Handbook of the Mammals of the World - Volume 1: Carnivora

Edited by Don E. Wilson and Russell A. Mittermeier. 2009. Lynx Edicions, Montseny, 8, 08193 Bellaterra, Barcelona, Spain. 728 pages. 230 USD, Cloth.

The Handbook of the Mammals of the World (HMW) is a new and ambitious project from Lynx Edicions which is currently producing the Handbook of the Birds of the World (HBW) [Currently at Volume 14 out of 18]. This will be a series of eight volumes and it will describe all the currently recognized 5000 or so mammal species. As with HBW, there will be an overview of each mammalian family before the species accounts. Each volume will present the taxa in phylogenetic order and will include only those species that exist or have become extinct since 1600.

There is an account for each of the currently recognized species by the leading mammologists of the world. Each account includes sections on Systematics, Morphological Aspects, Habitat, General Habits, Communications, Food and Feeding, Breeding, Movements, Home range and Social organization, Relationship with Humans and Status and Conservation. All species are illustrated and numerous photographs supplement the art work. The forthcoming volumes will cover Hoofed Mammals, Primates, Sea Mammals, Marsupials, Rodents, Insectivores and finally Bats.

The first volume introduction is on in the most fundamental terms. The various forms of the skeleton are colour coded so you can follow a single bone into its various formats – fox foot, dolphin flipper, bat wing and so on. Then you see how this translates into motion. The internal organs get a similar treatment, especially the reproductive system that helps define our mammal nature. This includes the mammal link to reptiles, the monotremes, and Australia's contribution: the marsupials.

This first volume covers the Carnivores – cats, dogs, mongooses, weasels and bears. These are some of the most appealing animals in the world. On the first page is a dramatic portrait of a Snow Leopard by Robert Batemen. The family introductions include many truly appealing photographs, not only of the most gorgeous mammal [at least in my opinion] – a baby Polar Bear, but many of the "poster boys" – Sea Otters, Pandas, Meerkats, Tigers and so on. These photos range from great to glorious. Nothing could be more appealing than a mother Polar Bear nuzzling her cub.

Each species account starts with an illustration plate of the "average" appearance of that mammal. If we look at the common, widespread and relatively easy to see [I have seen six in the first eight months of 2009] Red Fox, there are three colour phases. In my life I have seen all three, but this year I saw four reds and two that were half way between red and black. I think we need to remember that how a mammal appears is dependant on many factors, not the least of which is genetics, diet and health. Some poor foxes I have seen are not "red", but a sad mangy brown. You cannot expect this colour variation to be included in this type of book; but you need to make this allowance in the field. Such variations are covered by the text. In reading the account for Striped Skunks I discovered that brown and even red animals have been seen.

The descriptions are thorough, giving coverage of different morphs like the "glacier" and "cinnamon" versions of the American Black Bear. There is similar coverage of the various Brown Bears around the world. In reading the Gray Wolf account I was surprised that there was no mention of the recent molecular studies that have shown the Eastern Wolf is a distinct species (Canis lycaon) and not a subspecies of the Gray Wolf. Equally surprising, there was no mention of the work done by John and Mary Theberge and their 14-year study of wolves in Algonquin Provincial Park. This study continued the wolf research of Douglas Pimlott, also not mentioned. The Theberge study resulted in a book and 22 scientific papers, enough to capture someone's attention. The Dingo is also now considered a subspecies of the Grey Wolf as is the domestic dog [Canis lupus familiaris].

Some years ago I had excellent views of a Patagonian (Red) Fox. I could not find this species in the index and eventually worked out it was listed only as the Culpeo (*Pseudalopex culpaeus*). It is sometimes called the (Common) Andean Fox in the proposed genus *Lycalopex*, so it seems the taxonomy needs work.

The text on other species, such as the Tiger, is wellbalanced and informative. The distribution, subspecies, diet and the conservation status are covered in concise terms. In the case of the Tiger the complex issues of parts for medicine, habitat protection and prey species are all raised. Incidentally the artist has captured the intense "stare" that only a Tiger can give in the illustration of *Panthera tigris altaica*.

If you are excited by the fluid of the Yellow Mongoose, the butterfly ears of the Bat-eared Fox or the antics of a Golden Jackal then this is the book for you. If you seriously want to find and see mammals then this will help. If you simply enjoy beautiful books, here is one for the wish list. Lynx are to be congratulated on beginning what will eventually be the reference work for the Class Mammalia. This is a musthave book for all those with an interest in mammals.

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