Human activity during the Anthropocene has transformed landscapes worldwide on a scale that rivals or exceeds even the largest of natural forces. Landscape ecology has emerged as a science to investigate the interactions between natural and anthropogenic landscapes and ecological processes across a wide range of scales and systems: from the effects of habitat or resource distributions on the individual movements, gene flow, and population dynamics of plants and animals; to the human alteration of landscapes affecting the structure of biological communities and the functioning of entire ecosystems; to the sustainable management of natural resources and the ecosystem goods and services upon which society depends. This novel and comprehensive text presents the principles, theory, methods, and applications of landscape ecology in an engaging and accessible format that is supplemented by numerous examples and case studies from a variety of systems, including freshwater and marine 'scapes'.

Essentials of Landscape Ecology is suitable for upper-level undergraduate and graduate courses in landscape ecology. This textbook can also be used as a supplemental text in other ecology courses, as well as courses in forestry, resource and wildlife management, conservation and restoration biology, sustainable land-use and environmental planning. For the professional landscape ecologist, it provides an authoritative overview of the latest research and developments.

Cover image: © Linda Gass, 2007. Fields of Salt. Art quilt (stitched painting) depicting a landscape in the San Francisco Bay Area (California, USA) where the natural wetlands have been converted to salt ponds for industrial salt production.

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## Contents

Chapter 1 An Introduction to Landscape Ecology: Foundations and Core Concepts	1
Why Study Landscape Ecology?	2
Birth of a Discipline	4
Regional Perspectives on Landscape Ecology	5
European Perspective	5
North American Perspective	7
Globalization of Landscape Ecology	8
Core Concepts of Landscape Ecology	9
Organization of this Book	11
Chapter Summary Points	12
Discussion Questions	13
Chapter 2 Scaling Issues in Landscape Ecology	14
Why is Scale so Important in Ecology?	14
Uses (and Misuses) of Scale in Ecology	16
Ecological Scale	16
Relationship between Grain and Extent	16
Effect of Changing Grain and Extent	18
Choosing the 'Right' Scale of Study	21
Hierarchy Theory and Landscape Ecology	24
Hierarchical Organization of Biological Systems	27
Structure of a Hierarchical System	28
Landscape Scale or Landscape Level?	29
Implications of Hierarchy Theory for Landscape Ecology	32
Extrapolating Across Scales	33
Extrapolating Within Domains of Scale	34
Extrapolating Across Domains of Scale	34
Uncertainty, Predictability, and Ecological Forecasting	36
Future Directions	39
Chapter Summary Points	40
Discussion Questions	41
Data Imput Subsystem	
Data Processing and Database Management Subsystem ment of the processing and Database Management of the processing and Database Management Subsystem	
Chapter 3 Landscape Heterogeneity and Dynamics	42
Heterogeneity and Disturbance Dynamics as Core Concepts in Landscape Ecology	42
Emergence of Heterogeneity and Dynamical Concepts in Ecology	44
Heterogeneity at Broad Geographic Scales: Biogeography and Life Zones	44
Dynamics of Plant Community Assembly: Climax State or Independent Assembly?	45
Patch Dynamics: A Paradigm Shift in Ecology	47
Toward a Non-Equilibrium View of Ecology	48
Homogeneity: The Frictionless Plane of Ecological Theory	49
Tromogenery. The Friedomess France of Ecological Theory	1)

Patch-Based Theory in Ecology	50
Toward a Landscape-Mosaic View of Environmental Heterogeneity	52
How is Heterogeneity Defined?	54
Spatial Heterogeneity	54
Temporal Heterogeneity	55
How are Disturbances Defined?	56
The Disturbance Regime	56
The Intermediate Disturbance Hypothesis	58
Large Infrequent Disturbances	59
Implications of the Disturbance Regime for Landscape Dynamics	61
Formation and Evolution of Landscapes: Geomorphological Processes	63
