



A FAILURE OR A DECENT START?
JAMES H. HUNT

Born in Tennessee in 1944 and raised in North Carolina, Jim Hunt has sought a mechanistic understanding of social wasp evolution since 1974. He studied zoology at North Carolina State University, Louisiana State University, and the University of California, Berkeley. Following a postdoctoral year at Harvard University, he accepted a one-year Visiting Assistant Professorship at the University of Missouri-St. Louis. He retired from that institution in 2007 following a 33-year career, ending as Chair of the Department. He was a Visiting Professor of Entomology at the University of Kansas in the spring of 1986 and now is a Visiting Professor of Biology and of Entomology at North Carolina State University. It is an open-ended appointment in which he will “visit” for many years to come. He has published diverse articles on the biology of social wasps, based on laboratory studies together with field studies in Missouri, North Carolina, and several neotropical locations. In 1981 he compiled and edited *Selected Readings in Sociobiology* (McGraw Hill), in 1994 co-edited *Nourishment and Evolution in Insect Societies* (Westview Press/Oxford & IBH Publishing), and in 2007 authored *The Evolution of Social Wasps* (Oxford University Press), which was written during a 2003–04 fellowship year at the Wissenschaftskolleg zu Berlin. – Address: Department of Entomology, Box 7613, North Carolina State University, Raleigh, NC 27695 USA. Web: www4.ncsu.edu/~jhhunt

It was an audacious proposal – to write a comprehensive treatise on the biology of social insects. The only book like it had been published in 1971, authored by Edward O. Wilson – by now the author of more than twenty books. For several decades Wilson’s *The Insect Societies* was the entry point for academic inquiry into the lives of social insects, but it is

seriously of date. A new *Insect Societies* is long overdue. However, the increase in knowledge since 1971 is enormous, and the quantity of literature is orders of magnitude more. It would be a daunting undertaking.

The Insect Societies was little less than a miracle of timing and utility for me. I began to study social insects as a first-year Ph.D. student in the spring of 1970. I already knew a bit about ants from my lifelong fascination with natural history, but my knowledge of ants as subjects of academic inquiry was nonexistent. As a student undertaking a research program on organisms I scarcely knew, I began to read ant literature from left, right, and everywhere. There was much to read, but the more I read the more jumbled my knowledge became. I had no coherent picture of ants as I wanted and needed to know them. Then *The Insect Societies* appeared, and the jumbled pieces fell into place. From that milestone I was able to move ahead with my research and begin my career-long engagement with social insects. In spring 1986 I was a visiting professor at the University of Kansas, where my teaching responsibility included a course on social insects. I invested heavily in course preparation, and by the end of the semester I had a substantial body of materials that covered the breadth of social insect biology. I looked at what I had accomplished and thought that if I could teach the course twice more and then take a sabbatical, I could write an updated *Insect Societies*. Alas, the students at my home university lacked sufficient background knowledge to enable me to teach the course at an advanced level, and my vision of a new *Insect Societies* fell away. It didn't, though, fall completely from my mind. I occasionally wondered if it could be done and, more to the point, if I could do it.

By the time I applied to the Wissenschaftskolleg to undertake the project, I had a combination of experiences and circumstances that lent themselves to what I envisioned. I had success with a previous book project undertaken at the Wissenschaftskolleg. I came; I wrote a book; I went home. I am retired and have the time. Working with co-investigators, but also often working alone, I had published in many areas of investigation: natural history, ecology, demography, behavior, biochemistry, physiology, development, and recent studies based on genomics. As I looked at the discipline, I could see no other investigator with that diversity of experience. On top of all this, I boldly said that I had the chutzpah to think I could pull it off. In the summer before leaving home, however, I began to doubt my ability to do what I had proposed. I was daunted by my own project.

My arrival at Wiko coincided with the receipt of two manuscripts returned to me for pre-publication responses to reviewers. One of these was a nuisance, but the other was the most important publication of my career. I invested heavily in its improvement. Former

Wiko Fellow Timothy Linksvayer and the journal's editor, Allen Moore, provided valuable reviews. Moore also sent e-mails with laudatory comments such as I have never seen from an editor. By mid-fall both papers were in press, and I had an unobstructed view of what lay ahead. I was beyond being daunted by my project – I was frozen. I decided the project couldn't be done. I felt an obligation, though, to provide a product to Wiko to repay the confidence and investment placed in me, so I undertook a small book that could be completed by the end of the year. As I labored I didn't enjoy it, and it wasn't good. When a somewhat similar and very good book appeared in early winter, I gave up.

