

## **European Forum on Nature Conservation and Pastoralism**

### ***The role of the European Forum on Nature Conservation and Pastoralism***

Europe's natural and cultural heritage is enriched by the wide variety of regional farming systems which work in harmony with local environmental conditions. However, many of these farming systems are currently under threat. The aims of the European Forum on Nature Conservation and Pastoralism are therefore:

- To increase understanding that certain European farming systems are of high nature conservation and cultural value.
- To ensure the availability, dissemination and exchange of supporting information, combining research and practical expertise.
- To bring together ecologists, nature conservation managers, farmers and policy makers to consider problems faced by these systems and potential solutions.
- To develop and promote policy options which ensure the ecological maintenance and development of these farming systems and cultural landscapes.

The Forum is a pan-European non-profit organisation, bringing together non-governmental and governmental participants from several interest areas. It is a network to exchange information, identify conclusions, and inform policy development. To achieve its aims, the Forum holds conferences every two years, organises workshops and seminars, and produces two issues of the newsletter *La Cañada* per year. It also conducts research into the ecological relationships on high-nature-conservation-value farmland and into the development of appropriate policies for such areas. The following provides an overview of what the Forum regards as its key activities and main achievements during the period 1996-2001 (based on a report to WWF-UK in December 2001). An indication is also provided of recent activities and work in this field. The report is structured around the five main headers which encompass the Forum's work.

### **ADMINISTRATION & MANAGEMENT**

#### **Main activities during the period 1996-2001**

- Obtained financial support for Forum's general activities from WWF-UK (1996-2000), JNCC (1996-present) and DG Environment under their support for NGOs working in the field of environmental protection (1997/98 - present). Additional support was also obtained for a range of specific activities as indicated below.
- Established a secondment arrangement for three years (April 1998-March 2001) with English Nature to part-fund a full-time post of Director. The majority of the work of the Forum is contibuted by members in a voluntary or part-funded capacity. Given the increase in demands on the Forum there was a need for a full-time position in order to maintain momentum and help guide the input from the wider membeship.
- Maintained close links with Natacha Yellachich and (following Natacha's departure) Annali Bamber Jones in WWF's European Policy Office.

#### **Recent and current activities**

- Financial support for Forum's general activities currently continue to be funded from the JNCC and DG Environment's support for NGOs. An increasing amount of Forum's budget is now coming from project-specific activities.

- Following the retirement of our Director, decentralised further the activities of the EFNCP to allow more initiative from the network itself both in the initiation and development of projects.
- Continued to maintain close links with Annali Bamber Jones and (following Annali's departure) Elixabeth Guttstein in WWF's European Policy Office.

The essence of the Forum is to bring together partners to share expertise and where appropriate to co-ordinate work. Until 2001, this was achieved through the combined work of a full-time Director on secondment from English Nature, who was concerned mainly with administrative matters, and a large amount of mostly voluntary input from individuals within the Forum's network on specific activities. In 2001, the Director reached retirement age, so that this very significant funding stream came to an end. Recognising both financial imperatives and the benefits of individual empowerment for the members of the network, it was decided that EFNCP would be run for the time being at least through the cooperative involvement of a wider range of individuals, none of whom would be employed full-time, but each of which could claim at least some payment for their work. EFNCP thus has no full-time staff at present, but its activities involve a substantial commitment of time from a small number of individuals within the network. These are mostly members of the Executive Committee and governing Board. EFNCP's work therefore both complements and benefits from the other ongoing work carried out by these individuals, whether it be in agriculture, research, farm advice or policy.

The Forum has proven to be a most effective way of achieving the cooperation of many skilled but busy people to identify, resource and conduct necessary research; to translate this to appropriate formats, both to increase awareness and to inform policy making; and to enhance communication and understanding between those developing policies and those affected by the implementation of these policies. Uniquely, it has shown an ability to feed-back information from those affected by policy changes to officials responsible for developing those changes.

