



OXBOW ASSOCIATES, INC.

Wetlands Delineation and Permitting • Wildlife Studies • Herpetology • Vernal Pool Ecology

BRIAN O. BUTLER

PROFESSIONAL SUMMARY

Mr. Butler is the President of Oxbow Associates, Inc., a wetlands and wildlife consulting company providing a broad range of ecological, permitting and design services and specializing in rare and herpetofaunal wildlife study and mitigation. He is also Past President of the AMWS (Assoc. Mass. Wetlands Scientists). He has studied the ecology of herpetozoan species, and in particular turtles, native to the Northeast for more than twenty-five years. He has conducted field research with nine of the ten turtle species native to southern New England and has conducted studies and field investigations of timber rattlesnakes, copperheads, rare salamanders and a variety of vernal pool taxa. Mr. Butler has also conducted taxon-specific and general habitat and impact assessments for development projects in Massachusetts and surrounding states.

Mr. Butler has consulted on projects with potential impacts to rare wetlands wildlife species ranging from subdivisions, to highway expansion, utility rights-of-way, military base conversions and solar, wind and natural gas energy facilities.

Mr. Butler conducts wetlands delineations, permitting and design of wetland restoration and mitigation plans and reviews wetland delineations for conservation commissions in Massachusetts and has completed the forty-hour federal wetland delineation course and was certified by the State of New Hampshire as a Wetland Scientist (Cert. #115, no longer maintained). He sits on advisory committees for state wildlife regulations and policies and review of individual herpetozoan listing status and testifies as an expert witness in legal proceedings and before the Mass. State Legislature on environmental legislation. Mr. Butler is an approved Primary Rattlesnake Monitor for construction projects in New Jersey.

EDUCATION

M.S., Biology, Worcester State College, 1991. Thesis: "Early Post-Emergent Behavior of Hatchling Blanding's Turtles".

B.S., Marine Biology, Southampton College, 1980 Senior Project: "Spatial Partitioning Among Juvenile Rockfishes (genus *Sebastes*) in a California Kelp Forest Community".

PUBLICATIONS, Peer Reviewed

Tadevosyan, T., J. Lorch, **B. O. Butler**. (in press) *Lampropeltis triangulum Triangulum* (Eastern Milk Snake). Snake Fungal Dermatitis. Herpetological Review.

Buhlmann, K. A., S. L. Koch, **B. O. Butler**, T. D. Tuberville, V. J. Palemo, B. A. Bastarache, and Z. A. Cava. 2015. Reintroduction and Head-starting: Tools for Blanding's Turtle (*Emydoidea blandingii*) Conservation. Herpetological Conservation and Biology 10 (Symposium):436-454.

Smyers, S. D., B. A. Trowbridge and **B. O. Butler** 2011. Leaf Diet Affects Growth of a Shredder, *Limnephilus indivisis*, From a Seasonal New England Pond. *Northeast Naturalist* 18(1) pp.27-36.

Rhodin, A. G. J. and **B. O. Butler** 1997. The Painted Turtles (*Chrysemys picta*) of New England: Taxonomy, Morphometrics, and Reproduction. *In: Status and Conservation of Turtles of the Northeastern United States*. T. F. Tyning, ed. Serpent's Tale, Lanesboro, Minn. 53 pp.

Butler, B. O. and T. E. Graham. 1995. Early Post-Emergent Behavior and Habitat Selection in Hatching Blanding's Turtles, *Emydoidea blandingii*, in Massachusetts. *Chelonian Conservation and Biology*. 1:187-196.

Butler, B. O. and T. E. Graham. 1993. Tracking Hatchling Blanding's Turtles with Fluorescent Pigments. *Herpetological Review*. 24:21-22.

Graham, T. E. and **B. O. Butler**. 1993. Metabolic Rates of Wintering Blanding's turtles. *Comparative Biochemistry and Physiology A*. 106A:663-665.

Linck, M. H., J. A. DePari, **B. O. Butler**, and T. E. Graham. 1989. Nesting Behavior of the Turtle *Emydoidea blandingii*, in Massachusetts, *Journal of Herpetology* 4:442-444.

PUBLICATIONS, Popular Press

Butler, B. O. 1996-1999. **Wildlife Watch**. Biweekly natural history column for *Worcester Telegram and Gazette, Montachusett Section*.

Butler, B. O. and D. M. Carroll. 1995. Sculpted Shadows: Massachusetts' Wood Turtles. *Massachusetts Wildlife* 45:17-20, 30-31.

Butler, B. O. 1992. Bay State Blanding's Turtles. *Massachusetts Wildlife*. 42:17-25.

