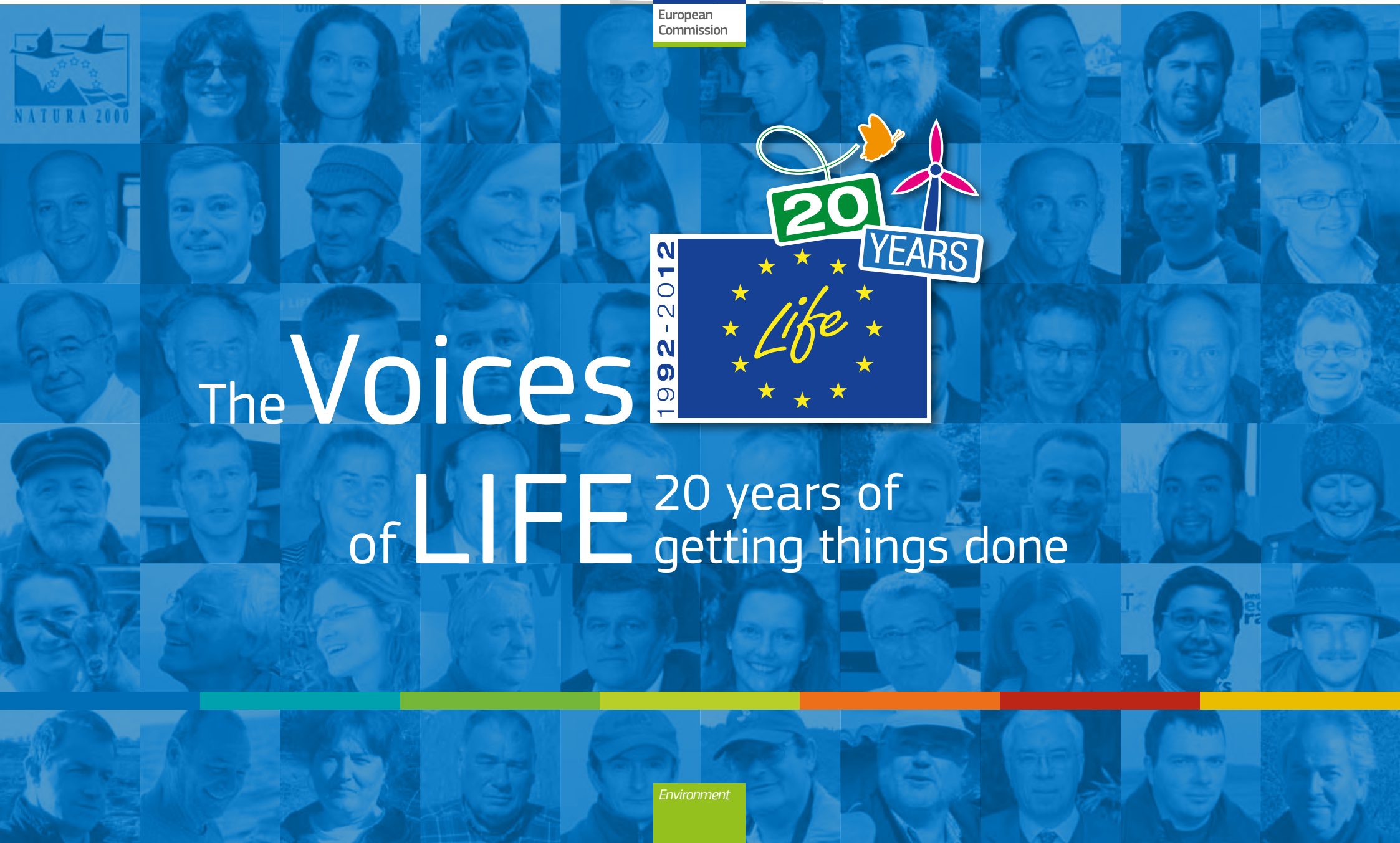

European Commission

The Voices of LIFE

20 years of getting things done

1992-2012

20 YEARS

Life

Environment

European Commission
Environment Directorate-General

LIFE ("The Financial Instrument for the Environment") is a programme launched by the European Commission and coordinated by the Environment Directorate-General (LIFE Units - E.3. and E.4.).

