Record Nr. UNINA9910777849903321 After the fires: the ecology of change in Yellowstone National Park // **Titolo** editor, Linda L. Wallace Pubbl/distr/stampa New Haven,: Yale University Press, c2004 **ISBN** 1-281-72967-1 9786611729677 0-300-12775-8 1 online resource (401 pages): illustrations, maps Descrizione fisica Altri autori (Persone) WallaceLinda L. <1951-2009.> Disciplina 634.9/618/0978752 Soggetti Forest fires - Yellowstone National Park Forest fires - Environmental aspects - Yellowstone National Park Fire ecology - Yellowstone National Park Yellowstone National Park Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia

Nota di contenuto

Front matter -- Contents -- Preface -- 1. The Fires of 1988: A Chronology and Invitation to Research -- 2. Postglacial Fire, Vegetation, and Climate History of the Yellowstone-Lamar and Central Plateau Provinces. Yellowstone National Park -- 3. Yellowstone Fires and the Physical Landscape -- 4. Establishment, Growth, and Survival of Lodgepole Pine in the First Decade -- 5. Fire Effects, Elk, and Ecosystem Resilience in Yellowstone's Sagebrush Grasslands -- 6. Elk Biology and Ecology Before and After the Yellowstone Fires of 1988 --7. Effects of Wildfire on Growth of Cutthroat Trout in Yellowstone -- 8. Stream Ecosystem Responses to Fire: The First Ten Years -- 9. Food Web Dynamics in Yellowstone Streams: Shifts in the Trophic Basis of a Stream Food Web After Wildfire Disturbance -- 10. Role of Fire in Determining Annual Water Yield in Mountain Watersheds -- 11. Early Postfire Forest Succession in the Heterogeneous Teton -- 12. Snags and Coarse Woody Debris: An Important Legacy of Forests in the Greater Yellowstone Ecosystem -- 13. Fire Patterns and Ungulate Survival in Northern Yellowstone Park: The Results of Two Independent Models -- 14. Ten Years After the 1988 Yellowstone Fires: Is

## Sommario/riassunto

Restoration Needed? -- 15. Epilogue: After the Fires. What Have We Learned? -- List of Contributors -- Index

The ravaging fires in Yellowstone National Park in 1988 caused grave concern among scientists about the possible short- and long term repercussions. This book provides the first comprehensive scientific summary of the actual response of the Yellowstone ecosystem to the fires. Written by experts in wildlife biology, ecosystem science, landscape ecology, and forest science, the book shows not only that many things changed after the fires (for ecological components of the system are interactive) but also that some things did not change. The largest effects of the fires were felt at the smallest scales, and the long-term devastation predicted did not come to pass. The resilience of this naturally functioning ecosystem to these huge fires has important lessons for heavily managed regions.