



ESF/LESC Exploratory Workshop:

**Ethical and Social Issues in the Implementation of European Policy:
Examples of Environmental Policy in the Management of Wetlands**

Wells (Somerset), United Kingdom, 28-29 August 2003

**Ethical and social issues in the implementation of European policy:
Examples of environmental policy in
the management of wetlands.**

A Workshop sponsored by the European Science Foundation:

**August 28-29, 2003
Wells, Somerset, England**

Convened by: Adrian Armstrong

Meeting Report





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Summary

The objective of the workshop was to bring together workers concerned with the implementation of European environmental policy in the restoration and management of wetlands. Wetlands are a particularly critical and important habitat, and were chosen as the focus for the workshop in order to ground the discussions in concrete examples. The workshop focused on the interface between the technical implementation and the ethical and social issues that arise at the local level. It brought together technical workers with social policy experts, and ethical philosophers, to explore both the rationale for such actions, the extent to which they lead to local conflicts, and the ways these were resolved. The workshop discussed these issues in the framework of four specific schemes, each associated with the restoration of wetlands in highly contrasting locations: The Somerset Levels (UK), The Vallée du Druegon (France), the Biebrza Valley (Poland), and The Lower Danube, (Rumania).

The interdisciplinary nature of the problems identified in these case studies provided a forum for interchange between those concerned with the policy at a national and European level, those concerned with the practical implementation, and those concerned with the philosophical bases for this action. The aim was to increase the understanding of each group for the problems addressed by the others.

At the conclusion of the workshop, the group agreed that the meeting had been very fruitful, and that it would be worthwhile meeting again to explore issues in greater depth. A committee was formed to seek funding for additional meetings.

Key Words:

Environmental Ethics, Wetland Restoration, Economic Evaluation, Social Conflicts, European Policy evaluation.



Background.

It is clear that the implementation of environmental issues raises many ethical and social issues. Often these lead to conflicts. Frequently then, scientists are presented with the need to produce practical solutions to problems which they are not qualified to address. Issues are not so much the technical ones of how to achieve an end; but the ethical and social issues of establishing the ends being to be implemented.

Nowhere is this issue more focussed than in the implementation of programmes to protect, preserve, and even re-create wetlands. There is a direct competition between those who wish to exploit these highly productive areas and those who wish to preserve them for environmental and ecological purposes. Although such areas are now often subject to planning restrictions imposed by national, European, and International (e.g. the Ramsar Convention) restrictions, the actual implementation of preservation schemes requires action “on the ground”. Frequently, this is seen as imposed “from above” and there seems to be few examples where local issues have been successfully resolved.

Even where local opinion is maintained as part of the process, there remain issues, notably the one of reconciling economic arguments about values. The difficulties encountered in putting value on “nature” is frequently seen as the need for more research – but it can also be seen as a clash of ethical systems that cannot be resolved except by ethical debate. So, the debate between a conservationist who feels that nature is priceless and so cannot be valued, and an economist because he cannot get a value statement out of that attitude, is a failure of neither side, but an indication of the need for a cross-discipline debate.



The workshop

The workshop aimed to explore these themes by bringing together scientists concerned with the implementation of conservation schemes; economists working with the valuation of the environment; social scientists with expertise in the analysis of the socio-political implications of these issues; and ethicists active in this area. The aim was to:

- First to develop an understanding of the ways each of the different stakeholder groups approach the problems. This required an exposition of the background and the methods of each discipline – economics; politics; ecology; ethics, in a way to establish common grounds for subsequent discussion.
- Second to learn about the practical problems associated with specific examples. Four case studies (the Somerset levels in UK; The Vallée du Drueon in France; the Biebrza wetlands in Poland; the Lower Danube in Rumania) were presented as contexts within which the issues were discussed. In particular the presenters described ways in which conflicts have been identified and resolved in the specific examples.
- Thirdly, the workshop will broke into four subgroups to discuss the issues raised by each of the case studies. Each of these four subgroups was asked to identify the main themes and general lessons from the example they discussed, and presented them in a follow-up plenary session.

The conference was based at the site of one of the case studies, (The Somerset Levels wetland, UK) and the delegates taken on a field visit, to familiarise themselves with the locale, and met and discussed the issues with local stakeholders.

This workshop identified a theme that is common throughout Europe, which is that of the practical implementation of European legislation. The transfer of “high level” directives into national legislation, and then the implementation of local action plans presents a common set of problems in all countries, which is the resolution of the apparent conflicts between the desires and aspirations of local stakeholders and the concern of the framers of the European policy.