## BIENNIAL CONFERENCES

### **Main activities during the period 1996-2001**

- Held the Fifth Meeting of the Forum with the theme *Nature Conservation and Extensive Agriculture in Europe: Integrating Mountain Livestock Farming into EU Policy Development* in Cogne, northern Italy (September 1996). The meeting was funded jointly by the Forum together with the Assessorato dell'Agricoltura, Forastazione e Risorse Naturali, Regione Autonoma Valle d'Aosta.
- Held the Sixth Meeting of the Forum with the theme *Managing high nature conservation value farmland: policies, processes and practices* in Luhacovice, Czech Republic (June 1998). This conference was organised by EFNCP with additional funding and support from the Dutch Ministry for Agriculture, Nature Management & Fisheries.
- Held the Seventh Meeting of the Forum with the theme *Recognising European pastoral farming systems and understanding their ecology: a necessity for appropriate conservation and rural development policies*, Ennistymon, Ireland (June 2000). This conference was organised by EFNCP with funding and support from the Irish Heritage Council and Dutch Ministry for Agriculture, Nature Management & Fisheries. <http://www.efncp.org/pdf/proc7.pdf>

### **Recent and current activities**

- Forum representatives are involved in a number of meetings to establish arrangements for the Eighth Meeting of the Forum which was scheduled to be held in Montpellier and the Southern Causses, France in autumn 2002. This conference is being organised by EFNCP in association with a number of NGOs in France.

The Forum's biennial meetings fulfil a major part of the role as a forum. These review progress on basic scientific work and identify further research needs in order to fulfil the requirements of informing policy development and awareness raising. A further role of main Forum meetings is to use the location to bring into the network a new range of contacts as well as maintaining earlier ones - as well as to see, on the ground, examples of high-nature-value farming systems. The 1998 meeting was held in the Czech Republic to facilitate the development of contacts in central and eastern Europe. This was successful and the Forum now counts many participants from central and eastern Europe. Further work in this region, related to EU accession has thus been stimulated. The meeting in 2000 maintained that wide involvement, but was also integrated into the Forum's high priority work on producing a typology of European farming systems for environmental purposes.

It was intended that the 2002 meeting in France would build on the successes of recent Forum meetings adopting a similar structure, especially with regard to incorporating farm visits and discussions into the overall programme. It was envisaged that the meeting would focus on the sheep regime and farming systems and the location established in southern France provides a good venue for this, because problems faced by sheep producers there are relevant to those in many mountain areas throughout Europe. It was intended that the French venue would also aid the building of further French-speaking involvement in work of the Forum overall.

The agreement between EFNCP and the French NGOs was predicated on the assumption that the main funding would be from the DG Environmental NGO support budget for 2002/3 and that additional support would be sought in the main (through our French partners) from French Government sources. The themes of this meeting would include the environmental issues associated with sheep systems and the French approach to Rural Development, using the limestone landscape of the Causses as a way of linking to other karstic areas of Europe.

Lack of news from the Commission on the success or otherwise of the Forum's application for NGO support for 2002/3, combined with the extremely disruptive effects of the French elections on the funding process in France, have meant that there is no possibility of being able to plan the conference with confidence in the time available. The EFNCP Executive Committee has therefore reluctantly decided to postpone the conference until fiscal year 2003/4. Work in 2002/3 will therefore once more be concerned with fund raising and beginning to organise a programme.

## RESEARCH

### **Main activities during the period 1996-2001**

- *Possible Options for Better Integration of Environmental Concerns into the CAP Support for Animal Products.* This project was awarded jointly to CEAS Consultants Ltd. and the Forum and funded by DG Environment 1996/1997. This study developed thinking on how alternative systems of livestock support might be introduced, reviewed the potential options and explained why it was believed that the system recommended (Forage Area Payment Scheme) could meet the objectives of redistributing current support in a more production-neutral and environmentally beneficial manner. In essence, the proposals were essentially for a unified system of area payments for all of the livestock sectors, which would

provide a much more robust basic level of support upon which further levels of environmental measures could be applied without any fundamental contradiction.

