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Environmental History in Europe from 1994 to 2004: Enthusiasm and Consolidation

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ABSTRACT

This review presents European scholarship in environmental history by highlighting a limited number of works which have proved significant in their respective countries. The decade from 1994–2004 saw the development of a new scholarly network for environmental history in Europe. Members of this network have contributed to an overview about important work done in their region during the last ten years. A series of case studies on the UK, Sweden, Finland, Denmark, the Netherlands and Belgium, France, Italy, Spain and Czechia and Slovakia are offered. The emerging picture shows the diversity of approaches and themes as well as the different degrees of institutional backing and involvement into teaching curricula. The introduction discusses the language challenges in Europe and some common traits in the development are sketched in the conclusions.

KEYWORDS

Review, European, environmental history, 1994–2004.

INTRODUCTION

How, if at all, is environmental history in Europe different now from what it was in 1995, when this journal was first published? When the decade under consideration began in 1994, European environmental history had already had

some history. Coming mainly from historical geography, ecology, and different sub-fields of history such as the history of technology or agricultural history, European scholars had written pieces about human impact on nature, the changing human appreciation of nature, and a lot of other themes, but had not often connected themselves to 'Environmental History' as a distinct approach. In the late 1980s, historians with an interest in environmental matters had begun setting up a network, acknowledging the distinction of environmental history as theirs, the 'European Association for Environmental History' (EAEH). Incidentally, it has stood the test of time solely in Britain, where it still exists today as a 'UK branch'.

From 1989 until 1993, when it was still European-wide, the EAEH was able to publish a Newsletter. When, after a pause of two years, in 1995 the launch was announced of a new journal which promised a more professional way of publication and wider distribution, it was gladly welcomed in the community. Richard Grove as founding editor quickly globalised its scope and an international board ensured the quality of scholarship. But the absence of an organisation to connect scholars across Europe could not be compensated for by a journal.

So the European Society for Environmental History (ESEH) was founded in 1999. This soon became a large scholarly society and currently has about 360 members from 39 different countries, among them 28 European countries. The authors of the following survey are dedicated members of ESEH, most of them act as regional representatives in the Board.

Since 1999, ESEH has held two international conferences, 2001 in St. Andrews, Scotland and 2003 in Prague, Czechia, the third one will be held in Florence, in February, 2005. The foundation of ESEH constitutes one of the major institutional developments in environmental history over the last decade. Information about ESEH can be found on its website, www.eseh.org, or in the Societies Section of this journal, where, thanks to the generosity of the White Horse Press, a newsletter called 'Notepad' has been published regularly since February, 2002.

Self-conscious environmental historians were a rarity in Europe even at the beginning of the last decade. To meet a sizeable number of them, one had to cross the Atlantic. Colleagues from the Nordic countries were the first to establish connections with this community and invite their US colleagues to teach in Scandinavia and Finland. Such collaboration was helped by the fact that the Nordic countries are highly anglophone, and teaching in English was a possibility. It still matters how anglophone a country and her historians are. The following surveys of the current state and trends in environmental history are sorted in a rather intuitive way by perceived maturity and size of the field of environmental history in the respective regions, starting where environmental history has reached some degree of establishment and proceeding to those where it is not yet well established. This sequence corresponds somewhat to the degree of anglophony in the various regions.

Language is an important question for European scholars. The European Union alone has 20 official languages, with at least 7 more spoken as national languages in Europe. Figure 1 shows the total proportion of European citizens speaking each language in the EU (as mother tongue or as foreign language), which makes the paramount importance of English visible at a glance.

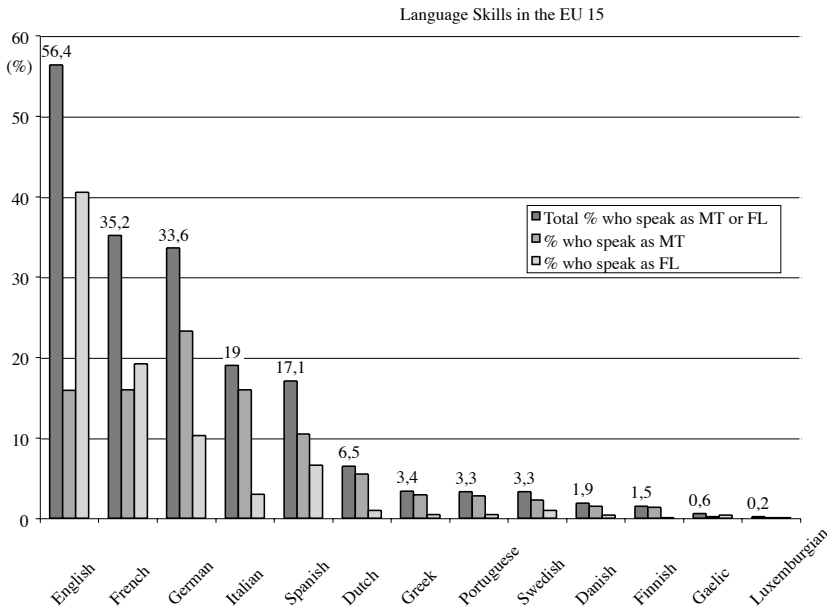


Figure 1: The thirteen languages of the EU 15 in the year 2000 as practised by number of speakers as both mother tongue (MT) or foreign language (FL).

Source: European Commission, Directorate-General for Education and Culture, Europeans and Languages: a Eurobarometer Special Survey (Data are from a December 2000 survey).

The diversity of languages and national cultures (which includes scholarly culture) sets Europe apart from the rest of the world, and is a major factor to be considered in the development of scholarly networks and scholarship at large. For that reason, this article is a collaborative effort. With one obvious exception, the authors write about communities of scholars for whom English is a second language. For most scholars, visibility of their work is influenced to a higher degree by the language it is written in than by any other factor. In some countries (in particular the smaller ones) articles in foreign languages are valued highly, often higher than books in the native language, to the point that they determine academic careers. This is due to a perceived need for international

visibility. To avoid this distortion, works in several European languages are presented hereafter, even if we are aware that this will limit the international readability of some of them.

As the authors of the chapter on the Nordic countries point out, about 1000 works within the scope of environmental history were published in Finland and Denmark alone in the past ten years. The scope of this article forbids a comprehensive survey, and even an abridged survey would yield an annotated bibliography rather than an overview. Instead of attempting completeness, the authors have been asked to highlight one or two of the most important contributions to environmental history, which have been accomplished in their region. Selection criteria were either scholarly value or the controversy or publicity the work created. Each of the following articles is a limited glimpse of what is considered important by the authors, and the articles differ in what they see as environmental history. The struggle to have environmental history recognised as a sub-discipline of historical studies in a country sometimes leads to an emphasis on difference to related work, in particular in regions where the field is relatively new. Relations to forest history can be difficult. That is particularly visible in some of the articles. As the thematic focus is different in each contribution, an overall picture of the diversity of themes and approaches within Europe emerges. In a few instances, work by European scholars about non-European themes is mentioned, which helps to complete the picture of international communication and collaboration within environmental history.

There might be – and in some cases surely are – works from the last ten years, which are not covered by this article, such as environmental history studies in Portugal, Greece, Poland, Ireland, Norway, Iceland and both the Balkan and the Baltic states. Neither Romania nor Bulgaria is included. This could not be helped here. Further development of the network of ESEH will hopefully bring scholarship from these countries to international attention. No chapter on Russia and the other ex-Soviet republics in Eastern Europe such as the Ukraine, Belarus and Moldavia, could be included due to the sadly premature death of ESEH's regional representative in this region, Alexei Karimov.

THE UNITED KINGDOM

ROBERT A. LAMBERT AND JAN OOSTHOEK

Modern British environmental history has its roots in a number of disciplines. Major contributions have been made in the past by landscape history, economic and social history, historical geography, archaeology, environmental science, philosophy, and wider studies of the British Empire. As the subject has matured in Britain, more scholars and institutions have embraced its potential. A body of historiography and lively debate around the subject has developed over the last ten years². Some of the most powerful strands of British environmental history

are recognisable in the works of the main contributors over the past decade: Scottish historian T.C. Smout, geographer Ian Simmons, colonial historians Richard Grove and John MacKenzie, American historian Peter Coates and historical geographer John Sheail.

Chris Smout is one of the founding fathers of environmental history in Britain in the modern era, inheriting the legacy of the earliest pioneers (W.G. Hoskins, Oliver Rackham and Peter Brimblecombe³), and building upon it. His contributions have been dynamic and wide ranging; promoting institutional support for the discipline; producing research publications; using teaching, PhD supervision, external lectures, the media and conferences; and engaging with environmental policymakers/managers and the public. In 1990 he gave the Raleigh Lecture on British History at the British Academy in London, taking as his theme the rise of green consciousness in Highland Scotland 1750–1990. In 1999, he delivered the prestigious Ford Lectures on British History at the University of Oxford, under the title: ‘Use and Delight: environmental history in northern Britain since 1600’. These six lectures led to the book *Nature Contested* (2000), which has won recognition from scholars, students and those beyond the classroom⁴. Smout’s work is distinguished by a lifelong curiosity for wildlife and landscapes, and a desire to produce scholarly and accessible environmental history, coupled with an ability to offer insights from both the natural and social sciences. As he has often observed, we do need to understand that ‘Nature, like us, has a history’.

There has always been a strong interest in the interaction between people and the environment within the historical geography community. The geographical approach reached new heights during the 1990s with the publication of Ian Simmons’ book, *Environmental History: A Concise Introduction* (1993), an ambitious work offering ‘A history of the world in only five chapters’.⁵ This study details how humans, with the help of natural processes, have transformed the globe. As Simmons explained, ‘The task of this narrative is to see how human communities and natural changes together have produced today’s variegations’.⁶ Although interaction is mentioned, the action is mainly a one-way street. This problem is corrected in *An Environmental History of Great Britain* (2001), which provided an overview of the development of the British ‘environment’ from the end of the last Ice Age until the present.⁷ This expansive work showed, in a systematic way, how landscape and human communities changed together. Simmons synthesised material from a variety of disciplinary backgrounds such as physical geography, archaeology, place name analysis, as well as social/economic history and the history of science. He also epitomises the interdisciplinary approach linking geography and history with the natural sciences.

