

Leslie Edward Watling

Present Address: Darling Marine Center, University of Maine, Walpole, Maine 04573
Phone: 207-563-3146 FAX:207-563-3119 e-mail: Watling@maine.edu

Date and Place of Birth: 13 October 1945; Calgary, Alberta, Canada

Citizenship: Canadian (possess U.S. Permanent Immigrant Visa)

Education:

B.Sc., Zoology, University of Calgary, 1965
M.S., Marine Science, University of the Pacific, 1969
Ph.D., Marine Studies, University of Delaware, 1974

Professional Experience:

Museum Curator, University of the Pacific, 1965-67
Research Assistant, University of the Pacific, 1967-68
Resident Research Biologist, University of Delaware, 1968-1970, 1971-72, 1974-76
Assistant Professor, Dept. of Oceanography, University of Maine, 1976-80
Associate Professor, Dept. of Oceanography, University of Maine, 1980-91
Acting Chairman, Dept. of Oceanography, University of Maine, 1980-81
Associate Editor, *Journal of Crustacean Biology*, 1980-81
Member, Governing Board, The Crustacean Society, 1980-84
Member, Editorial Board, *Proc. National Shellfisheries Association*, 1988-
Director, Darling Marine Center, University Maine, 1985-1990
Professor, Dept. of Oceanography, 1991-
President-Elect and President, The Crustacean Society, 1992-1993, 1994-1995
Member, National Research Council Committee on Marine Biodiversity, 1994

Teaching Experience

University of the Pacific, Teaching Assistant for Advanced Invertebrate Zoology
University of Delaware, Teaching Assistant for Introduction to Marine Biology
Decapoda--A short course, Summer 1978
University of Maine, have taught the following courses:
Biological Oceanography Marine Invertebrate Zoology
Anatomy and Phylogeny of Crustacea Biology of Decapods
Ecology of Marine Sediment Dwellers Deep-Sea Biology
Interpretation of Biostatistics Analytical Marine Biogeography

Awards and Honors:

Pacific Marine Station Fellowship, 1965-66, 1966-67
National Science Foundation Stipend for Summer Institute in Systematics, Smithsonian Institution,
June 1971
Smithsonian Senior Postdoctoral Fellowship, January to May, 1990.
Best Paper Award, *Journal of Crustacean Biology*, for volumes 10 and 11 (1992-93).
Pew Fellow in Marine Conservation, 1998-2001
Spilocuma watlingi Omholt and Heard (cumacean), *Gnathiphimedia watlingi* Coleman and *Phippsiella*
watlingi Berge, Vader & DeBroyer, (amphipods), and *Hydroniscus watlingi* George (isopod), named in my honor.

Memberships:

Society of Systematic Biologists	Biological Society of Washington
The Crustacean Society	Ecological Society of America
The Estuarine Research Federation	American Society of Zoologists
Society of Sigma Xi	Amer. Assoc. Zool. Nomenclature
Palaeontological Assoc.	The Classification Society of N. America
Amer. Soc. Limnologists and Oceanographers	

Graduate Students:

1. Smith, R.D. 1977. The feeding habits of the sand dollar, *Echinarachnius parma* (Lamarck). M.S.
2. Field, B.R. 1978. Structural analysis of fouling community development in the Damariscotta River estuary, Maine. M.S.
3. Holman, H. 1980. The micromorphology of the amphipod genus *Gammarus* and its systematic implications. M.S.
4. Rahaim, P. 1980. Temporal and spatial variations in the distribution of organic matter on an intertidal mudflat. M.S.
5. Arbuckle, J. 1982. Effects of disturbance on the macrofauna of a mudflat community in eastern Maine. M.S.
6. Messier, D. 1982. A comparative study of benthic community structure in the Saco and Kennebec River estuaries, Maine. M.S.
7. Shaw, D.V. 1983. The effect of decomposing macro-algae on the distribution of nematodes and harpacticoid copepods. M.S.
8. Gonzalez, F. 1984. Selection of sediment particles by intertidal deposit-feeders. M.S.
9. Hillyard, A. 1986. Microspatial distribution of the smaller intertidal macrofauna. Ph.D.
10. Packer, D. 1988. Community structure of macrobenthic fauna at an offshore Gulf of Maine site, with population structure analysis of the ophiuroid *Ophiura sarsi* and its trophic relationship to American plaice (*Hippoglossoides platessoides*). M.S. Thesis, University of Maine.
11. Ward, K. 1988. Annual production, population structure, and biomass of some deep-water benthic polychaetes from the Gulf of Maine. M.S.
12. Morrison, M. 1993. Life history and secondary productivity of *Unciola inermis* (Crustacea, Amphipoda). M.S.
13. McLeod, I. 1994. Release of lead by digestive juices of two polychaetes. M.S.
14. Sampson, S. 1995. Comparative anatomy of amphipod digestive systems. Ph.D.
15. Bethune, D., 1995. Life history and production of the gammaridean amphipod *Ampelisca agassizi*. M.S.
16. Chavez, S., 1997. Microgeography of tidal flat macrofauna and the intertidal habitat characterization of the Damariscotta River estuary, Maine. M.S.
17. Thiel, M., 1997. Extended parental care in estuarine amphipods. Ph.D.
18. Eckhardt, A., 1999. Effects of mobile fishing gear on boulder faunas in the Gulf of Maine. M.S.
19. Sparks-McConkey, P., 2000. Effects of shrimp trawling on the macrofauna of muddy sediments. M.S.
20. Gerken, S., 2000. The cumacean Family Gynodiastylidae. Ph.D.
21. Gonzalez, E., 2001. A revision of South American species of the amphipod genus *Hyaella*. Ph.D.
22. Haye, P., 2002. Molecular phylogeny of cumacean families. Ph.D.
23. Simpson, A., 2003. Effects of fishing gear on a deep mud-bottom community. M.S.
24. Grannis, B. 2004. Effects of fishing and cable-laying on Stellwagen Bank. M.S.
25. Atherton, T., 2004. non-thesis EES degree.
26. Knight, E. 2005. Recovery of gravel bottom communities after cessation of trawling. M.S.
27. Simpson, A. in progress. Reproductive morphology of deep water octocorals. Ph.D.
28. Mosher, C. in progress. Ophiuroids associated with deep water octocorals. M.S.
29. Nenadovic, M. in progress. Impact of Trawling on the Benthic Macrofaunal of Stellwagen Bank National Marine Sanctuary. M.S.

