

CURRICULUM VITAE

2/11/09

Name: Thomas Peter Quinn
Address: School of Aquatic and Fishery Sciences, Box 355020
Univ. of Washington
Seattle, WA 98195
Phone: (206) 543-9042
e-mail: tqinn@u.washington.edu

Degrees: B.A. with Distinction in Biology, Swarthmore College, 1976
M.S. in Fisheries, University of Washington, 1978
Ph.D. in Fisheries, University of Washington, 1981

Employment:

2000-present	Professor, School of Aquatic and Fishery Sciences
1990-2000	Associate Professor, School of Fisheries,
1992-1995	Associate Director for Instruction, School of Fisheries
1986-1990	Assistant Professor, School of Fisheries, Univ. of Washington
1984-1985	Research Associate, Department of Oceanography, University of British Columbia, Vancouver, B.C.
1981-1984	Post-doctoral Fellow, University of British Columbia and Pacific Biological Station, Nanaimo, B. C., Canada

Research Interests:

Behavior, ecology and evolution of fishes, with emphasis on migrations, life history patterns, reproduction, habitat requirements and diversification of Pacific salmon

Professional Societies:

American Fisheries Society
American Society of Ichthyologists and Herpetologists
Animal Behavior Society

Honors:

College of Ocean and Fishery Sciences Undergraduate Teaching Award, 1989
Distinguished Teaching Award, University of Washington, 1991
Marsha Landolt Distinguished Graduate Mentor Award, University of Washington, 2008
National Research Council panel on the Status of Pacific Northwest Anadromous Salmonids
College of Ocean and Fishery Sciences Distinguished Research Award 1998
Fulbright Fellowship to study in Ireland, 2000

Publications

1978

- Quinn, T., G.W. Esch, T.C. Hazen and J.W. Gibbons. 1978. Long range movement and homing by largemouth bass (*Micropterus salmoides*) in a thermally altered reservoir. *Copeia* 1978: 542-545.
- Quinn, T.P. 1978. The role of the odors of conspecifics in the locomotor behavior of the blind cave characin, *Astyanax jordani*. Master's thesis, University of Washington.

1980

- Quinn, T.P. 1980. Locomotor responses of juvenile blind cave fish, *Astyanax jordani*, to the odors of conspecifics. *Behavioral and Neural Biology* 29: 123-127.
- Quinn, T.P. 1980. Evidence for celestial and magnetic compass orientation in lake migrating sockeye salmon fry. *Journal of Comparative Physiology* 137: 243-248.
- Quinn, T.P., B.S. Miller and R.C. Wingert. 1980. Depth distribution and seasonal and diel movements of ratfish, *Hydrolagus colliei*, in Puget Sound, Washington. *Fishery Bulletin* 78: 816-821.

1981

- Quinn, T.P. Compass orientation of juvenile sockeye salmon (*Oncorhynchus nerka*). Doctoral dissertation, University of Washington.
- Quinn, T.P., R.T. Merrill and E.L. Brannon. Magnetic field detection in sockeye salmon. *Journal of Experimental Zoology* 217: 137-142.
- Brannon, E.L., T.P. Quinn, G.L. Lucchetti and B.D. Ross. Compass orientation of sockeye salmon from a complex river system. *Canadian Journal of Zoology* 59: 1548-1553.

1982

- Whitman, R.P., T.P. Quinn and E.L. Brannon. The influence of suspended volcanic ash on the homing behavior of adult chinook salmon. *Transactions of the American Fisheries Society* 111: 63-69.
- Quinn, T.P. and E.L. Brannon. The use of celestial and magnetic cues by orienting sockeye salmon smolts. *Journal of Comparative Physiology* 147: 547-552.
- Quinn, T.P. A model for salmon navigation on the high seas. In: E.L. Brannon and E.O. Salo (editors), *Salmon and Trout Migratory Behavior Symposium*. School of Fisheries, University of Washington, pp. 229-237.
- Quinn, T.P. Intra-specific differences in sockeye salmon fry compass orientation mechanisms. In: E.L. Brannon and E.O. Salo (editors), *Salmon and Trout Migratory Behavior Symposium*. School of Fisheries, University of Washington, pp. 79-85.

1983

- Quinn, T.P., E.L. Brannon and R.P. Whitman. Pheromones and the water source preferences of adult coho salmon (*Oncorhynchus kisutch*). *Journal of Fish Biology* 22: 677-684.
- Quinn, T.P. and C. Groot. Orientation of chum salmon (*Oncorhynchus keta*) after internal and external magnetic field alteration. *Canadian Journal of Fisheries and Aquatic Sciences* 40: 1598-1606.

1984

- Quinn, T.P. An experimental approach to fish compass and map orientation. In: J.D. McCleave, G.P. Arnold, J.J. Dodson and W.H. Neill (editors), *Mechanisms of Migration in Fishes*. Plenum Press, New York, pp. 113-123.
- Quinn, T.P. Homing and straying in Pacific salmon. In: J.D. McCleave, G.P. Arnold, J.J. Dodson and W.H. Neill (editors), *Mechanisms of Migration in Fishes*. Plenum Press, New York, pp. 357-362.
- Ogden, J.C. and T.P. Quinn. Migration in coral reef fishes: Ecological significance and orientation mechanisms. In: J.D. McCleave, G.P. Arnold, J.J. Dodson and W.H. Neill (editors), *Mechanisms of Migration in Fishes*. Plenum Press, New York, pp. 293-308.
- Quinn, T.P. and C. Groot. The effect of water flow rate on bimodal orientation of juvenile chum salmon, *Oncorhynchus keta*. *Animal Behaviour* 32: 628-629.
- Brannon, E.L., R.P. Whitman and T.P. Quinn. Responses of returning adult coho salmon to home water and population-specific odors. *Transactions of the American Fisheries Society* 113: 374-377.
- Quinn, T.P. and J.C. Ogden. Field evidence of compass orientation in migrating juvenile grunts (Haemulidae). *Journal of Experimental Marine Biology and Ecology* 81: 181-192.
- Quinn, T.P. and K. Fresh. Homing and straying in chinook salmon (*Oncorhynchus tshawytscha*) from Cowlitz River Hatchery, Washington. *Canadian Journal of Fisheries and Aquatic Sciences* 41: 1078-1082.
- Quinn, T.P. and C. Groot. Pacific salmon (*Oncorhynchus*) migrations: Orientation vs. random movement. *Canadian Journal of Fisheries and Aquatic Sciences* 41: 1319-1324.

1985

- Quinn, T.P. and C.A. Busack. Chemosensory recognition of siblings in juvenile coho salmon (*Oncorhynchus kisutch*). *Animal Behaviour* 33: 51-56.
- Quinn, T.P. Salmon homing: Is the puzzle complete? Review of A.D. Hasler and A.T. Scholz, *Olfactory Imprinting and Homing in Salmon*. *Environmental Biology of Fishes* 12: 315-317.
- Quinn, T.P. Homing and the evolution of sockeye salmon, *Oncorhynchus nerka*. In: M.A. Rankin (editor), *Migrations: Mechanisms and Adaptive Significance*. *Contributions in Marine Science, Supplement to Vol. 27*: 353-366.

1986

- Quinn, T.P. and G.M. Tolson. Evidence of chemically mediated population recognition in coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Zoology* 64: 84-87.