Workshop Timetable

Day 1 Thursday 28th August

- 0900 Welcome – Adrian Armstrong
0910 Welcome – Welcome from ESF and introduction to the work of ESF
Prof. Stella Michaelidou
0920 Introduction to the conference – Chris Bradley
0930 The principles of ecological management – Owen Mountford
0945 Hydrology of wetlands – Mike Acreman
1000 Methodology : ethics
1000 An introduction to environmental ethics – Robin Attfield
1010 Ethics in environmental conflicts – Markku Oksanen
1030 A theological perspective – Melvyn Matthews
1100 Coffee Break

1130 Methodology – social perspectives
1130 John Bryson - A social introduction
1150 Katrin Oltmer - An introduction to ecological economics
1210 Juha Hiedanpää - Wetland forest planning and valuation

12.30 Presentation of case study: The Somerset Levels.
Adrian Armstrong & Chris Bradley
Policy issues in ESA Management – Jane Poore (DEFRA).

1300 Lunch
1400 Field excursion to case study site , to meet local stakeholders
Moorlynch – Mike Acreman and John Leece
Burrough Mump – Owen Mountford and Adrian Armstrong.

1900 Workshop Dinner - The Bishop's Palace, Wells



Day 2: Friday 29th August

0900 Case Study 2: The Valle du Drugeon – Genevieve Petit Maire

0930 Case Study 3: Danube Delta: Angheluta Vadineanu

Institutional arrangements in Romania – Ioana Ispas

1000 Case study 4: Biezbra wetland, Poland. Hubert Piorkowski

1030 Coffee

1100 “Break out groups” to discuss case studies

1200 Plenary feedback

1230 Lunch

1330 Offered presentations

1330 Irene Klaver & Jozef Keulartz. Wetlands and large herbivores.

1345 Anna Lasut - Flood insurance as an instrument of environmental policy

1400 Jaroslav Ungermann – The Morava Valley river flood plain wetland

1415 Marek Kruk - Ecosystem budget method as a tool to implement environmental policy for wetland - water quality relations

1430 Jac Swart Deliberation as a strategy in conservation and decision making

1445 Henny van der Windt: The Wadden Sea wetland.

1500 Leszek Labedzki - Controlled run-off from agriculturally used wetlands in the Niotec river valley as a method for their preservation.

1515 Alan Feest - Engineering and ecology

1530 Tea

1600 The way forward

1700 Workshop close



The workshop convened in the Swan Hotel, Wells, Somerset on 28-29th August 2003.

Prof Robin Attfield sent his apologies – having had an accident, he was unable to travel. He did send the text of his talk, which was presented in outline by Adrian Armstrong.

Most of the delegates had sent drafts of their paper in advance, which were circulated at the meeting. These are appended. In addition, many of the delegates had their presentations on powerpoint, and these will be collected together and made available on CD-ROM.

Break out sessions

Following the presentations of the three case studies, the workshop split into three groups to discuss the issues raised.

The three groups then returned to a plenary and reported back the main issues. These were:

Group A: Biebrza wetlands.

This is a large and heterogeneous area. The aim of current planning is to maintain the open wetland as it exists at present. This landscape is highly dependent on human intervention both for its current state and for its future maintenance. The system is thus far from “natural” and the question raised is the degree to which it is sustainable.

In the wetland the key conflict is between the conservationists and the farmers. The farmers appear to be not interested in the conservation argument (although they are of course themselves a highly heterogeneous group), but seem to react mainly passively. They are not engaged in the conservation movement itself, nor in its implementation – many have very small farms, giving a low standard of living, and have low levels of education. Involvement of this community with the conservation process thus requires a significant educational input.

Group B: The Lower Danube.

After Angheluta Vadineanu’s presentation, an overview of the Romanian legislative structure for environmental work had been giving by Ioanna Ispas.

Successful ecological restoration required the development of links with the local communities. These are however far from uniform. In the past, planned activities have tended to ignore the local people. Including them in the planning process now requires considerable education. Further there was need to consider the economic and social viability of the system. Only from a secure social and economic situation can the landscape be maintained.

Ecotourism was identified as a “false idol” – soon, it seems, everyone in the world will be spending their time visiting everybody else’s environment as an “ecotourist”. Will there then be anything left for either group to see or to value?

One delegate noted sadly that under the communist regimes, some parts of Eastern Europe had the best ecological laws, but the worst practice. It is not enough just to legislate – but to enforce the laws, and to engage the people in the process.



Group C: The Drugeon Valley.

