



Animal Space Use: Memory Effects, Scaling Complexity, and Biophysical Model Coherence (Hardback)

By Arild O Gautestad

Dog Ear Publishing, United States, 2015. Hardback. Book Condition: New. 244 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****. Animal space use is complex, both from the individual and the population perspective. Spatial memory leads to site fidelity, emergence of home ranges, and multi-scaled use of the environment, and attraction to conspecifics-another memory-dependent property-contributes to population survival by counteracting decline in local abundance from unconstrained dispersal. However, memory effects, multi-scaled space use, and intraspecific cohesion present deep theoretical challenges for biophysical modeling. Animal Space Use presents a range of system descriptors, model designs, and simulations; intrinsic properties from memory and scaling are illustrated in detail, and classical models are scrutinized with respect to compliance with real data. The presentations of concepts are geared towards a broad audience of researchers and students with interest in animal space use. A joint effort between biologists, physicists, and statisticians is now on track to provide a more coherent theory for ecological inference-with a potential for stronger predictive power of ecological models than from more classical approaches. In Animal Space Use, Dr. Arild Gautestad advocates that an extension of the biophysical frame of reference may be needed to understand systems...



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Reviews

Extensive guide! Its such a excellent read. This can be for anyone who statte that there was not a worth looking at. I am just effortlessly will get a satisfaction of looking at a written publication.

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This book will not be effortless to start on reading through but very exciting to learn. It is amongst the most remarkable book i have got go through. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Dr. Easton Collier DVM