## The Deadly Balance: Predators and People in a Crowded World

By Adam Hart. 2023. Bloomsbury Sigma. 368 pages, 37.00 CAD, Hardcover, 25.90 CAD, E-book.

The Deadly Balance is an authoritative, well-researched account with 33 pages of references. It documents the relationships that humans have with the wild animals around the world that kill and sometimes eat us: Lions, Tigers, crocodiles, hyenas, bears, canids (wild dogs), other species of cats (especially leopards), and Chimpanzees our closest relatives. We



are both fascinated by and terrified of many wild animals, even on an increasingly urbanized planet. This book will interest many readers—including the general public, people interested in or studying carnivores, human dimensions researchers, and journalists—and help them gain a better understanding of the relative dangers from the world's carnivores.

I found the book easy to read despite it being bogged down in detailed accounts and statistics of animal attacks by all the species previously mentioned (and then some). Ultimately, all these creatures have much more to fear from us, and most of these species have decreased tremendously in both numbers and ranges in the past century or two. That being said, there are many areas of the world where people are still regularly killed and consumed by predators. Rural, impoverished people are generally more susceptible to predator attacks-a major theme in the book that Hart repeatedly discusses (pp. 33, 49, 85, 87-88, 95, 110, 132, 136, 151, 189, and 318). He describes how it is easy for folks in high-income countries to support carnivore conservation, but the reality is that they are generally not the ones affected by predators. He also notes that the media is often heavily biased toward reporting stories about animal attacks on North Americans, specifically white people (p. 39); a Cougar, bear, or wolf non-lethally attacking a white person, for instance, is covered in much more depth than many people dying (sometimes in the dozens or hundreds) from animal attacks in other parts of the world, such as India or Nepal (e.g., pp. 39, 51, 55, and 228). I generally agree with that statement.

I learned many new things from this book and was mostly surprised at how many people are regularly killed in other parts of the world (remember the media bias mentioned above). For example, an astonishing 373 000 people have been killed by Tigers in India in the past ~200 years (p. 83), which amounts to ~1800 deaths a year. And that is just one country in Tiger's large (but shrinking) range. In just 20 years, over 1000 Tanzanians were attacked by Lions, and two-thirds of those were killed and eaten (p. 35). Lion and Tiger attacks are covered the most in this book, but there are other species that leave behind many victims. For example, there were 892 people killed by Saltwater Crocodiles in over 21 years, up to 2021 (p. 145). Also, in just two Indian states, 289 people were killed by Leopards (Panthera pardus) in only seven years (p. 245). Leopards have a vast range and are quite adaptable to living in humandominated areas; they survive there by killing feral dogs and other domestic animals (pp. 247-248). Furthermore, all those above statistics are likely underestimates given that rural, impoverished people often disappear undocumented. Those numbers are literally orders of magnitude higher than the kill totals for species—such as Cougars (p. 222), wolves (p. 295), sharks (p. 308), American Black Bears (p. 259), and even Brown Bears (p. 266)-that North Americans often hear about in the media. Despite news reports of their potential danger, some predatory animal families, like canids, actually pose little to no statistical threat to humans worldwide (p. 304).

Throughout the book, Hart discusses the importance of involving local communities in conservation decisions and not imposing carnivore conservation strategies on them (e.g., pp. 73, 251, 306, and 322). While I agree that is intuitively important, I also tired of repeatedly reading it. Hart also mentions multiple times that he stands firmly behind protecting habitats rather than focussing on animal rights (p. 115), but it became similarly tiresome to read him bemoaning animal rights groups (pp. 89, 117, 160, 214, and 247), even though I understood his intention. However, his main conclusions that good conservation is complex (pp. 322–323) and empathetic (p. 323), and it's about people not animals (p. 320), listening to communities (p. 321), and supporting rather than imposing conservation frameworks on local people (p. 322) are wellresearched and detailed throughout the tome.

A few other things are notable in the book. First, many people survive attacks with the help of others, even when the attacks are by animals like Lions (e.g., pp. 14 and 37). Yellowstone National Park recommends that visitors hike in groups, and this strategy likely saves many people from most predator attacks. Also, I had always thought that anacondas (specifically Green Anacondas) were relatively dangerous to people, and of course that viewpoint has been aided by sensationalist media sources (i.e., movies). I was shocked to read that there are no recorded accounts of them killing people (p. 190)-but there are for pythons (pp. 188-189). In fact, more people are killed each year by often unheard-of (for North Americans) Mugger Crocodiles than are attacked by snakes (p. 162 and Chapter 5). Finally, I was pleased to read in the bear section about the importance of using bear spray in saving people from bear attacks (p. 2), but I was shocked that Hart doesn't mention using bear spray against other species, especially in other parts of the world where animal attacks are more frequent. While surprise predatory attacks by ambush species like Tiger and Leopard might be difficult to avoid even with bear spray, it surely would prevent numerous other tragedies.

The Deadly Balance is well-written and thoroughly researched with the author providing detailed background information on the majority of animals that can harm us. Hart is from the United Kingdom, so some words are spelled differently than I am used to (e.g., learnt versus learned; pp. 182 and 231). In addition, some of the phrases he uses were also new to me, such as: "was to hand" (pp. 66-67); "take an age" (p. 97); "rough sleepers" (p. 206); "loaded for bear" (p. 252); and "I was at pains" (p. 261). Neither of these issues distracted from the book, however; I simply googled the meaning of those passages that didn't make sense to me. There are a few minor errors in the book. Interestingly, the most glaring omission has to do with one of the animals I study, Coyotes (pp. 289-290). In that passage, Hart neglects to mention the two humans killed by Coyotes, which surprised me as they have been covered in-depth (Carbyn 1989; Timm et al. 2004; Gehrt et al. 2022). Otherwise, I think that maps and other visuals would have been helpful to include, as there is only text throughout the book's lengthy 368 pages.

This is an important publication. While maybe not as captivating as a book focussed on the individual trials and tribulations of a specific species (e.g., wolves in Yellowstone; Way 2021), it is nonetheless an important contribution to science. With most wildlife populations declining (despite recent increases for wolves, Cougars, and Tigers in certain areas), it is important to frame the relatively low chance of injury that most people have from most species. In that sense, *The Deadly Balance* will surely interest and surprise most readers, especially those of us from North America.

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