Record Nr. UNINA9910821350803321 Alaska's changing boreal forest / / edited by F. Stuart Chapin III [and **Titolo** five others1 Pubbl/distr/stampa New York, New York:,: Oxford University Press,, 2006 ©2006 **ISBN** 0-19-756192-6 1-280-50216-9 1-4237-6156-1 0-19-534832-X 1-60256-996-7 Descrizione fisica 1 online resource (369 p.) Collana Long-Term Ecological Research Network Series Disciplina 577.3/7/09798 Soggetti Taiga ecology - Alaska Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Previously issued in print: 2006. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Contents; Contributors; 1. The Conceptual Basis of LTER Studies in the Alaskan Boreal Forest; 2. Regional Overview of Interior Alaska; 3. State Factor Control of Soil Formation in Interior Alaska; 4. Climate and Permafrost Dynamics of the Alaskan Boreal Forest: 5. Holocene Development of the Alaskan Boreal Forest; 6. Floristic Diversity and Vegetation Distribution in the Alaskan Boreal Forest; 7. Successional Processes in the Alaskan Boreal Forest; 8. Mammalian Herbivore Population Dynamics in the Alaskan Boreal Forest 9. Dynamics of Phytophagous Insects and Their Pathogens in Alaskan Boreal Forests 10. Running Waters of the Alaskan Boreal Forest: 11. Controls over Forest Production in Interior Alaska; 12. The Role of Fine Roots in the Functioning of Alaskan Boreal Forests; 13. Mammalian Herbivory, Ecosystem Engineering, and Ecological Cascades in Alaskan Boreal Forests; 14. Microbial Processes in the Alaskan Boreal Forest; 15. Patterns of Biogeochemistry in Alaskan Boreal Forests; 16. Watershed Hydrology and Chemistry in the Alaskan Boreal Forest: The Central Role of Permafrost

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## Sommario/riassunto

The Boreal forest is the northern-most forest in the world, whose organisms and dynamics are shaped by low temperature and high latitude. The Alaskan Boreal forest is now warming as rapidly as any place on earth, providing an unprecedented opportunity to examine a biome as it adjusts to change.