This case study appears to have been ideal “bottom up” scheme – initiated by local participants and actors, and made possible through central state and European funds. The cost of doing so has been high in terms of personal commitment from the initiators of the project, and those brought in to implement it. The continued success of the scheme has required a continuous cycle of interactions between the project officer and the local community, in all its aspects, including open meetings, personal contacts, and educational activities in the local schools. This has been possible because of the small size of the project, and its tight geographical limitation.

However, the example was suffering from problems with its long term sustainability. The scheme relies on external funding to make the conservation schemes attractive to farmers. The issue again, is this activity sustainable in the long term? It was noted for example that the scheme has at present no external funding.

It was noted that one of the reasons that the Drugeon Valley restoration had been possible, was because the original drainage work had not been fully completed. (The old river course had been block off, but never filled, and so could be restored). The site in the Netherlands described by Klaver & Keulartz was a site designated for industrial use, but never converted to that use. Incomplete “improvement” had in both cases enhanced the chances of “restoration!”

Excursion Report

On the afternoon of the first day, the delegates were taken to two locations in the Somerset Levels and Moors ESA. This excursion was aimed to provide a firm basis for the discussions.

Before the excursion, some information about the Somerset Levels and Moors area was presented by Chris Bradley and Adrian Armstrong, and the administrative arrangements for the Environmentally Sensitive Area scheme were presented by Jane Poore of DEFRA (Department for the Environment, Food and Rural Affairs). For the afternoon excursions, the delegates were joined by Richard Bradford and David Fletcher of Somerset County Council (Levels and Moors Officer and Countryside Group Manager respectively).

At **Moorlynch**, the delegates were met by John Leece of English Nature, who described their involvement with a site that was being returned to wet grassland after arable cultivation. Mike Acreman explained some of the aspects of the hydrological management, including the actions of restoring surface drainage channels.

At **Burrough Mump**, the delegates were given an overview of **Southlake Moor** by Owen Mountford and Adrian Armstrong. (A hand out describing Southlake Moore had been made available as part of the workshop pack). The view there provided an excellent overview of the ESA. Here they were able to discuss the issues of the practical management of the area.

This excursion gave the delegates the opportunity to meet local stakeholders from the conservation bodies. Unfortunately the officer of RSPB (Royal Society for the Protection of Birds) had to withdraw at the last minute. This discussion was continued over the workshop dinner held the same evening.



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ESF policy is to encourage contributions from both young and female researchers.

The attached table identifies the numbers in each category

Age	Male	Female
Under 35	3	7
35-50	8	1
50+	8	1
Totals	19	9

Although not ideal, it was felt that a reasonable degree of representation of both young and female scientists was achieved. It was unfortunate that several older women scientists were unable to attend the workshop.

Nationality:

Nationality	Number
Cyprus	1
Czech Republic	1
Finland	2
France	1
Poland	5
Romania	2
The Netherlands	4
UK	11
USA	1
Total	28

The workshop also achieved a wide spread of nationalities. The emphasis on UK delegates was in part due to the inclusion of UK stakeholders, plus the wish to include UK experts to lead the discussion on the field visit.

Scientists were identified by their institutional address - and not their nationalities - using these would have given a different range of countries represented (one of the Dutch delegates was in fact a German national; whereas the delegate from the USA was of Dutch origin).

It was unfortunate that delegates from Spain (who was to have described the case study of the Doñana) and Italy (who was to have led the economic discussion) were both unable to attend. These, and other scientists, who were invited but were unable to attend, clearly indicate that there is a Europe-wide support for discussion of this area.



Future activities

At the discussion at the end, of the workshop, the issue of further meetings was discussed. Everyone was very positive about the workshop, and felt that it had addressed a real need. It was thus decided to explore ways in which the group could meet again in further years. In deciding this guiding principles were identified:

1. The workshop had benefited enormously from the cross-discipline discussions, and the meeting between conservation scientists, philosophers, ethicists, and social scientists should be the primary focus for the continued meetings. There was no point in convening meetings that replicate other discipline-oriented groups (such as the International Mires and Wetlands Group).
2. The workshop needed the focus of a specific set of environmental problems, and agreed to retain that focus in terms of wetlands (although perhaps more widely defined than was the case for this workshop). This restricted the field to a manageable amount, but more importantly gave the discussions a firm grounding in practical issues and situations.
3. The workshop felt that they had barely scratched the surface of some of the issues, and that future meetings should perhaps focus on one or two issues in a little more depth, so building on the foundations laid in this workshop

In order to take these ideas forward, a committee was formed to explore the issues. (This would be a “virtual” committee, communicating by email) consisting of:

Adrian Armstrong
Angheluta Vadineanu
Chris Bradley
Henny van der Windt
Marek Kruk

The committee would attempt to identify avenues for further funding. These could include the establishment of an ESF network (an idea support by Prof Michaelidou) or some form of European Commission funding (e.g. as a n accompanying measure in the Science and Society programme).