Formation of Montane Landscapes	63
Formation of River Networks	68
Formation and Diversity of Soils	69
Landscape Dynamics: Abiotic Disturbances	73
Volcanic Eruptions	73
Landsliding	76
Flooding and the Natural Flow Regime	78
Windstorms, Hurricanes, and Storm Surges	85
Drought	89
Fire	94
Landscape Dynamics: Biotic Agents of Landscape Formation and Disturbance	101
Organisms as Geomorphic Agents	102
Organisms as Ecosystem Engineers	102
The Keystone Role of Species	102
Relative Impact of Species on Landscapes	103
Humans as the Primary Driver of Landscape Change	107
	107
Stages of Anthropogenic Landscape Transformation  Types of Human Land Lies	
Types of Human Land Use  Land Use Lagrany Effects	
Land-Use Legacy Effects Future Directions	
	0,1212
Chapter Summary Points  Discussion Overtions	
Discussion Questions	
Chapter 4 Landscape Pattern Analysis	
On the Importance of Landscape Pattern Analysis in Landscape Ecology	127
Sources of Landscape Data	128
Historical Land Surveys	129
Remote Sensing	131
From Landscape Data to Landscape Data Analysis	153
Geographical Information Systems	156
Data Input Subsystem	157
Data Processing and Database Management Subsystem	158
Data Manipulation and Analysis Subsystem	159
Data Output Subsystem	165
Landscape Metrics	165
Measures of Landscape Composition	167
Measures of Landscape Configuration	
	168
Effects of Pattern and Scale on Landscape Metrics	178
Effects of Pattern and Scale on Landscape Metrics Use and Misuse of Landscape Metrics	178 184
Effects of Pattern and Scale on Landscape Metrics Use and Misuse of Landscape Metrics  Spatial Analysis	178 184 186
Effects of Pattern and Scale on Landscape Metrics Use and Misuse of Landscape Metrics	178 184

Future Directions (and Some Caveats)			
Chapter Summary Points	203		
Discussion Questions			
Chapter 5 Landscape Connectivity	206		
What is Landscape Connectivity and Why is it Important?	206		
Elements of Landscape Connectivity			
Structural versus Functional Connectivity			
Patch Connectivity versus Landscape Connectivity			
Patch-Based Connectivity Measures			
Which Patch-Connectivity Measure to Use and When?	212		
From Patches to Landscapes	213		
Methods for Assessing Landscape Connectivity	214		
Neutral Landscape Models	214		
Graph-Theoretic Approaches	221		
Assessing Connectivity in Heterogeneous Landscapes	227		
Assessing Connectivity in River Networks	232		
Which Landscape Connectivity Approach to Use and When?	235		
Beyond Landscape Connectivity	236		
Should Landscape Connectivity be a Dependent or Independent			
Variable?	236		
Future Directions	237		
Chapter Summary Points	237		
Discussion Questions	238		
Chapter 6 Landscape Effects on Individual Movement and Dispersal: Behavioral Landscape Ecology	239		
Why are Movement and Dispersal Important from a Landscape Ecological			
Perspective?	240		
Scales of Movement	241		
Movement Responses to Hierarchical Patch Structure	242		
Allometric Scaling of Movement	245		
Movement Responses to Patch Structure	245		
Movement out of Patches (Emigration)	243		
Movement Between Patches	245		
Movement into Patches (Immigration)			
Analysis of Movement Pathways	246		
Amary 515 of Wiovement Tathway 5	246 256		
Tracking Animal Movements	246 256 260 264		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements	246 256 260		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways	246 256 260 264 265 268 269		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement	246 256 260 264 265 268 269 272		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement	246 256 260 264 265 268 269 272 272		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement Spatially Explicit Models of Animal Movement	246 256 260 264 265 268 269 272 272 272		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement Spatially Explicit Models of Animal Movement Space Use and Home-Range Analysis	246 256 260 264 265 268 269 272 272 277 280		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement Spatially Explicit Models of Animal Movement Space Use and