- *The environmental impact of dairy production within the EU: practical options for the improvement of the environmental impact.* This project was awarded jointly to CEAS Consultants Ltd. and the Forum and funded by DG Environment. As part of this study, the Forum developed a typology which essentially differentiates systems according to the way in which farmland is managed combining economic/technical classification criteria, bio-geographical region and forage and fodder resources. Using these three dimensions, all dairy farm in the EU were allocated to one of ten broad dairy systems by reference to threshold values of some key indicators such as fertiliser use, concentrate use, farm size, herd size, milk yield, livestock density and main winter fodder used. A copy of the full report is available on DG Environment's website at <http://europa.eu.int/comm/environment/agriculture/pdf/dairy.pdf>.
- *The environmental impact of olive oil production within the EU: practical options for the improvement of the environmental impact.* This project was awarded to the Forum in association with the Asociacion para el Analisis y Reforma de la Política Agro-Rural in Spain and funded by DG Environment. The rationale behind this study was the same as with the Dairy work. A copy of the full report is available on DG Environment's website at <http://www.europa.eu.int/comm/environment/agriculture/pdf/oliveoil.pdf>.

### Recent and current activities

- *A review of the Irish Rural Development Plan 2000-2005: implications for national heritage.* This project was awarded to the Forum by the Heritage Council of Ireland. Within this project the Forum assessed the likely implications for farmers and the environment of a shift to new payments under the new RDP in Ireland.
- Forum representatives contributed to a two-day seminar organised by the European Environment Agency in Copenhagen in February 2002 concerned with *Developing a typology of European farming systems for environmental purposes*. This two-day meeting discussed technical approaches for taking the concept forward, and in particular for defining High Nature Conservation Value farmland on the basis of available (or easily developed) remote sensing or farm account data sets.
- A Forum representative (Dr Eric Bignal) continued to act as a scientific adviser to one of the research projects funded under the European Commission's 5th Framework programme - *ELPEN: European Livestock Production Evaluation Network: Development of a Livestock Policy Decision Support Tool*.
- *PASTORAL: the agricultural, ecological and socio-economic importance of free-ranging livestock rearing in Europe.* This Concerted Action is funded under the European Commission's 5<sup>th</sup> Framework programme and conducted in collaboration with partners from throughout Europe. To-date, the Forum has assisted in the organisation, contribution to and dissemination from three workshops: *Extent & Characteristics of Extensive Grazing Systems* (Spain, July 2001), *Impact of Scale & Accession on Biodiversity Value* (Romania, October 2001) and *Ecological principles and nature conservation value* (Scotland, June 2002) <http://www.sac.ac.uk/envsci/external/Pastoral/default.htm>
- Forum representatives contributed to a report on *The environmental effects of Common Agricultural Policy direct aids to farmers and the cultivation of sugar beet* which was prepared by the Central Science Laboratory under contract from DEFRA

- The Forum continued to be approached by a wide range of individuals and organisations for input to research proposals. Examples include involvement in:
  - *PAN: Thematic Network on Cultural Landscapes and their Ecosystems*. This Thematic Network will be funded under the European Commission's 5<sup>th</sup> Framework programme. The project will be coordinated by the University of Bergen and will be conducted in collaboration with partners from throughout Europe. The Forum will assist with the organisation of six workshops over a three period and will both contribute to these and help with the dissemination of the outputs.
  - The submission of a full proposal concerned with *Developing a High Nature Value farming area indicator* to the European Environment Agency in response to a call by them for tenders. If successful, the project will be led by the Danish Centre for Forest, Landscape and Planning and will involve a number of partners from throughout Europe.
  - The submission of an Accompanying Measures proposal concerned with *Transhumance: A review of the role of transhumance in mountain ecosystem processes and dynamics* to the European Commission's Framework 5 Programme in March 2002. A decision on the proposal is pending. If successful, the project will be led by ALTERRA in the Netherlands and will involve a number of partners from throughout Europe.
  - The submission of an unsuccessful research proposal on *Conflicts and Sustainability around Mountain Protected Areas* to the European Commission's Framework 5 Programme in October 2001. If this had been successful, this network would have been led by the Centre for Mountain Studies at Perth College and would have involved a variety of partners from throughout the EU

Much of the research work of the Forum in recent years has revolved around trying to address one issue - the lack of a structured classification, from an environmental perspective, of European farming systems. What is required is a broad typology which can be related to farms - since farms are the units that are the target of policy and through which management decisions are made. Without such a "common currency" it is very difficult to make progress on policy issues regarding farming and the environment, such as maintaining the status quo, environmental cross compliance, environmental enhancement, or appropriate developments. If we do not have a clear idea of whether European pastoral farming can be divided into more or less discrete systems (from our nature conservation perspective), how can we begin to understand (or influence) management which impacts on these systems through incentives to farmers? This is the aspect of the Forum's work where the external funding has been most significant, not least because these projects emerge in the course of the funding year.

