Paul W. Webb_____

Curriculum Vitae

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The University of Michigan
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Education

B. Sc. (first class honours, Zoology)	1967
Ph.D. (Zoology)	1971
University of Bristol, Bristol, England	

Professional Experience

July 2010 to present	Director, the Program in the Environment,
September 2001 to June 2010.	Associate Director, the Program in the Environment,
September 2002 to present.	Professor of Ecology and Evolutionary Biology, Professor of Natural Resources and Environment, Professor of the Environment.
January to May 2003.	Interim Director, University of Michigan Biological Station.
January 2002 to May 2002.	Visiting Scientist, Centre for Fisheries, Environment, and Food (CEFAS), Fisheries Laboratory, Pakefield Road, Lowestoft, Suffolk, NR33 0HT, England.
May 2001 to present.	Professor of Ecology and evolutionary Biology, Professor of Natural Resources and Environment.
May 1985 to 2001.	Professor of Biology,

	Professor of Natural Resources and Environment.
Summer 1973, 1974, 1989, 1991, 1993 to present	University of Michigan Biological Station: instructor for *Biology and Ecology of Fishes*.
September 1, 1996 to December 31, 1996.	Associate Dean, School of Natural Resources and Environment.
September 1995 to August 1996.	Interim Dean, School of Natural Resources and Environment.
June 1993 to June 1994.	University of Michigan Fellow in the Committee on Institutional Cooperation Academic Leadership Program.
September 1989 to August 1990.	Visiting Scientist, Ministry of Agriculture, Fisheries and Food (MAFF), Directorate of Fisheries Research, Fisheries Laboratory, Pakefield Road, Lowestoft, Suffolk, NR33 0HT, England.
May 1980 to May 1985	Professor of Natural Resources
May 1976 to May 1980	Associate Professor of Natural Resources.
August 1979 to August 1980	Senior Research Associate, National Marine Fisheries Service, Southwest Fisheries Center, and Postdoctoral Scholar, Scripps Institution of Oceanography, La Jolla, California
December 1972 to May 1976	The University of Michigan, Assistant Professor of Natural Resources
October 1970 to November 1972	National Research Council of Canada, Postdoctoral Fellowship, Fisheries Research Board of Canada, Pacific Biological Station, Nanaimo, B.C., Canada.
October 1967 to October 1970	Scientific Research Council of United Kingdom, Doctoral Student Fellowship, University of Bristol, Department of Zoology, Bristol, England.

Administrative Experience
Within the School of Natural Resources and Environment

Service on committees within the School of Natural Resources and Environment concerned with most aspects of academic programs, and the following major committees:

2007-2009	Promotion and Tenure Committee
2004-2005	MS Program Review Committee.
September to December 1996.	Associate Dean
September 1995 to	Interim Dean

August 1996.

1985-1987	Promotion and Tenure Committee
1982-1983	Transition Team re-organizing the School of Natural Resources after review

Within Department of Ecology and Evolutionary Biology

2006-2007	Committee on revising the Introductory Biology sequence
2004- 2008	Curriculum Committee.
2000-2001	Qualifying Exam Committee.
1994-1996	Qualifying Exam Committee (Chair in 1996).
1991-1994	Executive Committee.
1988-1991	Leader of Organismic Biology group.
Various	Search committees in ichthyology, functional morphology and physiology.

Within University of Michigan

2010 to present	Water Theme Semester Steering Committee
2006-2007	Life Sciences Curriculum Committee
2006-present	Undergraduate Science Building Governance Committee
2006-present	Matthaei Botanical Gardens Academic Advisory Committee
2006	Student Advising Workshop
2002-present	Associate Director, Program in the Environment.
2002-present	UMBS Executive Committee
2001-2002	UMBS Director Search Committee.
2000-2001	Curriculum Planning Committee for the Program in the Environment.
1999-2001	Undergraduate Mentor.
2000	Orientation Speaker, Office of New Student Programs.
1996-1998	Faculty Steering Committee, the Theme Semester in the Environment.
1995	Task Force on First Year Experience.
1992-1994	Provosts Advisory Committee on University Budget.
1992 to present	Undergraduate Mentorship Program.
1991-1992	Budget Priorities Committee.
1989-1993	University Committee on the Use and Care of Animals.
1986-1989	Executive Committee, University of Michigan Research Club.
1985-1987	Great Lakes and Marine Water Center Executive Committee.
1985-1986	President, University of Michigan Research Club.
1982-1986	Rackham School of Graduate Studies Executive Board.
1976-1977	Rackham School of Graduate Studies Divisional Board (Biological and Health Sciences).

