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| 1. | Record Nr. | UNINA9910298265403321 |
| | Titolo | Simulation Modeling of Forest Landscape Disturbances / / edited by Ajith H. Perera, Brian R. Sturtevant, Lisa J. Buse |
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| | ISBN | 3-319-19809-2 |
| | Edizione | [1st ed. 2015.] |
| | Descrizione fisica | 1 online resource (324 p.) |
| | Disciplina | 570 |
| | Soggetti | Landscape ecology<br>Forestry<br>Applied ecology<br>Landscape Ecology<br>Applied Ecology |
| | Lingua di pubblicazione | Inglese |
| | Formato | Materiale a stampa |
| | Livello bibliografico | Monografia |
| | Note generali | Description based upon print version of record. |
| | Nota di bibliografia | Includes bibliographical references at the end of each chapters and index. |
| | Nota di contenuto | Simulation modeling of forest landscape disturbances: An overview -- Modeling windthrow at stand and landscape scales -- Approaches to modeling landscape-scale drought-induced forest mortality -- Modeling wildfire regimes in forest landscapes: Abstracting a complex reality -- Modeling insect disturbance across forested landscapes: Insights from the spruce budworm -- Individual-based modeling: Mountain pine beetle seasonal biology in response to climate -- Southern pine beetle herbivory in the southern United States: Moving from external disturbance to internal process -- Exploring interactions among multiple disturbance agents in forest landscapes: Simulating effects of fire, beetles, and disease under climate change -- Simulating forest landscape disturbances as coupled human and natural systems -- Simulating forest recovery following disturbances: Vegetation dynamics and biogeochemistry -- Simulation modeling of forest landscape disturbances: Where do we go from here?. |
| | Sommario/riassunto | Forest landscape disturbances are a global phenomenon. Simulation models are an important tool in understanding these broad scale processes and exploring their effects on forest ecosystems. This book |

contains a collection of insights from a group of ecologists who address a variety of processes: physical disturbances such as drought, wind, and fire; biological disturbances such as defoliating insects and bark beetles; anthropogenic influences; interactions among disturbances; effects of climate change on disturbances; and the recovery of forest landscapes from disturbances—all from a simulation modeling perspective. These discussions and examples offer a broad synopsis of the state of this rapidly evolving subject.