*Spatial Capture-Recapture* provides a revolutionary extension of traditional capture-recapture methods for studying animal populations using data from live-trapping, camera trapping, DNA sampling, acoustic sampling, and related field methods. This book is a timely conceptual and methodological synthesis of spatial capture-recapture modeling, and a comprehensive how-to manual with detailed examples of a wide range of relevant spatial capture-recapture models for inference about population size and spatial and temporal variation in demographic parameters It serves as a resource for practicing field biologists studying animal populations and as a text for graduate students and professionals in ecology, conservation biology, and fisheries and wildlife management.

Key features:

• Comprehensive coverage of revolutionary new methods in ecology

• Detailed worked examples with R and BUGS code for each methodological element along with software instructions and a companion R package so the reader can implement analyses and learn by doing

• Practical approach, embracing Bayesian and classical inference strategies in order to provide different options to best get the job done