



LIFE and agri-environment supporting Natura 2000

Experience from the LIFE programme



European Commission Environment Directorate General

LIFE-Focus is the journal of the LIFE III programme (2000–2004).

LIFE ("L'Instrument Financier pour l'Environnement" / The Financing Instrument for the Environment) is a European Commission programme administered by the LIFE Unit of the Directorate-General for the Environment.

The content of LIFE Focus does not necessarily reflect the opinions of the institutions of the European Union.

Editor: Bruno Julien, European Commission, Environment DG, LIFE Unit – BU-9 02/1, B-1049 Brussels – Text: Anton Gazenbeek, Ecosystems LTD / Nature Link International – Revision: Bernard Brookes, Environment DG, LIFE Unit – Contributors: Yolaine Bouteiller, Mats Eriksson, Mariella Fourli, Ana Guimarães, Michael Hamell, John Houston, Concha Olmeda, Stefano Picchi, Angelo Salsi, Kerstin Sundseth, Marc Thauront, Alexandra Vakrou – Cover photos: Fundación Global Nature, Matthew Oates, English Nature, Louis-Marie Preau, LPO – Production: Nadine Mézard & Lea Wongsoredjo, Ecosystems LTD / Nature Link International – Graphic design: Nature Conservation Bureau – This issue of LIFE-Nature Focus is published in English.

Europe Direct is a service to help you find answers to your questions about the European Union New freephone number: **00 800 6 7 8 9 10 11**

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu.int).

Luxembourg: Office for Official Publications of the European Communities, 2003

ISBN 92-894-6023-7 ISSN N° 1725-5619

© European Communities, 2003 Reproduction is authorised provided the source is acknowledged.

Printed in Belgium

Printed on recycled paper

European Commission

LIFE Focus / LIFE and agri-environment supporting Natura 2000 - Experience from the LIFE programme

Luxembourg: Office for Official Publications of the European Communities

2003 – 72 pp – 21 x 28 cm ISBN 92-894-6023-7 ISSN N° 1725-5619



Preface	2
Chapter 1 – Introduction: the roles of LIFE and agri-environment	4
Chapter 2 – LIFE launches long-term management through agri-environmentp. 6Case one: Varde, Denmarkp. 7Case two: Pelouses sèches relictuelles, Francep. 8Case three: Liminganlahti, Finlandp. 9Case four: Chiemgau, Germanyp. 10	7 8 9
Chapter 3 – LIFE promotes wider use of agri-environment for Natura 2000p. 12Case one: Villacañas, Spainp. 13Case two: Plateau de Millevaches, Francep. 14Case three: March-Thaya, Austriap. 15Case four: Stora Alvaret, Swedenp. 16	3 4 5
Chapter 4 – LIFE designs new agri-environmental measures for nature conservation p. 18Case one: Drove roads, Spain p. 19Case two: Canis lupus, Greece p. 21Case three: Limestone pavements, UK p. 23Case four: Delta del Ebro, Spain p. 25Case five: Made in France p. 27	9 1 3 5
Chapter 5 – How attractive are agri-environmental measures to farmers?p. 29Case one: Steppe habitats, Portugalp. 30Case two: Brandenburg, Germanyp. 32Case three: Poitou-Charentes, Francep. 34Case four: Fiener Bruch, Germanyp. 36Case five: Examples from Germanyp. 38	0 2 4 6
Chapter 6 – LIFE helps find markets for conservation-oriented farmingp. 42Case one: Dijle valley, Belgiump. 43Case two: Rhön, Germanyp. 45Case three: Lafnitz river, Austriap. 47	3
Chapter 7 – Conclusions and recommendations	О
Appendix I: Points raised by the Oct. 23 2002 workshop discussions on LIFE, agri-environment and Natura 2000	9
Appendix II: LIFE, semi-natural habitats and agri-environment: overlap and concurrence	2
Appendix III: List of participants to workshop	6
Appendix IV: List of projects mentioned	8

Why is there a link between LIFE, Natura 2000 and agri-environmental measures?



The Natura 2000 Network must surely be one of the more ambitious environmental targets the European Union has set itself. It is probably the first attempt in the world to create, in a systematic way and according to a strict timetable, a coherent ecological network spanning half a continent.

Political support for the network was given at the Göteborg summit in June 2001, when the Union's heads of state and government set a goal of ending the loss of biodiversity in the EU by 2010, but the practical implementation has proved to be less straightforward.

There have been delays in identifying and proposing suitable sites for inclusion in the Natura 2000 Network. However, the network has now been officially established for the Macaronesian biogeographic region¹ (comprising the Azores, Madeira and the Canary Islands), while discussions on the other regions are well advanced².

With Natura 2000 site designation nearly complete, the focus has moved to the next phase. On a site-by-site basis, conservation targets must now be set and management plans drawn up and executed. What this means in practice to stakeholders, local communities

and individual citizens has led to very vigorous, and at times confrontational, debate and will certainly remain a very important issue during implementation of Natura 2000 on the ground. In June 2002 the EU Ministers of the Environment adopted the El Teide Declaration, which confirms the necessity of dialogue between landowners, land users and other stakeholders in the implementation of Natura 2000.

The legal basis of Natura 2000 is the Birds and Habitats Directives³ which fixed a target of restoration and maintenance of each designated site at a favourable conservation status. The means to achieve this is left to Member States.

The implementation of Natura 2000 does not imply a

long list of compulsory rules and constraints imposed by "Brussels", nor that human activities are necessarily forbidden. It does mean adapting activities which may adversely affect habitats and species (agriculture, forestry, fishing, hunting, recreation) and adapting them to the sustainable maintenance of Natura 2000 sites. That is why the contractual measures of Articles 6.1 and 6.2 of the Habitats Directive are being widely used in the practical implementation of Natura 2000. In consultation and collaboration with landowners and stakeholders, voluntary site management agreements are drawn up in which practices favourable to nature conservation are maintained or existing practices are modified to be more compatible. For degraded sites, projects are negotiated with owners and users which imply significant landscape changes through, for instance, rehabilitation of wetlands or removal of plantations of exotic species.

Site restoration and management implies costs. Until now there have been limited resources for Natura 2000. The most frequently used EU funds are: first, LIFE-Nature, which since 1992 has co-financed projects, selected on the basis of merit. The projects must support implementation of the Birds and Habitats Directives. Second, under the Common Agricultural Policy, the agri-environmental Regulation 2078/924 and agrienvironmental measures of the rural development Regulation 1257/99⁵ have sometimes been used to finance maintenance of Natura 2000 sites on agricultural land. The two sources have also been successfully combined to restore sites and install sustainable longterm management, as many of the cases described in this report will reveal.

- Geographic area delimited by particular climatic and vegetation types.
- See http://europa.eu.int/comm/environment/nature/natura.htm
- Council Directive 79/409/EEC of April 2 1979 on the conservation of wild birds and Council Directive 92/43/EEC of May 21 1992 on the conservation of natural habitats and of wild fauna and flora.
- Council Regulation (EC) N° 2078/92 of June 30 1992 on agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of the countryside.
- Council Regulation (EC) N° 1257/1999 of May 17 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund



Introduction: the roles of LIFE and agri-environment



Installing cattle stops on the Plateau de Millevaches. Photo © CEPA

Agri-environmental measures were introduced during two stages of reform of the Common Agricultural Policy (CAP). The MacSharry reform of 1992 introduced the first measures under agri-environment Regulation 2078/92, part of a package to move support to farmers away from product prices to direct payments. One of the options, under the so-called accompanying measures, was payments linked to the respect of the environment, at a time when Community environmental legislation was being established (for instance, the Nitrate Directive had come into force in 1991). Reduction in the (negative) impact of farming on biodiversity was specifically mentioned.

Regulation 2078/92 also formed part of the strategy of the Fifth Environmental Action Programme. The target was that 15% of agricultural land should be covered by the measures by 2000. In fact, as much as 20% was covered by 1998, but the variation across countries was enormous, ranging from less than 1% to as much as 87%.

Agri-environmental measures were included in the rural development strategy of the Agenda 2000 reform proposed by Commissioner Fischler in 1999. The so-called "second pillar" of the CAP came into being, and was embodied in the Rural Development Plans under Regulation 1257/99. These incorporated (1) further shift of farm support to direct payments, (2) further compliance with environmental objectives and (3) subsidiarity. In

concrete terms, co-financing of aid to farmers was offered for those who chose and agreed to adopt environmentally compatible production methods for at least 5 years. Mentioned amongst the specific objectives were extensification of farming and conservation of farmed environments of high natural value. Precise actions and conditions were laid down in national or regional rural development plans. Some of these include biodiversity and Natura 2000 as criteria. Regulation 1257/99 lays down Community-wide limits (per hectare) of aid, which vary according to the type of land cover. It was estimated that agri-environmental measures accounted for 10% of EU-financed agricultural support in 2001.

The two pillars of the CAP

Thus the Common Agricultural Policy is now divided into two 'pillars', the first being market management and the second rural development.

Market management, the first pillar, includes measures to support production and prices through import tariffs, export subsidies and intervention buying. It includes also direct payments for certain crops and livestock and management of set-aside of agricultural land and production quotas.

The second, "rural development", pillar groups structural and environmental aids. These include modernisation

and diversification, support for marketing, early retirement aids, additional support for farmers in lessfavoured areas and areas with environmental restrictions (including Natura 2000 sites), afforestation of farmland and agri-environmental measures. All these measures fall under the Rural Development Regulation (Regulation (EC) No.1257/99). Each Member State has drawn up a Rural Development Plan (RDP) specifying detailed implementation of the Regulation from 2000 to 2006. Application of agri-environmental measures is compulsory for Member States.

Thus, the agri-environmental measures have their background in agricultural policy. They began on a limited scale in some Member States back in the 1980s and were instituted at EU level through Regulation 2078/ 92 in 1992 before becoming part of the rural development axis of the EU's Common Agricultural Policy in 1999. Although they aim to reward farmers who make extra efforts to favour the environment, agrienvironmental measures are not a priori intended to further nature conservation, although they may contribute to that goal.

Good farming practice

The basis for giving aid under agri-environmental measures is the additional costs, the income foregone and provision of a financial incentive for farmers to go beyond good farming practice in order to provide environmental benefit. Good farming practice means applying sustainable farming techniques and conforming with any relevant legislation (e.g. relating to the environment, public health and animal welfare).1

The content and terms of agri-environmental measures are established at national or regional level within the framework of the national rural development plans and are made available to farmers on a voluntary basis. Regulation 1257/99 lays down the broad framework, EU co-financing rates (usually 50%, up to 75% for objective 1 areas) and limits for area payments, but the choice of actions and implementation of aids are left to the Member States.

LIFE-Nature

LIFE, in contrast to rural development, is a centralised instrument launched in 1992 and now in its third phase², where the Commission directly selects projects for cofinancing and monitors them throughout. The branch 'nature' of the instrument co-finances projects which support the implementation of the Birds and Habitats Directives, in particular establishment of the Natura 2000 Network.

The 682 LIFE-Nature projects approved for co-financing between 1992 and the end of 2003 have targeted approximately 10% of the circa 17,000 Natura 2000 sites proposed (Habitats Directive) or designated (Birds Directive) so far. The direct monitoring of LIFE projects gives the Commission a 'window' on to the practical implementation of Natura 2000 in the field.

LIFE projects and agri-environmental measures

The application of the subsidiarity principle to the implementation of the Rural Development Regulation (and thus to agri-environmental measures) has already been mentioned. Because of their practical application at local level, LIFE projects can provide valuable information and experience as to how these measures could be deployed and adapted to contribute in the best way to nature conservation. Moreover, by orienting existing agrienvironmental measures towards implementation of Natura 2000, LIFE maintains a Community perspective and supports Community policy.

In many cases LIFE projects have demonstrated how local agri-environmental schemes could be adapted to reconcile farming interests with nature protection. Discrepancies have been identified, and proposals made to correct them. On several occasions LIFE projects have revealed contradictory situations and illustrated the need to adapt current agri-environmental measures to the real needs of farming in protected areas.

The following chapters present a series of practical examples of LIFE projects, presented according to themes. Most of the projects were also presented at a workshop where LIFE project managers and officials from the Directorates-General Agriculture and Environment of the European Commission met in October 2002. For each theme conclusions are drawn and – where appropriate – practical suggestions made as to the future application of relevant agri-environmental measures.

Because agri-environment rewards action by farmers over and above good farming practice and compliance with legislation, it could lead to paradoxes for nature conservation. Nature reserves designated under national law may contain, as part of the legal act establishing the reserve, compulsory restrictions on farming (no fertilisers or biocides, no mowing before a certain date etc) in the interests of the species and habitats for which the reserve was established. It might then be argued that because the restriction is obligatory, any agri-environmental measures available under rural development plans in that Member State to compensate farmers for not using fertilisers or mowing late, cannot be applied to farmers in the nature reserve. Such interpretations would however only apply to nature reserves which are not part of Natura 2000, as Article 16.1 of Regulation 1257/99 allows compensation of costs and losses resulting from the application of EU environmental legislation such as the Birds and Habitats Directives.

See Regulation 1655/2000 of July 17 2000 (LIFE III) and http:// www.europa.eu.int/comm/environment/life/home.htm



LIFE launches long-term management through agri-environment



Recurring management by grazing on land cleared by Liminganlahti LIFE project. Photo © Jorma Pessa

The issue at stake

For some Natura 2000 sites (active raised bogs or ancient climax woodlands are two habitat types where this is often the case) it is sufficient to provide legal and physical protection to conserve the habitats in a favourable state. Other sites however require continuous maintenance to protect valuable habitats and prevent deterioration. Such sites typically include open semi-natural habitats: grasslands (calcareous, steppe and *Nardus*), species-rich hay and *Molinia* meadows, heaths and fens.

These habitats are inherently unstable and if left to themselves will evolve to other habitats of lower conservation interest, dominated by shrubs and trees. Historically, such habitats were generally maintained by human activities – livestock grazing, mowing etc. – connected to traditional, extensive farming systems. With recent intensification of farming and abandonment of less productive marginal land many have become overgrown

with shrubs and trees, converted to intensive arable farming or silage grassland or planted to forest.

The same argument applies to a range of birds protected under Annex I of the Birds Directive and other species, plant or animal, protected under Annex II of the Habitats Directive which require open land (meadow-breeding birds or sand-dwelling plants and invertebrates, to name but two). This open land is very often the result of farming practices which, if stopped or changed, will lead to a loss of the habitat on which these species depend.

The challenge for nature conservation management is to find a way of making maintenance of these habitats, once restored, economically viable for land owners and users.

The following examples show how conservation managers and stakeholders, acting together, have combined LIFE and agri-environmental measures to address this challenge.

LIFE in action | case one

Flooding farmland to create new economic opportunities for farmers

The Varde river valley was, until the 1950s, a complex patchwork of Atlantic salt meadows hosting a spectacular range of birds and other animals (one of the last breeding sites for the corncrake in Denmark). With time, however, the estuary and surrounding meadows succumbed to the pressures of agricultural intensification and eventually became a prime centre for the production of grass pellets for animal feed. Over 1,700 ditches were dug to drain the wet areas and high levels of fertilisers were used to promote growth. This of course took its toll on the area's wildlife, which gradually but systematically deteriorated over the years. However, the market for grass pellets crashed in the 1990s. This forced the Varde Farmers' Union to explore ways to change agricultural practices whilst still maintaining the farms in local ownership. They found that the area would be ideally suited for agri-environmental schemes, which would give them at least a 20year span of activity. However, for these schemes to be eligible, the fields would have to revert back to their former undrained state. The LIFE-Nature project "Varde", initiated by the Varde Farmers' Union, set out to do just that.

What did the LIFE project do?

- > Involved all stakeholders in the project's strategy through creation of a steering committee.
- > Enabled farmers who did not want to participate in restoration to swap land inside the project area against sections outside.
- > Restored the former hydrological situation through closure of 600 ditches. Sluices were installed to permit control of the water levels.

How did agri-environment contribute?

By the end of the project, 2,488 hectares of land had been restored to its former natural hydrological condition and subsequently covered by 20-year management agreements, involving over 250 farmers. These agreements set down a series of requirements for the management of the land including:

- > grazing by ruminants and horses at a maximum of 0.8 livestock units per hectare;
- > mowing of meadows after June 25 only;
- > no ploughing or use of fertilisers or pesticides.

Compliance was rewarded with a payment of €400 per hectare per year - the same return that farmers previously received from grass pellet production.

