Inhalt

Vorwort/Preface	Seite XI/XII
Keynotes	
Forest Business – How Do We Manage our Forests in Hesse? Carsten Wilke	1
Avoided Deforestation in the Climate Change Negotiations and the Voluntary Carbon Market Sebastian Hetsch, Martin Schröder	8
Optimizing Forest Land Use in Tropical Landscapes Roland Olschewski	9
Non-Industrial Private Timber Supply: What Have We Learned from Survey Data? Jari Kuuluvainen	14
Speech by the Winner of the Georg Ludwig Hartig Award	
About Taking, Giving and Receiving. Aspects of Sustainability in the Publications by Georg Ludwig Hartig and Martin Faustmann Hans-Joachim Weimann	31
Studies on the Basis of Faustmann's and Pressler's Ideas	
Optimal Rotation with Declining Discount Rate Colin Price	36
When to Cut a Tree Fritz Helmedag	38
Calculation of the Value which Forest Land and Immature Stands Posses for Forestry under the Generalized Faustmann Formula Sun Joseph Chang	39
Discovery of the Faustmann Formula in England and in the German Territorial States 1683-1849 Esa-Jussi Viitala	40
Faustmann Theory, Steady State Analysis and Application to an Evolving World Jean-Luc Peyron	41
Pressler Did Understand how to Use the Indicator Per Cent Peichen Gong, Karl-Gustaf Löfgren	43



New Solution in Forest Market Valuation Issue: Faustmann's Formula in Forest Real Estate Valuation Markku Airaksinen, Simo Hannelius	44
The Optimal Rotation Problem with Variable Forestland Holding Size Suman Majumdar, Yaoqi Zhang	45
Optimal Rotation Problem Revisited: Internal Rate of Return, Land Expectation, and Profit Maximization	46
Yaoqi Zhang, Suman Majumdar	
On the Optimization of Legislative Periods Similarities to the Optimization of Rotation Periods Robert Kaiser, Matthias Bösch, Martin Moog	47
Nonindustrial Private Forest Owners, Empirical Studies and Policy	
Conservation Contracts for Forest Biodiversity. Theory and Experience from Finland Artti Juutinen, Markuu Ollikainen	48
Faustmann and the Alternative Test Approach Patrice Harou, Chinlong Zheng	49
Cogongrass Control and Financial Returns for Non-Industrial Private Forest Landowners in the United States Mid-South Donald L. Grebner, Gregory S. Amacher, Stephen C. Grado	50
Made Markets: Entrepreneurial Rent-Seeking and Institutional Change in the Forestry Sector Achim Schlüter, Liviu Nichiforel	51
Taxation, Life-Time Uncertainty and Non-Industrial Private Forest-Owners Decision-Making Sepul K. Barua, Jari Kuuluvainen, Jussi Uusivuori	52
Importance of the Financial Situation for the Growth of a Forest Machine Entrepreneur Juho Soirinsuo, Pekka Mäkinen	53
Climate Change and Forestry	
Adaptation and Mitigation to Climate Change by the Multipurpose Modeling of Forest Management Planning Rasoul Yousefpour, Marc Hanewinkel	54
The Evaluation of Forest Crop Damages due to Climate Change – An Application of the Dempster-Shafer Method lacopo Bernetti, Christian Ciampi, Sandro Sacchelli, Claudio Fagarazzi	55