I stayed in Berlin over the holidays and turned my attention to a review article to be written with a co-author, who had been invited by a journal editor to write it. Working in an area in which I had no experience was the hardest writing I had ever done. I produced a decent first draft of my part of the review, but doing so was unenjoyable. After that, what to do?? I read Darwin's *Voyage of the Beagle*. I read Shakespeare's *King Lear* and wrote an essay for the Lear workshop organized by Stephen Greenblatt and Meredith Reiches. Working on the essay was a brain-cleansing delight. When it was completed, however, I once again faced the void. I described my state of mind to a friend, Frau Prof. Dr. rer. nat. habil. Gudrun A. Brockmann (I love German academic titles), whereupon she promptly gave me a swift kick in the pants. The next morning I began to work. I arranged tables in my apartment into a work space with a view of sky and trees – the best work space of my career. I began with a chapter on termites, the social insects I know least well. My envisioned structure of the book was the same as Wilson's *The Insect Societies*. Four taxonomic chapters – termites, wasps, ants, bees – to be followed by a number of topical chapters – communication, food and foraging, nourishment, development, and so on. I never made it out of termites. The sheer volume of literature is enormous, and specialists among termite biologists have knowledge far beyond anything I could hope to learn. As I tried to cover the biology of termites from a broad perspective, I struggled increasingly with the weight of my lack of meaningful progress. I read a great deal and wrote a modest amount, but what I wrote was not very good. Long days made no difference. In mid-May I put in 10-hour days through four days of glorious sunny weather. The second evening after gray weather returned I thought, "This is crazy; I'm killing myself." The next morning I awoke clear-headed and decided that it was indeed crazy. I wrote not another word about termites. A week or so later I undertook a chapter on social bees but within a few days encountered the same problem: a mountain of literature covering a broad range of topics that I knew I couldn't conquer. I put the project in mothballs altogether. In my first Wiko

year I had ventured into Berlin often – three opera companies, two symphony orchestras, and many museums. I exercised daily and lost ten kilos. This year I made a virtual prisoner of myself and gained three kilos. In June and early July, then, I did what I theretofore had not done – I went out to enjoy Berlin. There is nothing in the foreseeable future that might bring me back to Europe, and I decided to not let the year be a total loss in the enjoyment of being there.

On the 16th of July – I stayed as long as possible – I flew to India to spend a month at Raghavendra Gadagkar's home base, the Centre for Ecological Studies at the Indian Institute of Science in Bangalore. It was a marvelous and memorable experience. When leaving India I told Raghavendra that I didn't have it in me to continue my project. That may not be the case. I recently have re-engaged with the invited review, now two reviews, being written with my colleague in France. This time the writing has been stimulating and enjoyable, and I think we are doing a good job. It's a vastly different feeling from when I put the book into mothballs. Based on my experience with the review article, it has struck me that I had attacked the book project in an altogether incorrect way. I had planned the same organization as in *The Insect Societies*: chapters on termites, wasps, ants, and bees followed by a series of topical chapters. My Wiko experience, however, taught me that to assemble the literature covering the breadth of knowledge on a single taxonomic group is impossible. Now, though, I have written a review that covers all social insects on a topic about which I previously knew next to nothing. Because I have learned this can be done, then perhaps other topics can similarly be done. The chapter on termites is gone. In its place, the writing done at Wiko, which turned out to be more than I thought, can be divided into sections that treat a diversity of topics. I once again see the project as do-able. I once again am prepared to undertake it. I may once again fail. I may not.

I cannot overstate my admiration and respect for the Wissenschaftskolleg staff, administration, and leadership. They have my deep and lifelong thanks. The collegiality and congeniality of the Fellows class were superb. The colloquia were stimulating and educational in fields far beyond my prior knowledge. The meals together were a delight, although the mental stimulation that accompanied the lunches may have been gone by the second glass of wine on Thursday nights. There were some pleasant evenings and enjoyable events and outings with closer friends from among the large group. The end-of-year party was a delight. Fond memories of the year will linger long even though I departed forlorn that my project had been a failure ... Or is it a decent start?