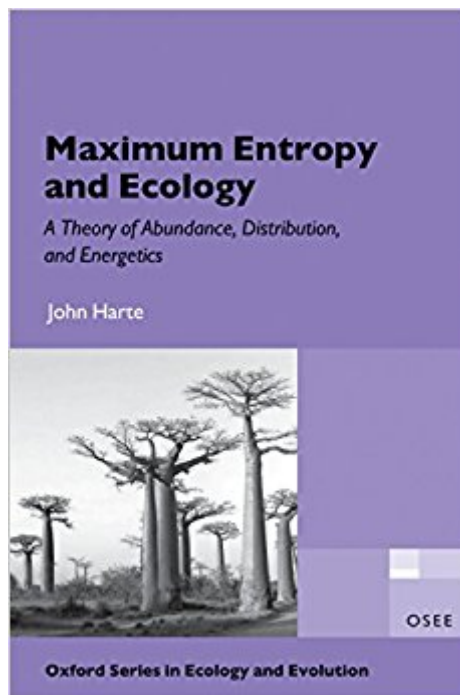




Ebook Directory
the best source of ebook

The book was found

Maximum Entropy And Ecology: A Theory Of Abundance, Distribution, And Energetics (Oxford Series In Ecology And Evolution)



Synopsis

This pioneering graduate textbook provides readers with the concepts and practical tools required to understand the maximum entropy principle, and apply it to an understanding of ecological patterns. Rather than building and combining mechanistic models of ecosystems, the approach is grounded in information theory and the logic of inference. Paralleling the derivation of thermodynamics from the maximum entropy principle, the state variable theory of ecology developed in this book predicts realistic forms for all metrics of ecology that describe patterns in the distribution, abundance, and energetics of species over multiple spatial scales, a wide range of habitats, and diverse taxonomic groups. The first part of the book is foundational, discussing the nature of theory, the relationship of ecology to other sciences, and the concept of the logic of inference. Subsequent sections present the fundamentals of macroecology and of maximum information entropy, starting from first principles. The core of the book integrates these fundamental principles, leading to the derivation and testing of the predictions of the maximum entropy theory of ecology (METE). A final section broadens the book's perspective by showing how METE can help clarify several major issues in conservation biology, placing it in context with other theories and highlighting avenues for future research.

Book Information

File Size: 13725 KB

Print Length: 274 pages

Publisher: OUP Oxford; 1 edition (June 23, 2011)

Publication Date: June 23, 2011

Sold by: Amazon Digital Services LLC

Language: English

ASIN: B005FVPF7C

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Enabled

Lending: Not Enabled

Screen Reader: Supported

Enhanced Typesetting: Enabled

Best Sellers Rank: #1,884,256 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #93

in Books > Science & Math > Physics > Entropy #129 in Kindle Store > Kindle eBooks >

Nonfiction > Science > Biological Sciences > Biophysics #249 in Kindle Store > Kindle eBooks > Nonfiction > Science > Chemistry > Physical & Theoretical

Customer Reviews

This review only pertains to the kindle version. The equations are much too small. This book is unreadable without equations, and in the kindle version, on tablets, equations are too tiny to be readable. On a phone, equations are almost readable.

I thought this would be something like thermodynamics... But it turns out, it is about information theory, with an application of the methods used in statistical thermodynamics. It's still a very good book though, and I met the author too and he is a very intelligent and sensible man. It does make me wish I understood math better.

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

Maximum Entropy and Ecology: A Theory of Abundance, Distribution, and Energetics (Oxford Series in Ecology and Evolution) Exploiting Continuity: Maximum Entropy Estimation of Continuous Distribution (Series on Econometrics and Management Sciences) Entropy - God's Dice Game: The book describes the historical evolution of the understanding of entropy, alongside biographies of the scientists who ... communication theory, economy, and sociology Ecology: The Experimental Analysis of Distribution and Abundance (6th Edition) Entropy, Information, and Evolution: New Perspective on Physical and Biological Evolution (Bradford Books) Evolution As Entropy: Toward a Unified Theory of Biology (Science and Its Conceptual Foundations series) The Maximum Entropy Method (Springer Series in Information Sciences) Maximum Entropy in Action: A Collection of Expository Essays Maximum Entropy Formalism Robotic Fish iSplash-MICRO: A 50mm Robotic Fish Generating the Maximum Velocity of Real Fish (High Speed Robotics. Mechanical engineering and kinematics for maximum velocity robot fish. Book 4) Maximum Ride Box Set (Maximum Ride, School's Out Forever, Saving the World) Parasites and the Behavior of Animals (Oxford Series in Ecology and Evolution) Statistical Mechanics: Entropy, Order Parameters and Complexity (Oxford Master Series in Physics) Ecology: Global Insights and Investigations (Botany, Zoology, Ecology and Evolution) Ecology: Global Insights & Investigations (Botany, Zoology, Ecology and Evolution) Encyclopedia of Texas Seashells: Identification, Ecology, Distribution, and History (Harte Research Institute for Gulf of Mexico Studies Series) The Art of Pulse Diagnosis: A Step-by-Step Exploration of Method, Directionality, Organ Energetics, Complement Channel Pulses, Textures, and Images Introducing Biological Energetics: How Energy and Information Control the Living World Inotropic

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)