Some studies have approached environmental history from an economic point of view. A good example is B.W. Clapp’s *An Environmental History of Britain since the Industrial Revolution* (1994).⁸ Whilst this book is widely used as an introductory textbook to the subject in British universities it is, on deeper

reflection, much more of a standard economic and social history than an environmental history. The weakness with Clapp's approach is that there seems to be little interaction between humans and the natural environment. His discussion of pollution provides no ecological context to tie this issue to the wider environment that lies beyond the industrial heartlands of Britain.

An important strand in British environmental history developed from the study of the history of the British Empire and the effects of colonialism on the environment. Traditional studies of Imperialism emphasise blind environmental degradation and disruption of pre-colonial ecologies by aggressive resource extraction. In *Green Imperialism* (1995), Grove offers evidence that some colonial administrators were very aware of the fragility of local environments and indigenous environmental knowledge. Often they pursued a policy to protect landscapes, soils and forests from the negative impacts of colonial exploitation. Grove argues that the colonial context was the breeding ground for early environmental ideas, which were transported back to Europe where they fuelled early environmental concerns. Grove's contribution to environmental history is that he sees the development of environmentalism in different parts of the world, not in national isolation, but across time and space.⁹ The same argument is made by colonial historian John MacKenzie in *Empires of Nature and the Nature of Empires* (1997). This book surveys the lively historiography of the environmental history of the British Empire suggesting fresh modes of analysis and intimate connections with, for example, the important Scottish colonial experience.¹⁰ Both Grove and MacKenzie place British environmental history in a global context and make clear that any understanding of the domestic British environment cannot be separated from the colonial legacy.

Until recently few comprehensive works existed encompassing the whole history of Western environmental thought and attitudes to Nature from antiquity to the present. Peter Coates's *Nature: Western Attitudes since Ancient Times* (1998) changed that. Coates begins in ancient Greece and Rome and works his way up through the ages to the environmentalism and post-modern thinking of the late twentieth century.¹¹ His book contributes to an emerging literature on the history of environmentalism and nature conservation that has appeared over the past decade. John Sheail contributed two volumes charting the history of nature conservation, national parks and environmental policy in the United Kingdom during the twentieth century¹². Sheail is an historical geographer by training, but has worked as a governmental Scientific Officer (NERC). This has given him a unique internal perspective on the development of conservation policy in Britain. His approach is founded on the study of political and social developments that have shaped the British environment in recent times. His book *An Environmental History of Twentieth Century Britain* (2002) charts the way in which the UK has dealt with environmental problems and changes during that century. Sheail's work is characterised by a meticulous attention to

detail, a remarkable use of public and private archival material, and an intimate understanding of administrative and institutional histories.

The creation of an institutionalised base at university level has been important for the wider development of British environmental history. Here Scotland led the way. The first Institute for Environmental History in Europe was established at the University of St. Andrews in 1992, on the initiative of T.C. Smout. The Institute organised conferences on themes within environmental history: such as woodland history, species history, soil history, conservation history and landuse history. These annual conferences led to a series of edited publications supported by Scottish Cultural Press, and later Tuckwell Press.¹³ Whilst Cambridge University Press and Edinburgh University Press have both developed book series linking 'Environment and History', no British publisher has done more to support the overall development of environmental history than White Horse Press in Cambridge, run by Andrew and Alison Johnson, both through the publication of the international journal *Environment and History* (since 1995), and a series of monographs.¹⁴

The Institute for Environmental History at St. Andrews became a launch pad both for further institutional recognition of the discipline and the winning of external funding from national Research Councils. First came two funded PhD scholarships: one at St. Andrews (from 1993–1996) on conservation history, one at Stirling (from 1997–2000) on forest history. A Leverhulme Special Research Fellowship was held at St. Andrews (from 1998–2000) on the history of the grey seal in Britain.¹⁵ The Institute also launched the popular Scottish Woodland History Discussion Group (SWHDG) in 1995, subsequently holding annual conferences and publishing proceedings as *Notes*. From these early successes came a desire for expansion and increased university co-operation. A joint research centre was proposed linking academics in the Schools of History at St. Andrews and Stirling, and in 1999 the concept of establishing a Centre for Environmental History and Policy (CEHP) won three years of substantial funding from the Scottish Higher Education Funding Council. In October 2002, CEHP received four years additional funding from the Arts and Humanities Research Board (AHRB) and was re-launched as the AHRB Centre for Environmental History with a multi-disciplinary research focus on waste.

Some History departments at British universities are now offering introductory courses in environmental history. The Universities of Nottingham (England) and St. Andrews (Scotland) offer the only full postgraduate degree programmes in environmental history in Britain, but it is expected that more institutions will follow. A handful of British universities offer isolated undergraduate or postgraduate modules, or have faculty working on environmental history.¹⁶ With all these combined teaching and research initiatives the future of environmental history in Britain looks bright. The fact that students are being increasingly drawn towards the discipline is reflected in the ever-increasing number of undergraduate and postgraduate dissertations being completed on

aspects of environmental history. More and more, environmental history is being seen as valid and distinctive.

FINLAND, SWEDEN, DENMARK

PER ELIASSON, POUL HOLM AND TIMO MYLLYNTAUS

Research in environmental history has experienced strong growth in the Nordic countries in the last years. A recent bibliographic survey of Finland identified about 300 publications in the field within the period 1994–2003.¹⁷ A similar bibliographic study of Denmark identified about 700 contributions in the same years.¹⁸ The scope of issues under study seems to be constantly expanding. Ph.D. theses and thematic anthologies are the most representative genres of publications, while international peer-reviewed publications are less common. A bibliometric study indicated that Swedish and Finnish researchers are more inclined than Norwegian and Danish colleagues to publish in international journals.¹⁹ Both in Denmark and Sweden research funding for environmental history was stronger in the mid- to late 1990s than in recent years, while Norway and Finland seem to be increasing funding.²⁰

Finland

The relationships between humans and nature have been examined by Finnish historians in various ways since the eighteenth century. However, a new concept *ympäristöhistoria*, environmental history, with a modern definition of the discipline was coined in the mid-1970s and since then, environmental issues have been studied within a new problem-oriented framework.²¹

Traditionally, forests have been the most popular topic in Finnish environmental history partly because forested wilderness belonged to the inspiring symbols of the national awakening in the nineteenth century. In recent research, the focus has moved from industrial fellings, use and exports to issues on the principles of forestry,²² interest groups in the multiple use of forests,²³ and forestry conflicts.²⁴ In various studies, Finnish peculiarities have been analysed by applying methods of cross-national comparison.

The histories of watercourses, lakes and rivers have become accompanied with research on urban water supply, pollution and wastewater treatment. This 'new water history' has especially attracted a younger generation of graduates and postgraduates, who have put the use of water resources in societal context.²⁵

As to the history of landscapes, urban areas have risen alongside more conventional rural settings, such as national landscapes of remote forests and lakes.²⁶ Landscape history is also connected to the history of nature conservation, another major field in Finnish research. Environmental movements have

been active for three decades, and their history has become a popular topic for graduate students preparing their Master's theses.

Besides the past of their own country, Finns have also begun to research the environmental history of other countries.²⁷ Environmental issues of the ancient Middle East and Rome,²⁸ the USA,²⁹ the USSR-Russia,³⁰ and Africa³¹ have been dealt with. Quite often international research topics fit well into Finnish research traditions, such as forests, water, nature conservation and famines.

Sweden

Research in Sweden, done mainly in form of dissertations, has concentrated on two themes: the physical and mental construction of the modern Swedish rural or city landscape and the international post-war debate on economic growth and resource crisis.³²

Work on electrification and the use of rivers, old metal deposits, introduction of artificial fertilisers, history of science and the construction of a national landscape and zoo parks, forestry, forest history and biodiversity, energy history and CO₂, floating of timber, sewage systems and sanitation and movements critical of modernisation fall into the first thematic category.³³

The second category is represented by research concerning the two sides of politics and economic growth in the post-war period. The origin of the idea of unlimited economic growth is analysed in Eva Friman's dissertation. According to her findings, this concept is surprisingly new, formed in the neo-classical economic theories in the post-war period. Another interesting focus is the growing concern about a resource and population crisis. This debate is treated by Björn-Ola Linnér, who writes about the Swedish-American food scientist Georg Borgström (1912–1990) as a central focus. As Friman shows, the problem of scarcity was believed to be resolvable by changing relative prices, bringing technological change and substitution as a rescue. Linnér can show how this rather naive faith was challenged by a counter-discourse questioning not only the possibilities of long-term economic growth with limited resources. It also questioned the social consequences of uneven distribution of these resources, especially food. These researchers link the Swedish political debate via historical investigation to the international arena in an exemplary way.³⁴

Denmark

Two Danish studies in environmental history have enjoyed widespread international attention in the last decade. The first was the doctoral dissertation by Thorkild Kjærgaard, *Den danske revolution 1500–1800. En økohistorisk tolkning* (1992) published in English in 1994 under the title *The Danish Revolution 1500–1800: An Ecohistorical Interpretation* with Cambridge University Press. This study won international acclaim for its synthesis of the environmental

effects of agricultural practices of the Ancien Régime. Danish reviewers were however highly critical of what they perceived to be a cavalier and distorted use of sources. Due to this mixed reception Danish historians hesitated to follow up on Kjærgaard's innovative, if contentious work. Bo Fritzbøger's recent work on Danish forest history is, however, a new and promising venture, which has won critical acclaim, while it still awaits international publication.³⁵

Even more contentious is the work by the Danish political scientist Bjørn Lomborg, *The Skeptical Environmentalist* (Cambridge 2001). While hardly a work in environmental history in the traditional sense, we cannot disregard the tremendous effect of this book on international, especially American, politics. The work finds most of its argumentative power in time series of indices of environmental hazards. Lomborg has been criticised in a number of international journals for a one-sided, over-optimistic interpretation of recent human environmental impacts. Nevertheless, he remains highly influential and his work has hitherto failed to attract a systematic critical analysis by environmental historians.

Finally, because of its Danish lead, we might mention the ongoing international project on the History of Marine Animal Populations (HMAP), which is a global project, headquartered at the University of Southern Denmark. The project aims to stimulate international comparative work on past ocean history in a cross-disciplinary effort involving *inter alia* biologists, archaeologists and historians.³⁶

Teaching of environmental history is well developed in the Nordic countries, for example with a graduate school in Esbjerg, Denmark as one of the outstanding new contributions to the scene, with the long established institute for environmental history in Umeå, Sweden, and a chair with an emphasis on economic, social and environmental history in Turku, Finland.

