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**PROCEEDINGS OF THE
THIRTEENTH NORTH AMERICAN
CRANE WORKSHOP**



**14-17 April 2014
Lafayette, Louisiana**



FRONTISPIECE. Gary Krapu, Research Wildlife Biologist Emeritus, USGS Northern Prairie Wildlife Research Center, received the L. H. WALKINSHAW CRANE CONSERVATION AWARD in recognition of his career-long work to better understand the needs of sandhill cranes in the Platte River ecosystem; initiate a comprehensive, long-term research program to guide conservation and management of the Mid-continental Population of sandhill cranes; and for collaborative research efforts with biologists of other nations to guide international conservation of cranes. The Award was presented by Jane Austin, President of the North American Crane Working Group, on 17 April 2014. Gary received his M.S. and Ph.D. degrees in Animal Ecology from Iowa State University. He was employed as a Research Wildlife Biologist at Northern Prairie under the U.S. Fish and Wildlife Service and U.S. Geological Survey from 1968 until his retirement in 2011 and in emeritus status thereafter. While at Northern Prairie, he also conducted studies on waterfowl, including wetland habitat requirements, role of stored nutrients in waterfowl reproduction, brood habitat use and factors influencing duckling survival, waterfowl nutrition, and staging ecology of white-fronted geese. He continues to conduct research on sandhill cranes at Northern Prairie, primarily studying population dynamics of the Mid-continent Population and the geographic distribution and ecology of sandhill cranes breeding in Russia and western Alaska. (Photo by Glenn Olsen)

Front cover: Whooping crane family at nest, Jefferson Davis Parish, Louisiana, April 2016, by Eva Szyszkoski, Louisiana Department of Wildlife and Fisheries.

Back cover: Scenes from the Thirteenth Workshop in Lafayette, Louisiana, by Barry Hartup, Glenn Olsen, Tommy Michot, Eva Szyszkoski, Richard Urbanek, and Sara Zimorski.

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Editor

DAVID A. ABORN

Associate Editor

RICHARD P. URBANEK

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PREFACE

The North American Crane Working Group (NACWG) is an organization of professional biologists, aviculturists, land managers, non-professional crane enthusiasts, and others interested in and dedicated to the conservation of cranes and crane habitats in North America. Our group meets approximately every 3 years to exchange information pertaining to sandhill cranes and whooping cranes and occasionally reports about some of the other cranes species. Our meeting in Lafayette, Louisiana, 14-17 April 2014, celebrated the return of whooping cranes to Louisiana for the first time in 60 years. The workshop was organized by Sammy King and Gay Gomez, and we thank them for their efforts. The field trips to see the release site for the whooping cranes, as well as learning about Louisiana's crawfish and rice industry, were enlightening and enjoyable. The NACWG Board of Directors consisted of President Jane Austin, Vice-President Richard Urbanek, Treasurer Daryl Henderson, Felipe Chavez-Ramirez, David Aborn, Barry Hartup, and Sammy King. The scientific program consisted of 39 scientific talks and 13 posters. The papers in this volume include some of those presented at the workshop as well as others submitted later. Papers submitted for publication in the Proceedings are peer-reviewed according to scientific journal standards. We thank the following referees for their contribution to the quality of this volume:

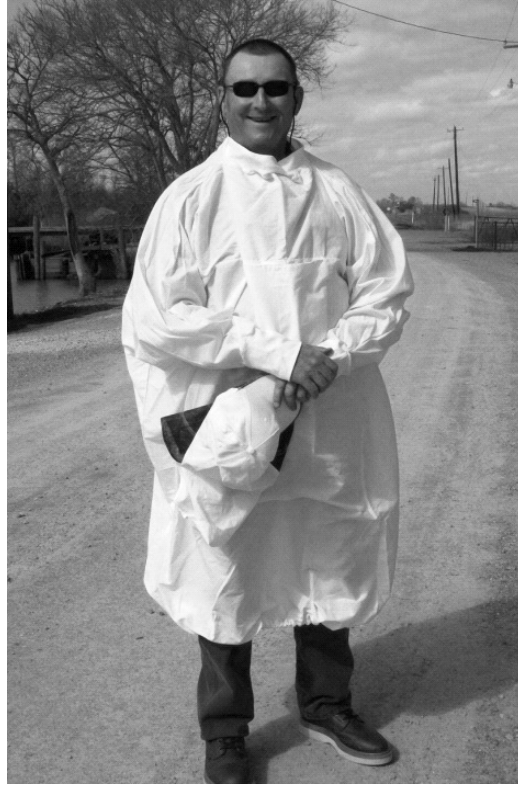
Nicholas J. Aebischer, Jeb A. Barzen, Andrew W. Cantrell, Michael D. Culbreth, Martin J. Folk, Matthew A. Hayes, Scott G. Hereford, Jerome J. Howard, Anne E. Lacy, Julia A. Langenberg, and Sara E. Zimorski.

Barry K. Hartup, Daryl S. Henderson, and Tommy C. Michot were instrumental in final editing and proofing.