Continued to work with Dr. Malcolm Gordon's group at UCLA/CalTech on biomechanics of locomotion. See papers by Bartol et al in answers to question 1 above.

Wrote concept outline for Office of Naval research on aquatic vertebrate maneuverability. The results "Webb, P. W. (2002). Maneuverability – definitions and general issues. In Biology-inspired maneuvering hydrodynamics for AUV application (ed. F. E. Fish). Office of Naval Research." Is being considered for an edited book.

Other Experience

1996-2003	Les Cheneaux Economic Forum, Natural Resources group, contributor.
2003	Facilitator: Restore the Greatness: Great Lakes Workshop.
1995	Participant in Academic Leadership Project prioritizing Executive and Lifelong Learning needs for employed of Government Agencies.
1993-1994	University of Michigan Fellow in the Committee on Institutional Cooperation Academic Leadership Program.

Consulting

2008	University of Ohio, Athens. External evaluator for Environmental Studies Program.
2003	Office of Naval Research, Biology-inspired Maneuvering Hydrodynamics for AUV Application from Aquatic Vertebrates.
1995-2003	University of California, Los Angeles, Department of Biology, Dr. Malcolm Gordon (with Dr. D. Weihs, Technion, Israel). Mechanics and physiology of median and paired fin swimmers.
1990-91	Shedd Aquarium, Chicago. Educational materials on swimming for Marine Mammal Display.
1982-83	Keron Productions, Inc. Design of educational software in physiological-ecology.
1981-82	Detroit Edison. Assist design of studies on fish entrainment at cooling water intakes.
1979-80	California Institute of Technology, Department of Engineering Science. Mechanics and energetics of fish swimming.
1987	Phase-7 Ventures, Inc. Fish attraction to scented lures.
1980, 1982, 1994, 1997	US Navy workshops on fish mechanics and swimming performance.

Editorial Boards

2000-2003	Editor, Michigan Department of Natural Resources Research and Technical Reports.
1995-2002	Editorial Advisor for Marine Ecology Progress Series.
1989-1993	Editorial board of the Journal of Experimental Biology.
1989 to 1995	Appointed referee for Marine Ecology Progress Series.
1984 to 1999	Founder member of editorial board for Journal of Fish Physiology and Biochemistry.
1980-1983	Founder member of editorial board for the Canadian Journal of Fisheries and Aquatic Sciences.

Scientific Societies

American Association for the Advancement of Science (elected fellow May 1983)
American Fisheries Society
American Institute of Biological Sciences
Canadian Society of Zoologists
Ecological Society of America
Society for Experimental Biologists
Society for Integrative and Comparative Biology (formerly the American Society of Zoologists)
University of Michigan Research Club (life member).

Formal Classes Taught

Undergraduate Classes:
- Introduction to Animal Physiology (co-taught with various instructors).
- Ecological Issues.
- Animal Physiological Ecology.
- Homeplace: Life in the Huron River Valley (co-taught with John Knott, English, and Jim Walker, Engineering).
- Comparative Vertebrate Morphology (co-taught with Carl Gans).

Undergraduate/Graduate Classes
- Biology of Fishes.
- Biology and Ecology of Fishes (at the University of Michigan Biological Station).
- Physiological-Ecology of Fishes.

Graduate Classes
- Seminar on Sustainability (with Bunyan Bryant).
- Research Paradigms.
- Ecological Management (co-taught with various instructors)

Publications

Papers

1. Webb, P. W. 1971a. The swimming energetics of trout. I) Thrust and power output at cruising speeds. J. Exp. Biol. *55*; 489-520.

2. Webb, P. W. 1971b. The swimming energetics of trout. II) Oxygen consumption and swimming efficiency. J. Exp. Biol. *55*; 521-540.

3. Webb, P. W. and J. R. Brett. 1972a. Respiratory adaptations of prenatal young in the ovary of two species of viviparous seaperch, *Rhacochilus vacca* and *Embiotoca lateralis*. J. Fish. Res. Bd Canada *29*; 1525-1542.