Home-Range Analysis Methods of Home-Range Estimation	246 256 260 264 265 268 269 272 272 277 280 280		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement Spatially Explicit Models of Animal Movement Space Use and Home-Range Analysis Methods of Home-Range Estimation Measuring Plant Dispersal	246 256 260 264 265 268 269 272 272 277 280 280 280 284		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement Spatially Explicit Models of Animal Movement Space Use and Home-Range Analysis Methods of Home-Range Estimation Measuring Plant Dispersal Future Directions	246 256 260 264 265 268 269 272 272 277 280 280 280 284 286		
Tracking Animal Movements Scaling Issues in Tracking Animal Movements Measuring Movement Pathways Models of Animal Movement Mathematical Models of Animal Movement Spatially Explicit Models of Animal Movement Space Use and Home-Range Analysis Methods of Home-Range Estimation Measuring Plant Dispersal	246 256 260 264 265 268 269 272 272 277 280		

-		
-	d Landscape Ecologists Study Population Distributions and Dynamics?	292
Overview:	Effects of Habitat Loss and Fragmentation on Populations	292
	oss versus Fragmentation	293
	ea and Isolation Effects	294
	ation and Edge Effects	294
	tribution Patterns	299
1	attern Analysis of Species Distributions	300
	sus Landscape Effects on Species Distributions	302
	tribution Models	303
•	Selection Functions	303
	l Niche Models	306
	nvelope Models	308
Summary		309
	Population Models	310
	ulation Growth Model	310
	pulation Models	310
	k Population Dynamics	312
	to Identify Population Sources and Sinks?	313
	at Sinks a Drain on Habitat Sources?	314
	ation Dynamics	315
	Metapopulation Models	316
	Function Model	318
	nk Metapopulations	319
	ulation Viability and Extinction Thresholds	321
	plicit Population Simulation Models	329
	DIRECT FORMULATION MINIMARION VIDUES	1/-/
-		
Which Popu	ilation Model to Use and When?	332
Which Popu Future Dire	alation Model to Use and When?	332
Which Popu Future Dire Chapter Su	alation Model to Use and When? ections mmary Points	332 334 334
Which Popu Future Dire	alation Model to Use and When? ections mmary Points	332
Which Popu Future Dire Chapter Su	Landscape Effects on Population Spatial Spread: Range	334 334 335
Which Popu Future Dire Chapter Sur Discussion	alation Model to Use and When? ections mmary Points Questions	334 334 335
Which Populature Directly Chapter Sur Discussion  Chapter 8  Spatial Spre	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology	334 334 335 337
Which Populature Directly Chapter Surplement Surplement Spatial Spread Landscape 1	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts	334 334 335 337 339
Which Populature Directly Chapter Sur Discussion  Chapter 8  Spatial Spread Spread Spread Sur Landscape Modeling	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change	334 334 335 337 339 340
Which Populature Directly Chapter Sur Discussion  Chapter 8  Spatial Spread Spr	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change lifts in Fragmented Landscapes	334 334 335 337 339 340 343
Which Populature Directly Chapter Sur Discussion  Chapter 8  Spatial Spreading Landscape Modeling Range Shi Landscape I Landsc	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread	334 334 335 337 339 340 343
Which Populature Directly Chapter Sur Discussion  Chapter 8  Spatial Spreading Modeling Range Shirt Landscape Landsc	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread	334 334 335 337 339 340 343 344
Which Populature Directly Chapter Surpose Spatial Spread Spatial Medicape Landscape Landscape Spatial Medicape Spatial Medica	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread	334 334 335 337 339 340 344 344
Which Populature Directly Chapter Surpose Spatial Spread Spatial Medicape Landscape Landscape Spatial Medicape Spatial Medica	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread	334 334 335 337 339 340 343 344 344 349
Which Populature Directly Chapter Sur Discussion  Chapter 8  Spatial Spreading Range Shi Landscape Landscape Spatial Mandscape Spatial Man	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread	334 334 337 337 339 340 343 344 349 353