NETHERLANDS AND BELGIUM

PETRA VAN DAM

In the Netherlands and Belgium, a small group of environmental historians is very active. A platform for discussion is the Dutch language *Yearbook for Ecological History* which comprises abstracts in English and reviews foreign literature.³⁷ There is no Chair for environmental history yet, but a number of universities have both undergraduate and graduate courses in environmental history topics including landscape, water management, pollution, and environmental ideas.³⁸ Since Dutch is a small language in the world, in the following I cite besides PhD theses and major books also the English-language articles which summarise such works.

The western parts of Belgium and the Netherlands are situated on the coastal plain adjoining the North Sea covered by low-lying massive peat bogs and extensive sand and clay sediments, which are cut up by numerous branches of

the rivers Rhine and Meuse. Due to their geographic position, both countries have a long tradition of the history of water management with strong roots in historical geography and the history of politics and law. Recently a 'new hydraulic' history is arising that integrates the old approach with ecological questions, social-economic history and the history of technology in order to come to an environmental approach to water history. Petra van Dam, Dries Tys and Tim Soens have written the first PhD theses in this area on the early modern period. Before 1900 water quantity was the main concern of water authorities, yet in the twentieth century water quality has become their main focus. The pioneering study by Jan van den Noort shows, how in the late 1970s the share of water levies spent on water cleaning surpassed all other expenses. Typical, too, for the coastal zone were problems with increasing levels of salt in groundwater and surface water, as a consequence of industrial effluents and intensive drainage, and because the sea encroached on the land after dredging works in the mouths of the main rivers in the interest of international shipping (Rotterdam harbour).³⁹

Belgium and the Netherlands were heavily urbanised already in the Middle Ages, and in addition Belgium was among the first countries to industrialise, facilitated by its large coal reserves. Following up on the pioneering studies on urban pollution by Henk van Zon and Peter Poulussen, Christophe Verbruggen carried out a study on pollution in nineteenth century Ghent. In contrast to other studies of urban pollution such as the ones on Alkmaar by G. Vis and on Leiden by Cor Smit, he applied an innovative quantitative approach to the city registers 'de commodo' and 'incommodo', containing the environmental complaints of the citizens, which enabled him to produce a systematic survey of shifts in the arguments. The transition from fear of air pollution to water pollution occurred in the last quarter of the century and the general public only very slowly became aware of inorganic pollution.⁴⁰

The history of the nature conservation movement and of perceptions of nature is another well developed field. Henny van der Windt published a groundbreaking study demonstrating that the early protectors concentrated very much on birds, which is no surprise in a wetland dominated environment. Over time they changed their reasoning from more economic- and individually-oriented ethical arguments to more ecosystem-oriented ethical arguments.⁴¹

GERMANY, AUSTRIA, SWITZERLAND

ANDREAS DIX AND CHRISTIAN PFISTER

The last ten years of environmental history in Germany, Austria and Switzerland can be characterised as a period of institutional stabilisation after a boom in the late 1980s. Environmental history has become a more and more accepted historical sub-discipline. Some chairs at universities were renamed to include

environmental history or newly founded like in Darmstadt, Bochum, Freiburg, Braunschweig and Bern. In 2004, a collaborative graduate centre with the title 'Interdisciplinary Environmental History' was established at the University of Göttingen under the direction of Bernd Herrmann. In Austria, a cluster around the new established 'Zentrum für Umweltgeschichte' has formed, comprising teaching at the University of Vienna and research at the University of Klagenfurt's Vienna Campus. In Switzerland, environmental history is taught in Zürich in combination with the history of technology (David Gugerli ETHZ), in Geneva (François Walter) and in Bern (in terms of economic, social and environmental history, Christian Pfister). A fourth chair is currently being established in St. Gallen, again for economic, social and environmental history.

Over the last years several overviews about the wide range of topics and methods of environmental history have appeared.⁴² A long missed introduction, now written by Verena Winiwarter, will appear later this year.⁴³ At the moment most research is published either in specialised or in regional journals. Only a few books reach a wider audience. Probably the most important contribution in this sense – with an enormous echo in mass media – was Joachim Radkau's world history of the environment titled 'Nature and Power'.⁴⁴ In the introduction of this book Radkau tries to formulate a concept of environmental history within a political context. He also reviews popular myths of environmental history. In the following five chapters the historical interplay between human societies and their natural environment is discussed. He analyses popular and influential topics in these chapters, such as the question whether the deforestation of the Mediterranean caused the decline of the Roman Empire or not, the hypothesis of the 'tragedy of the commons', colonialism as a watershed in environmental history and the ecological consequences of growing globalisation from the mid-nineteenth century onwards. This book is well written and it is not least its good style that makes it so influential. Another overview with a perspective on world history is Rolf Peter Sieferle's 'Looking Back on Nature'.⁴⁵ Sieferle discusses the three great stages of human development (hunter-gatherer, agrarian and industrial society) with a focus on the interaction between humans and nature. He underlines the ecological consequences of energy and material consumption in lucid prose. In the last chapter his story becomes more and more pessimistic. This book is based on Sieferle's groundbreaking empirical research and book on the 'subterranean forest', which was translated into English in 2001.⁴⁶ The discussion about historical changes of energy and material flows has become important on the agenda of environmental politics but has also become an empirically based, important part of environmental history. A fundamental book for this approach is Marina Fischer Kowalski's 'Social Metabolism and Colonisation of Nature'.⁴⁷ The analysis of material and energy flows also made it possible to bridge the gap between social and natural sciences and offered the chance to describe the great changes in environmental history with a genuine theory of interaction.

In the mid-1990s, Christian Pfister triggered a major debate on the question whether the 1950s as a period of increasing consumption of fossil fuels should be considered as an era of fundamental change.⁴⁸ In this debate it became clear that most of the profound changes occurred at the end of the 1950s. It is now accepted that the acceleration of global energy consumption and pollution can be explained by the interaction of two factors – namely economic growth and the decline of relative prices of fossil fuel.⁴⁹

Significant results were obtained in historical-climatological research since the early 1990s, both on national level and in the framework of international research programmes. The main focus is on data, methods, definitions of the ‘Medieval Warm Period’ and the ‘Little Ice Age’, synoptic interpretation of past climates, climatic anomalies and natural disasters, and on the vulnerability of economies and societies with respect to climate change as well as on images and social representations of past weather and climate.⁵⁰ Historical climatologists are increasingly called to comment on current climatic extremes in the Germanophone mass media.

FRANCE

GENEVIÈVE MASSARD-GUILBAUD

In France, environmental history was not considered a sub-discipline per se until quite recently. While for years or even decades disciplines like geography, economics, law, history of sciences or philosophy have all seen the environment as a valuable topic, it was not before the end of the 1990s that the phrase ‘history of the environment’ appeared in this country, with a very small number of earlier exceptions.⁵¹ This assertion challenges the vision a number of non-French historians have of Braudel and other historians of the *École des Annales* as pioneers in the field – which they were not, in spite of the misleading translation of the title of one of Braudel’s major works.⁵²

This does not mean that absolutely nothing was written that could be considered environmental history. But the works we could cite were more public health history or history of technology which progressively *tended towards* environmental history, without having adopted yet what Walter and Delort (respectively a French speaking Swiss historian and a French historian) have called the ‘environmental paradigm’, i.e. an argumentative pattern in which human beings are not considered external to nature but part of it, belonging to biosphere and ecosystems.

Since about 1999, things have begun to change, and this change is coming from different places. Rural historians seem more and more interested in studies of rivers, water systems, fens and bogs, as well as land and particular spaces organised as commons. Natural catastrophes have drawn some attention, and mountains, considered as a special environment, as well.⁵³ But paradoxically,

even some of those historians who practise what in other countries would be called environmental history, resist this appellation. The reason for that is certainly a complex one and would deserve an article of its own.

A more decisive 'environmental push' has come from two other sub-disciplines: urban history and history of technology. Specialists of these fields have been the first to join ESEH and to set up and edit, together with German scholars, a series of round-tables dedicated to urban environmental history, which today connects researchers from Europe and America.⁵⁴ If one cannot say that France has produced major books in environmental history yet, many interesting works are now forthcoming in this field.⁵⁵

Until recently, most of French academic jobs, and especially lecturers' jobs, were not advertised with a title as specific as 'environmental' history. This may be changing, and for the first time this year we could see the University of Aix-Marseille seeking to appoint a lecturer in 'the history of the environment'. Another sign that things are changing, was a change of names: In June 2004 the *Centre d'Histoire des Techniques* (Paris) changed its name to *Centre d'Histoire des Techniques et de l'Environnement*. All these clues indicate that France is now trying to catch up with her neighbours as far as environmental history is concerned.

ITALY

MARCO ARMIERO

Is environmental history something new in Italy? How old is it? Of course, it is not very easy to answer this question. First, we should decide what environmental history really is; secondly, we could find roots of this discipline in the more traditional fields of agricultural and economic history. However, I do not have enough space to reconstruct the story of the origins of environmental history in Italy.⁵⁶ Without considering the remote origins of the discipline, the 1980s can be assumed as the starting point of environmental history in Italy. Some scholars, such as Giorgio Nebbia, have spoken about a 'green fashion' in Italian universities in the last few years; however, even if this were true, it has been more diffuse in the other social sciences than in history. I am not pessimistic about the future; there are many signs that show new interest for our discipline: in the last ten years, there have been meetings⁵⁷, publications, summer schools, and also a newsletter⁵⁸ dedicated to environmental history. What has been the result of this discovery of environmental history? Although interest is growing, it is still a small section of Italian historical studies. Its fate has not been helped by a resurgence of interest in political history and a crisis in social history. On the other hand, within political and public uses of history environmental issues have not yet been included, due to the weakness of green culture in the country. One could argue that forest history is the largest (and oldest) field of

environmental history in Italy. Many different approaches to this topic have been taken, e.g. ecological, geographical, cultural, and socio-economic. They testify to multidisciplinary interests and to the variety of scientific backgrounds of the scholars devoted to this issue.⁵⁹

But food, not forest, reached a wider audience: Bevilacqua's *La mucca è savia* (The savvy cow) deserves mention as a book which had a more general impact.⁶⁰ Bevilacqua deals with a very dramatic problem of contemporary societies: food health and safety. This problem has been demonstrated by the outbreak of BSE, one of the most important problems for our (economic and biological) survival. Bevilacqua came from agricultural history to environmental history. Maybe his 'Tra natura e storia' (Between Nature and History)⁶¹ signalled the transition between the two approaches: this book was very important. It offered the possibility for agricultural historians to reconsider some of their topics with new perspectives. In particular Bevilacqua proposed to define nature as a 'co-operating partner', underlining that not only human work but also nature's work produces wealth. Considering the creative power of nature, Bevilacqua reconstructs the rise and fall of capitalist agriculture, reflecting on two facts: the dependence of agricultural production on external inputs (energy, chemical fertilisers, herbicides etc.) and the ethical and health problems linked with this kind of production, in particular the life-conditions of animals and the risks for consumers.

