PREFACE

Roy R. Snelling
Natural History Museum of Los Angeles County
900 Exposition Boulevard, Los Angeles, California, U.S.A.
antmanrs@nhm.org

Slightly more than fifty years ago a significant advance in the systematics of ants was published — E. O. Wilson's doctoral thesis: A monographic revision of the ant genus *Lasius* (Wilson, 1955). This was not quite Ed's first paper on formicid systematics (Wilson, 1951, 1952), but it was the first comprehensive revision of an ant genus based on modern or Mayrian taxonomic principles. Ant systematics had truly entered the modern era only five years earlier with W. S. Creighton's revolutionary *Ants of North America* (Creighton, 1950). Creighton emphasized the need for species and subspecies based on solid morphological features and sound field experience. Creighton's work clearly influenced Borgmeier's massive revision of the New World army ants (1955). Enlarging upon Creighton's philosophical understanding that taxa must be based on secure morphological differentiation and that species must be understood as populations subject to (often) considerable geographic variation, Wilson's revision, following on Creighton's monumental accomplishment, effectively ended the era of such giants as Forel, Emery, and Wheeler. Each of these workers had described numerous subspecies and varieties, often from inadequate samples; these new taxa were all too frequently ascribed to species that were, themselves, poorly known.

Creighton had dismissed the varietal form, the backbone of the quadrinomial system then applied to ants. Some of the "varieties" he did continue to recognize as geographic variants or subspecies, usually based on morphological characteristics; most, however, were consigned to oblivion as nothing more than trivial sporadic variations within a population. Only five years later, Wilson took the next step and dispensed with subspecies, having determined that most ceased to exist as taxonomically meaningful entities when entire populations were critically examined.

I first began studying ants, as part of my larger interest in the aculeate Hymenoptera, in the years just prior to the appearance of Creighton's book. Suffice to say that when I first realized just how chaotic ant taxonomy was, I promptly determined not to work on ants. Some years later I acquired a copy of *Ants of North America*, but by then I was deeply involved with bees and social wasps, and had only a casual interest in ants. It was not until about 1960 that I became more involved with ants. *Ants of North America* was supplemented by reprints of more recent works, including Ed's *Lasius* monograph. Suddenly, ant systematics, a previously arcane welter of confusing subspecies and varieties and wholly unworkable keys, had become comprehensible! Those individuals entering ant systematics over the past half century cannot begin to comprehend the profound significance of these two publications. But now, fifty years later, we can look back and appreciate Ed's contributions, examined more fully in the following paper, to our field of endeavor.

The present volume, containing contributions from ant taxonomists the world over, began as a chance email interchange between Jack Longino and myself in the spring of 2003. Basically, it was something on the order of (from Jack): "Maybe we should put together a Festschrift for the Old Boy (*i.e.*, Ed)." My response was, "Not a bad idea." We left it at that and signed off. The idea didn't die there. Phil Ward, who happened to be visiting the LACM at the time, and I started talking about it and shortly agreed in principle to explore the possibility. I immediately began contacting colleagues and potential contributors; most were enthusiastic and agreed to provide papers. A lot of hard work by Ed's colleagues from around the world has resulted in this volume. There are a couple of

thoughtful essays, one from Barry Bolton, another from Bob Taylor. Another paper examines the great diversity of ant species in arid lands in Australia. But the papers submitted here are primarily taxonomic/systematic in nature.

All of the papers included herein have been reviewed by the editors and, sometimes also by the usual battery of "anonymous reviewers." I wish to thank two of my colleagues at the Natural History Museum of Los Angeles County, Brian V. Brown and Fred S. Truxal, for their encouragement. Particular thanks are tendered to my son and grandson, Gordon and James, respectively, and to Weiping Xie and Bill Mertz who came to my assistance many times when my ineptitude with computer technology became all too evident. And finally, I and my co-editors, Phil Ward and Brian Fisher, wish to express our profound gratitude to all the authors whose contributions made this volume possible.

LITERATURE CITED

Borgmeier, T. 1955. Die Wanderameisen der Neotropischen Region. *Studia Entomologica* **3**: 1-720. **Creighton, W.S.** 1950. The ants of North America. *Bulletin of the Museum of Comparative Zoology* **104**: 1-585.

Wilson, E.O. 1951. A new *Leptothorax* from Alabama. *Psyche* 57: 128-130.

Wilson, E. O. 1952. O complexo *Solenopsis saevissima* na America do sul. *Memórias do Instituto Oswaldo Cruz* **50**: 49-68.

Wilson, E. O. 1955. A monographic revision of the ant genus *Lasius*. *Bulletin of the Museum of Comparative Zoology at Harvard College* **113**: 1-201.