1. Record Nr. UNINA9910959044403321

Titolo	Design and analysis of ecological experiments / / edited by Samuel M. Scheiner and Jessica Gurevitch
Pubbl/distr/stampa	Oxford : , : Oxford University Press, , 2023
ISBN	0-19-770067-5 1-280-53066-9 9786610530663 0-19-803022-3 1-4294-0174-5
Edizione	[2nd ed.]
Descrizione fisica	514 p. : il. ; ; 24 cm
Collana	Oxford scholarship online
Disciplina	577/.07/27
Soggetti	Ecology - Statistical methods Experimental design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous edition: London : Chapman and Hall, 1993. Previously issued in print: 2001.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Contributors; 1 Theories, Hypotheses, and Statistics; 2 Power Analysis and Experimental Design; 3 Exploratory Data Analysis and Graphic Display; 4 ANOVA: Experimental Layout and Analysis; 5 ANOVA and ANCOVA: Field Competition Experiments; 6 MANOVA: Multiple Response Variables and Multispecies Interactions; 7 ANCOVA: Nonparametric and Randomization Approaches; 8 Repeated-measures Analysis: Growth and Other Time-dependent Measures; 9 Time Series Intervention Analysis: Unreplicated Large-scale Experiments; 10 Nonlinear Curve Fitting: Predation and Functional Response Curves; 11 Logit Modeling and Logistic Regression: Aphids, Ants, and Plants12 Path Analysis: Pollination; 13 Failure-time Analysis: Studying Times to Events and Rates at Which Events Occur; 14 The Bootstrap and the Jackknife: Describing the Precision of Ecological Indices; 15 Spatial Statistics: Analysis of Field Experiments; 16 Mantel Tests: Spatial Structure in Field Experiments; 17 Bayesian Statistics: Estimating Plant Demographic Parameters; 18 Meta-analysis: Combining the Results of Independent Experiments; References; Index

Sommario/riassunto

This title focuses on the design and analysis of ecological experiments, concentrating on statistical approaches. Each chapter presents a particular statistical technique or set of techniques in the context of resolving an ecological issue.