

1. Record Nr.	UNINA9910830259603321
Autore	Vero Sara E.
Titolo	Fieldwork ready : an introductory guide to field research for agriculture, environment and soil scientists / / Sara E. Vero
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley, , [2021] ©2021
ISBN	0-89118-380-9 0-89118-379-5 0-89118-376-0
Descrizione fisica	1 online resource : illustrations
Collana	ASA, CSSA, and SSSA Bks.
Disciplina	363.700721
Soggetti	Environmental sciences - Research - Methodology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- List of Photo Contributors -- Preface -- Acknowledgments -- Chapter 1 Introduction -- What is "Fieldwork?" -- Who Does Fieldwork? -- Why Am I Doing this? -- References -- Chapter 2 Types of Fieldwork -- Experimental Design -- Plot Experiment -- Survey -- Case Study -- Monitoring -- Sampling Design -- Event Sampling -- Grab Versus Composite Sampling -- Sampling for Laboratory Studies -- References -- Chapter 3 Preparation -- Site Selection -- Where Do I Need to Look? -- Risk Assessment -- Emergency -- Equipment -- Tools -- Consumables -- Maps, Apps, and Fieldsheets -- Local or Regional Maps -- Sketch Maps -- Plot Diagrams -- Mobile Apps -- Field Sheets -- Photographs -- Personal Protective Equipment (PPE) -- Vehicles -- Weather -- Target Conditions -- Precipitation -- Humidity and Temperature -- Wind -- Sunlight -- Soil Conditions -- River Conditions -- Concluding Remarks -- References -- Chapter 4 Logistics -- Communication -- Your Team -- The Local Community -- Officials -- The Buddy System -- Checklists -- The Importance of the "Trial Run" -- In the Field -- Things Go Wrong! -- Delays -- Errors -- Standard Operating Procedures and Quality Control -- Accidents -- Vandalism, Theft, and Interference -- Moving On -- Taking Care of Yourself in the Field -- Dressing for the Field -- Hydration -- Food -- Toilet -- Moving in the

Outdoors -- Fatigue -- Personal Safety -- Stress -- Accommodation --
Sample Management -- Packaging Samples -- Labeling -- Wildlife -- A
Note on Insects -- Domestic Animals -- Zoonoses and Biosecurity --
References -- Chapter 5 Environmental Monitoring -- Resolution,
Precision, Accuracy, and Hysteresis -- Monitoring Arrays: An Overview
-- Components -- Logger-Box or Enclosure -- The Data-Logger --
Power -- Power Calculation - Example -- Sensors.
Air, Soil, and Water Temperature -- Stage -- Humidity -- Wind Speed
-- Rain Gauges -- Volumetric Soil Water Content -- Matric Potential --
Step-by-Step Installation -- References -- Chapter 6 Soil Techniques
-- Soil Sampling Equipment -- Soil Survey -- Pore-Water Sampling --
References -- Chapter 7 Water Techniques -- Surface Water Sampling -
Freshwater -- Instream Parameters -- Stream Width and Depth --
Physico-Chemical Parameters -- Using a Multiparameter Probe --
Sampling for Laboratory Analysis -- Autosamplers -- Sediment (Bed,
Bank, and Water Column) -- Groundwater Sampling -- Microbial and
Sterile Sampling -- Soil and Sediments -- Water -- Sample Preservation
-- References -- Chapter 8 Plants -- Finding a Slope -- Randomizing
Plots -- Marking Field Plots -- Applying Treatment to Field Plots --
Phenology -- Wheat -- Corn -- Perennial Forage Grasses -- Soybeans
-- Vegetation Sampling -- Root Sampling -- Plant Height -- Yield --
Forage Crops -- Grain Crops -- References -- Chapter 9 Animal
Techniques -- Live-Catch Trapping -- Use of Trail Cameras --
References -- EULA.

Sommario/riassunto

"This book is unique in addressing the less-discussed aspects of fieldwork including the soft skills' such as communication, planning and logistics as well as basic technical skills used in environmental research. While training and standard operating procedures are available for the latter category, little support is given to students and early career researchers regarding the former, despite their importance. This book attempts to address this knowledge gap and further, could be used as a support to graduate and undergraduate field courses and modules"--