Publications

1. Narchi, W. and L. Watling. 1968. Range extension of *Branchiostoma californiense* Cooper in Tomales Bay. *Wasmann J. Biol.* 13:121-123.
2. Watling, L. 1970. Two new species of Cytherinae (Ostracoda) from Central California. *Crustaceana* 19:251-263.
3. Maurer, D., L. Watling, & R. Keck. 1971. The Delaware oyster industry: a reality? *Trans. Amer. Fish. Soc.* 100:100-111.
4. Watling, L., & D. Maurer. 1972. Marine shallow water amphipods of the Delaware Bay area, U.S.A. *Crustaceana*, Suppl. 3:251-266.
5. Watling, L. 1972. Jellyfish regular visitors to Delaware shores. *Mar. Advisory Bulletin* 2, University of Delaware, 4p.
6. Watling, L., & D. Maurer. 1972. Marine shallow water hydroids of the Delaware Bay region. *J. Nat. Hist.* 6:643-649.
7. Watling, L. 1972. A new species of *Acetabulastoma* Shornikov from Central California with a review of the genus. *Proc. Biol. Soc. Wash.* 85:481-488.
8. Watling, L., & D. Maurer. 1973. Guide to the macroscopic estuarine and marine invertebrates of the Delaware Bay region. *Delaware Bay Report Series*, Vol. 5, pp. 1-176, University of Delaware.
9. Keck, R., D. Maurer & L. Watling. 1973. Tidal stream development and its effect on the distribution of the American oyster. *Hydrobiol.* 42:369-373.
10. Maurer, D., & L. Watling. 1973. Studies on the oyster community of Delaware: the effects of the estuarine environment on the associated fauna. *Int. Rev. ges. Hydrobiol.* 58:161-201.
11. Watling, L. & D. Maurer. 1973. A new euryhaline species of *Parapleustes* (Amphipoda) from the east coast of North America. *Proc. Biol. Soc. Washington* 86:1-8.
12. Maurer, D., L. Watling, & G. Aprill. 1974. The distribution and ecology of common marine and estuarine pelecypods in the Delaware Bay area. *Nautilus* 88:38-45.
13. Watling, L., J. Lindsay, R. Smith, & D. Maurer. 1974. The distribution of Isopoda from the Delaware Bay region. *Int. Rev. ges. Hydrobiol.* 59:343-351.
14. Watling, L., W. Leathem, P. Kinner, C. Wethe, & D. Maurer. 1974. An evaluation of sewage sludge dumping on the benthos off Delaware Bay. *Mar. Poll. Bull.* 5:39-42.
15. Watling, L., & D. Maurer. 1974. An evaluation of the mid-Atlantic Bight inner continental shelf benthic assemblages. pp. 319-337, In: *Marine Environmental Implications of Offshore Oil and Gas Development in the Baltimore Canyon Region of the Mid-Atlantic Coast*. *Proc. Conference and Workshop*. Bureau of Land Management.
16. Watling, L. 1975. Analysis of structural variations in a shallow estuarine deposit-feeding community. *J. exp. mar. Biol. Ecol.* 19:275- 313.
17. Watling, L. & D. Maurer. 1975. *Chiridotaea stenops* Menzies and Frankenburg, a juvenile of *C. arenicola* Wigley (Crustacea: Isopoda). *Proc. Biol. Soc. Wash.* 88:121-126.
18. Watling, L. 1975. Artificial islands: information needs and impact criteria. *Mar. Poll. Bull.* 6:139-142.
19. Watling, L. 1975. *Parametopella inquilinus* n. sp. from Delaware Bay oyster beds. *Proc. Biol. Soc. Wash.* 88:429-432.
20. Maurer, D., P. Kinner, W. Leathem, & L. Watling. 1976. Benthic faunal assemblages off the Delmarva Peninsula. *Est. Coast. Mar. Sci.* 4:163-177.
21. Watling, L. 1977. Two new genera and a new subfamily of Bodotriidae (Crustacea: Cumacea) from eastern North America. *Proc. Biol. Soc. Wash.* 89:593-598.
22. Maurer, D., L. Watling, P. Kinner, W. Leathem, C. Wethe. 1978. Benthic invertebrate assemblages of Delaware Bay. *Mar. Biol.* 45:65-78.
23. Maurer, D., L. Watling, D. Bottom, A. Pembroke. 1978. Seasonal fluctuations of water quality (nutrients and pigments) in lower Delaware Bay. *Hydrobiol.* 60:203-211.
24. Watling, L., P. Kinner, D. Maurer. 1978. The use of species abundance estimates in marine benthic studies. *J. exp. mar. Biol. Ecol.* 35:109- 118.
25. Maurer, D., L. Watling, R. Lambert, A. Pembroke. 1978. Seasonal cycles of zooplankton populations in lower Delaware Bay. *Hydrobiol.* 61:149-160.
26. Watling, L. 1979. Marine fauna and flora of the Northeastern United States: Cumacea. *NMFS CIRC* 423:1-22.
27. Watling, L., D. Bottom, A. Pembroke, D. Maurer. 1979. Seasonal variation in Delaware Bay phytoplankton community structure. *Mar. Biol.* 52:207-215.
28. Watling, L. 1979. Zoogeographic affinities of northeastern North American Gammaridean Amphipoda. *Bull. Biol. Soc. Washington* 3:256-282.