Bevilacqua's research testifies to the connection between environmental history and history of agriculture. Other authors have taken a different approach but with similar results. For this reason, I will – for the remainder of this brief sketch – focus on historical studies of cities and industries. Even if these studies are not very well known, in the last few years there have been some noteworthy publications by several authors. We could use two of Ercole Sori's books as examples.⁶² They could in fact be considered as the first studies in Italian urban environmental history. In particular, Sori studied the techniques of water and rubbish disposal in the cities between the early modern age and the beginning of the nineteenth century. Sori's model of the main categories of urban environment history depicts the city as an ecosystem linked to the larger environment through flows of materials and energy. In his most recent book, Sori analysed the relationships between manufacturing systems and their outputs. In it, he demonstrates the old origin of the industrial problems and proposed to understand consumption as part of the production system. He did not deal with the huge pollution problems, which commenced in the second half of the nineteenth century. New research on these problems continues to be written by Italian environmental historians such as Gabriella Corona, Simone Neri Serneri and Marino Ruzzenenti, often connected with the study of environmentalism, another new branch of Italian environmental history.

SPAIN

MANUEL GONZÁLEZ DE MOLINA

Spanish environmental history is still a young field of research. It arose at the beginning of the 1990s linked to the rise of environmental movements and the emergent ecological paradigm in the social sciences.⁶³ Three preferential topics of research can be identified. The first one is the privatisation of common property, especially public forests, and its implications for a possible 'Tragedy of the Commons'. This issue has involved a large number of historians, among whom Spanish environmental history was born. Forest and environmental history are therefore often not well distinguishable.⁶⁴ Forests have also become a topic of discussions about property regimes (private, public, common, etc..) and their comparative efficiency with regard to environmental effects in the present. Historical studies of the forest have led to the publication of interesting works about rural protest, and have brought about an important renovation of Spanish social history.⁶⁵

The second topic developed by Spanish environmental historians has been a debate of historiography itself. Contributions have focused mainly on a critique of the epistemological and methodological basis and, in particular, the axiomatic assumptions in conventional ways of doing history. Within this discussion, one specific theoretical concept has gained hegemony. Spanish environmental historians have claimed that environmental history is a complex *approach* which tries to explain the human past in an integral way by using the methodology of both natural and social sciences.⁶⁶

Finally, environmental history has made a decisive contribution to a traditional debate in Spain, the one about the country's 'economic backwardness'. Some historians continue to think that agriculture was unable to stimulate economic growth and see this as the reason why Spain was not an industrialised country up to recent days. Differences in the average yields of cereals obtained in Spain and in Northern Europe seemed like an irrefutable proof of such backwardness. Practically from the beginning of the Modern Age, Spanish agriculture could not increase its productivity and could not provide labour, capital and a market for industrial production. Agrarian backwardness was considered one of the main reasons for other pathologies in Spanish society which hindered 'modernisation', like caciquismo, tax weakness, and illiteracy.

Researchers doing environmental history have questioned this notion of backwardness by using theories and methodologies from ecological economics and agro-ecology for their historical analysis. The results show that environmental limitations are the main reason for the observed low agricultural yields. Evolution of crops depended on the possibility to overcome typical factors limiting growth in traditional 'organic' agriculture, in particular water and nutrient availability.⁶⁷ Until market integration broke up the isolation of agrarian systems and the more or less circular flows of both energy and materials, the distribution and type of

crops was closely linked to the possibilities of the respective environments, as well as to the food needs of the population and the demand of a very modest local and regional market. Institutional and social reasons underlay the relative 'backwardness' of Spanish agriculture, which persisted after chemical fertilisers, machinery and improved seeds had become available.⁶⁸ Diffusion of these technologies was again influenced by environmental constraints.⁶⁹

As can be seen, the outcome of these ten years is modest but encouraging, not only because of the quantity and quality of contributions that we have outlined, but for the current situation of environmental historiography in Spain, which grows quickly. The publication of the main contributions at the second national meeting of environmental history, recently held in Huesca, is an evident proof of this growth.⁷⁰

HUNGARY

LAJOS RÁCZ

Several factors encouraged the development of Hungarian research in environmental history since the 1990s. As in other countries, disciplinary research approached a crisis, which led to more attention and better financial means being provided for interdisciplinary research. By the 1990s, political monitoring of scholarly work disappeared. The international prosperity of ecological studies and the exceptional attention to ecological ways of thinking also helped the establishment of the field in Hungary.

The most traditional branch of Hungarian environmental history is historical geography. In this tradition, Pál Beluszky wrote comprehensive survey monographs on the historical geography and settlement history of the Great Hungarian Plains and the entire Carpathian Basin.⁷¹ Sándor Frisnyák has produced the definitive survey of Hungary's historical geography. Zoltán Hajdú's bulky monograph dealt with the history of the Hungarian administrative system. Other historians situated themselves in the tradition of examining historical space: Gyula Kristó published a monograph on the emergence and development of the Hungarian Counties, while Lajos Timár examined nineteenth- and twentieth-century Hungarian urban societies.⁷²

The Institute of History at Eötvös Loránd University (Budapest) under the direction of Ágnes R. Várkonyi established the first school and seminar where education and research on environmental history was carried out from 1989 onwards. Students there were primarily interested in changes of everyday life, forms of economy and farming, and questions of mentality in late medieval and early modern Hungary.⁷³

Topics for the other large group of Hungarian scholars of environmental history are situated at the interfaces of history, geography, geology, and meteorology. László Kordos attempted a reconstruction of the environmental circumstances

of prehistoric time, using geology, speleology, and anthropology. János Mika tried to chart the future perspectives and regional consequences of climatic changes.⁷⁴ Based on historical sources, Andrea Kiss and Lajos Rácz examined the climatic and environmental changes of medieval and modern periods.⁷⁵ Attila Kerényi's summary work deals with general and regional questions of environmental protection.⁷⁶

Landscape reconstruction was attempted with the tools of medieval archaeology. András Pálóczi Horváth analysed the physical environment of medieval settlements, Károly Takács reconstructed the medieval hydraulic system of Hungary, József Laszlovszky laid out a general framework of human-nature interactions for medieval society and their physical environment and Mariann Bálint prepared reconstructions of the landscape of central parts of medieval Hungary. András Grynaeus offered a dendrochronological analysis of the Carpathian Basin since Roman times.⁷⁷

Scientists who view the symbiosis of humans and their animate and inanimate environment as a sort of ecosystem form yet another direction of Hungarian environmental history. Zsolt Molnár's comprehensive analysis deals with changes of the historical landscape and vegetation. Péter Szabó is investigating systems of medieval forest economy.⁷⁸ Balázs Borsos is currently writing a monograph on the traditional economic system of a well-defined geographical unit, the Bodroglököz.⁷⁹ András Lányi is the most famous Hungarian proponent of environmental ethics and the political philosophy of environmentalism.⁸⁰

Since the beginning of the 1990s, two Hungarian universities offer education in environmental history and human ecology. Besides the aforementioned Institute of History and Sociology of the Eötvös Loránd University, environmental history courses are offered at the Institutes of Geography and History of the University of Szeged. The privately financed Central European University in Budapest offers some environmental history education in its Department for Medieval Studies.

CZECHIA AND SLOVAKIA

LEOS JELEČEK

In Czechia and Slovakia, environmental history originated in the 1990s. Prior to that, only few works were published, particularly in historical geographies of the environment.⁸¹ The term 'historical ecology' was first used in the late 1980s as title for the only collection of essays.⁸² Several works by historians in this period conceptually correspond with Donald Worster's second level of environmental history.^{83,84} 'Environmental history' was introduced in major Czech historical and geographical journals and the development of environmental history in Czechia was accelerated as a consequence of the publication of research reports

resulting from the author's research fellowship with Donald Worster at Kansas University (USA).⁸⁵

On a general level, and despite the above mentioned works, environmental history is barely practised within Czech historiography. Prior to 1989 this can be traced back to ideological reasons, later it might be due to the concentration of historians on the much needed re-interpretation of Czech and Slovak history and its emphasis on political history. The necessity to perceive the reality of the world in dialectic relations of nature and humanity across space and time requires new theoretical and methodological approaches. This may also be a certain hindrance for the diffusion of environmental history. But the agenda of the 1999 congress of Czech historians already included a workshop on 'Environmental History'.⁸⁶ It was organised by historical geographers from the Department of Social Geography and Regional Development, Charles University Faculty of Science, the same group which then organised the second International Conference of ESEH, held in Prague, September, 2003.⁸⁷ The 1999 workshop has shown – among other things – that research into settlement development and deserted villages seemed particularly fruitful in terms of integrating environmental aspects. Likewise, facsimile editions of old maps of Czech historical towns, edited by E. Semotanová and J. Žemlička,⁸⁸ form a source base for research of landscape changes. An extensive bibliography on research in environmental history is provided in the web-site *Klaudyán*.⁸⁹

Environmental history in Czechia and Slovakia has several distinct features. The main disciplines of its origin and development are: a) geography in general, and historical geography in particular; within this disciplinary field, research on long-term land use changes has proven particularly stimulating; b) (historical) climatology; c) landscape ecology and ecology; d) medieval archaeology and archaeometry as part of the study of the medieval colonisation.

Long term studies of land-use and land cover changes (LUCC) have been conducted for the entire territory of Czechia from the first half of the nineteenth century, and in model areas from the first half of the eighteenth century to the present. Main sources are cadastral data and maps for individual cadastral units and old maps from the eighteenth and nineteenth centuries combined with results of contemporary field surveying. This type of research started in 1994 at Charles University at the department mentioned above, funded partially by grants from the Czech Republic Grant Agency. The methods developed and the results, which could be obtained have won international acclaim, e.g. in activities of the LUCC Commission of the International Geographical Union in form of co-authorship of two atlases, the IGBP-IHDP LUCC program, and other international activities.⁹⁰ The data base of the so-called 'stable' or 'Franciscan' cadastre has also been used in co-operation with colleagues from Austria, Slovenia and Slovakia to develop research into social and natural driving forces of land-use and land cover change with the aim of predicting their future development.

