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Education:

1985	Ph. D. Fisheries Sciences, Hokkaido University, Japan
1973	B. Fisheries Science, Hokkaido University, Japan

Employment:

2005-present	Professor, Hokkaido University
2000-present	Affiliate Professor, University of Alaska Fairbanks
1998-2005	Professor, Hokkaido Tokai University
1990-1998	Chief scientist, National Salmon Hatchery, Fisheries Agency of Japan
1973-1990	Research scientist, National Salmon Hatchery, Fisheries Agency of Japan

Main Professional Recognition:

1995-present	American Fisheries Society
1995-present	Oceanographic Society of Japan
1985-present	Ecological Society of Japan
1970-present	Japanese Society of Fisheries Science
1970-present	Ichthyological Society of Japan

Awards

2006	Progress Fisheries Science Award, Japanese Society of Fisheries Science
1998	Zoological Science Award (recognition as the most significant publication of the year), the Zoological Society of Japan

Professional Service

2009-present	Member of AICE, PICES
2005-2009	Member of FIS TASK team, PICES
2000-present	Member of the IUCN/SSC Salmon Specialist Group
1999-present	Member of counseling committee, the Ichthyological Society of Japan
1997-present	Member of counseling committee, the Japanese Society of Fisheries Science
1994-2007	Member of BASS TASK team, PICES

Publications and Reports (List 5 recent/relevant publications)

Books

Kaeriyama, M. 2008. Ecosystem-based sustainable conservation and management of Pacific salmon. *In* Fisheries for Global Welfare and Environment, 5th World Fisheries Congress 2008 (eds. K. Tsukamoto, T. Kawamura, T. Takeuchi, T. D. Beard, Jr. and M. J. Kaiser), pp.371-380.

Kaeriyama, M. and Edpalina, R. R. 2004. Evaluation of the biological interaction between wild and hatchery population for sustainable fisheries management of Pacific salmon. *In* Stock Enhancement and Sea Ranching, Second Edition: Developments, pitfalls and opportunities (eds. Leber, K. M., Kitada, S., Blankenship, H. L., and Svasand, T.), pp. 247-259.

Kaeriyama, M. 2004. Population ecology of Pacific salmon. *In* Ecology and evolution of salmonids (ed. K. Maekawa), pp. 137-163. Bunichi-sougo, Tokyo.

Kaeriyama, M. 2002. Modern salmonology. p. 128., Seizando, Tokyo.

Kaeriyama, M. 2001. Salmon episode. *In* Episode of fishes (ed. K. Amaoka), pp. 134-150. Tokai Univ. Press, Tokyo.

Scientific papers

Kishi, M.J., M. Kaeriyama, H. Ueno, and Y. Kamezawa. 2010. The effect of climate change on the growth of Japanese chum salmon (*Oncorhynchus keta*) using a bioenergetics model coupled with three-dimensional lower trophic ecosystem model (NEMURO). Deep Sea Research II. doi. 10.1016/j.dsr2.2009.12.013.

Yokotani, Y., Y. Koshino, K. Miyamoto, H. Kudo, S. Kitada, and M. Kaeriyama. 2010. Estimating the spawning escapement of pink salmon *Oncorhynchus gorbuscha* using the area-under-the-curve method in the Rusha River of the Shiretoko Peninsula, Hokkaido Island. Nippon Suisan Gakkaishi, 76: 383-391.

Kaeriyama, M., H. Seo, and H. Kudo. 2009. Trends in run size and carrying capacity of Pacific salmon in the North Pacific Ocean. NPAFC Bull., 5: 293-302.

Yokotani, R., N. Azuma, H. Kudo, S. Abe, and M. Kaeriyama. 2009. Genetic differentiation between early- and late-run populations of chum salmon (*Oncorhynchus keta*) naturally spawned in the Yurappu River inferred from mitochondrial DNA analysis. Fish Genetics and Breeding Science, 39: 9-16.

Myers, K. W., R. V. Walker, N. D. Davis, J. L. Armstrong, and M. Kaeriyama. 2009. High seas distribution, biology, and ecology of Arctic-Yukon-Kuskokwim salmon: Direct information from high seas tagging experiments, 1954-2006. Am. Fish. Soc. Symp. 70: 1-39.

Drinkwater, K. F., G. Beaugrand, M. Kaeriyama, S. Kim, G. Ottersen, R. I. Perry, H. Portner, J. J. Polovina, A. Takasuka. 2009. On the processes linking climate to ecosystem changes. Journal of Marine Systems, doi:10.1016/j.jmarsys.2008.12.014.

