



**The History of the Salt Marsh Paradigm as it Relates to the Role of Salt Marshes
in the Secondary Production of Nekton**

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Classic Papers

- Boesch, D.F., Turner, R.E. 1984. Dependence of fishery species on salt marshes: the role of food and refuge. *Estuaries* 7: 460-468.
- Childers, D.L.; Day, J.W., JR., and McKellar, H.N., Jr. 2000. Twenty more years of marsh and estuarine flux studies: revisiting Nixon (1980) *in* Weinstein, M.P. and D.A. Kreeger. (eds.), *Concepts and Controversies in Tidal Marsh Ecology*. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 391-424
- Haines, E.B. 1979. Interactions between Georgia salt marshes and coastal waters: A changing paradigm. Pages 35-46 *in* Livingston, R.J., ed. *Ecological Processes in Coastal and Marine Systems*. New York: Plenum Press.
- Nixon, S.W. 1980. Between coastal marshes and coastal waters - a review of twenty years of speculation and research on the role of salt marshes in estuarine productivity and water chemistry. Pages 437-525 *in* Hamilton, R., MacDonald, K.B., editors. *Estuarine and Wetland Processes*. New York (NY): Plenum Press.
- Odum, E.P. 1968. A research challenge: evaluating the productivity of coastal and estuarine water. Proc. 2nd Sea Grant Conference, Graduate School of Oceanography, University of Rhode Island, Kingston, RI.
- Teal, J.M. 1962. Energy flow in the salt marsh ecosystem of Georgia. *Ecology* 43: 614-624.

Summary Papers

- Deegan, L.A., Hughes, J.E., Rountree, R.A. 2000. Salt marsh ecosystem support of marine transient species. Pages 333-368 *in* Weinstein, M.P., Kreeger, D.A. eds. *Concepts and controversies in tidal marsh ecology*. Dordrecht (Netherlands): Kluwer Academic Publishers.
- Kneib, R.T. 1997. The role of tidal marshes in the ecology of estuarine nekton. *Oceanography, Marine Biology Annual Reviews* 35:163-220.
- Odum, W.E., Fisher, J.S., Pickral, J.C. 1979. Factors controlling the flux of particulate organic carbon from estuarine wetlands. Pages 69-80 *in* Livingston R.J., ed. *Ecological Processes in Coastal and Marine Systems*. New York (NY): Plenum Press.

- Odum, E.P. 1980. The status of three ecosystem-level hypotheses regarding salt marsh estuaries: tidal subsidy, outwelling, and detritus-based food chains. Pages 485-495 in V. Kennedy, editor. *Estuarine Perspectives*, Academic Press, New York, NY.
- Turner, R.E. 1977. Intertidal vegetation and commercial yields of penaeid shrimp. *Transactions of the American Fisheries Society* 106:411-414.
- Weinstein, M.P. and D.A. Kreeger (co-editors). 2000. Concepts and controversies in tidal marsh ecology. Kluwer Academic Publ., Dordrecht, The Netherlands, 875 pp.
- Woodwell, G.M., C.A.S. Hall, D.E. Whitney and R.A. Houghton. 1979. The Flax Pond ecosystem study: exchanges of inorganic nitrogen between an estuarine marsh and Long Island Sound. *Ecology* 60:695-702.
- Zimmerman, R.J., Minello, T.M., Rozas, L.P. 2000. Salt marsh linkages to productivity of penaeid shrimps and blue crabs in the northern Gulf of Mexico. Pages 293-314 in Weinstein, M.P., Kreeger, D.A., eds. *Concepts and Controversies in Tidal Marsh Ecology*. Dordrecht (Netherlands): Kluwer Academic Publishers.

Recent Papers

- Beck, M.W., Heck, K.L., Jr., Able, K.W., Childers, D.L., Eggleston, D.B., Gillanders, B.M., Halpern, B., Hays, C.G., Hoshino, L., Minello, T.J., Orth, R.J., Sheridan, P.F., Weinstein, M.P. 2001. The identification, conservation, and management of estuarine and marine nurseries for fish and invertebrates. *Bioscience* 51:633-641.
- Chalmers, A.G., R.G. Weigert and P. Wolf. 1985. Carbon balance in a salt marsh: interactions of diffusive export, tidal deposition and rainfall caused erosion. *Estuarine, Coastal and Shelf Science* 21:757-771.
- Dame, R.F. 1994. The net flux of materials between marsh-estuarine systems and the sea. The Atlantic coast of the United States. Pages 295-302 in W. Mitsch, editor. *Global Wetlands*, Elsevier Publishing, Amsterdam, The Netherlands.
- Deegan, L.A. 1993. Nutrient and energy transport between estuaries and coastal marine ecosystems by fish migration. *Canadian Journal of Fisheries and Aquatic Science* 50: 74-79.
- Deegan, L.A., Garritt, R.H. 1997. Evidence for spatial variability in estuarine food webs. *Marine Ecology Progress Series* 147: 31-47.
- Eldridge, P.M., Cifuentes, L.A. 2000. A stable isotope model approach to estimating the contribution of organic matter from marshes to estuaries. Pages 495-514 in M.P. Weinstein, M.P., Kreeger, D.A., eds. *Concepts and Controversies in Tidal Marsh Ecology*. Dordrecht (Netherlands): Kluwer Academic Publishers.

- Litvin, S.Y. and M.P. Weinstein, M.P. 2003. Life History strategies of estuarine nekton: the role of marsh macrophytes, benthic macroalgae, and phytoplankton in the trophic spectrum. *Estuaries* 26(2B):552-562.
- Minello, T.J., Able, K.W., Weinstein, M.P., Hays, C. 2003. Salt marsh nurseries for nekton: testing hypotheses on density, growth and survival through meta-analysis. *Marine Ecology Progress Series* 246:39-59.
- Peterson, B.J., Howarth, R.W. 1987. Sulfur, carbon, and nitrogen isotopes used to trace organic matter flow in the salt-marsh estuaries of Sapelo Island, Georgia. *Limnology and Oceanography* 32:1195-1213.
- Peterson, B.J., Howarth, R.W. and Garritt, R.W. 1986. Multiple stable isotopes used to trace the flow of organic matter in estuarine food webs. *Science* 227:1361-1363.
- Rozas, L. P. C.C. McIvor and W.E. Odum. Intertidal rivulets and creekbanks: corridors between tidal creeks and marshes. *Marine Ecology Progress Series* 96:147-157.
- Weinstein, M.P., S.Y. Litvin, K.I. Bosley, C.M. Fuller and S.C Wainright. 2000. The role of tidal salt marsh as an energy source for juvenile marine transient finfishes: a stable isotope approach. *Transactions of the American Fisheries Society*. 129:797-810

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