Estuary Enhancement Program

Scientific Publications

As the largest privately funded wetland restoration project in the country, the Estuary Enhancement Program has provided a wealth of crucial research on estuary and wetlands habitats. The diverse team working on the EEP, and on the EEP restoration sites, includes world-renowned experts in marine biology, wetland ecology, and related fields who have produced dozens of scientific papers in peer-reviewed publications, many of them groundbreaking in nature, including the following.

1. Able, K.W. In review. Impacts of an invasive species (*Phragmites australis*) on the marsh surface changes in the fish habitat and fishes. Estuaries.

2. Able K.W., J.H. Balletto, S.M. Hagan, P.R. Jivoff, and K.A. Strait. 2007. Linkages Between Salt Marshes and Other Nekton Habitats in Delaware USA. Reviews in Fisheries Science, 15:1–61, 2007.

3. Able, K.W., D.M. Nemerson, P.R. Light, and R.O. Bush. 2000. Initial response of fishes to marsh restoration at a former salt hay farm bordering Delaware Bay. M.P. Weinstein and D.A. Kreeger, (eds.). Concepts and Controversies in Tidal Marsh Ecology. The Netherlands: Kluwer Academic Publishers. 749-773.

4. Able, K.W., D.M. Nemerson; R.O. Bush, and P.R. Light. 2001. Spatial variation in Delaware Bay (USA) Marsh Creek Fish Assemblages. Estuaries. 24(3):441-452.

5. Able, K.W., D.M. Nemerson, and T.M. Grothues. 2004. Evaluating salt marsh restoration in Delaware Bay: Analysis of fish response at former salt hay farms. Estuaries. 27(1):58-59.

6. Able, K.W. and S.M. Hagan. 2000. Effects of Common Reed (*Phragmites australis*) invasion on marsh surface macrofauna: Response of fishes and decapod crustaceans. Estuaries. 23(5):633-646.

7. Able, K.W. and S.M. Hagan. 2003. The impact of common reed, *Phragmites australis*, on essential fish habitat: Influence on reproduction, embryological development and larval abundance of mummichog (*Fundulus heteroclitus*). Estuaries. 26(1):40-50.

8. Able, K.W., S.M. Hagan, and S.A. Brown. 2003. Mechanisms of marsh habitat alteration due to *Phragmites*: Response of young-of-the-year mummichog (*Fundulus heteroclitus*) to treatment for *Phragmites* removal. Estuaries. 26(2B):484-494.

9. Able, K.W., S.M. Hagan, and S.A. Brown. 2005. Production of fishes in restored salt marshes in Delaware Bay: Progress towards estimates for mummichogs in treated *Phragmites* Marshes. Report to PSEG Estuary Enhancement Program, Salem, NJ.

10. Able, K.W., S.M. Hagan and S.A. Brown. 2006. Habitat use, movement and growth of young-of-the year *Fundulus* spp. in southern New Jersey salt marshes: comparisons based on tag/recapture. Journal of Experimental Marine Biology and Ecology 335 (2006) 177-187.

11. Able, K.W., S.M. Hagan, J. McLellan, and D.A. Witting. 2002. Characterization and comparison of benthic gears for sampling estuarine fishes and crustaceans. Rutgers University Marine Field Station Jacques Cousteau Technical Report #100-18.

12. Angradi, T.R., S.M. Hagan, and K.W. Able. 2001. Vegetation type and the intertidal marcoinvertebrate fauna of a brackish marsh: *Phragmites* vs. *Spartina*. Wetlands. 21(1): 75-92.

13. Aubrey, D.G. and L.L. Weishar. 1998. Hydrodynamic controls on hydroperiods in marshes. Proceedings of the ASCE Wetlands Journal Engineering & River Restoration Conference; Denver, CO. 62.

14. Balletto, J.H., J.M. Teal, and L.L. Weishar. 1997. Restoration of a salt hay farm on Delaware Bay: A progress report in the first year after restoring tidal circulation. Proceedings of the 24th Annual Conference on Ecosystems Restoration and Creation; Tampa, FL.

15. Balletto, J.H.; M. Vaskis Heimbuch, and H.J. Mahoney. 2005. Delaware Bay salt marsh restoration: Mitigation for a power plant cooling water system in New Jersey, USA. Ecological Engineering. 25:204-213.

