1.
Record Nr.	UNINA9910516108503321
Autore	Maser Chris
Titolo	Trees, Truffles & Beasts: How Forests Function
Pubbl/distr/stampa	Rutgers University Press
ISBN	0-8135-4226-X
Descrizione fisica	1 online resource (280 p.) : ill
Disciplina	577.3
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	In today's world of specialization, people are attempting to protect the Earth's fragile state by swapping limousines for hybrids and pesticide-laced foods for organic produce. At other times, environmental awareness is translated into public relations gimmicks or trendy commodities. Moreover, simplistic policies, like single-species protection or planting ten trees for every tree cut down, are touted as bureaucratic or industrial panaceas. Because today's decisions are tomorrow's consequences, every small effort makes a difference, but a broader understanding of our environmental problems is necessary to the development of sustainable ecosystem policies. In Trees, Truffles, and Beasts, Chris Maser, Andrew W. Claridge, and James M. Trappe make a compelling case that we must first understand the complexity and interdependency of species and habitats from the microscopic level to the gigantic. Comparing forests in the Pacific Northwestern United States and Southeastern mainland of Australia, the authors show how easily observable species, trees and mammals are part of a complicated infrastructure that includes fungi, lichens, and organisms invisible to the naked eye, such as microbes. Eminently readable, this important book shows that forests are far more complicated than most of us might think, which means simplistic policies will not save them. Understanding the biophysical intricacies of our life-support systems just might.

2.
Record Nr.	UNINA9910136796903321
Autore	Katja M. Kanninen
Titolo	Metals and neurodegeneration: Restoring the balance
Pubbl/distr/stampa	Frontiers Media SA, 2016
Descrizione fisica	1 online resource (132 p.)
Collana	Frontiers Research Topics
Soggetti	Neurosciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Biometals such as copper, zinc and iron have key biological functions, however, aberrant metabolism can lead to detrimental effects on cell function and survival. These biometals have important roles in the brain, driving cellular respiration, antioxidant activity, intracellular signaling and many additional structural and enzymatic functions. There is now considerable evidence that abnormal biometal homeostasis is a key feature of many neurodegenerative diseases and may have an important role in the onset and progression of disorders such as Alzheimer's, Parkinson's, prion and motor neuron diseases. Recent studies also support biometal roles in a number of less common neurodegenerative disorders. The role of biometals in a growing list of brain disorders is supported by evidence from a wide range of sources including molecular genetics, biochemical studies and biometal imaging. These studies have spurred a growing interest in understanding the role of biometals in brain function and disease as well as the development of therapeutic approaches that may be able to restore the altered biometal chemistry of the brain. These approaches range from genetic manipulation of biometal transport to chelation of excess metals or delivery of metals where levels are deficient. A number of these approaches are offering promising results in cellular and animal models of neurodegeneration with successful translation to pre-clinical and clinical trials. At a time of aging populations and slow progress in development of neurotherapeutics to treat age-related

neurodegenerative diseases, there is now a critical need to further our understanding of biometals in neurodegeneration. This issue covers a broad range of topics related to biometals and their role in neurodegeneration. It is hoped that this will inspire greater discussion and exchange of ideas in this crucial area of research and lead to positive outcomes for sufferers of these neurodegenerative diseases.