MONITORING BIRD POPULATIONS USING MIST NETS

C. John Ralph and Erica H. Dunn, Editors

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PREFACE

Mist nets were introduced to North America about mid-way through the 20th century. In the decades since then, they have become a widely adopted and indispensable bird-capturing tool for the scientific study of birds. At first, mist nets were an inventory tool, allowing in-hand comparison of species previously scrutinized only over the barrel of a shotgun, but in the early 1970s, netting began to be used for monitoring population trends and demographic composition. Early users had to develop protocols for mist netting based on their own experience. Some 30 years later, there has still been relatively little evaluation to determine the effect of different mist netting methods (or of extrinsic factors) on the numbers and kinds of birds that are captured, and the degree to which demography of captured birds represents true population characteristics.

Recognizing the need for greater evaluation of mist-netting and the need for standards on the use of this technique, a workshop was held in October 1993 entitled "The use of mist nets to monitor bird populations." The workshop took place at the Marconi Conference Center on the shores of Tomales Bay, California, and was sponsored by the Point Reyes Bird Observatory, U.S. Forest Service, U.S. Fish and Wildlife Service, Canadian Wildlife Service, and the Institute for Bird Populations.

The objectives of the workshop were to examine the strengths and weaknesses of mist-netting for a variety of population monitoring purposes, with a primary focus on passerines, and to develop recommendations on the best methods for using mist nets as a population monitoring tool. The conference attracted 40 participants from Canada, Costa Rica, Germany, Great Britain, and France, as well as from all across the United States. The majority of papers presented at the workshop are included in this volume, as well as several prepared as follow-up. During intensive breakout sessions, all participants reached consensus on recommended standards, reflected in the final chapter of this volume, "Recommendations for the use of mist nets for inventory and monitoring of bird populations." All manuscripts underwent extensive peer review as well as review by editors. During this process, delays made it possible for a reevaluation of all the manuscripts. All the authors enthusiastically participated in this process, and as a result many new data were brought forward, and updated analyses were incorporated into manuscripts during 2001–2003. As well, several new manuscripts were submitted that were not presented at the workshop. The co-editors completed the final editing in late 2003.

Both the manuscripts and the recommended standards for mist netting were greatly improved by comments from authors of all the papers in this volume, as well as from Bob Altman, Doug Barnum, Jeffrey Brown, Deanna Dawson, Sam Droege, Joseph Engler, Denise Hardesty, Daniel Hernandez, Jane Hicks, Stephanie Jones, Joe Kaplan, James Karr, Martin McNicholl, Bill McShea, Rhonda Millikin, Nicolle Mode, Bert Murray, Glenn Olsen, Peter Pyle, John Rappole, Dan Reinking, W. John Richardson, Christian Vansteenwegen, Dennis Vroman, George Wallace, and Richard Weisbrod. The editors are also indebted to Kim Hollinger and Linda Long, for their dedicated and extensive work as editorial assistants, to John Rotenberry for his help in finalizing this volume, and to Keith Hanson for the very topical artwork that appears on its cover. Finally, we thank the Canadian Wildlife Service for its contribution to the cost of publication.

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