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Altri autori (Persone)	JohnsonEdward A (Ecology Professor) MiyanishiKiyoko
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Nota di contenuto	Disturbance and succession / Edward A. Johnson and Kiyoko Miyanishi -- The turbulent wind in plant and forest canopies / John J. Finnigan -- Microbursts and macrobursts : windstorms and blowdowns / Mark R. Hjelmfelt -- Understanding how the interaction of wind and trees results in windthrow, stem breakage, and canopy gap formation / Christopher P. Quine and Barry A. Gardiner -- Meteorological conditions associated with ice storm damage to forests / Kaz Higuchi and Amir Shabbar -- The effect of icing events on the death and regeneration of North American trees / David F. Greene, Kathleen F. Jones, and Olga J. Proulx -- Disturbance processes and dynamics in coastal dunes / Patrick A. Hesp and M. Luisa Martinez -- Coastal dune succession and the reality of dune processes / Kiyoko Miyanishi and Edward A. Johnson -- Fluvial geomorphic disturbances and life history traits of riparian tree species / Futoshi Nakamura and Satomi Inahara -- Water level changes in ponds and lakes : the hydrological processes / Masaki Hayashi and Garth van der Kamp -- Development of post-disturbance vegetation in prairie wetlands / Arnold G. van der Valk --

Modeling heating effects / Geoffrey N. Mercer and Rodney O. Weber -- Fire effects on grasslands / Paul H. Zedler -- Wildfire and tree population processes / Sheri L. Gutsell and Edward A. Johnson -- Insect defoliators as periodic disturbances in northern forest ecosystems / Barry J. Cooke, Vincent G. Nealis, and Jacques Regniere -- Dynamics of mountain pine beetle outbreaks / Justin Heavilin, James Powell, and Jesse A. Logan -- Relationship between spruce budworm outbreaks and forest dynamics in eastern North America / Hubert Morin, Yves Jardon, and Regean Gagnon -- Impact of beaver (castor canadensis Kuhl) foraging on species composition of boreal forests / Noble T. Donkor.

Sommario/riassunto

The media coverage of natural disasters (hurricanes, fires, floods, ice storms, etc.) indicates the prevalence of natural disasters in most, if not all, ecosystems. In order for scientists to study, understand, and ultimately predict how these disturbances affect ecosystems, it is necessary for them to know more about the physical processes involved in these disturbances and to learn how to couple these processes to the ecological systems. Essential for all ecologists, forest researchers, and conservation biologists, this book includes chapters on the disturbance processes, how the disturbance causes necrosis or death to individuals, and their effects on population or community processes. In this book, physical scientists who study disturbances provide an introduction to the physical disturbance processes, while ecologists relate this information to the way the vegetation responds to the disturbances. This reference is also key for all researchers hydrology, geomorphology, and environmental management. * Includes coverage on six different disturbance processes: Wind, Gravity, Geomorphic, Hydrologic, Combustion, and Biotic * Provides a clear explanation of how some of the physical processes of disturbance affect plant ecological processes * Offers ecologists an up-to-date understanding of the physical processes and allows them to predict future affects of disturbances * Unites two related fields by linking the disturbance processes and ecological responses * Presents physical scientists with ideas of how they might usefully apply their knowledge to advance understanding of ecological systems.