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Celebrating 20 years of LIFE's people

Europe's wildlife and natural resources have been benefitting from LIFE support for 20 years. It was back in 1992 when the EU's financial instrument for the environment first opened its doors to help provide co-finance for projects involved in implementing European environmental policy. Much of this initial work concentrated on launching actions through the then 12 Member States to establish an embryonic Natura 2000 network. Since then, LIFE's mandate has grown and flourished. It has strengthened its focus on nature conservation and expanded its reach to a wide range of environmental protection and information dissemination services. Today, LIFE is operating in all 27 Member States, where it continues to build on its impressive portfolio of results in tackling key challenges such as biodiversity decline, habitat loss, resource efficiency and climate action, among other important intervention areas.

Central to LIFE's success has been the role of people. Therefore what better way to mark the 20th anniversary of the programme than to focus on the people who have helped LIFE to get things done? These include the coordinators and team members from the more than 3 500 projects over the last two decades who have invested their time and energy converting LIFE funds into practical, tangible, on-the-ground benefits for Europe's environment. They also include the politicians from local, regional, national and European levels who have persistently backed and promoted LIFE's case throughout the years. Equally important are all the tens of thousands of individuals from the local communities and businesses who have participated in LIFE projects and contributed to their accomplishments. Not forgetting of course the dedicated personnel from countless governing bodies around Europe who have administered and steered LIFE's outputs so effectively since 1992.

To hear these individuals, communities and businesses in their own words is to understand directly the value, impact and inspiration of LIFE: its value as a source of support for established conservation organisations and programmes; its impact on people who took a new interest in nature and the environment as a result of their interaction with the programme; and its inspiration for countless green business initiatives.

We'll hear the voices of people from all over the EU - and indeed from neighbouring countries - whose experiences reflect the LIFE programme's broad perspective on the relevance of holistic support for Europe's environment as a whole.

We hope you will find this publication both enlightening and inspirational. The stories it contains demonstrate LIFE's considerable scope for connecting with a wide cross-section of different peoples' environmental convictions. They also underscore the passion and commitment that exists for sustaining our environmental inheritance. Together, they show that LIFE remains in good stead to continue its productive and popular support for Europe's environment into the next 20 years.

FOREWORD

CONTENTS

1992-2012

36 MEET THE CITIZENS

3

56 MEET THE GUARDIANS

4

80 MEET THE BUSINESSES

5

1 BEHIND THE SCENES

From its conception over 20 years ago, through its development during successive programming periods, many aspects of the LIFE programme have remained somewhat invisible to the wider public. In this section of the brochure we shine the spotlight on some of these "behind the scenes" activities and on some of the people and organisations that have helped to make LIFE the programme it is today.

Lifting the lid on the LIFE programme

The founding father

Often credited with being the father of LIFE, retired Member of the European Parliament (MEP), Hemmo Muntingh, still has a strong attachment to the programme he helped to establish more than 20 years ago.

From the modest €70 million programme that was established in 1992, the LIFE programme, with a current budget of over €2 billion, is now firmly established as the EU's main financial instrument for the environment. However, for Hemmo Muntingh this outcome was not always certain.

The story of LIFE began in 1989, when Mr Muntingh was seeking to hold his seat in the European Parliament (EP), having first been elected in 1979. During the election campaign, his party, the Dutch Labour Party (*Partij van de Arbeid, PvdA*) proposed the idea of a European Environment Fund. "In fact, this was already party policy and I asked for it to be included in the election programme," he recalls.

