Hauke L. Kite-Powell

Research Specialist Marine Policy Center, MS 41 Woods Hole Oceanographic Institution Woods Hole, Massachusetts 02543-1138 USA (508) 289-2938 office

hauke@whoi.edu

RESEARCH INTERESTS

Maritime economics and management; Marine resource economics and management

PROFESSIONAL PREPARATION

B.S., Naval Architecture and Marine Engineering, Massachusetts Institute of Technology, 1984 M.S., Ocean Systems Management, Massachusetts Institute of Technology, 1986 M.S., Technology and Policy, Massachusetts Institute of Technology, 1988 Ph.D., Ocean Systems Management, Massachusetts Institute of Technology, 1992

APPOINTMENTS

Research Specialist, Woods Hole Oceanographic Institution (WHOI), 1995-present Research Associate, WHOI, 1992-1995
Research Assistant, WHOI, 1988-1992
Summer Student Fellow, WHOI, 1985
Lecturer, Massachusetts Maritime Academy, 2008-present
Lecturer, Massachusetts Institute of Technology, 1994-2007
Senior Analyst, Marsoft, Inc., 1998-present

EDUCATIONAL ACTIVITY

 Thesis committee member: Elizabeth Halliday (MIT-WHOI, Ph.D. awarded 2012); Megan May (MIT-WHOI, Ph.D. in progress); Merrielle McCleod (Brown Univ., M.S. awarded 2009)

OTHER PROFESSIONAL ACTIVITIES

- Member, International Council for the Exploration of the Seas Working Group on Social and Economic Dimensions of Aquaculture
- Member, Marine Technology Society, Society of Naval Architects and Marine Engineers,
- Member, Editorial Board, Journal of Ocean and Coastal Economics
- Chair, Woods Hole Diversity Advisory Committee
- Reviewer: ad hoc reviewer for California Sea Grant Program, and various journal including Journal of Ocean and Coastal Economics, Journal of Aquaculture Economics and Management, and WMU Journal of Maritime Affairs

REVIEWED PUBLICATIONS

- Kite-Powell, H.L., C. Brehme, S. Kraus, P. McCarron, H. Tetrault, and B. Wikgren. In prep. The spatial and temporal distribution of risk to Right Whales from lobster fishing gear off the coast of Maine.
- Rogers, D.R., C. Mazur, A. Cobban, A. Pepe, H.L. Kite-Powell, and V.P. Edgcomb. Submitted.

 Denitrification and anammox processes in sediments underneath oysters at coastal aquaculture sites, Cape Cod, MA. *Marine Ecology Progress Series*.
- Tlusty, M.F., B. Wikgren, K. Lagueux, H.L. Kite-Powell, D. Jin, P. Hoagland, R.D. Kenney, and S.D. Kraus. 2017. Co-occurrence mapping of disparate data sets to assess potential aquaculture sites in the Gulf of Maine. *Reviews in Fisheries Science and Aquaculture*, DOI: 10.1080/23308249.2017.1343798
- Kite-Powell, H.L. 2017. Economics of multi-use and co-location. In: B. Buck, R. Langan, and B. Costa-Pierce, editors, *Aquaculture perspective of multi-use sites in the open ocean*. Springer Verlag. http://link.springer.com/chapter/10.1007/978-3-319-51159-7 10
- Wikgren, B., H.L. Kite-Powell, and S. Kraus. 2014. Modeling the distribution of the North Atlantic right whale (*Eubalaena glacialis*) off coastal Maine by areal co-kriging. *Endangered Species Research* 24:21-31. doi: 10.3354/esr00579
- Kite-Powell, H.L., M. Rubino, and B. Morehead. 2013. The future of US seafood supply. Aquaculture Economics and Management 17(3):228-250. **DOI:**10.1080/13657305.2013.812691
- Hoagland, P., H.L. Kite-Powell, D. Jin, and A.R. Solow. 2013. Supply-side approaches to the economic valuation of coastal and marine habitat in the Red Sea. *Journal of King Saud University Science* 25:217-228.
- Lindell, S.R., S. Miner, C. Goudey, H.L. Kite-Powell, and S. Page. 2012. Acoustic conditioning and ranching of Black Sea Bass *Centropristis striata* in Massachusetts, USA. In *Proceedings of the 39th Scientific Symposium of the UJNR Aquaculture Panel, Kagoshima, Japan* Bull. Fisheries Research Agency. No. 35, 103-110.
- Jin, D., H.L. Kite-Powell, P. Hoagland, and A.R. Solow. 2012. A bioeconomic analysis of traditional fisheries in the Red Sea off the coast of the Kingdom of Saudi Arabia. *Marine Resource Economics* 27(2):137-148.
- Jin, D., H.L. Kite-Powell, and W. Talley. 2012. U.S. Ship Accident Research. Chapter 4 in W. Talley, ed., *Maritime Safety, Security and Piracy*.
- Cooley, S.R., N. Lucey, H.L. Kite-Powell, and S.C. Doney. 2012. Nutrition and income from molluscs today imply vulnerability to ocean acidification tomorrow. *Fish and Fisheries* 13(2), 182-215, doi: 10.1111/j.1467-2979.2011.00424.x

