1. Record Nr. UNINA9910253958803321

Titolo	The Roles of Remote Sensing in Nature Conservation : A Practical Guide and Case Studies / / edited by Ricardo Díaz-Delgado, Richard Lucas, Clive Hurford
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-64332-0
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XII, 318 p. 102 illus., 64 illus. in color.)
Disciplina	577
Soggetti	Conservation biology Ecology Remote sensing Biodiversity Conservation Biology/Ecology Remote Sensing/Photogrammetry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1. Introducing the Book “The Roles of Remote Sensing in Nature Conservation” -- 2. Towards a Mature Age of Remote Sensing for Natura 2000 Habitat Conservation: Poor method transferability as a prime obstacle -- 3. Pre-processing of Remotely Sensed Imagery -- 4. Long-term Ecological Monitoring at Landscape Scale for Nature Conservation: The example of Doñana protected area.5. NILS - A Nationwide Inventory Program for Monitoring the Conditions and Changes of the Swedish Landscape -- 6. Mapping Coastal Habitats in Wales -- 7. Integrated Monitoring for Biodiversity Using Remote Sensing: From local to regional -- 8. Sub-pixel Mapping of Doñana Shrubland Species.9. Mapping the Distribution of Understorey Rhododendron ponticum Using Low-tech Multispectral UAV Derived Imagery -- 10. The Potential of UAV Derived Image Features for Discriminating Savannah Tree Species -- 11. A Toolbox for Remotely Monitoring Large Carnivores in Sweden -- 12. Coupling Field Sampling with Earth Observation Increases Understanding of Tiger Movement and

Behaviour -- 13. Improving the Accuracy of Bird Counts Using Manual and Automated Counts in ImageJ: An Open-Source Image Processing Program -- 14. Using UAVs to Map Aquatic Bird Colonies -- 15. The Integrated Land Cover and Change Classifications -- 16. Expected Advances In a Rapidly Developing Work Area.

Sommario/riassunto

During recent decades, a rapid increase in available data sources has enabled researchers to develop hundreds of new remote sensing applications: data provided by new sensors attached to satellites, aircrafts and drones. However, a major challenge remains unresolved: how to transfer the knowledge of these technological advances to conservation practitioners and facilitate access to the remote sensing products that are currently available. In this volume, we illustrate the ability of new technologies, such as drones, camera traps or miniaturized sensors, to enhance our information on habitat condition, species occurrence, invasive species mapping or biodiversity. There are several case studies from Natura 2000 and LTER sites: these were designed to meet the requirements of the EC Birds and Habitats Directives and the commitments associated with the EU Biodiversity Strategy, including regular habitat assessments. The authors of this volume, who work for different conservation and research agencies, provide a practical perspective on how remote sensing applications can benefit these long-term monitoring or surveillance programs. With these requirements in mind, the time is now right for conservation ecologists, researchers, technicians, managers, policy makers and practitioners to embrace the new technologies and products that are available from the remote sensing community. .