What is the outcome?

The project is a classic win-win example where both the farmers and the conservationists benefit. Thanks to an initial investment of €1.7 million through LIFE-Nature, the farmers are able to continue farming their land for the next 20 years via agri-environmental payments that



Restoring the hydrology of the Varde meadows. Photo © Søren Mariegaard

will bring in over €1 million to the area a year. As for nature, the amount of nitrogen leaching into the water has been reduced and the corncrake (Crex crex) - a threatened bird species over most of its European range - returned in 2001 after 30 years absence. Farmers in the Varde estuary are now aware of Natura 2000 and even contact site biologists on their own initiative to give news of the corncrake. This LIFE-Nature project has clearly acted as a catalyst to bring about stakeholder consensus on agricultural management techniques compatible with nature conservation.

LIFE in action | case two

Bringing grazing back to calcareous grasslands

The "Pelouses sèches" or dry grasslands project undertaken by a consortium of conservation NGOs, covered 29 Natura 2000 sites containing relict calcareous grassland throughout France. The grasslands – ranging from a few to several hundred hectares – were threatened by the demise of mowing or shepherding which had previously helped to keep them in good conservation condition. These previously open areas were fast becoming overgrown with shrubs and trees.



Flock of sheep on calcareous grassland near the village of Baume, Franche-Comté. Photo © Pascal Collin, ENC

What did the LIFE project do?

- Shrubs and bushes were cleared at practically all sites, followed either by intensive grazing or repeated mowing over a few years so that shoots and suckers of competing plants were topped, allowing typical calcareous grassland flora to appear.
- > Financed preparation of management plans for 22 of the 29 sites.
- > Financed NGO staff to work closely with local stakeholders to determine the best application of the management plan on each site.
- > Concluded agreements between farmers and NGOs for long-term management of the land restored by LIFE.
- In some sites the establishment of shepherds and flocks was assisted by providing the necessary infrastructure (e.g. for fencing and drinking troughs).

How did agri-environment contribute?

- > Grazing by sheep the traditional activity on calcareous grasslands – was considered the best means of maintaining biodiversity after restoration by LIFE. The challenge was how to entice farmers to put flocks on these areas and keep them there after the end of the LIFE project.
- > Some of the existing measures under the French agri-environmental programme provided the solution. They lay down mowing regimes and stocking densities which fitted the requirements in the management plans for calcareous grasslands. Through such a contract a farmer receives premia¹ for applying the appropriate management. The fact that the contracts guarantee payment for 5 successive years makes them doubly attractive. Contracts with farmers were concluded in 16 sites, and even generated new employment: three farmers in the Lorraine site joined forces to hire a shepherd to do the grazing required by their contracts, while in a site in the Franche-Comté a young farmer established a holding based on grazing management with agri-environmental contracts.

What was the outcome?

In most sites the combination of LIFE investments leading to regular management through grazing by sheep or mowing financed by an agri-environmental measure worked well. Over 500 hectares have come under grazing management and 170 hectares under mowing management. Simultaneously, some interesting lessons were learned. Thus, although the project approach was successful on blocks of land of at least 30–40 hectares, farmers were not interested in smaller areas which they considered uneconomic. Sites within cereal or vineyard areas were also not taken up, in this case because local farmers no longer had skills or interest in keeping livestock.

e.g. €110 per hectare per year under CTE (land management contract) no. 20-3 under the French rural development plan.

LIFE in action | case three

Furthering mowing and grazing systems in Europe's far north

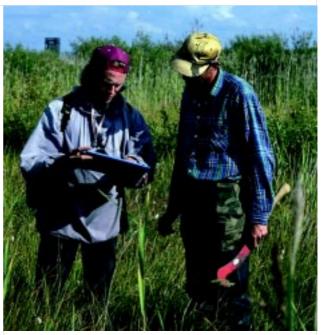
On the coast of the Gulf of Bothnia in the north of Finland there are large expanses of Natura 2000 meadows. They are important as staging and breeding grounds for migratory birds and for their botanic value. Traditionally they were used for hay and cattle grazing, but in recent years large areas had been abandoned by agriculture and become overgrown, with consequent loss of bird habitats. The LIFE project "Liminganlahti" set out to reverse this process.

What did LIFE do?

The project included a massive programme of clearance of reeds and bushes from almost 500 hectares of abandoned meadows. Project staff made detailed plans for the management of the restored habitats which focused on regular grazing or mowing as technique. They also helped farmers prepare 'farm management plans' (a requirement for agri-environmental contracts in Finland) and to choose the best management measures according to conservation requirements and individual farm situations.

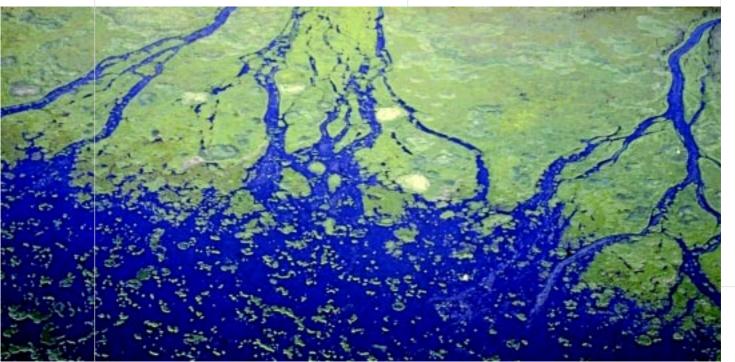
How did agri-environment contribute?

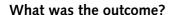
As almost half the local population was still dependent on farming, it was possible to entrust regular management of cleared land to local farmers. Contracts using measures from the Finnish agri-environmental programme for extensive grazing and mowing made this economically viable.



Management measures were planned in the field by a specialist. Photo © Jorma Pessa

Aerial photo of the Temmesjoki river estuary. Photo © Jorma Pessa





- > Thanks to the promotional effect of the LIFE project, the take-up of agri-environmental contracts exceeded expectations and the area finally covered was well in excess of the area cleared in the project. Without technical assistance from the LIFE project the take-up rate would have been much lower. Natura 2000 land managed by grazing rose from 80 hectares in 1995 to 900 hectares in 2001 (mostly with beef cattle), while the area managed by mowing went from 40 hectares to 150 hectares. This brought €188,000 of agri-environmental premia in 2001 to the local community.
- > The LIFE project managers have presented their strategy and experience to conservation colleagues in Finland and Estonia. Practices developed by this project are now used on 17 other Natura 2000 sites in Finland.

Initial clearance of reeds from abandoned meadows. Photo © Holger Elme Nielsen



LIFE in action | case four

Making mowing the fens worthwhile again

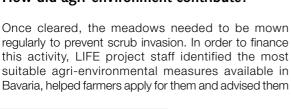
The Chiemgau district in the foothills of the Bavarian Alps boasts some of the most extensive alkaline fens¹ in central Europe. They provide a habitat for a wide variety of birds. Changes in agricultural practice had led to the abandonment of centuries-old mowing of the fens, with the result that tall rushes and shrubs of alder and willow were crowding out the exceptional fen flora and filling up open spaces needed for meadow birds. Two consecutive LIFE projects "Chiemgau" set out to reverse this trend.

What did LIFE do?

The project hired 120 local farmers to clear several hundred hectares of overgrown abandoned fen meadows. This provided welcome additional income for the farmers during times of year which are traditionally quiet.

How did agri-environment contribute?

regularly to prevent scrub invasion. In order to finance this activity, LIFE project staff identified the most suitable agri-environmental measures available in Bavaria, helped farmers apply for them and advised them





Farmers taking a break after cutting trees from overgrown meadows. Photo @ Hans Kaindl

¹ listed as habitat types 6410 and 7210 on Annex I of the Habitats Directive



Iris sibirica meadow near Übersee, Chiemgau. Photo © Michael Lohmann

on implementation. Annual payments ranged from €305 to €450 per hectare. At the close of the project in 2000 over 440 hectares of fens were being mowed under agrienvironmental contracts.

What was the outcome?

Besides assuring appropriate management of fens in a Natura 2000 area, the LIFE project had another result:

participating farmers discovered there was local demand for the hay mown in the fens as bedding material in winter stables for livestock, as fodder and litter for horse breeders and riding stables and for use in organic farming. Once word got around, demand began exceeding supply! Thus the combination of the LIFE project and agrienvironmental measures led to a revival of using hay from fens in farming, providing an extra incentive to maintaining these Natura 2000 habitats.

Conclusion

These are just a few examples of the many LIFE-Nature projects which initiated the use of existing agrienvironmental measures to maintain favourable conservation status of Natura 2000 sites on agricultural land. We have checked some countries (see Appendix II): almost one in four French and British LIFE-Nature projects co-financed between 1992 and 2002 made use of agri-environmental measures. The projects follow a pattern in which LIFE-Nature co-finances work to restore degraded habitats after which agri-environmental measures are brought in to make it worthwhile for farmers to continue managing the sites.

There is thus a clear division of labour between the two instruments. On the one hand LIFE is necessary for financing initial investments (engineering works or largescale clearance) which agri-environmental measures do not cover. On the other hand LIFE projects are not intended for medium- or long-term management of nature conservation areas, whereas agri-environmental measures - if they are available in the region - can be used for this.

In short, LIFE-Nature, by encouraging the use of existing agri-environmental measures:

- i. allows accumulation of experience and practical demonstration at local level;
- ii. provides a logical link between two different EU instruments with different objectives to further EU nature conservation policy in a sustainable way. By orienting agri-environmental measures on Natura 2000 site management, LIFE-Nature is directly promoting an EU dimension among stakeholders at local level.





Installing a drinking trough for livestock (Alsace, LIFE project "Pelouses sèches"). Photo © Bernard Destrieux, CSA

The issue at stake

The preceding theme showed how land which has been restored to good conservation status through LIFE investments is kept in good condition through management by local farmers working under agrienvironmental contracts and funding.

To what extent can such projects act as demonstration models for other Natura 2000 sites?

LIFE in action | case one

Generating an incentive to restore wetlands

In the Villacañas district of Castilla La Mancha (central Spain) there are three seasonal lakes surrounded by saline steppes and intensively farmed arable land. These steppes are a priority habitat for Natura 2000, while the lakes are important for birdlife. The total area of saline steppes in Villacañas has shrunk by over half in the past 20 years due to conversion of land to agriculture, in particular to cereal production following Spain's accession to the EU in 1986.

The 1999 LIFE project "Villacañas", with an NGO beneficiary, set out to reverse this trend.



What did LIFE do?

- > Restoration work (tree planting, bird refuges) to restore the wetlands and their margins.
- > Prepare proposals for local agri-environmental measures. In cooperation with local farmers three measures were technically elaborated, financially assessed and proposed to the regional government in 2001.
- > Reduce stocking densities around one of the lakes to prevent overgrazing of steppes.

How did agri-environment contribute?

The regional government accepted one of the proposed measures, to set aside cereal land and olive groves around the lakes. Although the most expensive of the measures

Photo left: Planting trees. Photo © Eduardo de Miguel Photo right: Construction of artificial islands as part of the work to improve the wetlands as habitat for birds. Photo © Fundación Global-Nature

proposed, it was the easiest to administer and offered the best long-term benefits in terms of regeneration of saline steppes.

What was the outcome?

Two years later the regional government extended the measure to all its Natura 2000 sites with lakes and saline steppes, equivalent to over ten times the area of the Villacañas site. Whereas the set-aside measure costs about €78,000 a year in Villacañas, the annual cost may now rise to 750,000 if all stakeholders in the most important parts of these sites participate. This represents a significant commitment by the Castilla La Mancha regional government following up the LIFE project, which will hopefully encourage farmers in the targeted Natura 2000 sites towards sustainable land use.



LIFE in action | case two

Formulating a menu of measures to restore habitats

The Plateau de Millevaches in central France includes around 1,800 hectares of heaths, bogs and *Nardus* grassland listed on Annex I of the Habitats Directive. Rural depopulation and abandonment of traditional extensive grazing means the habitats fall victim either to conifer plantations or spontaneous reinvasion of scrub. The 1998 LIFE project "Haute-Vézère" set out to safeguard and restore them.

Photo left: Flock of Limousin sheep used for grazing heathland and wetland areas in Haute Vézère.

Photo right: Discussing recurring management on-site. Photos © Conservatoire Régional des Espaces Naturels du Limousin, CL)



What did LIFE do?

- > Restored degraded habitats by clearing land or reversing previous drainage work.
- > Carried out follow-up recurring management to prevent re-growth.
- > Hired project personnel to work with farmers to prepare agri-environmental measures for further restoration and recurring management of the sites.

How did agri-environment contribute?

> Both on land directly restored and other sites, recurring management through the use of agri-environmental measures was successfully promoted. Sixteen out of the 42 local farmers had taken up agri-environmental contracts by the end of the project.

What was the outcome?

- > Several measures prepared during the project were adopted into the French national agrienvironmental programmes, including:
 - 1. restrictions on drainage for bogs, heaths and water meadows;

- management of land with Annex I habitats by grazing or mowing;
- 3. payments to farmers for fencing off bogs against livestock;
- 4. compensation for reconverting arable land to plots for wild flora;
- payment for restoration of degraded heaths through manual clearing of bushes and shrubs followed by intensive mowing and control of reinvading woody plants.

Interestingly, these new agri-environmental measures included investment-type actions which, previously, were co-financed by LIFE projects. However, the premia offered were criticised on the grounds that:

- > they were generally too low to act as incentives:
- > the premium for shrub clearance was only a little more than that for extensive grazing although the actual cost and effort were much greater;
- > in order to receive a premium, restoration work had to yield an end result of a maximum 100 shoots per hectare. Achieving this level meant considerable work for farmers and was more than what was required for nature management.

LIFE in action | case three

Spreading the word among farmers

The March and Thaya wetland to the north-east of Vienna is located in one of Austria's most productive arable farming areas. Water meadows had gradually been abandoned and in 1995 covered only 11% of the Natura 2000 site. The two-phase project "March-Thaya" set out to conserve and regenerate these humid grasslands as well as other floodplain and riverine habitats.



High water in the alluvial plains of Lussparz (March-Thaya). Photo © Gerhard Neuhauser

What did LIFE do?

The beneficiary, a local NGO called Distelverein, is rooted in the local farming community and has always worked closely with farmers. During the project it:

- 1. organised meetings to explain to farmers what Natura 2000 meant in practice;
- 2. evaluated the different agri-environmental contracts available in Lower Austria for their potential contribution to local Natura 2000 objectives and advised farmers which were the best for their holdings;
- 3. promoted agri-environmental measures as a means of conserving the water meadows and other areas of nature conservation value in the project area (the NGO actively approached farmers and asked if they were interested in agri-environmental contracts);
- 4. used LIFE funds to purchase hardy cattle which were rented to farmers to allow them to take up agri-environmental contracts for grazing abandoned water meadows.

What was the outcome?

The area of water meadows has been increased and all

are now being mowed or grazed. Agri-environmental contracts on Natura 2000 areas now cover 1,150 hectares and are worth almost €0.5 million in payments annually.

The regional administration gave the beneficiary the task of monitoring the ecological effects of the agrienvironmental contracts. From the findings of this monitoring, the Distelverein developed a completely new measure, "WS" - premia to preserve small-scale landscape features like dry grassland on sandy ridges or humid depressions in fields - which the authorities included in the regional Rural Development Programme (RDP). The Distelverein succeeded also in widening the application of another measure, "WF" - grassland management according to nature conservation criteria. However, it did not succeed with a proposed measure to allow conservation-oriented management measures on land set aside under the compulsory CAP supply management regime.

Last but not least, the beneficiary has been contracted by the nature conservation authorities to draw up a draft management plan for the March-Thaya Natura 2000 site, using its knowledge of local ecology and agriculture. The preparation of the plan is being co-financed under the local RDP.



LIFE in action | case four

Investing in restoration of alvar grasslands

The island of Öland off the Swedish coast has large areas of natural grassland on "alvars" (rocky pavements left behind after the retreat of the Ice Age glaciers) traditionally grazed by livestock. However, as alvars have poor soil and can only support low livestock densities, they were among the first to be abandoned during post-war rationalisation of farming. By 1994 only 60% of Stora Alvaret, with 26,000 hectares the largest alvar on Öland, was still being grazed. The rest of the area had become overgrown.

The 1996 LIFE project "Stora Alvaret" was launched to recover the grassland habitats.



What did LIFE do?

