

JAMES D. McCLEAVE

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EDUCATIONAL EXPERIENCE

A.B.	Carleton College	1961
M.S.	Montana State University	1963
Ph.D.	Montana State University	1967

PROFESSIONAL EXPERIENCE

Professor Emeritus of Marine Sciences, University of Maine	2008-date
Assistant Director for Research, Maine Sea Grant College	2003-2008
Professor of Marine Sciences, University of Maine	1996-2008
Visiting Scientist, National Institute of Water and Atmospheric Research, Christchurch, New Zealand	2001-2002
Associate Director, School of Marine Sciences, University of Maine	1999-2001
Chair, Department of Oceanography, University of Maine	1994-1996
Professor of Oceanography, University of Maine	1990-1996
Cooperating Professor of Biological Sciences, University of Maine	1990-date
Mary Derrickson McCurdy Visiting Scholar, Duke University Marine Laboratory, North Carolina	1992-1993
Chair, Department of Oceanography, University of Maine	1990-1992
Chair, Department of Zoology, University of Maine	1987-1990
Professor of Zoology, University of Maine	1978-1990
Visiting Professor of Biology, McGill University, Montreal	1985-1986
Visiting Scientist, Fisheries Laboratory, Ministry of Agriculture, Fisheries and Food, Lowestoft, England	1978
Associate Professor of Zoology, University of Maine	1972-1978
Assistant Professor of Zoology, University of Maine	1968-1972
Assistant Professor of Biology, Western Illinois University	1967-1968

RESEARCH CRUISE EXPERIENCE (*Chief Scientist)

F.V. <i>Newfoundland Alert</i> . Sargasso Sea.	4 weeks	2007
R.V. <i>Columbus Iselin</i> . Sargasso Sea.	4 weeks	1989*
	Distribution of eels in fronts	
O.R.V. <i>Cape Florida</i> . Sargasso Sea.	3 weeks	1985*
	Distribution of eel leptocephali	2 cruises, 3 weeks each
R.V. <i>Columbus Iselin</i> . Sargasso Sea.	2 cruises, 3 weeks each	1984*
	Distribution of eel leptocephali	3 weeks
R.V. <i>Clione</i> . North Sea.	2 weeks	1980
	Eel tracking	2 weeks
	3 cruises, 2 weeks each	1978
A.R.A. <i>Islas Orcadas</i> . Scotia Sea, Antarctica	6 weeks	1976

Benthic fish and invertebrate ecology	7 weeks	1975
R.V. <i>Friedrich Heinke</i> . North Sea, Bay of Biscay	4 weeks	1974
Eel tracking, larval fish collection		

PROFESSIONAL SOCIETIES

American Fisheries Society
 American Society of Ichthyologists and Herpetologists
 Estuarine and Coastal Research Federation

PROFESSIONAL ACTIVITIES AND AWARDS

Member, Maine Oil Spill Advisory Committee	2008-date
Member, Working Group on Atlantic Eels, International Council for the Exploration of the Sea	1990-2000
Member, Marine Sciences Task Force, University of Maine	1995-1996
Project Director, National Science Foundation, Research Facilities Modernization Grant to Zoology/Oceanography	1991-1992
Associate Editor, Transactions of the American Fisheries Society	1985-1987
International Scientific Exchange Award, Natural Sciences and Engineering Research Council of Canada	1985-1986
Member, Board of Directors, Huntsman Marine Science Center	1983-1987
Leopold Schepp Foundation, Eppley Foundation for Research	1982-1984
Postdoctoral Fellowships	1985-1986
Chairman of Organizing Committee and Editor, NATO Advanced Research Institute, Mechanisms of Migration in Fishes	1981-1983
Member, Anadromous and Catadromous Fish Committee, International Council for the Exploration of the Sea	1978-1985
University of Maine, Presidential Research Achievement Award	1979
Science Faculty Professional Development Award, National Science Foundation	1978
Project Director, Research Initiation and Support Grant to Migratory Fish Research Institute, National Science Foundation	1977-1981

PUBLICATIONS AND MANUSCRIPTS

- Gorsky, D., J. Trial, J. Zydlewski, and J. McCleave. 2009. The effects of smolt stocking strategies on migratory path selection of adult Atlantic salmon in the Penobscot River, Maine. *N. Amer. J. Fish. Manage* 29:949-957.
- McCleave, J.D., and E. Edeline. 2009. Diadromy as a conditional strategy: patterns and drivers of eel movements in continental habitats. *Amer. Fish. Soc. Symp.* 69:97-119.
- McCleave, J.D. 2008. Contrasts between spawning times of *Anguilla* species estimated from larval sampling at sea and from otolith analysis of recruiting glass eels. *Mar. Biol.* 155:249-262.
- Miller, M.J., and J.D. McCleave. 2007. Species assemblages of leptocephali in the southwestern Sargasso Sea. *Mar. Ecol. Prog. Ser.* 344:197-212.
- McCleave, J.D., and D.J. Jellyman. 2004. Male dominance in the longfin eel population of a New Zealand river: probable causes and implications for management. *N. A. J. Fish. Manage.* 24:490-505.

