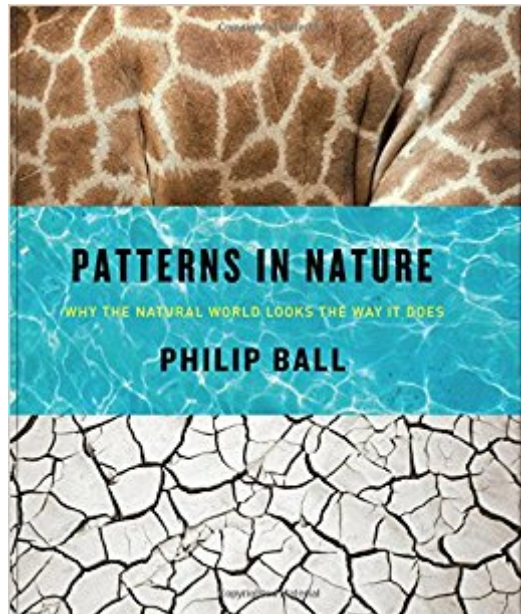


The book was found

Patterns In Nature: Why The Natural World Looks The Way It Does



Synopsis

Though at first glance the natural world may appear overwhelming in its diversity and complexity, there are regularities running through it, from the hexagons of a honeycomb to the spirals of a seashell and the branching veins of a leaf. Revealing the order at the foundation of the seemingly chaotic natural world, *Patterns in Nature* explores not only the math and science but also the beauty and artistry behind nature's awe-inspiring designs. Unlike the patterns we create in technology, architecture, and art, natural patterns are formed spontaneously from the forces that act in the physical world. Very often the same types of pattern and form – spirals, stripes, branches, and fractals, say – recur in places that seem to have nothing in common, as when the markings of a zebra mimic the ripples in windblown sand. That's because, as *Patterns in Nature* shows, at the most basic level these patterns can often be described using the same mathematical and physical principles: there is a surprising underlying unity in the kaleidoscope of the natural world. Richly illustrated with 250 color photographs and anchored by accessible and insightful chapters by esteemed science writer Philip Ball, *Patterns in Nature* reveals the organization at work in vast and ancient forests, powerful rivers, massing clouds, and coastlines carved out by the sea. By exploring similarities such as those between a snail shell and the swirling stars of a galaxy, or the branches of a tree and those of a river network, this spectacular visual tour conveys the wonder, beauty, and richness of natural pattern formation.

Book Information

Hardcover: 288 pages

Publisher: University Of Chicago Press (April 5, 2016)

Language: English

ISBN-10: 022633242X

ISBN-13: 978-0226332420

Product Dimensions: 8.5 x 1.1 x 10 inches

Shipping Weight: 3.2 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars 29 customer reviews

Best Sellers Rank: #61,431 in Books (See Top 100 in Books) #19 in Books > Science & Math > Physics > System Theory #56 in Books > Arts & Photography > History & Criticism > Themes > Plants & Animals #164 in Books > Science & Math > Biological Sciences > Ecology

Customer Reviews

"The most beautiful book of 2016." (Publishers Weekly) "This coffee-table book showcases the spots,

stripes, spirals, and fractals and other intricate patterns found in the natural world." (Live Science) "From tigers' stripes to the hexagons that make up honeycombs to the ripples in windblown sand, the natural world is full of order and regularity. Science writer Ball investigates the phenomenon in his new book, *Patterns in Nature*, with 250 photographs of snowflakes, shells, and more. Nature's patterns follow basic principles of mathematics and physics, leading to similarities in the stripes, spirals, branches and fractals around us.

There's an abundance of detail in nature that we can't see," he says. "Even in what seems unstructured, there's pattern." (Wall Street Journal)

"Acclaimed English science writer Ball curates a visually striking, riotously colorful photographic display of the most dramatic examples of the sheer splendor of physical patterns in the natural world. He lightly ties the work together with snippets of scientific history, using bits of physics, chemistry, and mathematics to show that although patterns in living beings can offer clear, functional evolutionary advantages, the small set of design elements that we can see—symmetries, branching fractals, spirals, flowing swirls, spots, and stripes—come from a basic set of organizing properties of growth and equilibrium seeking. . . . This is formidable eye candy for the I-love-science crowd, sure to spark a sense of impressed wonder at the beauty of our universe and our ability to photograph it." (Publishers Weekly)