4. Webb, P. W. and J. R. Brett. 1972b. Oxygen consumption of embryos and parents, and oxygen transfer characteristics within the ovary of two species of viviparous seaperch, *Rhacochilus vacca* and *Embiotoca lateralis*. J. Fish. Res. Bd Canada *29*; 1543-1553.
Reprinted (1979) p. 406-418 in *Readings in Ichthyology*. (Eds. M. S. Love and G. M. Cailliet). Goodyear, Santa Monica, CA.

5. Webb, P. W. and J. R. Brett. 1972c. The effects of sublethal concentrations of whole bleached kraftmill effluent on the growth and food conversion efficiency of underyearling sockeye salmon (*Oncorhynchus nerka*). J. Fish. Res. Bd Canada *29*; 1555-1563.

6. Webb, P. W. and J. R. Brett. 1973. Effects of sublethal concentrations of sodium pentachlorophenate on growth rate, food conversion efficiency and swimming performance in underyearling sockeye salmon (*Oncorhynchus nerka*). J. Fish. Res. Bd Canada *30*; 499-507.

7. Webb, P. W. 1973a. Effects of partial caudal-fin amputation on the kinematics and metabolic rate of underyearling sockeye salmon (*Oncorhynchus nerka*) at steady swimming speeds. J. Exp. Biol. *59*;565-581.

8. Webb, P. W. 1973b. Kinematics of pectoral-fin propulsion in *Cymatogaster aggregata*. J. Exp. Biol. *59*; 697-710.

9. Webb, P. W. 1974. Pisces (Zoology). Bioenergetics. p. 333-336 in *McGraw-Hill Encyclopedia of Science and Technology Year Book 1974*. (Ed. D. N. Lapedes). McGraw-Hill, New York, N.Y.

10. Webb, P. W. 1975a. Synchrony of locomotion and ventilation in *Cymatogaster aggregata*. Can. J. Zool. *53*; 904-907.

11. Webb, P. W. 1975b. Efficiency of pectoral-fin propulsion in *Cymatogaster aggregata*. p. 573-583 in *Swimming and Flying in Nature*, Vol. 2. (Eds. T. Y. Wu, C. J. Brokaw and C. Brennan). Plenum Press, New York, N.Y.

12. Webb, P. W. 1975c. Acceleration performance of rainbow trout, *Salmo gairdneri*, and green sunfish, *Lepomis cyanellus*. J. Exp. Biol. *63*;451-465.

13. Webb, P. W. 1976. The effect of size on the fast-start performance of rainbow trout (*Salmo gairdneri* Richardson) and a consideration of piscivorous predator-prey interactions. J. Exp. Biol. *65*; 157-177.

14. Webb, P. W. 1977a. Effects of size on performance and energetics of fish. p. 315-331 in *Scale Effects in Animal Locomotion* (ed. T. J. Pedley). Academic Press, New York, N.Y.

15. Webb, P. W. 1977b. Effects of median-fin amputation on fast-start performance of rainbow trout (*Salmo gairdneri*). J. Exp. Biol. *68*;123-125.

16. Webb, P. W. 1978a. Partitioning of energy into metabolism and growth. p. 184-214. In *Ecology of Freshwater Fish Production* (ed. S. D. Gerking). Blackwell Scientific Publ., Cambridge, England.

17. Webb, P. W. 1978b. Fast-start performance and body form in seven species of teleost fish. J. Exp. Biol. *74*; 211-226.

18. Webb, P. W. 1978c. Temperature effects on acceleration of rainbow trout (*Salmo gairdneri*). J. Fish. Res. Bd Canada *35*; 1417-1422.

19. Webb, P. W. 1978d. Hydrodynamics; non-scrombroid fish. p. 189-237 in *Fish Physiology*, Vol. 7 (ed. W. S. Hoar and D. J. Randall). Academic Press, New York, N.Y.

20. Webb, P. W. 1979. Mechanics of escape responses in crayfish (*Orconectes virilis*, Hagen). J. Exp. Biol. *79*; 245-263.

21. Webb, P. W. and J. M. Skadsen. 1979. Reduced skin mass: An adaptation for acceleration in some teleost fishes. Can. J. Zool. *57*; 1570-1575.

