

New Publications

Salt Marsh Management

Esselink, P., 2000. Nature Management of Coastal Salt Marshes. Interactions between anthropogenic influences and natural dynamics. Koeman en Bijkerk bv, Haren, Hfl 40 (Euro 18,20).



This is the title of an interesting thesis written by Peter Esselink, University of Groningen, The Netherlands. It was published in October 2000. It contains 8 chapters and 2 shorter 'boxes', in a well-bound, well-illustrated book (249 pages, 246 in English). Six of the chapters have been published in scientific journals since 1996; the others can only be found in the thesis. Most of the fieldwork of Peter Esselink was carried out in the Dollard area, the brackish bay on the Dutch-German border. One chapter deals with the effects of sheep grazing on the vegetation on Friedrichskoog, Germany.

The Dutch Dollard salt marshes (740 ha) proved to be very suitable for research on the effects of nature management. Two third of their total surface has been managed as nature reserve since 1981, including substantial reduction of grazing pressure and neglect of the drainage system. The other 270 ha are still in agricultural use, with high grazing pressure and ditching, and are excellent for comparison. So questions about long-term effects of nature conservation management in the direction of 'Naturbelassen' ('left to nature'), but with some grazing by cattle (according to the Dutch ideas about salt marsh nature management) could be investigated here! What would happen with erosion and sedimentation rates, and what about vegetation development in poorly drained situations?

Peter cooperated with several other scientists, and organized the help of quite a number of students. This explains partly the size of his thesis. It gives chapters on accretion, drainage, vegetation developments and the influences of grazing livestock on vegetation development, as well as the effects of grazing by geese. Especially graylag geese proved to be important. One chapter deals with the habitat preference of graylag and barnacle geese, and a 'box' of 7 pages reveals the relationship between breeding redshanks and vegetation development.

What I appreciate most are the general introduction (on the development of the mainland salt marshes and human influences since the early days of the Wadden Sea), and the concluding chapter

on future nature conservation. The latter stands for a careful analysis of the present situation and the expected developments in the mainland salt marshes, and judgments about strategies to make the best of them. The result is a book that may contribute to the background and vision of others, especially those who are involved in management of the Wadden Sea area. Highly recommended!

This book can be ordered directly at Peter Esselink (p.esselink@biol.rug.nl), Koeman en Bijkerk bv, PO Box 14; NL -9750 AA Haren.

Jaap de Vlas.

Management of Polders

Goeldner-Gianella, L., 2000. L'Allemagne et Ses Polders. Conquête et renaissance des marais maritimes. CTHS Paris, pp. 254, 250 F.



This book shows how a traditional land-winning technique, the embankment of polders, has been abandoned at the Wadden Sea costs during the last decades. The different reasons for discontinuing these embankments, which had been carried out over about fifty years, are analyzed: the development of coastal protection policy and agriculture, the opposition of ecologists against the embankments, the increasing knowledge in salt marsh ecology, and also the progress in the nature protection legislation. The discontinuation of these embankment techniques and the possible consequences of the current sea level rise resulted in a completely new strategy for coastal protection.

The book widely addresses the questions of the general public concerning the development of the European coasts and the still existing interest conflict between nature conservation and coastal defense.

This case study of the German coast is of particular interest for scientists and managers concerned with the protection of wetlands and coastal defense in Europe. It is an excellent overview of the development of the coastal protection policy and techniques in the Wadden Sea with focus on Germany and the Schleswig-Holstein polders combined with factual information in tables and maps. The book is written in French, which, unfortunately, limits the number of readers. The author, Lydia

Goeldner-Gianella, has a degree in geography and is currently teaching at the University of Paris. Her work on this topic received an award from the Chancellor of the University of Paris in 1998.

Monitoring in Schleswig-Holstein

Wattenmeermonitoring 1999. Schriftenreihe des Nationalparks Schleswig-Holsteinisches Wattenmeer. Pp. 51.



The results of the Schleswig-Holstein part of the Trilateral Monitoring and Assessment Program (TMAP) are compiled for the year 1999 and were presented during a two-day workshop on Sylt in November 2000. Besides the recent status and developments concerning breeding and migratory birds, common seals, fish, eelgrass, macroalgae and blue mussels the report focuses on socio-economic aspects. Since 1998, socio-economic monitoring (SÖM) has been carried out in the Schleswig-Holstein National Park (see also Gätje, WSNL 2000, No. 1). The 2000 report is currently under preparation.