Economic Value of Forest Genetic Diversity in the Face of Climate Change Jette Bredahl Jacobsen, Aske Skovmand Bosselmann, Erik Dahl Kjær, Bo Jellesmark Thorsen	57
Carbon Sink Economics: Examples from Forestry in Europe Maria Nijnik	59
Sequester or Harvest – the Optimal Use of Managed Forests to Mitigate Climate Change Lauri Valsta	60
Effects of Carbon Sequestration Rewards on Forest Management – An Empirical Application of Adjusted Faustmann-Formulas Margret Köthke, Matthias Dieter	61
Optimization of the Stand Level Management Taking Account Climate Benefits of the Harvested Wood Products Henna Lyhykainen	62
Multi-Species Forest Vintages and Carbon Sequestration Clara Costa-Duarte, Maria A. Cunha-e-Sá, Renato Rosa	63
Economics of Forest Management	
Incorporating a Process Based Norway Spruce Model with Economics and Optimization Sami Niinimäki, Olli Tahvonen, Jari Perttunen	64
Size-Class Model Based on Simulated Growth Data – Estimation and Technical Analysis Jani Laturi, Jussi Lintunen, Sini Niinistö	65
Economic Analysis of Exploitation and Regeneration in Plantations with Problematic Site Productivity Andreas Halbritter, Peter Deegen	66
Economics of Optimal Uneven-Aged Management for Norway Spruce Olli Tahvonen, Timo Pukkala, Erkii Lähde, Olavi Laiho	67
An Economic Evaluation of Strategies for the Transformation from Even-Aged to Near-Natural Forestry in a Conifer Dominated Forest in Denmark Erik Schou, Jette Bredahl Jacobsen	d 68
Optimizing Cork Oak Forest Management Scheduling in the Western Mediterranean Basin Augusta Costa, José G. Borges, Ângelo C. Oliveira	69
What Makes Mountain Pine Beetle a Tricky Pest? Optimal Harvest when Facing Beetle Attack in a Mixed Species Forest Tim Boole G. Cornelis van Kooten	70

Optimum Tree-Stem Bucking of Brutian Pine (<i>Pinus brutia</i>) Trees in Antalya, Turkey Abdullah E. Akay, Hasan Serin, Mehmet Pak, Neşe Yenilmez	71
Forest Stand and Enterprise Level Links and Solutions with Full Enumeration and Linear Programming Ruth Dirsch	80
Applications of the Tree-Level Faustmann Formula in Tree-Marking Seyed Mehdi Heshmatol Vaezin, Jean-Luc Peyron	81
V-Value Optimization Method for Forest Planning Jouni Pykäläinen, Jukka Mäkitie	82
The Multiple Effects of Carbon Values on Optimal Rotation Colin Price, Rob Willis	84
Regional Studies	
Economic Analysis of Agricultural Land Use Integrated with Forestry: A Hypothetical Application in Turkey Mehmet Pak	85
Forests Multiple Use Management Renato Rosa	87
Financial Effects of Silvicultural Measures in Pure Spruce Protection Forests in Bavarian Alps Sebastian Höllerl, Remigius Hammerl, Thomas Knoke, Reinhard Mosandl	88
Estimation the Change in Value of European Forestland under Climate Change. Is "Faustmann" an Appropriate Approach? Marc Hanewinkel	89
Dynamic Waves and the Harvest of Multiple Rotations <i>Richard J. Brazee, Henrik Meilby</i>	91
About the Relevance of Faustmann Calculations in Public Forests of Hesse, Germany Armin Offer	92
Understanding Sustainability as a Landscape Goal and Process: A Framework for Economic Modeling (or Understanding) and Analysis John Fedkiw, Richard J. Brazee	94
Stochastic Studies	
Review of the Impacts of Risk and Uncertainty on Forest Management Robert Rusteberg, Rahul Ravikrishnan, Saumitra Bhagwat, Richard J. Brazee	95

A Methodological Review on Investment Decisions under Uncertainty in Forest Science Studies Patrick Hildebrandt, Thomas Knoke	96
Further Generalization of Faustmann's Formula with Stochastic Interest Rates Joseph Buongiorno, Mo Zhou	97
The Value of Expiring Credits Based on Arbitrage Theory Klaus Wallner	99
Pressler's Indicator Rate Formula as a Guide for Forest Management in a Dynamic World of Unanticipated Changes Sun Joseph Chang, Peter Deegen	103
Optimal Rotation under Different Stochastic Prices Saeed Bayazidi, Atsushi Yoshimoto	104
Faustmann Rotation and Population Dynamics in the Presence of a Risk of Destructive Events Patrice Loisel	105
Natural Risk Modelling in Silvicultural Decision Models: A Survival Function Approach Kai Staupendahl, Bernhard Möhring	107
Valuation of Timber and Carbon Sequestration: An American Call Option Technique Stanislav Petrasek, John Perez-Garcia, Bruce Lippke, B. Bruce Bare	109
Faustmann's Mirror Hypsometer – Since 1856 to 1930s Used for Tree Heights Measuring Wolfgang Rücker	111