.E. 2011. Incidental fishing mortality may be responsible for the death of ten billion juvenile sea scallops in the mid-Atlantic. Marine Ecology Progress Series. 425: 167-173
- Adams, C.F., **Harris, B.P.**, Marino II, M.C., and Stokesbury, K.D.E. 2010. Quantifying sea scallop bed diameter on Georges Bank with geostatistics. Fisheries Research 106(3): 460–467
- Harris, B.P.** and Stokesbury K.D.E. 2010. The spatial structure of local surficial sediment characteristics on Georges Bank, USA. Continental Shelf Research 30(17): 1840–1853
- McGuire, C.J. and **Harris, B.P.** 2010. Some *back-ended* legal and political issues in United States fisheries management. Journal of Politics and Law. 3(2): 52-62
- Stokesbury, K.D.E., **Harris, B.P.**, Carey J.D., and O'Keefe C.E. 2010. High juvenile sea scallop (*Placopecten magellanicus*) densities on banks and ledges in the Central Gulf of Maine. Journal of Shellfish Research. 29(2): 369-372
- Stokesbury, K.D.E., **Harris, B.P.**, and Marino II, M.C. 2010. Using technology to forward fisheries science: the sea scallop example. In: Baxter, J.M., and Galbraith C.A., (Eds.), Species Management: Challenges and Solutions for the 21st Century. Scottish Natural Heritage
- Jacobson, L.D, Stokesbury, K.D.E., Allard, M.A., Chute, A., **Harris, B.P.**, Hart, D. Jaffarian, T., Marino II, M.C., Nogueira, J.I., and Rago, P. 2010. Quantification, effects and stock assessment modeling

- approaches for measurement errors in body size data from sea scallops (*Placopecten magellanicus*). Fishery Bulletin. 108(2): 233–247
- Tian, R.C., Chen, C.S., Stokesbury, K.D.E., Rothschild, B.J., Cowles, G., Xu, Q.C., **Harris, B.P.**, and Marino, M.C. 2009. Dispersal and settlement of sea scallop larvae spawned in the fishery closed areas on Georges Bank. ICES Journal of Marine Science. 66(10):2155-2164
- Tian, R.C., Chen, C.S., Stokesbury, K.D.E., Rothschild, B.J., Cowles, G., Xu, Q.C., **Harris, B.P.**, and Marino, M.C. 2009. Sensitivity analysis of sea scallop (*Placopecten magellanicus*) larvae trajectories to hydrodynamic model configuration on Georges Bank and adjacent coastal regions. Fisheries Oceanography. 18(3): 173–184
- Stokesbury, K.D.E., **Harris, B.P.**, and Marino M. C. 2009. Astonishment, stupefaction, and a naturalist's approach to ecosystem-based fisheries studies. In R.J. Beamish and B.J. Rothschild (eds.), The Future of Fisheries Science in North America, Fish & Fisheries Series 31, Springer Science + Business Media B.V. 2009
- Tian, R.C., Chen, C., Stokesbury, K.D.E., Rothschild, B.J., Cowles, G.C., Xu, Q., Hu, S., **Harris, B.P.**, and Marino II, M.C. 2009. Modeling the connectivity between sea scallop populations in the Middle Atlantic Bight and over Georges Bank. Marine Ecology Progress Series. 380: 147-160
- McGuire, C.J. and **Harris, B.P.** 2008. Rights-based fisheries and ecosystem-based management: Maybe scientists and fishermen know the way? American Bar Association - Marine Resources. 12(1):18 – 21
- Harris, B.P.** and McGuire, C.J. 2008. Operational issues in U.S. fisheries management: What are some of the major scientific, political and legal hurdles to implementing ecosystem-based management? American Bar Association - Marine Resources. 11(2): 5 – 6
- Adams, C.F., **Harris, B.P.**, and Stokesbury, K.D.E. 2008. Geostatistical comparison of two independent video surveys of sea scallop abundance in the Elephant Trunk Closed Area, USA. ICES Journal of Marine Science. 65(6): 995-1003
- Stokesbury, K.D.E., **Harris, B.P.**, Marino II, M.C., and Nogueira, J.I. 2007. Sea scallop mass mortality in a marine protected area. Marine Ecology Progress Series. 349: 151-158
- Harris, B.P.** and Stokesbury, K.D.E. 2006. Shell growth of sea scallops (*Placopecten magellanicus* Gmelin, 1791) in the southern and northern Great South Channel, USA. ICES Journal of Marine Science. 63: 811-821
- Stokesbury, K.D.E., and **Harris, B.P.** 2006. Impact of a limited fishery for sea scallop (*Placopecten magellanicus*) on the epibenthic community of Georges Bank closed areas. Marine Ecology Progress Series. 307: 85-100
- Stokesbury, K.D.E., **Harris, B.P.**, Marino II, M.C. and Nogueira, J.I. 2004 Estimation of sea scallop abundance using a video survey in off-shore USA waters. Journal of Shellfish Research. 23:33-44

