

A Tribute to Joseph Schieser Nelson, 1937–2011

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FIGURE 1. Joseph S. Nelson in the fish collection of the University of Alberta Museum of Zoology, circa 2008. Photo: Emma Gilbertson.

“Tiger Joe,” who died 13 August 2011, was one heck of a fine fellow. Joseph Schieser Nelson (Figure 1) was born 12 April 1937 in San Francisco, California, his parents’ third child, 10 and 13 years younger than his brothers. Eight months later, Joe’s father, a mining engineer, moved the family to Allenby, near Copper Mountain in the Thompson Okanagan region of British Columbia—a move from the 12th largest city in the United States, with more than 600 000 people at the time, to a small town with only 68 homes. Thus, Joe

grew up surrounded by the outdoors, in a place rich with fish-filled lakes. Later, in his high school years in Vancouver, Joe also kept himself surrounded by fishes as an aquarist.

Despite a passionate interest in astronomy, Joe turned to ichthyology at the University of British Columbia, where he was influenced by many well-known, or soon-to-be-well-known, names such as Cas Lindsey and Don McPhail. He completed an honour’s thesis there, in 1960, on Kokanee Salmon (*Oncorhynchus nerka*).

From Vancouver, Joe ventured to the other side of the Rockies, and he spent the next two years at the University of Alberta, in Edmonton, pursuing an M.Sc. degree under the supervision of J. Ralph Nursall. Joe returned to Vancouver in 1962 and began his Ph.D. with Cas Lindsey. For his dissertation, he examined hybridization between two *Catostomus* sucker species. Joe built an ungainly hatchery near Prince George to rear the offspring of his artificially hybridized fish. His supervisor thought privately that the gangling contraption would never work, but he was wrong. In fact, it worked beautifully!

During this time, Joe also met his future wife, Claudine, whom he married on 31 August 1963; they were married for nearly 48 years. Joe is survived by Claudine and their four children—Brenda (Mark Brown), Janice (David Kelly), Mark, and Karen (Rob Baron)—and four grandchildren—Anna Nicholls, Kaitlind Kelly, and twins Zaria and Zephran Kelly. Joe was a devoted and loving husband to Claudine and a superb father to his children. They always speak glowingly of him, especially of their experiences in the field with their father when they were kids. In his later years, meeting Joe in the hallway inevitably led to a recent story about his grandchildren.

After his doctoral studies, Joe briefly returned to the United States as a Research Associate at Indiana University, where he became Assistant Director of the Indiana University Biological Stations. During this sojourn in the south, Joe began his work on stickleback fishes, investigating Ninespine Sticklebacks (*Pungitius pungitius*) in the Missouri River drainage. His interest in the Gasterosteidae continued throughout his life, and his last submitted paper was on variation in Brook Stickleback (*Culaea inconstans*) populations in Astotin Lake, Alberta. In all, Joe published over 120 scholarly articles (listed below).

Joe returned to the University of Alberta in 1968 as an Assistant Professor, and he remained there for the duration of his career, progressing through Associate Professor and then attaining the top rank of Professor, and eventually taking on a number of administrative positions, including Associate Dean of Student Services for the Faculty of Science. He supervised 18 master's and 9 doctoral projects, and his students went on to positions in institutions throughout the world, including Iran (Dr. Yasdan Kievany, Isfahan University of Technology), Brazil (Dr. Ierecê Maria de Lucena Rosa, Universidade Federal da Paraíba), Thailand (Dr. Jaranthada Karnasuta, Permanent Secretary, Ministry of Agriculture and Cooperatives), as well as closer to home (e.g., Dr. Mrinal Das, MacEwan University, Alberta; Dr. James Reist, Fisheries and Oceans Canada Freshwater Institute, Manitoba). Joe was also responsible for the teaching and research collections of fishes as the Curator of Ichthyology for the University of Alberta Museum of Zoology (UAMZ). These collections were greatly increased during his tenure as Cura-

tor, and Joe also enhanced the diversity of fish represented, providing many additional taxa for ichthyology students to learn.

To most people, Joe was best known as the author of *Fishes of the World* and as the co-author (with Martin Paetz) of *The Fishes of Alberta*. Both of these books are classics in their fields, and both have won high praise from biologists. Joe participated fully in the ichthyological community with memberships in many organizations, including the American Elasmobranch Society, American Fisheries Society, American Society of Ichthyologists and Herpetologists (and Chairman of the associated Names of Fishes Committee), Canadian Society of Zoologists, Canadian Society of Environmental Biologists, Canadian Society for Ecology and Evolution, Federation of Alberta Naturalists, Ottawa Field-Naturalists' Club, European Ichthyological Union, Ichthyological Society of Japan, Société Française d'Ichtyologie, Society of Systematic Biologists, and Society of Vertebrate Paleontology.