22. Webb, P. W. 1980a. Does schooling reduce fast-start response latencies in teleosts? Comp. Biochem. Physiol. *65A*; 231-234.

23. Webb, P. W. 1980b. Fast-start performance and strike tactics of fish. U.S. Navy Tech. Rep. NOSC Bioscience Dept., San Diego, CA p. 272-299.

24. Webb, P. W. and J. M. Skadsen. 1980. Strike tactics of *Esox*. Can. J. Zool. *58*; 1462-1469.

25. Webb, P. W. and G. R. Smith. 1980. Function of the caudal fin in early fishes. Copeia *1980*; 559-562.

26. Skadsen, J. M., P. W. Webb and P. T. Kostecki. 1980. Measurement of sublethal metabolic stress in rainbow trout (*Salmo gairdneri*) using automated respirometry. J. Environ. Sci. Health B. *15*; 193-206.

27. Webb, P. W. 1981a. The effect of the bottom on the fast-start of a flatfish, *Citharichthys stigmaeus*. Fish. Bull. (U.S.) *79*; 271-276.

28. Webb, P. W. 1981b. Responses of northern anchovy, *Engraulis mordax*, larvae to predation by a biting planktivore, *Amphiprion percula*. Fish. Bull. (U.S.) *79*; 727-735.

29. Webb, P. W. and R. T. Carolla. 1981. Burst swimming performance of northern anchovy, *Engraulis mordax*, larvae. Fish. Bull. (U.S.) *79*; 143-150.

30. Webb, P. W. and R. S. Keyes. 1981. Division of labor between median fins in swimming dolphin fish. Copeia *1981*; 901-904.

31. Webb, P. W. 1982a. Locomotor patterns in the evolution of actinopterygian fishes. Amer. Zool. *22*; 329-342.

32. Webb, P. W. 1982b. Locomotor patterns in actinopterygian evolution. "In Press With" summary for Bioscience *32*; 338-339.

33. Webb, P. W. 1982c. Fast-start resistance of trout. J. Exp. Biol. *96*;93-106.

34. Webb, P. W. 1982d. Avoidance responses of fathead minnow to strikes by four teleost predators. J. Comp. Physiol. *174A*;371-378.

35. Webb. P. W. and R. S. Keyes. 1982. Swimming kinematics of sharks. Fish. Bull. (U.S.) *80*; 803-812.

36. Webb, P. W. 1983. Speed, acceleration and manoeuverability of two teleost fishes. J. Exp. Biol. *102*; 115-122.

37. Weihs, D. and P. W. Webb. 1983. Optimization of locomotion. In *Fish Biomechanics* (eds. P. W. Webb and D. Weihs), pp. 339-371. Praeger, New York.

38. Webb, P. W. 1984a. Body form, locomotion and foraging in aquatic vertebrates. Amer. Zool. *24*:107-120.

39. Webb, P. W. 1984b. Body and fin form and strike tactics of four teleost predators attacking fathead minnow prey. Can. J. Fish. Aquat. Sci. *41*:157-165.

40. Webb, P. W. 1984c. Form and function in fish swimming. Scient. Amer. *251*:72-82.

41. Weihs, D. and P. W. Webb. 1984. Optimal avoidance and evasion tactics in predator-prey interactions. J. Theor. Biol. *106*:189-206.

42. Webb, P. W., P. T. Kostecki and E. D. Stevens. 1984. The effect of size and swimming speed on locomotor kinematics of rainbow trout. J. Exp. Biol. *109*:77-95.

43. Webb, P. W. 1984. Chase response latencies of some teleostean piscivores. Comp. Biochem. Physiol. *79A*:45-48

44. Webb, P. W. 1984. Osteichthyes. In *McGraw-Hill Encyclopedia of Science and Technology Year Book 1985*. pp. 308-311. McGraw-Hill, New York, N.Y.

45. Webb, P. W. and R. W. Blake. 1985 Swimming. In *Functional Vertebrate Morphology* (eds. M. Hildebrand, D.M. Bramble, K.F. Liem and D.B. Wake. pp.110-128. Harvard University Press.

46. Johnsrude, C.L. and P.W. Webb. 1985. Mechanical properties of the myotomal musculo-skeletal system of rainbow trout (*Salmo gairdneri*). J. Exp. Biol. *119*:71-83.

