

1. Record Nr.	UNINA9910964226003321
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Titolo	Observation and Ecology : Broadening the Scope of Science to Understand a Complex World // by Rafe Sagarin, Aníbal Pauchard
Pubbl/distr/stampa	Washington, DC : , : Island Press/Center for Resource Economics : , : Imprint : Island Press, , 2012
ISBN	9781597268264 1597268267 9781610912303 1610912306
Edizione	[1st ed. 2012.]
Descrizione fisica	1 online resource (230 p.)
Altri autori (Persone)	PauchardAnibal
Disciplina	577
Soggetti	Sustainability Science - History Freshwater ecology Marine ecology Biotic communities Ecology History of Science Freshwater and Marine Ecology Ecosystems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword -- Acknowledgments -- Introduction -- Part I. The Role of Observation in Ecological Science. 1. An Observational Approach to Ecology -- 2. Observational Approaches in Historical Context -- Part II. Using Observations in Ecology. 3. Using All the Senses in Ecology -- 4. Using Technology to Expand Our Observational Senses -- 5. Local, Traditional, and Accidental Ecological Observers and Observations -- Part III. The Challenges Posed by an Observational Approach. 6. Dealing with Too Many Observations, and Too Few -- 7. Is Observation-Based Ecology Scientific? -- Part IV. Beyond Academia: The Power of Observational Approaches. 8. Ecology's Renewed Importance in Policy

Sommario/riassunto

The need to understand and address large-scale environmental problems that are difficult to study in controlled environments—issues ranging from climate change to overfishing to invasive species—is driving the field of ecology in new and important directions. *Observation and Ecology* documents that transformation, exploring how scientists and researchers are expanding their methodological toolbox to incorporate an array of new and reexamined observational approaches—from traditional ecological knowledge to animal-borne sensors to genomic and remote-sensing technologies—to track, study, and understand current environmental problems and their implications. The authors paint a clear picture of what observational approaches to ecology are and where they fit in the context of ecological science. They consider the full range of observational abilities we have available to us and explore the challenges and practical difficulties of using a primarily observational approach to achieve scientific understanding. They also show how observations can be a bridge from ecological science to education, environmental policy, and resource management. Observations in Ecology can play a key role in understanding our changing planet and the consequences of human activities on ecological processes. This book will serve as an important resource for future scientists and conservation leaders who are seeking a more holistic and applicable approach to ecological science.