

PREFACE

The dawn of the 21st century has seen a broadening gap between views of ornithological and other biological collections. On the one hand, these collections and the specimens they contain are recognized by many as central to modern-day research ranging from ecology through functional anatomy to genomics. Indeed, dramatic new technical advancements have diversified the types of specimens that we can collect and preserve, and have opened new doors to the types of questions that can be answered with both traditional and new specimen types. Accordingly, to many, this century heralds expanding potential for collections-based ornithological research. On the other hand, the broader public, and even many in the scientific research community, appear to view biological collections as something of a holdover from a bygone age of discovery. Many picture museum collections as arcane repositories of dusty old specimens, and this view has fueled opposition from some to modern specimen collecting. This opposition, in turn, has led to increasing challenges for modern collections, and a seismic shift away from research for many.

The growing disconnect between the perceived and actual research value of ornithological collections led to a symposium, held at the Joint Meeting of the American Ornithologists' Union (AOU) and Cooper Ornithological Society (COS) in August 2013, which was hosted—appropriately enough—by the Field Museum of Natural History in Chicago, Illinois. The goals of that symposium

were to survey the many uses of traditional ornithological specimens, to illustrate new technologies for using them in modern-day research, and to introduce the concept of the “extended specimen”—a constellation of specimen and data types that jointly add research value to each other. At the conclusion of that symposium, I was approached by Brett Sandercock, who at that time was Series Editor for the Studies in Avian Biology series. Brett suggested that the symposium might make a useful contribution to that series, and so the concept for this volume was hatched.

The intent of this volume is very much in line with the original AOU/COS symposium: to introduce both professional and amateur ornithologists to the many modern-day uses of ornithological research collections, and thereby bridge the perception gap regarding their scientific value. The authors of the various chapters hope to inspire creative young minds to use specimens and associated data in exciting new ways to address ever more challenging research questions. At the same time, we hope to encourage and support those in charge of ornithological collections to embrace the concept of the extended specimen, thereby further broadening the research impact of those collections. Happily, many in the collections community have been thinking in this way for years, and have been growing their own collections and/or building strategic partnerships to include new specimen and data types that have historically fallen somewhat outside of most ornithological

collections. This volume celebrates those efforts and encourages more. Finally, we aim to help the broader public understand that, rather than being dusty old drawers filled with specimens of questionable research value, ornithological collections are dynamic centers of modern-day research, utilizing cutting-edge methods drawn from across the scientific spectrum to help us understand and preserve the diversity of life on our planet.

This volume would not have been possible without the help and input of many. I wish to thank my co-organizers of the AOU/COS symposium—Kim Bostwick, Edwin Scholes III, and David Winkler—for pulling together that original collection of presentations. Thanks also, of course, to the participants in that original symposium, many of whom are

authors of chapters in this volume. The Local Committee, particularly John Bates, was instrumental in making that symposium a reality. Brett Sandercock encouraged us to publish the symposium as a volume in the Studies in Avian Biology series, and Kate Huyvaert picked up the baton to help make that happen when she took over as Series Editor. Thanks to Chuck Crumly at CRC Press for pushing this project along with appropriate carrots and sticks. Most of all, thanks to the many researchers and staff working hard to expand our ornithological collections to meet the opportunities and challenges of research in the 21st century.

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