29. Maurer, D., L. Watling, W. Leathem, P. Kinner. 1979. Seasonal changes in feeding types of estuarine benthic invertebrates from Delaware Bay. *J. exp. mar. biol. Ecol.* 36:125-155.
30. Watling, L. & H. Holman. 1980. New Amphipoda from the Southern Ocean with partial revisions of the Acanthonotozomatidae and Paramphithoidae. *Proc. Biol. Soc. Wash.* 93:609-654.
31. Incze, L., R.A. Lutz & L. Watling. 1980. Relationships between effects of environmental temperature and seston on growth and mortality of *Mytilus edulis* in a temperate northern estuary. *Mar. Biol.* 57:147-156.
32. Zimmer, C., T.E. Bowman & L. Watling. 1980. Cumaceans of the American Atlantic Boreal coast region (Crustacea: Peracarida). *Smithsonian Contrib. Zoology* 302:1-29.
33. Watling, L. & H. Holman. 1981. Additional acanthonotozomatid, paramphithoid and stegocephalid Amphipoda from the Southern Ocean. *Proc. Biol. Soc. Wash.* 94:181-227.
34. Watling, L. 1981. An alternative phylogeny of peracarid crustaceans. *J. Crust. biol.* 1:201-210.
35. Anderson, F.E., L. Black, L. Watling, W. Mook & L. Mayer. 1981. A temporal and spatial study of mudflat erosion and deposition. *J. Sed. Petrol.* 51:729-736.
36. Watling L. 1981. Amphipoda from the northwestern Atlantic: the genera *Jerbarnia*, *Epimeria*, and *Harpinia*. *Sarsia* 66:203-211.
37. Holman, H. & L. Watling. 1981. *Pagetina reducta* n. sp. (Crustacea: Amphipoda) with a revision of the Family Pagetinidae. *Sarsia* 66:213-215.
38. Anderson, F.E., L. Black, L. Mayer & L. Watling. 1981. A temporal and spatial study of mudflat texture. *Northeast. Geol.* 3:184-191.
39. Steneck, R.S. & L. Watling. 1982. Feeding capabilities and limitations of herbivorous molluscs: a functional group approach. *Mar. Biol.* 68:299-319.
40. Watling, L. 1982. Cumacea. pp. 243-245. In: S.B. Parker (ed.) *Synopsis and Classification of Living Organisms*. McGraw-Hill.
41. Holman, H. & L. Watling. 1983. A revision of the Stilipedidae (Crustacea: Amphipoda). *Crustaceana* 44:27-53.
42. Watling, L. 1983. Peracaridan dis-unity and its bearing on eumalacostracan phylogeny with a reclassification of eumalacostracan superorders. In: F.R. Schram (ed.) *Crustacean Phylogeny*. *Crustacean Issues* 1:213-228.
43. Holman, H. & L. Watling. 1983. Amphipoda from the Southern Ocean: Families Colomastigidae, Dexaminidae, Leucothoidae, Liljeborgiidae, and Sebidae. *Antarctic Res. Ser.* 38:215-262.
44. Mayer, L., P.T. Rahaim, W. Geurin, S.A. Macko, L. Watling & F. Anderson. 1985. Biological and granulometric controls on sedimentary organic matter of an intertidal mudflat. *Est. Coast. Shelf Sci.* 20:491-503.
45. Watling, L. 1988. Amphipoda. In: R. Higgins & H. Thiel (ed.) *Manual of Meiofauna*. Smithsonian Inst. Press, p. 409-411.
46. Watling, L. 1988. Cumacea. In: R. Higgins & H. Thiel (ed.) *Manual of Meiofauna*. Smithsonian Inst. Press, p. 413-416.
47. Watling, L. 1988. Small-scale features of marine sediment and their importance to the study of deposit-feeding. *Mar. Ecol.-Prog. Ser.* 47:135-144.
48. Watling, L. & O. Breedy. 1988. A new cumacean (Crustacea) genus from beaches of Golfo de Nicoya, Costa Rica. *Rev. Biol. Trop.* 36:527-533.
49. Watling, L. 1989. A classification of crustacean setae based on the homology concept. In: B. Felgenhauer & L. Watling (eds.) *Functional Morphology of Feeding and Grooming in Crustacea*. *Crustacean Issues* 6:15-26.
50. Watling, L. 1989. Small-scale features of marine sediments and their importance to deposit-feeders. In: G. Lopez, G. Taghon & J. Levinton (eds.) *Nutritional Ecology of Marine Deposit Feeders*. *Lecture Notes on Coastal and Estuarine Studies*, Vol. 31. pp. 269-290.
51. Watling, L. & M. Thurston. 1989. Antarctica as an evolutionary incubator: evidence from the cladistic biogeography of the amphipod Family Iphimediidae. In: J.A. Crame (editor), *Origins and evolution of the Antarctic biota*. *Geological Soc. Spec. Publ.* 47:297-313.
52. Findlay, R.H., G.M. King, & L. Watling. 1989. Efficacy of phospholipid analysis in determining microbial biomass in sediments. *Appl. Environ. Microbiol.* 55:2888-2893.
53. Langton, R.W. & L. Watling. 1990. The fish-benthos connection: a definition of prey groups in the Gulf of Maine. In M. Barnes & R. N. Gibson (eds.), *Trophic Relationships in the Marine Environment*, pp. 424- 438. Aberdeen University Press.
54. Watling, L. 1991. Revision and rediagnosis of some Nannastacidae (Crustacea, Cumacea). *Proc. Biological Soc. Washington* 104:751-757.
55. Watling, L. 1991. Revision of the Cumacean Family Leuconidae. *J. Crust. Biol.* 11:569-582.
56. Watling, L. 1991. The sedimentary milieu and its consequences to resident organisms. *Amer. Zool.* 31:789-796.
57. Watling, L. 1992. Holistic pattern analysis as an alternative to pattern cladistics in hypothesizing crustacean phylogenetic sequences. *Acta Zoologica* 73:349-354.