- > Cleared 1,600 hectares of overgrowth, reestablishing the typical grassland habitats. Farmers were contracted to do this work.
- > Encouraged farmers to take up contracts under existing agri-environmental measures.

How did agri-environment contribute?

Regulation 2078/92 gave premia for extensive grazing. Thus, recurring management of the restored land was ensured so that it would not revert to scrub.

What was the outcome?

By the end of the project in 2000, 85% of Stora Alvaret was again being grazed.

One of the many Öland farmers with livestock on the alvar.

Photo © Thorsten Jansson

Farmers were very enthusiastic, as the combination of increased grazing areas and agri-environmental support considerably improved their economic situation. Local firms became specialised in clearing and restoration of overgrown land.

The project demonstrated that it was possible to incite farmers to restore overgrown land and that this had beneficial effects on nature. The project beneficiary, the Kalmar County administration, succeeded in using these results to get scrub clearing activities included in the new Swedish Rural Development Plan under Regulation 1257/99.

Thus the benefits of this project now stretch well beyond the boundaries of Stora Alvaret.



Stora Alvaret – even the shrubby cinquefoil is grazed by cattle. Photo © Thorsten Jansson

Conclusion

The above examples show that LIFE has indeed had a demonstration effect leading to the adoption of new measures in national and regional agri-environmental programmes which support site restoration and management.

However, as the French "Haute-Vézère" project example illustrates, it is important that measures are attractive and competitive, not only for recurring management, but also for investment-type work. Nor should requirements increase the work beyond what is sufficient for nature conservation.

Integrating heavy restoration work into agrienvironmental measures will not succeed as long as Regulation 1257/99 sets a permitted maximum premium of €450 per hectare for all types of land use except annual crops or specialised perennial cultures. The cost of similar work undertaken by LIFE projects and subcontracted is often in excess of this.

Besides the case studies cited in this report, many other LIFE projects actively promoted agri-environmental programmes among farmers to ensure appropriate recurring management on Natura 2000 sites restored with LIFE funds. Projects have also helped farmers prepare agri-environmental support applications. By assisting with preparation, projects have not only taken a burden off farmers, but also channelled the agrienvironmental support to better coincide with Natura 2000 conservation targets. Projects, such as the Varde case study in the previous chapter, have also given information about local biodiversity to farmers, so that they are aware of what they are doing and why, and trained them in conservation-oriented management.

LIFE has been able to produce such excellent results on the ground by paying personnel to liaise with farmers. The March-Thaya project, for instance, showed how such cooperation not only boosts take-up of agrienvironmental measures, but also how monitoring provides valuable feedback which can be used to improve the measures and farming practices. These conclusions highlight the important role of project staff within LIFE.



LIFE designs new agri-environmental measures for nature conservation



The bird's-eye primrose (Primula farinosa) is typical of humid calcareous meadows (Yorkshire Dales project).
Photo © English Nature

The issue at stake

The agri-environmental programmes are primarily intended to reward farmers who go beyond good farming practise to manage their land to the benefit of the environment. They are not *a priori* designed to further nature conservation, but *may* be useful from a nature conservation viewpoint.

Conscious of this situation, some LIFE-Nature projects have served as "Natura 2000 laboratories" to formulate new measures and adapt existing ones to nature conservation, testing them in practice and then proposing them for inclusion in rural development plans.

LIFE in action | case one

Using livestock to shore up the Natura 2000 Network

Traditionally there was an annual seasonal movement of livestock - known as transhumance - from winter grazing on the lowland pastures in coastal Spain to summer grazing in mountain pastures in northern and inland regions. Herdsmen travelled on foot with their herds over a network of 120,000 km of drove roads ("vias pecuarias" in Spanish). Protected as ancient rights of way, this network still exists, providing natural ecological corridors through cultivated land, allowing interconnection between the populations of fauna and flora on Natura 2000 sites in Spain.

Although there are still movements of about 800,000 head of livestock in Spain each year, transhumance on foot has largely been replaced by road and rail transport. The drove roads have fallen into disuse and been partly destroyed by building, ploughing and forest planting. Coincidentally mountain pastures for summer grazing have been abandoned with consequent loss of habitats. On the other hand Mediterranean winter grazing areas, the "dehesas1", also valuable habitats, suffer from overgrazing.

The 1993 LIFE project "Proyecto 2001", proposed by the NGO Fundación Global-Nature, set out to halt the loss of these drove roads and protect them as ecological corridors.

Agroforestry and pasture ecosystem in the Iberian peninsula, created during thousands of years by selected pruning and clearing of forest shrubs and by extensive pressure of a migrating livestock system on dry and poor soils, characterized by a sparse oak canopy over shrubs and grass patches. In this combination of oak trees and pastures, stock can graze under shade. The tree cover is pruned regularly and provides a source of wood.

Drover with his flock passing the castle of Segovia, Castilla-Léon. Photo © Fundación Global-Nature, Eduardo de Miguel



What did LIFE do?

transhumance.

- > Gave direct support to farmers still practising
 - > Informed the public of transhumance and drove roads and their ecological importance.
 - > Provided a legal service and information office in favour of drove roads, which led to the introduction of new legislation in 1995 to protect them.

How did agri-environment contribute?

A potential agri-environmental measure in favour of transhumance was drawn up, including an estimate of the costs involved and the necessary incentive premium per head of livestock, distance travelled and type of transport.

A shepherd and his dog. Photo © Fundación Global-Nature, Eduardo de Miguel





Flock of sheep heading north. Photo © Fundación Global-Nature, Eduardo de Miguel



Drover looking for shade. Photo © Fundación Global-Nature, Eduardo de Miguel



Transhumance on an ancient drove road. Photo © Fundación Global-Nature, Eduardo de Miguel

What was the outcome?

The proposal was not adopted by the competent authorities at the end of the project, but, after much debate, a special transhumance measure was included in the Rural Development Plan adopted in 2001. A premium per unit area of the wintering farm was offered, providing a minimum distance travelled, change in altitude and duration were adhered to by the transhumance.

This result was only a partial implementation of the proposal formulated during the LIFE project. A higher premium for transhumance on foot had been proposed, as well as a payment per head rather than per hectare.

LIFE in action | case two

Helping farmers coexist with wildlife

Occurrence of large predators protected by the Birds and Habitats Directives can sometimes lead to conflicts with farmers. Several LIFE projects have financed experimental demonstrative actions for damage prevention, or in situations where this is not possible, damage compensation.

A striking example for the wolf is the 1997 Greek project "Canis lupus".



Shepherd with puppy supplied by ARCTUROS. Photo © ARCTUROS, Greece

What did LIFE do?

- > Established a permanent wolf monitoring network.
- > Proposed legislation for better protection of the species.
- > Increased populations of natural prey to prevent attacks on livestock.
- > Provided information to stakeholders and the general public.

How were farmers' concerns addressed?

One of the project's actions was to prevent losses to flocks of sheep by breeding indigenous sheepdogs to protect flocks against wolves. Puppies were given out to farmers with the most susceptible flocks. Farmers signed agreements to ensure the correct breeding and use of the dogs, and the beneficiary undertook annual checks to monitor respect of the agreement and to see if farmers are satisfied with the dogs.

Similar actions for bears

A second Greek project, 'Gramos and Rodopi', continued this strategy after 2000 for bears. Not only did it provide sheep dogs, but it also provided electric fences to keep bears away from crops and beehives. Demand for both was so popular that it exceeded what could be delivered out of the project budget! This was complemented by planting wild fruit trees and restoring abandoned orchards, to give the bears an alternative food supply.



Flock of sheep tended by a dog provided by the beneficiary.

Photo © ARCTUROS, Greece



Wolf at the beneficiary's sanctuary located in NW Greece.

Photo © ARCTUROS, Greece



Young Greek sheepdog with goats. Photo © ARCTUROS, Greece

What was the outcome?

The beneficiary's work was acknowledged by the authorities, who included three new measures in the 2000–2006 Rural Development Plan for Greece:

- 1. acquiring and using sheep dogs in areas where wolf and bear are present;
- 2. installing and keeping electric fences to protect crops and hives in areas with bears;
- cultivation by farmers of special plots of cereals or fruit trees to provide food resources for bears or avifauna.

These measures were the first case of damage prevention measures against large carnivores undertaken by the Greek authorities.

LIFE in action | case three

Adapting agri-environment to deliver nature conservation benefits

The uplands of West Yorkshire boast one of Britain's most important karst landscapes, including a rich array of calcareous grassland, mire and woodland habitats. Their high conservation value has led to designation as Natura 2000 sites with the result that farmers cannot move into intensive production systems. Without agri-environmental support agriculture would not be economically viable there. Current farming activities are principally hill sheep and suckler cows.

About €500,000 are paid out each year under three agri-environmental measures to farmers on two Natura 2000 sites (Ingleborough and Craven). During the late 1990s these measures reduced overgrazing which was threatening the habitats in the protected areas.

However, reducing stocking density alone turned out to be insufficient. Sheep farming began increasing at the expense of cattle so that, although overgrazing as such was reduced, lack of cattle meant that some grassland habitats were deteriorating. Sheep are selective grazers and therefore mixed cattle and sheep farming would be the ideal system from a nature conservation viewpoint.

The current agri-environmental measures do not specify the type of livestock but only the stocking density. They may even have encouraged a shift from cattle to sheep because of the higher profitability of keeping sheep at the prescribed stocking densities.

This analysis was the basis of the 2002 LIFE project "Yorkshire Dales" which aims to promote extensive cattle farming with traditional hardy breeds on the Natura 2000 sites.

Limestone pavement, West Yorkshire. Photo © English Nature



What will LIFE do?

- > Offer additional support measures to 15 farms to enable them to convert to conservation-oriented practices on 1,500 hectares of habitat protected by Natura 2000, using traditional hardy cattle breeds. The project will also co-finance the necessary on-farm infrastructure, such as winter housing for livestock, which is not available under the agrienvironmental scheme.
- Study the relative nature conservation benefits of different cattle rearing systems and publicise its findings amongst Natura 2000 site managers.
- > Work with farmers on marketing quality beef from traditional breeds.

How will agri-environment contribute?

The existing agri-environmental schemes will continue to provide funding for long-term land management once the desired stocking mix and density have been achieved.



Highland cow – one of the hardy breeds to be used in the project.

Photo © Matthew Oates

The expected outcome

Depending on the result, the LIFE-project beneficiary will press for a change in the English Rural Development Plan to enable co-financing of nature conservation management on a "whole-farm" basis as done by LIFE in this project.

Land targeted for grazing with hardy cattle.

Photo © National Trust



LIFE in action | case four

What kind of farming is best for birds?

The Ebro Delta (Catalonia, Spain) covers 32,000 hectares, of which about one quarter is marsh and lagoon. The remainder is paddy (rice) fields. It is one of the leading Natura 2000 sites for overwintering of migratory birds. Much of the birdlife is sustained by the paddy fields, which act as a huge artificial wetland, attracting invertebrates, fish and amphibians as food for waterfowl. Paddy fields are usually undisturbed from October to late March, the ideal situation for migratory birds. However, modern rice cultivation uses large quantities of fertiliser, herbicides and pesticides, which contaminate the water and adjoining lagoons and marshes. In addition, efficient drainage dries out the paddy fields completely during autumn and winter, reducing their value as habitats for birds.

The 1996 LIFE project "Delta del Ebro" examined the ecological and economic viability of different styles of rice farming so as to raise awareness among rice farmers of the ecological role played by the paddy fields and to promote sustainable agricultural practices.

> Manual weeding in the organic rice fields. Photo © Antoni Curcó





Local farmers attend a training course on organic rice farming.

Photo © Carles Ibàñez

What did LIFE do?

Monitored three blocks of paddy fields managed respectively according to:

- > conventional farming;
- > organic farming;
- > farming with agri-environmental management contracts.

The existing agri-environmental measure already stipulated mechanical weeding (reducing use of herbicides), biological pest control to reduce pesticides, ploughing in straw instead of burning it and prolonging flooding of rice fields after harvest until December.

The test blocks were monitored for species diversity, physical production of rice and financial returns.

What was the outcome?

- > The greatest gain in biodiversity occurred on the organically farmed land.
- > Water quality was best on the organic plots.
- > Rice yields were highest on the conventionally farmed land, although land farmed under agri-environmental contracts scored only 5–10% less well.

> Net financial returns were higher from organically and agri-environmentally farmed fields than from conventionally farmed fields.

Organic farming was shown to be the best system for nature conservation. Consequently a demonstration project for organic rice farming was run by LIFE in 1999. Although it showed production costs only 20% higher than those of conventional growing, the rice produced could be sold at twice the usual price.

The project invested in personnel for promoting both organic and agri-environmental farming, advising farmers and monitoring compliance. As a result take-up was very rapid and by the end of the project in 2001 over 80% of farmers in the area were participating in agri-environment on a total 21,000 hectares of paddy fields. The measures have been continued as part of the Rural Development Plan for 2000–2006, with additions such as incentives for reducing nitrogen use and for mechanical control of weeds in irrigation channels.

However, improvements can still be made, such as promoting alternatives to pesticides, maintaining strips of vegetation along field edges and extending the period for which mechanical weeding incentives apply.

LIFE in action | case five

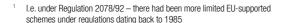
"Made in France", a cocktail of conservation-oriented agri-environmental measures

During the first phase of LIFE, which coincided with the early years of the first EU-wide agri-environmental measures¹, there were several projects in France which proposed new types of management contracts with precise conservation benefits. These measures were then tested in the field by farmers to judge their technical feasibility and acceptability. Funding came either entirely from LIFE or by topping up existing agri-environmental contracts.

What was the outcome?

These new forms of management contract were adopted and integrated into the French Rural Development Plans either during or following the LIFE projects. Some examples were:

- > contracts to protect the corncrake (mowing of crops was delayed until after July 25th, and to be carried out at low speed and from the inside to the outside of fields to allow birds and chicks to escape) (1991 project "Basses Vallées Angevines");
- > contracts specifying the mowing of continental salt marshes and prohibiting use of fertilisers (1991 project "Prés salés de Lorraine");
- > specific contracts for heath, mire and fen habitats (1994 project "Tourbières de Midi-Pyrénées", 1995 project "Tourbières en France", and the Anglo-French 1995 project "Atlantic heaths");
- > contracts compensating farmers for prolonging spring flooding in wetlands (1995 project "Zones humides du Cotentin").





Photos above and below: Marshes in the Cotentin (Normandy). Photo © PNR des marais du Cotentin et du Bessin





Conclusion

As the Ebro Delta case study illustrates, LIFE projects can be excellent field laboratories to discover how far existing agri-environmental programmes benefit Natura 2000. This means the LIFE instrument has a potentially significant role in monitoring the relationship between agrienvironment and Natura 2000 objectives. The projects have also shown gaps or inadequate precision in existing agri-environmental measures used to support Natura 2000, which lessen their impact on biodiversity protection (this was the origin of the Yorkshire Dales project).

LIFE projects can and do propose modifications to improve agri-environment's efficacy for nature conservation. LIFE-Nature has been quite successful in the conception and testing of nature conservationoriented management contracts for agricultural land use which have then been included in national and regional Rural Development Programmes. In practice this means that farmers over wide areas are given incentives to contribute towards greater environmental sustainability and are compensated for particular efforts in managing Natura 2000 sites in a sustainable way.

However, as shown by the Spanish transhumance project, a measure may only be partially adapted, reducing the potential gain. Technical specifications vital to the efficiency of an action may be left out or premia may be set too low to encourage or halt the decline of beneficial practices.

Finally, the definition of who can apply for the measure can have important effects. The wildlife damage prevention measures adopted by the Greek RDP following the two successful LIFE projects described in the case study extend to all professional farmers, but in the Member States there may be subsistence farming or sideline activities which suffer from damage by wildlife, but are not officially registered as farming and so cannot apply for the measures. Flanking aspects can play an equally important role. On many semi-natural grasslands in Sweden there are too few livestock so that these habitats are threatened by undergrazing. Thus in the forests of Småland there are many scattered plots of such biologically valuable grassland, each only a few hectares large. As farms here are often too small to provide full-time employment, farmers generally take outside jobs. Participating in agri-environmental grazing schemes in favour of these grasslands on their holdings is however a problem. To start grazing, one needs infrastructure. (fences, walls, cattle sheds for wintering stock through the long winters). These part-time farmers cannot themselves afford to invest in such infrastructure, for which they do not receive grant aids.

How attractive are agri-environmental measures to farmers?