Once re-elected, Mr Muntingh set about making good on his election promise, and when the opportunity arose during the Parliament's budget procedure in 1989, he included an amendment proposing a budget line for an Environment Fund. "As a goal, I mentioned an amount that would be equivalent to 1% of the total EU budget in 1995. The European Parliament accepted the proposal, but in the joint decision of the European Council and the European Commission the budget contained only a PM[1], without an amount."

Not perturbed, Mr Muntingh redoubled his efforts during the budget procedure of 1990. "I tried it again the following year, this time via the Parliament's environment committee, and an amount of ECU 31 million was introduced to the budget. The EP's budget committee accepted this amendment of the environment committee and also declared it a priority of the EP. There was even a further amendment in the budget committee to raise the amount from ECU 31 million to ECU 81 million."

The EP, in its first reading of the budget, accepted this proposal but once again it ran aground in the Council, where for a second time, the budget amount was replaced with a PM. "Of course, the EP reintroduced the ECU 81 million in the second reading but during the very difficult negotiations that followed it had to be withdrawn. However, a budget amount of ECU 31 million, the amount I had originally proposed, was eventually accepted. It was

HEMMO MUNTINGH

1. P.M or Pro Memory, a procedure used to inscribe a budget line without specifying an amount.

not as much as the EP wanted but it was an important step forward - 'reculer pour mieux sauter' as they say!"

During its passage though the institutions, the Environmental Fund acquired the name by which it eventually came to be known: LIFE. "As far as I remember, the name, l'Instrument financier pour l´environnement (LIFE), was invented by the rapporteur of the EP's budget committee, Mr Alain Lamasourre." (See box: The namer)

The story did not end there, however, and it soon emerged that the Commission and the EP had very different ideas about how the new programme should be operationalised. "The controversy became so hot that the EP resorted to an unusual method to safeguard its position: it blocked the creation of any new posts in the Commission until such time as it came up with an acceptable proposal for LIFE. The Commission responded by drawing up a new Regulation for LIFE. I saw the first concept and it seemed okay, and because I was the rapporteur for the environment committee in the EP I had the possibility to steer the final concept in the right direction.

> *"I am very proud of LIFE and the contribution it makes, especially to nature conservation, which has always been my passion in life"*

"I could tell you a lot more about this. In fact, I already introduced the concept of an Environment Fund in the EP in 1979 and 1980. But it was not accepted. So, for over 10 years I had to fight all the way. But it was worth it. The environment and nature conservation has been my life's work. Even before I became an MEP I was the Director of the Dutch Society for the Preservation of the Wadden Sea (*Waddenvereniging*). All my life, even as a young boy, I have always been happiest when I am close to nature; bird watching or trying to get a glimpse of some special plant or animal.

"I am retired now and I have to content myself with the beautiful nature in my garden here in Friesland. But I still follow LIFE from a distance and I am pleased to see the very good work it has been doing for nature conservation. I can only hope that this continues in the future. In the coming years I think the environment and nature in the newer EU Member States will come under intense pressure arising from the implementation of the EU's agriculture and regional policies. I hope that LIFE can help to offset this and demonstrate how we can do things differently in future, and avoid the mistakes of the past."

Alain Lamassoure

The namer

Alain Lamassoure, the French MEP who played a large role in establishing the LIFE programme, says that he got the idea for its name after dinner one night in his hotel room in the Métropole, Brussels. LIFE is in fact an acronym: L'Instrument Financier pour l'Environnement ("financial instrument for the environment").

Mr Lamassoure's original idea was to create an extra Structural Fund. "There were already three Structural Funds: regional, social and rural development. It was a period when environmental concerns started to appear in most Member States, and my original idea was to complement the three Structural Funds with one dedicated to protecting the environment," he says.

While a programme with financial means was agreed, it did not go so far as a Structural Fund. Mr Lamassoure regrets that the amount of funds available was not higher, but he says that "it has been very helpful in many countries, particularly on biodiversity and now new renewable energies. Hopefully, it will be beefed up in the next general framework."

"It's become a very important programme in the EU... It's my child, but it's grown up. I'm proud of it... but I trust those in charge in the Commission and the Parliament to reorient it whenever necessary and point it in the right direction," he says.