## DISSEMINATION

### **Main activities during the period 1996-2001**

- Produced and distributed issues 5-14 of the Forum newsletter *La Cañada*.
- Maintained contacts with a wide variety of interested parties throughout Europe through involvement and representation on other networks (e.g. GAP, Eurosite) and through participation of Forum representatives at a wide variety of meetings, seminars and input to project proposals.
- Maintained a flow of papers and articles for a range of audiences to illustrate the importance of these farming systems (see list at end of this document)

- Obtained funding from the Dutch Ministry of Agriculture, Nature Management and Fisheries with respect to funding the translation of one of the Forum's previous publications (*The Nature of Farming*) into French (*La nature de l'agriculture*).
- Establish and develop the Forum site on the internet (<http://www.efncp.org>)
- Arranged a study visit by a group from the Highlands and Islands of Scotland to the Alentejo Region of Portugal (January 1996). This visit was funded principally by DG Environment under their Travel Grant Aid Programme and organised the Forum in consultation with the Institute for European Environmental Policy.
- Arranged a study visit by a group of farmers union representatives from the Highlands and Islands of Scotland to the European Commission offices in Brussels to meet with DG Agriculture and DG Environment staff (December 2001). This visit was organised by the Forum and funded principally by the individual farmers union delegates meeting their own costs.

### **Recent and current activities**

- Issue 15 of the Forum's newsletter *La Cañada* was produced and disseminated early in March 2002. *La Cañada* was designed originally to provide an information exchange linking the network of ecologists, nature conservationists, farmers and policy makers who constitute the participants in the Forum. The need for the newsletter was identified initially at the Forum's meeting in Pau, France in 1992; the first edition appeared in March 1994. Very rapidly, it became apparent that *La Cañada* is effective also in spreading the message to a much wider audience, some of whom themselves become active in this area. There is a continuing increase in interest to receive *La Cañada* as well as a high degree of retention. *La Cañada* is sent to those active in Forum activities, appropriate officials in governments and the Commission, and as part of information provided in response to enquiries about the Forum. It has proven a very effective tool.
- Arranged a study visit by a group of farmers union representatives from the Highlands and Islands of Scotland to the European Commission offices in Brussels to meet with DG Agriculture and DG Environment staff (December 2001). This visit was organised by the Forum and funded principally by the individual farmers union delegates. One of the continuing aims of the EFNCP is to promote the importance of extensive farming systems for nature conservation in a way that crosses borders and interest groups. Taking policy makers out into the field to meet farmers and their families (e.g. at the EFNCP biennial conferences) and taking stake-holders (farmers) from the Scottish Highlands and Islands to Brussels in December 2001 are good examples of this type of approach. At all of the EFNCP events the aim is to avoid being parochial and to broaden the debate geographically and culturally.
- Maintained contacts with a wide variety of interested parties throughout Europe through involvement and representation on other networks (e.g. GAP, Eurosite).
- A Forum representative participated in a workshop in Brussels in March 2002 where the interim results were presented from the *Europe's Rural Futures* project funded by WWF and the UK-Land Use Policy Group
- Forum representatives participated in the *Greening the CAP* workshops organised by the Institute of European Environmental Policy for the European Commission

- Maintained a flow of papers and articles for a range of audiences to illustrate the importance of these farming systems. The Forum also continues to be approached by a wide range of individuals and organisations for input to meetings and workshops. Examples of both channels include:

Bignal, E.M., Jones, G., & McCracken, D.I. 2001 Comment: future directions in agriculture policy and nature conservation. *British Wildlife* 13 16-20.