Historical climatology is a second major area of environmental history in the region, with Rudolf Brázdil from the Institute of Geography, Masaryk University Brno, as a central person. Research is based on archival sources, which means that climatologists work in close co-operation with archivists. Brázdil's team has a long-standing co-operation with leading European historical climatologists such as Christian Pfister. This work has resulted in a number of international publications.⁹¹

As regards Slovakia, the origins of environmental history can be found in disciplines such as landscape ecology and land use research, as indicated in the papers of Slovak colleagues at the ESEH conference held in Prague in 2003. Slovak historians are recently concentrated on political and cultural history, similar to the situation in Czechia.⁹²

CONCLUDING REMARKS

Environmental history developed in close connection to the growing public concern about environmental problems, which reached their heyday in Europe with the Chernobyl disaster of 1986. Forest dieback as a consequence of long-range air-pollution and the acidification of lakes in the north of Europe lead not only to scientific programmes in many European countries, but also to a growing awareness among historians that human-nature interactions might be a worthwhile subject of study. Even if this happened later than in the USA, and was triggered by different events, the situation on the outset is still similar, and can be characterised as one of public concern with historians responding. European environmental history is distinct from other scholarly communities in its relatively close connection to historical geography and the sciences in general, which is most visible in the history of climate. This field is considered an important part of history, and not primarily of climatology, as it would be in other parts of the world. The conceptual challenge of such interdisciplinary work consequently has drawn some attention by historians, and debates about historiography – such as were described for Spain above – have resulted from this orientation. While agricultural history was mentioned in many of the short contributions as a corresponding field, the origins of environmental history in Germany are much more in the history of technology than in agricultural history. National and regional histories of the origin and development of environmental history are different. What is recognised as a national contribution depends on what gets published in international journals, a type of publication with which scientists have more experience than scholars in the humanities have. In many regions the ongoing struggle to define the field as distinct and thus have it institutionally recognised can still be seen, a form of defining relationships which becomes less important as a field matures.

Even the scholarly network of ESEH does not provide the means to cover

Europe in its entirety, as has been pointed out at the beginning. The question remains if this survey yields an overall picture. One can speculate why environmental history was a late starter in post-communist countries, which might well have to do with the suppression of environmental concerns and movements under communist rule and the subsequent race for market integration, while at the same time historians felt much more pressing needs than turning to the environment. Chapter authors, upon reading the entire manuscript of this paper, have wondered if one could attempt to describe distinct features of European environmental history at large. The picture which emerges has certain similarities, in that the modern period figures prominently, caused in several cases by the closeness between environmental sociology, environmental policy and history. Pollution, while important, is not studied as a single impact phenomenon, but in the context of its different causes, indicating that narratives and research questions have reached some degree of sophistication. In general, European environmental history frequently focuses on urban areas and cultural landscapes. Compared to American and African environmental history, it more seldom examines wilderness or sparsely populated areas. In addition, in Europe environmental changes are studied over longer timespans than in America or Africa. One reason for this is the abundance of written documents and artefacts from Antiquity onwards. However, the co-operation with archaeology is still less developed than one would expect. Environmental history of early modern times and the Middle Ages seems to be on the rise in Europe. What we have cast in the net here is certainly only the uppermost 'trophic level', and this is to some degree also the internationally visible level.

This article should not be understood as a pleading for anglophony. Not only does this handicap scholars, it also would detach research from its most important audience: the local people, who should benefit from the research done about their place of living. It does plead for diversity, despite all the difficulties, which arise from it. English is indispensable as means of communication, and would at best be combined with other languages. Support for translation and international networking should by all means be increased in order to develop the field further. How much we all benefit from such co-operation has been proven by the one genre of environmental history that has been conceptually neglected in the preceding chapters: International collections of essays, such as the volume edited by Peter Brimblecombe and Christian Pfister, the more recent one by Mauro Agnoletti and Steve Anderson, or the one on urban environmental problems by Christoph Bernhardt are important stepping stones towards a better integration of European scholarship, preserving at the same time the value of its diversity.⁹³ For that, edited volumes – despite their well-known drawbacks – will be important in the years to come. With a well-established journal, lively, if young national communities and newly established networks of co-operation, European environmental history will certainly contribute to the international development of the field in unique and substantial ways in the decades to come.

NOTES

¹ Verena Winiwarter currently holds an APART-fellowship of the Austrian Academy of Sciences.

² For valuable British survey essays see T.C. Smout, 'Introduction' in *Scotland since Prehistory: Natural Change and Human Impact* (Aberdeen: Scottish Cultural Press, 1993), xii-xx; John Sheail, 'Green History: the evolving agenda', *Rural History*, Vol. 4, No.2, 1993, 209-23; Michael Williams, 'The Relations of Environmental History and Historical Geography', *Journal of Historical Geography*, Vol.20, No.1, 1994, 3-21; John Sheail, 'The Ecologist and Environmental History: a British Perspective', *Journal of Biogeography*, Vol.22, 1995, 953-66; Linda Merricks, 'Environmental History', *Rural History*, Vol.7, No.1, 1996, 97-109; John Sheail, 'Environmental History: a Challenge for the Local Historian', *Archives*, Vol.22, No.97, 1997, 157-69; Oliver Rackham, 'Prospects for Landscape History and Historical Ecology', *Landscapes*, Vol. 2, 2000, 3-15; Matt Osborn, 'Sowing the Field of British environmental history', H-Net Environment Group discussion paper, 2001; Fiona Watson, 'Seeing the wood and the trees: Why Environmental History Matters', *History Scotland*, Vol.2, No.3, 2002, 44-8; Ian Whyte, 'Recent Research on Scottish Landscape History', *Landscape History*, Vol. 25, 2004, 85-9.

³ See especially: Oliver Rackham, *The History of the Countryside* (London: Dent, 1986) linking history with woodland ecology; W.G. Hoskins, *The Making of the English Landscape* (London: Hodder and Stoughton, 1955) as inter-disciplinary landscape and rural history; Peter Brimblecombe, *The Big Smoke: The History of Air Pollution in London since Medieval times* (London: Methuen, 1987) linking atmospheric chemistry with historical scholarship.

⁴ T.C. Smout, *The Highlands and the Roots of Green Consciousness, 1750-1990* (Baltimore: SNH, 1993); T.C. Smout, *Nature Contested: Environmental History in Scotland and Northern England since 1600* (Edinburgh: Edinburgh University Press, 2000).

⁵ I.G. Simmons, *Environmental History: A Concise Introduction* (Oxford & Cambridge (USA): Blackwell, 1993), p. 1.

⁶ *Ibid.*, p. 124.

⁷ I.G. Simmons, *An Environmental History of Great Britain from 10,000 Years Ago to the Present* (Edinburgh: Edinburgh University Press, 2001).

⁸ Brian W. Clapp, *An Environmental History of Britain Since the Industrial Revolution* (London: Longman, 1994).

⁹ Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860* (Cambridge: Cambridge University Press, 1995).

¹⁰ John M. MacKenzie, *Empires of Nature and the Nature of Empires. Imperialism, Scotland and the Environment* (East Linton: Tuckwell Press, 1997).

¹¹ Peter Coates, *Nature: Western Attitudes Since Ancient Times* (Cambridge & Berkeley: Polity Press / Univ. of Calif. Press, 1998).

¹² John Sheail, *Nature Conservation in Britain: The Formative Years* (London: Stationery Office, 1998); John Sheail, *An Environmental History of Twentieth-Century Britain* (Basingstoke: Palgrave, 2002)

¹³ The series includes: T.C. Smout (ed.), *Scotland since Prehistory: Natural Change and Human Impacts* (Aberdeen: Scottish Cultural Press, 1993); T.C. Smout and S. Foster (eds), *The History of Soils and Field Systems* (Aberdeen: Scottish Cultural Press, 1994); G. Whittington (ed.), *Fragile Environments: The Use and Management of Tentsmuir NNR, Fife* (Edinburgh: Scottish Cultural Press, 1996); T.C. Smout (ed.), *Scottish Woodland History* (Edinburgh: Scottish Cultural Press, 1997); Robert A. Lambert (ed.), *Species History in Scotland: Introductions and Extinctions since the Ice Age* (Edinburgh: Scottish Cultural Press, 1998); T.C. Smout and R.A. Lambert (eds), *Rothiemurchus: Nature and People on a Highland Estate, 1500–2000* (Dalkeith: Scottish Cultural Press, 1999); George Holmes and Roger Crofts, *Scotland's Environment: The Future* (East Linton: Tuckwell Press, 2000); T.C. Smout (ed.), *Nature, Landscape and People since the Second World War* (East Linton: Tuckwell Press, 2001).

¹⁴ Volume 1 No.1 of *Environment and History* was published in February 1995. Recent monographs include: Richard H. Grove, *Ecology, Climate and Empire: Studies in Colonial Environmental History* (Cambridge: White Horse Press, 1997); Richard H. Grove and John Chappell (eds), *El Niño: History and Crisis* (Cambridge: White Horse Press, 2000); Judith A. Bennett, *Pacific Forest: A History of Resource Control and Contest in the Solomon Islands* (Cambridge: White Horse Press, 2000); Rolf Peter Sieferle, *The Subterranean Forest: Energy Systems and the Industrial Revolution* (Cambridge: White Horse Press, 2001); Robert A. Lambert, *Contested Mountains: Nature, Development and Environment in the Cairngorms Region of Scotland, 1880–1980* (Cambridge: White Horse Press, 2001); Stephen Mosley, *The Chimney of the World: A History of Smoke Pollution in Victorian and Edwardian Manchester* (Cambridge: White Horse Press, 2001); Björn-Ola Linnér, *The Return of Malthus: Environmentalism and Post-War Population-Resource Crises* (Isle of Harris: White Horse Press, 2003).

¹⁵ Jan Oosthoek, 'An Environmental History of State Forestry in Scotland, 1919–1970' Unpublished PhD thesis, University of Stirling, 2001; Robert A. Lambert, 'The Grey Seal in Britain: A Twentieth century History of a Nature Conservation Success', *Environment and History*, Volume 8, No. 4, 2002, 449–74.