- Quinn, T.P. and T.J. Hara. Sibling recognition and olfactory sensitivity in juvenile coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Zoology* 64: 921-925.
- Groot, C., T.P. Quinn and T.J. Hara. Responses of migrating adult sockeye salmon (*Oncorhynchus nerka*) to population-specific odors. *Canadian Journal of Zoology* 64: 926-932.
- Brannon, E.L., T.P. Quinn, R.P. Whitman, A.E. Nevissi, R.E. Nakatani and C. D. McAuliffe. The homing of adult chinook salmon after brief exposure to whole and dispersed crude oil. *Transactions of the American Fisheries Society* 115: 823-827.
- Quinn, T.P., K.D. Cooke and G. Ellis. The responses of adult sockeye salmon (*Oncorhynchus nerka*) to a commercial purse seine. *Canadian Technical Report of Fisheries and Aquatic Sciences* 1511: 13 p.
- Quinn, T.P. Review of McKeown, B.A., Fish Migration, and Smith, R.J.F., The Control of Fish Migration. *Copeia* 1986: 268-269.

1987

- Quinn, T.P. and R.F. Tallman. Seasonal environmental predictability and homing in riverine fishes. *Environmental Biology of Fishes* 18: 155-159.
- Matthews, K.R., B.S. Miller and T.P. Quinn. Movement studies of nearshore demersal rockfishes in Puget Sound, Washington. *Proceedings of the Lowell Wakefield International Rockfish Symposium, Anchorage, Alaska*, pp. 63-72.
- Groot, C. and T.P. Quinn. The homing migration of sockeye salmon to the Fraser River. *Fishery Bulletin* 85: 455-469.
- Quinn, T.P. and W.C. Leggett. Perspectives on the marine migrations of diadromous fishes. *American Fisheries Society Symposium* 1: 377-388
- Quinn, T.P. and B.A. terHart. Movements of adult sockeye salmon (*Oncorhynchus nerka*) in British Columbia coastal waters in relation to temperature and salinity stratification: Ultrasonic telemetry results. In: H.D. Smith, L. Margolis and C. C. Wood (editors), *Sockeye Salmon (*Oncorhynchus nerka*) Population Biology and Future Management*. *Canadian Special Publication in Fisheries and Aquatic Sciences* 96: 61-77.
- Quinn, T.P., C.C. Wood, L. Margolis, B. Riddell and K.D. Hyatt. Homing in wild sockeye salmon (*Oncorhynchus nerka*) populations as inferred from differences in parasite prevalence and allozyme allele frequencies. *Canadian Journal of Fisheries and Aquatic Sciences* 44: 1963-1971.

1988

- Quinn, T.P., A.F. Olson and J.T. Konecki. Effects of anaesthesia on the chemosensory behaviour of Pacific salmon. *Journal of Fish Biology* 33: 637-641.
- Quinn, T.P. Estimated swimming speeds of migrating adult sockeye salmon. *Canadian Journal of Zoology* 66: 2160-2163.
- Walker, M.M., T.P. Quinn, J.L. Kirschvink and C. Groot. Production of single-domain magnetite throughout life by sockeye salmon, *Oncorhynchus nerka*. *Journal of Experimental Biology* 140: 51-63.

McIsaac, D.O. and T.P. Quinn. Evidence for a hereditary component in homing behavior of chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 45: 2201-2205.

1989

Quinn, T.P., B.A. terHart and C. Groot. Migratory orientation and vertical movements of homing adult sockeye salmon (*Oncorhynchus nerka*) in coastal waters. *Animal Behaviour* 37: 587-599.

Moser, M.L., A.F. Olson and T.P. Quinn. Migratory behavior of coho salmon smolts (*Oncorhynchus kisutch*) in Grays Harbor, Washington. *Proceedings of the 1988 Chinook and Coho Salmon Workshop*. pp. 220-226.

Quinn, T.P. and S. Courtenay. Intraspecific chemosensory discrimination in salmonid fishes: Alternative explanations. In: E.L. Brannon and B. Jonsson (editors), *Salmon and Trout Migratory Behavior Symposium*. pp. 35-41.

Brannon, E.L. and T.P. Quinn. Odor cues used by homing coho salmon. In: E.L. Brannon and B. Jonsson (editors), *Salmon and Trout Migratory Behavior Symposium*. pp. 30-34.

Quinn, T.P. Review of McDowall, R.M., *Diadromy in Fishes*. 1989. *Quarterly Review of Biology* 64: 358-359.

Quinn, T.P. and J.T. Light. Occurrence of threespine sticklebacks (*Gasterosteus aculeatus*) in the open North Pacific Ocean: migration or drift? *Canadian Journal of Zoology* 67: 2850-2852.

Quinn, T.P. Current controversies in the study of marine migration. Review of Herrnkind, W.F. and A.B. Thistle (eds.) *Signposts in the Sea*. *Environmental Biology of Fishes* 26: 311-313.

Quinn, T.P., E.L. Brannon and A.H. Dittman. Spatial aspects of imprinting and homing by coho salmon (*Oncorhynchus kisutch*). *Fishery Bulletin* 87: 769-774.

1990

Brannon, E.L. and T.P. Quinn. A field test of the pheromone hypothesis for homing by Pacific salmon. *Journal of Chemical Ecology* 16: 603-609.

Quinn, T.P. Current controversies in the study of salmon homing. *Ethology, Ecology and Evolution* 2: 49-63.

Quinn, T.P. and A.H. Dittman. Pacific salmon migrations and homing: mechanisms and adaptive significance. *Trends in Ecology and Evolution* 5: 174-177.

Quinn, T. P. Migratory behavior of Pacific salmon in estuaries: recent results with ultrasonic telemetry. In: C. A. Simenstad (editor), *Effects of Dredging on Anadromous Pacific Coast Fishes*. Washington Sea Grant, Seattle, Washington, pp. 13-25.

Ruggerone, G.T., T.P. Quinn, I.A. McGregor and T.S. Wilkinson. Horizontal and vertical movements of adult steelhead trout, *Oncorhynchus mykiss*, in Dean and Fisher channels, British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences* 47: 1963-1969.

Moser, M.L., A.F. Olson and T.P. Quinn. Effects of dummy ultrasonic transmitters on juvenile coho salmon. *American Fisheries Society Symposium* 7: 353-356.

Matthews, K.R., T.P. Quinn and B.S. Miller. The application of ultrasonic transmitters to demersal rockfish movement research on shallow rocky reefs in Puget Sound, Washington. *American Fisheries Society Symposium* 7: 375-379.

1991

- Quinn, T.P. and R.D. Brodeur. Intra-specific variations in the movement patterns of marine animals. *American Zoologist* 31: 231-241.
- Blair, G.R. and T.P. Quinn. Homing and spawning site selection by sockeye salmon (*Oncorhynchus nerka*) in Iliamna Lake, Alaska. *Canadian Journal of Zoology* 69: 176-181.
- Quinn, T.P., R.S. Nemeth and D. O. McIsaac. Patterns of homing and straying by fall chinook salmon in the lower Columbia River. *Transactions of the American Fisheries Society* 120: 150-156.
- Pascual, M. A. and T. P. Quinn. Evaluation of alternative models of the coastal migration of adult Fraser River sockeye salmon (*Oncorhynchus nerka*). *Canadian Journal of Fisheries and Aquatic Sciences* 48: 799-810.
- Berman, C.H. and T.P. Quinn. Behavioural thermoregulation and homing by spring chinook salmon, *Oncorhynchus tshawytscha* (Walbaum), in the Yakima River. *Journal of Fish Biology* 39: 301-312.
- Moser, M.L., A.F. Olson and T.P. Quinn. Riverine and estuarine migratory behavior of coho salmon (*Oncorhynchus kisutch*) smolts. *Canadian Journal of Fisheries and Aquatic Sciences* 48: 1670-1678.
- Quinn, T.P. Models of Pacific salmon orientation and navigation on the open ocean. *Journal of Theoretical Biology* 150: 539-545.