He also was on the editorial board of *Fish and Fisheries* and was part of the International Commission on Zoological Nomenclature for many years. He also served on the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) from 1981 until 2007, first as a member of the Fish and Marine Mammals Subcommittee and then, after the subcommittees were reorganized, on the Freshwater Fishes Subcommittee.

In recognition of his contributions to the study of fishes, Joe was the recipient of many awards, some of which were the Fry Medal (Canadian Society of Zoologists, 2010), Robert H. Gibbs, Jr. Memorial Award and the Robert K. Johnson Award (2002 and 2010, respectively, American Society of Ichthyologists and Herpetologists), and the Distinguished Service Award (as chair of the Names of Fishes Committee) and the William E. Ricker Resource Conservation Award (2000 and 2011, respectively, American Fisheries Society).

During his career, Joe named 20 species and one genus of fishes (list below). Four species of fishes were also named for Joe: *Barilius nelsoni* Barman, 1988 (Cyprinidae) from River Gumti, northeastern India; *Bembrops nelsoni* Thompson & Suttkus, 2002 (Perciformes) from the Philippine Islands and western Indian Ocean; *Granulacanthus joenelsoni* Hanke, Wilson, & Lindoe, 2001 (an extinct Silurian acanthodian) from the Northwest Territories, Canada; and *Myopsaron nelsoni* Shibukawa, 2010 (Perciformes) from Japan.

Of course, Joe was much more than an academic; he was also an extremely likeable and inspiring person. Early on in his career, he acquired the nickname "Tiger Joe," the origins of which are now obscure. Some say it was his tenacity that made him Tiger Joe; others say the name was a bit of irony, since his demeanour was generally not at all tiger-like. We advocate for the following "Tiger Joe" nickname creation myth. During the extensive field work necessary to collect data for the original *Fishes of Alberta* book, Joe's two field

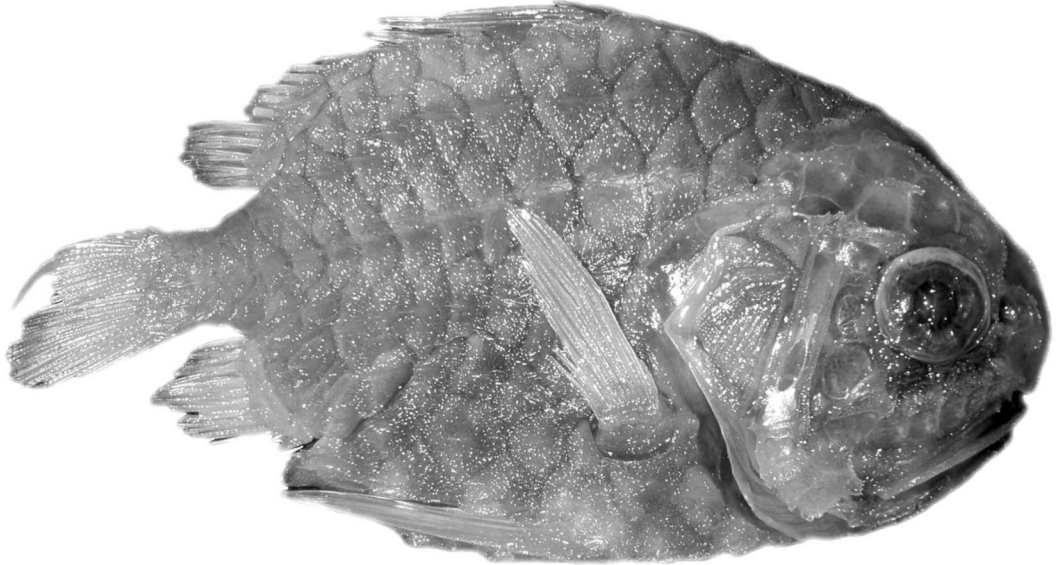


FIGURE 2. The pinecone fish (Monocentridae), named for its appearance, not its habitat. From the collections that were curated by Joe Nelson at the University of Alberta Museum of Zoology (UAMZ 7854).

assistants were classic 1960s incarnations of hairy, hard-working, hard-drinking biology students (both of whom went on to become famous Canadian fisheries personalities in their own right—another story...). At the end of each field day, a trip was made to the nearest small-town hotel for cold beer. The field assistants would drink multiple pints each, while Joe only ever ordered a single half-glass. The students teased him about his abstemious behaviour, calling him ‘a Tiger!’

