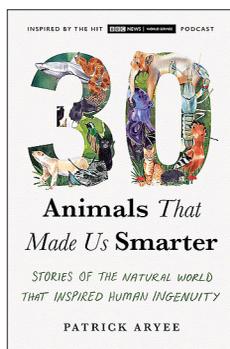


OTHER

30 Animals that Made Us Smarter: Stories of the Natural World that Inspired Human Ingenuity

By Patrick Aryee. 2022. Island Press. 384 pages and 42 illustrations, 30.95 CAD, Paper, 24.99 CAD, E-book.

From robotics to health care to transportation to preventing brain injuries, humans have turned to the non-human animal world to inspire and shape technologies. Animals have adapted and evolved over millions of years to not only survive, but to also function better within their environments. For example, Polar Bears have evolved to keep warm in the Arctic, while mosquitos have developed mouthparts that allow their bites to go undetected.



By studying animals both large and incredibly small, we have been able to make advancements and create technologies that make human lives easier, safer, and more efficient. This process of learning from systems and designs in nature is also known as biomimicry.

What originally began as a BBC podcast of the same name hosted by Aryee, *30 Animals that Made Us Smarter* takes readers through 30 case studies that describe how specific animal adaptations and abilities have inspired technologies to improve human life. Readers will learn how studying a cow's digestive system inspired water filtration systems, how a kingfisher's beak inspired more aerodynamic transportation in Japan, and how studying *Stenocara gracilipes* beetles to improve water collection may

teach humans better ways to harvest water droplets from fog. There are so many examples of biomimicry, some that you'd expect and others that will leave you in awe of human ingenuity.

When I first began reading this book, I expected to learn more details about the historical ways that animals have shaped our knowledge. However, *30 Animals* instead details more recent discoveries. For example, Aryee describes how studying woodpeckers helped to develop helmets and the 'black box' used in airplanes. Several of the technologies he mentions were recently developed, are still in the process of being developed, or are being tested. I learned how studying snake movements are helping to develop robots that can move more easily in rugged terrain and search earthquake rubble for victims. It was enjoyable to get more in-depth stories about some examples of biomimicry that I already knew, while also learning about some that won't impact my life for years to come.

I also really enjoyed learning about the various

research labs throughout the globe and how different disciplines take lessons from nature. It's truly amazing that all these disciplines—including medicine, engineering, transportation, and sports—have taken ideas from the natural world. This really highlights how much humans have to learn from the other beings around us!

The author's writing style is easy to read, quite conversational, and he has a great sense of humour. While some of the chapters can be a bit tedious, Aryee's storytelling abilities make the information accessible to a wide audience. His enthusiasm for the natural world and science storytelling is obvious throughout the book. Combined with his wit, *30 Animals* is sure to educate and entertain anyone who is interested to learn.

TIANNA BURKE

Lands & Wildlife Programs Manager,
Georgian Bay Mnidoo Gamii Biosphere,
Parry Sound, ON, Canada