Tyler Coverdale
Email: Tyler_Coverdale@Brown.edu
Phone: (216) 235-1987
Fax: (401) 863-2166

Brown University
Dept. of Ecology and Evolutionary Biology
80 Waterman Street, Box G-W
Providence, RI 02912

EDUCATION

B.S. Biology **2010**
Brown University, Providence RI

Academic Honors and Awards:

- Honors in Biology for thesis: *"Historical Development of Cape Cod Salt Marshes Triggers Current Runaway Herbivory and Marsh Die-off"* **2010**
- Magna Cum Laude **2010**
- Senior Prize in Biology for independent research **2010**
- Sigma Xi society **2009**
- Harold Ward Undergraduate Teaching and Research Award recipient **2009**

PUBLICATIONS

IN PRINT / IN PRESS:

1) **Coverdale, T. C.,** A. H. Altieri, and M. D. Bertness. 2012. Belowground herbivory increases vulnerability of New England salt marshes to die-off. *Ecology* **93**(9) 2085-2094.

2) Altieri, A. H., M. D. Bertness, **T. C. Coverdale**, N. C. Herrmann, and C. Holdredge. 2012. A trophic cascade triggers collapse of a salt-marsh ecosystem with intensive recreational fishing. *Ecology* **93**(6): 1402-1410.

3) **Coverdale, T. C.,** M. D. Bertness, and A. H. Altieri. *In press*. Regional ontogeny of New England salt marsh die-off. *Conservation Biology*.

4) **Coverdale, T. C.,** N. C. Herrmann, A. H. Altieri, and M. D. Bertness. *In press*. Latent impacts: the role of historical human impacts in coastal habitat loss. *Frontiers in Ecology and the Environment*.

5) Altieri, A. H., M. D. Bertness, **T. C. Coverdale**, E. E. Axelman, N. C. Herrmann, and P. L. Szathmary. *In press*. Facilitation drives the resilience of salt marshes and rapid reversal of die-off. *Ecology*.

IN REVIEW / IN PREP:

6) M. D. Bertness and **T. C. Coverdale**. *In review*. Fear of an invasive species can trigger recovery of degraded ecosystems.

7) He, Q., M. D. Bertness. **T. C. Coverdale**, J. F. Bruno, A. H. Altieri, P. R. Ehrlich, B. Li, J. Liu, Baoshan Cui. *In review*. Impacts of China's booming economy on marine ecosystems.

8) **Coverdale, T. C.,** E. W. Young, C. P. Brisson and M. D. Bertness. *In prep*. Salt marsh die-off reverses centuries of carbon sequestration and marsh expansion.

9) **Coverdale, T. C.,** A. H. Altieri, C. P. Brisson, and M. D. Bertness. *In prep*. Predation, plant defense, and food limitation lead to recovery of herbivore-driven marsh die-off.

10) **Coverdale, T. C.,** E. E. Axelman, C. P. Brisson, E. W. Young, A. H. Altieri and M. D. Bertness. *In prep*. Opportunistic invasion drives the recovery of New England salt marshes.

PRESENTATIONS

1) *Synergistic, delayed effects of multiple human impacts on ecosystems*. **T. Coverdale**, N. Herrmann, A. Altieri and M. Bertness. 2011 Benthic Ecology Meeting Presentation, Mobile AL.

2) *Recreational fishing triggers trophic cascade and marsh die-off*. A. Altieri, **T. Coverdale**, N. Herrmann, C. Holdredge, and M. Bertness. 2011 Benthic Ecology Meeting Presentation, Mobile AL.

3) *Potential mechanisms of recovery of Cape Cod salt marshes from consumer-driven die-off*. L. Szathmary, A. Altieri, **T. Coverdale**, and M. Bertness. 2011 Benthic Ecology Meeting Presentation, Mobile AL.

4) *Recreational fishing triggers salt marsh die-off on Cape Cod, MA.* **T. Coverdale***,* A. Altieri, M. Bertness, N. Herrmann, and C. Holdredge. 2011 NEERS Spring Meeting, Port Jefferson NY.

5) *Recreational fishing triggers salt marsh die-off on Cape Cod, MA*. **T. Coverdale***,* A. Altieri, M. Bertness, N. Herrmann, and C. Holdredge. 2011 Atlantic Research Center Science in the Seashore Research Symposium, Truro MA.

6) *Overfishing triggers runaway herbivory and salt marsh die-off in New England.* **T. C. Coverdale** and M. D. Bertness. Narragansett Bay National Estuarine Research Reserve. 2011.

7) *Is overfishing triggering marsh die-off in Cape Cod salt marshes?* **T. Coverdale** and N. Herrmann. Atlantic Research Center, Cape Cod National Seashore, 2011. http://www.nps.gov/caco/naturescience/research-posters.htm

8) *Historical development of Cape Cod salt marshes triggers current runaway herbivory and marsh die-off*. **T. Coverdale**, N. Herrmann, A. Altieri and M. Bertness. 2010 Benthic Ecology Meeting Presentation, Wilmington NC.

9) *Cordgrass die-off in Cape Cod salt marshes leads to loss of important ecosystem services*. N. Herrmann, **T. Coverdale**, M. Bertness and A. Altieri. 2010 Benthic Ecology Meeting Presentation, Wilmington NC.

PRESS AND MEDIA

1) "Depression-era drainage ditches emerge as sleeping threat to Cape Cod salt marshes". January, 2013. Ecological Society of America (http://www.esa.org/esablog/research/depression-era-drainage-ditches-emerge-as-sleeping-threat-to-cape-cod-salt-marshes/)

2) "Student's curiosity produces ecological buzz". January, 2013. Brown University Public Relations (http://news.brown.edu/pressreleases/2013/01/coverdale)

3) **Coverdale, T. C.** "Saving Cape Cod's salt marshes, one fish at a time". The Providence Journal Op-ed. July 27th, 2012.

4) "Pressures on predators lead to marshland die-offs". June, 2012. New York Times Science Times.

5) **Coverdale, T. C.** *Salt Marsh Die-off Spreads into Long Island Sound*. The Nature Conservancy Mashomack Preserve Newsletter, 2011.

6) "Crabs put the pinch on marshlands". September, 2011. NSF Science Nation [Video].

7) "Crabs may be killing Cape Cod's marshes". July, 2010. The Boston Globe.

FUNDING HISTORY

Harold Ward Undergraduate Teaching and Research Assistanceship **2009**

Sander Buchman Memorial Long Island Sound Research Stipend, TNC **2011-2012**

Updated 01/25/2013

TEACHING AND PROFESSIONAL ACTIVITIES

Teaching Assistant, Coastal Ecology and Conservation	**2010-2012**
Reviewer for *Estuaries and Coasts* and *JEMBE*	**2011-2012**
Reviewer for *Marine Community Ecology and Conservation, ed. 2*	**2013**
Teaching Assistant, Marine Biology	**2012**
Teaching Assistant, Principles of Ecology	**2009**
Tutor, Principles of Ecology	**2009**

EMPLOYMENT HISTORY

Lab Manager, Supervisor and Researcher, Bertness Lab, Brown University	**2012-present**
Research Assistant, Bertness Lab, Brown University	**2010-2012**
Undergraduate Researcher, Bertness Lab, Brown University	**2009-2010**
Undergraduate Researcher, Swartz Lab, Brown University	**2006-2008**