

James Harry Churchill

Physical Oceanographer

Research Specialist

Department of Physical Oceanography

Woods Hole Oceanographic Institution

508-289-2807 Fax: 508-457-2181

Email: jchurchill@whoi.edu

B.S., University of Maine (engineering physics), 1974; M.S., University of Maine (physics), 1977

Research Specialist, 1986–, Research Assistant, 1977–1981; Research Associate, 1981–1986, Woods Hole Oceanographic Institution; Research and Teaching Assistant, 1973–1977, Physics Department, University of Maine, Orono.

Selected Publications

Churchill, J. H., 1989. The effect of commercial trawling on sediment resuspension and transport over the middle Atlantic bight continental shelf. *Continental Shelf Research*, **9**, 841–864.

Churchill, James H., 1995. Quantifying the effect of discrete contaminant discharge on the marine environment. *Journal of Marine Environmental Engineering*, **1**, 199–218.

Churchill, J. H., 1998. Sediment resuspension by bottom fishing gear. In: Effects of Fishing Gear on the Sea Floor off New England, E. M. Dorsey and J. Pederson, eds., Conservation Law Foundation, Boston, Massachusetts, pp. 134–137.

Churchill, James H., Jackson O. Blanton, James L. Hench, Richard A. Luettich, Jr., and F. E. Werner, 1999. Flood tide circulation near Beaufort Inlet, North Carolina: Implications for larval recruitment. *Estuaries*, **22**, 1057–1070.

Manning, J. P., R. G. Lough, J. H. Churchill, and C. E. Naimie, 2001. Modeling the effects of a slope water intrusion on advection of fish larvae in May 1995 on Georges Bank. *Journal of Marine Science*, **58**, 985–993.

Churchill, J. H., R. B. Forward, R. A. Luettich, J. L. Hench, W. F. Hettler, L. B. Crowder, and J. O. Blanton, 1999. Circulation and larval fish transport within a tidally dominated estuary. *Fisheries Oceanography*, **8**, 173–189.

Forward, R. B., K. A. Reinsel, D. Peters, R. A. Tankersley, J. H. Churchill, L. Crowder, W. F. Hettler, S. M. Warlen, and M. Green, 1999. Transport of fish larvae through a tidal inlet. *Fisheries Oceanography*, **8**, 153–172.

Luettich, R. A., J. L. Hench, C. W. Fulcher, F. E. Werner, B. O. Blanton, and J. H. Churchill, 1999. Barotropic tidal and wind-driven larval transport in the vicinity of a barrier island inlet. *Fisheries Oceanography*, **8**, 190–209.

Hare, J. A., J. H. Churchill, R. K. Cowen, T. Berger, P. Cornillon, P. Dragos, S. Glenn, J. J. Govoni, and Thomas Lee, 2002. Routes and rates of larval fish transport from the southeastern to the mid-Atlantic North American continental shelf. *Limnology and Oceanography*, **47**, 1774–1789.

- Churchill, J. H., E. A. Ralph, A. M. Cates, J. W. Budd, and N. R. Urban, 2003. Observations of a negatively buoyant river plume in a large lake. *Limnology and Oceanography*, **48**, 884-894.
- Churchill, James H., James P. Manning and Robert C. Beardsley, 2003. Slope water intrusions onto Georges Bank. *Journal of Geophysical Research*, (GLOBEC Special Issue), **108**(C11), doi: 10.1029/2002JC001400.
- Churchill, James H., Albert J. Williams, and Elise A. Ralph, 2004. Sediment resuspension and transport over the shelf and slope off of Lake Superior's Keweenaw Peninsula. *Journal of Geophysical Research*, **109**(C10), doi:10.1029/2003JC001997.
- Churchill, J. H., W. C. Kerfoot, and M. T. Auer, 2004. Exchange of water between the Keweenaw Waterway and Lake Superior: Characteristics and forcing mechanisms. *Journal of Great Lakes Research*, **30** (supplement 1): 55-63.
- Churchill, J. H., N. R. Pettigrew and R. P. Signell, 2005. Structure and variability of the western Maine coastal current. *Deep-Sea Research II*, **52**, 2392-2410.
- Keafer, B. A., J. H. Churchill and D. M. Anderson, 2005. Blooms of the toxic dinoflagellate, *Alexandrium fundyense* near the Casco Bay region of the western Gulf of Maine: Advection from offshore source populations and interactions with the Kennebec River plume. *Deep-Sea Research II*, **52**, 2631-2655.
- Janzen, C. D., J. H. Churchill and N. R. Pettigrew, 2005. Observations of exchange between eastern Casco Bay and the western Gulf of Maine. *Deep-Sea Research II*, **52**, 2411-2429.
- Pettigrew, N. R., J. H. Churchill, C. D. Janzen, L. J. Mangum, R. P. Signell, A. C. Thomas, D. W. Townsend, J. P. Wallinga, and H. Xue, 2005. The kinematic and hydrographic structure of the Gulf of Maine Coastal Current. *Deep-Sea Research II*, **52**, 2369-2391.
- Manning, J. P. and J. H. Churchill, 2006. Estimates of dispersion from clustered-drifter deployments on the southern flank of Georges Bank, 2006. *Deep-Sea Research II*, **53**, 2501-2519 .
- Churchill, J. H. and W. C. Kerfoot. 2007. The impact of surface heat flux and wind on thermal stratification in Portage Lake, Michigan. *Journal of Great Lakes Research*, **33**, 143-155.
- Kerfoot, W. C., J. W. Budd, J. H. Churchill and C. Chen. Metacommunity perspective on zooplankton communities in Lake Superior. In: State of Lakes Superior, M. Munawar ed. Ecovision World Monograph Series, Ontario, Canada, in press.
- Churchill, J.H and G. Gawarkiewicz. Shelfbreak frontal eddies over the slope north of Cape Hatteras. *Journal of Geophysical Research*, in press.

Collaborating Scientists Over Last 48 Months: F. Aikman, NOAA; D. Anderson, WHOI; J. Austin, U. Minnesota (Duluth); R. Beardsley, WHOI; E. Bohm, Inst. Atmos. Science and Climate, Italian National Research Council, Rome, Italy; C. Chen, University of Massachusetts; G. Gawarkiewicz, WHOI; J. Hare, NMFS, Beaufort, NC; C. Kerfoot, Michigan Technical University; J. Ledwell, WHOI; S. Lentz, WHOI; S. Lohrenz, University of Southern Mississippi; J. Manning, NMFS, Woods Hole; J. Pelegri., Institut de Ciencies del Mar; Barcelona, Spain; L. Pietrafesa; N. C. State. University; N. Pettigrew, University of Maine; D. Savage, Skidaway Institute of Oceanography; R. Signell, USGS, Woods Hole; D. Townsend, University of Maine; A. Williams, WHOI.