Which Populature Directly Chapter Surce—Single Species Directly Species Di	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change iffs in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread e Connectivity and the Potential for Invasive Spread istribution Models of Invasive Spread	332 334 335 337 339 340 343 344 344 349 353 355
Which Populature Directly Chapter Surce—Single Species Directly Species Di	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread e Connectivity and the Potential for Invasive Spread nk Metapopulation Dynamics and Invasive Spread	334 334 335 337 339 340 343 344 344 349 353 355 356
Which Populature Directly Chapter Surcape Modeling Range Shi Landscape Landscape Spatial Mandscape Spatial Mandscape Source—Si Species Dandscape Landscape Source—Si Species Dandscape Landscape Species Dandscape	Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change iffs in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread e Connectivity and the Potential for Invasive Spread istribution Models of Invasive Spread	332 334 335 337 337 339 340 343 344 344 349 353 355 356 357
Which Populature Directly Chapter Surcape Modeling Range Shi Landscape Landscape Spatial Me Landscape Source—Si Species Dandscape Landscape Landsc	alation Model to Use and When? Actions Interior Model to Use and When? Actions Interior Model to Use and When? Interior Model	332 334 334
Which Populature Directly Chapter Surcesion  Chapter 8  Spatial Spreading Range Shit Landscape Landscape Spatial Mandscape Species Dandscape Landscape Species Dandscape Landscape Species Dandscape Spatial Mandscape Spatial Mands	alation Model to Use and When? actions mmary Points Questions  Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change lifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread e Connectivity and the Potential for Invasive Spread ink Metapopulation Dynamics and Invasive Spread istribution Models of Invasive Spread Epidemiology e Ecology of Disease Spread	332 334 335 337 337 339 340 343 344 344 349 353 355 356 357 358
Which Populature Directly Chapter Surcesion  Chapter 8  Spatial Spreading Range Shit Landscape Landscape Spatial Mandscape Species Durce—Sin Species Durce—Sin Species Durce—Sin Spatial Mandscape Landscape Landscape Landscape Spatial Mandscape Spa	alation Model to Use and When? actions mmary Points Questions  Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change lifts in Fragmented Landscapes Effects on Invasive Spread e Ecology of Invasive Spread odels of Invasive Spread e Connectivity and the Potential for Invasive Spread istribution Models of Invasive Spread Epidemiology e Ecology of Disease Spread odels of Disease Spread	334 334 335 337 337 339 340 343 344 349 353 355 356 357 358 358 362
Which Populature Directly Chapter Surcession  Chapter 8  Spatial Spreading Range Shit Landscape Landscape Spatial Mandscape Species Dandscape Landscape Landscape Landscape Landscape Landscape Spatial Mandscape Landscape Landsc	alation Model to Use and When? actions mmary Points Questions  Landscape Effects on Population Spatial Spread: Range Shifts, Biological Invasions, and Landscape Epidemiology  ead: The Good, the Bad, and the Ugly Effects on Species' Range Shifts Species Distributions in Response to Climate Change ifts in Fragmented Landscapes Effects on Invasive Spread to Ecology of Invasive Spread to Ecology of Invasive Spread to Connectivity and the Potential for Invasive Spread to Response to Climate Change that is the Change of the Connectivity and the Potential for Invasive Spread to Ecology of Invasive Spread to Ecology of Disease Spread	334 334 335 337 337 339 340 343 344 349 353 355 356 357 358 362 362 364

CHAINEL BUILDING	Future Directions Chapter Summary Points	
Chapter Summary Points  Discussion Questions		374 375
Discussion Qu	icstions	
Chapter 9 L	andscape Genetics: Landscape Effects on Gene Flow	
	nd Population Genetic Structure	377
Vhat is Lands	cape Genetics?	378