¹⁶ As of August 2004, some of the key institutional players are: University of Bristol (Peter Coates); University of Cambridge (Paul Warde); University of Durham (Ian Simmons); University of East Anglia (Peter Brimblecombe); University of Kent (Karen Jones); University of Newcastle (Jan Oosthoek); University of Nottingham (Robert Lambert); University of Oxford (William Beinart); University of Sussex (Richard Grove); University of Stirling (Fiona Watson, Phia Steyn, Richard Oram); University of St. Andrews (T.C. Smout, John Clark); CEH Monks Wood (John Sheail).

¹⁷ Timo Myllyntaus, *Environmental History. A Bibliography on Finnish Research*, Turku: University of Turku (forthcoming).

¹⁸ Poul Holm, Anne Løkke, Dorthe Gert Simonsen, Jytte Ringved, Inge Schjellerup, Finn Arler, Bo Fritzbøger, Bo Poulsen, *Humanistisk naturforskning*. Statens Humanistiske Forskningsråd (Copenhagen) 2004.

¹⁹ Lars J. Lundgren, Christer Nordlund & Sofie Storbjörk, *Miljöns mänskliga dimension*. Vetenskapsrådet (Stockholm) 2002, 26–9.

²⁰ Lundgren et al. 2002, 44–78.

- ²¹ Veijo Saloheimo et al., *Itä-Suomen ympäristöhistoriallisen tutkimuksen loppuraportti* [Final report on the research on the environmental history of Eastern Finland], Publication of Karelian Institute no 33, Joensuu: University of Joensuu 1978.
- ²² Karl-Erik, Michelsen, *History of Forest Research in Finland, Part 1. The Unknown Forest*, Jyväskylä: The Finnish Forest Research Institute 1995, 142pp. Tapani Tasanen, *Läksi puut ylenemään. Metsien hoidon historia Suomessa keskiajalta metsäteollisuuden läpimurtoon 1870-luvulla* [The history of silviculture in Finland from the Middle Ages to the breakthrough of forest industry in the 1870s], Ph.D. thesis, Metsäntutkimuslaitoksen tiedonantoja 920, Vammala: 2004, 444pp. [English summary pp. 395–440].
- ²³ Ismo Björn, *Kaikki irti metsästä: Metsän käyttö ja muutos taigan reunalla itäisimmässä Suomessa erätaloudesta vuoteen 2000* [Capitalising on the forest: Use and change in the forest in the wilderness economy on the edge of the taiga in Eastern Finland through the year 2000], Ph.D. thesis, Bibliotheca Historica 49, Suomen Historiallinen Seura, Helsinki: 1999, 268pp. [English summary pp. 254–65].
- ²⁴ Eeva Hellström, *Conflict Cultures: Qualitative Comparative Analysis of Environmental Conflicts in Forestry*, Ph.D. thesis, Silva Fennica, Monographs 2/2001, Helsinki: Finnish Society of Forest Science 2001, 109pp. Available also on the internet: <http://ethesis.helsinki.fi/julkaisut/maa/talou/vk/hellstrom/>.
- ²⁵ Timo Herranen, *Vettä ja elämää. Helsingin vesihuollon historia 1876–2001* [Water and life. The history of water supply in Helsinki, 1876–2001], Helsinki: Helsingin vesi 2001, 238pp.; Timo Herranen, *125 Years of Life with Water, The History of Water Services in Helsinki*, Helsinki: Helsinki Water 2002, 79pp.; Petri Juuti, *Kaupunki ja vesi. Tampereen vesihuollon ympäristöhistoria 1835–1921* [City and water. Environmental history of water supply in Tampere, 1835–1921], Ph.D. thesis, Tampere: KehräMedia 2001, 283 pp. [English summary pp. 266–83]. Available also on the internet: <http://www.uta.fi/aitokset/kirjasto/vaitokset/2001/2001081.html>; Tapio Katko, *Water! Evolution of Water Supply and Sanitation in Finland from the mid-1800s to 2000*, Helsinki: Finnish Water and Waste Water Works Association 1997, 104pp., Simo Laakkonen, *Vesiensuojelun synty. Helsingin ja sen merialueen ympäristöhistoriaa 1878–1928* [The origin of water protection. Environmental history of Helsinki sea area in 1878–1928], Ph.D. thesis, Tampere: 2001, 307pp. [English summary pp. 301–7].
- ²⁶ Lauri Putkonen, (ed.), *National Landscapes*, Helsinki: Ministry of the Environment and Finnish Building Centre 1994, 64pp.; Matti Luostarinen, and Anja Yli-Viikari (eds.), *Maaseudun kulttuurimaisemat. Rural Landscapes in Finland*, Suomen ympäristö 87, Helsinki: Maatalouden tutkimuskeskus and Suomen ympäristökeskus 1997, 151pp.; Maunu, Häyrynen, *Maisemapuistosta reformipuistoon: Helsingin kaupunkipuistot ja puistopolitiikka 1880-luvulta 1930-luvulle* [City parks and park policy in Helsinki from the 1880s to the 1930s], Ph.D. thesis, Entisaikain Helsinki 14, Helsinki: 1994, 239pp.
- ²⁷ Timo Myllyntaus and Mikko Saikku (eds.), *Encountering the Past in Nature, Essays in Environmental History*, Foreword by Alfred W. Crosby, Second, revised edition, Athens, OH: Ohio University Press 2001, 184pp.
- ²⁸ Miika Lavento and Miika Huotari, A Water Management System around Jabal Harûn, Petra – Its Design and Significance, *Proceedings of the 11th International Conference on the History of Water Management and Hydraulic Engineering in the Mediterranean Region, Israel 7–12 May 2001*, Christoph Ohlig, Yehuda Peleg, and Tsvika Tsuk (eds.) Cura aquarum in Israel, Schriften der Deutschen Wasserhistorischen Gesellschaft, Bd. 1, Siegburg: 2002, pp. 93–106.

- ²⁹ Pekka Hämäläinen, *The Comanche Empire: A Study of Indigenous Power, 1700–1875*, Ph.D. thesis, Helsinki: Helsinki University Press 2001, 315pp.; Mikko Saikku, *The Evolution of a Place. Patterns of Environmental Change in the Yazoo-Mississippi Delta from the Ice Age to the New Deal*, Ph.D. thesis, Renvall Institute Publications 12, Helsinki: University of Helsinki: 2001, 334pp.
- ³⁰ Ilmo Massa and Veli-Pekka Tynkkynen, (eds.), *The Struggle for Russian Environmental Policy*, Kikumora publications B 17, Helsinki: Aleksanteri Institute 2001, 180pp.
- ³¹ Antti, Erkkilä, *Living on the Land: Change in Forest Cover in North-Central Namibia 1943–1996*, Ph.D. thesis, Silva Carelia 37, Joensuu: University of Joensuu 2001, 118pp.; Holger Weiss, *Babban yunwa: Hunger und Gesellschaft in Nord-Nigeria und den Nachbarregionen in der frühen Kolonialzeit: Unter besonderer Berücksichtigung der späten vorkolonialen Verhältnisse und der Einwirkung der Kolonialmächte*, Ph.D. thesis, Bibliotheca Historica 22, Helsinki: Suomen Historiallinen Seura 1997, 480pp.
- ³² Historiographical overview in Lars J. Lundgren, 'Vad är miljöhistoria? eller Den gamla frågan om bofinken' in *Värna, vårda, värdera: miljöhistoriska aspekter och aspekter på miljöhistoria*, ed. Erland Mårald and Christer Nordlund (Umeå: Univ., 2003); Birgitta Odén, 'Projektet Natur och samhälle' in *På historiens slagfält: en festskrift tillägnad Sverker Oredsson*, ed. Lars M. Andersson (Uppsala Lund: Sisyfos, 2002).
- ³³ Eva Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900–1918* (Göteborg: Historiska institutionen, Univ., 1996); John Svidén, *Industrialisering och förändrad miljöpåverkan: råvaruflöden samt svavel- och kvicksilverutsläpp vid bruk i norra Kalmar län 1655–1920* (Linköping: Tema, Univ., 1996); Erland Mårald, *Jordens kretslopp: lantbruket, staden och den kemiska vetenskapen 1840–1910* (Umeå: Univ., 2000); Christer Nordlund, *Det upphöjda landet: vetenskapen, landhöjningsfrågan och kartläggningen av Sveriges förflutna, 1860–1930* (Umeå: Univ., 2001); Sofia Åkerberg, *Knowledge and Pleasure at Regent's Park: The Gardens of the Zoological Society of London during the Nineteenth Century* (Umeå: Univ., 2001); Ebba Lisberg Jensen, *Som man ropar i skogen: modernitet, makt och mångfald i kampen om Njakafjäll och i den svenska skogsbruksdebatten 1970–2000* (Lund: Univ., 2002); Per Eliasson, *Skog, makt och människor: en miljöhistoria om svensk skog 1800–1875* (Stockholm: Kungl. Skogs- och lantbruksakad., 2002); Astrid Kander, *Economic Growth, Energy Consumption and CO₂ Emissions in Sweden 1800–2000* (Lund: Univ., 2002); Erik Törnlund, 'Flotningen dör aldrig': *bäckflotningens avveckling efter Ume- och Vindelälven 1945–70* (Umeå: Univ., 2002); Jonas Hallström, *Constructing a Pipe-bound City: A History of Water Supply, Sewerage, and Excreta Removal in Norrköping and Linköping, Sweden, 1860–1910* (Linköping: Dept. of Water and Environmental Studies, Univ., 2002); Martin Stolare, *Kultur och natur: moderniseringskritiska rörelser i Sverige 1900–1920* (Göteborg: Historiska institutionen, Univ., 2003).
- ³⁴ Björn-Ola Linnér, *The World Household: Georg Borgström and the Postwar Population-resource Crisis* (Linköping: Tema, Univ., 1998); Björn-Ola Linnér, *The Return of Malthus: Environmentalism and Post-war Population-resource Crises* (Isle of Harris: White Horse Press 2003); Eva Friman, *No Limits: The 20th century Discourse of Economic Growth* (Umeå: Institutionen för historiska studier, Univ., 2002).
- ³⁵ Bo Fritzboøger, *Kulturskoven. Dansk skovbrug fra oldtid til nutid*. Copenhagen: Gyldendal 1994. For an introduction to his work see: Bo Fritzboøger, 'A Silvicultural Revolution. The Dissolution of Traditional Agro-Forestry in Denmark (AD 1730–1820)', in *The Agricultural Revolution - Reconsidered*, ed. C. Bjørn (Odense: Landbohøistorisk

Selskab, 1998), 25–34; Bo Fritzbøger, 'Forest Legislation and Management in Scandinavia, 1660–1850: Natural resources between economy and conservation', *Jahrbuch für europäische Verwaltungsgeschichte* 11 (1999), 87–109.