1992

- Bisson, P.A., T.P. Quinn, G.H. Reeves and S.V. Gregory. Best management practices, cumulative effects, and long-term trends in fish abundance in Pacific Northwest river systems. In: *Watershed Management*. R.J. Naiman (editor). Springer-Verlag, pp.189-232.
- Quinn, T.P. Book Review of Groot, C. and L. Margolis (editors) *Pacific Salmon Life Histories*. *Copeia* 1992: 927-928.
- Quinn, T.P. and A.H. Dittman. Fishes. In: *Animal Homing*. F. Papi (editor). Chapman and Hall, pp.145-211.
- Quinn, T. P. and G.R. Blair. Morphological changes in senescing adult male sockeye salmon (*Oncorhynchus nerka* Walbaum). *Journal of Fish Biology* 41: 1045-1047.
- Quinn, T P. and S. Bloomberg. Fecundity of chinook salmon (*Oncorhynchus tshawytscha*) from the Waitaki and Rakaia rivers. *New Zealand Journal of Marine and Freshwater Research* 26: 429-434.

1993

- Olson, A.F. and T.P. Quinn. Vertical and horizontal movements of adult chinook salmon, *Oncorhynchus tshawytscha*, in the Columbia River estuary. *Fishery Bulletin* 91: 171-178.
- Blair, G.R., D.E. Rogers and T.P. Quinn. Variation in life history characteristics and morphology of sockeye salmon (*Oncorhynchus nerka*) in the Kvichak River

- system, Bristol Bay, Alaska. Transactions of the American Fisheries Society 122: 550-559.
- Quinn, T.P. Book Review of Pearcy, W.G. Ocean Ecology of North Pacific Salmonids. Transactions of the American Fisheries Society 122: 513-514.
- Unwin, M. J. and T. P. Quinn. Homing and straying patterns of chinook salmon (*Oncorhynchus tshawytscha*) from a New Zealand hatchery: spatial distribution of strays and effects of release date. Canadian Journal of Fisheries and Aquatic Sciences 50: 1168-1175.
- Quinn, T.P. A review of homing and straying of wild and hatchery-produced salmon. Fisheries Research 18: 29-44.
- Quinn, T. P. and M. J. Unwin. Life history patterns of New Zealand chinook salmon (*Oncorhynchus tshawytscha*) populations. Canadian Journal of Fisheries and Aquatic Sciences 50: 1414-1421.

1994

- Nevitt, G.A., A.H. Dittman, T.P. Quinn and W.J. Moody, Jr. Evidence for a peripheral olfactory memory in imprinted salmon. Proceedings of the National Academy of Science. 91: 4288-4292.
- Dittman, A.H. and T.P. Quinn. Avoidance of a putative pheromone, 17a,20b-dihydroxy-4-pregnene-3-one, by precociously mature chinook salmon (*Oncorhynchus tshawytscha*). Canadian Journal of Zoology 72: 215-219.
- Quinn, T.P. Anthropogenic influences on fish populations of the Georgia Basin. Part I: Salmonids. In: Review of the Marine Environment and Biota of Strait of Georgia, Puget Sound and Juan de Fuca Strait. Canadian Technical Report of Fisheries and Aquatic Sciences 1948: 219-229.
- Quinn, T.P. How do sharks orient at sea? Trends in Ecology and Evolution 9: 277-278.
- Quinn, T. P. and C. J. Foote. The effects of body size and sexual dimorphism on the reproductive behaviour of sockeye salmon (*Oncorhynchus nerka*). Animal Behaviour 48: 751-761.
- Dittman, A.H., T.P. Quinn, W.W. Dickhoff and D.A. Larsen. Interactions between novel water, thyroxine and olfactory imprinting in underyearling coho salmon (*Oncorhynchus kisutch*, Walbaum). Aquaculture and Fisheries Management 25 (Supplement 2): 157-169.
- Pascual, M.A. and T.P. Quinn. Geographical patterns of straying of fall chinook salmon (*Oncorhynchus tshawytscha*) from Columbia River (U.S.A.) hatcheries. Aquaculture and Fisheries Management 25 (Supplement 2): 17-30.
- Peterson, N.P., E.F. Prentice and T.P. Quinn. Comparison of sequential coded-wire and passive integrated transponder tags for assessing overwinter growth and survival of juvenile coho salmon. North American Journal of Fisheries Management 14: 870-873.
- Quinn, T.P. Review of Cloud, J.G. and Thorgaard, G.H., Genetic Conservation of Salmonid Fishes. Animal Behavior 48: 1489-1490.
- Varnavskaya, N.V., C.C. Wood, R.J. Everett, R.L. Wilmot, V.S. Varnavsky. V.V. Midanaya and T.P. Quinn. Genetic differentiation of subpopulations of sockeye salmon (*Oncorhynchus nerka*) within lakes of Alaska, British Columbia and

- Kamchatka, Russia. *Canadian Journal of Fisheries and Aquatic Sciences* 51 (Supplement 1): 147-157.
- Quinn, T.P., A.H. Dittman, N.P. Peterson and E.C. Volk. Distribution, survival and growth of sibling groups of juvenile coho salmon, *Oncorhynchus kisutch*, in an experimental stream channel. *Canadian Journal of Zoology* 72: 2119-2123.
- 1995**
- Spalding, S., N.P. Peterson and T.P. Quinn. Summer distribution, survival and growth of juvenile coho salmon *Oncorhynchus kisutch* under varying experimental conditions of brushy in-stream cover. *Transactions of the American Fisheries Society* 124: 124-130.
- Adkison, M.D., T.P. Quinn and O. Rutten. An inexpensive, non-disruptive method of in situ dart tagging for visual recognition of fish underwater. *North American Journal of Fisheries Management* 15: 507-511.
- Pascual, M.A., T.P. Quinn and H. Fuss. Factors affecting the homing of Columbia River hatchery-produced fall chinook salmon. *Transactions of the American Fisheries Society* 124: 308-320.
- Warner, E.J. and T.P. Quinn. The horizontal and vertical movements of telemetered rainbow trout (*Oncorhynchus mykiss*) in Lake Washington. *Canadian Journal of Zoology* 73: 146-153.
- Konecki, J.T., C.A. Woody and T.P. Quinn. Influence of temperature on incubation rates of coho salmon (*Oncorhynchus kisutch*) from ten Washington populations. *Northwest Science* 69: 126-132.
- Hendry, A.P., F.E. Leonetti and T.P. Quinn. Spatial and temporal isolating mechanisms: the formation of discrete breeding aggregations of sockeye salmon (*Oncorhynchus nerka*). *Canadian Journal of Zoology* 73: 339-352.
- Roni, P. and T.P. Quinn. Geographic variation in size and age of North American chinook salmon (*Oncorhynchus tshawytscha*). *North American Journal of Fisheries Management* 15: 325-345.
- Konecki, J.T., C.A. Woody and T.P. Quinn. Critical thermal maxima of coho salmon (*Oncorhynchus kisutch*) fry under field and laboratory acclimation regimes. *Canadian Journal of Zoology* 73: 993-996.
- Quinn, T.P. Review of Cone, J. A Common Fate: Endangered Salmon and the People of the Pacific Northwest. Illahee, *Journal of the Northwest Environment* 11: 106-107.
- Berg, O.K., C.J. Foote and T.P. Quinn. Fish age, nematode, *Philonema oncorhynchi*, infection and development of sexual dimorphism by the adult male sockeye salmon, *Oncorhynchus nerka*, in western Alaska. *Canadian Journal of Zoology* 73: 1999-2004.
- Lonzarich, D.G. and T.P. Quinn. Experimental evidence for the effect of depth and structure on the distribution, growth and survival of stream fishes. *Canadian Journal of Zoology* 73: 2223-2230.
- Konecki, J.T., C.A. Woody and T.P. Quinn. Temperature preference in two populations of juvenile coho salmon (*Oncorhynchus kisutch*). *Environmental Biology of Fishes* 44: 417-421.