CONSERVATION & MANAGEMENT PERMITS (Pursuant to MA Endangered Species Act) – Examples

- **Communication and LIDAR Tower, Holyoke, MA**- 21 State Listed Species associated with mountain site. **Marbled and Jefferson Salamander, Timber Rattlesnake, N. Copperhead, Black Rat Snake, et al.**
- **Richmond Nantucket**. Nantucket Blue-eyed Grass, Nantucket, MA
- **Pocomo Rd., Nantucket**. St. Andrews Cross (End.), Nantucket Bl-eyed Grass, N. E. Blazing Star.
- **Pioneer Valley Energy Center**, Westfield, MA. 400MW Electr. Generation Plant – E. Box Turtle
- **Lowes Flatbed Distribution/Transloading Facility, Westfield, MA** - Eastern Box Turtle
- **Pine Hill Rare Plant Translocation – Cape Cod, MA NSTAR Utility**.
- **The Berkshire School, \$100,000,000 Capital Improvements Project 2007 - 2013** Timber Rattlesnake
- **HiRock YMCA**, Mt. Washington, MA – Timber Rattlesnake
- **Avalon Acton – 400 Unit Residential Development**, Blue-Spotted Salamander (complex)
- **Oceanfront Home, Truro, MA**- Broom Crowberry, Box Turtle, Spadefoot Toad, N. Harrier.
- **Connet Woods, Rochester, MA** – Eastern Box Turtle
- **The Bay Club at Mattapoissett, Mattapoissett, MA** – Eastern Box Turtle, *et al.*
- **New Bedford Business Park, Dartmouth & New Bedford, MA** - Eastern Box Turtle
- **Groton/Ayer, MA - Residential Projects**. Four projects/900 acres, 5 species.
- **Sugarloaf Estates, Douglas, MA** – Marbled Salamander

PRESENTATIONS and ABSTRACTS

“Tenets and Tactics for Linear Project Permitting: Rare and Endangered Species. NECA Environmental Conference, June 15, 2017, Marlborough, MA.

“Ecology and Assessment of Massachusetts Vernal Pools”. Assoc. of Mass. Wetlands Scientists, Berlin, MA. **Butler, B. O.** and S. D. Smyers. April, 2016 and April 2017.

"Establishment of a Population of Blanding's Turtle (*Emydoidea blandingii*) at Assabet River National Wildlife Refuge: Headstarting and Translocation". **B. Butler**, et al., Northeast Natural History Conference, Apr. 13-15, 2013, Springfield, MA.

"Reintroduction as a Conservation Tool for Blanding's Turtles". K. Buhlmann, T. Tuberville, S. Koch, Brian Butler, V. Palermo, J. St. Sauver, and E. McGourty. **Joint Meeting of Ichthyologists and Herpetologists**, July 12, 2010. Providence, RI.

"Preliminary Biological Monitoring Results From a Created **Vernal Pool**: Using Supplemental Benthic Material and Amphibian Eggs / Larvae to "Jumpstart" the Establishment of Functioning Vernal Pool Habitat". Society of Wetlands Scientists, New England Conference, Nov. 14, 2002, Worcester, MA.

A Four-Year Study of the Efficacy of Barriers for the Prevention of Road Mortality to **Spotted Turtles** (*Clemmys guttata*), A species of "Special Concern" in Massachusetts. Society of Wetlands Scientists, New England Conference, Oct. 19, 2001, Worcester, MA.

Abstract: "Population Structure in a Nest Site-Subsidized Population of **Blanding's Turtle**". Blanding's Turtle Workshop. Bell Museum of Natural History. May, 1998.

Abstract: "Impacts of Military Activities - **Blanding's Turtles** at Fort Devens, Massachusetts, USA", presented at Conservation, Restoration, and Management of Tortoises and Turtles: An International Conference. State University of New York, Purchase, 1993.

"Status and Conservation of the **Blanding's Turtle** in Massachusetts", Mass. Audubon Conference on Conservation of Turtles of the Northeast, Worcester State University, 1993.

EMPLOYMENT

Principal, **Oxbow Associates, Inc.**, 1991 - present.

Boston University, 1986-1991.

VA Research Facility, 1981-1986.

AFFILIATIONS & CERTIFICATIONS

Association of Massachusetts Wetlands Scientists – **President 2011-13, Vice President, 2009-11**

Certified NH Wetland Scientist – Cert. No. 115 (Certification no longer maintained)

40 hr. USACOE Federal Wetland Delineation

Blanding's Turtle Working Group

Massachusetts Herpetological Working Group

Mass. Vernal Pool Technical Advisory Committee

Mass. Endangered Species Act Regulatory Revision Advisory Committee

Belmont (MA) Cons. Comm., Assoc., 1990-92.

Lunenburg, MA Cons. Comm., Assoc. 1994-96.

Society of Wetlands Scientists

Society for the Study of Amphibians & Reptiles

Chelonian Research Foundation - Reviewer of submitted papers.

10hr. OSHA Construction

CURRENT USFW PROJECT: 2007- Present

Translocation of Blanding's Turtles to Assabet River NWR – Using 20 years of field study from a Blanding's turtle donor site, a multi-year cooperative project with USFWS, Savannah River Ecology Labs, Bristol Agricultural High School and Oxbow Associates, Inc., intended to found and accelerate establishment of a Blanding's turtle population at a newly acquired eastern Massachusetts National Wildlife Refuge, now in its 10th year with more than 1,000 hatchlings translocated to date.

Professional References

1. Stephanie Koch, PhD
U.S Fish and Wildlife
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2. Matthew A. Waldrip, PWS, CESSWI
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Brian Butler, MS – Qualifications and Experience Summary

Contact Information:

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Boxborough, MA 01719 (FedEx/physical address)**

Professional Experience:

- **Founder and Partner of Oxbow Associates, Inc.**
- **Master of Science Degree, Worcester State University**
- **Eight peer-reviewed publications**
- **Twenty-five (25) years Ecological and Environmental Consulting Experience**
- **Designs and conducts field studies of rare and endangered species for energy, commercial, government and residential development in New England**