Cereal growing in Mediterranean steppes. Photo © José Alho

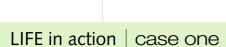
The issue at stake

Are those agri-environmental measures, which are considered useful for nature conservation purposes, whether already existing or developed by LIFE, truly effective in practice? Do they offer an attractive option to farmers in comparison to other practices or forms of support?

In this context, there are two important questions to consider.

- 1. What is the interaction between agrienvironmental measures which have a bearing on nature conservation and the other CAP measures?
- 2. How attractive are agri-environmental measures overall to farmers?

Many LIFE projects, including those which do not develop or promote agri-environmental measures, yield feedback on how agri-environmental schemes perform and are perceived by farmers and conservation managers. Some LIFE projects have examined these questions more thoroughly.



Steppe habitats in Portugal – how successful is success?

On the vast plain of Castro Verde in southern Alentejo (Portugal) the traditional farming system is non-irrigated extensive cereal production with fallows every 2 or 3 years. This has given rise to a semi-natural steppe environment with a rich population of birds protected by Annex I of the Birds Directive, including *Otis tarda* (great bustard) and *Falco naumanni* (lesser kestrel). Abandonment of farming and rural depopulation are a constant problem and eucalyptus plantations for paper pulp now compete with traditional agriculture. The two-phase LIFE project "Castro Verde" set out to conserve the habitat and improve the lot of steppe birds.



Great bustard (Otis tarda) in the project area.

Photo © Nuno Lecog



What did LIFE do?

- > Bought land to demonstrate farming adapted to steppe birds (cereal production rotating with pasture). Additional plots were planted with legumes to provide foraging areas for bustards.
- > Used this farming model to draw up an agrienvironmental measure, amongst the first in Portugal and the only one to specifically target cereal-growing for the benefit of wild birds.
- Increased awareness among farmers of steppe bird conservation and provided them with assistance in making applications for agrienvironmental payments.

This information panel highlights the coexistence of farming and nature conservation. Photo © José Alho



Scientific studies on species biology in the Castro Verde project. Photo © LPN

Lesser kestrel (Falco naumannii) in the project area. Photo © Nuno Lecog

How did agri-environment contribute?

The measure developed by the project supported farmers who continued traditional cereal farming with some additional constraints (no herbicides, leaving strips of vegetation as refuge, planting plots of legumes as foraging area for bustards and limits on the number of livestock per hectare of fallow land).

What was the outcome?

Seventy per cent of farmers in the Castro Verde SPA took up contracts during the second phase of the project. This led to a significant increase in the populations of both great bustard and lesser kestrel. The efficacy of the agrienvironmental measure is further demonstrated by the fact that great bustard populations declined in all other Portuguese sites.

However, feedback from the LIFE project revealed a number of problems.

- 1. Verification of the implementation of the agrienvironmental measures was not sufficiently detailed.
- 2. Conflicting advice was given. For instance, some agricultural authorities recommended ploughing, which is detrimental to steppe conservation.
- 3. Reduced levels of premium are now being offered in the Rural Development Plan relative to those offered initially by LIFE, with the effect that many farmers may not renew their contracts.
- 4. EU aid for planting forest now exceeds premia offered under the agri-environmental measure, which tempts farmers to replace traditional cereal growing areas by eucalyptus.
- 5. Local authority land use zoning plans regulating where forest cover is possible, are often imprecise.
- 6. Irrigation remains a threat to the steppes.





LIFE in action | case two

Bustards in Germany and the paradoxes of large-scale extensification

The Buckow and Belziger Wiesen sites in Brandenburg include one of the two remaining *Otis tarda* (great bustard) populations left in eastern Germany as well as many other protected birds. About 10,000 hectares of mainly grass and arable land are farmed by a mix of very large holdings and smaller family farms. In response to the rapid structural changes in farming following German reunification and East German transition to a market economy, the 1992 LIFE project "Großtrappen" was launched to help the bustards by minimising destruction and fragmentation of their habitats and promoting extensive farming.



Traditional cattle used for landscape conservation in the Belziger Wiesen.

Photo © B. Block

What did LIFE do?

- Secured future appropriate land use by purchasing a large area of land and renting it back to farmers under strict management conditions. In so doing, alternatives to conventional farming were demonstrated.
- Showed farmers how these alternatives could be financed, by promoting agri-environmental measures.
- > Continuous monitoring of bustards, their nests and their foraging habitats.
- > Explained to farmers how destruction of nests and chicks during mowing could be reduced.
- > Rescued eggs for captive breeding.

How did agri-environment contribute?

By the end of the project almost half the protected area was managed under agri-environmental measures. The situation remained stable and over 4,000 hectares was still covered by contracts in 2002.

What was the outcome?

Following 60 years of steady decline in the great bustard population, there was a stabilisation, then a slight recovery.

However, there was resentment amongst farmers over the loss of soil fertility as a result of the large-scale extensification, which led to conflict in 2000. As nutrient levels fell, the vegetation became botanically more diverse, but less suitable for livestock, leading to falling returns. The farmers claimed that the premia, which had been fixed in advance for a five-year period, no longer compensated the lower yields.

In addition the administrative requirements for agrienvironmental contracts were considered too inflexible.

> > Contracts were awarded by sections as defined by the land registry and farmers were required to mow entire sections in one go, although bustards may only have been nesting in one corner. Early mowing of one part of a



Strips in the grassland which are left intact until the next mowing date. Photo @ B. Block

section and later mowing of the rest was not allowed, even though the conservation managers had no objection to this.

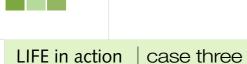
- > Mowing dates were fixed and could not be adjusted to take account of exceptional weather circumstances, the state of crops or shifts in breeding periods. This can even hinder the bustards, as grass which grows too tall and dense is detrimental to the chicks.
- > It was not possible to exchange sections within a contract when bustards changed nesting areas. The sections were fixed for 5 years.
- > Ecologically favourable evolutions like a spread of reeds or tall herbaceous formations were administatively undesirable, as they reduced the farmland area covered by the agri-environmental measure, which is supposed to stay unchanged.

The LIFE project "Federsee" reported similar effects. Federsee is a fen where certain sedge and Molinia meadows only have to be mown every 3rd or 5th year to maintain them in good shape and where, from a biodiversity point of view, it is better if they are not mown completely, but in rotating sections because this increases the number of different habitat structures. Yet the regional agri-environmental programme imposes annual mowing and a fixed mowed area during the programme's duration. In other fens nearby, agri-environmental contracts which

disallow fertiliser use have, by drastically suppressing phosphorus and potassium input, turned fen meadows into grasslands dominated by Deschampsia cespitosa, with a corresponding loss in diversity of flora and invertebrates, as well as of yields.

The Großtrappen project fostered structural and invertebrate diversity by "bustard strips", a permanent grass fallow within arable land. Photo © B. Block

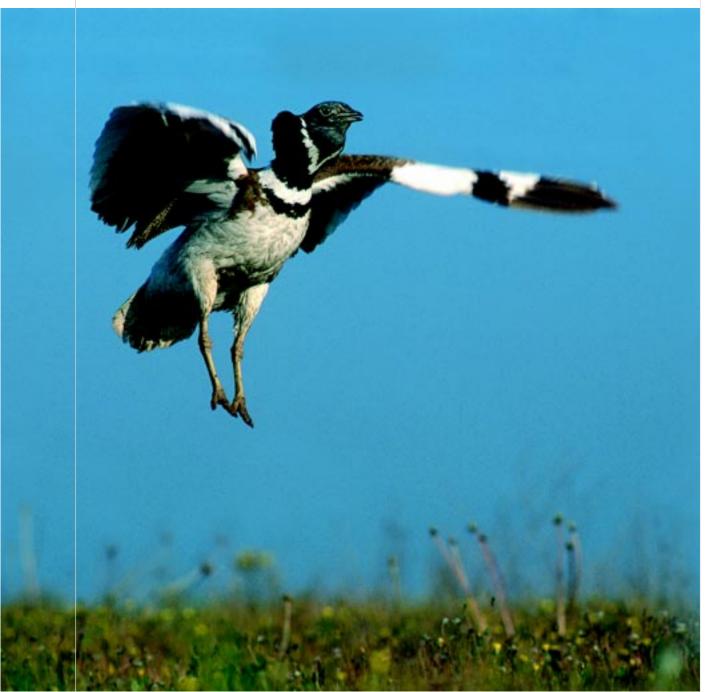




Arable farming and breeding grounds for little bustards

Tetrax tetrax (little bustard), protected under the Birds Directive, requires a mosaic of open areas and tall vegetation, the latter to provide cover for nests and chicks. An agricultural rotation of arable crops, grass and fodder crops provides the ideal habitat. Formerly the Poitou-Charentes region (south-west France) was host to large numbers of little bustards. However, changes in agriculture towards large fields of arable crops and elimination of livestock had reduced the 1980 population to a third of its numbers by 1995. In 1996 a French bird protection NGO embarked on the LIFE project "Tetrax" to try to halt this process.

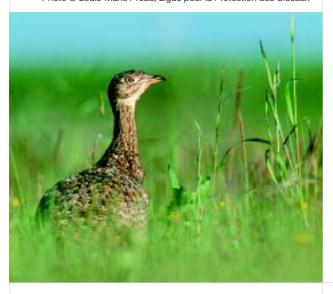
 ${\it Male little bustard during mating parade.}$ Photo © Louis-Marie Preau, Ligue pour la Protection des Oiseaux



What did LIFE do?

- > Informed farmers about the little bustard.
- > Prepared and promoted agri-environmental measures together with farmers, farmers' associations and the administration. The first experimental contracts were annual, with an option to renew or cancel after each year, because contracts of longer duration were thought to be less attractive to farmers. As large arable fields already provided sufficient open areas, measures focused on providing more uncultivated land with vegetation cover for nests and chicks by:
 - 1. withdrawing land from cereals or oilseed cultivation and sowing with grass or lucerne:
 - 2. halting mowing of grass and fodder crops during the breeding period of the little bustard and leaving strips of tall vegetation as refuge at mowing time;
 - 3. on obligatory CAP set-aside areas, allowing farmers to sow clover or grass, but delaying the compulsory mowing until after September (this measure had the highest success rate, because the set-aside was in any case compulsory and the LIFE measure resulted in less weeds and shifted mowing to a more convenient time for farmers);
 - 4. delaying autumn ploughing-in of cereal or oilseed stubble.
- > Monitored the implementation and results of the contracts.

Female little bustard, camouflaged by surrounding vegetation. Photo © Louis-Marie Preau, Ligue pour la Protection des Oiseaux





Landscape in Poitou-Charentes. Photo © Alain Armouet, Ligue pour la Protection des Oiseaux

What was the outcome?

- > The area covered by these LIFE agrienvironmental measures rose rapidly to 505 hectares in 2000, equivalent to 4% of the project site, including almost one third of known nesting sites. However, this was below the initial target and furthermore the area fell back to 409 hectares in 2001, when the measures should have been integrated into the RDP, but administrative and financial problems at national level delayed its introduction.
- > Scientific monitoring showed that areas with LIFE agri-environmental contracts did have more little bustard breeding success than other areas, but the fundamental problem remained that suitable habitats were too small and too dispersed to effectively halt the decline in the overall population.

The LIFE project did not succeed in noticeably changing farming practice in the area because the agrienvironmental payments offered could not compete with the profitability of conventional agriculture. Even the market support payments for grain and oilseed were higher than the premia offered for sowing grass or lucerne.



Great bustards, land management and farmers' strategies

The Fiener Bruch in Sachsen-Anhalt has one of the two last *Otis tarda* (great bustard) populations left in eastern Germany. It is a district of mixed farming where the birds move between open areas for courtship, foraging areas with taller vegetation (providing cover and invertebrate prey for raising chicks) and fields with stubble or perennial crops for winter foraging. The land is farmed by large holdings, successors to the former East German collective farms, and as these have an important dairying component there is a tendency to intensify grassland use. The 1994 LIFE project "Fiener Bruch" sought to improve the habitat for the great bustard.



Bustard eggs from a disturbed nest are retrieved by the LIFE project in order to hatch them in incubators. Photo © Thomas Bich



Great bustard (Otis tarda) nest with one egg in the foreground (Fiener Bruch, June 2000). Farmers informed the LIFE project about nests found during agricultural work. Photo © Thomas Bich

What did LIFE do?

- > Identified the most critical sites for the species.
- > Purchased land to ensure appropriate land use on the main courtship sites.
- > Employed a site manager to liaise with farmers so as to avoid disturbance of nesting sites and promote appropriate land use through agri-environmental contracts.

What was the outcome?

At the end of the project in 1997 some 1,400 hectares were under agri-environmental contracts. Soon afterwards farmers began refusing to prolong their contracts and their land was returned to intensive production. In 2002 only 420 hectares was still under agri-environmental management.

From the point of view of great bustard and meadow bird conservation, suckler cows on grassland are preferable, and the agri-environmental contracts in the Fiener Bruch encouraged such land use (extensive grazing, haying). However, from the farmers' point of view milk is more attractive in terms of returns, especially if productivity is increased by keeping dairy cows in the stables year-round under a zero grazing system and bringing fodder to them. This implies raising yields of hay, silage and forage maize. So, after the five-year contracts concluded during LIFE came to an end, many farmers converted semi-natural grasslands to fodder production. Great bustard conservation implies landscape management which clashes with the economic strategy of local farmers, while the average agri-environmental payment of €200/hectare in the Fiener Bruch is too low to compete with the returns from dairy farming.



LIFE in action | case five

"Examples from Germany" – How to face situations where agri-environment no longer entices farmers



Mowing Federsee fen meadows. Photo © Jost Einstein

First situation: no farmer interest in conservation management

The LIFE project "Federsee" in the Alpine foothills covers over 3,000 hectares of fen lands hosting a range of plant communities: water meadows, sedges and reeds. These need to be mowed regularly and until recently this was part of local farming practice.

Agri-environment unable to compensate intrinsic lack of demand for produce

Much of the area is still mowed by farmers, thanks to agri-environmental support, but already 50 hectares has to be mowed by a local conservation NGO because of lack of farmer interest. The quality of the hay produced is very poor and now inadequate for feeding to livestock. Nor is it used any more as livestock bedding. Agrienvironmental payments are apparently unattractive for mowing and disposal of the hay.

What did LIFE do?

LIFE co-financed purchase of machinery to allow the NGO to do the necessary mowing itself. The NGO still bears the annual mowing costs.

Situation deteriorating because of agricultural trends

To plan site management, the Federsee LIFE project commissioned a study on future local agricultural trends which revealed that the district milk quota is 6 million kg, supplied by 1,400 cows. I.e. 4,100 kg of milk per cow, below the average for southern Germany. If farmers boost productivity to 6,500 kg/cow, 932 cows would be enough to fulfil the entire milk quota. But then, what becomes of the pasture and hay meadows for the 500 cows no longer needed? Boosting dairy productivity moreover often implies zero grazing: keeping cows in stables and feeding them forage maize and silage. The fens, being relatively unproductive, would become entirely redundant then.

If local farmers lose interest in even more of the wet grasslands and sedge meadows than the 50 hectares mentioned above, management of the Natura 2000 site will become an acute problem. Mowing yields 3.5 tonnes of hay per hectare in the Federsee. The hay from the 50 hectares already mown by the NGO has to be composted and the LIFE study on farming trends estimated 1,000 hectares might be completely written off by farmers. In which case, even if they manage to find and pay contractors to do mowing, the Natura 2000 site managers will end up with 3,500 tonnes a year of unwanted hay for composting.

What did LIFE do?

Having become aware of the potential problem through its study, the Federsee project investigated ways of creating new uses for this hay (e.g. bio-energy) and laid contacts with possible industrial and professional consumers.

Second situation: interest in management, but not in the product

The LIFE project "Dümmer" targets over 10,000 hectares of fen of great importance for migrating birds. Most of it is owned by the regional government of Niedersachsen and LIFE has been co-financing work to reverse past drainage and raise water levels. These fen meadows still need to be mowed, but the nutritional value of the hay is so poor that the low return for the effort of mowing it would even make agri-environmental contracts unattractive.

