

Return of the Peregrine: A North American Saga of Tenacity and Teamwork

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has the database on which to found major parts of these reviews, and they would benefit the conservation of Asian birds and all those who enjoy watching them and want to know to what species the population they are watching is best attributed.

The two volumes are sold as a set and I strongly recommend them, but I hope that a softcover edition, based on the first volume but expanded to include many sonograms, will be offered for sale in the region covered, where the price of the two volumes combined will be a significant obstacle to widespread use.—EDWARD C. DICKINSON, *Flat 3, Bolsover Court, 19 Bolsover Road, Eastbourne, East Sussex BN20 7JG, United Kingdom. E-mail: edward@asiaorn.org*

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Return of the Peregrine: A North American Saga of Tenacity and Teamwork.—Edited by Tom J. Cade and William Burnham. 2003. The Peregrine Fund, Boise, Idaho. 394 pp., many illustrations and photographs. ISBN 0-9619839-3-0. Cloth, \$59.50.—This book is a compendium of chapters and side-bars. Some are more technical than others, all are interesting and personal, and some also provide useful historical anecdotes. The authors were all directly involved in a huge effort (perhaps like none seen before) to understand the decline of a single bird species. The Peregrine Falcon (*Falco peregrinus*) was in danger of extirpation throughout much of its worldwide range. There was also the possibility of extinction. None of this was alarmism. *Return of the Peregrine* is also the encouraging story of a carefully orchestrated recovery.

The account may be perceived as one-sided, and it is—as the editors state. If one were to read only Peakall (1993) and this book, one might get the mistaken impression that the entire story of discovery of contaminant effects, species endangerment, and remediation in wild birds happened solely with the Peregrine Falcon. Work on other species of raptors—Osprey (*Pandion haliaetus*), Bald Eagle (*Haliaeetus leucocephalus*),

Golden Eagle (*Aquila chrysaetos*), American Kestrel (*F. sparverius*), Merlin (*F. columbarius*), and many others—as well as innumerable other bird species—played equally into the larger scenario. Yet no bird species, not even our national symbol, received as much attention and awe as the Peregrine Falcon. As to where the peregrine mystique comes from, it is easily understood by anyone who has direct experience of Peregrine Falcons. In conservation, we need this “magic” as much as we need the hard data. And nearly every ornithologist I know has a special attraction to some particular avian group. I believe this bond helps make avian conservation successful. Those devoted to Peregrine Falcons have expressed this as well as could be.

Return of the Peregrine is not a comprehensive story of conservation biology and ecotoxicology in the 20th century. But an inspiring case-history in 20th-century conservation it certainly is. Experiences with the Peregrine Falcon have led to many current efforts in conservation. For example, recovery of the California Condor (*Gymnogyps californianus*) has moved in the same directions, modeled largely on the Peregrine Falcon effort (see Snyder and Snyder 2000). Another outcome, in my opinion, is the emerging explanation of a widespread crash in numbers of vultures (*Gyps* spp.) on the Indian subcontinent (related to diclofenac, a widely used veterinary medicine; Oaks et al. 2004, Risebrough 2004, Anonymous 2005).

The collective perspective from the many diverse contributors to *Return of the Peregrine* is unique, and it represents their monumental contributions to a truly successful effort—from start to finish: population decline, problems identified, suitable techniques rapidly developed and refined, a restoration effort begun before it is too late, troubled populations beginning to recover, and finally, wild populations becoming self-sustaining again—next problem! If only it were that simple; but these advances do not happen overnight. They involve efforts and commitments over lifetimes, huge personal commitments, and long-term devotions to a cause. This book describes such a web of involvements regarding the Peregrine Falcon.

In the early 1960s, there was great concern about the population status of many bird species. The events chronicled in *Return of the Peregrine* happened when modern management approaches, now routine, were just emerging.

Developments around the Peregrine Falcon effort undoubtedly contributed importantly to these. But given the somewhat frightening degradation of conservation policies under present-day national guidance (Pope and Rauber 2004; see audubonaction@audubon.org), *Return of the Peregrine* is a must-read for encouraging our next generation of conservationists. Key elements in the still ongoing recovery were “tenacity and teamwork,” perpetual optimism, and a consistent, decade-after-decade “make it happen” attitude. As William Ruckelshaus (a hero in the book and USEPA Administrator in 1972, when DDT was banned) said,

When you’re faced with seemingly insurmountable or intractable problems, you can either stew about them, convince yourselves that they can’t be solved, or you can break them down into practical and solvable problems.

The book discusses the roles of such notable figures as Joe Hickey, Cade and Burnham, Derek Ratcliffe, Lucille and Bill Stickel, Bob Risebrough, Dave Peakall, and Ian Newton, just to mention a few. The recovery was also boosted by the pioneering efforts of the U.S. Fish and Wildlife Service and Canadian Wildlife Service. It was an international, multi-organizational effort. There were also the contributions of others in a “second generation” in the Peregrine Falcon recovery who expanded on the original efforts or started new research and conservation projects. Among them: Chuck Henny, Keith Hobson, Stan Temple, Lloyd Kiff, Brian Walton, Clayton White, and many others. The “pedigree” and outreach associated with the Peregrine Falcon recovery is long and wide.

