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companion website; Chapter 1 Introduction; The boreal forest biome; Geographical distribution; Distinguishing features; Boreal wildfires; Major characteristics; Ecological significance; Goals and scope of the book; References; Chapter 2 Formation of wildfire residuals; Factors that affect the formation of residuals; Boreal forest communities; Boreal wildfires; Residual formation and distribution; Spatial heterogeneity in fire behavior; Process of residual formation; Summary; References Chapter 3 Types of wildfire residuals and their extent Types of wildfire residuals; A post-wildfire scene; Past descriptions of wildfire residuals; Abundance and extent of wildfire residuals; Snag residuals; Live tree residuals; Residual patches; Changes in residuals after wildfires; Snag residuals; Live tree residuals; Residual patches; Toward improved definitions and assessment; Reasons for improvement; Definitions of wildfire residuals; Improved study approaches; Summary; References; Chapter 4 Ecological roles of wildfire residuals; Ecological processes involving snag residuals

Invasion by beetlesColonization by woodpeckers: Occupation by other bird species; Forest regeneration; Roles of the residual patches; Providing temporary shelter; Supplementing the recovery; Creating heterogeneity; Ecological significance; Wildfire residuals and the carbon cycle; Wildfire residuals and nutrient and hydrological cycles; Summary; References; Chapter 5 Role of wildfire residuals in forest management applications; Restoring wildfire residuals; Ecological expectations; Considerations for application; Challenges and uncertainties; Emulating wildfire disturbance; Background

Emulating wildfire residuals by forest harvestExpectations and uncertainties; Salvage logging; Background; Ecological consequences; Practical considerations; Uncertainties; Summary; References; Chapter 6 Ecology of boreal wildfire residuals-a summary and synthesis; Wildfire residuals and their occurrence; Residual vegetation types; Spatial patterns of residuals; Ecological roles of wildfire residuals; Snag residuals; Residual patches; A conceptual view; Knowledge uncertainties; Management applications and wildfire residuals; Salvage logging; Emulating wildfire disturbances

Restoring wildfire residualsSuppressing fire; Research needs on wildfire residuals; Advancing research methods; Expanding research topics; Conclusion; Index; Supplemental Images; EULA

Sommario/riassunto

This book will draw attention to the residuals in pan-boreal forest fires and synthesize the state of knowledge. It will do so by: (a) Examining the concept of fire residuals from different perspectives, (b) Reviewing the growing body of scientific literature on the topic, (c) Conceptualizing the process of residual formation in relation to scale of fire disturbance, (d) Discussing the roles of fire residuals in ecological processes, (e) Describing approaches and methods of studying fire residuals, (f) Compiling and summarizing what is known about fire residual vegetation with respect t