BioOne DIGITAL LIBRARY

The Peregrine Falcon.

Author: Bijlsma, Rob G.

Source: Ardea, 112(2): 339-340

Published By: Netherlands Ornithologists' Union

URL: https://doi.org/10.5253/arde.2024.a10

The BioOne Digital Library (<u>https://bioone.org/</u>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<u>https://bioone.org/subscribe</u>), the BioOne Complete Archive (<u>https://bioone.org/archive</u>), and the BioOne eBooks program offerings ESA eBook Collection (<u>https://bioone.org/esa-ebooks</u>) and CSIRO Publishing BioSelect Collection (<u>https://bioone.org/csiro-ebooks</u>).

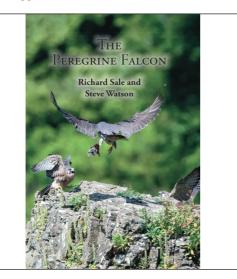
Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at <u>www.bioone.org/terms-of-use</u>.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Book reviews

Sale R. & Watson S. 2022. The Peregrine Falcon. Snowfinch Publishing, Coberley. Hardback with dust cover, 528 pp. ISBN 978-0-957132-6-2. Price \in 64.69.



Following five books on other falcon species, including New Naturalist 132 covering four European species in a single volume, Richard Sale (this time with Steve Watson as coauthor) concludes with a tome on Peregrine Falcons Falco peregrinus. This is no easy undertaking, regarding the wealth of papers and books on this species most popular among raptor enthusiasts. Is there anything new to add after Derek Ratcliffe's 'The Peregrine Falcon' of 1980 (with an updated reprint in 1993) and Rockenbauch's two volume set 'Der Wanderfalke in Deutschland' (1998, 2002)? Most certainly. Ratcliffe's book essentially was a monograph about the bird in Britain and Ireland, as he himself modestly explained in the preface to the second edition, and Rockenbauch's book is - nomen est omen - a monograph about Peregrines in Germany (and surrounding countries). And, unimaginable today, in both landmark books there is not a word about GPS-tracking (and little reference to radiotracking), trap cameras and video cameras, inertial measuring units and the other hightech paraphernalia that permeates present-day research. Gone are the days of observing nests from cramped hides high up in the mountains under atrocious weather conditions. A step change, that finds its expression in the present volume. Also telling: 59% of the 765 - mostly English - references used for the present volume date from the year 2000 or later, i.e. material not yet available to Ratcliffe and Rockenbauch. Breeding biology, population dynamics, migration and food, the traditional components of a monograph, are extensively covered and quantified with tables and figures. It is here that the great strides made in the past few decades come to fruition. Specific findings are presented in the relevant sections, proving the difficulty of drawing general ecological and biological inferences from disparate studies covering several continents, a multitude of habitats and various backgrounds (e.g. studies on declining, increasing or stable populations, coastal or inland, urban or rural, peripheral or not). Examples are well referenced, and checking statements against the original sources is easy (and commendable).

A substantial section is devoted to flight characteristics, a fitting tribute to the avian master of speed incarnate, with inevitable elaborations about maximum speed. Peregrines are fast flyers, no mistake, but rather than theorizing (with the occasional falconry bird lured into a steep dive) about maximum speed it is more interesting to record speeds used by falcons in real life. Indeed, Sale justifiably remarks that "while they may indeed be able to travel at or above 300 kph, in the wild they need to be so far from their prey they may have difficulty in spotting it (despite their excellent eyesight)". Not to mention problems experienced during rapid deceleration upon approaching its prey, with "negative g-forces that would tear the wings off most aircraft", in order to avoid damage upon strike. And why would a falcon attack its prey at five times the speed of that prey anyway? Much attention is paid to adaptations to high speeds, ranging from bone structure to nasal system, visual acuity (twin foveae, probably allowing detection of far-off prey) and flickerfusion frequency (which is high, but only useful in full daylight). Equipped with so many fine-tuned adaptations to superior flying it comes as no surprise that Peregrine diets are diverse. In fact, any bird within the 50-500 g range and frequenting open spaces is potential prey, and many beyond that range as well. Prey lists vary by geography, habitat and season (and perhaps over time, although no attempt is made to longitudinally compare prey lists for the past century or so; but see Rockenbauch mentioned above and Obuch & Chavko, Raptor Journal 16: 17-31, 2022). A wide range of studies from across the world shows how versatile Peregrines are, with the proviso that for any region usually just one or two species groups provide the bulk of prey. These are often doves and pigeons, but sometimes auks and petrels, waders, grouse, passerines or parrots. The Peregrine's morphology and hunting style were instrumental in the successful colonization of much of the world, except the tropics where Peregrines are outcompeted by falcon species fine-tuned to less seasonal prey resources including mammals.

The book is well bound, printed on high quality paper and illustrated with hundreds of graphs and photos. The latter are not your average coffee table plates but specifically chosen to detail or illustrate certain aspects mentioned in the text. This alone must have taken an effort to collate and adds substantially to the informative value of the book.

Rob G. Bijlsma, Doldersummerweg 1, 7983 LD Wapse, The Netherlands, rob.bijlsma@planet.nl