

In Memoriam

Dr. David J. T. Hussell

Jon D. McCracken

Born in 1934 in Winchester, England, Dr. David J. T. Hussell passed away on 10 April 2015 in Simcoe, Ontario, at the age of 80. He is survived by his wife (Dr. Erica Dunn), two sons (Jeremy and Peter) and two grandsons. David's life and accomplishments were celebrated by the many people who attended a memorial service held near Long Point, Ontario, on 30 May 2015.

I first met David in 1975, when I was a wide-eyed, first-year biology student about to embark on what turned out to be a life-changing spring and summer volunteering for Long Point Bird Observatory (LPBO).

Way before that, as a teen growing up in England, David developed an early interest in birds, making frequent birding trips on his bicycle to visit various bird observatories. Like his dad before him, however, he went on to choose a career in civil engineering, earning a professional degree at the University of London. Soon after, he migrated to Canada and found a job with the



David Hussell in Iceland, 1972. *Photo: Erica Dunn*

Ontario Department of Highways in 1957. He continued there for several years before rediscovering his childhood passion for birds.

In 1964, he enrolled as a Ph.D. student at the University of Michigan, which is where he also met his future wife (and fellow ornithologist) “Ricky” Dunn. His thesis examined the breeding biology of Lapland Longspurs (*Calcarius lapponicus*) and Snow Buntings (*Plectrophenax nivalis*) in the High Arctic — a place and environment that resonated with him for the rest of his life.

After receiving his doctorate, he went on to complete post-doctoral research at the University of Pennsylvania (working on European Starlings) and the American Museum of Natural History. The latter is where he first got interested in studying the reproductive ecology of Tree Swallows. It turned out that this was an area of research that fascinated David for about 40 years — at another place that clearly resonated with him — Long Point, Ontario.

David was the last of what I call the original “band of banders” — which was a spirited team of amateur ornithologists from the Ontario Bird Banding Association who, in the fall of 1959, ventured 30 km out into the middle of Lake Erie, to the tip of Long Point. Their mission was to investigate the site’s potential as a future banding station. A wise visionary from the outset, David recognized that not only was the Long Point site fantastic for birds, but he soon had it in his mind that a systematic, daily protocol of migration monitoring could one day become a useful tool for tracking bird population changes over time. Shortly thereafter, in 1960, the LPBO operation “hatched”.

LPBO is the oldest research station of its type in the Western Hemisphere, and it’s impossible to overlook David’s extraordinary contributions to that organization. He was not only one of the Observatory’s founders, he served as the Chair of the Board for several years, and as the first Executive Director from 1974–1982, not to mention the tens of thousands of hours he volunteered in the field.

David continued to be involved in LPBO research activities during his subsequent employment as a Research Scientist for the Ontario Ministry of Natural Resources, and again later throughout his retirement. For more than five decades, he maintained a close, personal involvement in the Observatory’s programs, especially migration monitoring and Tree Swallow research.

Stepping out a little farther afield, David is widely regarded as the founding father of migration monitoring in North America. Not only was he instrumental in pioneering LPBO and its programs, he also played major roles in developing new bird observatories in Ontario at Thunder Cape, Innis Point and Prince Edward Point, as well as helping conceive and champion the development of the Canadian Migration Monitoring Network. Along the way, he created the first analytical approaches to calculating population trend estimates of migrating birds, and developed guidance documents that we still use today for establishing migration monitoring stations.

He was also heavily involved in the process of transforming LPBO into Bird Studies Canada, and building it as an international centre of excellence. Most

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recently, he played a leadership role in developing the ‘Raptor Population Index’ for hawk monitoring stations across the continent. Indeed, when you think about trickle-down effects and impacts, it can be said that David played some sort of role in the development of many migration monitoring stations in North America.

In addition to his steady love for Long Point, David continued to enjoy spending parts of his summers working in the High Arctic, where he most recently was making significant contributions to the study of Northern Wheatear (*Oenanthe oenanthe*) migration and breeding ecology.