Quinn, T.P., A.P. Hendry and L.A. Wetzel. The influence of life history trade-offs and the size of incubation gravels on egg size variation in sockeye salmon (*Oncorhynchus nerka*). *Oikos* 74: 425-438.

1996

- Quinn, T.P., N.P. Peterson and S. Spalding. 1996. Effects of instream brush on juvenile coho salmon: Response to comment by C.C. Coutant. *Transactions of the American Fisheries Society* 125: 151-153.
- Dittman, A.H. and T.P. Quinn. 1996. Homing in Pacific salmon: mechanisms and ecological basis. *Journal of Experimental Biology* 199: 83-91.
- Peterson, N.P. and T.P. Quinn. Spatial and temporal variation in dissolved oxygen in natural egg pockets of chum salmon, *Oncorhynchus keta* (Walbaum), in Kennedy Creek, Washington. *Journal of Fish Biology* 48: 131-143.
- Dittman, A.H., T.P. Quinn and G.A. Nevitt. Timing of imprinting to natural and artificial odors by coho salmon (*Oncorhynchus kisutch*). *Canadian Journal of Fisheries and Aquatic Sciences* 53: 434-442.
- Quinn, T.P., M.D. Adkison and M.B. Ward. Behavioral tactics of male sockeye salmon (*Oncorhynchus nerka*) under varying operational sex ratios. *Ethology* 102: 304-322.
- Quinn, T.P. and D.J. Adams. Environmental changes affecting the migratory timing of American shad and sockeye salmon. *Ecology* 77: 1151-1162.
- Quinn, T.P., J.L. Nielsen, C. Gan, M.J. Unwin, R. Wilmot, C. Guthrie, and F.M. Utter. Origin and genetic structure of chinook salmon (*Oncorhynchus tshawytscha*) transplanted from California to New Zealand: Allozyme and mtDNA evidence. *Fishery Bulletin* 94: 506-521.
- Peterson, N.P. and T.P. Quinn. Persistence of egg pocket architecture in redds of chum salmon (*Oncorhynchus keta*). *Environmental Biology of Fishes* 46: 243-253.
- Candy, J.R., E.W. Carter, T.P. Quinn and B.R. Riddell. Adult chinook salmon behavior and survival after catch and release from purse-seine vessels in Johnstone Strait, British Columbia. *North American Journal of Fisheries Management* 16: 521-529.
- Hendry, A.P., T.P. Quinn and F.M. Utter. Genetic evidence for the persistence and divergence of native and introduced populations of sockeye salmon (*Oncorhynchus nerka*) within Lake Washington, WA. *Canadian Journal of Fisheries and Aquatic Sciences* 53: 823-832.
- Montgomery, D.R., J.M. Buffington, N.P. Peterson, D. Schuett-Hames and T.P. Quinn. Stream-bed scour, egg burial depths, and the influence of salmonid spawning on bed surface mobility and embryo survival. *Canadian Journal of Fisheries and Aquatic Sciences* 53: 1061-1070.
- Quinn, T.P. and N.P. Peterson. The influence of habitat complexity and fish size on over-winter survival and growth of individually-marked juvenile coho salmon (*Oncorhynchus kisutch*) in Big Beef Creek, Washington. *Canadian Journal of Fisheries and Aquatic Sciences* 53: 1555-1564.
- Hawkins, D.K. and T.P. Quinn. Critical swimming velocity and associated morphology of juvenile coastal cutthroat trout (*Oncorhynchus clarki clarki*), steelhead trout

- (*O. mykiss*) and their hybrids. Canadian Journal of Fisheries and Aquatic Sciences 53: 1487-1496.
- Berejikian, B.A., S.B. Mathews and T.P. Quinn. The effects of hatchery and wild ancestry and rearing environments on the development of agonistic behavior in steelhead trout (*Oncorhynchus mykiss*) fry. Canadian Journal of Fisheries and Aquatic Sciences 53: 2004-2014.
- 1997**
- Hendry, A.P. and T.P. Quinn. 1997. Variation in adult life history and morphology among Lake Washington sockeye salmon (*Oncorhynchus nerka*) populations, in relation to habitat features and ancestral affinities. Canadian Journal of Fisheries and Aquatic Sciences 54: 75-84.
- Quinn, T.P. 1997. Review of "Migration: The Biology of Life on the Move" by Hugh Dingle. Quarterly Review of Biology 72: 232.
- Courtenay, S.C., T.P. Quinn, H.M.C. Dupuis, C. Groot and P.A. Larkin. 1997. Factors affecting the recognition of population-specific odours by juvenile coho salmon (*Oncorhynchus kisutch*). Journal of Fish Biology 50: 1042-1060.
- Quinn, T.P., S. Hodgson and C. Peven. 1997. Temperature, flow and the migration of adult sockeye salmon (*Oncorhynchus nerka*) in the Columbia River. Canadian Journal of Fisheries and Aquatic Sciences 54: 1349-1360.
- Dittman, A. H., T. P. Quinn, G. A. Nevitt, B. Hacker and D. R. Storm. 1997. Sensitization of olfactory guanylyl cyclase to a specific imprinted odorant in coho salmon. Neuron 19: 381-389.
- Berg, O.K., M.D. Adkison and T.P. Quinn. 1997. Bilateral asymmetry, sexual dimorphism, and nematode parasites in mature male sockeye salmon *Oncorhynchus nerka*. Northwest Science 71: 305-312.
- 1998**
- McPhee, M.V. and T.P. Quinn. 1998. Factors affecting the duration of nest defense and reproductive lifespan of female sockeye salmon, *Oncorhynchus nerka*. Environmental Biology of Fishes 51: 369-375.
- Spidle, A.P., T.P. Quinn and P. Bentzen. 1998. Sex-biased marine survival and growth in a population of coho salmon (*Oncorhynchus kisutch*). Journal of Fish Biology 52: 907-915.
- Kinnison, M., M. Unwin, N. Boustead and T. Quinn. 1998. Population-specific variation in body dimensions of adult chinook salmon (*Oncorhynchus tshawytscha*) from New Zealand and a related Sacramento River population, 90 years after introduction. Canadian Journal of Fisheries and Aquatic Sciences 55: 554-563.
- Quinn, T.P. and M.V. McPhee. 1998. Effects of senescence and density on the aggression of adult female sockeye salmon. Journal of Fish Biology 52: 1295-1300.
- Quinn, T.P., E. Graynoth, C.C. Wood and C.J. Foote. 1998. Genotypic and phenotypic divergence of sockeye salmon in New Zealand from their ancestral British Columbia populations. Transactions of the American Fisheries Society 127: 517-534.