47. Webb, P.W. 1986a. Locomotion and predator-prey relationships. pp. 24-41. In *Predator-Prey Relationships* (eds. M. E. Feder and G. V. Lauder), Chicago University Press, Chicago, IL.

48. Webb, P.W. 1986b. Effect of body form and response threshold on the vulnerability of four species of teleost prey attacked by largemouth bass. Can. J. Fish. Aquat. Sci. *43*;763-771.

49. Webb, P. W. and Weihs, D. 1986. Functional locomotor morphology of early life history stages of fishes. Trans. Amer. Fish. Soc. *115*:115-127.

50. Webb, P. W. 1986. Kinematics of lake sturgeon, *Acipenser fulvescens*, at cruising speeds. Can. J. Zool. *64*; 2137-2141.

51. Daniel, T. L. and Webb, P. W. 1987. Physics, design and locomotor performance. p. 343-369 in *Comparative Physiology: Life in Water and on Land* (eds. P. Dejours, L. Bolis, C. R. Taylor and E. R. Weibel), Liviana Press, Springer-Verlag, NY.

52. Fuiman, L. A. and Webb, P. W. 1988. Ontogeny of routine swimming activity and performance in zebra danios (Teleostei:Cyprinidae). Anim. Behav. *36*;250-261.

53. Webb, P. W. 1988. Simple physical principles and vertebrate aquatic locomotion. Amer. Zool. *28*;709-725.

54. Webb, P. W. and Johnsrude, C. L. 1988. The effect of size on the mechanical properties of the myotomal-skeletal system of rainbow trout (*Salmo gairdneri*). Fish Physiol. Biochem. *5*;163-171.

55. Webb, P. W. 1988. "Steady" swimming kinematics of tiger musky, an esociform accelerator, and rainbow trout, a generalist cruiser. J. Exp. Biol. *138*;51-69.

56. Webb, P. W. (1989). Station-holding by three species of benthic fishes. J. exp. Biol. 145;303-320.

57. Metcalfe, J. D., Arnold, G. P. and Webb, P. W. (1990). The energetics of migration by selective tidal stream transport: An analysis for plaice tracked in the southern North Sea. J. Mar. Biol. Ass. U.K. 70;149-162.

58. Webb, P. W. (1990). How does benthic living affect body volume, tissue composition, and density of fishes? Can. J. Zool. 68;1250-1255.

59. Webb, P. W. and V. V. de Buffrénil. (1990). Locomotion in the biology of large aquatic vertebrates. Trans. Amer. Fish. Soc. 119;629-641.

60. Webb, P. W. (1991). The composition and mechanics of routine swimming. Can. J. Fish. Aquat. Sci. 48;583-590.

61. Webb, P. W., Sims, D., and Schultz, W. W. (1991). The effect of an air/water interface on the fast-start performance of rainbow trout (*Oncorhynchus mykiss*). J. exp. Biol. 155;219-226.

62. Arnold, G. P., Webb, P. W. and Holford, B. H. (1991). The role of the pectoral fins in station-holding of Atlantic salmon parr (*Salmo salar* L.). J. exp. Biol. 156;625-629.

63. Webb, P. W. (1992). Is the high cost of body/caudal fin undulatory propulsion due to increased friction drag? J. exp. Biol. 162;157-166.

64. Webb. P. W., Hardy, D. H. and Mehl, V. L. (1992). The effect of armored skin on the swimming of longnose gar, *Lepisosteus osseus*. Can. J. Zool. 70;1173-1179.

65. Webb, P. W. (1993). Swimming. In *The Physiology of Fishes* (Ed. D.D. Evans). pp. 47-73. CRC Press, Marine Science Series, Boca Raton, FL.

66. Webb, P. W. (1993). The effect of solid and porous channel walls on steady swimming of steelhead trout, *Oncorhynchus mykiss*. J. exp. Biol. 178;97-108.

67. Webb, P. W. (1993). Is tilting at low swimming speeds unique to negatively buoyant fish? Observations on steelhead trout, *Oncorhynchus mykiss*, and bluegill, *Lepomis macrochirus.* J. Fish. Biol. 43;687-694.

