

Book review



## The Red Book of the Fauna of Serbia III – Birds

**Editors:** Dimitrije RADIŠIĆ, Voislav VASIĆ, Slobodan PUZOVIĆ, Milan RUŽIĆ, Marko ŠČIBAN, Bratislav GRUBAČ, Ante VUJIĆ. The Red book of the fauna of Serbia III – Birds. Institute for nature conservation of Serbia, University of Novi Sad, Faculty of sciences, Department of biology and ecology and Bird protection and study society of Serbia. Belgrade 2018. 552 pages.

The first Red books were published in Switzerland in the 1950s, and since then practically every country has produced its own version. Red books and Red lists are an internationally recognized method of determining the risk of species extinction, and as such contribute greatly to the conservation of biodiversity. Previously published Red books in Serbia dealt with flora, diurnal butterflies, orthopterans, amphibians and reptiles. The editors listed above combined the contributions of a group of thirty six authors and seventy seven photographers into a monumental tome entitled, “The Red book of the fauna of Serbia III – Birds.” As stated in the foreword, the authors considered it their duty to create a reliable instrument that would serve as a scientific foundation for local bird protection and conservation efforts. Their target audience included scientists, who will find here a large amount of data on the habitat and distribution of various species, but also those who make decisions on which species to protect, as well as those who act on these decisions in the field. It goes without saying that this Red book will also raise awareness of the importance of biodiversity and the necessity for its preservation to casual readers outside of the intended target audience.

The book, presented in Serbian and English, is divided into nine chapters, and ends with an impressive reference list, supplementary material and index. The chapters follow a logical progression by first introducing Red books as a concept, detailing their purpose and significance. The sources and structure of data and the methods employed for their analyses are also included, as well as information on species distributions, population trends and conservation status. The chapters that comprise the first part of the book emphasize the importance of being familiar with bird habitats, threatening factors and protection measures. A particularly inspiring

segment gives a detailed account of species with unfavorable conservation statuses, divided into chapters on breeding and non-breeding populations.

In the first chapter, a group of authors clearly and concisely defines the concept and significance of Red books of flora and fauna, noting the three century long tradition of bird research in Serbia and listing the names of many people, amateurs and experts alike, who have collected valuable data on the presence and distribution of birds in the country. A large number of pages are dedicated to the general characteristics of birds and their conservation status, which serves to stress the need for publications such as this. The final part of the chapter introduces the reader to the diversity of the ornithofauna of Serbia and its many breeding and occupancy sites.

The second chapter, which focuses on the sources and structure of data used for extinction risk assessment, illustrates the bewildering amount of published and unpublished data the authors were inundated with, the oldest of which dates back to the seventeenth century. The book does an excellent job of combining this abundance of information, which is often disproportionately distributed among taxa, into a coherent whole. Attesting to the difficulty of this task is the number of bird sightings, a massive 312,533, that were used to put together this Red book. Methods used to estimate population sizes and trends for breeding and non-breeding species in order to assess extinction risks are plainly laid out. Additionally, the authors took upon themselves the equally laborious chore of compiling distribution maps. Maps are present for all but three birds of prey and non-breeding species, but the reasons for this omission are stated in the text and are credibly justified.

Chapter three deals with threat assessment of birds in Serbia, and provides the reader with facts and explanations

necessary to follow and understand the subsequent chapters: namely, descriptions and interpretations of criteria and conservation statuses used by the IUCN. Definitions of frequently used terms such as population, subpopulation, generation time, population reduction, continuous decline, extreme fluctuations, extent of occurrence (EOO), area of occupancy (AOO), occupancy sites and strong fragmentation are helpfully included. Explanations of evaluation procedures for breeding and non-breeding populations are given in a straightforward and precise manner. The three steps necessary for completion of regional reports are also thoroughly covered. An expert team (whose members are listed in the text) has evaluated species conservation statuses by applying the relevant IUCN criteria for the territory of Serbia. The chapter ends with a section listing bird species according to their threat level in the country, summarizing extinct, endangered and stable species. This section also provides insight into population statuses in different regions of Serbia.

The fourth chapter covers the habitats of endangered bird species in Serbia. Herein, the authors present evidence in support of applying the CORINE classification of habitats. A clear understanding of which habitats in Serbia are most significant for birds and which habitats contain the most threatened species emerges from the information outlined in the text. Factors that threaten bird species by threatening the places they inhabit are also given due attention in this part of the book.

The fifth chapter offers a detailed descriptions of factors that threaten bird species in Serbia, based on criteria sanctioned by the IUCN. The authors provide the percentage of endangered species, a figure that should not be taken lightly. The main threats to continued bird survival on the planet Earth are accounted for, and the most crucial factors negatively impacting endangered species in Serbia are explicitly listed. These factors have been classified into five main threat groups, with each one described in considerable detail.

By logically building upon data on threats to survival, the sixth chapter is dedicated to conservation measures of bird species in Serbia. The authors highlight and exhaustively explain all passive and active measures used worldwide and in Europe specifically, as well as on a more local scale, and suggest specific measures of protection. Governmental and non-governmental organizations that actively contribute to the implementation of these measures are specifically addressed.

The seventh chapter serves as a sort of key to the remainder of the book: it shows how the entries on endangered bird species in Serbia are structured and places emphasis on how and why the entries for breeding and non-breeding species are conceptualized differently. This highly useful chapter provides the reader with the tools necessary to truly take in and comprehend what follows.

The core of the book is undoubtedly in chapters eight and nine. The former consists of comprehensive entries on 92 breeding populations with unfavorable conservation statuses. Each entry contains the Serbian and Latin name of the species (both up to date with current nomenclatures), synonyms, biometric data, distribution both in and outside of Serbia, conservation status and criteria, list of threats and visual supplements in the form of a photograph of the species and two distribution maps. The latter chapter provides entries on 31 non-breeding populations with unfavorable conservation statuses. These entries contain less data and are not as detailed as those in chapter eight, a fact that the authors call attention to and justify by stressing that this group of species has been far less studied.

The final section of the book contains supplementary material, a species index and a reference list, further enhancing its quality.

What we have before us, then, is a truly essential book entitled, “The Red book of the fauna of Serbia III – Birds”, written and edited by a large group of authors. Together, they have made a tremendous effort to collect and analyze an overwhelming amount of unbalanced data, and produce entries on 123 bird species. The text is well complemented by high-quality visual material: photos of habitats, sites and individual bird species, as well as species distribution maps. The level of commitment on the part of the editors who have managed to coordinate different data types and reconcile varied writing styles to create a book that is of equal value to field practitioners and amateur bird lovers is simply astounding. The contributions of those very same amateurs should not be underestimated: a significant portion of the data presented in these pages resulted from their enthusiasm, and is presented alongside the work of eminent experts in the field of ornithology. Aside from governmental institutions involved in the publication of this Red book, special recognition must also be given to the Bird protection and study society of Serbia. The value of the final product is immeasurable: its contributions to the knowledge on bird diversity in Serbia, assessment of their populations and habitats and possible approaches for improving the current situation are unparalleled. It is all in the pages of this book, and ready for any scientist, conservationist or nature lover to delve into and explore.

*Dr Olivera Bjelić Čabrilo  
Associate Professor  
University of Novi Sad  
Faculty of Sciences  
Department of Biology and Ecology*