Preface

When I was a graduate student in the Department of Entomology at the University of Manitoba, Professor Thorsteinson, Thor, was the Head of the Department, and a rather enigmatic and mythical character. Although I never took a course from him, he served on my PhD examining committee, so I had more contact with him than many other students in the Department at the time. My interactions with him were always unpredictable. Some days he seemed distracted, he always had a lot on his mind. Some days he would focus more fully on our discussion, or the question I had asked, and he would be thoughtful and insightful. One thing is for certain, my interactions with him were always interesting.

In the summer of 1976, prior to Thor's retirement, he suffered a serious automobile accident, which delayed the family's postretirement plans to move to Vancouver. They eventually moved west, and he became disconnected from the entomological community in Manitoba. I encountered him only once after that in the 1980's, at a meeting of the Western Forum, a collective of pest management specialists working out practical solutions to



Ásgeir Jónas Thorsteinson (1917-1998)

insect and plant disease problems. Thor and I sat down in the bar after an afternoon session for a beer; he was most interested in what had happened in the Department since he had left. He was particularly interested in the Canada Biting Fly Centre, a valuable component of the Department for about 10 years. The Director of the CBFC was Dr Mary Chance. Mary reverted to her maiden name at the time of her marriage to Manfred Jaeger. It just so happened that her maiden name was Galloway. From a distance, this caused Thor to think about the ramifications of this change, and he eventually asked me what had happened to my wife, Carol. When I explained the situation, we both had a good laugh. Cam Jay, a subsequent Head of Department was some years later visiting Vancouver with his wife, Doreen. They were driving through the city when Cam decided they should visit Thor, or at least call him while they were in the city. He had no idea about where Thor and his wife, Mildred, were living, so he turned into a strip mall where there was a telephone booth by the sidewalk. He jumped out of their vehicle and entered the telephone booth with the notion to look up Thor's contact information. As his fingers were walking up and down the pages of the directory, there was a gentle tap-tap-tap on the glass, and as he looked up, there was Thor smiling back at him. Talk about coincidence!

Several years ago, it occurred to me that I hadn't heard anything about Thor for many years. I searched obituaries on-line; I used various on-line search strategies and contacted entomologists around British Columbia to find something about how to find out where he was or what had happened to him. It wasn't until Rob Currie forwarded Mildred's obituary to me that I was able to complete my quest. I contacted Thor's family via the funeral home, and his daughter, Julian, contacted me. From that point, we have worked together to compile the following obituary. (T.D.Galloway)

Editor's note. Remarkably, following his death in 1998, no scientific tribute to A.J. Thorsteinson was published. We are, therefore, pleased to reproduce in the Bulletin a slightly revised version of a recently published summary of Dr Thorsteinson's career. The full version, which includes a list of Dr Thorsteinson's publications and the names of his graduate students, appears in the Proceedings of the Entomological Society of Manitoba (2014, **70**: 5–10). We thank the Editor of the Proceedings for granting us permission to use this material. Thor was born 2 September 1917 in Winnipeg. He attended high school in Winnipeg from 1931 to 1935, during which time he worked in the commercial fishery on Lake Winnipeg. He was valedictorian of his graduating class in 1935 before enrolling in Winnipeg Normal School to obtain his first class teacher certification. He taught public school at Old Fort School in 1937-1938. He was hired in the Department of Entomology at the University of Manitoba during the summers of 1939 and 1940, where he had enrolled in 1939; he received an Isbister Scholarship at the University of Manitoba, and the University Gold Medal in his graduating year, when he also served as Vice Stick and President of the fourth year class in 1940-1941. Upon graduation, he worked as an assistant cereal breeder in the Cereal Division at the Rust Research Laboratory on the University of Manitoba campus.

Thor's academic career was interrupted by WWII, and he served as a Lieutenant in the Canadian Army Infantry, Motor Division from 1942-1944. After the war, he pursued graduate training in Entomology and entered a programme at Imperial College, University of London in 1945 with a 2-year British Council Scholarship. He completed his PhD in December 1946, after which he returned to Canada to work for 2 years as an insect physiologist at the Forest Insect Laboratory in Sault Ste Marie, Ontario. He joined A.V. Mitchener in the Department of Entomology at the University of Manitoba in 1948 as an Assistant Professor. He was promoted to Associate Professor in 1953 and became Acting Chairman of the Department of Entomology in 1956 and Professor of Entomology and Chair in 1958. Thor supervised 21 graduate students from 1955 to 1974, many of whom had long, successful careers in entomology. Thor stepped down as Head of the Department in 1976 and retired in August 1977.

It's difficult to categorize Thor's research activities. He would have called himself an insect physiologist, specializing in host plant selection and interactions between herbivorous insects and plants. He and his collaborators published at least 40 refereed papers, spanning a considerable range of topics. Notable among these is the Thorsteinson (1960) paper, "Host plant selection in phytophagous insects", which appeared in the Annual Review of Entomology. This paper was recognized as a Science Citation Classic, cited more than 300 times since it was published, and is still being cited in 2015. He and a number of post-doctoral researchers have contributed significantly to the nature of insect-host plant relationships. Many of these studies involved important crop pests, such as diamondback moth, cabbage maggot, and the two-striped and lesser migratory grasshoppers.

Another well connected thread through Thor's research career was his interest in biting flies. This included mosquitoes, and the impact of various natural chemicals on growth and development for mosquito larvae. In later years, he interacted extensively with the City of Winnipeg personnel who were in charge of mosquito abatement activities. Thor's views were well entrenched and he was a frequent contributor to public hearings conducted by the City. He firmly believed that thermal fogging, the adulticide strategy at the time, was not effective and should be abandoned. Dr Reiny Brust, one of the best known mosquito researchers in Canada, studied for his MSc under Thor's supervision.

Another area related to biting flies arose from his observations on behaviour of host-seeking horse flies. As the story goes, he watched horse flies accumulate inside his vehicle when he parked with the windows rolled down at the family cottage near Piney, Manitoba. This is certainly prime horse fly habitat, so there would have been no shortage of flies for study. As he wondered about what it was that attracted flies to enter his vehicle, he considered heat as a first hypothesis, given the higher temperature inside the car. He then conceived what he initially referred to as a heliothermal trap, a large black target that he thought would absorb the sun's radiant energy and thus have a higher temperature. The trap for his target worked brilliantly, but as he later discovered through careful experimentation carried out by graduate students, Garth Bracken,

Dieter Peschken and Wally Tostowaryk, along with departmental collaborator, Dr Bill Hanec, it was the reflective nature of a shiny, black sphere that was most responsible for the attraction. This trap became universally known as the Manitoba Horse Fly Trap, and you can find horse fly workers the world over who use this trap, or one based on its principles, wherever horse flies are studied. His papers on the horse fly trap have been cited collectively more than 200 times. As an amazing testament to the effectiveness of the trap, TDG recorded an astounding average catch of 10,000 horse flies, per hour, one day at a study site near Whitemouth Lake, Manitoba.

It is unfortunate this summary was inadvertently delayed from the time of his death, 15 March 1998. In its publication, we hope Thor's contributions to his field of research and to the University of Manitoba might be recognized.

Reference

Thorsteinson, A.J. 1960. Host selection in phytophagous insects. Annual Review of Entomology, **5:** 193–218.

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