Hamburg Wadden Sea Atlas



Nationalpark-Atlas Hamburgisches Wattenmeer. Nationalparkplan Teil 1. Naturschutz und Landschaftspflege in Hamburg. Schriftenreihe der Umweltbehörde. Heft Nr. 50, 2001. Umweltbehörde Hamburg, pp. 168.

This publication is a valuable amendment of the two volumes of the "Umweltatlas Wattenmeer" (see WSNL 1999, No. 1) and focuses on the National Park of the Hamburg Wadden Sea, the smallest of the three German national parks. The atlas entails a comprehensive overview of the recent knowledge of all important aspects concerning nature values, human uses and historical and landscape values on the islands of Neuwerk, Scharhörn, Nigehörn and the surrounding tidal area supplemented with information about nature protection, management and monitoring. Each article consists of a thematic map together with one page of an easy-to-read text. The huge amount of detailed information can therefore easily be found and understood by everybody.

Breeding Birds in the Wadden Sea

Rasmussen, L.M., Fleet, D.M., Hälterlein, B., Koks, B.J., Potel, P., Südbeck, P., 2000. Breeding Birds in the Wadden Sea in 1996. Results of a total survey in 1996 and of numbers of colony breeding species between 1991 and 1996. Wadden Sea Ecosystem No. 10. Common Wadden Sea Secretariat, Wilhelmshaven, pp. 122.



With the publication of this report, it is the second time that a complete breeding bird survey in the entire Wadden Sea is presented by the Joint Monitoring Group of Breeding Birds in the Wadden Sea (JMBB) in the framework of the Trilateral Monitoring and Assessment Program (TMAP). The results of the first complete survey of breeding birds of the entire Wadden Sea in 1990 were published in 1994 (Fleet et al. 1994, Wadden Sea Ecosystem No. 1). Considering the huge data set and the limited available time for a trilateral evaluation and the compilation of the report by the members of the JMBB, the publication of the results – only four years after the survey – can be seen as a great accomplishment.

The report includes the results of the 1996 total survey and a comparison with the first survey five years ago. Furthermore, for the colony nesting species, changes in distribution and abundance are given for the first time on an annual basis for the period between 1991 and 1996. The report reflects the fact that the joint breeding bird monitoring program has now been operational for a longer period of time, allowing for the analysis of long-term series. The evaluation consists of three main parts: firstly, an overview on the basic information regarding the study area and the methods used in the 1996 survey; secondly, the results, which are given separately for each of the concerned 31 species; and thirdly, the discussion chapter, which confirms the outstanding significance of the breeding bird fauna of the entire Wadden Sea. It is shown that the breeding bird monitoring provides a mechanism for evaluating the nature conservation actions and achievements in the Wadden Sea.

Climate Change



Lozán, J.L., GraBl, H., and Hupfer, P., (Eds.), 2001. Climate of the 21th Century: Changes and Risks – Scientific Facts. pp. 448, ISBN 3-00-006227-0, \$ 30.

In this book, the reader will find information about future trends in air temperature, precipitation, sea level, mountain glaciers and other climate change related variables. An overview is provided on the history of climate and the causes of change. The consequences of climate change are described concerning warming and rising sea level but also future ones like the social impact of displacement of climatic zones and the consequences for the world economy, including water and food supplies which cannot yet be adequately assessed. The book gives a comprehensive description and an assessment of the main findings of recent climate investigations.

The book can be order directly at J.L. Lozán, Imbekstieg 12, 22527 Hamburg, Lozan@t-online.de

Fish Migration



Jager, Z. Upstream fish migration: Northern Netherlands coastal zone. RIKZ Report 99.022, pp.37.

55 estuaries are located along the Dutch Wadden Sea coast, only one of which still has a relatively natural gradient between fresh water and salt water: the Ems Dollard. The rest is separated by dikes, dams and sluices that make it difficult or impossible for fish to migrate. As a result, of the 11 migrating fish species originally native in the Netherlands, four are now extinct and five are on the Red List.

An integrated approach considering the whole catchment area of an estuary is necessary to improve the conditions for migrating fish. This concerns the barrier between salt and fresh water but also the freshwater itself. Are there suitable habitats upstream, are they accessible, and is the water quality satisfactory? The report indicates which upriver locations may be suitable for the different fish species and which various management measures can be taken to improve the situation.