The wider group of the workshop was asked to identify any additional members that ought to be included (the workshop group had been rather ad hoc, and several; immediately identifiable potential participants had been unable to attend because of other commitments). They were also asked to identify any sources of funding that the committee had not explored, and to bring these to the attention of the committee.

Publication

Chris Bradley described progress with publication plans. During the workshop, participants had responded positively to the suggestion. Chris will produce a book proposal for RGS-IBG (Royal Geographical Society – Institute of British Geographers) series for their committee meeting on 5th September. A copy of the outline submission is appended.

Adrian Armstrong will explore the possibilities of inserting a meeting report into one of the Environmental Ethics journals.



Publication proposal:

Ethical and Social Issues in Wetland Management and the role of environmental policy

Edited by A. Armstrong, C. Bradley, and J. Bryson

Overview.

This edited book will examine the ethical issues that arise in wetland management as a result of implementing the Biodiversity Convention. The book seeks to drive the research agenda by identifying how an ethical perspective should be an integral component of environmental policy making, to enable the views of all interested parties to be fully incorporated within the decision-making process. The book will focus on wetland management for a number of reasons: there has been growing recognition of the important role of wetlands within the biosphere; to the extent that there is growing pressure for wider wetland conservation (and restoration), secondly, the physical basis for regulating physical processes within wetlands is generally well understood, although some work remains to understand fully the links between wetland hydrology and ecology. Finally, wetlands may be considered as transitional environments, that occupy a distinctive niche intermediate to the aquatic and terrestrial habitats, and in some cases individual wetlands may to require pro-active management to conserve particular habitats.

An important feature of the book is the degree to which it will include contributions from human and physical geographers, experts in social policy and ethical philosophers. In a total of around **110,000 words**, the book will seek to establish and review the current methodological basis in wetland management from differing disciplinary perspectives. The application (and integration) of these methodologies will then be illustrated in a number of Case Studies examining specific floodplain wetlands in four countries: the Somerset Levels (UK), the Vallée du Drugeon (France), the Biebrza wetlands (Poland), and the Danube Delta (Romania). The case studies will seek to identify common themes and problems in implementing environmental policies across Europe and illustrate the degree to which physical and social scientists need to work together

A selection of supplementary 'case-notes' will illustrate significant additional problems relating both to management and the implementation of Environmental Policies in selected European contexts.

The book will conclude with a substantive chapter, written by an Environmental Philosopher that considers the Philosophical context and debate represented by both the three 'Case Studies' and the 'Case Notes'.

Contents.

Chapter 1: Introduction.

Authors: The Editors

This chapter will set the context for the book, by describing the background to current environmental management issues (e.g. the Biodiversity Convention; the Habitats Directive) and the extent to which responses have been implemented within the EU. It will define key terms, and justify the emphasis on wetland environments. The chapter will also consider the extent to which social and physical scientists have worked together, and highlight the need for an ethical perspective to management



Chapter 2: Wetland Hydrology

Author: M. Acreman,

Chapter 2 will review our current understanding of wetland physical processes.

It will emphasise recent advances in understanding wetland hydrology, and finish by identifying ways in which these physical principles have influenced wetland management.

2.1 Introduction

2.2 Freshwater Wetlands and the River Catchment

- geomorphological context in which wetlands form.
- Importance of variations in quantity and quality of water inflow
- Description of the wetland hydro-period and the dynamics of the wetland water budget.

2.3. Wetland Functional Values.

- description of general features of the association between plant communities and specific geomorphological units.
- Assessment of the difficulties in deriving a causal relationship between hydrological processes

2.4. Summary of Hydrologically-based Wetland Management

- summary of how recent advances in understanding physical and ecological processes (described in Sections 2.2 and 2.3) have informed wetland management.

Chapter 3: The Principles of Ecology Management

Author: O. Mountford

This chapter will introduce and outline the Ecological basis for wetland management, and will clarify the role of Ecologists in environmental management.

3.1. Introduction.

3.2. Underlying Principles of ecological management (e.g. Communities & Ecosystems; succession & Disturbance; Competition; Grazing etc.)

3.3. Ecological Principles in Wetland Restoration

outlining the degree to which the Ecological Principles described in Section 3.2. have been, or should be, incorporated within specific ecosystem restoration programmes.

