

PREFACE

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The Savannah River Site (SRS) is a 78,000-ha tract in western South Carolina operated by the U. S. Department of Energy (DOE). It is designated as a DOE National Environmental Research Park. Although the primary mission of Savannah River Site was the production of nuclear weapons materials, the site has a long history of environmental stewardship, restoration, and ecological research. Natural resources have been managed since the inception of the federal facility by the U.S. Forest Service (Savannah River Institute, SRI) according to Department of Energy policies. The natural resource programs have evolved from an initial goal of reforestation of abandoned farmland to sustainable management, restoration, and stewardship. Ecological research at SRS has been conducted by several organizations, including the Savannah River Ecology Laboratory (SREL), the U.S. Forest Service Southern Research Station, Westinghouse Savannah River Company, the Philadelphia Academy of Sciences, and many cooperating universities. This research has focused on everything from radiological impacts of facilities to the effects of forest management.

Researchers on the Savannah River Site have always been conscious of the competing mandates present in the operation of the facility. On the one hand, fundamental ecological research has been conducted on the plant and animal communities, both terrestrial and aquatic, from the first years of federal management. On the other hand, the primary functions of the nuclear program required that research be directed towards answering pressing questions posed by the management planners. Also, research activities could be and were often constrained by competing activities and land-use needs involving other workers and programs on the site. Thus, SRS researchers have worked within an atmosphere where research and management must be cooperative in logistical planning, strategic planning, and on-site implementation. Because improved integration of research and management is increasingly seen as a worthwhile goal for both the scientific community and land management agencies, experiences on the Savannah River Site may be instructive in helping others to attain this integration.

As described by Meyers and Odum (*this volume*), some of the earliest ecological research at SRS was conducted on birds. Dr. Eugene P. Odum, founder of SREL, initiated studies of the

birds found in abandoned farmland even before the Savannah River Site was officially designated. SREL researchers have continued their ornithological research to the present, covering many issues but focusing largely on radiological and endangered species impacts of the SRS program, especially in wetland ecosystems. In the late 1980s, the Department of Energy initiated a Biodiversity Program to fund ecological research designed to meet specific information needs of SRS land managers. J. G. Irwin, SRI Forest Manager at the time, was responsible for identifying the need for the research-management collaboration underlying the Biodiversity Program. Ornithological work conducted under the SRI Biodiversity Program has been done primarily by scientists associated with the Southern Research Station and various universities, including the University of Georgia, Clemson University, the University of Florida, Purdue University, and Virginia Polytechnic Institute.

The papers presented herein arose from a workshop held at the Savannah River Site in 1996 sponsored by the Savannah River Institute. As the volume of ornithological work conducted at SRS increased, programmatic review indicated that a synthesizing workshop was warranted. John I. Blake, Research Manager of the Savannah River Institute, initiated discussion with J. B. Dunning and the idea of the workshop was born. In addition to introducing the participants to the range of avian research being conducted on the SRS, a goal of the workshop was to explore the interaction of researchers and managers within the multidisciplinary program of the Savannah River Site, identifying successful aspects of the collaboration as well as lessons for improvement. The workshop was one of a series of similar workshops held during the early to mid 1990s intended to summarize available information on topics of interest to SRS land managers, such as spatially explicit population models, the importance of coarse woody debris to the biodiversity of Southern forests, ecological restoration, and the ecological legacy of historical land use.

In organizing the workshop, an attempt was made to represent as much of the ornithological research conducted at SRS as possible. Participants included biologists from SRI and researchers from the Southern Research Station, SREL, Westinghouse Savannah River Company, and several of the universities mentioned above. Bi-

ologists with the South Carolina Department of Natural Resources, non-governmental organizations such as the National Audubon Society, and regional ornithologists who did not work specifically at the SRS also were invited to provide a wider range of opinions on the material presented in workshop talks. The resulting discussions improved our collective understanding of the research/management interaction, and eventually resulted in the papers published in this volume of *Studies in Avian Biology*.

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