58. Watling, L. 1993. Functional morphology of the amphipod mandible. *J. Nat. Hist.* 27:837-849.
59. Blake, J.A., & L. Watling. 1994. Life history studies of deep-sea benthic infauna: Polychaeta, Aplousobranchia, and Cumacea from the continental slope off Massachusetts. pp. 243-260 In: C.M. Young & K.J. Eckelbarger (eds.) *Reproduction, Larval Biology, and Recruitment of the Deep-Sea Benthos*. Columbia University Press.
60. Packer, D., L. Watling & R. Langton. 1994. The population structure of the brittle star, *Ophiura sarsi*, and its trophic relationship to American plaice (*Hippoglossoides platessoides*). *J. exp. mar. biol. ecol.* 179: 207-222.
61. Mountain, D.G., R.W. Langton & L. Watling. 1994. Oceanographic processes and benthic substrates: influences on demersal fish habitats and benthic communities. pp. 20-25, In: R.W. Langton, J.B. Pearce & J.A. Gibson (eds.) *Selected Living Resources, Habitat Conditions, and Human Perturbations of the Gulf of Maine*. NOAA Technical Memorandum NMFS-NE-106.
62. Findlay, R.H., L. Watling & L.M. Mayer. 1995. Environmental impact of salmon net-pen culture on Maine marine benthic communities: a case study. *Estuaries* 18 (1A):145-179.
63. Watling, L. & J.D. Thomas. 1995. Chapter 1. Introduction to the Amphipoda. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel*. Volume 12, pp. 1-20. Special Publications of the Santa Barbara Museum of Natural History, Santa Barbara, California.
64. Watling, L. 1995. Chapter 3. The Families Ampeliscidae, Amphilochidae, Liljeborgiidae, and Pleustidae. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel*. Volume 12, pp. 137-176. Special Publications of the Santa Barbara Museum of Natural History, Santa Barbara, California.
65. Watling, L. 1995. Chapter 5. The Suborder Caprellidae. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel*. Volume 12, pp. 223-240. Special Publications of the Santa Barbara Museum of Natural History, Santa Barbara, California.
66. Eckelbarger, K.J. & L. Watling. 1995. The role of phylogenetic constraints in determining reproductive patterns in deep-sea invertebrates. *Invertebrate Biology* 1: 256-269.
67. Auster, P.J., R.J. Malatesta, R.W. Langton, L. Watling, P.C. Valentine, C.L. Donaldson, E.W. Langton, A.N. Shepard & I. Babb. 1996. The impacts of mobile fishing gear on seafloor habitats in the Gulf of Maine (Northwest Atlantic): implications for conservation of fish populations. *Reviews in Fishery Science* 4: 185-202.
68. Thiel, M., S. Sampson & L. Watling. 1997. Extended parental care in endobenthic amphipods. *Journal of Natural History* 31: 713-725.
69. Watling, L. & L. McCann. 1997. Cumacea. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel*. Volume 11, The Crustacea Part 2, pp. 121-180. Santa Barbara Museum of Natural History.
70. Gerken, S. L. Watling, I. P. Williams. 1997. Order Mysidacea. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel*. Volume 10, The Crustacea Part 1, pp. 123-142. Santa Barbara Museum of Natural History.
71. Findlay, R.H. & L. Watling. 1997. Seasonal variation in microbial community structure as a backdrop for the detection of anthropogenic stress. Pp. 49-64 In: R.P. Eganhouse (Ed.) *Molecular Markers in Environmental Geochemistry*. American Chemical society, Washington, D.C.
72. Auster, P.J., L. Watling & A. Rieser. 1997. Comment: The interface between fisheries research and habitat management. *North American Journal of Fisheries Science* 17: 591-595.
73. Findlay, R.H. & L. Watling. 1997. Prediction of benthic impact from salmon net-pens based on the balance of benthic oxygen supply and demand. *Marine Ecology Progress Series* 155: 147-157.
74. Watling, L. 1998. On the identity of *Spencebatea abyssicola* (Cumacea), with additional observations on the genera allied to *Procampylaspis*. *Journal of Crustacean Biology* 18: 205-209.
75. Thiel, M., L. Stearns & L. Watling. 1998. Effects of green algal mats on bivalves in a New England mudflat. *Helgoländer Meeresuntersuchungen* 52: 15-28.
76. Thiel, M. & L. Watling. 1998. Effects of green algal mats on infaunal colonization of a New England mud flat – long lasting but highly localized effects. *Hydrobiologia* 375/376: 177-189.
77. Gerken, S. & L. Watling. 1998. *Diastylis tongoyensis*, a new diastylid (Crustacea: Cumacea) from the northern central coast of Chile, with an amendment to the description of *Diastylis crenellata* Watling & McCann 1997. *Proceedings of the Biological Society of Washington* 111:857-874.
78. Findlay, R.H. & L. Watling. 1998. Seasonal variation in the structure of a marine benthic microbial community. *Microbial Ecology* 36: 23-30.
79. Watling, L. & E. Norse. 1998. Disturbance of the seabed by mobile fishing gear: a comparison to forest clear-cutting. *Conservation Biology* 12: 1180-1197.
80. Hessler, R.R. & L. Watling. 1999. Les Pécararides: un groupe controversé. *Traité de Zoologie, Anatomie, Systematique, Biologie*. Tome VII, Fascicule III A, Crustacés Pécararides. Mémoires de l'Institut Océanographique, Monaco, 19: 1-10.

