

## Foreword

The Fourth International Swan Symposium was held at the Airlie Conference Center, near Warrenton, Virginia, USA from 13–18 February 2001, and was held concurrently with the Eighteenth Trumpeter Swan Society Conference. International swan symposia, which have been held at approximately 10-yearly intervals since 1971, provide the main forum for members of the Swan Specialist Group (SSG), and other interested parties, to discuss the most recent results of their swan research programs, to identify gaps in knowledge with a view to encouraging new projects in these areas, and to facilitate the development of collaborative studies where appropriate. The SSG forms part of the Wetlands International/IUCN-Species Survival Commission Specialist Group network. As such, it is charged with providing the sound scientific basis for advising on swan management and conservation issues, especially at flyway or international levels. The 62 papers and 26 posters presented at the Symposium provided valuable new data on the status and ecology of swan species, generated since the Third International Swan Symposium in 1989, and we are proud to publish 54 of these papers here to provide an information source for scientists and reserve managers. Of the eight swan species and sub-species in the world, new data were presented for seven (Trumpeter Swan, Tundra Swan, Whooper Swan, Bewick's Swan, Mute Swan, Black-necked Swan and Coscoroba Swan), with only the Black Swan missing on this occasion.

Swans are truly a global family; they are widespread in North and South America, Europe, Asia and Australia/New Zealand, with smaller numbers occurring in Africa, and Black-necked Swans have even been recorded as vagrants in Antarctica. Since two swan symposia have been held in Europe (at Slimbridge, UK, in 1971 and at Oxford, UK, in 1989) and one in Asia (at Sapporo, Japan, in 1979), it therefore seemed appropriate that the fourth swan symposium should be held, for the first time, in the Americas. The offer by William J. ("Bill") Sladen, on behalf of

Environmental Studies at Airlie, to host the meeting was particularly appropriate given Bill's lifetime devotion to swan research and conservation. The Swan Specialist Group is most grateful to the Environmental Studies at Airlie for their hospitality at a most successful meeting, particularly to Donielle Rininger for undertaking the substantial logistical arrangements needed to ensure that the 143 participants from 16 countries were all in the right place at the right time. The exceptional facilities provided by Airlie Conference Center, and efficient time-keeping by those chairing each session, resulted in the intensive program of talks and field excursions being enjoyable, as well as informative and on schedule.

In preparation for the meeting, the Swan Specialist Group's Regional and Species Coordinators acted as the Scientific Committee for the symposium: Eileen Rees, Roberto Schlatter, Carl Mitchell, Susan Earnst, Roland Limpert, Jan Beekman, Olafur Einarsson, Bjarke Laubek, Bert Coleman, Maria Wieloch, Ming Ma, Richard Kingsford and Murray Williams. The Scientific Committee reviewed abstracts to decide on the acceptance of oral and poster presentations, with valuable additional input from Ruth Shea on behalf of the Trumpeter Swan Society. In addition to the invaluable financial support provided by the Co-Sponsors and Patrons of the symposium and proceedings, without which neither the symposium nor the proceedings would have been possible, we are indebted to many others for their help in various ways: Pelle Andersen-Harild, Jon Bart, Vincent van den Berk, Jeff Black, Eric Bolen, John Bowler, Mark Brazil, Cindy Bronson, Preben Clausen, Bert Coleman, Jim Cooper, Ruth Cromie, Mike Daw, Simon Delany, Dirk Derksen, Andy Douse, Craig Ely, Tony Fox, Mark Fuller, Carol Gilbert, Todd Grant, Kim Head, Baz Hughes, Gary Ivey, Joe Johnston, Greg Justice, Janet Kear, Jim King, Richard Kingsford, Mel Kershaw, Steve Kohl, Bjarke Laubek, Konstantin Litvin, James Lovvorn, Carl D. Mitchell, Bart

Nolet, Mark O'Connell, David Parkin, Christopher Perrins, John Quinn, James Robinson, Marcus Rowcliffe, David Salmon, Joel Schmutz, Dafila Scott, Lady Scott, Jane Sears, Jerry Serie, Marcel Silvius, Dorothy Simpson, Chris Spray, Alan Thomson, Richard Ubels, Maria Wieloch, Murray Williams and Freddy Woog. We also thank first authors for submitting and amending their manuscripts, and for acting as reviewers for other papers in the proceedings.

The Symposium was opened by a welcome from Kim Head (President, Airlie Foundation), with introductory talks by Gerard Boere (International Conservation Officer, Wetlands International) on '*Wetlands International and its Specialist Group Network*', Harvey Nelson (President, The Trumpeter Swan Society) on the development of Trumpeter Swan management programs and John Turner (past Director of the U.S. Fish and Wildlife Service, and current President of the Conservation Fund) on '*U.S. Involvement with Swan Conservation and Research*'. In his speech John Turner observed that '*swans bring people together*', and this was particularly true of the Fourth International Swan Symposium, with participants attending from across the globe and from a variety of backgrounds, including scientists, amateur and professional ornithologists, reserve managers and animal welfare organizations.

Several major research projects have been developed within the SSG in the last decade, including energetics studies, assessment of population monitoring and trends and collaborative studies of birds breeding in the Russian arctic. The program of the Symposium therefore was organized into several thematic sessions to reflect the range of activity by swan researchers in the last decade: (1) population trends and dynamics; (2) ecology of migration; (3) breeding biology and demography; (4) feeding ecology and energetics; (5) management and conservation; and (6) general biology (including taxonomy, biometrics, animal health and molecular studies). The papers published here are grouped under similar thematic headings.

Finally, as co-editors of the symposium proceedings, we would like to acknowledge the major contribution made by our third editor, Dr. John Coulson, and to his wife Becky who provided invaluable support in checking and correcting the proofs. John is well known for his studies of seabirds, especially Kittiwakes, but his analytical brain and editorial pen have been invaluable in ensuring that scientific standards were maintained in the publication of these proceedings.

Eileen C. Rees and Susan L. Ernst  
Wetlands International/IUCN-SSC  
Swan Specialist Group