16. Chitty, J.D. 2000. The response of a resident marsh killifish, *Cyprinodon variegatus*, to marsh restoration in southern New Jersey. Master's thesis. New Brunswick, NJ: Rutgers University.

17. Chitty, J.D. and K.W. Able. 2004. Habitat use, movements and growth of the sheepshead minnow, *Cyprinodon variegatus*, in a restored salt marsh. The Bulletin of the New Jersey Academy of Science 49 (2): 1-8.

18. Currin, C.A., S.C. Wainright, K.W. Able, M.P. Weinstein, and C.M. Fuller. 2003. Determination of food web support and trophic position of the mummichog, *Fundulus heteroclitus*, in New Jersey smooth cordgrass (*Spartina alterniflora*), common reed (*Phragmites australis*), and restored salt marshes. Estuaries. 26(2B):495-511.

19. Gratton, C. and R.F. Denno. 2005. Restoration of arthropod assemblages in a *Spartina* salt marsh following removal of the invasive plant *Phragmites australis*. Restoration Ecology. 13(2):358-372.

20. Grothues, T.M. and K.W. Able. 2003. Discerning vegetation and environmental correlates with subtidal marsh fish assemblage dynamics during *Phragmites* eradication efforts: Interannual trend measures. Estuaries. 26(2B):574-586.20.

21. Grothues, T.M. and K.W. Able. 2003. Response of juvenile fish assemblages in tidal salt marsh creeks treated for *Phragmites* removal. Estuaries. 26(2B):563-573.

22. Grothues, T.M., D.M. Nemerson and K.W. Able. 2004. Evaluating salt marsh restoration in Delaware Bay: analysis of fish response at former salt hay farms. Estuaries 27(1):58-69.
23. Hagan, S.M., S.A. Brown and K.W. Able. 2007. Production of mummichog *(Fundulus heteroclitus*): response in marshes treated for common reed (*Phragmites australis*) removal. Wetlands (27) 1: 54-67.

24. Hinkle, R.L. and W.J. Mitsch. 2005. Salt marsh vegetation recovery at salt hay farm wetland restoration sites on Delaware Bay. Ecological Engineering. 25:240-251.

25. Howes, B.L., J.M. Teal, and S. Peterson. 2005. Experimental *Phragmites* control through enhanced sediment sulfur cycling. Ecological Engineering. 25:292-303.

26. Hunter, K.L., D.A. Fox, L.M. Brown, and K.W. Able. 2006. Responses of resident marsh fishes to stages of *Phragmites australis* invasion in three mid-Atlantic estuaries, U.S.A. Estuaries and Coasts 29 (3):487-498.

27. Jivoff, P.R. and K.W. Able. 2003. Blue crab, *Callinectes sapidus*, response to the invasive common reed, *Phragmites australis*: Abundance, size, sex ratio, and molting frequency. Estuaries. 26(2B):587-595.

28. Jivoff, P.R. and K.W. Able. 2003. Evaluating salt marsh restoration in Delaware Bay: The response of blue crabs, *Callinectes sapidus*, at former salt hay farms. Estuaries. 26(3):709-719.

29. Jivoff, P.R. and K.W. Able. In review. Evaluating Salt Marsh Restoration in Upper Delaware Bay: The Response of Blue Crabs, *Callinectes sapidus*, to the treatment for the eradication of *Phragmites australis* and re-establishment of *Spartina allerniflora*.

30. Jivoff, P.J., K.W. Able, and E.J. Martino. In review. Identifying essential habitats of blue crabs (*Callinectes sapidus*) from inter-and intra-estuarine variability in southern New Jersey.

31. Kimball, M. E. and K. W. Able. 2007. Nekton utilization of intertidal salt marsh creeks: tidal influences in natural *Spartina*, invasive *Phragmites*, and marshes treated for *Phragmites* removal. Journal of Experimental Marine Biology and Ecology 346:87-101.

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34. Litvin, S.Y., M.P. Weinstein, and C.A. Currin. In revision. Marine transients and the coastal conveyor belt: nutrient flow from primary producers to juvenile weakfish (*Cynosion regalis*) Ecology.

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39. Nemerson, D.M. 2001. Trophic dynamics and habitat ecology of the dominate fish of Delaware Bay (USA) marsh creeks. Abstract of Ph.D. dissertation. New Brunswick, NJ: Rutgers University.

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