Return of the Peregrine describes a movement that has also involved many public and private organizations; central among these were the Raptor Research Foundation (founded in 1966) and The Peregrine Fund. Many federal and state governmental agencies had critical roles in keeping the entire effort afloat, especially through the federal and state Endangered Species acts. There were also many important private sources of funding. Thousands of people (really more like tens of thousands) were involved in one way or another. In their entirety, the contributors were an unlikely but united mix of scientists, politicians, policymakers, volunteers, birdwatchers, wildlife artists, falconers, and egg collectors. Lots of politicking, handshaking, and public-relations

activities brought it home. The effort aroused enthusiasm and support from presidents, senators and congressmen, agency directors and managers, corporate heads, and movie stars. Thousands of volunteer naturalists sat for hours on end observing, recording data, protecting hack sites and newly occupied eyries, and caring for captive birds. Many of those volunteers have since become biologists themselves. Incredibly, everybody embraced this cause as if it were a national goal—and maybe it was.

Most readers will not go through this book cover-to-cover, but will come back to it again and again. The paintings and drawings that illustrate the book are excellent. Quotations and picture-narratives succinctly summarize many of the key ideas in the written narratives. The stories are often written in the author’s voice, as if that person were talking; this makes for enjoyable, easy reading. However, one has to be patient with some of the inevitable redundancy inherent in a compendium of this type. Many of the articles contain useful and valuable reference data along with authoritative insights and analyses (e.g., Newton’s chapter 20) and the book is loaded with interesting historical facts. I especially appreciated Burnham and Cade’s reproductions of Clayton White’s maps of North American Peregrine Falcon distribution over time (chapter 21). Those three maps speak volumes. Chapter 19, by a notable group of authors, gives accounts and anecdotes of notable individual Peregrine Falcons, aptly illustrating the personal affection that raptor researchers and enthusiasts have for “their birds.”

I hope the publishers have printed enough copies. This compendium needs to be in the libraries of conservationists, ornithologists, and bird-lovers. It nicely brings the science and the passion of nature conservation together, as it should be. There is no end to this story.—DANIEL W. ANDERSON, *Department of Wildlife, Fish, and Conservation Biology, University of California, Davis, California 95616, USA. E-mail: dwanderson@ucdavis.edu*

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occurs in rather obscure sources. Being Russian, with a developing ability to communicate in English, Potapov is qualified to bridge the two languages, but he needed more help than he evidently got from his editors and coauthor in smoothing out rough passages of text. Even so, it is exciting to read details about the natural history of the Gyrfalcon from the first-hand accounts of Russian field workers searching out the vast expanses of the Russian and Siberian northlands for this rare falcon. The ~500 references include no fewer than 162 Russian titles (translated). Finnish and Scandinavian languages are also well represented and, overall, the list of titles is a rich compendium of the world literature on the Gyrfalcon.

Unfortunately, the book was not well edited and contains many errors—omission of words, tandem duplication of the same word, misspellings (including authors' names and scientific names), and confusions resulting from poor use of English. The legends for some figures and plates lack sufficient information to allow the reader to interpret what the depicted data are supposed to represent (see especially figs. 2.1, 2.2, and 2.3 and plates 3–7 dealing with plumage color and pattern). In all, I found more than 260 errors and confusions in 280 pages of text and references. Clearly, the manuscript for this book needed meticulous copyediting, which it did not receive.

Chapter 1, with Olga Potapova as senior author, presents an interesting paleogeographic theory to explain how the proto-Gyrfalcon population became geographically isolated from the ancestral Saker (*F. cherrug*) or Saker-Gyrfalcon common ancestor as a result of an uninhabitable barrier of larch forest that spread across Eurasia, separating the northern tundra grasslands from the southern steppes, starting around 9,000 BP. One problem with this explanation is whether or not the genetic and phenotypic differentiations between Gyrfalcons and Sakers could have taken place in less than 10,000 years BP. Wink et al. (2004) estimated—from interspecific genetic distances ranging from 0.4% to 2.0% among falcon species in the *Hierofalco* group, which includes the Saker and Gyrfalcon—that this amount of differentiation would have occurred in a period of 200,000–1,000,000 years BP. They further pointed out that among other bird families, such small genetic distances indicate taxonomic differentiation at no more

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The Gyrfalcon.—Eugene Potapov and Richard Sale. 2005. Yale University Press, New Haven, Connecticut. 288 pp. ISBN 0-300-10778-1. Cloth, \$45.—Latest in what has been a distinguished Poyser series of monographs on birds of prey, this book is mainly a descriptive biology of the Gyrfalcon (*Falco rusticolus*)—the largest of falcons, circumpolar in distribution, and with unique adaptations to life in harsh Arctic environments. The first nine chapters treat paleobiography and systematics; identification and colors; distribution; population; habitat and landscape preferences; food and feeding habits; breeding cycle; dispersal, seasonal movements, and winter distribution; and competitors, commensals, and conspecifics. The final two chapters deal with man and falcons and threats and conservation.

Because neither author has done much original research on the Gyrfalcon, their book is mainly a review of the literature, though they present original research on morphometrics and plumage variations based on extensive examination of museum skins. By far the most important contribution of this book is its comprehensive summary of the Russian literature on the Gyrfalcon, much of which