

Monty Wood passed away peacefully on 24 August 2020 after partially recovering from a serious illness in July. He had been looking forward to resuming his numerous research collaborations following his recovery.

Monty was born on 22 December 1933 in London, Ontario. He was an avid naturalist from an early age and his broad passion for nature persisted throughout his life even as his career path became more focused on entomology during his university years. He received his BA and MA degrees from the University of Toronto in 1956 and 1959, respectively, studying elusive beaver beetles for the latter. A switch to black flies and the guidance of Douglas Davies at McMaster University in Hamilton resulted in a PhD degree on the *Eusimulium*-group in 1963.

Monty joined Agriculture Canada in 1964 as a research scientist and taxonomist in the Diptera Unit of the Canadian National Collection of Insects (CNC) in Ottawa. Monty initially continued to study the systematics of black flies and published periodically on the family for numbers of years, but his broad interests and skills ensured that he developed expertise in understanding Diptera more broadly, including adults and their immatures. He became an authority on Culicidae, Asilidae and numbers of other smaller families. Ultimately, he focused on one particularly large and difficult family, the Tachinidae. Few systematists have had that breadth of knowledge of such diverse groups, including their different life stages.

It was at an early point in Monty's career that the CNC dipterists launched an ambitious project in 1966 that would involve nearly all of them, to varying degrees, over the next 2 decades (Cumming et al. 2011). Their plan was to coordinate a team of international dipterists in the preparation of a manual for the identification of the families and genera of flies of America north of Mexico. This culminated in the publication of the three volumes of the *Manual of Nearctic Diptera* in the 1980s (McAlpine et al. 1981, 1987; McAlpine and Wood 1989; available online at <https://esc-sec.ca/publications/aafc/>) and brought international acclaim to the six CNC dipterists who led the project. For the first time, there was a concerted effort to understand the homologies among the hugely diverse members of the order from a strictly Hennigian phylogenetic perspective. Willi Hennig spent 3 months in Ottawa in 1967 and strongly influenced the direction of the manual. Cladistic perspective became the centre point for a better understanding of these flies. Monty was the last surviving member of that illustrious team.

Monty authored several chapters for the *Manual* including the one for the Tachinidae. At the time, the Tachinidae comprised 414 genera in America north of Mexico according to the most recent catalogue (Sabrosky and Arnaud 1965). This was an oversplit classification that was largely the legacy of an early American tachinidologist, C.H.T. Townsend, and a near-impossible one for Monty to follow for his generic key in the *Manual*. To construct a workable key, he first needed to re-evaluate the morphology, evolutionary history and classification of the family. Trips abroad to study types and confer with the leading European tachinidologists of the day, Louis Mesnil and Benno Herting, were instrumental in this process. A revolutionary classification of Nearctic Tachinidae was taking shape in Monty's mind during the 1970s as he studied the hundreds of genera and compared them to the more progressively arranged genera, tribes and subfamilies of



J. O'Hara (Ottawa, 1991)

**Donald Montgomery (Monty) Wood  
(22 December 1933 – 24 August 2020)**

the Palaearctic Region. The first substantial glimpse of his vision for the Nearctic fauna came in the form of a taxonomic conspectus of the Blondeliini of North and Central America and the West Indies (Wood 1985). In this work, the tribe was redefined for the New World and an astonishing 177 new generic-level synonyms and 321 new species-level combinations were proposed. Two years later, the *Manual* chapter appeared (Wood 1987) and a further reduction in genera to a total of about 330 was incorporated into the key (see O'Hara and Wood 1998). These changes revolutionized the classification of Nearctic Tachinidae and later served as the framework for a regional catalogue (O'Hara and Wood 2004). Similarly, his co-authored chapter on the phylogeny of the Nematocera in the third volume of the *Manual* provided a cladistic basis for the phylogeny of this diverse group of flies and launched numerous further studies that have refined our understanding of this group (Wood and Borkent 1989).

Early retirement in 1986 was followed by 34 years as an active Honorary Research Associate at the CNC, a position Monty held until his death. These were intensely active years for his research and field work and included many collaborations internationally and with his close colleagues in the Diptera Unit. He was appointed a Research Associate with various institutions including Instituto Nacional de Biodiversidad (Costa Rica), National Museum of Natural History (Washington), American Museum of Natural History (New York), Carnegie Museum of Natural History (Pittsburgh), and Florida State Collection of Arthropods (Gainesville). Monty enjoyed teaching and regularly served as an Adjunct Professor at Carleton University in Ottawa during the 1970s and 1980s, where he had an enormous impact on the lives of several students such as Art Borkent, Brad Sinclair and Andrew Smith.

Monty had a keen interest in field studies and spent part of almost every year of his adult life on collecting trips throughout the world until he was physically unable to travel. An interest in the effects of the Bering Land Bridge on the Canadian insect fauna took him and some colleagues to the Yukon on several occasions in the 1980s. These trips resulted in valuable collections of insects and other arthropods as well as a publication with lepidopterist Don Lafontaine on the zoogeography of Beringian Noctuidae (Lafontaine and Wood 1988).

A greater emphasis on Neotropical Tachinidae after retirement was accompanied by more field travel to the southern portion of the Americas, from Mexico to southern Chile and most countries between. Monty purchased land in the biologically-rich cloud forest of Costa Rica and built a field station there, Estación Biológica Monteverde, in 1989. This station continues to operate today on the principles of conservation, education and research. Monty's private insect collection of some tens of thousands of beautifully prepared specimens has largely been donated over the past few years to the CNC. The Tachinidae benefited most from this donation and the CNC's tachinid collection is now the largest and taxonomically richest in the world.



Monty on a collecting trip to the Yukon, 1987.

V. Behan-Pelleiter



R. Canning

Monty, Pelee Island, Ontario 1985.