81. Norse, E. & L. Watling. 1999. Impacts of mobile fishing gear: the biodiversity perspective. Pp. 31-40, in L. Benaka, editor. Fish habitat: essential fish habitat and rehabilitation. American Fisheries Society Symposium 22, Bethesda, Maryland.
82. Watling, L. 1999. Toward understanding the relationships of the peracaridan orders: the necessity of determining exact homologies. Pp. 73-89, In F.R. Schram & J.C. von Vaupel Klein (editors). Crustaceans and the Biodiversity Crisis. Proceeding of the Fourth International Crustacean Congress, Amsterdam. Brill, Leiden, The Nether lands.
83. Fautin, D.G. & L. Watling. 1999. Review of textbooks of invertebrate zoology. American Zoologist 39: 818-824. (invited and peer-reviewed)
84. Watling, L. & S. Gerken. 1999. A new species of leuconid (Crustacea: Cumacea), *Leucon (Crymoleucon) noerrevangi*, from the Faroe Islands. Sarsia 84 (5): 437-444.
85. Watling, L. & S. Gerken. 1999. Two new cumacean (Crustacea) species from the deep South Atlantic. Zoosystema, Paris, 21(4): 661-669.
86. Gerken, S. & L. Watling. 1999. Cumacea (Crustacea) of the Faroe Islands Region. Fróskaparrit 47: 199-227.
87. Petrescu, I. & L. Watling. 1999. Revision of genus *Americuma* Watling, 1991 (Crustacea, Cumacea) with the description of *Styloptocuma heardi* (Bacescu, 1979) based on neotype material. Travaux du Museum National d'Histoire naturelle "Grigore Antipa", 41: 299-308.
88. Gerken, S., L. Watling, A. Klitgaard. 2000. Some contumacious Cumacea from Arctic waters. Journal of Crustacean Biology 20: 31-43.
89. Watling, L., F.R. Schram & C.H.J. Hof. 2000. The place of the Hoplocarida in the malacostracan pantheon. Journal of Crustacean Biology 20 (Special Number 2): 1-11.
90. Johnson, W.E., P. Stephens & L. Watling. 2001. Reproductive biology of peracarid crustaceans. Advances in Marine Biology 39: 105-260. [Review Paper]
91. Watling, L. & S. Gerken. 2001. *Humesiana*, a remarkable new cumacean genus from the Caribbean. Journal of Crustacean Biology 21: 243-248.
92. Sparks-McConkey, P.J. and L. Watling. 2001. Effects on the ecological integrity of a soft-bottom habitat from a trawling disturbance. Hydrobiologia 456: 73-85.
93. Watling, L., R.H. Findlay, L.M. Mayer & D. Schick. 2001. Impact of a scallop drag on a shallow subtidal marine benthic community. Journal of Sea Research 46: 309-324.
94. Gonzalez, E. & L. Watling. 2001. Three new species of *Hyaella* from Chile (Crustacea: Amphipoda: Hyaellidae). Hydrobiologia 464: 175-199.
95. Gonzalez, E. & L. Watling. 2002. Redescription of *Hyaella azteca* from its type locality. Journal of Crustacean Biology 22(1): 173-183.
96. Watling, L. & S. Angsupanich. 2002. *Procampylaspis andamanensis*, (Crustacea, Cumacea) first record of the genus from the Indo-Polynesian biogeographic province. Phuket Marine Biological Center Special Publication 23 (1): 33-40
97. Watling, L. & S. Angsupanich. 2002. Cumacea of Thailand – an annotated list. Phuket Marine Biological Center Special Publication 23 (1): 41-51.
98. Gonzalez, E. & L. Watling. 2002. A new species of *Hyaella* from the Andes in Peru (Crustacea: Amphipoda: Hyaellidae). Revista de Biología Tropical 50 (2): 649-658.
99. Gonzalez, E. & L. Watling. 2002. Redescription of the freshwater amphipod *Hyaella faxoni* Stebbing, 1903 from Costa Rica (Crustacea: Hyaellidae). Revista de Biología Tropical 50 (2): 659-667
100. Gonzalez, E. & L. Watling. 2003. A new species of *Hyaella* from Brazil (Crustacea: Amphipoda) and redescription of three other species in the genus. Journal of Natural History 37(17): 2045-2076.
101. Gonzalez E. & L. Watling. 2003. A new species of *Hyaella* from the Patagonia, Chile, with the redescription of *H. simplex* Schellenberg, 1943 (Crustacea: Amphipoda). Journal of Natural History 37(17): 2077-2094.
102. Gonzalez, E. & L. Watling. 2003. A new species of *Hyaella* from Colombia and the redescription of *H. meinerti* Stebbing 1899 from Venezuela (Crustacea: Amphipoda). Journal of Natural History 37 (17): 2095-2111.
103. Gonzalez, E. & L. Watling. 2003. Two new species of *Hyaella* from Lake Titicaca and redescription of four others in the genus (Crustacea: Amphipoda). Hydrobiologia 497: 181-204.
104. Thiel, M., E.R. González, M.J. Balanda, Pilar Haye, R. Heard & L. Watling. 2003. Diversity of Chilean Peracarids (Crustacea: Malacostraca). In M.E. Hendrickx (ed.). Contributions to the Study of East Pacific Crustaceans, Volume 2: 177-189.
105. Haye, P., I. Kornfield & L. Watling. 2004. Molecular insights into cumacean family relationships (Crustacea, Cumacea). Molecular Phylogenetics and Evolution 30: 798-804.
106. Watling, L. & S. Gerken. 2005. The Cumacea of the Faroes Islands region: water mass relationships and North Atlantic biogeography. Frodskaparrit Biofar symposium.