- Kinnison, M.T., M.J. Unwin, W.K. Hershberger and T.P. Quinn. 1998. Egg size, fecundity and early development rate of two New Zealand chinook salmon (*Oncorhynchus tshawytscha*) populations, with a comparison to their ancestral Sacramento River population. *Canadian Journal of Fisheries and Aquatic Sciences* 55: 1946-1953.
- Rhodes, J.S. and T.P. Quinn. 1998. Factors affecting the outcome of territorial contests between hatchery and naturally reared coho salmon parr in the laboratory. *Journal of Fish Biology* 53: 1220-1230.
- Dittman, A.H., T.P. Quinn and E.C. Volk. 1998. Is the distribution, growth and survival of juvenile salmonids sex-biased? Negative results for coho salmon in an experimental stream channel. *Journal of Fish Biology* 53: 1360-1364.
- McCormick, S.D., L.P. Hansen, T.P. Quinn and R.L. Saunders. 1998. Movement, migration, and smolting of Atlantic salmon. *Canadian Journal of Fisheries and Aquatic Sciences* 55 (Supplement 1): 77-92.
- Hansen, L.P. and T.P. Quinn. 1998. The marine phase of the Atlantic salmon (*Salmo salar*) life cycle, with comparisons to Pacific salmon. *Canadian Journal of Fisheries and Aquatic Sciences* 55 (Supplement 1): 104-118.
- Marschall, E.A., T.P. Quinn, D.A. Roff, J.A. Hutchings, N.B. Metcalfe, T.A. Bakke, R.L. Saunders and N.L. Poff. 1998. A framework for understanding Atlantic salmon (*Salmo salar*) life history. *Canadian Journal of Fisheries and Aquatic Sciences* 55 (Supplement 1): 48-58.
- Kinnison, M.T., M.J. Unwin, and T.P. Quinn. 1998. Growth and salinity tolerance of juvenile chinook salmon (*Oncorhynchus tshawytscha*) from two introduced New Zealand populations. *Canadian Journal of Zoology* 76: 2219-2226.

1999

- Montgomery, D.R., E.M. Beamer, G. Pess and T.P. Quinn. 1999. Channel type and salmon spawning distribution. *Canadian Journal of Fisheries and Aquatic Sciences* 56: 377-387.
- Quinn, T.P. 1999. Variation in Pacific salmon reproductive behaviour associated with species, sex and levels of competition. *Behaviour* 136: 179-204.
- Unwin, M.J., M.T. Kinnison and T. P. Quinn. 1999. Exceptions to semelparity: postmaturation survival, morphology and energetics of male chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 56: 1172-1181.
- Hendry, A.P., O.K. Berg and T.P. Quinn. 1999. Breeding date, life history, and energy allocation in a population of sockeye salmon (*Oncorhynchus nerka*). *Oikos* 85: 499-514.
- Griffith, J.N., A.P. Hendry and T.P. Quinn. 1999. Exploratory behavior or straying: adult sockeye salmon (*Oncorhynchus nerka*) entering a non-natal hatchery. *Fishery Bulletin* 97: 713-716
- Quinn, T.P., E.C. Volk and A.P. Hendry. 1999. Natural otolith microstructure patterns reveal precise homing to natal incubation sites by sockeye salmon (*Oncorhynchus nerka*). *Canadian Journal of Zoology* 77: 766-775.

- Steen, R.P. and T.P. Quinn. 1999. Egg burial depth by sockeye salmon (*Oncorhynchus nerka*): implications for survival of embryos and natural selection on female body size. *Canadian Journal of Zoology* 77: 836-841.
- Rhodes, J.S. and T.P. Quinn. 1999. Comparative performance of genetically similar hatchery and naturally-reared juvenile coho salmon in streams. *North American Journal of Fisheries Management* 19: 670-677.
- Quinn, T.P. 1999. Revisiting the stock concept in Pacific salmon: insights from Alaska and New Zealand. *Northwest Science* 73: 312-324
- Candy, J.R. and T.P. Quinn. 1999. Behavior of adult chinook salmon (*Oncorhynchus tshawytscha*) in British Columbia coastal waters determined from ultrasonic telemetry. *Canadian Journal of Zoology* 77: 1161-1169.
- Quinn, T.P. and M.T. Kinnison. 1999. Size-selective and sex-selective predation by brown bears on sockeye salmon. *Oecologia* 121: 273-282.

2000

- Essington, T.E., T.P. Quinn and V.E. Ewert. 2000. Intra- and interspecific competition and the reproductive success of sympatric Pacific salmon. *Canadian Journal of Fisheries and Aquatic Sciences* 57: 205-213.
- Quinn, T. P., M. J. Unwin, and M. T. Kinnison. 2000. Evolution of temporal isolation in the wild: genetic divergence in timing of migration and breeding by introduced chinook salmon populations. *Evolution* 54: 1372-1385.
- Schuett-Hames, D. E., N. P. Peterson, R. Conrad and T. P. Quinn. 2000. Patterns of gravel scour and fill after spawning by chum salmon in a western Washington stream. *North American Journal of Fisheries Management* 20: 610-617.
- Scholz, N. L., N. K. Truelove, B. L. French, B. A. Berejekian, T. P. Quinn, E. Casillas and T. K. Collier. 2000. Diazinon disrupts antipredator and homing behavior in chinook salmon (*Oncorhynchus tshawytscha*). *Canadian Journal of Fisheries and Aquatic Sciences* 57: 1911-1918.
- Quinn, T.P. and G.B. Buck. 2000. Scavenging by brown bears, *Ursus arctos*, and glaucous-winged gulls, *Larus glaucescens*, on adult sockeye salmon, *Oncorhynchus nerka*. *Canadian Field-Naturalist* 114: 217-223.
- Hendry, A.P., J. K. Wenburg, P. Bentzen, E. C. Volk and T. P. Quinn. 2000. Rapid evolution of reproductive isolation in the wild: evidence from introduced salmon. *Science* 290: 516-518.
- Unwin, M. J., T. P. Quinn, M.T. Kinnison and N.C. Boustead. 2000. Divergence in juvenile growth and life history in two recently colonized and partially isolated chinook salmon populations. *Journal of Fish Biology* 57: 943-960.

2001

- Roni, P. and T. P. Quinn. 2001. Density and size of juvenile salmonids in response to placement of large woody debris in western Oregon and Washington streams. *Canadian Journal of Fisheries and Aquatic Sciences* 58: 282-292.
- Courtenay, S. C., T. P. Quinn, H. M. C. Dupuis, C. Groot and P. A. Larkin. 2001. Discrimination of family-specific odours by juvenile coho salmon (*Oncorhynchus kisutch*): roles of learning and odour concentration. *Journal of Fish Biology* 58: 107-125.