³⁶ Poul Holm, T. D. Smith, et al. (eds.), *The Exploited Seas: New Directions for Marine Environmental History*. Research in Maritime History. St. Johns, New Foundland, International Maritime Economic History Association / Census of Marine Life (2002). See also the project website: www.hmapcoml.org.

³⁷ *Jaarboek voor Ecologische Geschiedenis* Ghent/Hilversum: Academia Press and Verloren (JEG).

³⁸ University of Groningen (Henk van Zon, Henny van der Windt), University of Wageningen (Anton Schuurman), Free University in Amsterdam (Wybren Verstegen, Petra van Dam), University of Ghent (Erik Thoen), Free University of Brussels (Dries Tys), Université Libre de Bruxelles (Chloë Deligne), Catholic University of Louvain (Isabelle Parmentier).

³⁹ Petra J.E.M. van Dam, *Vissen in Veenmeren. De sluisvisserij op aal tussen Haarlem en Amsterdam en de ecologische transformatie in Rijnland, 1440–1530* (Hilversum: Verloren, 1998); *ibidem*, 'Sinking Peat Bogs: Environmental Change in Holland, 1350–1550' *Environmental History* Vol. 6, No. 1, 2001, 32–45; Dries Tys, *Landschap als materiële cultuur. De interactie tussen macht en ruimte in een kustgebied en de wording van een laatmiddeleeuws tot vroegmodern landschap Kamerlings Ambacht, 500–1200/1600* (Brussels: Unpublished PhD thesis Free University of Brussels); Tim Soens, *Waterbeheer in de Vlaamse kustvlakte. Institutionele, sociaal-economische en politieke aspecten van het waterbeheer in de Late Middeleeuwen. Van landschapsgeschiedenis naar ecologische geschiedenis* (University of Ghent forthcoming). Erik Thoen and Tim Soens, 'Waterbeheer in de Vlaamse kustvlakte in de Late Middeleeuwen en het Ancien Régime. Van landschapsgeschiedenis naar ecologische geschiedenis', *Jaarboek voor Ecologische Geschiedenis* 2001, 1–24; Jan van den Noort, *De hand in eigen boezem. Waterkwaliteit in het hoogheemraadschap van Delfland 1888–2003*. (Rotterdam/Hilversum: Verloren, 2003), Chris de Bont, *Delft's water. Two thousand years of habitation and water management in and around Delft* (Delft and Zutphen: IHE and Walburg Pers, 2003).

⁴⁰ Christophe Verbruggen, *De stank bederft onze etenswaren. De reacties op industriële milieuhinder in het 19de-eeuwse Gent* (Gent: Academia Press, 2002).; *Ibidem*, 'Nineteenth century reactions to industrial pollution in Ghent, the Manchester of the continent. The case of the chemical industry', in Christoph Bernhardt and Geneviève Massard-Guilbaud (eds), *The Modern Demon. Pollution in Urban and Industrial European Societies* (Clermont-Ferrand: Presses Universitaires Blaise-Pascal, 2002), 377–93; G.N.M Vis, *Van 'vulliscuy!' tot huisvuilcentrale. Vuilnis en afval en hun verwerking in Alkmaar en omgeving van de middeleeuwen tot heden* (Hilversum: Verloren 1996); Cor Smit, *Leiden met een luchtje. Straten, water, groen en afval in een Hollandse stad, 1200–2000* (Leiden: Primavera Press, 2001); Myriam Daru, 'The Dialects of Dirt', In: *The Modern Demon*, 57–74; Isabelle Parmentier, 'Autorités communales et financement de la lutte contre la pollution (Belgique, fin XVIIIe-début IXe siècle)' In *The Modern Demon*, 259–72 Chloë Deligne, *Bruxelles et sa rivière. Genèse d' un territoire urbain (12^e-18^e siècle)* (Turnhout: Brepols, 2003).

⁴¹ Henny J. van der Windt, *En dan: wat is natuur nog in dit land?* (Amsterdam/Meppel: Boom 1995), *Ibidem*, 'The Rise of the Nature Conservation Movement and the Role of the State: The Case of the Netherlands, 1860–1955', In *Jahrbuch für Europäische*

Verwaltungsgeschichte Vol. 11, 1999. Special issue: Naturnutzung und Naturschutz in der europäischen Rechts- und Verwaltungsgeschichte. (Baden-Baden: Nomos Verlagsgesellschaft) 227–53; Jan J. Boersema, *The Torah and the Stoics on Humankind and Nature: A Contribution to the Debate on Sustainability and Quality* (Leiden: Brill Press, 2001); Mechtild D.Th.M. de Jong, *Scheidslijnen in het denken over natuurbeheer in Nederland. Een genealogie van vier ecologische theorieën* (Delft: Delft University Press Science, 2002).

⁴² Werner Abelshauer (ed.), *Umweltgeschichte. Umweltverträgliches Wirtschaften in historischer Perspektive*. (Göttingen: Vandenhoeck & Ruprecht, 1994) (Geschichte und Gesellschaft, Sonderheft; 15). Günter Bayerl, Norman Fuchsloch, Torsten Meyer (eds.), *Umweltgeschichte*. (Münster: Waxmann, 1996) (Cottbuser Studien zur Geschichte von Technik, Arbeit und Umwelt; 1). Wolfram Siemann (ed.), *Umweltgeschichte. Themen und Perspektiven*. (Munich: C.H. Beck, 2003).

⁴³ Verena Winiwarter, *Umweltgeschichte. Eine Einführung*. (Stuttgart: UTB, 2005).

⁴⁴ Joachim Radkau, *Natur und Macht. Eine Weltgeschichte der Umwelt*. (Munich: C.H. Beck, 2nd ed. 2002), currently an English translation is in preparation.

⁴⁵ Rolf Peter Sieferle, *Rückblick auf die Natur. Eine Geschichte des Menschen und seiner Umwelt*. (Munich: Luchterhand, 1997).

⁴⁶ Rolf Peter Sieferle, *The Subterranean Forest. Energy Systems and the Industrial Revolution*. (Cambridge: The White Horse Press, 2001 (published in German 1982).

⁴⁷ Fischer-Kowalski, Marina, *Gesellschaftlicher Stoffwechsel und Kolonisierung von Natur. Ein Versuch in Sozialer Ökologie*. (Amsterdam: Overseas Publishers Association, 1997).

⁴⁸ Christian Pfister (ed.), *Das 1950er Syndrom. Der Weg in die Konsumgesellschaft*. (Bern: Haupt, 1995).

⁴⁹ Christian Pfister, *Energiepreis und Umweltbelastung. Zum Stand der Diskussion über das „1950er Syndrom“*, in: *Umweltgeschichte. Themen und Perspektiven*, ed. Wolfram Siemann (Munich: C.H. Beck, 2003): 61–86.

⁵⁰ Rudolf Brázdil, Christian Pfister, Heinz Wanner, Hans von Storch, Jürg Luterbacher, ‘Historical Climatology in Europe. The State of the Art’, *Climatic Change* (accepted).

⁵¹ The main exceptions being a special issue of *Annales ESC*, dedicated to environment and history (vol. 29, 1973, 3) and Corinne Beck et Robert Delort (eds), *Pour une histoire de l’environnement et des phénomènes naturels* (Paris: CNRS, 1993). We must also mention the work done by the *Groupe d’histoire des forêts françaises* [French forest history group], which produced a number of interesting if rather specialised publications.

⁵² For a discussion of this idea, see Massard-Guilbaud, ‘De la ‘part du milieu’ à l’histoire de l’environnement’, *Le Mouvement Social* 200, (2002), 64–72. The subtitle of the first volume of Braudel’s book, ‘The Identity of France’, which in French is ‘Space and History’ was rendered as ‘Environment and History’ in the English translation, which is unfortunate, as Braudel clearly was not working with the concept of ‘environment’ and the meaning of space is quite different from it.

⁵³ As far as Alps are concerned, see René Favier’s work (<http://larhra.ish-lyon.cnrs.fr/mont/index.htm>). As for earthquakes, see Gregoy Quenet, *La naissance d’un risque. Les tremblements de terre en France XVIe-XVIIIe siècles* (Seysssel: Champ Vallon, forthcoming 2005). See also Nadine Vivier et Marie-Danielle Demélas, *Les propriétés collectives face aux attaques libérales, 1750–1914* (Rennes: PU, 2003).

⁵⁴ The papers of these round-tables have been published in two volumes. Christoph Bernhardt and Geneviève Massard-Guilbaud (eds), *Le Démon moderne. La pollution dans les sociétés urbaines et industrielles d'Europe/The Modern Demon. Pollution in Urban and Industrial European Societies* (Clermont-Ferrand: PU Blaise-Pascal, 2002). Dieter Schott, Bill Luckin and Geneviève Massard-Guilbaud (eds), *Resources of the city. Contributions to an environmental History of modern Europe* (Aldershot: Ashgate, forthcoming 2005).

⁵⁵ Among them (all forthcoming): André Guillerme, Anne-Cécile Lefort et Gérard Gigaudon, *Dangereux, insalubre, incommode: paysages en banlieue parisienne (XIXe-XXe siècles)* (Seyssel: Champvallon); Massard-Guilbaud, *Une Histoire sociale de la pollution industrielle dans les villes françaises, 1790–1914* (Paris: Belin), Sabine Barles, *L'invention des déchets urbains (1790–1970)*.

⁵⁶ On this, see Marco Armiero and Stefania Barca, *Storia dell'ambiente. Una introduzione*, Roma: Carocci 2004.

⁵⁷ For example: 'Storia ambientale. Una nuova frontiera storiografica', Milan 1997; 'History and Forest Resources', Florence 1998; 'Ambiente e risorse nel Mezzogiorno contemporaneo', Naples 1999; 'Napoli sostenibile', Naples, 2001; 'Environmental stories from the Mediterranean World (19th-20th centuries)', Naples 2003.

⁵⁸ 'I frutti di Demetra. Bollettino di storia e ambiente', Roma: Donzelli.

