## Contents

1 Introduction: Definitions, Background ............................ 1  
  1.1 Different “Routes” to Sociality .................................... 2  
  References ........................................................................ 6  

2 Competition for Limiting Resources, Hamilton’s Rule, and Chesson’s $R^*$ .............................................. 9  
  2.1 West et al. (2002) Places Hamilton’s Rule in the Context of Intraspecific Competition .................................. 10  
  2.2 Generalizing Chesson’s $R^*$ and Linking it to Hamilton’s Rule ...... 13  
  References ........................................................................ 17  

3 Flexible and Derived Varieties of Mammalian Social Organization: Promiscuity in Aggregations May Have Served as a Recent “Toolkit” Giving Rise to “Sexual Segregation,” Polygynous Social Structures, Monogamy, Polyandry, and Leks ........................................ 19  
  3.1 The Evolution of Thermal Niches and the Evolution of Mammalian Sociality ......................................................... 25  
  3.2 Abiotic and Biotic “Drivers” of Body Sizes and Home-Range Sizes in Mammals .................................................. 26  
  3.4 “Promiscuous” Associations with Overlapping Home Ranges Without Male Monopolization: A Mammalian “Toolkit” ........... 30  
  3.5 “Solitary” Mammals and Sexual Segregation Grade to Polygyny ... 32  
  References ........................................................................ 33  

4 Multimale-Multifemale Groups and “Nested” Architectures: Collaboration Among Mammalian Males .............................. 37  
  4.1 Incipient Division-of-Labor in Multimale-Multifemale Groups of Mammals ............................................................ 38  
  4.2 “Nested” (“Hierarchical,” “Modular”) Social Organization and Management of Competition as Well as Competition by Queuing .................................................. 39
9  Proximate Causation: Functional Traits and the Ubiquity of Signaler to Receiver Interactions: From Biochemical to Whole Organism Levels of Mammalian Social Organization ........................................ 97
  9.1  An Integration of Social Neuroscience and Ecology Is on the Horizon 99
  9.3  The Promise of Mammalian Sociogenomics Has Yet to Be Realized 101
References ............................................................................. 101

10  Synopsis ............................................................................. 105
  10.1 Synopsis ........................................................................... 105
  10.2 Coda ............................................................................... 106
References ............................................................................. 109

Index ....................................................................................... 111
The Evolution of Mammalian Sociality in an Ecological Perspective
Jones, C.B.
2014, XI, 112 p. 11 illus., 3 illus. in color., Softcover
ISBN: 978-3-319-03930-5