68. Webb, P. W. Exercise performance of fish. (1994). In *Advances in Veterinary Science and Comparative Medicine* (ed. J.H. Jones), 38B; p. 1-49. Academic Press, Orlando.

69. Webb, P. W. and Zhang, H. (1994). The relationship between responsiveness and elusiveness of heat-shocked goldfish (*Carassius auratus*) to attacks by rainbow trout (*Oncorhynchus mykiss*). Can. J. Zool. 72;423-426.

70. Webb, P. W. (1994). The biology of fish swimming. In *Mechanics and Physiology of Animal Swimming*, (eds L. Maddock, Q. Bone, and J.M.V. Rayner), pp. 45-62. Cambridge University Press, Cambridge, UK.

71. Webb, P. W. and Weihs, D. (1994). Hydrostatic stability of fish with swimbladders: Not all fish are unstable. Can. J. Zool. 72;1149-1154.

72. Webb, P. W. (1995). Locomotion. *In* C. Groot, L. Margolis and W. C. Clark (eds), pp. 70-99. Physiological-Ecology of Pacific Salmon. UBC Press, Vancouver.

73. Webb, P. W., LaLiberte, G. D. and Schrank, A. J. (1996). Does body and fin form affect the maneuverability of fish traversing vertical and horizontal slits? Environ. Biol. Fish. 46;7-14.

74. Webb, P. W, Gerstner, C. L. and Minton, S. T. (1996). Station holding by the mottled sculpin, *Cottus bairdi* (Teleostei: Cottidae), and other fishes. Copeia 1996;488-493.

75. Gans, C., Gaunt, A. S. and Webb, P. W. (1997). Vertebrate Locomotion. In Handbook of Physiology (Ed. W. H. Dantzler), pp. 55-213. American Physiological Society, Oxford University Press, Oxford, UK.

76. Webb, P. W. (1997) Designs for Stability and Maneuverability in Aquatic Vertebrates: What can we learn? Proceedings of the Tenth International Symposium on Unmanned Untethered Submersible Technology, pp. 86-108, Autonomous Undersea Systems Institute, Lee, NH.

77. Webb, P. W. (1997). Swimming. In *The Physiology of Fishes*, 2nd. edition, (Ed. D. H. Evans). pp. 3-24. CRC Press, Marine Science Series, Boca Raton, FL.

78. Gerstner, C. L. and Webb, P. W. (1998). The station-holding performance of the plaice *Pleuronectes platessa* on artificial substratum ripples. Can. J. Zool. 76;260-268.

79. Webb, P. W. (1998). Entrainment by river chub, *Nocomis micropogon*, and smallmouth bass, *Micropterus dolomieu*, on cylinders. J. exp. biol. 201;2403-2412.

80. Schrank, A. J. and Webb, P. W. (1998). Do body and fin form affect the abilities of fish to stabilize swimming during maneuvers through vertical and horizontal tubes? Environ. Biol. Fishes. 53;365-371.

81. Schrank, A. J., Webb, P. W. and Mayberry, S. (1999). How do body and paired-fin positions affect the ability of three teleost fishes to maneuver around bends? Can. J. Zool. 77;203-210.

82. Webb, P. W. and Gerstner, C. L. (2000). Swimming behaviour: predictions from biomechanical principles. In *Biomechanics in Animal Behaviour* (P. Domenici and R. W. Blake, eds), pp. 59-77. Bios Scientific Publishers Ltd., Oxford.

83. Webb, P. W. (2000). Maneuverability versus stability? Do fish perform well in both? Proc. 1st International Symposium on Aqua Bio-Mechanisms/ International Seminar on Aqua Bio-Mechanisms (ISABMEC 2000), August, Tokai University Pacific Center, Honolulu, Hawaii.

84. Hove, J. R., Gordon, M. S., Webb, P. W. and Weihs D. (2000). A modified Blazka-type respirometer for the study of swimming metabolism in fishes having deep, laterally compressed bodies or unusual locomotor modes. J. Fish. Biol. 56;1017-1022

85. Webb, P. W. and Gardiner Fairchild, A. (2001). Performance and maneuverability of three species of teleostean fishes. Can. J. Zool. 79;1866-1877.