- Gende, S. M., T. P. Quinn and M. F. Willson. 2001. Consumption choice by bears feeding on salmon. *Oecologia* 127: 372-382.
- Bentzen, P., J. B. Olsen, J. McLean, T. R. Seamons, and T. P. Quinn. 2001. Kinship analysis of Pacific salmon: insights into mating, homing and timing of reproduction. *Journal of Heredity* 92: 127-136.
- Hendry, A. P., O. K. Berg and T. P. Quinn. 2001. Breeding location choice in salmon: causes (habitat, competition, body size, energy stores) and consequences (life span, energy stores). *Oikos* 93: 407-418.
- Roni, P. and T. P. Quinn. 2001. Effects of wood placement on movements of trout and juvenile coho salmon in natural and artificial stream channels. *Transactions of the American Fisheries Society* 130: 675-685.
- Kinnison, M. T., M. J. Unwin, A. P. Hendry, and T. P. Quinn. 2001. Migratory costs and the evolution of egg size and number allocation in new and indigenous salmon populations. *Evolution* 55: 1656-1667.
- Quinn, T. P. and G. B. Buck. 2001. Size and sex selective mortality on adult Pacific salmon: bears, gulls and fish out of water. *Transactions of the American Fisheries Society* 130: 995-1005.
- Quinn, T.P., Hendry, A.P., and Buck, G.B. 2001. Balancing natural and sexual selection in sockeye salmon: interactions between body size, reproductive opportunity and vulnerability to predation by bears. *Evolutionary Ecology Research* 3: 917-937.
- Quinn, T. P., L. Wetzel, S. Bishop, K. Overberg and D. E. Rogers. 2001. Influence of breeding habitat on bear predation, and age at maturity and sexual dimorphism of sockeye salmon populations. *Canadian Journal of Zoology* 79: 1782-1793.
- Kahler, T. H., P. Roni and T. P. Quinn. 2001. Summer movement and growth of juvenile anadromous salmonids in small western Washington streams. *Canadian Journal of Fisheries and Aquatic Sciences* 58: 1947-1956.
- Quinn, T.P., M.T. Kinnison and M.J. Unwin. 2001. Evolution of chinook salmon (*Oncorhynchus tshawytscha*) populations in New Zealand: pattern, rate, and process. *Genetica* 112/113: 493-513.
- Quinn, T.P. 2001. Review of: Sustainable Fisheries Management: Pacific salmon. Edited by E.E. Knutson, C. R. Steward, D. D. MacDonald, J. E. Williams, and D. W. Reiser. *Copeia* 2001: 1174-1175.
- Mackey, G., J. E. McLean and T. P. Quinn. 2001. Comparisons of run timing, spatial distribution, and length of wild and newly-established hatchery populations of steelhead in Forks Creek, Washington. *North American Journal of Fisheries Management* 21: 717-724.
- Barry, T.P., M.J. Unwin, J.A. Malison and T.P. Quinn. 2001. Free and total cortisol levels in semelparous and iteroparous chinook salmon. *Journal of Fish Biology* 59: 1673-1676.

2002

- Hodgson, S. and T. P. Quinn. 2002. The timing of adult sockeye salmon migration into fresh water: adaptations by populations to prevailing thermal regimes. *Canadian Journal of Zoology* 80: 542-555.
- Nowak, G. M. and T. P. Quinn. 2002. Diel and seasonal patterns of horizontal and vertical movements of telemetered cutthroat trout (*Oncorhynchus clarki*) in Lake

- Washington, Washington. Transactions of the American Fisheries Society 131: 452-462.
- Robards, M. D. and T. P. Quinn. 2002. The migratory timing of adult summer-run steelhead trout (*Oncorhynchus mykiss*) in the Columbia River: Six decades of environmental change. Transactions of the American Fisheries Society 131: 523-536.
- Dickerson, B. R., M. F. Willson and T. P. Quinn. 2002. Body size, arrival date, and reproductive success of pink salmon, *Oncorhynchus gorbuscha*. Ethology, Ecology and Evolution 14: 29-44.
- Kinnison, M.T., P. Bentzen, M.J. Unwin and T.P. Quinn. 2002. Reconstructing recent divergence: evaluating non-equilibrium population structure in New Zealand chinook salmon. Molecular Ecology 11: 739-754.
- Quinn, T. P., J. A. Peterson, V. Gallucci, W. K. Hershberger, and E. L. Brannon. 2002. Artificial selection and environmental change: countervailing factors affecting the timing of spawning by coho and chinook salmon. Transactions of the American Fisheries Society 131: 591-598.
- 2003
- McLean, J. E., Bentzen, P., and Quinn, T. P. 2003. Differential reproductive success of sympatric, naturally-spawning hatchery and wild steelhead trout (*Oncorhynchus mykiss*) through the adult stage. Canadian Journal of Fisheries and Aquatic Sciences 60: 433-440.
- Quinn, T.P., S. M. Gende, G. T. Ruggerone and D. E. Rogers. 2003. Density dependent predation by brown bears (*Ursus arctos*) on sockeye salmon (*Oncorhynchus nerka*). Canadian Journal of Fisheries and Aquatic Sciences 60: 553-562.
- Unwin, M. J., M. T. Kinnison, N. C. Boustead and T. P. Quinn. 2003. Genetic control over survival in Pacific salmon (*Oncorhynchus* spp.): experimental evidence between and within populations of New Zealand chinook salmon (*O. tshawytscha*). Canadian Journal of Fisheries and Aquatic Sciences 60: 1-11.
- Stewart, I. J., R. Hilborn, and T. P. Quinn. 2003. Coherence of observed adult sockeye salmon abundance within and among spawning habitats in the Kvichak River watershed. Alaska Fishery Research Bulletin 10: 28-41.
- Hilborn, R. T. P. Quinn, D. E. Schindler and D. E. Rogers. 2003. Biocomplexity and fisheries sustainability. Proceedings of the National Academy of Science 100: 6564-8568.
- Vøllestad, L. A. and T. P. Quinn. 2003. Trade-off between growth rate and aggression in juvenile coho salmon *Oncorhynchus kisutch*. Animal Behaviour 66: 561-568.
- Stewart, I. S., T. P. Quinn and P. Bentzen. 2003. Evidence for fine-scale natal homing among island beach spawning sockeye salmon, *Oncorhynchus nerka*. Environmental Biology of Fishes 67: 77-85.
- Kinnison, M. T., M. J. Unwin and T. P. Quinn. 2003. Migratory costs and contemporary evolution of reproductive allocation in male chinook salmon. Journal of Evolutionary Biology 16: 1257-1269.
- Quinn, T. P. 2003. Migration of Freshwater Fishes. By: Martyn C. Lucas and Etienne Baras. Book Review, in The Quarterly Review of Biology 78: 490-491.

2004

- Gende, S. M., Quinn, T. P., Hilborn, R., Hendry, A. P., and B. Dickerson. 2004. Brown bears selectively kill salmon with higher energy content but only in habitats that facilitate choice. *Oikos* 104: 518-528.
- Quinn, T. P., L. A. Vøllestad, J. Peterson and V. Gallucci. 2004. Influences of fresh water and marine growth on the egg size – egg number tradeoff in coho and chinook salmon. *Transactions of the American Fisheries Society* 133: 55-65.
- Seamons, T. R., P. Bentzen and T. P. Quinn. 2004. The effects of adult length and arrival date on individual reproductive success in wild steelhead trout (*Oncorhynchus mykiss*) *Canadian Journal of Fisheries and Aquatic Sciences* 61:193-204.
- Seamons, T. R., P. Bentzen and T. P. Quinn. 2004. The mating system of steelhead (*Oncorhynchus mykiss*), inferred by molecular analysis of parents and progeny. *Environmental Biology of Fishes* 69: 333-344.
- Gende, S. M., T. P. Quinn, M. F. Willson, R. Heintz, and T. M. Scott. 2004. Magnitude and fate of salmon-derived nutrients and energy in a coastal stream ecosystem. *Journal of Freshwater Ecology* 19: 149-160.
- Gende, S. M. and T. P. Quinn. 2004. The relative importance of prey density and social dominance in determining energy intake by bears feeding on Pacific salmon. *Canadian Journal of Zoology* 82: 75-85.
- Stewart, I. J., S. M. Carlson, C. P. Boatright, G. B. Buck, and T. P. Quinn. 2004. Site fidelity of spawning sockeye salmon (*Oncorhynchus nerka* W.) in the presence and absence of olfactory cues. *Ecology of Freshwater Fishes* 13: 104-110.
- McLean, J. E., Bentzen, P., and Quinn, T. P. 2004. Differential reproductive success of sympatric, naturally spawning hatchery and wild steelhead (*Oncorhynchus mykiss*). *Environmental Biology of Fishes* 69: 359-369.
- Nowak, G. M., R. A. Tabor, E. J. Warner, K. L. Fresh and T. P. Quinn. 2004. Ontogenetic shifts in habitat and diet of cutthroat trout in Lake Washington, Washington. *North American Journal of Fisheries Management* 24: 624-635.
- Vøllestad, L. A., J. Peterson and T. P. Quinn. 2004. Effects of fresh water and marine growth rates on early maturity in male coho and chinook salmon. *Transactions of the American Fisheries Society* 133: 495-503.
- Brannon, E. L., M. S. Powell, T. P. Quinn and A. Talbot. 2004. Population structure of Columbia River basin chinook salmon and steelhead trout. *Reviews in Fisheries Science* 12: 99-232.
- Dickerson, B. R., M. F. Willson, P. Bentzen and T. P. Quinn. 2004. Size-assortative mating in salmonids: negative evidence for pink salmon in natural conditions. *Animal Behaviour* 68: 381-385.
- Boatright, C., T. Quinn and R. Hilborn. 2004. Timing of adult migration and stock structure of sockeye salmon in Bear Lake, Alaska. *Transactions of the American Fisheries Society* 133: 911-921.
- Beauchamp, D. A., C. J. Sergeant, M. M. Mazur, J. M. Scheuerell, D. E. Schindler, M. D. Scheuerell, K. L. Fresh, D. E. Seiler, and T. P. Quinn. 2004. Spatial-temporal dynamics of early feeding demand and food supply by sockeye salmon fry in Lake Washington. *Transactions of the American Fisheries Society* 133: 1014-1032.