Yet, in contrast to the Federsee project, farmers are still interested in renting the regional government's land even though the rent contract stipulates they must mow it, in conformity with conservation-oriented stipulations. 2,000 hectares is currently leased! Why is this? The district's major farming activity is livestock, mainly via intensive, housed forms of production. Under the CAP first pillar, since 1992 premia for fattening and finishing beef cattle have been subjected to a maximum stocking density. To avoid penalties, farms who stock more beef cattle per hectare than the limit have to reduce density (i.e. less animals) or else increase their forage area (the land used to grow fodder qualifies for calculating stocking densities). By renting the conservation land from the regional government and mowing the hay, beef farmers around the Dümmer increase their forage area so that their entire herd remains within the stocking density limits set by the beef premia. This is an interesting example where a changed definition of a first pillar market support measure is promoting extensive land use as a side effect.

Third situation: effect of land rent on agri-environmental take-up

This effect has been noticed, for instance, within the project "Westliches Münsterland". In this district near Münster (Germany) many farmers work land which they do not own, but rent from landowners. Rents here are €700-800/hectare. As the maximum agri-environmental premium for extensive meadow management possible under Regulation 1257/99 is €450/hectare, the premia are insufficient to cover costs and so no agrienvironmental contracts have been concluded in the project area.

Such levels of rent help explain a current debate in Germany whether farmers can qualify for agrienvironmental payments on land let to them by public authority owners at no or nominal charge. Some argue that this would give them an unfair economic advantage over farmers who rent at market rates or farm their own land (on which they pay property taxes), and so distort competition. Because public land includes considerable areas dedicated to conservation, the outcome of this debate is important for Natura 2000 site management.

Cattle grazing the Federsee fens. Photo © Stefan Schwab



Conclusion

LIFE projects show how different Community-funded instruments within one and the same Natura 2000 area interact and whether the benefits of measures supporting nature conservation are cancelled out or reduced by other measures. This provides valuable information for improving policy as well as compatibility between different policies ("knowledge-based policy formulation").

Several LIFE projects have revealed negative externalities, like the loss of soil fertility in the German 'Großtrappen' experience, which can make agri-environmental contracts unattractive or disadvantageous to farmers and reduce the efficiency of the measures. Internal constraints may take the form of administrative requirements which go against practical adjustments which farmers and site managers agree upon. Both can act as a disincentive for farmers to use agri-environmental support to the benefit of nature conservation.

The "Tetrax" and "Fiener Bruch" projects provided concrete evidence of maximum limits for agrienvironmental payments being too low to favour conservation-oriented farming over conventional farming. Through dealing directly with farmers, these LIFE projects reveal where economic strategies do or do not converge with Natura 2000 management recommendations. In the "Tetrax" example, the contracts for set-aside management were the most successful because they provided solutions to farmers' concerns about weeds and time management; in the "Fiener Bruch" case the farmers' goal

to maximise profit from milk production made agrienvironment financially irrelevant.

NGOs and public sector nature conservation bodies own land within the Natura 2000 network. Recurring management by own staff or contractors is expensive. Support through agri-environmental schemes for NGOs is not explicitly dealt with in Regulation 1257/99 - in practice this depends on national definitions of 'farmer'. In Austria and France nature conservation NGOs have indeed created enterprises with agricultural objectives which received 'farm registration numbers' and were able to conclude agri-environmental contracts. In the French LIFE project "Pelouses sèches", one of the NGO partners used this route to receive agri-environmental premia for measures to remove shrubs and to manage restored land by grazing. A more frequently used possibility is to lease land to local farmers, who can then apply for agrienvironmental support.

Finally, the examples where agri-environment is no longer relevant to farmers illustrate the risks of relying only on the agricultural sector for the long-term management of Natura 2000 sites. Even where agri-environmental measures are taken up by farmers today, there is no guarantee that future changes to agriculture, either through revisions of the CAP first pillar or the arrival of new products and processes, may not lead to wide-scale abandonment of the type of farming supported by the agri-environmental measures. In which case the conservation benefits being targeted may be in jeopardy too.

Steppic landscape in Castro Verde. Photo © Inês Castry



Recommendations and solutions

- > Claims that administrative and auditing requirements of agri-environmental contracts and payments (e.g. Regulation 445/2002, the Commission Guidelines of July 2002, etc) sometimes contradict technically necessary or desirable details of practical agrienvironmental implementation, need to be examined and where proven correct, acted on.
- > The level of agri-environmental premia should be raised to make them competitive with conventional agriculture on Natura 2000 sites. Higher agri-environmental payments for contracts within Natura 2000 sites are already possible under Article 16.1 of the Rural Development Regulation 1257/99, but not widely used (France and Nordrhein-Westfalen (Germany) are two who do use Article 16 to give financial incentives for Natura 2000 areas). The Article 16 possibility should be maintained and promoted more strongly.
- > Annual increments to premia could be a possible solution for situations where farmers' profits fall as conservation benefit rises. Alternatively, fixed premia for specific actions could be combined with sliding premia awarded according to results achieved for nature conservation. E.g. the premia could be set relative to the number of birds successfully nesting on the managed land and so compensate for lower soil fertility resulting from correct application of the contractual actions.

- > Measures could be tailored to entire farms or zones rather than individual fields. Such an approach could be very helpful in situations where nature conservation goals and farmer strategies do not coincide, such as was the case for the "Fiener Bruch" and "Tetrax" projects.
- > Agri-environmental measures applied in Natura 2000 areas should be correctly monitored and evaluated. Measures should, where necessary, be revised to include better precision and additional incentives.
- > The possibility of applying measures detrimental to Natura 2000 sites should be removed. For instance, referring to the "Castro Verde" project, premia for forest planting should not be available for protected steppe areas.
- > There should be better coordination at local level between agencies responsible for different programmes, so as to avoid competitive or mutually contradictory forms of aid and conflicting technical advice.
- > Land use planning should be precise and integrate Natura 2000 management plans.
- > Site management plans should be the basis for all EU funding on land within a Natura 2000 area. A step in this direction is the French "document d'objectif", a management plan drawn up according to a standard methodology for every French Natura 2000 site through consultation with stakeholders. Authorities are obliged to take the plan into account in decision-making.

LIFE helps find markets for conservation-oriented farming



Semi-natural landscape along the Dijle river, Belgium.
Photo © Désiré Vanautgaerden

The issue at stake

There are other means, besides agri-environmental measures, of sustaining farming to the benefit of conservation targets, and LIFE projects have explored these.

As mentioned in the preceding chapter, there is a risk in total reliance on farming within a given Natura 2000 site. Extensive farming which is heavily reliant on agrienvironmental premia, is particularly susceptible to modifications to the subsidy regime. If however, the produce from conservation-oriented farming is highly valued by consumers, there is an additional, economic incentive for farmers, over and above the agrienvironmental premia they may already enjoy.

Leasing conservation land owned by NGOs or public bodies to farmers, who can apply for agri-environmental support, is not always successful in areas where agriculture is dominated by intensive farming. Nor, at the other extreme, where land is being abandoned by agricultural activity so that ever fewer farmers are present.

LIFE-Nature projects have explored ways to involve farmers in managing land owned by conservation bodies and to help farmers promote the output of conservation-oriented land use to the outside world as quality produce.

LIFE in action | case one

Nature conservation and agriculture without agri-environmental support and with astute marketing

The Dijle valley in Brabant (Belgium) was long an area of small, mixed farms raising livestock on grass in the wetter areas and growing arable and fodder crops on the drier slopes. Changes in farming practice led to the abandonment of botanically valuable hay meadows. These were planted with poplars, converted to fish ponds or, more recently, sown with maize. The 1998 LIFE project "Dijlevallei" funded the purchase and restoration of this land by a Belgian nature conservation NGO.



Hay meadows in the Doode Bemde along the Dijle. Photo © Désiré Vanautgaerden

What did LIFE do?

- > Bought land in the central, humid part of the valley.
- > Cut down poplar plantations and converted maize fields back to grass.
- > Restored former wetlands through closure of drainage channels.
- > Created and fenced off grazing blocks of about 20 hectares each.

How were farmers involved?

To manage these blocks of restored land, the strategy was to cooperate with willing farmers, because:

- > if shown to have an economic value for farmers, future management would be guaranteed;
- > except for the most sensitive areas which require manual treatment, this would be the least costly management solution for the NGO.



Snapshots of the Veeakker restaurant and butcher's shop.

Photos © Veeakker cvba

Seven local farmers took up the offers to exploit the grazing blocks. Agri-environmental measures did not play a role because they had not yet been set up in Flanders. Instead, the beneficiary sought other ways to make management of this land attractive to farmers. First, direct on-farm sale of meat to consumers was tried but was unsuccessful. Next, collaboration was sought with a farmers' cooperative committed to sustainable production. Cooperative members are subject to strict production conditions and inspections, but do get a higher price for their produce than from conventional markets. The cooperative commercialises the produce through three shops and a restaurant in the Brussels urban area, using quality and sustainability as selling points.

What was the outcome?

> A successful partnership with the farmers' cooperative was achieved. Farmers mow their meadows in May or June, then graze them with Limousin cattle until November, under management prescriptions specified in the lease agreements with the NGO. The additional criteria imposed by the cooperative (sustainability = using fodder grown on the farm) mean that the mowed hay is fed to the

stabled cattle in winter, thus closing the circuit.

- > For the farmers' cooperative, the arrangement with the NGO Natuurpunt is advantageous, because having meat originating from nature reserve management provides an extra selling point. It also provides access to a large group of potentially sympathetic consumers. Collaboration has recently expanded to cover surplus Galloway cattle from other Natuurpunt sites where rustic livestock is used for grazing management.
- > One problem, which is threatening the cooperative's financial viability and marketing, are new EU public health regulations on slaughterhouses which have led to a decline in mobile on-farm slaughter and small abattoirs. Survival of the farmers' cooperative depends on such facilities.

Galloway cattle in a Flemish Natura 2000 site.

Photo © Natuurpunt



LIFE in action | case two

Working with farmers to help them help nature

The Rhön, in the heart of Germany, is a plateau dissected by deep valleys. Three types of grassland habitats present there (calcareous, Nardus and Geranio-Trisetum grassland) are threatened by abandonment of mowing and grazing by farmers on these lands.

The 1993 and 1998 LIFE projects "Rhön" aimed to get farming back onto this land, as part of a wide-ranging nature conservation programme for the district. Several EU funding instruments were employed simultaneously.



Goats from the flock of Ditmar Weckbeck, partner in the LIFE project. Photo © Archiv Bayerische Verwaltungsstelle Biosphärenreservat Rhön

What did LIFE do?

- > Paid contractors (often local farmers) to clear overgrowth from abandoned grassland and to carry out repeated mowing and grazing on cleared areas.
- > Made special efforts to encourage shepherds to return to those areas where sheep farming had been abandoned in the early 1990s.
- > Recognising the importance of farmer participation, staff hired via LIFE organised

meetings to debate the problems facing both farming and nature conservation (for instance: too small and fragmented holdings, low returns on traditional livestock keeping). Effective ways of managing the grasslands were discussed. The response was very enthusiastic and led to the establishment of 5 working groups in different villages. To address land abandonment, they proposed:

1. building up a suckler cow herd of 120 animals, jointly owned by participating



Klaus Pörtner, partner in the LIFE project "Rhön" loading hay bales from land under agri-environmental contract. Photo © Archiv Bayerische Verwaltungsstelle Biosphärenreservat Rhön

- farmers, to create a need for hay as winter fodder, thereby ensuring use of upland grasslands;
- 2. on-farm slaughter of livestock with direct marketing via a local butcher;
- addressing fragmentation of holdings by pooling and swapping land on an informal and seasonal basis without the need to formally change property rights.

LIFE manager Ursula Schneider presenting the project to the local public. Photo © Archiv Bayerische Verwaltungsstelle Biosphärenreservat Rhön



What was the outcome?

- > Large tracts of degraded grassland habitats listed in the Habitats Directive have been restored and brought back into use. For instance, a coherent block of 140 hectares Nardus grassland was restored while almost the entire Lange Rhön, the largest pSCI here, is now managed under agri-environmental contracts.
- > Remaining shepherds increased their level of activity and new ones came in, supported by agri-environmental premia. In addition, the beneficiary helped them gain economic incentives through direct marketing of sheepmeat. LEADER and EAGGF funding was used to start up farmers' shops in the villages and to build stables and cold stores. Value is being added, e.g. by producing salami from the poor quality mutton of surplus old sheep. The beneficiary, inter alia using LEADER support, has launched a local economic network involving 20 farmers and 10 hotels and restaurants. The hotel or restaurant commits itself only to use farmers' produce for certain dishes on its menu, which are then promoted to visitors as a practical way to support local nature and society ("help conserve the landscape you have come to enjoy by eating these dishes").

LIFE in action | case three

Finding ways to manage publicly owned Natura 2000 sites

The Lafnitz river on the border between the Austrian regions Styria and Burgenland still has its natural banks and meanders, but is hemmed in by intensively farmed land, sometimes right up to the riverbanks. The importance of agriculture means that there is a risk of calls to regulate the river to safeguard farmland. However, the local water and nature conservation authorities found common cause. Both wished to increase the dynamics of the river, the water authority to improve its self-regeneration and flood retention capacities, the nature conservation body to restore floodplain forests and meadows lost to agriculture.

This meant moving intensive agriculture further back from the riverbanks to create room for semi-natural habitats and allow dynamic processes such as erosion and flooding without damaging property and creating demands for compensation. LIFE supported these actions through the 1998 project "Lafnitztal".



Aerial view of Lafnitz river meanders . Photo © BBL Hartberg

What did LIFE do?

> The project was a joint effort between the conservation, water and agricultural authorities and a local farmers' association. A corridor of land along both sides of the Lafnitz river was acquired by first purchasing plots of land from

owners in the area, then using the agricultural policy instrument of rural land consolidation, swapping the plots for land along the river. This corridor was taken out of intensive production, and became public Natura 2000 land dedicated to conservation of the river dynamics and habitats.



How were farmers involved?

How should the river corridor be managed once acquired? The relict floodplain forests could be left to natural succession, but converting intensively farmed agricultural land to semi-natural humid grasslands was more complex.

- > The farmers' association launched a demonstration project for cattle grazing a new activity in the Lafnitz valley as a management tool for the Natura 2000 corridor. A 1998 LEADER project funded purchase of equipment, such as fences and troughs. By 1999 two grazing blocks were available through land acquisition under the LIFE project.
- > A farmers' cooperative was set up to manage equipment and grazing. Members contributed cattle to the cooperative. After a slow start, thirty farmers had joined by 2002. The public bodies which owned the LIFE land signed conventions with the cooperative granting access to their land in exchange for compliance with management requirements and regular on-site inspections. Cattle stay on pasture year-round, but in winter are also fed hay from the LIFE meadows adjoining the grazing blocks, so that farmers have a professional incentive to mow these meadows.

How did agri-environment contribute?

- > Agri-environmental contracts for non-use of agricultural chemicals, late mowing and removal of cut grass were used. In addition, direct marketing of meat and farm tourism are being considered to supplement revenue.
- > Recurring grazing and mowing management of 140 hectares of public Natura 2000 land is now assured by farmers, rather than being a financial burden on the conservation bodies. Monitoring shows that biodiversity in these areas is recovering. Feedback from monitoring has led to changes such as rotational grazing to increase conservation benefit.

Interface between arable land and riverine habitats along the Lafnitz.

Photo © BBL Hartberg



Conclusion

All three case studies are examples of how cooperation with farmers generated spin-off projects. Through attention to on-site cooperation and promotion, LIFE has shown itself of great value in the practical application of Rural Development Plans towards forms of agriculture compatible with sustainable conservation of Natura 2000 sites.

These, and many other projects, show how LIFE has found ways to ensure management of land owned by nature conservation bodies. Cases where farmers take up the recurring management, which would otherwise have to be contracted out or done with own personnel, are particularly important. This saves conservation budget expenditure and at the same time, farmers are drawn into the management of Natura 2000 land. As the three cases illustrate, participation can also generate new opportunities for farmers. Agri-environmental measures are of great assistance in rewarding farmers for efforts to adapt to management techniques which include nature conservation constraints.

The "Rhön" project showed how the combined use of EU funds can help launch and support sustainable, conservation-oriented farming in Natura 2000 sites. LIFE funding permitted the initial investment in grassland restoration whilst LEADER and the Structural Funds financed infrastructure to enable shepherds to re-exploit these grasslands. The agri-environmental scheme partfinanced the running costs of keeping stock on these lands and LEADER and EAGGF-Guidance helped open up new marketing channels for the output.

The "Dijlevallei" and the "Rhön" projects are telling examples of the value of direct marketing to consumers of produce from conservation-oriented farming, labelling it as quality products with environmental and ecological benefits. If consumers do indeed actively seek out and buy such produce, the campaign for sustainable longterm management of Natura 2000 sites in an agricultural setting is more than half won.