- McCleave, J.D. 2003. Spawning areas of the Atlantic eels. Pages 141-155. *In* K. Aida, K. Tsukamoto and K. Yamauchi (editors). Eel biology. Springer, Tokyo.
- McCleave, J.D., and D.J. Jellyman. 2002. Discrimination of New Zealand stream waters by glass eels of the shortfin eel (*Anguilla australis*) and the longfin eel (*Anguilla dieffenbachii*). *J. Fish Biol.* 61:785-800.
- Oliveira, K., and J.D. McCleave. 2002. Sexually different growth histories of the American eel in four rivers in Maine. *Trans. Am. Fish. Soc.* 131:203-211.
- McCleave, J.D. 2001. Fish: Eels. Pages 800-809. *In* J. Steele and C. McNeil (editors). Encyclopedia of Ocean Sciences. Academic Press, London.
- McCleave, J.D. 2001. Simulation of the impact of dams and fishing weirs on reproductive potential of silver-phase American eels in the Kennebec River basin, Maine, USA. *N. A. J. Fish. Manage.* 21:577-590.
- Oliveira, K., J.D. McCleave, and G.S. Wippelhauser. 2001. Regional variation and the effect of lake:river area on sex distribution of American eels, *Anguilla rostrata*. *J. Fish Biol.* 58:943-952
- Cieri, M.D., and J.D. McCleave. 2001. Validation of daily otolith increments in glass-phase American eels *Anguilla rostrata* (Lesueur) during estuarine residency. *J. Exp. Mar. Biol. Ecol.* 257:219-227.
- Cieri, M.D., and J.D. McCleave. 2000. Discrepancies between otoliths of larvae and juveniles of the American eel: Is something fishy happening at metamorphosis? *J. Fish Biol.* 57:1189-1198.
- Oliveira, K., and J.D. McCleave. 2000. Variation in population and life history traits of the American eel, *Anguilla rostrata*, in four rivers in Maine. *Env. Biol. Fishes* 59:141-151.
- McCleave, J.D., and G.P. Arnold. 1999. Movements of yellow- and silver-phase European eels (*Anguilla anguilla* (L.)) tracked in the western North Sea. *ICES J. Mar. Sci.* 56:510-536.
- Barbin, G.P., S.J. Parker and J.D. McCleave. 1998. Olfactory clues play a critical role in the estuarine migration of silver-phase American eels. *Env. Biol. Fish.* 53:283-291.
- McCleave, J.D., P.J. Brickley, K.M. O'Brien, D.A. Kistner-Morris, M.W. Wong, M. Gallagher and S.M. Watson. 1998. Do leptocephali of the European eel swim to reach continental waters? Status of the question. *J. Mar. Biol. Ass. U.K.* 78:285-306.
- Barbin, G.P., and J.D. McCleave. 1997. Fecundity of the American eel at 45°N in Maine, U.S.A. *J. Fish Biol.* 51:840-847.
- Parker, S.J., and J.D. McCleave. 1997. Selective tidal stream transport by American eels during homing movements and estuarine migration. *J. Mar. Biol. Ass. U.K.* 77:871-889.
- Wippelhauser, G.S., M.J. Miller and J.D. McCleave. 1996. Evidence of spawning and the larval distribution of snipe eels (Family Nemichthyidae) in the Sargasso Sea. *Bull. Mar. Sci.* 59: 298-309.
- Miller, M.J., and J.D. McCleave. 1994. Species assemblages of leptocephali in the Subtropical Convergence Zone of the Sargasso Sea. *J. Mar. Res.* 52: 743-772.
- McCleave, J.D., and M.J. Miller. 1994. Spawning of *Conger oceanicus* and *Conger triporiceps* (Congridae) in the Sargasso Sea and subsequent distribution of leptocephali. *Env. Biol. Fish.* 39: 339-355.
- McCleave, J.D. 1993. Physical and behavioural controls on the oceanic distribution and migration of leptocephali. *J. Fish Biol.* 43(supplement A): 243-273.