Bignal, E M and Baldock, D 2002 Agri-environmental policy in a changing European context (paper submitted to the BGS/BES Conference April 2002)

- The Forum website has been rather inactive in recent months and the Forum is currently considering ways of increasing activity and effectiveness of the site.
- Funding was unsuccessfully applied for under the Information Actions programme to arrange a study tour of Irish LFA farmers to the Scottish Highlands and Islands

## ORGANISATION OF SEMINARS & REPRESENTATION ON EC COMMITTEES

### **Main activities during the period 1996-2001**

- Held a seminar in Brussels on *The CAP and Environmental Practices* (January 1996). This one-day seminar was mainly aimed at European Commission officials and was funded principally by the British Ecological Society and organised through WWF's European Policy Office.
- Held a seminar in Debe, Poland on *Nature Conservation and Agriculture in Central Europe* (May 1996). This three-day seminar was organised by the Institute for European Environmental Policy and funded jointly by the Dutch Ministry of Agriculture, Nature Management and Fisheries and the Forum.
- Held a seminar in Brussels on *Agenda 2000 and Prospects for the Environment* (February 1998). This one-day seminar was mainly aimed at European Commission officials and was organised through WWF's European Policy Office.
- Held a symposium in Florence, Italy on *Conservation of biodiversity by supporting high-nature-value farming systems* (June 1998) This one-day symposium was mainly aimed at ecologists and was organised as part of the International Congress of Ecology. Publication of papers was supported by the British Ecological Society
- Held a seminar in Brussels on *A review of national proposals for Less Favoured Area (LFA) schemes under articles 13-21 of the new Rural Development Regulation (1257/99)* (March 2000). This one-day seminar was mainly aimed at European Commission officials and was organised through WWF's European Policy Office.
- Held a seminar in Bratislava, Slovakia on *Preparing for the Implementation of Agri-Environment Schemes in Central and Eastern Europe* (December 2000). This two-day seminar was aimed at Ministry of Agriculture officials and NGO representatives from the 10 Accession countries and was organised by AVALON and the Institute for European Environmental Policy with support from the European Forum for Nature Conservation and Pastoralism, the British Ecological Society and DG Environment.
- Held a seminar in Brussels on *A Review of the Environmental Implications of the EU Sheep and Goat Meat Sector* (January 2001). This one-day seminar was mainly aimed at European Commission

officials and was organised by EFNCP with support from the Land Use Policy Group of the *GB Wildlife and Countryside Agencies* in conjunction with *BirdLife* and *WWF*.

- Since 1998 the Forum has provided representation to meetings of the Consultative Committees on 'Rural Development', 'Agriculture and Environment' and 'Animal Products' established by DG Agriculture to consider and advise on further reform of the CAP.

### **Recent and current activities**

- Produced a report for the funders and published two articles in the newsletter *La Cañada* on the seminar held in Brussels on *A Review of the Environmental Implications of the EU Sheep and Goat Meat Sector* (January 2001)
- Facilitated a seminar organised by the Heritage Council of Ireland in Kilkenny in March 2002 on the interaction between the CAP RDP measures and the environment.
- The Forum has continued to provide representation to meetings of the Consultative Committees on 'Rural Development', 'Agriculture and Environment' and 'Animal Products' established by DG Agriculture. In March 2002 EFNCP provided a written submission to the DG Agriculture Advisory Committee on the CAP at which the Commissioner was present.
- The Forum held a seminar in Brussels in July 2002 focussed on *A debate on the use of Area Payments in the EU Livestock Sectors and LFA*.
- Funding has been applied for under the Information Actions programme to hold a seminar on the RDP forestry measures and biodiversity in open grazed landscapes

The target of sustainable development in agriculture is currently progressing through two approaches - by increasingly using the second pillar of the CAP (the Rural Development Regulation) whilst at the same time introducing some elements of sustainable development into the first pillar (direct support). Both of these approaches have positive and potentially negative sides and the EFNCP has been, and will continue to be, active in the debate. The EFNCP is probably one of the few environmental organisations questioning the strategy of moving all (most?) environmental actions into the second pillar measures. In this respect it has been active in attempting to get agri-environmental measures more focussed and targeted and in raising the issues of how the first pillar of the CAP could be greened. The ultimate object for a truly sustainable agriculture policy would be to have one very green pillar. Recent publications relating to this issue include articles in *La Cañada*.