The legislator

The results and findings of LIFE projects have strong implications for policymakers and over the past 20 years have impacted on legislation on a wide range of issues. In one area, in particular, LIFE projects were a very useful instrument for shaping policy: the management of coastal zones. Anne Burril, Deputy Head of Unit, DG ENV, worked on the drafting of the recommendation on Integrated Coastal Zone Management.

Anne Burril

Europe's coasts required a joined-up approach to management, but the EU recognised that it was "a very complex area", says Anne Burrill. "We didn't think that it was a very good idea for us to sit in our office and try to make up a solution, so we decided that the best thing to do was to actually have some private projects, some experience that we could draw on."

LIFE was the main instrument for financing this demonstration process, accounting for around two-thirds of the projects (some 20 projects were launched in 1995). Other projects were financed under the INTERREG programme. "These were private projects that we were doing to test out different approaches to integrated coastal management to see what works well and what doesn't," she says.

A team of consultants also worked on the initiative. "They were looking at the particular aspects of the pilot projects. For instance, there was this one fellow who was looking at legal aspects of the different projects. Another one was looking at public participation aspects. There were six themes in total," says Ms Burrill. This process led to the publication of a summary of the main finding of the projects, followed by a public consultation on the future of coastal management. A recommendation was preferred to a directive, and on 30 May 2002, a European Parliament and Council Recommendation concerning the implementation of Integrated Coastal Zone Management in Europe was adopted.

Ms Burrill says that one of the chief advantages of LIFE is its geographical reach. "Our projects were spread across EU countries. LIFE was the only vehicle that had in-depth and relatively long-term input from sample sites across the whole EU."

The Deputy Head of Unit explains that she "managed the policy up to [the point] where the recommendation was being adopted and have somewhat followed it since then. Because of the sensitivity of some of the issues, particularly the relationship to land use planning, it was decided that the best approach was to allow quite a lot of flexibility and to use a recommendation. We saw in the pilot projects quite a considerable range of approaches in different countries. So the recommendation that came out was a series of principles that we had derived from the pilot projects. It mandates the Member States to set national policies on integrated coastal management and it sets out the kind of things should be covered in these policies."

According to Ms Burrill, the Barcelona Convention on coastal management, which established a protocol for Mediterranean countries, was "very much inspired by the EU recommendation".

The leader

The LIFE programme has seen many changes and developments in its 20-year history, but for most of this time there has been at least one constant – Angelo Salsi, the current head of the LIFE Nature Unit.

A native of Bolzano, in the north of Italy, Mr Salsi joined the European Commission in 1994, having previously worked as an agro-meteorologist for the regional government of Emilia-Romagna. Since then, his career path has been closely aligned to development of the LIFE programme, having moved from being a LIFE Desk Officer to Deputy Head of the LIFE Unit, to his current position as Head of the LIFE Nature Unit.

"The concerns that led to the creation of LIFE are still there"

"I feel very honoured to be part of this experiment, and this community of people. From those who manage the programme to the beneficiaries and the Member States, there is a great sense of pride in what we are trying to achieve, and for me, LIFE's best days are still to come."

From its conception in the early 90s, Mr Salsi believes that LIFE is now reaching a stage of maturity as a programme, having won the appreciation and confidence of beneficiaries and those outside the programme.

"The concerns that led to the creation of LIFE are still there, they have not gone away, and I fear that the environment will continue to need public investment for many years to come. Twenty years have gone by but this has not made this instrument any less relevant. If you think of it in human terms, I would say we are at the end of our teens and we are now becoming an adult

Angelo Salsi

who knows its abilities and potential and is looking to the future with even bigger ambitions than before. This is reflected in the Commission's proposal for the new LIFE Regulation for 2014-2020, which is more innovative and ambitious, while also preserving the key elements that have made LIFE a success."

Making it work

With responsibility for one of the three main components of the LIFE programme, Mr Salsi will have a key role to play in realising these future ambitions.