- Hoagland, P., D. Jin, and H.L. Kite-Powell. 2012. The costs of beach replenishment along the US Atlantic coast. *Journal of Coastal Research* 28(1A):199-204. http://www.jcronline.org/doi/abs/10.2112/JCOASTRES-D-11-00066.1
- Ralston, E.P., H.L. Kite-Powell, and A. Beet. 2011. An estimate of the cost of acute health effects from marine pathogens and toxins in the United States. *Water and Health* 9(4):680-694. doi:10.2166/wh.2011.157
- Kite-Powell, H.L. 2011. The value of ocean surface wind information for maritime commerce. *Marine Technology Society Journal* 45(1):75-84.
- Cooley, S.R., H.L. Kite-Powell, and S.C. Doney. 2009. Ocean acidification's potential to alter global marine ecosystem services. *Oceanography* 22(4):172-181.
- Kite-Powell, H.L. 2009. Economic considerations in the design of ocean observing systems. *Oceanography* 22(2):44-49.
- Kite-Powell, H.L. 2009. A global perspective on the economics of ocean acidification. *Currents: The Journal of Marine Education* 25(1):24-28.
- Kite-Powell, H.L., L.E. Fleming, L.C. Backer, E. Faustman, P. Hoagland, A. Tsuchiya, L. Younglove, B.A. Wilcox, and R.J. Gast. 2008. Linking the oceans to public health: current efforts and future directions. *Environmental Health* **7**(Suppl 2):S6. http://www.ehjournal.net/supplements/7/S2
- Talley, W.K., D. Jin, and H.L. Kite-Powell. 2008. Determinants of the damage cost and injury severity of ferry vessel accidents. *WMU Journal of Maritime Affairs* 7(1):175-188.
- Kite-Powell, H.L., C.S. Colgan, and R. Weiher. 2008. Estimating the economic benefits of regional ocean observing systems. *Coastal Management Journal* 36(2):125-145.
- Jin, D., H.L. Kite-Powell and P. Hoagland. 2007. Anticipating the growth of an ocean aquaculture industry. *Agriculture Economics and Management* 11:225-242.
- Talley, W.K., D. Jin, and H.L. Kite-Powell. 2006. Determinants of the severity of passenger vessel accidents. *Maritime Policy and Management* 33(2):173-186.
- Jin, D., H.L. Kite-Powell and P. Hoagland. 2005. Risk assessment in open-ocean aquaculture: a firm-level investment-production model. *Aquaculture Economics and Management* 9(3):369-387.
- Talley, W.K., D. Jin, and H.L. Kite-Powell. 2005. Determinants of crew injuries in vessel accidents. *Maritime Policy and Management* 32(3):263-278.