The seminars organised by the Forum in Brussels in January 1996 (*The CAP and Environmental Practices*), February 1998 (*Agenda 2000 and Prospects for the Environment*), March 2000 (*A review of national proposals for Less Favoured Area schemes under articles 13-21 of the new Rural Development Regulation*) and January 2001 have proved highly popular and useful, both for members of the European Commission and national governments, and for Forum participants. The seminars aim to bring together those responsible for policy development and those dealing 'on the ground' with nature conservation and agriculture in high-nature-value areas. There has been strong encouragement from European Commission officials, particularly in DGs Agriculture and Environment, to develop further this successful formula.

Following the decision of the Agricultural Commissioner, Dr Fischler, DG Agriculture restructured its consultative committees, with one of the procedural changes being the incorporation of environmental NGOs into many of the committees. DG Agriculture consulted four European environmental networks



with expertise in agriculture to nominate the environmental NGO members of these committees. These four networks (World Wide Fund for Nature, BirdLife International, European Environment Bureau and the Forum) are working together to provide this input. The Forum will continue to work closely with EEB, BirdLife and WWF to ensure that more effective use is made of these Committees in order to get the environmental message across and into future policy.

## PUBLICATIONS

In addition to the newsletter *La Cañada*, publications arising from the work of the Forum from 1996-present include:

- Beaufoy, G. 1997. *Environmental Considerations for the Reform of the CAP Olive Oil Regime*. (EFNCP Occasional Publication Number 3). January 1997.
- Beaufoy, G. 1998. *The Reform of the CAP Olive-Oil Regime: What are the Implications for the Environment?*. (EFNCP Occasional Publication Number 14). February 1998.
- Beaufoy, G. 1998. The EU Habitats Directive in Spain: can it contribute effectively to the conservation of extensive agro-ecosystems. *Journal of Applied Ecology*, **35**: 974-978.
- Bignal, E.M. 1996 The EU's agri-environmental Regulation No 2078/92. Case Study: European Union Part II: Examples of Environmental Benefits. (EFNCP Occasional Publication Number 8). September 1996
- Bignal, E.M. 1998. Conservation of biodiversity by supporting high-nature-value farming systems. *Journal of Applied Ecology*, **35**: 949-954.
- Bignal, E. 1998. Low-Intensity Livestock Systems: Defining Ecological Attributes: paper presented at The European Policy Evaluation Network (ELPEN) Workshop 1, Institute of Mountain and Rural Economics, Greece, 22-24 January 1998 (EFNCP Occasional Publication Number 15). January 1998.
- Bignal, E. (ed.) 1998. *La nature de l'agriculture: Les systèmes d'agriculture à grande valeur naturelle – L'agriculture extensive dans neuf pays européens*. European Forum on Nature Conservation and Pastoralism, in association with the Institute for European Environmental Policy, February 1988.
- Bignal, E.M. 1999. Agenda 2000: the Common Agricultural Policy reform proposals. *British Wildlife*, **10**: 172-176.
- Bignal, E.M.. 1999 *The agri-environment challenge: agriculture and environmental interactions*. Commissioned report for DG Agriculture
- Bignal, E.M. & McCracken, D.I. 1996. Low-intensity farming systems in the conservation of the countryside. *Journal of Applied Ecology*, **33**, 413-424.
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- Bignal, E.M. & McCracken, D.I. 2000 The nature conservation value of European traditional farming systems. *Environmental Reviews* **8** 149-171
- Bignal, E.M. & Pienkowski, M.W. 1999. *Metapopulation dynamics and grazing systems: the nature conservation importance of management using natural processes in a cultural landscape (the Scottish Highlands and Islands)*. (Paper presented at a symposium on *Landscape effects of different farming systems* at the 5<sup>th</sup> World Congress of the International Association for Landscape Ecology, Snowmass Village, Colorado, U.S.A., 29 July to 3 August 1999). EFNCP Occasional Publication Number 22.
- Bignal, E., Baldock, D. & Tubbs, C. 1996. The EU's Agri-Environment Regulation No. 2078/92: Examples of Environmental Benefits. (EFNCP Occasional Publication Number 8). September 1996.
- Bignal, E., Bignal, S. & McCracken, D. 1997. The Social Life of the Chough. *British Wildlife* **8**(6) 373-383. August 1997.

