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Titolo	Conservation genetics in the age of genomics [[electronic resource] /] / edited by George Amato ... [et al.]
Pubbl/distr/stampa	New York, : Columbia University Press, c2009
ISBN	1-280-59794-1 9786613627773 0-231-50231-1
Descrizione fisica	1 online resource (265 p.)
Collana	New directions in biodiversity conservation
Altri autori (Persone)	AmatoGeorge
Disciplina	576.5/8
Soggetti	Ecological genetics Germplasm resources conservation Population genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Based on papers from two symposia, one held in San Diego and sponsored by the San Diego Zoological Park, and the other held in New York and sponsored by the Wildlife Conservation Society and the American Museum of Natural History Center for Biodiversity and Conservation.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	pt. 1. Perspectives on the union of conservation and genetics -- pt. 2. Conservation genetics in action : assessing the level and quality of genetic resources in endangered species -- pt. 3. Saving genetic resources -- pt. 4. Genomic technology meets conservation biology -- pt. 5. Policy, law, and philosophy of conservation biology in the age of genomics.
Sommario/riassunto	Genome sequencing enables scientists to study genes over time and to test the genetic variability of any form of life, from bacteria to mammals. Thanks to advances in molecular genetics, scientists can now determine an animal's degree of inbreeding or compare genetic variation of a captive species to wild or natural populations. Mapping an organism's genetic makeup recasts such terms as biodiversity and species and enables the conservation of rare or threatened species, populations, and genes. By introducing a new paradigm for studying and preserving life at a variety of levels, genomics offers solutions to

previously intractable problems in understanding the biology of complex organisms and creates new tools for preserving the patterns and processes of life on this planet. Featuring a number of high-profile researchers, this volume introduces the use of molecular genetics in conservation biology and provides a historical perspective on the opportunities and challenges presented by new technologies. It discusses zoo-, museum-, and herbarium-based biological collections, which have expanded over the past decade, and covers the promises and problems of genomic and reproductive technology. The collection concludes with the philosophical and legal issues of conservation genetics and their potential effects on public policy.

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