Conclusions and recommendations

It is clear that LIFE-Nature has worked alongside agri-environmental measures on numerous Natura 2000 sites, under a division of labour in which LIFE took care of the investments needed to secure or improve conservation status and agri-environmental measures were used for daily management during and after the end of the LIFE project. Furthermore, particularly in France and the UK, LIFE-Nature projects have been used to develop new agri-environmental measures tailored to specific conservation tasks at local level, which were then adopted at regional or national level and so made available to many more Natura 2000 sites.



Examining cores taken from the subsoil in the Federsee fens.

Photo © Frieder Mauch

Partnership between conservation managers and rural stakeholders

In so doing, LIFE-Nature projects have succeeded in building up cooperation between nature conservation managers and rural stakeholders at site level. Through the use of agri-environmental measures, sustainable land use practices, which are beneficial for Natura 2000, were developed and applied. In addition, the dialogue and partnership-building itself increases support for Natura 2000 among stakeholders and the local community.

Possibilities for action

As well as LIFE-Nature projects, use the Rural Development Regulation to promote the establishment of Natura 2000 partnerships between nature conservation and rural stakeholders.

Integrating Natura 2000 in rural development and CAP

Most existing agri-environmental measures are general in scope and do not specify management requirements of habitats and species protected by the Birds and Habitats Directives. This means that there are often discrepancies at a technical level, between land management practices that are suited to a conservation viewpoint and the "best available" agri-environmental measures. As a EU policy objective, Natura 2000 would seem to merit special consideration. Although Article 16 of Regulation 1257/99 does go some way towards this, this aspect might be worth exploring further¹. One of the main wishes expressed by LIFE-Nature project operators at the workshop² was greater integration of Natura 2000 in rural development and CAP market measures. This concern was also behind the recommendation for a 'Natura 2000 cross-compliance', i.e. besides horizontal cross-compliance based on good farming practice and respect of local environmental laws3, cross-compliance should also include respect for the Natura 2000 directives. This would make CAP market payments conditional to the respect of certain site management requirements for farming on Natura 2000 sites.

Possibilities for action

> Re-examine the definitions of good farming practice to make sure they are (1) not so broad as to allow farming methods in Natura 2000 areas that contradict Article 6 of the Habitats Directive, and (2) to encourage forms of low impact farming beneficial to nature conservation and biodiversity.

- The adoption of the proposals for the mid-term review of the CAP has linked the application of Article 16 in Regulation 1257/99, which already allowed higher payments for farms in 'areas faced with environmental restrictions', more explicitly with Natura 2000 and Article 16 will now exclusively concern only areas designated under the Habitats and Birds Directives.
- ² Workshop "LIFE, agri-environment and Natura 2000", Brussels, October 23 2002.
- Referred to in Article 3 of implementing Regulation 1259/99

- > Include directions for good farming practice and for appropriate agri-environmental measures in Natura 2000 management plans and ensure their implementation.
- > Revise the definition in Article 3 of Regulation 1259/99 to link CAP payments in general to respect of Natura 2000 legislation.
- > Pay more attention to conservation-oriented measures in future Rural Development Programmes by:
 - > setting up regional agri-environmental steering committees where nature conservation and/or Natura 2000 interests are represented;
 - > taking account of results of horizontal technical evaluations;
 - considering for inclusion any pilot schemes developed by LIFE or similar programmes (e.g. LEADER).

Agri-environmental payment levels and take-up rates

The case studies suggest that using agri-environment to help achieve Natura 2000 objectives works better in areas of extensive farming than in areas of intensive farming. The attractiveness of the premia and take-up of agrienvironmental measures is generally higher in areas of extensive farming. Farmers are more likely to enter into and renew agri-environmental contracts, because the premia provide (1) an incentive for their commitment and (2) compensation for loss of income due to change in techniques that lead to reduction in the value of output.

In areas of intensive farming, the agri-environmental premia offered do not financially match other uses of the land. The workshop case studies indicate that in intensive areas agri-environmental premia would have to be raised beyond the limits currently set by Regulation 1257/99 to become attractive. This also explains why, for instance, steppe birds like the great and little bustard remain under threat as they often range over large tracts of intensive arable land, where current agri-environmental measures are not always economically attractive to farmers. One suggestion from the workshop was that, in such cases, the definition of good farming practice should specifically take into account these birds' requirements, together with stricter application of cross-compliance.

Possibilities for action

Amend the Rural Development Regulation 1257/99 to allow higher ceilings for premia or higher top-ups for measures targeting Natura 2000, especially for measures targeting types of farming which attract high CAP first pillar support levels or which yield high returns.

> Closing a ditch to raise water levels in a wetland. Photo © Jost Finstein



> Enforce effectively respect of good farming practice in Natura 2000 areas, already a condition for CAP first pillar market support from Agenda 2000.

Administrative rigidity versus pragmatic flexibility in agri-environmental application

Another element raised at the workshop⁴, and frequently experienced during LIFE-Nature projects, is the rigidity and administrative complexity associated with agrienvironmental contracts. These render them less attractive for farmers and more difficult to use for conservation purposes⁵.

For instance, mowing dates could fluctuate from year to year and even from plot to plot, but in compliance with the management plan or the scientific opinion of the site manager. Of course, this flexible, ad hoc approach implies

Motor mowing a reedland near Bad Buchau, Baden-Württemberg.

Photo © Kerstin Wernicke



a higher control cost (e.g. regular use of qualified personnel to monitor the site and liaise with farmers).

Possibilities for action

- > Examine the role and content of the implementing and control regulations such as Regulation 445/2002 and the Commission's Guidelines of July 2002, essential as to how agri-environmental measures are drawn up, administered and monitored.
- > Target-oriented measures and flexible implementation by the Member State or region, who are responsible for drawing up the measures.
- > Use management plans as reference guides.
- > Take on board changes already made in the CAP following its mid-term review agreement of June 26 2003, based on Commission proposal COM23(2003).

Differences in uptake from country to country

The varying incidence of the use of agri-environmental measures during LIFE-Nature projects (see Appendix II 'LIFE, semi-natural habitats and environment') indicates the importance of the regional or local context. Some countries have very large proportions of their Natura 2000 Network taken up by habitats which require on-going management, or populations of species relying on such habitats. Other countries have a preponderance of sites that are intrinsically self-regulating. Besides this, national strategies in nature conservation vary widely, depending on a range of factors (e.g. strategies which tackle the most urgent threats or address the most endangered species or habitats; others that are based on the past experience and on which strengths new projects can build). Finally, implementation of agri-environment is not

Workshop "LIFE, agri-environment and Natura 2000", Brussels, October 23 2002

The original regulation introducing a system of integrated administration and control of CAP payments (Regulation 3508/92) was amended several times (Regulations 165/94, 3233/94, 3235/94, 1577/96, 2466/96) and was made applicable to all agri-environmental and other 'second pillar' payments under Agenda 2000 (via Regulation 1593/2000). Regulation 2419/2001 further specified the control mechanisms for the Rural Development Regulation. Finally, Regulation 445/2002laid down prescriptions for the implementation of the Rural Development Regulation. It has been supplemented by the Commission's 'Guidelines for the implementation of administration, control and sanctions in relation to measures based on Regulation 1257/99', published on July 23 2002. This set of rules and guidelines sets out how agri-environmental measures have to be administered and inspected, which is often alleged to be the root cause of much of the rigidity and complexity which is making agri-environment less effective than it could be from a conservation point of view, and binding personnel resources within the authorities responsible for conservation and rural development, to the detriment of promotion and advice among farmers and evaluation of the biodiversity impact of the measures.

uniform. In some Member States there may be a wide range of measures, significant promotion and high uptake; in others the offer may be limited, or adequate national funding is not available, resulting in a reduced promotion effort and modest uptake.

Possibilities for action

- > Natura 2000 requirements should be taken on board in the rural development financial envelopes to be attributed post-2006. The financial perspectives have been fixed for the period 2000-2006, but an opportunity remains for the amount in the reserve, which will be allocated based on performance.
- > Research is needed into the reasons for lack of uptake, providing recommendations how to improve it for the Natura 2000 areas.
- > Member States and regions should offer adequate agri-environmental schemes for Natura 2000 areas. No uptake by individual farmers is possible if the Member State or region has not offered measures suitable for Natura 2000 sites.
- > Actively promote agri-environmental schemes, perhaps coupled with assistance to farmers in selecting the most appropriate scheme and completing application forms. These actions could definitely increase uptake rates. Include a network of agri-environmental extension services, at least for Natura 2000 areas, in a revised Rural Development Regulation⁶.
- > Offer information and training to local agricultural administrations and organisations.

Networking and information flow at European level

Because agri-environment is implemented at Member State or even regional level, measures occurring in one country or region do not necessarily occur in the same manner in another. This means that an agri-environmental measure promoted by a LIFE-Nature project is not always transferable to a site located in a different country or region. For those working at site level, it is not always easy to distinguish between what is not possible only because of the way the Rural Development Regulation is interpreted and applied by a specific Member State, and what is not possible simply because the Regulation does not allow for it. Yet there is often scope for modifying existing measures or introducing new ones, as shown by the very fact that so many LIFE-Nature projects formulated and tested new agri-environmental measures which were then adopted. Consequently, there is much to be gained



Installing gauges to monitor water levels in a fen environment. Photo © Kerstin Wernicke

for Natura 2000 by better horizontal networking about agri-environment between LIFE projects and in general, those responsible for site management. Knowledge of different interpretations of the same rules - of what is possible in other states and regions - could be put to use to try to press for changes where that is seen as desirable.

The Co-op measures under LIFE-Nature offer opportunities for LIFE projects to liaise at European level about site management and agri-environmental measures, with a view to setting up a more permanent network and to produce conclusions and guidelines.

Possibilities for action

> Beyond LIFE-Nature Co-op projects, broader initiatives involving all relevant stakeholders in agri-environment and Natura 2000 at supranational level could be launched, building on the model of the workshop7. They could be considered part of the evaluation of the Rural **Development Regulation foreseen in Articles 20** & 35 of Regulation 1257/99 (note also reference to funding for evaluation foreseen in Article 49.2) or can use the provisions of Regulation 841/2000 which facilitates dissemination activities for the CAP.

The CAP mid-term review adopted June 26 2003 foresees assistance to help farmers adapt to the new CAP context, via farm advisory systems on standards and good farming practices. After 2007 Member States are obliged to offer farm advisory systems, though farmers' participation will remain voluntary.

Workshop "LIFE, agri-environment and Natura 2000", Brussels, October 23 2002.



Building a dam across the Kanzach stream to raise water levels. (LIFE project "Federsee"). Photo © Jost Einstein

EU enlargement

The countries of central and eastern Europe which accede to the EU on May 1 2004 have an abundance of valuable habitats and important populations of rare species on agricultural sites. Their agriculture is still, by and large, relatively underdeveloped or extensive. Appropriate agri-environmental schemes could play a major role in these new Member States – if they are developed at an early stage and promoted amongst stakeholders. Already under Regulation 1266/99 (SAPARD) agri-environmental schemes can be supported in candidate countries and such schemes have begun to be put into practice. The experience gained in the EU-15 with agri-environment and LIFE-

Nature projects in support of conservation, is available and can only be recommended.

Possibilities for action

- > Close involvement of nature conservation authorities in the drawing up of agrienvironmental measures.⁸
- Participation of environment authorities and NGOs has been encouraged under Regulation 1266/99 (SAPARD). This is foreseen in Annex 13.1 of Regulation 1257/99 but practical experience in the Member States shows that in the past this has not always been applied equally well everywhere. When it comes to the technical content of measures, the knowledge acquired through the application of Regulations 2078/92 and 1257/99 in Natura 2000 areas can be of great value, as will be the SAPARD experience once programmes have been under way long enough to allow first assessments. The challenge is to find effective ways of disseminating all the experience gained by agri-environment and LIFE-Nature to acceding countries (see also conclusions to previous subheading).

Financing Natura 2000

The current political context in the EU is favourable for proposing improvements to agri-environment which benefit Natura 2000. The mid-term review of the CAP and its Rural Development Regulation has been proposed and recently agreed and the debate on how to apply Article 8 of the Habitats Directive, which deals with the Community financial contribution to the costs of setting up and running the Natura 2000 Network, has begun in 2002 and the Commission has planned for this year a Communication on the issue.

Possibilities for action

Wider use of agri-environmental measures for nature conservation purposes in the light of the Council agreement on the mid-term CAP review proposals of June 26 2003.9 Public nature conservation authorities and NGOs have now more opportunity to contribute to the creation of well-conceived agri-environmental measures for Natura 2000 sites.

⁹ For further information, see http://europa.eu.int/comm/agriculture/mtr/index_en.htp



Measuring boundaries in the field. Photo © Kerstin Wernicke Recurring management in action. Photo © Jost Einstein



The Mid-Term Review and the Reform of the CAP from a Natura 2000 Perspective

The Commission's proposals for the mid-term review of the CAP has resulted in the EU agriculture ministers adopting on 26th June 2003 a fundamental reform of the CAP, with a view to provide a long-term perspective for sustainable agriculture. The legal texts were formally adopted at the Agriculture Council of September 2003.

General principles

Decoupling is generally to be applied to nearly all CAP market payments. This implies a single farm payment that will replace most of the premia now given under the CAP. The payment will be based on a reference amount in a reference period (2000 to 2002) for each farm. It will enter into force in 2005, but Member States with specific situations may delay implementation until 2007.

Comment: Because the single payment is not linked to production, one of the factors driving agricultural intensification will be removed. This is good news for Natura 2000 and biodiversity in general. However, there is both a risk of implementation and abandonment in different areas, including some Natura 2000 areas.

The single farm payment will be conditional to keeping farmland 'in good agricultural and environmental condition' and will be linked to the respect of environmental, animal welfare and hygiene standards (i.e. cross-compliance). Farm audits will take stock of parameters defined as important for certain targets (environment, animal welfare, etc) at individual farm level. If cross-compliance is not respected, direct payments (like the single farm payment) are to be reduced, in proportion to the negative effect resulting of the lack of cross-compliance.

Comment: This, of course, is potentially very significant for Natura 2000 and addresses a concern raised by several participants to the workshop¹⁰. At this stage it is necessary to wait for the implementing regulations and guidelines as they will also have consequences for how effective the reform will be in practice. The definition of 'good agricultural condition' for the market pillar of the CAP will obviously be important, following on from the 'good farming practice' adopted as a criterion by Agenda

 $^{\mbox{\scriptsize 10}}$ Workshop "LIFE, agri-environment and Natura 2000", Brussels, October 23 2002

2000 for rural development (see the above subheading "Integrating Natura 2000 in rural development and CAP"). To be effective, cross-compliance will require a clear approach by Member States in so far as farmers' obligations are concerned, including a thorough approach to control.

The reform of the CAP strengthens further rural development policy, adding to the second pillar more Community money. A compulsory reduction in direct payments "modulation" for bigger farms will be applied in order to finance the new needs of the rural development policy. Direct payments to the bigger farmers over and above the €5,000 franchise will be reduced by 3% in 2005, 4% in 2006 and 5% from 2007 to 2013.

Comment: This gradual phase-in, channelling expenditure on markets towards rural development, will make more money available than originally scheduled in the January 2003 proposal: 5% modulation will make €1,200 million available. The Member States may each keep 1%, and



each Member State will get at least 80% of this money back. This is expected to make more money available for rural development and potentially for Natura 2000 areas, through agri-environmental measures or Article 16 actions. However, it is stressed that the environmental legislation and policy has continued to develop since Agenda 2000 and the need for rural development funds for a broad range of environment-related issues is becoming even greater.

Specific issues

Member States which fear a risk of land abandonment can maintain part of the per hectare payments in the cereal sector or the suckler cow and sheep premia.

Comment: This can be generally beneficial for Natura 2000, as sites are often located in districts or regions most threatened by land abandonment because of low profitability of farming.

MR Lenc 1300 Inche

Member States may make additional payments of maximum 10% of the sum of their single farm payments to encourage specific kinds of farming which are important for the environment or yield quality produce.

Comment: This could benefit areas of intensive agriculture, or any other Natura 2000 site where conservation management depends on very special types of farming. Quality produce could be interpreted as products from traditional, extensive farming (of the kind which maintains biodiversity), or products from holdings which have taken on special obligations in the name of sustainability and biodiversity. It is necessary to wait to see the decisions of the Member States and the competent authorities on their approach with regard to the options.

