

Habitat fragmentation is one of the most ubiquitous and serious environmental threats confronting the long-term survival of plant and animal species worldwide. As species become restricted to remnant habitats, effective management for long-term conservation requires a quantitative understanding of the genetic and demographic effects of habitat fragmentation, and the implications for population viability. This book provides a detailed introduction to the genetic and demographic issues relevant to the conservation of fragmented populations such as demographic stochasticity, genetic erosion, inbreeding, metapopulation biology and population viability analysis. Also presented are two sets of case studies, one on animals, the other on plants, which illustrate a variety of approaches, including the application of molecular genetic markers, the investigation of reproductive biology, and the combination of demographic monitoring and modelling to examine long-term population viability. This book highlights the value of conducting integrated and inclusive studies for effective conservation management and will be of value to all those working in this crucial area of research.

Andrew Young is a Senior Research Scientist at the Centre for Plant Biodiversity Research, CSIRO Division of Plant Industry, where his research focuses on plant population genetics and ecology. He has published extensively on the genetic consequences of habitat fragmentation and the implications for plant conservation. He is co-editor of *Forest Conservation Genetics* (2000).

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Fragmented landscape in eastern Ontario.
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