Monty authored or co-authored more than 100 scientific publications (see partial list in Cumming et al. 2011, Appendix A). This included seven chapters in the *Manual of Nearctic Diptera*, including the aforementioned chapter on Tachinidae and a co-authored chapter on the phylogeny and classification of the Nematocera (Wood and Borkent 1989). He was lead author on the masterful 390 page handbook *The Mosquitoes of Canada* (Wood et al. 1979), which provided for the first time a complete presentation of all the species in our country, including both adults and larvae, keys to each species, their distributions and a detailed overview of their biology. He also was co-author of the highly acclaimed book *The Black Flies (Simuliidae) of North America* (Adler et al. 2004). His broad knowledge was also reflected in a pivotal paper which discussed and eloquently illustrated the homologies of the male genitalia of nematocerous families (Wood 1991). He was a member of the editorial team for the two-volume *Manual of Central American Diptera* (Brown et al. 2009, 2010), and an author or co-author on six of its chapters, including lead author on the Tachinidae, the largest chapter in the *Manual* and a summary of many hundreds of hours spent in Central America collecting and studying this family (Wood and Zumbado 2010). The adult morphology and terminology chapter in the *Manual* (Cumming and Wood 2009), along with its most recent version (Cumming and Wood 2017), are now the standard treatments on the morphology of the order and are used by virtually all dipterists.

Over the course of his long career Monty published or co-published 240 new Diptera taxa (4 family-group names, 3 genus-group names and 233 species-group names) and was honoured with 33 scientific patronyms authored by fellow taxonomists in recognition of his scientific achievements (see [http://www.canacoll.org/Diptera/Staff/Wood/Wood\\_Patronyms.pdf](http://www.canacoll.org/Diptera/Staff/Wood/Wood_Patronyms.pdf)).

What follows here is the personal experience of AB, illustrating Monty's generous support of others. "When I arrived in Ottawa in the fall of 1978 to begin a PhD study of midges (Chironomidae), Monty offered me a technical position working on his world catalogue of Tachinidae. Months of photocopying and filing papers followed but during that time, Monty and I debated the ins and outs of Diptera taxonomy, with him patiently and repeatedly showing me specimens from the collection that either indicated how previous publications were flawed or that my views were limited. Hence, an important lesson – in any debate, and certainly in areas of doubt – always go back to the specimens. At the same time, he showed how important well preserved and prepared specimens were in making comparisons – and this was, and remains, a standard at the CNC, with its vast collection of excellent specimens. As spring came in 1979, Monty asked if I would prefer to start my first field season instead of photocopying, giving me an extra field season of data before officially starting my PhD that fall. It was an opportunity I leapt at. However, when I started my collecting efforts, I despaired of finding the pertinent species I had chosen to work on. Consulting a distant colleague, Monty was able to locate the exact aquatic habitat and in showing me, we discovered the species were actually very common locally. Another lesson – many groups previously considered rare are in reality an expression of a lack of knowledge of the diversity of habitats actually present. Monty likewise uncovered numbers of other 'rare' groups that were important to subsequent phylogenetic studies. His interest in natural history was vast, with a broad knowledge of plants, vertebrates, and many other insect groups. He had a deep interest in historical zoogeography and evolution in its breadth.

Monty became my research supervisor a few months into my PhD and this changed my life. He shared his knowledge so freely and we debated so happily that my knowledge grew by leaps and bounds. Monty also supported my degree in several other remarkable ways. When he recognized that making slide preparations was a real bottleneck in my studies, he hired a student to prepare these, freeing up a huge amount of time to undertake other tasks. He also provided the means for field work locally and trips to numbers of locales: British Columbia, South Carolina, Arizona, and Ecuador, among others. When finishing up, he hired Ralph Idema, artist extraordinaire, to

provide numerous illustrations for the thesis (Borkent 1984). Throughout, he encouraged and directed on the basis of his profound knowledge, always in the most encouraging and egalitarian manner. This included a unique year-long course he taught at Carleton University called 'The Phylogeny of the Diptera'. We worked over the literature and specimens for many hours together and one product was ultimately the chapter in the third volume of the *Manual* on the phylogeny of the Nematocera (Wood and Borkent 1989). In short, Monty provided the freedom and financial support to complete this part of my studies in almost idyllic conditions. After I was hired by Agriculture Canada, we continued to work together, with many hours of discussion about nature, science and the various issues we were confronting in our research (and often with a small group of colleagues who gathered every Wednesday at noon to debate papers). One thing was very obvious about Monty – he demanded the highest standards in doing the best science possible. It was another lesson that percolated through all of his work and how he saw that of others – a wonderful characteristic for a scientist to have. And a wonderful experience for me and so many others. After I left Agriculture Canada in 1989, our relationship continued, particularly through connections in Costa Rica, where we both shared in the process of studying our groups there (particularly at INBio) and then with others in the organizing and implementing of what led to the *Manual of Central America Diptera*. He and Grace's apartment near INBio was generously made available for the many times I visited there over the years. And that, as in so many other ways, was what Monty was about: liberally helping others to do good science and ensuring in his own work, the highest standards were met."

Monty will be sorely missed but fondly remembered for his kindness in sharing his remarkably broad knowledge so freely with friends and colleagues, his love of nature, and his generosity in the pursuit of science. He is survived by his loving wife Grace of 57 years, his son Kenneth, daughter Sheila (Bernie Wynia) and grandson Andrew Wynia.

A video of a portion of the Memorial Service held in remembrance of Monty on 19 September 2020 is available on YouTube at <https://www.youtube.com/watch?v=DroihFcHWyI>.



Monty and Grace Wood, 8<sup>th</sup> International Congress of Dipterology, Potsdam, Germany 2014.

A. Borkent

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