⁵⁹ On Italian forest history see: Marco Armiero, 'Ambiente e storia: indagine su alcune riviste storiche', *Società e storia* 83 (1999): 154–61; Mauro Agnoletti, 'Fra storia e tecnica: sviluppi e tendenze della storia forestale' in *Storia e risorse forestali*, ed. M. Agnoletti (Firenze: Coppini, 2001).

⁶⁰ Roma: Donzelli 2002.

⁶¹ Roma: Donzelli 1996.

⁶² *Il rovescio della produzione. I rifiuti in età pre-industriale e paleotecnica*, Bologna: il Mulino 1999; *La città e i rifiuti. Ecologia urbana dal Medioevo al primo Novecento*, Bologna: il Mulino 2001.

⁶³ M. González de Molina and J. Martínez-Alier (eds), (2001), *Naturaleza Transformada: Estudios de Historia Ambiental en España*. Barcelona, Icaria.

⁶⁴ Rico Boquete, E. (1995): *Política forestal e repoboaicións en Galicia. 1941–1971*, Universidade de Santiago de Compostela; Sabio Alcutén, A. (1997), *Los montes públicos en Huesca (1859–1930). El bosque no se improvisa*. Huesca: Diputación Provincial; Balboa López, X. (1999), 'La historia de los montes públicos españoles (1812–1936): un balance y algunas propuestas', *Historia Agraria*, 18, 95–128; Cruz, S., González de Molina, M., Núñez, M. and Ortega, A. (2000), 'Social and Environmental Determining Factors of Forest Fire History: The Case of Eastern Andalusia, 1840–1890', in M. Agnoletti and S. Anderson (eds.), *Forest History. International Studies on Socioeconomic and Forest Ecosystem Change*. New York: Cabi Publishing, 211–22; Ortega Santos, A. (2002), *La tragedia de los cerramientos*. Valencia: Historia Social.

⁶⁵ M. González de Molina and A. Ortega Santos (2000), 'Bienes comunes y conflictos por los recursos en las sociedades rurales, siglos XIX y XX' *Historia Social*, 38, 95–116; Sabio Alcutén, A. (Coord.) (2002), *Naturaleza y conflicto social*. *Ayer*, 46, 11–179.

⁶⁶ J. Martínez Alier (1993), 'Temas de Historia Ecológica', in M. González de Molina and J. Martínez Alier (eds.), *Historia y Ecología*, *Ayer*, 11, 207–32; M. González de Molina (1993), *Historia y medio ambiente*. Madrid: Eudema.

- ⁶⁷ J.C. Ávila Cano and M. González de Molina (1999), 'El agua como factor limitante de la producción agrícola en Andalucía Oriental. La Vega de Granada, Siglos XIX y XX', in R. Garrabou and J.M. Naredo (eds.) *El agua en los sistemas agrarios. Una perspectiva histórica* (Madrid: Argenteria-Visor). R. Garrabou and J.N. Naredo (1999), *El agua en los sistemas agrarios. Una perspectiva histórica* (Madrid: Argenteria/Visor). R. Garrabou and J.M. Naredo (1996), *La fertilización en los sistemas agrarios. Una perspectiva histórica* (Madrid: Argenteria/Visor). M. González de Molina (2002), 'Environmental Constraints on Agricultural Growth in 19th century Granada (Southern Spain)', *Ecological Economics*, 41, 257–70.
- ⁶⁸ Pujol et al., 2001.
- ⁶⁹ Tello, E. (1999), 'La formación histórica de los paisajes agrarios mediterráneos: una aproximación evolutiva', *Historia Agraria*, 19, 195–214.
- ⁷⁰ A. Sabio Alcutén (Coord.) (2002), 'Naturaleza y conflicto social', *Ayer*, 46, 11–179.
- ⁷¹ Pál Beluszky, *A Nagyalföld történeti földrajza (Historical Geography of the Great Hungarian Plain)*. Pécs-Budapest: Dialóg Campus Kiadó, 2001. Sándor Frisnyák, *Magyarország történeti földrajza (Historical Geography of Hungary)*. Budapest: Tankönyvkiadó, 1999.
- ⁷² Gyula Kristó, *Die Arpadendynastie. Die Geschichte Ungarns von 895 bis 1301*. Budapest: Corvina Kiadó, 2001.
- ⁷³ Ágnes R. Várkonyi, *Táj és történelem (Landscape and History)*. Budapest: Osiris, 2000.
- ⁷⁴ János Mika, *Regionális éghajlati forgatókönyvek (Regional Climate Scenarios)*. Budapest: DSc thesis, 2000.
- ⁷⁵ Andrea Kiss, 'Hydrology and Environment in the Southern Basin of Lake Fertő/Neusiedler Lake in the Late Middle Ages', *Medium Aevum Quotidianum* 44 (2001): 61–77. Rudolf Brázdil and Andrea Kiss, 'Daily Weather Observations at Košice, Slovakia, in the period 1677–1681', *Meteorologický Casopis/Meteorological Journal* 4 (2001): 3–14. Lajos Rácz, *Climate History of Hungary Since 16th Century: Past, Present and Future*. Pécs: MTA RKK, 1999.
- ⁷⁶ Attila Kerényi, *Környezetvédelmi elvek a gyakorlatban (Environmental Protection in Practice)*. Debrecen: Kossuth Egyetemi Kiadó, 1997.
- ⁷⁷ András Pálóczi Horváth, Középkori településeink környezetregészeti kutatásának lehetőségei ('Possibilities for Environmental-archeologist Research of Medieval Settlements'), in Ágnes R. Várkonyi, *Táj és történelem (Landscape and History)*. Budapest: Osiris Kiadó. 2000; The following four articles are all part of one edited volume: József Laszlovszky and Péter Szabó (eds.), *People and Nature in Historical Perspective* (Budapest: CEU Press, 2003): Károly Takács, 'Medieval Hydraulic Systems in Hungary: Written Sources, Archaeology and Interpretation', 289–312; József Laszlovszky, 'Space and Place, Object and Text: Human-Nature Interaction and Topographical Studies', 81–106; Mariann Bálint, 'Landscape Development and Soil Formation in the Danube-Tisza Interfluvium', 157–74; András Grynaeus, 'Dendrochronology and Environmental History', 175–96.
- ⁷⁸ Péter Szabó, "'There is Hope for a Tree": Pollarding in Hungary', *Medium Aevum Quotidianum* 44 (2001): 41–60.
- ⁷⁹ Balázs Borsos, *Három folyó között, 1840–1910 (Between Three Rivers)*. Budapest: Akadémiai Kiadó, 2000.

⁸⁰ András Lányi, *Együttélés. A humánökológia a politikai filozófiában (Science of Living Together. Human Ecology in the Political Philosophy)*. Budapest: Liget Múhely Alapítvány, 1999.

⁸¹ *Historical Geography of Environmental Changes*, ed. V.V. Annenkov and L. Jeleček. Historická geografie – Historical Geography Vol. 27, (Prague: ICWH CSAS, 1988).

⁸² *Historická ekologie – Historical Ecology Vol. 1*, ed. J. Purš, (Prague: ICWH CSAS, 1988).

⁸³ J. Macek, 'Vnímání přírodních krás v českých zemích pozdního středověku', *Český časopis historický* 95 (1997): 289–314; M. Bláhová, 'Vztah člověka k lesu v českých pramenech přemyslovského období', in *XXI. Mikulovské symposium*, (Brno, 1991).

⁸⁴ D. Worster, 'Appendix: Doing Environmental History', in: *The Ends of the Earth* (New York: Cambridge University Press, 1988), 293.

⁸⁵ L. Jeleček, 'Nová historiografie? Environmentální dějiny v USA: vývoj, metodologie, výsledky', *Český časopis historický* 92 (1994): 510–40; Idem, 'Environmentální dějiny v USA a geografie', *Sborník České geografické společnosti* 99 (1994), 261–9.

⁸⁶ L. Jeleček, 'Environmentální dějiny a česká historiografie a historická geografie', in *VIII. sjezd českých historiků, Hradec Králové 10. – 12. září 1999*, ed. J. Pešek. (Praha: Scriptorium, 2000), 306–25. See also larger version in: *Klaudyán* no. 3/2000, www.klaudyan.psmart.cz.

⁸⁷ See <<http://www.ICESEH2003.natur.cuni.cz>>, or L. Jeleček et. al., ed: *Dealing with Diversity. 2nd International Conference of the European Society for Environmental History Prague 2003. Proceedings* (Praha: Charles University, Faculty of Science, 2003).

⁸⁸ *Historický atlas měst České republiky*, vols. 1–12 (Praha: Historický ústav Akademie věd AV ČR, 1995–2004).

⁸⁹ *Klaudyán* 4/2000, www.klaudyan.psmart.cz .

⁹⁰ I. Bičík, L. Jeleček, 'Long Term Research of LUCC in Czechia 1845–2000', in *Dealing with Diversity*, 224–231; I. Bičík, L. Jeleček, V. Štěpánek, 'Land-Use Changes and their Social Driving Forces in Czechia in the 19th and 20th Centuries', *Land Use Policy* 18 (2001) 65–73.

⁹¹ R. Brázdil, 'Climatic Fluctuation in the Czech Lands during the Last Millennium', *GeoJournal* 32 (1994) 199–205. R. Brázdil, O. Kotyza, *History of Weather and Climate in the Czech Lands*, vol. I, *Period 1000 – 1500* (Zürich: Geographisches Institut, 1995); vols. II, III, IV (Brno: Masarykova universita, 1995, 1999, 2000). J. Munzar, 'Floods and People in the Czech Republic. Loss of Historical Memory', in *Dealing with Diversity*, 55–8.

⁹² F. Žigrai, 'Environmental History in Slovakia – Some Remarks about Present State of Environmental History', *Dealing with Diversity*, 142.

⁹³ Peter Brimblecombe and Christian Pfister (eds.), *The Silent Countdown. Essays in European Environmental History* (Heidelberg: Springer Verlag, 1990); Mauro Agnoletti and Steve Anderson (eds.), *Methods and Approaches in Forest History*. (IUFRO Research Series 3, Oxford: CABI, 2000); Christoph Bernhardt (ed.), *Environmental Problems in European Cities in the 19th and 20th Century. Umweltprobleme in europäischen Städten des 19. und 20. Jahrhunderts*. (Cottbuser Studien zur Geschichte von Technik, Arbeit und Umwelt 14, Waxmann: Münster, New York, München, Berlin, 2001).