Chapter 4: Economic and Political Approaches to understanding the re-creation and maintenance of wetland habitats.

Author: J. Bryson.

This chapter will provide the social context to issues relating to environmental management, considering:

- the complexity of wetland environments
- the utility of use and exchange values
- the argument of development v. preservation
- the importance of information and knowledge

In doing this the importance of two themes / issues will be explored: firstly, how may scientific knowledge be incorporated into wetland management strategies; and secondly, which decision-makers acquire positions of power.



Chapter 5: An Introduction to Ecological Economics: the valuation of natural resources

Author: K. Oltmer

This chapter will summarise ways in which natural resources can be valued; including recreational use value; commercial use value; existence value and bequest value. The importance of Neo-classical economic theory in relation to natural resources will be considered.

Case Studies:

Each case-study will be of c. 8-9,000 words and will follow a common structure:

- Physical Background and catchment context (i.e. natural wetland characteristics)
- Identification of stake-holders and discussion of current conflicts
- Description of current management plans.

Chapter 6 Case Study 1: The Somerset Levels, UK

A. Armstrong C. Bradley & Jane Poore

Chapter 7 Case-Study 2: The Valle du Drugeon, France

Genevieve Magnon and co-workers

Chapter 8 Case-Study 3: The Danube Delta (Lower Danube Wetlands), Romania

A. Vadineanu and co-workers

Chapter 9: Case study 4: The Biebrza wetlands

Author Hubert Piorkowski

Chapter 10: Case Notes (each of around 2,500 – 3,000 words):

- i. Engineering and Ecology; A. Feest
- ii. Flood Insurance as an instrument of environmental policy; A. Lasut
- iii. The ecosystem budget method as a tool to implement environmental policy for wetland – water quality relations; M. Kruk
- iv. Controlled runoff from agriculturally-used wetlands in the Niotec river valley as a method for their preservation; L. Labedzki.
- v. Wetland forest planning and valuation; J. Hiedanpaa.
- vi. Deliberation as a strategy in conservation and decision-making; J. Swart and others
- vii. The example of the Wadden Sea: H. van der Windt
- viii. Wetlands and large herbivores. I. Klaver & J. Keulartz
- ix. The Morava River floodplain wetlands; J. Ungermann

Chapter 11: Ethics in Environmental Conflicts. M. Oksanen



Readership

This book seeks to provide an accessible introduction to developing an ethical context to environmental management. In so doing it should be a useful text-book for undergraduate students studying Geography, Environmental Science or Environmental Management degrees. It will also be useful supplementary reading for post-graduate students, and from an academic perspective, will complement the available literature on wetlands and environmental ethics.

Competing Titles.

We are aware of no other titles that address this topic from the inter-disciplinary perspective that this book follows. There is a wide literature on both Wetland Management (physical and social perspectives), and on Environmental Ethics, however, there appears to have been little academic exchange across the two topics. In particular, the physical science literature on wetlands pays little attention to the ethical perspective (it is missing, for example, from the Wetlands book by Mitsch & Gosselink, 2001), although the environmental ethics literature does use examples of wetland management. The subjects covered will be complementary to two recent books published by Routledge: 'Politics and the environment : from theory to practice' by James Connelly and others (2nd ed; 2002) and 'Environmental ethics : an introduction with readings' by John Benson (2000).

The RGS-IBG Book Series

This book should provide an appropriate addition to the RGS-IBG book series that includes an earlier book on Wetlands (Williams, 1993). The book should also address the main criteria for the RGS/IBG book series:

- quality of research – this is a developing area of environmental research, inevitably there is likely to be increasing attention to interdisciplinary work in this field. This will be enhanced by the combination of multi-authored generic chapters and summaries of individual case-study wetlands.
- Contribution to research field: the authors of individual chapter have a recognised research track-record. Hitherto, the authors have not collaborated to any significant degree, but they clearly have complementary interests that should be demonstrated by the content of the book.
- Likelihood to stimulate other research: we believe that this is likely to be a growing area of research, and we hope that this book should encourage further geographical and interdisciplinary research on environmental management.
- Scholarly but accessible: the structure of the book is intended to provide a scholarly but accessible entry into the literature, and to illustrate the interdependence of the physical and social sciences. This should be enhanced by the choice of case studies, and by the international authorship.



Workshop Papers

Title	Author	Page
The Principles of ecological management	Owen Mountford	1
Hydrology of wetlands	Mike Acreman	7
An introduction to environmental ethics	Robin Attfield	10
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