Kudo, H., Y. Doi, H. Ueda, and M. Kaeriyama. 2009. Molecular characterization and histochemical demonstration of salmon olfactory marker protein in the olfactory epithelium of lacustrine sockeye salmon (*Oncorhynchus nerka*). Comparative biochemistry and physiology, Part A, 154: 142-150.

Seo, H., H. Kudo and M. Kaeriyama. 2009. Spatiotemporal change in growth of two populations of Asian chum salmon in relation to intraspecific interaction. Fish. Sci. 75:957-966.

Kaeriyama, M. 2008. Ecosystem-based sustainable conservation and management of Pacific salmon. In Fisheries for Global Welfare and Environment (eds. K. Tsukamoto, T. Kawamura, T. Takeuchi, T. D. Beard, Jr. and M. J. Kaiser), pp. 371-380. TERRAPUB, Tokyo.

Yatsu, A., K. Y. Aydin, J. R. King, G. A. McFarlane, S. Chiba, K. Tadokoro, M. Kaeriyama, and Y. Watanabe. 2008. Elucidating dynamic responses of North Pacific fish populations to climatic forcing: influence of life-history strategy. Progress in Oceanography, 77: 252-268.

Kaeriyama, M. 2008. Changes in the life history and distribution of salmon due to global warming. Littera Populi, Spec. Issu. Environ. Sci., 38-39.

Kaeriyama, M., A. Yatsu, M. Noto, and S. Saito. 2007. Spatial and temporal changes in the growth patterns and survival of Hokkaido chum salmon populations in 1970-2001. N. Pac. Anadr. Fish Comm. Bull. 4: 251-256.

Kaeriyama, M. 2006. Carrying capacity and life history strategy of Pacific salmon in relation to long-term climate change. GLOBEC International Newsletter, 12: 38-39.

Kaeriyama, M. 2006. Life history and population dynamics of salmonids. Nippon Suisan Gakkaishi, 72: 628-631. *(in Japanese)*

Morita, K., T. Saito, Y. Miyakoshi, M. Fukuwaka, T. Nagasawa, and M. Kaeriyama. 2006. A review of Pacific salmon hatchery programmes on Hokkaido Island, Japan. ICES Journal of Marine Science, 63: 1353-1363.

Yatsu, A. and M. Kaeriyama. 2005. Linkages between coastal and open ocean habitats and dynamics of Japanese stocks of chum salmon and Japanese sardine. Deep-Sea Research II 52: 727-737.

Kaeriyama, M. 2005. Effects of anadromous fish on material cycle in the riparian ecosystem. Jap. J. Ecology, 55: 51-59. *(in Japanese)*

Kitagawa, M., T. Azumaya, K. W. Myers, and M. Kaeriyama. Spatial comparison of the feeding ecology of sockeye (*Oncorhynchus nerka*) and pink salmon (*O. gorbuscha*) in the ocean during the summer of 2003. NPAFC Technical Report (6): 31-34.

Abe, S., S. Sato, R. R. Edpalina, H. Ando, M. Kaeriyama, S. Urawa, and A. Urano. 2004. Stock identification of chum salmon by mitochondrial DNA sequence analysis. NPAFC Technical Report (5): 82-83.

Kaeriyama, M. 2004. Evaluation of carrying capacity of Pacific salmon in the North Pacific ocean for ecosystem-based sustainable conservation management. NPAFC Technical Report (5): 1-4.

Sato, S., H. Kojima, J. Ando, H. Ando, R. L. Wilmot, L. W. Seeb, V. E fremov, L. LeClair, W. Buchholz, D. Jin, S. Urawa, M. Kaeriyama, A. Urano, and S. Abe. 2004. Genetic population structure of chum salmon in the Pacific Rim inferred from mitochondrial DNA sequence variation. Environmental Biology of Fishes, 69: 37-50.

Kaeriyama, M., M. Nakamura, R. Edpalina, J. R. Bower, H. Yamaguchi, R. V. Walker, and K. W. Myers. 2004. Change in feeding ecology and trophic dynamics of Pacific salmon (*Oncorhynchus* spp.) in the central Gulf of Alaska in relation to climate events. Fisheries Oceanography, 13: 197-207.

Ueda, H., M. Kaeriyama, and S. Urawa. 2001. Recent progress in salmon migration research in Japan. PICES Scientific Report, No. 18: 199-201.