Changes to the Rural Development Regulation

Article 16 (areas faced with Environmental Restrictions (AERs) within the Rural Development Regulation 1257/99) has been changed, introducing an exclusive application to sites designated under the Birds and Habitats Directives, i.e. the Natura 2000 sites. Furthermore, the Council agreed an amendment to Article 16 which allows temporary and degressive payments over and above the ceiling in Regulation 1257/99, for duly justified cases taking account of specific problems.

Comment: Article 16 of the Rural Development Regulation is now specifically linked to Natura 2000 areas and this creates further possibilities for including actions for the sites of the Network. The modification of the Council to the original Commission proposal which allows the increase of the premium ceiling that has been set to a flat rate of €200/hectare per year, by introducing degressive payments over a five-year period which can start from €500/hectare per year or even be further increased in duly justified cases, allows a certain flexibility in Member States' planning and design of appropriate measures for Natura 2000 areas. This increase in the premium ceiling could be helpful in dealing with farmers who have been farming more intensively than the Natura 2000 site management plan proposes and should further facilitate the use of Article 16 provisions in relation to the environmental restrictions to farming attributed to the Natura 2000 management requirements.

Filling a ditch with the village of Bad Buchau in the background. (LIFE project "Federsee"). Photo © Kerstin Wernicke

The CAP second pillar (rural development including agri-environment) will be strengthened by adding new measures in favour of the environment, product quality and animal welfare, starting in 2005. Temporary and degressive support can be provided to farmers in order to cushion the effects of complying with environmental, hygiene and animal welfare standards based on EU legislation.

Comment: These measures provide the opportunity for a generally higher standard of farming in all non-Natura 2000 areas. This can bring some overall benefits to biodiversity and so improve the baseline of its protection.

Member States have been given the opportunity to increase the co-financing rates for agri-environmental measures by 10 percentage points, to 85% for new

Member States and Objective 1 areas in EU-15 and to 60% in the rest of EU-15.

Comment: This could help to address problems of insufficient national or regional funds to co-finance implementing the Rural Development Regulation. It is particularly promising for areas with high biodiversity and a poor level of economic development, typically found in Objective 1 areas and the accession countries.

With these basic principles and directions now agreed, the detailed transposition of EU decisions into the respective Rural Development Programmes is still to be worked out, particularly the implementation of cross-compliance and some of the new rural development measures. This means that there is scope for input and time for action by all those interested in biodiversity and conservation.



Points raised by the Oct. 23 2002 workshop discussions on LIFE, agri-environment and Natura 2000



Internal improvement (administrative aspects)

Agri-environment brings too much administration and regulations with it – this is upsetting and irritating both farmers and Natura 2000 site conservation managers. In effect, the control mechanisms devised for the first pillar of the CAP (market support), with their severe penalties, have been transposed to the second pillar (RDP). Some site management bodies represented at the seminar reported that 30-40% of the working time of the nature conservation staff is used to monitor and inspect agri-environment.

A first critique is that agri-environmental contracts co-financed by the EU are inflexible. They are set for 5 years and their content cannot be modified, not even if it becomes clear that slight adjustments give better conservation results. For instance, contracts for mowing. Weather in many areas of Europe is fickle, and can create real problems for farmers with such agri-environmental contracts. If the contract says he has to mow on June 1, but the weather is too bad to allow it, he can lose the premia over the full 5 years because he did not fulfil his contract to the letter that one single year. Yet, if he does go out and mow on June 1 to fulfil his contract, he can cause more damage to the natural environment than if he had mowed a week earlier or later. This inflexibility makes the contracts less attractive and even counterproductive at times.

Second critique: there is a tendency by the competent authorities to keep piling on controls and forms. This critique can be summarised as follows: the EU has issued a list of rules (Regulations 3508/92 and its modifications, 2419/2001, 445/2002; Commission Guidelines of July 23 2002) how agrienvironmental contracts are to be monitored and what the penalties for abuse are. These are designed to give 100% certainty to the EU that there is no abuse, but because the Member States are penalised if there is abuse, the national government tends to tighten up these rules even more (to be 120% covered) and, in federal states, the regional governments go a step further to be on the safe side (i.e. 150% covered). The end result is red tape in the extreme. For instance, the

administrative prescriptions for agri-environment which conservationists, farmers and local agricultural authorities have to adhere to in one German region run to 150 pages! In fact, there are already local authorities in some areas who refuse to conclude any more agri-environmental contracts, arguing that it is not worth the administrative effort.

Would a different control mechanism specially developed for the second pillar and its specific requirements, not be better? The second pillar needs control, but a different type from the first pillar; one more directed to its own special objectives.

There should be **flexibility of implementation** at the individual (farmer/site) level within the 5-year lifetime of an agrienvironmental measure. I.e. it should be possible to change terms of a contract during the 5 years if monitoring reveals that it is better to do so. This possibility to change could even make longer contracts (15-20 years, better for the farmers' economic security) feasible.

Correct and rigorous implementation of the **requirements** in agri-environmental management contracts can sometimes have peculiar outcomes. Therefore, relying on targets rather than requirements to formulate such measures could be better in some circumstances.

Regulation 1257/99 schemes are relatively inflexible, drawn up at a national level, which makes it difficult to tailor them to the very specific management needs of sites or individual farm holdings in areas of very high nature conservation value. Instead of standardised one-size-fits-all contracts valid at the entire regional or even national level, it could be better to have individualised contracts based on the conservation aspects of each Natura 2000 site and/or on the basis of each farm holding. A 'one-size-fits-all' philosophy of programmes covering the whole of a country, in spite of regional differences, means some types of lands which are valuable from an ecological point of view and require recurring management are still excluded from the agri-environmental programmes. In other cases, the management of particularly demanding habitats comes under the definition of a horizontal measure, but funding levels are too low for this specific situation and management. A suggestion to counteract this problem would be to have



small regional envelopes which each region/district can use to support small actions and unusual landscape features peculiar to itself. Another solution might be to have basic national measures, with local tailor-made measures as top-ups for these national measures.

In the same vein, management concepts for farm holdings as a whole should be worked out and agri-environmental measures tailored to this concept. At the moment, agri-environmental contracts are targeted to individual fields, not whole farms. Such a **'whole-farm' approach** could also be very helpful for situations where conservation goals and farmers' strategies do not immediately coincide.

In connection with a farm-based approach, longevity and stability of agri-environmental measures is very important. Changing programmes and rules every 5 years causes uncertainty among stakeholders, who would like certainty over a longer term to integrate agri-environment into their farm strategy and make it more attractive. There should at least be some guarantee of continuation after the current 5-year programmes end.

Avoiding conflict between agri-environment and other CAP instruments

Conflict between market support payments and agrienvironment (examples: afforestation using premia under 2080/92 replacing Annex I grasslands; support for fodder maize which incites farmers to convert grassland, market subsidies which prop up land uses opposing conservation goals such as intensive cropland or silage grassland in the middle of extensively used fields and pastures under agri-environment.) is a wide-spread problem.

To counteract the attractivity of other CAP payments, the **EU co-financing rate** for agri-environmental measures with a conservation angle could be increased to 75%.

Management plans for Natura 2000 areas, as foreseen in Art. 6.1 of the Habitats Directive, ought to act as basis or as guidelines for attributing all EU funds in the Natura 2000 area. I.e. a plan like the Document d'Objectif in France, which has a fixed methodology endorsed by the competent national authorities, will be drawn up for every Natura 2000 site and is to be the result of dialogue and consensus-finding among stakeholders.

Another possibility could be a **public service (interservice) agreement**, as in the UK, where conservation objectives to be reached for each site by a set deadline are laid down, and via these public service agreements the heads of the civil service departments involved sign up to these targets. Such agreements stipulate targets and intermediate deadlines, costs and any necessary changes to departmental practice (i.e. they are equivalent to "integration" in EU terms)

CAP subsidies granted through the first pillar (market support mechanisms) ought to have environmental obligations built in

(cross-compliance or 'conditionality of support'). Thus, suitable environmental indicators for CAP payments could be drawn up as condition to pay market support (at the very least in Natura 2000 areas). For instance, the wheat premium is only paid if a strip of wild vegetation is kept along the edge of the field. Other premia could be linked to a minimum presence of bushes, of tall old grass, of patches of reed, etc in the farm holding (or else such patches of nature in a field are counted as agricultural land in the calculation of the premium, so that farmers who leave such elements do not suffer a reduction of premia calculated on surface effectively under crop).

'Good agricultural practice' is to be elevated to a compulsory standard so that farm holdings which wish to receive CAP premia have to comply with precise norms in terms of biodiversity and environment, animal welfare, hygiene and occupational safety. These norms and practices must be effectively enforced by the Member States. Good farming practice, if rigorously and comprehensively applied, can maintain much biodiversity and will mean less agri-environment is necessary. In fact, farmers already have to fulfil good farming practice criteria to get CAP market support premia under the 1st pillar, but this is not being applied rigorously enough in all Member States. Agri-environment and rural development, the second pillar, only accounts for 15% of the CAP and should be reserved for special situations. Its budget is not big enough to cover all steppic or meadow-breeding birds in all the arable lands or grasslands of the EU - that the CAP first pillar can, and should, do.

Making Natura 2000 efforts more equitable

Affluent regions are, as a result of the development which made them rich, often relatively poor in Natura 2000 nature values, while the areas which are rich in nature include a disproportionately high share of the EU's economically weaker regions. This in turn can mean low availability of local funds to co-finance agri-environment. An example: in Castilla La Mancha, which is larger than Belgium, 16% of the territory is designated, but the population is only 1.5 million (less than one-sixth of Belgium's), the per capita GDP is below the EU average and co-finance for the RDP, even though it is only 12% (because of the Region's Objective I status), is a problem.

When the Rural Development Programmes based on Regulation 1257/99 were elaborated by Member States and regions in 2000, the lists of Natura 2000 sites were far from complete. The next rural development programme round begins in 2006, by when the lists of SIC (final Natura 2000 sites) should be complete and there should even be management plans for many of them.

One of the criteria for the post-2006 attribution of RDP envelopes ought to be Natura 2000 designation. Areas with greater density or coverage of Natura 2000 sites get larger envelopes; or 75 or even 80% EU co-finance. Similarly, Member States which designate large sites including buffer zones and potential restoration areas should get more than those which only designate small sites restricted to the pure Annex I habitats.

In some cases the national programme establishes agrienvironmental measures, which can be useful in Natura 2000 areas, as horizontal measures for all of the country, i.e. in such a way that all farmers, wherever they are, have a right to request them. This impossibility to restrict the measures to Natura 2000 areas, can cause problems for districts and regions (particularly in a federal context) which have a rich spectrum of Natura 2000 sites, but insufficient budgets to assure their cofinance for these measures, not just over the pSCIs and SPAs where they would like to deploy them, but over the whole of their territories, because the national definition does not allow them to discriminate.

The 'single premium' per holding under discussion in the reform of the CAP, to replace premia based on production, may, if based on the previous totals of all CAP subsidies granted to the holding in question, work against extensive and traditional holdings in Natura 2000 areas. Such farms, by their nature, did not qualify or obtain large subsidies from the market support pillar, and so would tend to get rather low values for the 'single premium', disadvantaging them from the start vis-à-vis colleagues who had farmed intensively and so qualified for high CAP subsidies. A possible solution might be to calculate a virtual figure for such holdings, based on average values in the broader district.

More precise targeting of known challenges

Farm holdings in Natura 2000 areas may have to coexist with wildlife listed on Annex II of the Habitats Directive (bears, wolves, otter, but also ungulates) or with birds on Annex I of the Birds Directive. These species are protected but can cause damage to livestock, beehives, orchards, crops, farmed fish etc. This ought to be considered a structural handicap, similar to the structural handicaps already recognised by the CAP (e.g. mountainous topography). To compensate for this, a surcharge could be added to existing premia, or a special premium introduced, to cover (as a flat rate advance payment) possible damages by wildlife to livestock and crops. Only if damages go beyond a certain threshold would individual compensations per unit be awarded. In the same vein, another route would be to support measures to prevent damages.

Besides the pSCI for habitats on Annex I of the Habitats Directive, attention should also be given, via the Rural Development Programmes, to the biotopes for birds on Annex I of Directive 79/409/EEC - especially wetlands (Article 4 of the Directive calls for their protection) and restoring other suitable habitats like open grasslands for meadow-breeding birds (Article 3).

Land under the compulsory regime for market set-aside is taken out of production for periods of 10 or 20 years; why can't such land be managed ecologically to produce biodiversity in the meantime? Thus, in Natura 2000 areas which already had problems maintaining semi-natural grasslands because of rural depopulation, the prohibition on grazing former arable land once it had been declared set-aside further reduced extensive grazing possibilities. In Natura 2000 areas set-aside should at least be made subordinate to the measures foreseen in the Natura 2000 site management plans. Either Natura 2000 areas should be exempt from the market set-aside obligation (i.e. set-aside is voluntary, and only if conform to management plan goals) or else in such areas it should be allowed to do one mowing a year or graze for a limited period per year, so that these set-aside pastures and arable lands do not fall prey to succession.

Set-aside could be positive for Natura 2000, but only if the land is not used instead to grow raw materials for industry or energy production, and some sort of conservation management is allowed/prescribed during the set-aside. In programmes where there already is a compulsory annual mowing/mulching of the set-aside land, this should not take place during the breeding season.

'Connectivity' needs to be looked at within rural development. Support, via RDP or otherwise, for local typical products on the basis of natural resources (i.e. 'Natura 2000 produce') could be an excellent way to reward and stimulate appropriate land use and management.

Nature areas and semi-natural landscapes managed by the sort of farming which maintains and enhances their value attract tourists, but the revenue from these tourists doesn't filter back to the farmers. Instead, it is the RDP which is helping such beneficial practices continue. Can the burden not be better spread?

Support for frameworks which can enhance the Natura 2000 agri-environmental connection

Support from the EU ought generally to be possible for personnel/structures to disseminate/promote agri-environment in Natura 2000 areas, formulate packages of measures suitable for Natura 2000 sites, and monitor the conservation effects of implementation. Ideally every relevant Natura 2000 site should have a structure sur place to explain to farmers what is possible and to help them.

Set up mechanisms for better networking and flow of information about agri-environment/RDP. This should be in two streams:

- 1. between DG AGRI, DG ENV and those directly involved in managing Natura 2000 at national and regional level;
- 2. between those responsible for site management, horizontally across the EU.

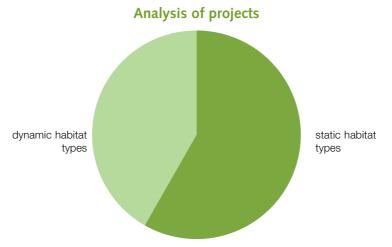
Because they are often enough significant landowners, NGOs or public sector conservation bodies ought to qualify for agrienvironmental support when managing Natura 2000 areas. This would be particularly relevant for areas where agriculture is so dominated by lucrative and capital-intensive forms of farming that there is no interest in agri-environment, or conversely where rural depopulation has led to the disappearance of farmers. In practice this depends on the national definitions of 'farmer'.



LIFE, semi-natural habitats and agri-environment: overlap and occurrence

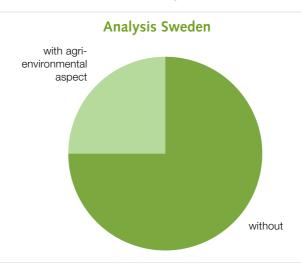


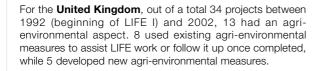
An analysis has been made for the 309 LIFE II projects co-financed between 1996 and 1999. Of these, 129 (42%) concerned, wholly or partly, the types of dynamic habitats where recurring management by farmers is vital: the various calcareous grasslands (codes 6110, 6120, 6170, 6210), steppe grasslands (codes 6220, 6240, 6260), *Nardus* grasslands (6230), species-rich hay meadows (6510, 6520) and *Molinia* meadows (6410), or heaths (4010–4040) and fens (7210, 7230).



