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	Nota di contenuto	Colour Plates; Principal Contributors; Preface; Part 1 Forest Reality and Modelling Strategies; 1 Suggestions for Choosing an Appropriate Level for Modelling Forest Stands; 2 Mapping Lodgepole Pine Site Index in Alberta; 3 Growth Modelling of Eucalyptus regnans for Carbon Accounting at the Landscape Scale; 4 Spatial Distribution Modelling of Forest Attributes Coupling Remotely Sensed Imagery and GIS Techniques; 5 Algorithmic and Interactive Approaches to Stand Growth Modelling; 6 Linking Process-based and Empirical Forest Models in Eucalyptus Plantations in Brazil 7 A Strategy for Growth and Yield Research in Pine and Eucalypt Plantations in Komatiland Forests in South Africa Part 2 Mathematical Approaches and Reasoning; 8 Quantitative Tools and Strategies for Modelling Forest Systems at Different Scales; 9 GLOBTREE: an Individual Tree Growth Model for Eucalyptus globulus in Portugal; 10 Modelling Dominant Height Growth: Effect of Stand Density; 11 Testing for Temporal Dependence of Pollen Cone Production in Jack Pine (Pinus

banksiana Lamb.)

12 Spatial Stochastic Modelling of Cone Production from Stone Pine (Pinus pinea L.) Stands in the Spanish Northern Plateau 13 Modelling the Carbon Sequestration of a Mixed, Uneven-aged, Managed Forest Using the Process Model SECRETS; 14 An Allometric-Weibull Model for Interpreting and Predicting the Dynamics of Foliage Biomass on Scots Pine Branches; 15 Diameter Distribution Models and Height-Diameter Equations for Estonian Forests; 16 Modelling the Diameter at Breast Height Growth of Populus euramericana Plantations in Spain

17 Stand Growth and Productivity of Mountain Forests in Southern Siberia in a Changing Climate Part 3 Estimation Processes; 18 Estimation and Applications of Size-biased Distributions in Forestry; 19 The SOP Model: the Parameter Estimation Alternatives; 20 Evaluating Estimation Methods for Logistic Regression in Modelling Individual-tree Mortality; 21 Using Process-dependent Groups of Species to Model the Dynamics of a Tropical Rainforest; 22 Modelling Current Annual Height Increment of Young Douglas-fir Stands at Different Sites; 23 Simulation and Sustainability of Cork Oak Stands

Part 4 Models, Validation and Decision under Uncertainty 24 A Critical Look at Procedures for Validating Growth and Yield Models; 25 Model Testing by Means of Cost-plus-loss Analyses; 26 Regulating the Yield of Goods and Services from Forests: Developing Tools to Support Management Decisions and Policy Development for Multiple Objective Forest Management; 27 CAPSIS: Computer-aided Projection for Strategies in Silviculture: Advantages of a Shared Forestmodelling Platform

28 Expected Volume and Value of Structural-dimension Lumber From 25-, 30-, 35-, 40- and 50-year-old Loblolly Pine Plantation Timber

Sommario/riassunto	There are many theoretical approaches to modelling forest systems, but not all of them have valid practical applications. This collection of papers, selected from those presented at a June 2002 workshop, reviews current thinking on various models and presents applications in different contexts.