- Carlson, S. C., H. B. Rich, Jr. and T. P. Quinn. 2004. Reproductive lifespan and sources of mortality for alternative male life history strategies in sockeye salmon, *Oncorhynchus nerka*. *Canadian Journal of Zoology* 82: 1878-1885
- Quinn, T. P. and K. W. Myers. 2004. Anadromy and the marine migrations of Pacific salmon and trout: Rounsefell revisited. *Reviews in Fish Biology and Fisheries* 14: 421-442.
- Hendry, A. P., V. Castric, M. T. Kinnison, and T. P. Quinn. 2004. The evolution of philopatry and dispersal: homing versus straying in salmonids. Pages 52-91 in A. P. Hendry, and S. C. Stearns, editors. *Evolution illuminated: salmon and their relatives*. Oxford University Press, Oxford.
- 2005
- Meehan, E. P., E. E. Seminet-Reneau and T. P. Quinn. 2005. Bear predation on Pacific salmon facilitates colonization of carcasses by fly maggots. *American Midland Naturalist* 153: 142-151.
- Dickerson, B. R., K. W. Brinck, M. F. Willson, P. Bentzen and T. P. Quinn. 2005. Relative importance of body size and timing of arrival to breeding grounds in reproductive success of pink salmon. *Ecology* 86: 347-352.
- Quinn, T. P. 2005. *The Behavior and Ecology of Pacific Salmon and Trout*. University of Washington Press, Seattle. 378 pages.
- McLean, J. E., P. Bentzen, and T. P. Quinn. 2005. Nonrandom, size- and timing-biased breeding in a hatchery population of steelhead trout. *Conservation Biology* 19: 446-454.
- Quinn, T. P. 2005. Review of *Inland Fishes of Washington*, by Richard Wydoski and Richard Whitney. *Quarterly Review of Biology* 80: 128-129.
- Robins, J. B., C. A. Abrey, T. P. Quinn and D. E. Rogers. 2005. Lacustrine growth of juvenile pink salmon, *Oncorhynchus gorbuscha*, and a comparison with sympatric sockeye salmon, *O. nerka*. *Journal of Fish Biology* 66: 1671-1680.
- Quinn, T. P., B. R. Dickerson and L. A. Vøllestad. 2005. Marine survival and distribution patterns of two Puget Sound hatchery populations of coho (*Oncorhynchus kisutch*) and chinook (*O. tshawytscha*) salmon. *Fisheries Research* 76: 209-220
- Newell, J. C. and T. P. Quinn. 2005. Behavioral thermoregulation by maturing adult sockeye salmon (*Oncorhynchus nerka*) in a stratified lake prior to spawning. *Canadian Journal of Zoology* 83: 1232-1239
- Dickerson, B. R., M. F. Willson, P. Bentzen and T. P. Quinn. 2005. Heritability of life history and morphological traits in a wild pink salmon, *Oncorhynchus gorbuscha*, population assessed by DNA parentage analysis. *Transactions of the American Fisheries Society* 134: 1323-1328.
- Magnuson, J. J. and T. P. Quinn. 2005. Arthur D. Hasler: he showed us the way. (obituary). *Environmental Biology of Fishes* 74: 67-77.
- Quinn, T. P. 2005. Comment: Sperm competition in salmon hatcheries - The need to institutionalize genetically benign spawning protocols. *Transactions of the American Fisheries Society* 134: 1490-1494.
- Quinn, T. P. 2005. Atlas of Pacific Salmon, by Xanthippe Augerot. Book Review, in *Integrative and Comparative Biology* 45: 952

2006

- Hodgson, S., T. P. Quinn, R. Hilborn, R. C. Francis, and D. E. Rogers. 2006. Marine and freshwater climatic factors affecting interannual variation in the timing of return migration to fresh water of sockeye salmon. *Fisheries Oceanography* 15: 1-24.
- Quinn, T. P., P. McGinnity and T. F. Cross. 2006. Long-term declines in body size and shifts in run timing of Atlantic salmon in Ireland. *Journal of Fish Biology* 68: 1713-1730.
- Rich, H. B., Jr., S. M. Carlson, B. E. Chasco, K. C. Briggs and T. P. Quinn. 2006. Movements of male sockeye salmon, *Oncorhynchus nerka*, on spawning grounds: the effects of in-stream residency, density, and body size. *Animal Behaviour* 71:971-981.
- Johnson, S. P., S. M. Carlson and T. P. Quinn. 2006. Tooth size and skin thickness in mature sockeye salmon: evidence for habitat constraints and variable investment between the sexes. *Ecology of Freshwater Fish* 15: 331-338.
- Hauser, L., T. R. Seamons, M. Dauer, K.A. Naish, and T.P. Quinn. 2006. An empirical verification of population assignment methods with parentage data: hatchery and wild steelhead (*Oncorhynchus mykiss*) in Forks Creek, Washington, USA. *Molecular Ecology* 15: 3157-3173.
- Quinn, T. P., I. J. Stewart and C. P. Boatright. 2006. Experimental evidence of homing to site of incubation by mature sockeye salmon (*Oncorhynchus nerka*). *Animal Behaviour* 77: 941-949.
- Quinn, T.P. and Myers, K.W. 2006. Patterns of anadromy and migrations of Pacific salmon and trout at sea. Pages 11-24 in Harris, G. & Milner, N. (eds), *Sea Trout: Biology, Conservation and Management, Proceedings of the First International Sea Trout Symposium, Cardiff, July 2004*. Blackwell Publishing Ltd, Oxford.

2007

- Seamons, TR, P Bentzen, TP Quinn. 2007. DNA parentage analysis reveals inter-annual variation in selection: results from 19 consecutive brood years in steelhead trout. *Evol. Ecol. Res.* 9:409-431.
- Allen, C. S., H. B. Rich, Jr. and T. P. Quinn. 2007. Condition-dependent reproductive tactics by large and small anadromous male sockeye salmon *Oncorhynchus nerka*. *Journal of Fish Biology* 70: 1302-1307.
- Garcia de Leaniz, C. I. A. Fleming, S. Einum, E. Verspoor, W. C. Jordan, S. Consuegra, N. Aubin-Horth, D. Lajus, B. H. Letcher, A. F. Youngson, J.H. Webb, L. A. Vøllestad, B. Villanueva, A. Ferguson, and T. P. Quinn. 2007. A critical review of adaptive genetic variation in Atlantic salmon: implications for conservation. *Biological Reviews* 82: 173-211.
- Quinn, T. P., S. Hodgson, L. Flynn, R. Hilborn and D. E. Rogers. 2007. Directional selection by commercial fisheries and the timing of sockeye salmon (*Oncorhynchus nerka*) migrations. *Ecological Applications* 17: 731-739.
- Quinn, T. P., D. M. Eggers, J. H. Clark, and H. B. Rich, Jr. 2007. Density, climate, and the processes of prespawning mortality and egg retention in Pacific salmon (*Oncorhynchus* spp.). *Canadian Journal of Fisheries and Aquatic Sciences* 64: 574-582.