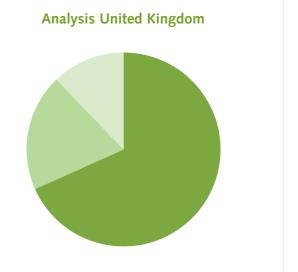
How many LIFE-Nature projects actively used agri-environment as part of the project and/or its continuation? This has been examined in detail for a selected sample of Member States and the differences between countries are quite striking:

In **Sweden**, out of 20 LIFE-Nature projects co-financed between 1995 (year of EU accession) and 2002 (second selection round under LIFE III), 5 have used agri-environmental measures as a supplement to the work directly undertaken by LIFE. This means one in four, which is quite high considering the preponderance of forest habitats among Swedish projects.







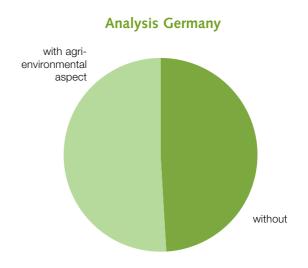


Analysis France

France had 56 projects in total between 1992 and 2002, of which 19 had an agri-environmental aspect. Of these 19, no less than 12 developed and tested new agri-environmental measures better suited to conservation requirements, which shows a strong focus on innovation amongst the French LIFE-Nature projects.

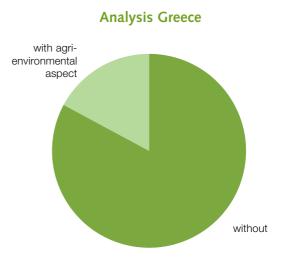


In Germany, out of a total of 53 projects financed over the years 1992-2002, 27 involved agri-environment in one way or another. Take-up of agri-environment is generally high in Germany, which has a long tradition in the matter: several Länder already had their own agri-environmental programme in the 1980s, funded regionally. Moreover, the majority of projects in Germany target exactly those types of habitats (grasslands, fens, heaths) where recurring management is essential to maintain conservation status. However, in contrast to the UK and France, the emphasis is very much on using existing agri-environmental measures, with little innovation (development of new measures).





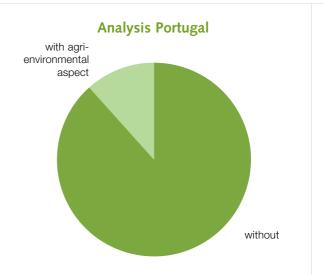
In **Greece**, out of 35 projects between 1992 and 2002, 6 included agri-environment. This lower rate is partly explained by the considerable percentage of projects which deal with marine and coastal sites or with pure inventory work, and partly by horizontal difficulties with agri-environment in general (insufficient diffusion of information and promotion of agri-environment by the competent authorities in the past). The percentage of projects using agri-environment is already much higher (6 out of 21) if we only look at those funded after 1997.



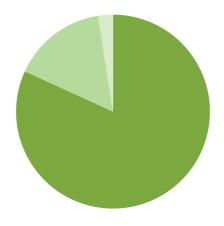


In **Spain** there were 155 projects between 1992 and 2002, but only 6 had an agri-environmental aspect. This remarkably low score is first and foremost explained by the fact that few LIFE-Nature projects took place in areas where there was any farming. Spain has a tradition of focusing on species-oriented projects, which often are carried out in national parks or other uninhabited areas, hunting estates or coastal and offshore zones. A minority of projects concern steppes and wetlands - the sort of area where farming and agri-environment can be expected to potentially have a role to play. Finally, Regulations 2078/92 and 1257/99 are implemented at regional level. The regions must provide part of the co-finance and this can be a problem, especially for regions which are weaker in economic and budgetary terms. Those programmes and measures which do exist are not always disseminated to farmers vigorously enough so that take-up is lower than it could be (which is why the Spanish LIFE-Nature projects which do use agri-environment, invest in staff time to promote the measures).

In **Portugal** there were 43 projects between 1992 and 2002 and 5 had an agri-environmental aspect. As in Spain, many Portuguese projects deal with topics or areas where farming is not a factor: marine projects, inventory projects, projects concerning endemic species in national parks on the Macaronesian islands, etc.

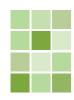






Italy had a total of 121 projects between 1992 and 2002. Of these, 22 had an agri-environmental aspect, including 3 projects which developed and tested new agri-environmental measures. It must be remembered that a significant share of Italian LIFE-Nature projects target habitats (forests, active raised bogs, lakes, dunes, etc.) where there is no agricultural use, or species which do not occur in farmed environments. As in Germany, the projects which do involve agri-environment often concern grassland habitats, with grazing the management activity being supported. Giving information about agri-environment, and awareness-raising directed to farmers, is also a common measure among these projects.





Participants list

LIFE, agri-environment and Natura 2000

One-day workshop – October 23 2002 Centre Borchette, 36 rue Froissart, 1040 Brussels

Bernhard Berger	DG ENV, B1	
Joel Boeufgras	Espaces naturels du Limousin (France)	
Bernard Brookes	DG ENV, D1	
Detlev Clemens	DG AGRI, G4	
Joost Dewyspelaere	Natuurpunt (Belgium)	
Paul Evans	English Nature (UK)	
Celsa Flores	DG AGRI, G4	
Fernando Fonseca	DG AGRI, E2	
Susann Forslund	Länstyrelsen i Kalmar län (Sweden)	
Anton Gazenbeek	Nature Link International – Ecosystems (LIFE monitoring team)	
Dr. Michael Geier	Bayerisches Staatsministerium für Landesentwicklung und Umweltfragen (Germany)	
Michael Hamell	DG ENV, B1	
Elisabeth Helming	Soges – AEIDL (LIFE monitoring team)	
Leonardo Nicolia	DG ENV, B1	
Carles Ibáñes	SEO/BirdLife (Spain)	
Christophe Jolivet	LPO – Ligue Protection des Oiseaux (France)	
Bruno Julien	DG ENV, D1	
Astrid Kaemena	DG ENV, B2	
Dr. Torsten Langgemach	Landesumweltamt Land Brandenburg + Landkreis Jerichower Land (Germany)	
Jesús Laviña	Mecomat-ATECMA (LIFE monitoring team)	
René L'Her	DG AGRI, F1	
Andreas Lillig	DG AGRI, F3	
Søren Mariegaard	Sydvestjysk Landboforening Varde (Denmark)	

Marc Maury	Mecomat-Ecosphère (LIFE monitoring team)
Eduardo de Miguel	Fundación Global Nature (Spain)
Adelmo Moreale	DG AGRI, F1
Francis Muller	Espaces Naturels de France (France)
Federico Nogara	DG ENV, D1
Olivier Patrimonio	Mecomat-Ecosphère (LIFE monitoring team)
Wolfgang Pelikan	Weideverein Lafnitztal (Austria)
Jorma Pessa	Pohjois-Pohjanmaan Ympäristökeskus (Finland)
Dr Antonio Picchi	Assessorato agricoltura, ambiente e sviluppo sostenibile, Regione Emilia-Romagna (Italy)
Ingrid Rudolph	Ministerium für Umwelt, Naturschutz, Landwirtschaft und Verbrauchersschutz, Land Nordrhein-Westfalen (Germany)
Angelo Salsi	DG ENV, D1
Miguel Soares	LPN - Liga para a Protecção da Natureza (Portugal)
Maria Spiliopoulou	DG ENV, D1
Kerstin Sundseth	Nature Link International – Ecosystems (LIFE monitoring team)
Tim Thom	Yorkshire Dales National Park (UK)
Alexandra Vakrou	DG ENV, B2
Wim Versteden	Veeakker (Belgium)
Iris Verstuyft	Natuurpunt (Belgium)
Annigun Wedin	Länstyrelsen i Kalmar län (Sweden)
Johannes Wolf	Distelverein (Austria)

Schoolchildren helping out with nature management.
Photo © Jost Einstein





List of projects mentioned

Short descriptions of each of these projects plus (for some) summaries of their main results can be consulted and downloaded from http://www.europa.eu.int/comm.environment (LIFE website)

Acronym	Full name and title	Contact
Atlantic Heaths	B4-3200/95/857, Conservation and reestablishment of Southern Atlantic wet heaths with <i>Erica tetralix</i> and dry coastal heaths with <i>Erica vagans</i> and <i>Ulex maritimus</i> in south-west England and north-west France (F + UK)	The Royal Society for the Protection of Birds http://www.rspb.org.uk
Basses vallées angevines	1973/91/SIN/8214, Protection des prairies alluviales des Basses vallées angevines	LPO – Ligue pour la Protection des Oiseaux Michel.metais.lpo.fr
Canis lupus	B4-3200/97/245, Conservation of <i>Canis lupus</i> and its habitats in central Greece & LIFE99NAT/GR6498, Implementation of management plans in Gramos and Rodopi areas, Greece	Arcturos arcturos@arcturos.gr www.arcturos.gr
Castro Verde	1973/91/12-1: Primeira fase do projecto de conservação de avifauna estepária da região de Castro Verde & B4-3200/95/510: Segunda fase do projecto de conservação de avifauna estepária da região de Castro Verde	LPN – Liga para a Protecção da Natureza. Lpn.natureza@mail.telepac.pt
Chiemgau	B4-3200/94/733 Südlicher Chiemgau: Erhalt und Wiederherstellung großflächiger Moore und eines Flußdeltas & B4-3200/97/239, Hochmoore und Lebensräume des Wachtelkönigs im südlichen Chiemgau	Bayerisches Staatsministerium für Landesentwicklung und Umweltfragen harald.lippert@stmlu.bayern.de
Cotentin	B4-3200/95/515, Gestion intégrée des zones humides du Cotentin	Le Syndicat Mixte d'Equipement Touristique de la Manche (SMET) info@parc-contentin-bessin.fr
Delta del Ebro	B4-3200/96/505/512, Mejora de la gestion del habitat en la ZEPA del Delta del Ebro	SEO – Sociedad Española de Ornitología seodeltebre@terra.es http://www/seo.org/rietvell
Dijlevallei	B4-3200/98/434, Dijlevallei	Natuurpunt Joost.dewyspelaere@natuurpunt.be
Dümmer	B4-3200/98/438, Wiedervernässung des Ochsenmoores am Dümmer & LIFE02NAT/D/8456, Wiedervernässung der westlichen Dümmerniederung	Land Niedersachsen, Niedersächsisches Umweltministerium ursula.langendorf@mu.niedersachsen.de
Federsee	B4-3200/96/489, Sicherung und Entwicklung der Natur in der Federseelandschaft	Bezirksstelle für Naturschutz und Landschaftspflege Tübingen Schwab@BNLTU.BWL.de http://www.naturschutz-am-federsee.de
Fiener Bruch	B4-3200/94/734, Erhalt der Kulturlandschaft Fiener Bruch	Landkreis Jerichower Land Post@lkjl.de
Großtrappen	B4-3200/92/14529, Erhaltung der Lebensräume für Großtrappen im Land Brandenburg	Landesumweltamt Brandenburg torsten.langgemach@lua.brandenburg.de

Haute-Vézère	B4-3200/98/462, Préserver le patrimoine naturel de la Haute-Vézère	Conservatoire Régional des Espaces Naturels du Limousin cren.limousin.N2000@wanadoo.fr
Lafnitztal	B4-3200/98/505, Wildflußgebiet Lafnitztal	Weideverein Ramsargebiet Lafnitztal wolfgang.pelikan@bgld.gv.at Komm.lp@aon.at
Liminganlahti	B4-3200/95/506, Conservation of Liminganlahti wetlands	Pohjois-Pohjanmaan ympäristökeskus jorma.pessa@vyh.fi www.vyh.fi/ppo/ppo.htm/llahti.htm
March-Thaya	B43200/95/846, Ramsar Management March-Thaya-Auen & B4-3200/98/500, Wasserwelt March-Thaya	DISTELVEREIN – Verein zur Erhaltung und Förderung ländlicher Lebensräume j.wolf@distelverein.at www.distelverein.at
Pelouses sèches	B4-3200/98/466, Protection des pelouses sèches rélictuelles de France	Espaces Naturels de France francis.muller@enf-conservatoires.org
Prés salés de Lorraine	1973/91/02-5, Sauvegarde des prés salés continentaux de Lorraine	Parc Naturel Régional de Lorraine www.pnr-lorraine.com
Proyecto 2001	B4-3200/93/769, Proyecto 2001: Creación de corredores ecológicos para la protección de especies amenazadas en peligro de extinción.	Fundacion Global Nature Edemiguel@fundacionglobalnature.org www.fundacionglobalnature.org
Rhön	B4-3200/93/747, Schutz des Lebensraumes Rhön – Baustein im europäischen Schutzgebietsnets Natura 2000 (1. Phase) & B4-3200/98/440, Lebensraum Rhön – Baustein für Natura 2000	Bayerisches Staatsministerium für Landesentwicklung und Umweltfragen michael.geier@brrhoenbayern.de www.biosphaerenreservat-rhoen.de/naturschutz/f_naturschutz.htm
Stora Alvaret	B4-3200/96/547, Protection and restoration of parts of Stora Alvaret	Kalmar County Administration Board surf@h.lst.se www.h.lst.se/verk/nat/st alv.htm
Tetrax	B4-3200/96/515, Programme expérimental de conservation de l'outarde canepetière et de la faune associée en France	LPO / BirdLife Christophe.jolivet@lpo.birdlife.asso.fr
Tourbières de Midi-Pyrénées & Tourbières en France	LIFE94/F/1222/F/00839, Tourbières de Midi- Pyrénées & B4-3200/95/518, Programme de protection de tourbières en France	Espaces naturels de France bruno.mounier@enf-conservatoires.org
Varde	LIFE99NAT/DK/006456, Wadden Sea estuary: nature and environment improvement project	National Forest and Nature Agency, Ministry of the Environment and Energy PSI@sns.dk
Villacañas	LIFE99NAT/ES/6339, Humedales en Villacañas	Fundación Global Nature Edemiguel@fundacionglobalnature.org www.fundacionglobalnature.org
Westliches Münsterland	B4-3200/98/478, Optimierung des SPA Moore und Heiden des westlichen Münsterlandes	Biologische Station Zwillbrock BSZwillbrock@t-online.de www.bszwillbrock.de/life/life.html
Yorkshire Dales	LIFE02NAT/UK/8639, Yorkshire Dales Limestone Country Project	Yorkshire Dales National Park Authority tim.thom@yorkshiredales.org.uk www.yorkshiredales.org.uk



Name LIFE ("L'Instrument Financier pour l'Environnement" / The financing instrument for the environment)

Type of intervention Co-financing of actions in favour of the environment in the European Union and candidate accession countries.

LIFE is made up of three branches: "LIFE-Nature", "LIFE-Environment" and "LIFE - Third countries".

Objectives

- > with a view to sustainable development in the European Union, contribute to the drawing up, implementation and up-dating of Community environment policy and legislation;
- > explore new solutions to environmental problems on a Community scale.

Projects Any natural or legal person, provided that the projects:

- > match the priorities laid down at Community level and contribute to the objectives listed;
- > are submitted by technically and financially reliable participants;
- > can be technically carried out and offer a good cost-benefit ratio.

Types of project

- > LIFE-Nature projects are **nature conservation projects** which contribute to the protection of species and maintaining or restoring of natural habitats according to the "Birds" and "Habitats" Directives.
- > LIFE-Environment projects are demonstration projects which contribute to the development of innovative and integrated techniques and methods, and to the further development of Community environment policy. The projects concern at least one of the following 5 themes:
 - integrate environmental and sustainable development considerations into land use development and planning;
 - promote the sustainable management of ground- and surface water;
 - minimise the environmental impact of economic activities;
 - promote the prevention, reuse, recovery and recycling of waste of all kinds and ensure the sound management of waste flows;
 - reduce the environmental impact of products.
- > LIFE Third countries projects are **technical assistance projects** which:
 - benefit the Community, through their contribution to the implementation of regional and international policies and agreements:
 - promote sustainable development at international, national or regional level;
 - bring solutions to serious environmental problems in the areas concerned.

Implementation The Member States or third countries send the Commission the proposals of projects to be co-financed. The Commission sets the date for sending the proposals annually and reaches a decision on these. It monitors the financing and follow-up of the implementation of the LIFE actions. Accompanying measures enable the projects to be monitored on the ground and, in the case of LIFE-Nature, to encourage certain forms of cooperation between similar projects ("Co-op" measure).

Period covered (LIFE III) 2000 to 2004.

Funds from the Community approximately €638 million of which €300 million to LIFE-Nature, €300 million to LIFE-Environment and €38 million to LIFE-Third countries.

Contact

European Commission – Directorate-General for the Environment LIFE Unit – BU-9 02/1 – B-1049 Brussels – Fax: +32 2 296 95 56 Internet: http://europa.eu.int/comm/environment/life/home.htm