107. Watling, L. 2005. Chapter 12: The Global Destruction of Bottom Habitats by Mobile Fishing Gear. In: L. Crowder & E.A. Norse (eds.) *Marine Conservation Biology*. Island Press.
108. Auster, P.J., J. Moore, K.B. Heinonen & L. Watling. 2005. A habitat classification scheme for seamount landscapes: assessing the functional role of deep-water corals as fish habitat. In: Freiwald, A. & J.M. Roberts (eds.) *Cold-Water Corals and Ecosystems*. Springer-Verlag.
109. Watling, L. & P.J. Auster. 2005. Distribution of deep-water Alcyonacea off the Northeast coast of the United States. In: Freiwald, A. & J.M. Roberts (eds.) *Cold-Water Corals and Ecosystems*. Springer-Verlag.
110. Eckelbarger, K.J., L. Watling & H. Fournier. 2005. Reproductive biology of the deep-sea polychaete, *Gorgoniapolynoe caeciliae* (Polynoidae), a commensal species associated with octocorals. *Journal of the Marine Biological Association of the United Kingdom* 85: 1425-1433.
111. Lehnert, H., Les Watling & R. Stone. 2005. *Cladorhiza corona* sp. nov. (Porifera: Demospongiae: Cladorhizidae) from the Aleutian Islands (Alaska). *Journal of the Marine Biological Association of the United Kingdom* 85: 1359-1366.
- 11x. Gonzalez, E. & L. Watling. In press. A new species of *Parhyaella* from Chile and redescription of three other species in the genus (Crustacea: Amphipoda). *Hydrobiologia*.
- 11x. Watling, L. in press. New Zealand Cumacea: a legacy of evolution and diversification in isolation. In, D. Gordon and N. Bruce (eds.) *New Zealand Biodiversity 2000*.
- 11x. Watling, L. in press. Cumacea. In: J. Carlton (ed.) *Light's Manual to the Invertebrates of the Central California Coast*.
- 11x. Watling, L. in press. Caprellid Amphipods. In: J. Carlton (ed.) *Light's Manual to the Invertebrates of the Central California Coast*.

Books and Journal Issues Edited:

- Felgenhauer, B., L. Watling & A. Thistle (eds.). 1989. Functional Morphology of Feeding and Grooming in Crustacea. *Crustacean Issues* 6, 225 p. A.A. Balkema.
- Watling, L. (ed.). 1991. VIIIth International Colloquium on Amphipoda. *Developments in Hydrobiology* 70, 299 p. Kluwer Academic Publishers.
- Moore, P.G. & L. Watling, (eds.). 1993. Amphipods, a noble obsession: essays in memory of J.Laurens Barnard (1928-1991). *Journal of Natural History*, Vol. 27, no. 4.
- Blake, J.A., L. Watling & P.H. Scott (eds.). 1995. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 12. Special Publications of the Santa Barbara Museum of Natural History, Santa Barbara, California.
- Watling, L. (Guest Editor). 1998. Special section "Effects of mobile fishing gear on marine benthic communities." *Conservation Biology* 12: 1178-1240.
- Watling, L. & M.J. Risk (Guest Editors). 2002. *Biology of Cold Water Corals*. *Hydrobiologia* 471: 1-164.

Popular Book

- Watling, L., J. Fegley & J. Moring. 2003. *Life Between the Tides: marine plants and animals of the northeast*. Tilbury Hourse Publishers, Gardiner, Me. 108 pp.

