

Preface

Humankind is a part of nature. It depends on nature for its existence, its well-being and its economic activity, and is connected with it by numerous ties. Nature provides food and water for our daily existence, the raw materials for handicrafts and industry and medicinal plants for healthcare. Forests not only supply us with wood, berries, mushrooms and wild game, but also protect us against soil erosion and flooding, create the oxygen we breathe and bind greenhouse gases that endanger our climate. Natural ecosystems act as water filters, and habitats for a large variety of plant and animal species, including the wild bees which are important for the pollination of our crops. People find spiritual inspiration and fulfillment in nature together with an esthetic pleasure, rest and recreation.

In recent years, the term ‘ecosystem services’ has become popular as the designation for all these benefits which are useful to people. Nature provides many effective, low-cost and sustainable solutions for human needs. Often however, people are not even aware of the role of natural resources or ecosystem services, or they see nature simply as an endlessly bubbling, never slacking fountain of human prosperity. Careful dealing with nature and investment in an intact natural environment is often considered a luxury, and conservation is generally a secondary issue. No wonder biodiversity is declining at a rapid pace worldwide—and also in Germany—and that the capacity of ecosystems to provide services is also being reduced to such a degree as to cause major concern.

Generally, growing economic use of nature involves a reduction of the regulatory and sociocultural services rendered. One goal of the concept of ecosystem services is to better demonstrate these contexts and move them into the public consciousness. It is therefore important to recognise and improve the standing of the non-marketable services of nature by improving the understanding for the systemic context and the dynamics between ecosystem properties, functions and services, natural capital and their beneficial effects in various spatial and temporal scales, and in connection with their multiple drivers. Valuating the services provided by ecosystems and landscapes—i. e. assigning economic/monetary value to them—is in accordance with the widespread tendency of our times. Often, the argument is raised that ‘concrete’ arguments need to be developed to persuade political leaders, and to gain broad acceptance by business and society at large. After all, monetary value and supposedly ‘hard’ figures are the language that is most easily understood, especially outside of the conservationist community. However, can we and should we really reduce nature, in all its complexity and its immeasurable significance for us human beings, to monetary values?

The reason and goal of the first comprehensive German-language discussion of this issue in 2013 was to present the multiple relationships between economics, ecology and ethics in a theoretically well-grounded manner, and to provide practical recommendations for the analysis, evaluation, control and communication of ecosystem services. We seek to address all those interested in building bridges and crossing borders between disciplines: both scientists and practitioners in the administrative, volunteer and professional spheres, especially those who deal with the environment, conservation and regional and land-use planning; experts from the business community, activists in politics, students, and all those interested in fundamental ecological, economic, ethical and environmentalist issues and issues which affect ecosystems and landscapes.

After a very positive reception of the German book, the English translation has now been completed. Springer-Spektrum as editor has initiated this project and made it possible; the organisation and the cooperative effort were carried out in a notably pleasant atmosphere. We would like to thank the numerous authors, from Dresden to Bonn and from Freiburg to Greifswald, for their contributions, and also apologise to those of our colleagues working in this and similar areas whom we were unable to accommodate for reasons of space. We hope that the present treatment will spark a constructive discussion with them. The length of the book was strictly limited, so that, in our view, while a number of very essential aspects of this highly complex topic have been addressed, others unfortunately have not.

Most of the authors provided their own translations; Phil Hill of Berlin translated the rest, and the publisher provided the final redaction. Our sincere thanks to all.

Phil Hill passed away suddenly on 22nd of December 2014. With the book we want say thank you to you, Phil, for the wonderful years of collaboration.

Karsten Grunewald and Olaf Bastian

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