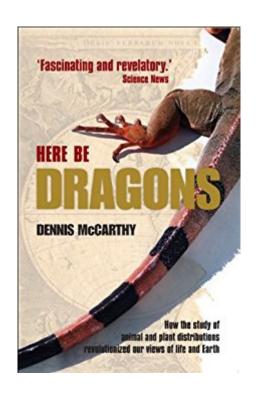


The book was found

Here Be Dragons: How The Study Of Animal And Plant Distributions Revolutionized Our Views Of Life And Earth





Synopsis

Why do we find polar bears only in the Arctic and penguins only in the Antarctic? Why do oceanic islands often have many types of birds but no large native mammals? As Charles Darwin and Alfred Russel Wallace travelled across distant lands studying the wildlife they both noticed that the distribution of plants and animals formed striking patterns - patterns that held strong clues to the past of the planet. The study of the spatial distribution of living things is known as biogeography. It is a field that could be said to have begun with Darwin and Wallace. In this lively book, Denis McCarthy tells the story of biogeography, from the 19th century to its growth into a major field of interdisciplinary research in the present day. It is a story that encompasses two great, insightful theories that were to provide the explanations to the strange patterns of life across the world evolution, and platetectonics. We find animals and plants where we do because, over time, the continents have moved, separating and coalescing in a long, slow dance; because sea levels have risen, cutting off one bit of land from another, and fallen, creating land bridges; because new and barren volcanic islands have risen up from the sea; and because animals and plants vary greatly in their ability to travel, and separation has caused the formation of new species. The story of biogeography is the story of how life has responded and has in turn altered the ever changing Earth. It is a narrative that includes many fascinating tales - of pygmy mammoths and elephant birds; of changing landscapes; of radical ideas by bold young scientists first dismissed and later, with vastly growing evidence, widely accepted. The story isnot yet done: there are still questions to be answered and biogeography is a lively area of research and debate. But our view of the planet has been changed profoundly by biogeography and its related fields: the emerging understanding is of a deeply interconnected system in which life and physical forces interact dynamically in space and time.

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Customer Reviews

In Here be Dragons, McCarthy does for biogeography what Brian Greene has done for string theory. Weaving the facts into a captivating narrative, the book informs under the guise of page-turning entertainment. With each intricately detailed example of how life has evolved to its present state, it was hard not to imagine myself surrounded by the uniqueness of the Galapagos, or the absolute awe that is the impenetrable rainforest. More important than the chapters on their own is the realization of how substantial a topic this really is. More importantly, how the subject of biogeography has become the longest running science experiment in the history of the world, and the truest, most unbiased, unattended one at that. Recommended reading for geographers, biologists, students, teachers, adults, children, believers and non; anyone that is interested in the surrounding world and the way it works will be fascinated from cover to cover.

This is a highly readable introduction to the underappreciated (and probably underdeveloped) field of biogeography. It makes a case that one can tell reams by looking at the flora and fauna of an area. It's not difficult to see that different species of plants and animals move about in different ways. Coconuts, for example, float and are resistant to sea water for a period of time. Surprise that tropical islands often have them, and also have animals which float (spiders), fly (birds), bob (tortoises) or cling (lizards). And you'll be convinced that different environments trigger different evolutionary trajectories. For example, large mammals in isolated resource-rich areas tend to shrink in size, while cold-blooded creatures may become much larger. These, and more, are convincingly explained in this short book.McCarthy suggests that we add a spatial dimension to our evolutionary understanding. Biological organisms are not only being molded by different environmental

pressures, but are also moving about, spreading over the earth like ivy. Their spread is encouraged by innate characteristics (e.g. floating) as well as by trade, exploration, wind, currents, and proximity; and it is also discouraged by water barriers, expansive deserts, thick growth, distance, and otherwise hostile environments. This line of thought can be very illuminating. After all, Darwin's theory of evolution was likely sparked by the subtle variations of finch beaks on neighboring islands. Weber's theory of plate tectonics was supported by genetic similarities of species on previously connected landmasses. If you follow a species through space across various environments they gradually change and at the ends they may be so different as to be classified as different species. (There's the answer to creationists who complain about "missing links.") This book is full of observations about geographical differences ... and similarities. For example, aside from superficial features, human populations everywhere are nearly identical genetically - more than you would expect from almost any other widely dispersed creature. Why? Possibly because we can walk, swim, climb, travel long distances, carry water, sail, paddle, we're dexterous for foraging, and adventurous in spirit. In other words we're mobile. We can do it all. Natural result: human genes are well blended. It's refreshing to read this book, about biogeography. Location and space have an important role in evolution. It's well written, well organized, it has endnotes and a good index and an attractive cover. My one petty complaint is that the outer margins are too wide -- wider even than the inner margin. That's an aesthetic issue that may not bother others.

I had to read this book for an assignment in college, but I loved it so much I bought it again! The writing is a terrific blend of educational and humorous, making it a real joy to read. The author referenced a number if other books within the text and I even bought those based solely on his recommendation.

As a fan of science books written for the layman, I found Here Be Dragons a fascinating read. Many popular books on evolution deal entirely or primarily with the time aspect of evolution. Mccarthy adds the spatial aspect as well, tying the evolution of life on earth with the shifting landscapes caused mainly but not solely by plate tectonics. He tells many fascinating evolutionary histories to illustrate this point including ring species where a particular species (in this case salamanders) shows subtle changes as one moves across a landscape until these changes accumulate enough to declare a new species. This new species may even them come in contact with the original. Another interesting tale concerned what can only be described as cultural differences among killer whales. Conceptually similar to Jared Diamond's Guns, Germs and Steel, Mccarthy uses geography

or more precisely changes in geography to explain various unusual or seemingly anomalous species distributions around the planet including why some species seem to exist nearly everywhere (wolves, mountain lions) while some are only found in rather small specific places. All in all, a very entertaining read synthesizing knowledge about two seemingly disparate disciplines, evolution and plate tectonics. A highly recommended read.

This book was a great read (coming from someone who doesn't read). It was very interesting from cover to cover. I had to read it for a class, but the amount of information is insane. I find myself showing my family some stuff they never would have thought to be true. This book is nothing short awesomeness.

Searched this title looking for something else but this booksounded interesting. It really is, too.

McCarthy explains the complexities of biogeography with an enjoyable ease. This one is a keeper foranyone even vaguely interested in evolution

Its like an upgraded version of Darwin's "Origin of Species"! Based on facts and figures! Awesome read and I would recommend it to everyone I know!

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