

Preface
List of Contributors
General Aspects
Introduction
Definitions
Geographical distribution
References
Climatic conditions
General climatic characteristics
Climate diagrams
References
Floral composition and its evolutionary development
References
Seasonality
Leaf shedding
Phenology
References
Vegetation structure and forest succession
Stand structure
Dynamics of forest ecosystems: the concept of succession
Primary successions
Secondary successions
Gap dynamics
References
The animal community: diversity and resources
Introduction
Composition of the fauna
The habitat and the fauna: patterns of occurrence, distribution and spatial dynamics
Diurnal rhythms, seasonality and life cycles
Succession
Trophic relationships
Species diversity
Resource partitioning
Organization of the ecosystem and functional relationships
Acknowledgements
References
Ecosystem Processes
Ecochemistry of temperate deciduous forest
Nutrient-related ecosystem characteristics
Distribution and dynamics of elements in vegetation components

Element balance in the litter layer
Element-associated processes in the soil layer
Element behaviour in temperate deciduous forests
Conclusions
References
Biomass and productivity
Definitions, methods of assessment
Biomass
Net primary productivity
References
Secondary production and decomposition
Introduction
Utilization of food: biochemistry, energy and nutrients
Processes within subunits of the ecosystem
Energy flow in the whole ecosystem
Nutrient cycles
Animals as heterotrophic regulators in forest ecosystems
References
Regional Aspects
Deciduous forests of North America
Introduction
Deciduous species and their major adaptations
Southeastern evergreen region
Oak-Hickory-Pine Region
Appalachian Oak Region
Mixed Mesophytic Region
Western Mesophytic Region
Oak-Hickory Region
Beech-Sugar Maple Region
Sugar Maple-Basswood Region
Northern Hardwood-Conifer Region
Boreal Forest
River Floodplain Forests
Western North American Forests
Conclusions
References
Fauna of the North American temperate deciduous forest
Introduction
Community composition
Geographical variation in species diversity and density

Ecological distribution

Successional patterns

Resource partitioning

Seasonality

Acknowledgements

References

Temperate deciduous forests in Mexico and Central America

Floristic composition

Ecological conditions and stand structures

References

Temperate deciduous forests of Europe

Introduction

Environment

Phytogeographical division of Europe

Historical survey

Deciduous tree species in Europe

Forest communities

Regional survey on the deciduous forests of Europe

Regional survey: the Middle European Region

Regional survey: the Alpic Region

Regional survey: the Carpathian Region

Regional survey: the Pannonian and the Western Pontic Region

Regional survey: the Submediterranean and Mediterranean regions

References

Fauna of the European temperate deciduous forest

Introduction

Well-studied European deciduous forests

Comparison of deciduous forests on mull and mor sites

References

Deciduous forests of the Near East

Introduction

Location

Orography and geology

Climate

Floristic development and composition

Forest types

References

Temperate deciduous forests in East Asia

Introduction

Deciduous broadleaved forests in China

Deciduous broadleaved forests in Japan
Deciduous broadleaved forests in Korea
Conclusions
References
Deciduous forests of Southern South America
Introduction
Location
Geology and soils
Climate
Vegetation history
Forest types
References
Systematic list of genera
Author index
Systematic
Index General
Index

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.