CURRENT GRADUATE STUDENTS

- T. Fish* - Pacific Halibut halibut (*Hippoglossus stenolepis*) reproductive biology.
- B. Rosenberg* - Photo-identification of Brown Bears, *Ursus arctos*.
- K. Bockelman* - Assessment of the benthic community inside and outside the Red King Crab Savings Area.
- B. Jevons* - Assessing the Diet of the Giant Pacific Octopus, *Enteroctopus dofleini*, using Stable Isotopes
- B. King* - Exploring methods to directly monitor trawl ground gear sea bed contact.
- B. Richie* - Impacts of diet on groundfish growth and fitness.
- A. Kroska* - Investigating halibut stress physiology.
- V. Batter* - Weathervane scallop species distribution modelling.
- T. Blackmon* - A Habitat-based Pacific razor clam stock assessment.
- L. Junge* - Assessment of habitat information to improve the Aleutian Island Pacific cod stock assessment.
- J. Olson* - Refining Estimates of Impact to Sensitive Marine Habitats by Commercial Fishing Gears in the Aleutian Islands with Application to the Bering Sea and Gulf of Alaska.

- C. Lescher - Examination of Observer-subsampling and Viability Assessment Methods of Trawl-caught Red King Crabs in the Bering Sea.
- K. Tyance - Nanwalek sockeye salmon partnership.
- J. Moffi - Assessing Cook Inlet beluga whale spatiotemporal distributions using industry data.

PAST GRADUATE STUDENTS (see www.alaskafastlab.org for project details)

- M. Baldwin-Schaeffer - Assessing the impacts of offshore mining on Norton Sound Red King Crab.
- A. Nimick - Modeling fishing effects on EFH: What is *more than minimal and not temporary*?
- S. Sitkiewicz - Impacts of the parasite *Ichthyophonus* on groundfish growth and fitness.
- J. Stone - Assessment of Eastern Bering Sea juvenile Chinook salmon stock origin and the role of diet in growth and fitness.
- J. Hagan - Assessing the accuracy and uncertainty of Landsat derived stream temperatures for use in Chinook salmon habitat assessments on the Anchor River, Alaska.
- J. Ashline - Juvenile Coho Salmon overwintering habitat selection and dispersal strategies.
- S. Zagorski - Benthic impacts of raised groundgear for the Eastern Bering Sea pollock fishery.
- C. Provost - Deepsea skate (*Bathyraja abyssicola*) size at age and maturity.
- C. Grenier - Quantifying *Ichthyophonus hoferi* prevalence and intensity in Pacific halibut (*Hippoglossus stenolepis*) in Cook Inlet, Alaska.
- S. Larsen - Triploid Induction of Hatchery Chinook Salmon (*Oncorhynchus tshawytscha*).
- J. Mumm - A bathymetry-based habitat model for predicting Yelloweye Rockfish (*Sebastes ruberrimus*) distributions on the Outer Coast of Alaska's Kenai Peninsula.
- C. Simpson - "Smart Fishing in the Bering Sea" curriculum development and evaluation.
- S. Simpson - Spatiotemporal assessment of Nushagak river salmon upstream migration with DIDSON sonar.
- D. Verna - Ballast water management and associated risk of invasive species in coastal Alaska.
- S. Webster - Size-at-age and diet composition of Pacific halibut (*Hippoglossus stenolepis*) in Cook Inlet, Alaska.