## CONTENTS

	Chapters' Contents	VII
	Preface	XIII
	Authors' Addresses	
I.	The Desert as a Habitat	1
II.	The Ecology of Rodents in the northern Sudan	15
III.	The Rodents of the Iranian Deserts	47
IV.		59
V.	The Population Ecology of the Rodents of the Rajasthan	
	Desert, India	75
VI.	Outbreaks of Rodents in Semi-Arid and Arid Australia:	
	Causes, Preventions and Evolutionary Considerations	117
VII.	Observations of Argentine Desert Rodent Ecology, with	
	Emphasis on Water Relations of Eligmodontia typus	155
VIII.	La diversité des Gerbillidés	177
IX.	Some Observations on Ecological Adaptations of Desert	
	Rodents and Suggestions for further Research work	185
X.	The Behavior Patterns of Desert Rodents	189
XI.	Activity Patterns of a Desert Rodent	225
XII.	Patterns of Food, Space and Diversity	241
XIII.		269
XIV.	0,	277
XV.		305
XVI.		
	Pleistocene of Israel	331
XVII.	Prehistoric Rodents of the Middle East	363
XVIII.		379
XIX.	Ecophysiology of Water and Energy in Desert Marsupials	
	and Rodents	389
XX.	Thermo-Regulation and Water Economy in Indian	
	Desert Rodents	397
XXI.	The Physiological Adaptations of Desert Rodents	413
XXII.	Nematode Parasites of the Indian Desert Rodents	445
XXIII.	Ecology of Desert Rodents of the U.S.S.R. (Jerboas and	405
	Gerbils)	465
	Author Index	599
	Genus and Species Index	607
	Subject Index	617

V.	The Population Ecology of the Rodents of the	
	Rajasthan Desert, India by Ishwar Prakash	
	Introduction	75
	Population Structure	81
	Ranges of Movements	95
	Food	96
	Predator-Prey Relationship	101
	Breeding Season and Litter Size	
	References	
	References	114
VI.	Outbreaks of Rodents in Semi-Arid and Arid	
* 1.	Australia: Causes, Preventions, and Evolutionary Con-	
	siderations by A. E. Newsome & L. K. Corbett	
	Introduction	117
	Climates in Central Australia	119
	The Study-Area: Habitats and Rodents	123
	Populations and Discussion	
	Conclusions and Discussion	
	Acknowledgements	151
	References	151
<b>3711</b>	Observations of Asserting December 19 down Foots	
VII.		
	with Emphasis on Water Relations of Eligmodontia	, 155
	typus by M. A. Mares	155 155
	Introduction	
	The Argentine Monte and some of its Rodents	156
	Methods and Materials	164
	Results and Discussion	165
	Acknowledgements	
	References	174
VIII.	La diversité des Gerbillidés par F. Petter	177
τv	Some Observations on Ecological Adaptations of	r
IA.	Desert Rodents and Suggestions for further Re-	
	Desert Rouents and Suggestions for further Re-	105
	search work by A. DE Vos	185
	Introduction	
	The Desert Environment	185
	Ecological Adaptations	186
	Need for further Research	
	References	188
X.		
	Eisenberg	189

	Introduction
	and Perognathus
	Spacing and Communication
	Acknowledgements
	References
	References
***	
XI.	Activity Patterns of a Desert Rodent by N. R. FRENCH Introduction
	The Microdosimeter and the Index of Activity.
	Variation in Activity
	Climatological Variables and Animal Activity
	Analysis
	Discussion
	Summary
	References
XII.	Patterns of Food, Space and Diversity by M. L.
	Rosenzweig, Barbara Smigel & A. Kraft
	Introduction
	Resource Allocation by Seed Selection
	Habitat Selection in Space
	The Pattern of Local Species Diversity
	Acknowledgements
	References
XIII.	
	Introduction
	Desert Coloration
	Acknowledgements
	References
XIV.	The Biology of some Desert-Dwelling Ground Squir-
* *	rels by A. C. HAWBECKER
	Introduction
	1004 110010
	Population Characteristics
	Habitat Factors
	References

XV.	Reproductive Biology of North American Desert	
	Rodents by H. D. Smith & C. D. Jorgensen	305
	Introduction	305
	Reproductive Biology: Species Summaries	308
	References	328
xvi	Rodent Faunas and Environmental Changes in the	
11 / 11	Pleistocene of Israel by E. TCHERNOV	331
	Introduction	331
	The Main Biogeographical Changes in the Near-East since	
	the Miocene	331
	The Composition of the Rodents Faunas in the Pleistocene	• • •
		336
	of Israel	
	Israel	347
	Analysis of the Main Habitats Occupied by the Pleistocene	
	Rodents of Israel	349
	Note on the Origin of the Israeli Desert Rodents	356
	References	361
XVII.	Prehistoric Rodents of the Middle East by PRISCILLA	0.00
	F. Turnbull	363
	Introduction	363
	Prehistoric Rodents	364
	Discussion	374
	Acknowledgements	376
	References	376
	Addenda	3/8a
WIII.	Desert Rodents: Physiological Problems of Desert	
	Life by K. Schmidt-Nielsen	379
	Introduction	379
	Problems of Temperature Regulation	380
	Water Balance, Intake and Loss	382
	References	388
XIX.	Ecophysiology of Water and Energy in Desert	
	Marsupials and Rodents by W. V. MAGFARLANE	389
	Introduction	389
	Methods	390
	Ecophysiology of Water and Energy	390
	Discussion	394
	References	395
XX	Thermo-Regulation and Water Economy in Indian	
~ ****	Desert Rodents by P. K. Ghosh	

	Methods35Thermo-Regulation35Water Economy46Conclusion4	97 97 98 01 10
XXI.		13
		13 16
	Rodent Kidney	28
		34 38
	References	41
XXII.		45
	2, 2, 3	+3 45
		45
		45
		62
	References	53
XXIII.	Ecology of the Desert Rodents of the U.S.S.R. (Jerboas and Gerbils)	
		65
		65
	Jerboas	68
		24
	References	90
		99
		)7
	Subject Index 6	17