

# Series Preface

## **Galapagos Book Series, “*Social and Ecological Sustainability in the Galapagos Islands*”**

In May 2011, the University of North Carolina (UNC) at Chapel Hill, USA, and the Universidad San Francisco de Quito (USFQ), Ecuador, jointly dedicated the Galapagos Science Center, an education, research, and community outreach facility on San Cristobal Island in the Galapagos Archipelago of Ecuador. The building dedication was the culmination of an emerging partnership between UNC and USFQ that began several years earlier through a 2006 invitation to Carlos Mena and Steve Walsh to assist the Galapagos National Park and the Nature Conservancy in a remote sensing assessment of land cover/land use change throughout the archipelago. Leveraging related work in the Ecuadorian Amazon, Carlos Mena (USFQ Professor of Life and Environmental Sciences) and Steve Walsh (UNC Lyle V. Jones Distinguished Professor of Geography), Co-Directors of the Galapagos Science Center, and Brian Frizzelle of the UNC Carolina Population Center traveled throughout the islands using pre-processed satellite imagery and spectral and geospatial equipment to validate preliminary analyses of the Galapagos with a focus on invasive plant species. Since that project, Mena and Walsh have continued to regularly engage the Galapagos Islands, coordinating research conducted at the Galapagos Science Center by faculty, staff, and students from both campuses as well as by collaborating scientists from institutions around the globe who together seek to understand the social, terrestrial, and marine subsystems in the Galapagos Islands and their linked and integrative effects. Now with nearly 50 permitted Park projects operating at the Galapagos Science Center and a diversity of scientific topics being studied using a host of theories and practices, innovative work continues in an assortment of compelling vital ways. The state-of-the-art facilities at the Galapagos Science Center include nearly 20,000 square feet of space that supports four laboratories (i.e., Microbiology and Genetics, Terrestrial Ecology, Marine Ecology, and Geospatial Modeling and Analysis), operated through a permanent administrative and technical staff, to support science, conservation, and

sustainability in the Galapagos Islands. In addition, students enroll in classes taught by UNC and USFQ faculty as well as conduct research to complete their undergraduate honors theses, graduate theses, and doctoral dissertations. Several scientists at the Galapagos Science Center engage the community on topics including water and pathogens, nutrition and public health, and tourism and community development.

From these beginnings and with the general intention of developing a Galapagos Book Series to document our scientific findings, highlight special needs, and describe novel approaches to addressing special social-ecological challenges to the conservation and sustainability of the Galapagos Islands, the Springer Book Series was launched through its inaugural book, *Science and Conservation in the Galapagos Islands, Frameworks & Perspectives*, edited by Steve Walsh and Carlos Mena and published by Springer in 2013. The Series has continued to expand, with books on Evolution, the Galapagos Marine Reserve, and Darwin and Darwinism. Now with considerable pleasure we welcome, *Disease Ecology of Galapagos Birds*, edited by Patricia Parker. This book addresses important elements of the story and condition of birds in the Galapagos Islands, with a central focus on a collection of interesting and vital topics—colonization, pathogens, hosts and parasites, the special circumstances that have led to evolutionary change of birds in the Galapagos Islands, and so much more.

The general goal of the Galapagos Book Series is to examine topics that are important in the Galapagos Islands, but also vital to island ecosystems around the globe. Increasingly, viewing islands as a coupled human-natural system offers a more holistic perspective for framing the many challenges to island conservation and sustainability, but the perspective also acknowledges the important context of history, human population, migration of plants, animals, and people, development, disturbances, and the evolution and adaptation of species (human and otherwise) on islands to changing social and ecological circumstances. *Disease Ecology of Galapagos Birds* makes considerable contributions to this perspective and offers a rich understanding of birds in the Galapagos Islands and the forces and circumstances of change and adaptation. Parker has assembled an expert set of authors to write vibrant chapters that are important as stand-alone statements of bird ecology of the Galapagos Islands, but are also woven into a collective statement that offers new insights, interpretations, and conclusions about Galapagos Birds.

Chapel Hill, NC, USA  
Quito, Ecuador

Stephen J. Walsh  
Carlos F. Mena

Disease Ecology

Galapagos Birds and their Parasites

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