- Talley, W.K., D. Jin, and H.L. Kite-Powell. 2005. Post OPA-90 vessel oil transfer spill prevention: the effectiveness of Coast Guard enforcement. *Environmental and Resource Economics* 30:93-114.
- Talley, W.K., D. Jin, and H.L. Kite-Powell. 2004. Post OPA-90 vessel oil spill differentials: transfers versus vessel accidents. *Maritime Policy and Management* 31(3):225-240.
- Kite-Powell, H.L., C. Colgan, and R. Weiher. 2003. Economics of an integrated ocean observing system. *Marine Technology Society Journal* 37(3):55-66.
- Hoagland, P., D. Jin, and H.L. Kite-Powell. 2003. The optimal allocation of ocean space: aquaculture and wild harvest fisheries. *Marine Resource Economics* 18:129-147.
- Hoagland, P., K.M. Riaf, D. Jin, and H.L. Kite-Powell. 2003. A comparison of access systems for natural resources: drawing lessons for ocean aquaculture in the US Exclusive Economic Zone. *In* Bridger, C. and B. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Reality*. Charleston, SC: World Aquaculture Society.
- Jin, D., P. Hoagland, and H.L. Kite-Powell. 2003. A Model of the optimal scale of open-ocean aquaculture. *In* Bridger, C. and B. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Reality*. Charleston, SC: World Aquaculture Society.
- Kite-Powell, H.L., P. Hoagland, D. Jin, and K. Murray. 2003. Economics of open ocean growout of shellfish in New England: sea scallops and blue mussels. Pages 293-306 in Bridger, C. and B. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Reality*. Charleston, SC: World Aquaculture Society.
- Kite-Powell, H.L., P. Hoagland, D. Jin, and K. Murray. 2003. Open ocean growout of finfish in New England: a bioeconomic model. Pages 319-324 in Bridger, C. and B. Costa-Pierce, eds., *Open-Ocean Aquaculture: From Research to Reality*. Charleston, SC: World Aquaculture Society.
- Mmochi, A.J., N. Mozes, H.L. Kite-Powell, A.M. Dubi, H. Gordin, N. Jiddwi, G. Kissil, F. Msuya, and J. Mwangamilo. 2002. Design and preliminary results of integrated mariculture pond system at Makoba, Zanzibar. 25 Anniversary Symposium Proceedings, Institute of Marine Science, Zanzibar, Tanzania.
- Jin, D., E. Thunberg, H.L. Kite-Powell and K. Blake. 2002. Total factor productivity change in New England fisheries: 1964-1993. *Journal of Environmental Economics and Management* 44(3):540-56.
- Jin, D., H.L. Kite-Powell, E. Thunberg, A. Solow, and W. Talley. 2002. A model of fishing vessel accident probability. *Journal of Safety Research* 33:497-510.
- Kite-Powell, H.L. 2001. Marine policy: shipping and ports. In: J. Steele, S. Thorpe, and K. Turekian, eds., *Encyclopedia of Ocean Sciences*. London: Academic Press.