Field Experience

Gulf of Maine Cruise Experience:

- 1982: R/V Cape Hatteras, box cores and trawls, depths 25-280 m; funded by NSF
- 1983: R/V Cape Hatteras, Chief Scientist, box cores and trawls, depths 25-280 m; NSF
- 1984: R/V Cape Hatteras, Chief Scientist, box cores and trawls, depths 100-300m; NSF
M/V Aloha and submersible Mermaid, Chief Scientist, 5 days of dives in depths of 75-280 m, collecting of soft bottom as well as rock dwelling invertebrates with hydraulic arm and suction devices; areas covered included both cold water and warm slope water communities of the Gulf of Maine; funded by NOAA-NURP, Northeast Program.
- 1985: R/V Cape Hatteras, Chief Scientist, box cores and trawls, depths 100-300 m; NSF
R/V Johnson and submersible Sea Link, Chief Scientist, 2 days of dives in rock wall and mud bottom environments in depths 60- 120m; microspatial sampling using primarily hydraulic arm and coring devices; funded by NOAA-NURP, Northeast Program.

- 1986: R/V Gyre, Sr. Scientist, box cores, depths 30-275m, time provided by another investigator on two cruises, May and August.
- 1987: R/V Cape Henlopen, Sr. Scientist, box cores and trawls, 30-275m; time provided by another investigator.
- 1987: R/V Powell and submersible Delta, Chief Scientist, 5 days of dives on assorted types of bottoms ranging from cold water muds to rock walls and relict glacial moraine and boulder deposits; samples included using a Venturi type pump to gently remove fauna from boulder surfaces, using mechanical arm to place rock-dwelling species in sample containers and placing of experiments on the bottom; broad scale faunal surveys were conducted in habitats that are otherwise unsampleable; data to be used to augment faunal assemblage data collated for soft bottoms; funded by NOAA-NURP, Northeast Program.
- 1992: R/V Sea Diver and submersible Clelia, Sr. Scientist, 7 days dive time, surveying of sea pen populations, sponge populations in area of bottom fishing by trawls.
- 1995: R/V Sea Diver and submersible Clelia, Chief Scientist, 7 days dive time, studies on the biology of the large ceriantharian, *Cerianthus borealis*.
- 1997: M/V Abel J and ROV Phantom S2, Chief Scientist, 8 days dive time, studies on the impact of trawling on the benthos of the central Gulf of Maine.
- 1998: M/V Seward Johnson and submersible Clelia, Chief Scientist, 5 days dive time, studies on fishing effects on the sea bottom, central Gulf of Maine and Bay of Fundy.
- 2002: R/V Connecticut and ROV MaxRov, Chief Scientist, 4 days dive time, studies on cold water octocorals in the Gulf of Maine.
- 2003: R/V Connecticut and ROV MaxRov, Chief Scientist, 11 days dive time, studies on cold water octocorals in the Gulf of Maine.

In addition, numerous one-day cruises have been conducted in the nearshore bay waters of the coastal Gulf of Maine since 1978; sampling by means of trawls and grabs; work chiefly funded by NOAA-Sea Grant.

Other Areas Cruise Experience:

- 1980: R/V Marion Dufresne, Antarctic region, chiefly south of Atlantic and Indian Oceans with focus on Bouvet Island, Lena and Ob seamounts, and the Crozet Island archipelago; sampling chiefly by means of trawls in depths of 30-1200m; responsibility was for identification of small crustaceans.
- 1982: R/V Hero, Co-Chief Scientist, Antarctic Peninsula region; sampling by means of trawls and grabs in depths of 20-1150m; extensive faunal samples taken with responsibility for crustaceans, especially associates of sponges and tunicates. Funded by NSF grant to J.H. Dearborn, University of Maine.
- 1985: R/V Cape Hatteras, Sr. Scientist, Atlantic coast of United States, sampling by means of box core in depths of 1200-3500m; funded by Minerals Management Service to Battelle, J. Blake Chief Scientist.
- 1986: M/V Aloha, Sr. Scientist, continental shelf off Southern California, sampling by means of box core in depths of 90-700m; funded by MMS to Battelle, J. Blake Chief Scientist.
- 1998: R/V Gyre, Chief Scientist, continental shelf and slope (to 900 m) off Texas and Florida, sampling by means of box core and dredge, with CTD casts at each station; funded by NSF-PEET.
- 2001: R/V Atlantis and submersible Alvin, Chief Scientist, continental slope south of Georges Bank and inner New England Seamount Chain, funded by NOAA Ocean Exploration program.
- 2003: R/V Atlantis and submersible Alvin, Chief Scientist, New England seamount chain, funded by NOAA Ocean Exploration program.
- 2004: R/V Ronald H. Brown and ROV Hercules. Chief scientist, New England Seamount Chain, funded by NOAA Ocean Exploration program.
- 2004: R/V Roger Revelle and ROV Jason. Sr. Scientist, Aleutian Islands outer Aleutian Ridge, funded by NOAA-NURP West Coast program, R. Stone, Chief Scientist.

2005: R/V Ronald H. Brown and ROV Hercules, Chief Scientist, Corner Rise Seamounts and New England Seamount Chain, funded by NOAA Ocean Exploration program.

2005: R/V Atlantis and submersible Alvin, Co-Chief Scientist, Georges Bank Canyons and western New England Seamount Chain, funded by NOAA-NURC NA&GL program.

Other Field Experience:

1965-68: California intertidal zone, teaching assistant for invertebrate zoology course, was responsible for collecting of specimens for use in laboratory.