Importantly, David was one of the first people to recognize, promote and celebrate the exceptional contributions that volunteers can make as “citizen scientists” to the study of birds, whether it was at migration monitoring stations or through other types of surveys that he helped create: Ontario’s first breeding bird atlas project, the Canadian Lakes Loon Survey, Project FeederWatch, the Ontario Heronry Inventory, and surveys of beached birds on the Great Lakes.

Just as importantly, he figured that volunteers could be motivated in other ways too, including fund-raising, and he proved it by creating the Baillie Birdathon in 1976. Since then, Birdathon participants have raised over \$5 million for more than 600 worthy bird conservation and research projects across the country.

During his career, David Hussell published about 75 scientific papers. In the process, he served as a trainer and mentor for dozens of young biologists. In the mid 1970s, together with his wife, Ricky, he created the Young Ornithologists’ Workshop (YOW) at Long Point, which I think is one of his most important legacies. Most of the teens who’ve graduated from the YOW program over the years have gone on to get degrees in biology and are themselves now making strong contributions to science and conservation.

David also enriched and influenced the lives of lots of ‘grown-up’ professional colleagues. Over the years, they awarded him many official accolades, including lifetime-achievement recognitions from the Society of Canadian Ornithologists (Speirs Award), the Hawk Migration Association of North America (Broun Award), the Ontario Field Ornithologists (Distinguished Ornithologist Award), the Ontario Bird Banding Association (Janette Dean Award) and the Linnaean Society of New York (Eisenmann Medal). He was also made a fellow of the American Ornithologists’ Union in 1991.

For those who knew him, David was subdued, humble and prone to understatement. He was also totally committed to rigorous and methodical thinking, had powerful observational skills, paid enormous attention to detail and had just the right touch of soft-spoken genius to

inspire others. His earlier training as an engineer was foundational to his later scientific mindset to design, probe, question, and tinker — not only with things, but also with ideas — both big and small.

Like all talented trail-blazers, you might think that David's path is a tough act to follow... but once you've taken up the road map, you'll find that the sign posts he thoughtfully laid down serve as clear stepping-stones to the future. He left a lot of sign posts. I know, because I am one of them.

List of Selected Publications

Hussell, D.J.T. 1972. Factors affecting clutch size in arctic passerines. *Ecological Monographs* 42:317-362.

Hussell, D.J.T. 1981. The use of migration counts for monitoring bird population levels. *Studies in Avian Biology* 6:92-102.

Hussell, D.J.T. 1985. On the adaptive basis for hatching asynchrony: brood reduction, nest failure and asynchronous hatching in Snow Buntings. *Ornis Scandinavica* 16:205-212.

Hussell, D.J.T. 1988. Supply and demand in tree swallow broods: a model of parent offspring food provisioning interactions in birds. *American Naturalist* 131:175-202.

Hussell, D.J.T. 2003. Climate change, spring temperatures, and timing of breeding of Tree Swallows (*Tachycineta bicolor*) in southern Ontario. *Auk* 120:607-618.

Hussell, D.J.T. and **C.J. Ralph.** 2005. Recommended methods for monitoring change in landbird populations by counting and capturing migrants. *North American Bird Bander* 30:6-20.

Hussell, D.J.T. and **T.E. Quinney.** 1987. Food abundance and clutch size of Tree Swallows *Tachycineta bicolor*. *Ibis* 129:243-258.

Farmer, C.J., D.J.T. Hussell and **D. Mizrahi.** 2007. Detecting population trends in migratory birds of prey. *Auk* 124:1047-1062.

Bairlein, F., D.R. Norris, R. Nagel, M. Bulte, C.C. Voigt, J.W. Fox, D.J.T. Hussell and **H. Schmaljohann.** 2012. Cross-hemisphere migration of a 25 g songbird. *Biology Letters* 8:505-507.

Hobson, K.A., S.L. Van Wilgenburg, E.H. Dunn, D.J.T. Hussell, P.D. Taylor and **D.M. Collister.** 2015. Predicting origins of passerines migrating through Canadian migration monitoring stations using stable-hydrogen isotope analyses of feathers: a new tool for bird conservation. *Avian Conservation and Ecology* 10(1):3. <http://dx.doi.org/10.5751/ACE-00719-100103>.

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