

Preface

Yet another book on "Biological Invasions"? It is true, the market already provides several recent works on this topic and, in the next few years, probably many more will follow. There are, however, two important points which argue in favour of the relevance and need of exactly this book.

Most books on biological invasions treat only a small part of the subject. They cover either invasive plants or invasive pest arthropods, address invasive species of a country, an island or a habitat, discuss the impact of alien species on economy or evolution, or gather an impressive number of case studies. This book is clearly different insofar that it attempts to cover all (or at least most) of these undoubtedly very important topics. A joint effort of 42 specialists, it deals with plants and animals, includes both the terrestrial and the aquatic environment, guides us from ecology via economy to socio-economy, and comprises also administrative and management aspects. Our intention is a strong focus on mechanisms and so, in the opening chapters we analyse the main pathways of biological invasions and discuss the traits of good invaders. The patterns of invasion and invasibility point to central aspects such as land management, nitrogen pollution or climate change. A presentation of the ecological impact of invasive species, based on striking case studies from major ecosystems worldwide, also tackles the key question whether genetically modified organisms may become invasive. This all includes relevant economic and socio-economic facets. The closing chapters claim an enormous current lack of preventive means, and demand more administrative and control measures as well as eradication programs.

This all leads to my second main point, of urgent need. We already live in a global world, in which the globalizing process has started with full power only a few decades ago. Still, the pace will increase considerably, and there will be ever more people and goods moving from one point of the world to another. This complete loss of biogeographical borders will lead to much more alien species everywhere and an increasing number of these will become invasive. Invasion biology, until recently known only to a few experts, is becoming ever

more topical in newspapers, keeping governments and administrations more than busy. The public awareness of biohazard due to invasive species is rising. Still, this process, reaching from the public opinion to politicians and a growing scientific community, needs to be intensified even more to face biological invasions as the most serious threat to biodiversity.

This work is based on the joint effort of all authors and co-authors involved, and I wish to thank these all for their state-of-the-art contributions. It was truly an enjoyable task producing this book together. Warmest thanks also go to the many people behind the scenes, helping us in many ways, and to the publisher who invited me to edit this book.

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Wolfgang Nentwig