1968-76: Delaware Bay; variety of projects resulted in several papers and a guide to the invertebrate fauna of the Delaware Bay region (see publication list).

1975-1986: Caribbean Islands; have collected algal-associated crustaceans from Bahamas, Grand Turk, St. Croix, St. Barthelemy, and Barbados.

1980: South Africa, Mauritius and Reunion; spent 3 weeks collecting in shallow water environments ranging from rocky shores and tidal flats to coral rubble; also collected living *Spelaeogriphus lepidops* from a stream in the bottom (150 ft below surface) of Bat Cave on Table Mountain.

1985: St. Croix, Principal Investigator, Hydrolab Project investigating decomposition of macro-algae in the Salt River Canyon; funded by NOAA-NURP, Hydrolab.

1990. Australia; collected extensively along shores of Western Australian outback, from Perth to Exmouth, as part of study of cumaceans funded by Australian Biotic Resources Survey.

1993. Australia; collected freshwater crustaceans from high mountain streams in Tasmania, some specimens returned to Maine and maintained in live culture.

1993. South Africa; made a return collection expedition to Bat Cave in Table Mountain to obtain living specimens of the rare, very small, peracaridan crustacean, *Spelaeogriphus lepidops*. These were returned alive to Maine for studies of their physiology and functional morphology.

1997: Chile; made extensive collections in southern, central, and northern coastal regions for cumaceans and other benthic small crustaceans.

1997: Hawaii; collections for cumaceans in the lagoons of Oahu.

1999: New Zealand; collections on both North and South Islands from small boats with portable dredge.

List of new taxa described by L. Watling (and co-authors)

Ostracoda:

Spinileberis hyalinus, n.sp. 1970
Pectocythere tomalensis, n.sp. 1970
Acetabulastoma californica, n.sp. 1972

Amphipoda:

Parapleustes aestuarius, n.sp. 1973
Parametopella inquilinus, n.sp. 1976
Acanthonotozomella barnardi, n.sp. 1980
ACANTHONOTOZOMOPSIS N.GEN. 1980
Iphimedia magellanica, n.sp. 1980
Iphimedia imparilabia, n.sp. 1980
Iphimediella georgei, n.sp. 1980
Iphimediella acuticoxa, n.sp. 1980
Iphimediella discoveryi, n.sp. 1980
Epimeria rimicarinata, n.sp. 1980
Parepimeria minor, n.sp. 1980
Parandaniexis dewitti, n.sp. 1980
Odius antarcticus, n.sp. 1981
Jerbarnia americana, n.sp. 1981
Epimeria obtusa, n.sp. 1981
Harpinia clivicola, n.sp. 1981
Pagetina reducta, n.sp. 1981
Alexandrellinae, n.subfam. 1983
Alexandrella subchelata, n.sp. 1983
Bathypanoploea schellenbergi, n.sp. 1983
Leucothoe orkneyi, n.sp. 1983
Hyalella chiloensis n.sp. 2001
Hyalella costera n.s.p 2001
Hyalella kochi n.sp. 2001
Hyalella pseudoazteca n.sp. 2003
Hyalella franciscaae n. sp. 2003
Hyalella quindioensis n.sp. 2003

Cumacea:

MANCOCUMINAE, N.SUBFAM. 1977
PSEUDOLEPTOCUMA, N.GEN. 1977
SPILOCUMA, N.GEN. 1977

Spilocuma salomani, n.sp. 1977
CORICUMA, N.GEN. 1989
Coricura nicoyense, n.sp. 1989
CYCLASPOCUMELLA, N.GEN. 1991
ELASSOCUMELLA, N.GEN. 1991
SCHEROCUMELLA, N.GEN. 1991
MACRAUOLEUCON, N.SUBGEN. 1991
CRYMOLEUCON, N.SUBGEN. 1991
ALYTOLEUCON, N.SUBGEN. 1991
OMMATOLEUCON, N.GEN. 1991
AUSTROLEUCON, N.GEN. 1991
NIPPOLEUCON, N.GEN. 1991
BYTHOLEUCON, N.GEN. 1991
Diastylis sentosa, n.sp. 1997
Diastylis crenellata, n.sp. 1997
Diastylis quadriplicata, n.sp. 1997
Diastylis santamariensis, n.sp. 1997
Leptostylis calva, n.sp. 1997
Leptostylis abditis, n.sp. 1997
ALLOEOLEUCON, N.GEN. 1997
Alloeoleucon santamariensis, n.sp. 1997
DIAPHONOLEUCON, N.SUBGEN. 1997
Leucon (Diaphonoleucon) declivis, n.sp. 1997
Leucon (Leucon) falcicosta, n.sp. 1997
Eudorella redacticruris, n.sp. 1997
Campylaspis maculinodulosa, n.sp. 1997
Campylaspis blakei, n.sp. 1997
Campylaspis biplicata, n.sp. 1997
Procampylaspis caenosa, n.sp. 1997
Cumella (Cumella) morion, n.sp. 1997
Cumella (Cumella) californica, n.sp. 1997
Diastylis tongoyensis n.sp. 1998
Leucon (Crymoleucon) noerrevangi, n.sp. 1999
Ektonodiastylis robusta n. sp. 2000
Procampylaspis andamenensis, n.sp. 2001
HUMESIANA N.GEN. 2001
Humesiana carltoni n.sp. 2001