

BOOK REVIEW

Raptors of Mexico and Central America, by William S. Clark and N. John Schmitt. 2017. Princeton University Press. 272 pages, 32 color plates, 213 color photos, 64 maps, 3 line drawings. Hardcover, \$39.95. ISBN 978-1-4008-8507-7.

There are numerous comprehensive bird guides that cover regions in the neotropics, including Mexico and Central America, but no previously published guides for this region are dedicated solely to raptors. Furthermore, most guides do not accurately illustrate the shapes and plumages of raptors, making raptor identification in the neotropics challenging without exhaustive experience. The much anticipated *Raptors of Mexico and Central America* is the first guide dedicated to raptors in Mexico and Central America and the first to correctly illustrate them as they would be observed in the field. Those who have had the opportunity to experience the neotropics will greatly appreciate this book, as it allows for detailed study of elusive species. Raptors are arguably among the most challenging of taxa to identify, owing to their highly variable plumage, behavior, and generally low abundance. In the neotropics, many raptors are a challenge simply to observe, making a book of this magnitude a respectable feat and an important contribution to the avian literature.

With many years of experience with neotropical raptors in the field and in collections, Clark and Schmitt accurately and exceptionally depict 69 species of diurnal raptors, including vagrants, that have been recorded from Mexico to Panama. Clark has published numerous books and peer-reviewed articles and is acknowledged as a global authority in raptor identification. With this knowledge, the attention to detail in this guide is second to none.

The word "raptor" is a loosely used term that may include several avian orders. Clark and Schmitt include the Accipitriformes (kites, hawks, eagles, and allies, 50 species), Cathartiformes (New World vultures, 5 species), and Falconiformes (falcons and allies, 14 species). Owls (Strigiformes) are not included. The book is laid out like a field guide with an introduction followed by color plates and species accounts. When first seen, however, *Raptors of Mexico and Central America* does not look or feel like your standard field guide, as it is a hardcover book measuring 7 × 10.2 inches and 1.2 inches thick, which makes it more of a reference book than a field guide. The relatively large size is critical for displaying the color plates, but as a result there are areas of negative space throughout the species accounts where more photos or text could have been added. For use in the field, a softcover edition and reduced size would be useful.

The majority of the introduction is what you would expect in a field guide, but there are a few judicious additions. It includes an overview of why and how the guide was produced. A neat feature that is atypical of guides is an itemized list of helpful facts to assist the reader in properly identifying raptors in the field. I find this to be an insightful section for less experienced raptor enthusiasts or birders. Also in the introduction, there is a glossary that Clark has used in his other books that includes 160 definitions of terms related to raptors. Some are intuitive and probably unnecessary (e.g., hawk), but most could be helpful. To assist in visualizing the more descriptive terms for identification, there are six drawings of raptor topography, which is a great educational tool.

The most exceptional part of the book is the section including 32 color plates, which has a green tab for ease of location. These plates are comprehensive, showcasing how these species would be observed in the field, both in flight and perched. This book stands apart in that it shows the birds at various angles in flight, as you see them in the field. Another aspect I greatly appreciate is how similar species are illustrated on the same plate. Nothing is more frustrating than having to flip between multiple pages to compare characteristics. The nuances of the illustrations, such as birds with prey, perched on a fence post, on the ground, or in the canopy, add an important behavioral component that is often lost in field guides.

Few guides cover all of raptors' often complex plumage variations. Some species comprise multiple subspecies, some are polymorphic, some are sexually dimorphic, and

BOOK REVIEW

some go through multiple plumage changes before reaching the definitive adult plumage. The only previously published guide to come close to illustrating this variation is *Raptors of the World* (2006, Princeton University Press). For example, juvenile Gray-headed Kites (*Leptodon cayanensis*) are polymorphic, with a light morph lacking streaking, an intermediate morph that has moderate streaking, and what I would call a dark morph (Clark calls it an intermediate) that has heavy streaking. The most extraordinary feat of this book is that its color plates cover all these plumage types; that is the attention to detail that this guide has to offer.

The core of the book is the species accounts, which take up 70% of the guide, with two to four pages dedicated to each species. For each species, the reference text is divided into an identification summary and sections on taxonomy and geographic variation, similar species, status and distribution, habitat, behavior, molt, description, fine points, unusual plumages, hybrids, and etymology. The information in these sections is very general and thin with information. I would like to have seen more attention to detail, especially in regards to habitat. Color photos accompany each species account, adding to the book tremendously by showing how the species appears in the field as well as fine plumage details. The photos vary greatly in size, from a full page to as small as 1.5 × 1.5 inches. This variation makes *Raptors of Mexico and Central America* feel more like a reference book, but I like the photos' dispersion throughout the text more than if they had all been grouped in a single section. The photos' quality is variable, and the number of photos per species varies from two to four. As a result, not all plumage types are included. The use of photos to illustrate such highly variable group can have its setbacks and challenges, but Clark does a commendable job choosing photos that show the more commonly observed plumages. The content is easy to read and the format is easy to follow. My favorite section for each species account is the one on behavior. Behavior is important to identifying birds, but field guides commonly neglect those important and often diagnostic behavioral characteristics.

Now that I have given this phenomenal guide the praise it deserves, I do have a few constructive criticisms. The range maps are in the species accounts at the top of the page rather than on the color plates. I do not mind the maps being in the species accounts, but the range maps are much too small. There seems to be enough white space to allow larger maps, as range maps are an important component of any field guide. Also, in the introduction, Clark states that the American Ornithological Society's (AOS) taxonomy was used, but that is not the case with four species. Clark refers to *Spizaetus melanoleucus* as the Black and White Eagle, but the AOS's common name is Black-and-white Hawk-Eagle. I have discussed this with Clark, and he believes the species is not a hawk-eagle because it is an aerial hunter that doesn't hunt in forests and that the name should be changed. The AOS and many raptor researchers consider the Harlan's Hawk to be a subspecies of the Red-tailed Hawk, as *Buteo jamaicensis harlani*, but in this guide Clark treats it as a separate species. Other taxonomic inconsistencies include the genus of the Tiny Hawk, which Clark classifies as *Hieraspiza* on the basis of bone structure but is classified as *Accipiter* by the AOS. Finally, Clark considers the White-breasted Hawk a full species, *Accipiter chionogaster*, whereas the AOS classifies it as a subspecies of the Sharp-shinned Hawk, *Accipiter striatus*. Clark alludes to making these taxonomic changes on the basis of recently published papers, but peer-reviewed articles to support these decisions are lacking.

Despite these minor criticisms, this guide is an exceptional piece of work that will be the primary reference for neotropical raptor identification for many years. The attention to detail is matched by no other guide in the region and will assist in the great challenge of identifying this exceptionally variable group of birds. It is a must-have for any raptor enthusiast, birder in the Neotropical Region, or birder traveling to the neotropics. This guide has made a paramount contribution to the plethora of bird guides and will be appreciated by anyone who opens it up.

Ryan A. Phillips
Belize Bird Conservancy