"This captivating book is a collection of stunning photographs that capture frequently repeating mathematical patterns in nature. These images depict patterns in living things, from pollen to animals, and in non-living things, from lightning to landscapes. Images are accompanied by brief, but clear, explanations for how these patterns can be generated by Fibonacci ratios, suggesting they result from simple self-organization. Excellent coffee table companion to the author's earlier *Nature's Patterns: A Tapestry in Three Parts* series, which describe in detail how physics and chemistry influence and interweave with evolution (biology) to create patterns and symmetry in nature. This book is a visual feast that can serve as a source of wonder and inspiration for artists and naturalists as well as scientists." (Forbes)

A renowned science writer, Philip Ball lives in London. He worked for over twenty years as an editor for *Nature*, writes regularly in the scientific and popular media, and has authored many books on the interactions of the sciences, the arts, and the wider culture. His most recent books include *Invisible: The Dangerous Allure of the Unseen* and *Serving the Reich: The Struggle for the Soul of Physics under Hitler*.

This is a great book for non-scientists who are curious about how natural patterns develop. The color plates serve to amplify and demonstrate the test, although a larger screen is best for viewing them.

This book has magnificent photos and poetic but clear descriptions of why there are only so many shapes in nature. I gave it as a major Christmas gift, and the recipients are so grateful. The pictures alone are worth the price.

Totally satisfied. Wonderful book, superb pictures.M C Aggio

A real treat for the eyes and a delight for the mind.

An excellent book with terrific photo examples and well-written text. Exceptionally good binding and paper as well.

I love it!

This is a very good book. There is an excellent marriage of Text and Images. Indeed most of the photographs are quite superb and the Text is highly informative. I am delighted with this book.

It's got some great pictures. There's not that much writing, which makes me wish that what was there would be a little more entertaining. It's not bad, just not great.

[Download to continue reading...](#)

Patterns in Nature: Why the Natural World Looks the Way It Does The Shepherd Trilogy: A Shepherd Looks at the 23rd Psalm / A Shepherd Looks at the Good Shepherd / A Shepherd Looks at the Lamb of God Spiritual Activation: Why Each of Us Does Make the Difference (Why Each of Us Does Makes the Difference) How Dogs Think: What the World Looks Like to Them and Why They Act the Way They Do The Language Hoax: Why the World Looks the Same in Any Language Why Does $E=mc^2$? (And Why Should We Care?) On the Map: A Mind-Expanding Exploration of the Way the World Looks (Ala Notable Books for Adults) Why Does It Happen: Tornadoes, Hurricanes and Typhoons: Natural Disaster Books for Kids Why Does It Happen?: Earthquakes and Volcanoes: Natural Disaster Books for Kids Why Does My Dog Act That Way?: A Complete Guide to Your Dog's Personality Buffett Beyond Value: Why Warren Buffett Looks to Growth and Management

When Investing His Forge Burns Hot for Mosaic Damascus: Knife Patterns & Techniques:
Damascus pattern making & techniques. Learn how to make mosaic Damascus patterns ...
techniques for making Damascus patterns. 11 Crochet Shawl Patterns: Crochet Poncho Patterns,
Free Easy Crochet Patterns and More Bavarian Crochet: Learn About Bavarian Stitches and
Patterns and Make 15 Cute and Easy Projects: (Crochet Patterns, Crochet for Beginners) (Crochet
Books Patterns, Cute And Easy Crochet) Crochet: Crochet Books: 30 Crochet Patterns In 30 Days
With The Ultimate Crochet Guide! (crochet patterns on kindle free, crochet patterns, crochet books,
... crocheting, crochet magazine Book 1) Dress Up Dolls Amigurumi Crochet Patterns: 5 big dolls
with clothes, shoes, accessories, tiny bear and big carry bag patterns (Sayjai's Amigurumi Crochet
Patterns) (Volume 3) Dress Up Dolls Amigurumi Crochet Patterns: 5 big dolls with clothes, shoes,
accessories, tiny bear and big carry bag patterns (Sayjai's Amigurumi Crochet Patterns Book 3)
Soccernomics: Why England Loses, Why Spain, Germany, and Brazil Win, and Why the U.S.,
Japan, Australia—and Even Iraq—Are Destined to Become the Kings of the
World’s Most Popular Sport Why Does the World Exist?: An Existential Detective Story Why
the World Does Not Exist

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)