It is widely accepted among conservation biologists that genetics is, more than ever, an essential and efficient tool for wild and captive population management and reserve design. However, a true synergy between population genetics and conservation biology is lacking. Following the first International Workshop on Population Genetics for Animal Conservation in 2003 at the Centro di Ecologia Alpina, Trento, Italy (recently incorporated into the Edmund Mach Foundation), the scientific committee felt that, given the global urgency of animal conservation, it was imperative that discussions at the conference were made accessible to graduate students and wildlife managers. This book integrates ‘the analytical methods approach’ with the ‘real problems approach’ in conservation genetics. Each chapter is an exhaustive review of one area of expertise, and a special effort has been made to explain the statistical tools available for the analysis of molecular data as clearly as possible. The result is a comprehensive volume of the state of the art in conservation genetics, illustrating the power and utility of this synergy.

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Population Genetics for Animal Conservation

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Conservation biology will succeed to the degree that its theoreticians, practitioners, and users acknowledge the larger context in which they exist, and to the degree that they respect one another’s roles, contributions and problems.

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The field of conservation genetics is evolving very quickly, due to both methodological and technical improvements. In this context, it is important that experts worldwide meet and share their knowledge about the latest theories and statistical developments. A group of scientists from the Centro di Ecologia Alpina (Trento) and the University of Ferrara decided to organize a meeting on Population Genetics for Animal Conservation. This meeting was held on 4–6 September 2003 at the Centro di Ecologia Alpina, and included many famous population geneticists and conservation biologists. This book is the outcome of this meeting. It does not correspond to a classical and comprehensive textbook, but focuses on the latest developments in conservation genetics, in a well-organized and integrated unity.

When going through the different chapters, I realized that this book does not simply reflect the situation of conservation genetics in 2003. All the most recent developments are included. I particularly appreciate that the authors of some chapters did not hesitate to share their feeling about the future of conservation genetics. Such views are usually excluded from scientific papers due to the peer-review process that promotes only well-accepted theories and methods. This is unusual in such a manual, but will be extremely useful to scientists having to design a research strategy for the next few years.

I am convinced that this volume complements extremely well the existing general textbooks on conservation genetics, and will stimulate the development of innovative studies in population genetics applied to the conservation of threatened populations or species.

Pierre Taberlet
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