- Anderson, J. H. and T. P. Quinn. 2007. Movements of adult coho salmon (*Oncorhynchus kisutch*) during colonization of newly accessible habitat. *Canadian Journal of Fisheries and Aquatic Sciences* 64: 1143-1154.
- Garcia de Leániz, C., I. A. Fleming, S. Einum, E. Verspoor, S. Consuegra, W. C. Jordan, N. Aubin-Horth, D. L. Lajus, B. Villanueva, A. Ferguson, A. F. Youngson, and T. P. Quinn. 2007. Local adaptation. Pages 195-235 in Verspoor, E. L. Stradmeyer, & J. L. Nielsen (eds.), *The Atlantic salmon: Genetics, conservation and management*. Blackwell Publishing, Oxford.
- Naish, K. A., J. E. Taylor, III, P. S. Levin, T. P. Quinn, J. R. Winton, D. Huppert and R. Hilborn. 2007. An evaluation of the effects of conservation and fishery enhancement hatcheries on wild populations of salmon. *Advances in Marine Biology* 53: 61-194.
- Newell, J. C., K. L. Fresh, and T. P. Quinn. 2007. Arrival patterns and movements of adult sockeye salmon (*Oncorhynchus nerka*) in Lake Washington: implications for management of an urban fishery. *North American Journal of Fisheries Management* 27: 908-917.
- Carlson, S. M. and T. P. Quinn. 2007. Ten years of varying lake level and selection on size-at-maturity in sockeye salmon. *Ecology* 88: 2620-2629.
- Schtickzelle, N. and T. P. Quinn. 2007. A metapopulation perspective for salmon and other anadromous fish. *Fish and Fisheries* 8: 297-314.
- Carlson, S. M., R. Hilborn, A. P. Hendry and T. P. Quinn. 2007. Predation by bears drives senescence in natural populations of salmon. *PLoSOne* 2(12): e1286.

2008

- Westley, P. A. H., S. M. Carlson and T. P. Quinn. 2008. Among-population variation in adipose fin size parallels the expression of other secondary sexual characteristics in sockeye salmon (*Oncorhynchus nerka*). *Environmental Biology of Fishes* 81: 439-446.
- Crozier, L. G., A. P. Hendry, P. W. Lawson, T. P. Quinn, N. J. Mantua, J. Battin, R. G. Shaw and R. B. Huey. 2008. Potential responses to climate change in organisms with complex life histories: evolution and plasticity in Pacific salmon. *Evolutionary Applications* 1: 252-270.
- Anderson, J. H. P. M. Kiffney, G. R. Pess and T. P. Quinn. 2008. Summer distribution and growth of juvenile coho salmon during colonization of newly accessible habitat. *Transactions of the American Fisheries Society* 137: 772-781.
- Kinnison, M. T., M. J. Unwin and T. P. Quinn. 2008. Eco-evolutionary versus habitat contributions to invasion in salmon: experimental evaluation in the wild. *Molecular Ecology* 17: 405-414.
- McLean, J. E., T. R. Seamons, M. B. Dauer, P. Bentzen and T. P. Quinn. 2008. Variation in reproductive success and effective number of breeders in a hatchery population of steelhead trout (*Oncorhynchus mykiss*): examination by microsatellite-based parentage analysis. *Conservation Genetics* 9: 295-304.
- Westley, P., R. Hilborn, T. P. Quinn, G. Ruggerone, and D. E. Schindler. 2008. Long-term changes in rearing habitat and downstream movement by juvenile sockeye salmon (*Oncorhynchus nerka*) in an interconnected Alaska lake system. *Ecology of Freshwater Fish* 17: 443-454.

- Lin, J., T. P. Quinn, R. Hilborn and L. Hauser. 2008. Fine-scale differentiation between sockeye salmon ecotypes and the effect of phenotype on straying. *Heredity* 101: 341-350.
- Taylor, E. B., Lowery, E., Lilliestr ale, A., Elz, A., and T. P. Quinn. 2008. Genetic analysis of sympatric char populations in Western Alaska: Arctic char (*Salvelinus alpinus*) and Dolly Varden (*S. malma*) are not two sides of the same coin. *Journal of Evolutionary Biology* 21: 1609-1625.
- Hauser, D. D. W., C. S. Allen, H. B. Rich, Jr., and T. P. Quinn. 2008. Resident harbor seals (*Phoca vitulina*) in Iliamna Lake, Alaska: summer diet and partial consumption of adult sockeye salmon (*Oncorhynchus nerka*). *Aquatic Mammals* 34: 303-309.
- Lin, J., E. Ziegler, L. Hauser, and T. P. Quinn. 2008. Contrasting patterns of morphological and neutral genetic divergence in geographically proximate populations of sockeye salmon (*Oncorhynchus nerka*) in Lake Aleknagik, Alaska. *Journal of Fish Biology* 73: 1993-2004.

2009

- Quinn, T. P., S. M. Carlson, S. M. Gende, and H. B. Rich, Jr. 2009. Transportation of Pacific salmon carcasses from streams to riparian forests by bears. *Canadian Journal of Zoology* 87: 195-203.
- Dauer, M. B., T. R. Seamons, L. Hauser, T. P. Quinn, and K. A. Naish. 2009. Estimating the ratio of hatchery-produced to wild adult steelhead on the spawning grounds using scale pattern analyses. *Transactions of the American Fisheries Society* 138: 15-22.

Manuscripts in press:

- Quinn, T. P., K. Doctor, N. Kendall and H. B. Rich, Jr. Diadromy and the life history of sockeye salmon: nature, nurture, and the hand of man. *American Fisheries Society Symposium*
- Quinn, T. P. Changing themes in the study of diadromous fishes *American Fisheries Society Symposium*
- Quinn, T. P. Pacific salmon population structure and dynamics: A perspective from Bristol Bay on life history variation across spatial and temporal scales. *American Fisheries Society Symposium*
- Seamons, T. R., M. B. Dauer, J. Sneva and T. P. Quinn. Use of parentage assignment and DNA genotyping to validate scale analysis for estimating steelhead trout (*Oncorhynchus mykiss*) age and spawning history. *North American Journal of Fisheries Management*
- Kendall, N. W. and T. P. Quinn. Effects of population-specific variation in age and length on fishery selection and exploitation rates of sockeye salmon. *Canadian Journal of Fisheries and Aquatic Sciences*
- Rich, H. B., Jr., T. P. Quinn, M. D. Scheuerell, and D. E. Schindler. Climate and intra-specific competition control the growth and life history of juvenile sockeye salmon (*Oncorhynchus nerka*) in Iliamna Lake, Alaska. *Canadian Journal of Fisheries and Aquatic Sciences*

Carlson, S. M., H. B. Rich, Jr., and T. P. Quinn. Does variation in selection imposed by bears drive divergence among populations in the size and shape of sockeye salmon? *Evolution*