- Bignal, E., Eden, P. & Viera, M. 1996. Report of a Visit by a Group from the Highlands and Islands of Scotland to the Alentejo Region of Portugal. (*EFNCP Occasional Publication* Number 2). January 1996.
- Bignal, E.M., Jones, G., & McCracken, D.I. 2001 Comment: future directions in agriculture policy and nature conservation. *British Wildlife* 13 16-20.
- Bignal, E., McCracken, D. & MacKay, A. 1998. The economics and ecology of extensively reared Highland Cattle in the Scottish LFA: an example of a self-sustaining livestock system. (Paper presented at a conference on *Livestock Production in the European LFAs* organised as part of the programme European Network for Livestock Systems and Integrated Rural Development at Bray, Ireland, on 3-5 December 1998.) (*EFNCP Occasional Publication* Number 19).
- CEAS/EFNCP 2000 *The environmental impact of dairy production in the EU: practical options for the improvement of the environmental impact*. Commissioned report to DG Environment
- EFNCP/ARPA 2000 *The environmental impact of olive oil production in the EU: practical options for improving the environmental impact*. Commissioned report to DG Environment
- EFNCP 2001 *Recognising European pastoral farming systems and understanding their ecology: a necessity for appropriate conservation and rural development policies*. (*EFNCP Occasional Publication Number 23*) January 2001
- Goss, S., Bignal, E., Beaufoy, G. & Bannister, N. 1997. *Possible Options for the Better Integration of Environmental Concerns into the Various Systems of Support for Animal Products*. Report to the European Commission DG XI by CEAS Consultants (Wye) Ltd Centre for European Agricultural Studies and the European Forum on Nature Conservation and Pastoralism (*EFNCP Occasional Publication* Number 9). March 1997.
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- Luick, R. 1998. Ecological and socio-economic implications for livestock-keeping systems on extensive grasslands in south-western Germany. *Journal of Applied Ecology*, **35**: 979-982.
- McCracken, D.I. & Bignal, E.M. 1998 Applying the results of ecological studies to land-use policies and practices. *Journal of Applied Ecology*, 35, 961-967
- Mitchell, K. (ed.) 1996. *The Common Agricultural Policy and Environmental Practices* (Proceedings of the seminar organised by the European Forum on Nature Conservation and Pastoralism at COPA, Brussels on 29 January 1996.) (*EFNCP Occasional Publication* Number 1)
- Mitchell, K., Hart, L., Baldock, D. & Partridge, K. (eds) 1997. *Agriculture and Nature Conservation in central and eastern European countries: Proceedings of a seminar held at Debe, Poland, 12-14 May 1996*. Institute for European Environmental Policy, London.

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Ostermann, O.P. 1998. The need for management of nature conservation sites designated under Natura 2000. *Journal of Applied Ecology*, **35**: 968-973.

Pienkowski, M. 1998. The nature conservation value of low-intensity farming systems. (Paper presented at the Workshop on *Viable livestock systems for positive environmental management* organised as part of the programme European Network for Livestock Systems and Integrated Rural Development at Tour du Valat, Camargue, France, on 6-7 March 1998) *EFNCP Occasional Publication* Number 17.

Pienkowski, M.W. (ed.) 1999. *Conservation of biodiversity by supporting high-nature-value farming systems* (Symposium organised by the European Forum on Nature Conservation and Pastoralism at the International Congress of Ecology, Florence July 1998. Proceedings published in *Journal of Applied Ecology* 35 (1998): 948-990; and summary to be published in the Congress proceedings.) *EFNCP Occasional Publication* Number 20.

Pienkowski, M.W. & Bignal, E.M. 1999. The historical and contemporary importance of herbivores for biodiversity. (Paper presented at a symposium *Préserver la biodiversité par le pâturage extensif*, organised by the *Fédération des Parcs Naturels Régionaux de France*, at Paris - La Villette, France, 23 June 1999.) *EFNCP Occasional Publication* Number 21.

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