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- Wippelhauser, G.S. and J.D. McCleave. 1988. Rhythmic activity of migrating juvenile American eels (*Anguilla rostrata* LeSueur). *J. Mar. Biol. Assoc. U.K.* 68:81-91.
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- McCleave, J.D. 1987. Migration of *Anguilla* in the ocean: Signposts for adults! Signposts for leptocephali? p. 102-117 *In* W.F. Hernnkind and A.B. Thistle (editors). *Signposts-in-the-Sea*. Proceedings of a multidisciplinary workshop on marine animal orientation and migration. Florida State Univ., Tallahassee.
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- McCleave, J.D., and G.S. Wippelhauser. 1987. Behavioral aspects of selective tidal stream transport in juvenile American eels (*Anguilla rostrata*). *Am. Fish. Soc. Symp.* 1: 138-150.
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- Kleckner, R.C., and J.D. McCleave. 1985. Spatial and temporal distribution of American eel larvae in relation to North Atlantic Ocean current systems. *Dana* 4: 67-92.

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- Power, J.H., and J.D. McCleave. 1980. Riverine movements of hatchery reared Atlantic salmon (*Salmo salar*) upon return as adults. *Env. Biol. Fishes* 5: 3-13.
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- McCleave, J.D., and J.H. Power. 1978. Influence of weak electric and magnetic fields on turning behavior in elvers of the American eel *Anguilla rostrata*. *Mar. Biol.* 46: 29-34.
- McCleave, J.D. 1978. Rhythmic aspects of estuarine migration of hatchery reared Atlantic salmon (*Salmo salar*) smolts. *J. Fish Biol.* 12: 559-570.
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- McCleave, J.D., J.H. Dearborn, and H.H. DeWitt. 1977. Ecology of benthic fishes and echinoderms along the Scotia Arc and Antarctic Peninsula. *Antarctic J.* 12: 19-20.
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- McCleave, J.D., S.M. Fried, and A.K. Towt. 1977. Daily movements of shortnose sturgeon, *Acipenser brevirostrum*, in a Maine estuary. *Copeia* 1977: 149-157.

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- Fried, S.M., J.D. McCleave, and K.A. Stred. 1976. Buoyancy compensation by Atlantic salmon (*Salmo salar*) smolts tagged internally with dummy ultrasonic telemetry transmitters. J. Fish. Res. Board Can. 33: 1377-1380.
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- McCleave, J.D., and K.A. Stred. 1975. Effect of dummy telemetry transmitters on stamina of Atlantic salmon (*Salmo salar*) smolts. J. Fish. Res. Board Can. 32: 559-563.
- Zimmerman, M.A., and J.D. McCleave. 1975. Orientation of elvers of American eels (*Anguilla rostrata*) in weak magnetic and electric fields. Helgoländer wiss. Meeresunters. 27: 175-189.
- McCleave, J.D., and S.M. Fried. 1975. Nighttime use by fishes of a tidal cove in Montsweag Bay near Wiscasset, Maine. Trans. Am. Fish. Soc. 104: 30-34.
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- Targett, T.E., and J.D. McCleave. 1974. Summer abundance of fishes in a Maine tidal cove with special reference to temperature. Trans. Am. Fish. Soc. 103: 325-330.
- Richardson, N.E., and J.D. McCleave. 1974. Locomotor activity patterns of juvenile Atlantic salmon in various light conditions. Biol. Bull. 147: 422-432.
- McCleave, J.D., K. Stred, and E. Albert. 1974. Effect of reinforcement schedule and unconditioned stimulus on classical cardiac conditioning in American eels (*Anguilla rostrata*). J. Fish. Res. Board Can. 31: 1254-1258.
- McCleave, J.D., and S.M. Fried. 1974. Three unusual shortnose sturgeons (*Acipenser brevirostrum*) from Montsweag Bay, Maine. Can. Field Nat. 88: 359-360.
- Fried, S.M., and J.D. McCleave. 1973. Occurrence of the shortnose sturgeon (*Acipenser brevirostrum*), an endangered species, in Montsweag Bay, Maine. J. Fish. Res. Board Can. 30: 563-564.
- Rommel, S.A., Jr., and J.D. McCleave. 1973. Prediction of oceanic electric fields in relation to fish migration. J. Cons. int. Explor. Mer 35: 27-31.
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- Recksiek, C.W., and J.D. McCleave. 1973. Distribution of pelagic fishes in the Sheepscot River - Back River Estuary, Wiscasset, Maine. Trans. Am. Fish. Soc. 102: 541-551.
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