David A. Aborn, Editor

Richard Urbanek, Associate Editor

November 2016



**THOMAS J. "TOM" HESS, JR.
1950-2014**

A native of Delaware, Tom Hess first encountered southwest Louisiana's marshes as a student at Rockefeller State Wildlife Refuge in Grand Chenier, Louisiana. Realizing he had found the place of his dreams, Tom, an avid waterfowl hunter and fisherman, vowed to return to the region. In 1972 he began work as a biologist assistant for the Louisiana Department of Wildlife and Fisheries (LDWF) at Rockefeller Refuge. He held a B.S. in Wildlife Management from Louisiana Polytechnic University (Louisiana Tech) and later earned an M.S. in Wildlife Management from Louisiana State University. Tom spent the first several years of his career as general manager and wetland manager of Little Pecan Island hunting lodge and preserve, a privately owned and managed tract of coastal fresh marsh near Grand Chenier, Louisiana. He spent the rest of his career as a biologist at Rockefeller Refuge, rising to the position of refuge manager, which he held until his death in March 2014. During his long career with LDWF, Tom worked with wetland management and endangered species. He contributed to the recovery of the state's brown pelicans and bald eagles and was an ardent supporter of the Louisiana whooping crane reintroduction. His enthusiasm for Louisiana's wetlands, waterfowl, and other wildlife was infectious; he worked well with landowners and other stakeholders and mentored many students and young staff members with his own inimitable blend of leadership, optimism, experience, and humor. In 2011 the Louisiana Wildlife Federation named him Professional Conservationist of the Year largely for his work with the whooping crane reintroduction. Indicative of Tom's passion for the Louisiana whooping cranes was his request that memorial donations be made to the Louisiana Wildlife and Fisheries Foundation, specifically to support the reintroduction project.

Gay Gomez, Lake Charles, Louisiana



SCOTT M. MELVIN
1953-2014

Scott Melvin earned a B.S. in Wildlife Management at the University of Maine in 1975. Scott's life-long love of cranes began when he followed with his graduate work at the University of Wisconsin. His M.S. at Steven's Point and his Ph.D. at Madison on the migration, habitat use, and nesting ecology of sandhill cranes pioneered the use of leg-band attachment of radiotransmitters and innovative tracking techniques for cranes. He returned to New England to work with the Maine Department of Inland Fisheries and Wildlife, where he was Assistant Leader of the Endangered and Nongame Wildlife Project, and the Massachusetts Division of Fisheries and Wildlife, where he worked for almost 30 years. He spent his free time documenting the first successful nesting of sandhill cranes in Maine in 2000 and Massachusetts in 2007.

As Senior Zoologist for Massachusetts Wildlife's Natural Heritage and Endangered Species Program, Scott oversaw research and conservation efforts for a variety of species ranging from turtles to grassland birds, but he is best known for his leadership in the recovery of the piping plover. Through conservation partnerships forged under Scott Melvin's tenure, the piping plover had a fourfold increase in numbers, with over 660 estimated nesting pairs in Massachusetts by 2014. While most of his time was spent as an agency biologist, he also enjoyed teaching over the years at the University of Maine, Harvard University, and the University of Massachusetts, where he also was advisor to many graduate students. While well known for his piping plover conservation efforts, cranes remained his first love, and he asked that memorial donations go to the International Crane Foundation.

Alison Whitlock, Petersham, Massachusetts, and Boston Globe (Photo by Bill Byrne)



TERRY J. KOHLER
1934-2016

Terry Kohler was a philanthropist, aviator, and pillar in conservation. In their corporate jet, Terry and his wife Mary transported eggs of trumpeter swans from Alaska and whooping crane eggs from northern Canada for hatching, rearing, and releases into Wisconsin. The Kohlers were leading supporters of the International Crane Foundation (ICF) for many years. They flew many cranes and eggs between ICF and the Patuxent Wildlife Research Center in Maryland and from these captive breeding centers to release sites in Florida, Idaho, Louisiana, and Wisconsin. Almost every one of the hundreds of reintroduced whooping cranes was transported in one of their planes. They supported hundreds of hours of flights to monitor both sandhill and whooping cranes east of the Mississippi River. Terry was an avid supporter of the ultralight aircraft-led migration technique used in reintroduction of the eastern migratory whooping crane population. Kohler aircraft flew biologists on hundreds of flights tracking the migration of released birds, translocating birds back to Wisconsin when needed, and surveying nests. The Kohlers recently became the major supporter of work in Texas to ensure the welfare of the natural population of whooping cranes on their wintering grounds.

The Kohlers flew around the world to deliver hatching eggs of Siberian cranes from ICF to a release project in Russia and visited the three areas of Russia where Siberian cranes nested. This flight was apparently the first passage of a private American aircraft across Russia. In 2009, Terry and Mary Kohler were awarded the Charles Lindbergh Award, which “is given annually to individuals whose work over many years has made significant contributions toward the Lindbergh’s concept of balancing technology and nature.”

Wildlife conservation, whooping cranes, and those of us lucky enough to work with Terry have lost a wonderful and generous supporter and friend. We will always remember and be forever grateful for the contributions made by Terry Kohler.

George Archibald, Baraboo, Wisconsin

USE OF SCIENTIFIC NAMES IN PROCEEDINGS OF THE THIRTEENTH NORTH AMERICAN CRANE WORKSHOP

Following publication of the *HBW* (Handbook of the Birds of the World) and *BirdLife International Illustrated Checklist of the Birds of the World* (del Hoyo et al. 2014), BirdLife International proposed modification of the scientific and common names for several crane species as well as for many other waterbirds. Four crane species (sarus, brolga, white-naped, and sandhill cranes) were removed from the genus *Grus* and placed in a new genus *Antigone*. The American Ornithologists' Union followed suit in its update to the checklist of North American birds (Chesser et al. 2016) by adopting the same changes. In these Proceedings, the editors of the North American Crane Working Group have chosen to retain the use of *Grus* for these species until further evidence is available to support the reclassification. We endorse the conclusions in Krajewski et al. (2010), the latest published research on this subject. Krajewski (personal communication, 2016) considers this reclassification to be premature. Crane phylogeny can only be confirmed when DNA data from nuclear genomes and more individuals of each species have been analyzed. Without such supporting evidence, it is recommended that the stability of taxon names that have been in use for many decades be maintained.

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