	pulation Genetics	380
	etic Markers	380
	Senetic Variation and Divergence	383
	ene Flow and Population Connectivity	390
	on Genetics to Landscape Genetics	393
	netic Clustering	393
	Ordination Techniques	396
andscape Ge		398
*	orrelates of Population Genetic Structure	399
Functional C		399
	of Movement Corridors and Barriers to Gene Flow	404
	versus Fragmentation Effects	409
	Population Dynamics	411
	us Historical Landscape Effects on Population Genetic Structure	413
	Landscape Genetics	415
	ng Selection: Other Mechanisms of Microgeographic Divergence	416
	ndscape-Genomic Approach to the Study of Adaptive Genetic Variation	421
10Ward a La	idscape denomic Approach to the study of Maptive defictie variation	121
Adaptive Re	enonege to Future Climate and Landecane Changes	125
	sponses to Future Climate and Landscape Changes	
uture Directi	ons	429
uture Directi Chapter Sumi	ons nary Points	429 431
Adaptive Re Future Directi Chapter Sum Discussion Qu	ons nary Points	429 431
Chapter Sum Discussion Qu	ons nary Points	429 431 432
Chapter 10 Chapter 10	ons nary Points testions	429 431 432
Chapter 10 Chapter 10	nary Points lestions  Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of	429 431 432
Chapter Summan Chapter 10  Chapter 10  Chapter 10  Chapter 10  Chapter 10  Chapter 10	nary Points lestions  Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of	439 431 434 435
Chapter Summiscussion Quantitation Chapter 10  Landscape 1  Communition	Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of es Community Structure	439 431 434 435 436
Chapter Summiscussion Quality  Chapter 10  Chapter 10  Chapter 10  Chapter 10  Community  Cleasures of Community	Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of es community Structure hess	439 431 434 435 436 437
Chapter Summiscussion Quantitation Communitation Species Richards Diversion Chapter 10	Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of es community Structure hess	439 431 434 435 436 437 437
Chapter Summiscussion Quantitation Communitation Species Richt Species Diver Spatial Partitation Communitation Com	Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of es community Structure community Structure community Structure community Structure	439 431 434 435 436 437 437 439
chapter Summission Quality Chapter 10  Chapter 10  Chapter 10  Chapter 10  Chapter 10  Community Chapter of Chapter Species Rich Species Diversity Chapter Spatial Particulations of Species Species Species Diversity Chapter of C	Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity	439 431 434 435 436 437 439 446
chapter Summiscussion Quality Chapter 10  Landscape 1  Community Leasures of Community L	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity ecies Diversity	439 431 434 435 436 437 437 439 446 447
chapter Summiscussion Quantitation of Communitation Species Richards of Species Diversity Spatial Partitation of Species Diversity atterns of Species Diversity attends of Diversity atte	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity ecies Diversity Gradients in Species Richness	429 431 432 434 435 436 437 437 439 446 447 451
chapter Summiscussion Quantitation of Communitation Species Diversional Communitation of Species Diversional Communitation	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity ecies Diversity Gradients in Species Richness Gradients in Species Richness Relationships	429 431 432 434 435 436 437 439 446 447 451 455
chapter Summission Quality Chapter 10  Landscape I Community Leasures of Community Leasu	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity ioning of Diversity ecies Diversity Gradients in Species Richness Gradients in Species Richness a Relationships ography and the Habitat Fragmentation Paradigm	439 431 434 435 436 437 437 439 446 447 451 455 467
Chapter Summission Quality Chapter 10  Cha	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity ecies Diversity Gradients in Species Richness Gradients in Species Richness a Relationships ography and the Habitat Fragmentation Paradigm itat Loss and Fragmentation on Species Diversity	439 431 432 434 435 436 437 439 446 447 451 455 467 474
