

Obituary

Memories of Bob Boutilier 1953–2003 – the early days

With the passing of a dear friend, an outstanding researcher, teacher, editor and an extraordinary human being, we should think about Bob's wonderful life lived to the full and how he enriched so many of our own lives, personally and scientifically. I knew Bob for about 30 years and enjoyed his companionship as a friend and his interaction and collaboration as a scientist throughout that time. In 1990, Bob was awarded the President's Medal of the SEB as an outstanding young researcher in animal biology, and I was asked to write a profile of him for the SEB Bulletin. I thought perhaps the readers of *The Journal of Experimental Biology* might be interested in reading a modified version of this profile of Bob written in 1990, telling of his early days in science, before he moved to Cambridge and the *JEB*.

“Bob Boutilier was born and raised in Halifax, Nova Scotia and attended nearby Acadia University in Wolfville as an undergraduate in biology. Sometime during this period, he fell under the influence of the resident physiologist Dan Toews, and two of Dan's visiting collaborators, Dave Randall and Graham Shelton, who together seduced him away from his ambition of saving the whales into a somewhat more focused interest in burrowing toads. From this resulted a fairly productive summer's work (four published papers before his B.Sc.!), his patronym Boots, and a lifetime career in comparative respiratory physiology. While these research interests have since broadened to include everything from fish to squid to seals, he always maintained a somewhat unnatural fascination with toads.

*Bob went on to reward his early mentors by doing an M.Sc. under Dan Toews at Acadia (physiology of skin-breathing and exercise in *Cryptobranchus*), a Ph.D. under Graham Shelton at the University of East Anglia (physiology of diving and intermittent ventilation in *Xenopus*), and a post-doc under Dave Randall at the University of British Columbia (pH regulation in teleost red cells). While the above-mentioned research topics describe his “official” projects at these times, Bob never felt particularly constrained by his job descriptions. During these periods, he also managed to fit in sojourns studying acid-base regulation in developing chick embryos, exercising mackerel in a small caravan on the wharf at Mevagissey in Cornwall, perfusing frog muscles at the Gulbenkian Institute in Portugal, and running land crabs on a belt-sander in Tahiti. Prior to joining Dave Randall at U.B.C., Bob also studied as a post-doc for a year with Norbert Heisler at the Max Planck Institute in Göttingen, where he worked on*

virtually every topic and species imaginable, perfected his mock German accent, and taught Norbert how to swear more effectively in English.

While at U.B.C., Bob was awarded a prestigious University Research Fellowship in 1984 by NSERC (the Canadian national funding agency) and shortly thereafter moved to Dalhousie University back in his home town of Halifax, where he became a tenured Associate Professor in the Biology Department at Dalhousie. In his six years at Dalhousie, he established an impressive laboratory and research program, an even more impressive publication and funding record, and hosted collaborators from all over the world. In 1988, he organized and hosted both Ted Taylor, the Zoological Secretary of the S.E.B., and the joint Canadian Society of Zoology – S.E.B. conference in Halifax at the same time. And 1990 also saw the graduation of his first two Ph.D. students, Yong Tang and Ralph Ferguson, a crowning achievement in his early career.

Bob next moved on to research into red cell metabolism in teleost fish and the comparative physiology of diving across the vertebrate classes. However, in 1990, it was clear that these interests would again change as he moved into molecular physiology and genetics in his Ocean Production Enhancement Network project (O.P.E.N.), one of the 14 “Networks of Excellence” established in 1990 by the Canadian government. O.P.E.N. was a five-year, multimillion dollar interdisciplinary study on the molecular genetics, physiology, energetics, and population dynamics of the Atlantic cod, and their implications for the commercial fishery. At the time, I was also optimistic that Bob would undoubtedly use the teaching release time awarded as part of this project to write up the work he did on land crabs in Tahiti!

To those who know Bob, the term “well-rounded” applied even more to his personality. He had a seemingly limitless store of jokes, accents, and mindless trivia. He was an accomplished musician and songwriter, a member of the Music Authors and Publishers Association of Canada. He collected models of toads and entire coral reefs. He was the Life Secretary of the Acadia Turtle Society, and the Home Secretary of the British chapter. He was also a surprisingly good athlete, and on his 35th birthday he surprised even himself by shooting his age on the back nine at the Wolfville golf course.”

Shortly after this was written, Bob became Chair of the Biology Department at Dalhousie University, one of the youngest chairmen ever in the history of the university. Sadly

(for Canada) but profitably (for the world's comparative physiology community!), Bob was seduced away two years later by Cambridge to become a Lecturer (later Reader) in Zoology and editor (later Editor-in-Chief) of the *JEB*, forging the journal into its wonderful present morphology and its status today as the leading journal in mechanistic comparative physiology. During that period, Bob continued to research a myriad of areas from hibernation to metabolic control to diving, but he never did write up that project we did together

with Dave Randall on land crabs in Tahiti (the erstwhile companion to *J. Exp Biol.* **126**, 271–298, published in 1986) – the one I gently chided him about in the SEB Bulletin article above. Perhaps it was best that way. With a guy as accomplished and quick-witted as Bob, it was useful to have something to hold over him! He will be sorely missed.

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