

## ANIMAL FACTS

*Natural History Museum Book of Animal Records.* By Mark Carwardine. 2013. Firefly Books. (ISBN 9781770852693). 256 pp. Paperback. \$19.95.

The *Book of Animal Records* is exactly as advertised: hundreds of pages chock-full of impressive animal achievements. Beginning with the mammals that humans recognize and love so well, and continuing through the other major extant animal groups, this book is an impressive repository of facts. Every section begins with a short introduction to a prominent animal order and a description of how many discovered species it contains, followed by a staggering variety of animal record-holders, from the expected “largest” or “smallest” individuals to more obscure tidbits such as “best grip,” “longest toes,” or “most bossy.”

The best part about reading this book is its ability to amaze the reader over and over again at the variety of animal adaptations that evolution has produced. For example, male Dayak fruit bats lactate right along with the females. Nine-banded armadillos always give birth to genetically identical quadruplets. Red kangaroos can jump an astounding horizontal distance of 42 feet in a single bound. Swifts may fly a staggering 300,000 miles before landing for the first time. The northern long-necked turtle actually lays its eggs underwater. And archer fish can spit drops of water to knock insects into their pond, even hitting targets that are in flight! Readers are provided with an impressive catalog of the extraordinary feats that animals are capable of.

Before you worry that the *Book of Animal Records* is a dry encyclopedia of information, understand that the book is also absolutely beautiful. Color photographs abound, literally on every page. Many of them are half-page or full-page images, remarkable in their clarity and detail. A full-page spread shows a polar bear's impressive maw close up. Another photo allows the reader to see heart, lungs, and digestive system through the transparent underbelly of a glass frog. And a zoomed-in view

of a woodcock's face clearly shows how this remarkable bird has a 360° field of vision without turning its head! The pictures in this book are many, beautiful, and enlightening. This reviewer couldn't wait to turn the page so as to enjoy yet another photograph of remarkable animals.

However, the book is not without some flaws. This reader quibbled with a few of the facts as presented. For example, hyenas are stated as the only animal capable of breaking down the organic matter of bones, hooves, hair, and so on. While impressive, hyenas are clearly not the only animals capable of this feat. Many snake species, bearded vultures, and others quickly come to mind. The book states that most birds have a poor sense of smell, with a few impressive exceptions. However, recent research shows that, in fact, many birds use smell to identify individuals, detect predators, find food, and more. The other feature of the book this reader disliked is its organization. Almost half of the book is dedicated to the mammalian orders, while other, much more abundant and diverse groups are given much shorter coverage. Most egregious is lumping together the vast majority of animal species into a single category called “Invertebrates” and then devoting only 50 pages to them all.

Despite a few drawbacks, overall this book is excellent. The records are interesting, the photographs are stunning, and the amount of information packed into this relatively small book is impressive. The *Book of Animal Records* is an excellent choice for the shelf of any animal enthusiast. It would also be an extremely useful source for students writing research papers about animal biology. If I have a student struggling to choose an interesting organism to research or another who needs just a little more information to improve their report, I will hand them the *Book of Animal Records*.



Robert Bogardus  
Mid-Plains Community College  
McCook, NE 69001  
bogardusr@mpcc.edu

## HUMAN EVOLUTION

*Paleofantasy: What Evolution Really Tells Us about Sex, Diet, and How We Live (First Edition).* By Marlene Zuk. 2013. W.W. Norton (ISBN 0393081370). 336 pp. Hardcover. \$18.94.

In this new book, Marlene Zuk critically evaluates current topics related to the paleolithic lifestyle. The author elaborates on the discrepancies of the popular belief that we are meant to live as our ancestors did, addressing issues of love and family, diet and exercise, health and disease, all in the context of human evolution. She is author of several publications, including *Sex on Six Legs: Lessons on Life, Love and Language from the Insect World*, and *Riddled with Life: Friendly Worms, Ladybug Sex, and the Parasites That Make Us Who We Are*. According to Zuk, “to assume that we evolved until we reached a particular point and now we are unlikely to change for the rest of history... is to miss out on some of the most exciting developments in evolutionary biology.” She posits that evolution is not a straight line, and claiming that we were at our peak performance in the past is clear ignorance of this fact.

One topic the author expounds upon in the book is the claim that we evolved to have multiple sexual partners. She begins the chapter by questioning our true sexual nature, asking if we indeed demonstrate similar sexual behaviors as our ancestors and how much of it might still be manifested today. Zuk begins the discussion by stating that human females rely on help in rearing their offspring, usually given by the father. As a result, it would seem that monogamy is natural in order to successfully raise a family. Others disagree, based on the proposition that fewer paleo men actually reproduced (less than half), and the higher reproductive rates of males in today's society (80–90%) gives the false impression that monogamy is natural. Many of those who contend this point see monogamy “as a miserably failed experiment,” leading to dissolution of over half of all marriages.

Zuk also takes on the “paleo diet,” which has gained momentum recently with the claim