Joe was soft-spoken, but he had a rich and powerful voice. If he ever lost his temper, or swore, we are not aware of it. His strongest expletive was “Garsh!” For many of his biologist colleagues, however, the fact that Joe was also an accomplished martial artist, with a 7th degree black belt in Wado Karate, gave the impression that there was a hidden, perhaps less gentle, side to his personality. In fact, this was never the case. Joe took up the study of karate after a nerve-wracking mugging on a train platform in a foreign city he was visiting to attend a scientific conference, but he continued with it long after it was clear he could defend himself if need be, and he became a sensei (teacher) of others. As his fellow karateka Ken Wasserman put it at the memorial service, “Mighty as he was, this sensei always offered kindness and support, and patient leadership with constant emphasis on being a good citizen, perfection of one’s own character, and respect for others and one’s self.” Joe was mighty, and he was compassionate. If anything, his legacy as a karate sensei and his legacy as an academic mentor are perfect mirror images of one another.

Joe was not a confrontational person by nature, but he did stand on points of principle. When a taxonomic name change occurred that shifted a number of trouts from the genus *Salmo* into the salmon genus *Oncorhynchus*, Joe was asked by those with a business interest if they could now market their salmon as the more valuable trout. Joe replied as a good taxonomist would: no, but if they wished to, they could now market their trout as salmon! When other taxonomists around him were caught up in the systematics wars of the 1980s, pitting cladists against pheneticists and evolutionary taxonomists, Joe practised a sort of academic judo, deflecting the attacks rather than battling them head-on. Although he leaned toward what was called “evolutionary taxonomy” himself, he understood and taught his students about the differences among the practices.

This non-confrontational manner, coupled with an ability to keep his mind on the truly important things, allowed Joe to sooth turbulent waters when necessary. A great example of this was during an important meeting regarding stream fragmentation caused by culverts acting as fish barriers. Representatives from federal and provincial fisheries agencies were arguing over issues such as Fisheries Act definitions of “important fish” and “critical habitat” and potential repercussions to industry. In the midst of a particularly heated discussion, Joe quietly but firmly interrupted and declared, “Anyone who prevents sticklebacks from spawning should be made to suffer the same fate.” Everyone laughed, and the tone of the discussion reverted to a responsible discussion to solve a real problem.

That story illustrates a key quality of Joe's personality. Joe Nelson was a gentleman, in the most honoured and delightful sense of the word. Always polite, always truthful and honest, always focused on the principles and importance of the bigger picture. MGS, who is periodically called upon as an expert witness, was deeply moved by Joe's example, and he keeps a small museum vial with a Brook Stickleback in the breast pocket of his going-to-court suit. During nasty cross-examination on questions of habitat destruction, he always feels for the stickleback and remembers that Joe taught him to be a gentleman." Joe taught many of us by example, although we may not all carry vials of fish in our pockets.

Joe could be serious, but he was also a playful man in many respects (he was actually caught on film flying down the hallway towards his office on a child's scooter). He retained an almost childlike fascination with and love of natural history throughout his life. He loved a good joke, and he especially loved a joke he could keep alive for a long time. Many of us remember the protracted kidding that Joe shared with his entomologist friends over the pinecone fish (Monocentridae). He innocently mentioned this fish (Figure 2) one day, but the entomologists said he was making it up, and a wonderful mythology developed in which the fish lived at the tops of pine trees, far from water.

He was a regular author of published letters to the editor in the *Edmonton Journal*, undoubtedly because his arguments were brief, clear, and diplomatic. When pet stores in Edmonton began carrying tropical fish with injected dyes to make them more colourful, Joe responded in typical fashion. His short and eloquent letter described the beauty of natural fishes, their immense diversity, and the wonder of their adaptations. The argument didn't criticize or offend anyone, yet it completely refuted the concept behind injecting colours into fish. As he would often instruct, "If you give politeness and respect, you get politeness and respect back. If you give anger and distrust, you get anger and distrust back." We think of those instructions, and his quiet adherence to them, as his most profound gift to those who knew him.

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Taxa described by J. S. Nelson

Neophrynichthys angustus Nelson, 1977
Neophrynichthys magnicirrus Nelson, 1977
Limnichthys polyactis Nelson, 1978
Bembrops morelandi Nelson, 1978
Hemerocoetes morelandi Nelson, 1979
Hemerocoetes artus Nelson, 1979
Psychrolutes sio Nelson, 1980
Ebinania macquariensis Nelson, 1982
Ebinania malacocephala Nelson, 1982
Pteropsaron heemstrai Nelson, 1982
Osopsaron natalensis Nelson, 1982
Creedia alleni Nelson, 1983
Creedia partimsquamigera Nelson, 1983
Crystalloctes pauciradiatus Nelson and Randall, 1985
Cottunculus nudus Nelson, 1989
Psychrolutes microporos Nelson, 1995
Bembrops cadenati Das and Nelson, 1996
Amblophthalmus Jackson and Nelson, 1998
Amblophthalmus eurystigmatophoros Jackson and Nelson, 1999
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