86. Gordon, M. S., Hove, J. R., Webb, P. W. and Weihs, D. (2001). Boxfishes as unusually well controlled autonomous underwater vehicles. Physiol. Biochem. Zool. 73;663-671. http://www.journals.uchicago.edu/PBZ/journal/issues/v73n6/000112/000112.web.pdf

87. Hove, J. R., O'Bryan, L. M., Gordon, M. S., Webb, P. W. and Weihs, D. (2001). Boxfishes (Teleostie: Ostraciidae) as a model system for fishes swimming with many fins: I. Kinematics. J. exp. Biol. 204; 1459-1471. http://www.biologists.com/serve.cgi?JEB/204/08/jeb3190.pdf

88. Höök, T. O., Eagan, N. M., and Webb, P. W. (2001). Habitat and human influences on larval fish assemblages in Northern Lake Huron coastal marsh bays. Wetlands 21;281–291. http://www.bioone.org/bioone/?request=get-document&issn=0277-5212&volume=021&issue=02&page=0281

89. Webb, P. W. (2002). Kinematics of plaice, *Pleuronectes platessa*, and cod, *Gadus morhua*, swimming near the bottom. J. exp. Biol. 205; 2125-2134. http://jeb.biologists.org/cgi/reprint/205/14/2125.pdf

90. Webb, P. W. (2002). Control of posture, depth, and swimming trajectories of fishes. Integ. Comp. Biol. 42;94-101. http://www.bioone.org/pdfserv/i1540-7063-042-01-0094.pdf

91. Eidietis, L., Forrester, T. L. and Webb, P. W. (2002). Relative abilities to correct rolling disturbances of three morphologically different fish. Can. J. Zool. 80;2156-2163.

92. Bartol, I. K., Gordon, M. S., Gharib, M., Hove, J. R., Webb, P. W. and Weihs, D. (2002). Flow patterns around the carapaces of rigid-bodied, multi-propulsor boxfishes (Teleostei: Ostraciidae). Integ. Comp. Biol. 42;971–980. http://www.bioone.org/bioone/?request=get-abstract&issn=1540-7063&volume=042&issue=05&page=0971

93. Schultz, W. W and Webb, P. W. (2002). Power requirements of swimming: Do new methods resolve old questions? Integ. Comp. Biol. 42;1018–1025. http://www.bioone.org/bioone/?request=get-abstract&issn=1540-7063&volume=042&issue=05&page=1018

94. Webb, P. W. (2002). Maneuverability – General issues. In Biology-inspired Maneuvering Hydrodynamics for AUV Application, F. E. Fish (ed.). Proceedings of the 13th International Symposium on Unmanned Untethered Submersible Technology, pp. B1-B9. Autonomous Undersea Systems Institute, Durham New Hampshire.

95. Diana, J. S., Webb, P. W. and T. Essington. (2003). Growth and appetite of juvenile lake sturgeon *Acipenser fulvescens*. Michigan Dept. Nat. Res. Res. Rept 2063;1-18.

96. Bartol, I. K., Gharib, M., Weihs, D., Webb, P. W., Hove, J. R. and Gordon, M. S. 2003. Hydrodynamic stability of swimming in ostraciid fishes: role of the carapace in the smooth trunkfish *Lactophrys triqueter* (Teleostei: Ostraciidae). J. exp. Biol. 2003 206: 725-744. http://jeb.biologists.org/cgi/reprint/206/4/725.pdf

97. Webb, P. W. 2004. Response latencies to postural disturbances in three species of teleostean fishes. J. exp. Biol. 207: 955-961. http://jeb.biologists.org/cgi/reprint/207/6/955.pdf

98. Cotel, A. J. and Webb, P. W. 2004. Why won't fish wobble? Proc. 17th ASCE Engineering Mechanics Conference, June 13-16, 2004, University of Delaware.

99. Webb, P. W. 2004. Maneuverability – General Issues. IEEE J. Ocean. Engin. 29;547-555.

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Outreach Activities

1. Monitoring Marsh Fishes of Les Cheneaux: Instructions for Monitoring Marsh Fishes and Calculation of an Index of Biotic Integrity. Provided to The Nature Conservancy, December 1999.

2. http://www.snre.umich.edu/~pwebb/LesChen/lchome.html (Results of analysis of human develoment impacts in Les Cheneaux, to be accessible to the community).