- Talley W., D. Jin, and H. L. Kite-Powell. 2001. Vessel accident oil spillage: post U.S. OPA-90. Transportation Research Part D: Environment and Transport 6:405-415.
- Goudey, C.A., G. Loverich, H.L. Kite-Powell, and B.A. Costa-Pierce. 2001. Mitigating the environmental effects of mariculture through single-point moorings (SPMs) and drifting cages. *ICES Journal of Marine Science* 58(2):497-503.
- Jin, D., H.L. Kite-Powell, and W. Talley. 2001. The safety of commercial fishing: determinants of vessel total losses and injuries. *Journal of Safety Research* 32:209-228.
- Kaplan, I. and H.L. Kite-Powell. 2000. Safety at sea and fisheries management: fishermen's attitudes and the need for co-management. *Marine Policy* 24(6):493-498.
- Jin, D. and H.L. Kite-Powell. 2000. Historical performance of shipyards in the United States: a dynamic shift-share analysis. *International Journal of Maritime Economics* 2(3):195-216.
- Jin, D. and H.L. Kite-Powell. 2000. Optimal fleet utilization and replacement. *Transportation Research Part E: Logistics and Transportation Review* 36:3-20.
- Jin, D. and H.L. Kite-Powell. 1999. On the optimal environmental liability limit for marine oil transport. *Transportation Research Part E: Logistics and Transportation Review* 35:77-100.
- Kite-Powell, H.L., D. Jin, J. Jebsen, V. Papakonstantinou, and N. Patrikalakis. 1999. Investigation of potential risk factors for groundings of commercial vessels in U.S. ports. *International Journal of Offshore and Polar Engineering* 9(1):16-21.
- Kite-Powell, H.L., P. Hoagland, and D. Jin. 1998. Policy, law, and public opposition: the prospects for abyssal ocean waste disposal in the United States. *Journal of Marine Systems* 14:377-96.
- Jin, D. and H.L. Kite-Powell. 1998. Cost assessment for abyssal seafloor waste isolation. *Journal of Marine Systems* 14:289-303.
- Kite-Powell, H.L., D. Jin, and S. Farrow. 1997. Expected safety benefits of electronic charts and integrated navigation systems. *Journal of Transport Economics and Policy* 31(2):147-62.
- Hoagland, P., H.L. Kite-Powell, and M. Schumacher. 1996. What kind of precaution? Regulating marine toxic pollution under the London Convention. *International Issues* 39(6):25-43.
- National Research Council, Committee on Assessment of Technical Issues in the Automated Nautical Charting System (H.L. Kite-Powell, member). 1996. *Technical issues in NOAA's nautical charting program*. Washington: National Academy Press.
- Jin, D. and H.L. Kite-Powell. 1996. The prospects of deep ocean waste disposal: an economic analysis. *Journal of Marine Environmental Engineering* 3:31-46.

- Jin, D. and H.L. Kite-Powell. 1995. Environmental liability, marine insurance, and an optimal risk sharing strategy for marine oil transport. *Marine Resource Economics* 10(1):1-19.
- Kite-Powell, H.L. and A.G. Gaines. 1995. Provisions and evaluation of the IMO performance standard for Electronic Chart Display and Information Systems. *Journal of Maritime Law and Commerce* 26(2):197-214.
- Kite-Powell, H.L. and A.G. Gaines. 1995. Evaluation of a technological standard for electronic chart systems. *Marine Policy* 19(3):185-97.
- Kite-Powell, H.L. and A.R. Solow. 1994. A Bayesian approach to estimating benefits of improved forecasts. *Meteorological Applications* 1:351-54.
- Kite-Powell, H.L. and D. Jin. 1994. Economics of research vessels and implications for fleet planning. *Marine Technology Society Journal* 28(4):34-38.
- Jin, D., H.L. Kite-Powell, and J. Broadus. 1994. Dynamic economic analysis of marine pollution prevention technologies: an application to double hulls and electronic charts.

 Environmental and Resource Economics 4:555-80. Reprinted 1995: International Hydrographic Review 72(2):71-96.
- Hoagland, P. and H.L. Kite-Powell. 1993. Technology transfer and scientific relevance. *Oceanography* 6(3):68-77.
- Hoagland, P. and H.L. Kite-Powell. 1991. European advanced marine electronic instrumentation: a U.S. perspective. *Marine Policy* 15(6):431-54.
- Broadus, J., P. Hoagland, and H.L. Kite-Powell. 1988. *Determining the structure of the United States marine instrumentation industry and its position in the world industry*. WHOI Technical Report 88-55.
- Kite-Powell, H.L. 1988. A broad-scale profile of the marine advanced technology industry. WHOI Technical Report 88-6.