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Research Interests

Long-term plankton and water-quality ecological survey of Buzzards Bay; plankton communities of Boston Harbor and adjacent waters; zooplankton feeding; food web accumulation and transport of red tide toxins; interactions between copepod feeding and reproductive success.

Current Research

2006-2012: Grant from ECOHAB (NOAA/NSF partnership). GOMTOX: Dynamics of *Alexandrium fundyense* distributions in the Gulf of Maine: An observational and modeling study of nearshore and offshore shellfish toxicity, vertical toxin flux, and bloom dynamics in a complex shelf sea. (Turner-UMass Dartmouth portion \$523,260), D.M. Anderson (PI, WHOI) and 15 Co-PIs.

Selected Recent Publications

- Turner, J. T., D. G. Borkman, J. A. Lincoln, D. A. Gauthier, and C. M. Petitpas. 2009. Plankton studies in Buzzards Bay, Massachusetts, USA. VI. Phytoplankton and water quality, 1987 to 1998. *Mar. Ecol. Prog. Ser.* 376:103-122.
- Gauthier, D. A., J. A. Lincoln, and J. T. Turner. 2008. Distribution, abundance, and growth of larval tautog, *Tautoga onitis*, in Buzzards Bay, Massachusetts, USA. *Mar. Ecol.* 29:76-88.
- Ianora, A., R. Casotti, M. Bastianini, C. Brunet, G. d'Ippolito, F. Acri, A. Fontana, A. Cutignano, J. T. Turner, and A. Miralto. 2008. Low reproductive success for copepods during a bloom of the non-aldehyde-producing diatom *Cerataulina pelagica* in the North Adriatic Sea. *Mar. Ecol.* 29:399-410.
- Oviatt, C. A., K. J. W. Hyde, A. A. Keller, and J. T. Turner. 2007. Production patterns in Massachusetts Bay with outfall relocation. *Estuaries and Coasts* 30: 35-46.
- Granéli, E., and J. T. Turner (editors). 2006. *Ecology of Harmful Algae*. Ecological Studies 189. Springer-Verlag, Berlin and Heidelberg 413 pp.
- Turner, J. T. 2006. Harmful algae interactions with marine planktonic grazers, Chapter 20, p. 259-270. In: Granéli, E., and J. T. Turner (editors) (2006). *Ecology of Harmful Algae*. Ecological Studies 189. Springer-Verlag, Berlin and Heidelberg.
- Turner, J. T., and E. Granéli. 2006. "Top-down" predation control on marine harmful algae, Chapter 27, p. 355-366. In: Granéli, E., and J. T. Turner (editors) (2006). *Ecology of Harmful Algae*. Ecological Studies 189. Springer-Verlag, Berlin and Heidelberg.
- Turner, J. T., D. G. Borkman, and C. A. Hunt. 2006. Zooplankton of Massachusetts Bay, USA, 1992-2003: Relationships between the copepod *Calanus finmarchicus* and the North Atlantic Oscillation. *Mar. Ecol. Prog. Ser.* 311:115-124.
- Doucette, G. J., J. T. Turner, C. L. Powell, B. A. Keafer, and D. M. Anderson. 2005. ECOHAB-Gulf of Maine. Trophic accumulation of PSP toxins in zooplankton during *Alexandrium* blooms in Casco Bay, Gulf of Maine, April - June, 1998. I. Toxin levels in *Alexandrium* and zooplankton size fractions. *Deep-Sea Res. II* 52: 2764-2783.
- Turner, J. T., G. J. Doucette, B. A. Keafer, and D. M. Anderson. 2005. ECOHAB-Gulf of Maine. Trophic accumulation of PSP toxins in zooplankton during *Alexandrium* blooms in Casco Bay, Gulf of Maine, April - June, 1998. II. Zooplankton abundance and size-fractionated community composition. *Deep-Sea Res. II* 52:2784-2800.
- Turner, J. T., and D. G. Borkman. 2005. Impact of zooplankton grazing on *Alexandrium* blooms in the offshore Gulf of Maine. *Deep-Sea Res. II* 52:2801-2816.
- Turner, J. T. 2004. The importance of small planktonic copepods and their roles in pelagic marine food webs. *Zool. Stud.* 43:255-266.