chapter Summiscussion Quantitation Quantitat	Landscape Effects on Community Structure and Dynamics Perspective on the Structure and Dynamics of es community Structure class risity cioning of Diversity cecies Diversity Gradients in Species Richness	439 434 435 436 437 439 446 447 451 455 467 474 475
Chapter Summand Chapter 10  Ch	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es  community Structure  class  rsity  cioning of Diversity  cries Diversity  Gradients in Species Richness  Gradients in Species Richness  a Relationships  cography and the Habitat Fragmentation Paradigm  citat Loss and Fragmentation on Species Diversity  count Hypothesis  ence of Habitat Loss and Fragmentation	425 431 432 434 435 436 437 439 446 447 451 455 467 474 475 477 478
Chapter Summa Discussion Quantitation Quantitation of Species Richards of Species Diversion of Species Partitudinal Control of Species Par	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity cricies Diversity Gradients in Species Richness Gradients in Species Richness a Relationships ography and the Habitat Fragmentation Paradigm citat Loss and Fragmentation on Species Diversity count Hypothesis ence of Habitat Loss and Fragmentation ects on Species Interactions	429 431 432 434 435 436 437 439 446 447 451 455 467 474 475 477 478
Chapter Summandiscussion Quantitation Quantitation of Species Richard Species Diversion of Species Diversion of Species Partitation of Species Area Island Bioge of Species of Habitat-Amount of Species of Species of Habitat-Amount of Species of Species of Habitat-Amount of Species of Habitat-Amount of Species of Habitat-Amount of Species of Species of Habitat-Amount of Species of Habitat-Amount of Species of Habitat-Amount of Species of Species of Habitat-Amount of Species of Habitat-Amount of Species of Species of Habitat-Amount of Species of Habitat-Amount of Species of Spec	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness risity cioning of Diversity ecies Diversity Gradients in Species Richness Gradients on Species Diversity fount Hypothesis ence of Habitat Loss and Fragmentation ects on Species Interactions Coexistence	439 431 432 434 435 436 437 439 446 447 451 455 467 474 478 478
Chapter Summa Discussion Quantitation Quantitation of Species Richard Species Diversion of Species Diversion of Species Diversion of Species Partial Partial Patterns of Species—Area Island Bioger Effects of Habitat-Americandscape Effects of Habitat-Americandscape Effects of Predator—Predato	Landscape Effects on Community Structure and Dynamics  Perspective on the Structure and Dynamics of es community Structure ness rsity cioning of Diversity cricies Diversity Gradients in Species Richness Gradients in Species Richness a Relationships ography and the Habitat Fragmentation Paradigm citat Loss and Fragmentation on Species Diversity count Hypothesis ence of Habitat Loss and Fragmentation ects on Species Interactions	429 431 432 434 435 436 437 439 446 447 451 455 467 474 475 477 478

Metacommunity Structure and Dynamics	502		
Future Directions	505		
Chapter Summary Points	507		
Discussion Questions			
Chapter 11 Landscape Effects on Ecosystem Structure and Function	512		
Why is a Landscape Ecology of Ecosystems Needed?	512		
Ecosystem Processes in a Landscape Context	514		
Topographic and Land-Management Effects on Nutrient Availability and			
Ecosystem Productivity	516		
Effects of Land-Cover Change on Nutrient Dynamics	521		
The Metaecosystem: Interacting Ecosystems in a Landscape Context			
Spatial Subsidies	525		
Mobile-Link Species	527		
Source–Sink Metaecosystem Dynamics	529		
From Ecosystem Function to Landscape Function	530		
Landscape Function and 'Dysfunctional' Landscapes	530		
Assessing and Monitoring Landscape Function	532		
Managing for Landscape Multifunctionality and Sustainability	539		
Future Directions	541		
Chapter Summary Points	542		
Discussion Questions	545		
Glossary	547		
References	573		
Index	623		