### GAYLE BARBIN ZYDLEWSKI

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### **EDUCATION AND TRAINING**

- 1996 Doctor of Philosophy, Oceanography, University of Maine, Orono, ME
- 1992 Master of Science, Zoology, University of Rhode Island, Kingston, RI
- 1990 Bachelor of Science, Marine Biology & Biology, Southeastern Massachusetts University, North Dartmouth, MA

# PROFESSIONAL EXPERIENCE (10 YEARS)

**Assistant Professor**, University of Maine, School of Marine Sciences (SMS), Orono, ME, Sep 2004 – Present **President**, Cove Brook Watershed Council, Winterport, Maine, Mar 2006 – present

Chair and Founder, Lower Penobscot Watershed Coalition, Feb 2007 – April 2009

Coordinator, Cove Brook Watershed Council and Lower Penobscot Watershed Coalition, *Aug* 2006 – *present* **Supervisory Fishery Biologist**, United States Fish and Wildlife Service - USFWS, Abernathy Fish Technology Center, Longview, WA, *Mar* 2003-Aug 2004

Fishery Biologist, USFWS, Abernathy Fish Technology Center, Longview, WA, Dec 1999 - Mar 2003

**Adjunct Faculty**, Washington State University, Dept. of Environmental Sciences, Vancouver, WA, *Jun* 2002 – *Sep* 2005

**Supervisory Fishery Biologist**, United States Fish and Wildlife Service - USFWS, Abernathy Fish Technology Center, Longview, WA, *Mar* 2003-Aug 2004

Fishery Biologist, USFWS, Abernathy Fish Technology Center, Longview, WA, Dec 1999 - Mar 2003

## PUBLICATIONS (SELECTED)

- Fernandes, S.J., **G.B. Zydlewski**, M.T. Kinnison, J.D. Zydlewski, G.S. Wippelhauser. Accepted. Seasonal Distribution and Movements of Atlantic and Shortnose Sturgeon in the Penobscot River Estuary, Maine. *Canadian Journal of Fisheries and Aquatic Sciences*.
- Spencer, R., J.D. Zydlewski, **G.B. Zydlewski**. Accepted. Migratory urge and gill Na<sup>+</sup>, K<sup>+</sup> -ATPase activity of hatchery reared Atlantic salmon smolts from Dennys and Penobscot River stocks, Maine. *Transactions of the American Fisheries Society*.
- Zydlewski, J., **G.B. Zydlewski**, R. Danner. In Press. Descaling injury impairs the osmoregulatory ability of Atlantic salmon smolts entering seawater. *Transactions of the American Fisheries Society*.
- **Zydlewski, G.B.**, J.D. Zydlewski, J. Johnson. 2009. Patterns of Migration and Residency in Coastal Cutthroat Trout (*Oncorhynchus clarki clarki*) from Two Tributaries of the Lower Columbia River. Journal of Fish Biology. 75(1): 203-222. doi:10.1111/j.1095-8649.2009.02280.x
- Rose, B.P., M.G. Mesa, **G.B. Zydlewski**. 2008. Field-Based Evaluations of Horizontal Flat-Plate Fish Screens. *North American Journal of Fisheries Management*. 28:1702–1713,
- **Zydlewski, G.B.,** W.S. Gale, J. Johnson, J. Holmes, W. Thornton, T. Brigham. 2008. Use of electroshock for euthanizing and immobilizing adult spring Chinook salmon in a hatchery. North American Journal of Aquaculture. 70:415–424
- **Zydlewski, G.B**, G. Horton, T. Dubreuil, J. Zydlewski, B. Letcher, S. Casey. 2006. Remote monitoring of fish in small streams: A unified approach using PIT tags. *Fisheries*. 31(10): 492-502.

- Hill, M.S., **G.B. Zydlewski**, W.S. Gale. 2006. Comparisons between hatchery and wild steelhead trout (*Oncorhynchus mykiss*) smolts: physiology and habitat use. *Canadian Journal of Fisheries and Aquatic Sciences*. 63: 1627-1638.
- Hill, M.S., **G.B. Zydlewski**, J.D. Zydlewski, J.M. Gasvoda. 2006. Development and evaluation of PIT tag detection units: PITpacks. *Fisheries Research*. 77: 102-109.
- **Zydlewski**, **G.B.**, S.D. McCormick, & A.J. Haro. 2005. The role of temperature in downstream migratory behavior of Atlantic salmon smolts. *Canadian Journal of Fisheries and Aquatic Sciences*. 62: 68-78.
- Mesa, M.G., L.K. Weiland, & G.B. Zydlewski. 2004. Critical swimming speeds of wild bull trout. *Northwest Science*. 78: 59-65.
- **Barbin, G.P.,** S.J. Parker, & J.D. McCleave. 1998. Olfactory clues play a critical role in the estuarine migration of silver-phase American eels. *Environmental Biology of Fishes*. 53: 283-291.
- **Barbin**, **G.P.** 1998. The role of olfaction in homing and estuarine migratory behavior of yellow-phase American eels. *Canadian Journal of Fisheries and Aquatic Sciences*. 55: 564-575.
- **Barbin**, **G.P.** & J.D. McCleave. 1997. Fecundity of the American eel at 45°N in Maine, U.S.A. *Journal of Fish Biology* 51(4): 840-847.
- Pettigrew, N.R., D.A. Kistner, **G.P. Barbin**, A.K. Laursen, D.W. Townsend, & J. Christensen. 1997. Somes Sound: fjord or well-mixed estuary? *Northeastern Naturalist* 4(1): 35-44.

### SYNERGISTIC ACTIVITIES

# Collaborative efforts to study the biology of fishes in the Gulf of Maine-funded research

o DOE (co-PI) Maine Tidal Power Initiative

o TNC/NOAA (co-PI) Sturgeon spawning

o Maine DMR (co-PI) Sturgeon in the Penobscot River

o Maine Technology Institute Coast of Maine Passive Acoustic Sensor System (COMPASS)

NOAA (co-PI)
 NOAA (PI)
 NOAA (co-PI)
 Seawater Performance of salmon
 Sturgeon in the Penobscot River

### **Reviewer for Professional Fisheries Journals**

- o American Fisheries Society Book Symposium Series
- o Aquaculture
- o Canadian Journal of Fisheries and Aquatic Sciences
- Fish Physiology and Biochemistry
- o Journal of Fish Biology
- North American Journal of Fisheries Management
- o Transactions of the American Fisheries Society

### **Professional Societies**

- o American Fisheries Society
- o World Sturgeon Conservation Society

#### **Graduate Students Advised**

- o MS Student (Marine BioResources), University of Maine: Haley Viehmann
- o MS Student (dual degree), University of Maine: Phillip Dionne
- o MS, University of Maine, 2008: Stephen Fernandes
- o MS, Washington State University, 2005: Megan Hill