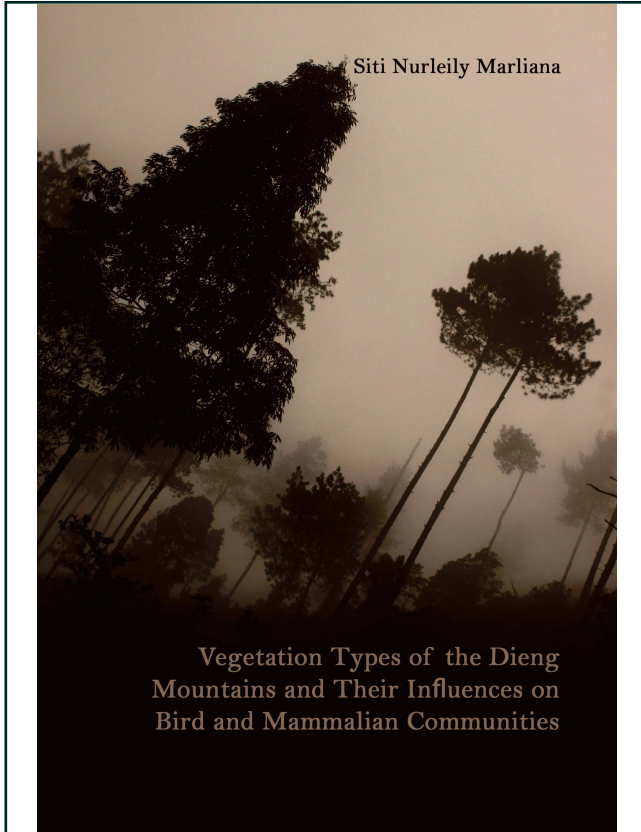




Siti Nurleily Marliana (Autor)

Vegetation Types of the Dieng Mountains and Their Influences on Bird and Mammalian Communities



<https://cuvillier.de/de/shop/publications/6289>

Copyright:

Cuvillier Verlag, Inhaberin Annette Jentsch-Cuvillier, Nonnenstieg 8, 37075 Göttingen,
Germany

Telefon: +49 (0)551 54724-0, E-Mail: info@cuvillier.de, Website: <https://cuvillier.de>



TABLE OF CONTENTS

Acknowledgment	vii
Summary	ix
Zusammenfassung	xiii
Table of Contents	xvii
List of Tables	xxi
List of Figures	xxiii
1 General Introduction	1
1.1 Research Background	1
1.1.1 Trend of Deforestation in Indonesia	1
1.1.2 The Decline of Java's Forests Cover	1
1.1.3 Environmental Degradation of the Dieng Mountains	3
1.1.4 Gaps and Shortfalls in Indonesia's Biodiversity and Environmental Preservation Efforts	4
1.2 Research Importance	4
1.2.1 Current Knowledge on the Dieng Mountains Area	4
1.2.2 The Future of the Dieng Mountains Ecosystem: Management and Recovery Efforts	5
1.2.3 Contributions to the Dieng Mountains Ecosystem Improvement	5
1.3 Problem Description and Aims	6
1.3.1 Problem Description	6
1.3.2 Aims	6
1.3.3 Research Questions	7
2 Study Area	9
2.1 Land Use of Early Civilization	10
2.2 Biophysical Conditions	11
2.2.1 Climate, Topography, and Geology	11
2.2.2 Demography and Land Use	12
2.2.3 Flora and Fauna	12
3 Structure and Floristic Composition of Secondary Vegetation in the Dieng Mountains	15
3.1 Introduction	15
3.1.1 Background	15
3.1.2 Description of the Dieng Mountains Vegetation and Ecology	16
3.1.3 Objectives and Research Questions	17
3.1.4 Hypotheses	17
3.2 Methods	18
3.2.1 Selection of Survey Locations	18



3.2.2	Data Collection	19
3.2.3	Data Analyses	20
3.3	Results	22
3.3.1	Vegetation Structure and Composition	22
3.3.2	Plant Species Richness	28
3.3.3	Plant Species Diversity	31
3.3.4	Stands Similarity	32
3.4	Discussion	34
3.4.1	Vegetation Structure of Woodland and Shrubland	34
3.4.2	Vegetation Structure of Grassland	37
3.4.3	Floristic Compositions	38
3.4.4	Plant Species Richness, Species Diversity, and Similarities of Vegetation Composition	41
3.5	Conclusion	42
4	The Density and Diversity of Bird Populations in Different Vegetation Types in the Dieng Mountains	45
4.1	Introduction	45
4.1.1	Background	45
4.1.2	The Importance of the Dieng Mountains as a Bird Habitat	46
4.1.3	Objectives and Research Questions	47
4.1.4	Hypotheses	47
4.2	Methods	48
4.2.1	Survey Locations	48
4.2.2	Data Collection	49
4.2.3	Data Analyses	50
4.3	Results	51
4.3.1	Bird Population Densities	51
4.3.2	Bird Species Richness and Diversity	53
4.4	Discussion	57
4.4.1	Bird Densities and Bird Community Composition	57
4.4.2	Bird Species Richness and Diversity	60
4.4.3	Farming Practices in the Dieng Mountains and Their Potential Effects on Bird Assemblage	61
4.5	Conclusion	62
5	Mammal Species Richness and Habitat Preference in the Dieng Mountains	65
5.1	Introduction	65
5.1.1	Background	65
5.1.2	Mammals of the Dieng Mountains	66
5.1.3	Objectives and Research Questions	67
5.1.4	Hypotheses	67
5.2	Methods	68



5.2.1	Survey Locations	68
5.2.2	Data Collection	68
5.2.3	Data Analyses	69
5.3	Results	70
5.3.1	Species Richness	70
5.3.2	Habitat Preference	73
5.4	Discussion	75
5.4.1	Species Richness and Measure of Encounters with Mammals	75
5.4.2	Habitat Preference	78
5.4.3	Implications for Conservation	79
5.5	Conclusion	80
6	General Conclusion	81
	References	83
	Appendices	97
	Curriculum Vitae	113