"My job is to make sure the machine works, not just in absolute terms but also in terms of the time and resource constraints we have to work with. But as well as ensuring that the administrative machinery works, I also have a programme that is not just about administration but about improving our environment. You have to make sure there is a balance between the two elements and that the means don't prevail over the scope – this is my big task."

Since becoming head of the LIFE Nature and Biodiversity Unit in 2009, Mr Salsi has worked hard at achieving this balance and at ensuring better integration between the financial instrument and the policy.

"When I first joined the Commission, the same Unit that was responsible for nature policy was also responsible for the nature component of LIFE; they were two sides of the same coin. At the time I was the Desk Officer responsible for the implementation of EU nature policy (Birds and Habitats Directives) in Italy and Romania, but I was also responsible for LIFE Nature projects in these countries. I remember on one occasion I was reviewing the Rural Development Programme (RDP) for an Italian region and I noticed there was a specific measure to target a certain type of forest habitat, but I also knew that an Italian LIFE project had done some work in this area so I was able to suggest that the project methodology was integrated into the RDP.

> *"The moment people start to perceive land and nature as a part of our shared heritage, just like historical sites or precious art collections, it will be become a major unifying force that will go well beyond what we imagine"*

"Since 2000, the policy units and the LIFE programme have been managed separately and this has made integration more difficult. So the day after I was appointed Head of Unit, the first thing I did was to set up a strategy to improve the bridge between these units, and this has already started to pay dividends. In the last couple of years we have been involved in 10-15 court cases relating to the protection of a bird or site, for example. The policy units would instigate these cases but we would support them by providing information or data gained from projects on the ground.

"In fact, just yesterday I received an e-mail from a colleague who identified a potential problem in relation to certain species in France, linked to the building of roads. This information comes directly from a LIFE project and could result in action being taken by our policy units."

Integration also has an important strategic function and Mr Salsi is particularly proud of the role LIFE has played in the development of the Natura 2000 network, which he considers to one of the programme's most important contributions over the last 20 years.

"In the 1990s we wanted LIFE to support the drawing up of inventories of potential Natura 2000 sites. Six or

seven countries did it and it was a major step forward, really, a huge one. You have to think that counties like Spain and Italy prepared all their inventories, which later led to the designation of Natura 2000 sites, through LIFE projects.

"Once the sites were designated, the next issue to address was management. So we said to the Member States, 'use LIFE money to develop a system for preparing and adopting management plans'. In France, there was a major project that led to what is called the 'document d'objectifs', which now provides a template for site management planning. Italy did the same thing and other countries also followed suit. Thousands of management plans have since been developed through LIFE projects."

More recently, LIFE has also made an important contribution to the development the Natura 2000 network of marine sites. "LIFE Nature has been a very efficient tool in developing techniques and indicators to identify and survey areas that could be designated. This marine network of sites now covers several hundred thousand square kilometres and a lot of this is due to LIFE projects."

Future priorities

Looking to the future, Mr Salsi believes that integration and Natura 2000 will remain key priorities for the LIFE Nature and Biodiversity component. "An important feature of the new Regulation is the invention of what we call 'integrated projects'. From a nature perspective, these projects are there to further support the management of Natura 2000.

"Natura 2000 won't solve all our problems, but it is so huge and such an enormous challenge that it wouldn't make sense to start diluting our efforts now, especially when we are so close to realising this incredible achievement. You have to remember, we're talking here about 18% of the EU territory, and I wouldn't be surprised if we double this in the coming years. If we even make sure that half or two-thirds of this is reasonably well implemented it will make a major change in the way we perceive nature and the environment.

"The moment people start to perceive land and nature as a part of our shared heritage, just like historical sites or precious art collections, it will be become a major unifying force that will go well beyond what we imagine. Unfortunately, we have been brought up to believe that a large chunk of our happiness comes from our material happiness, but studies show that this is absolutely not true. Happiness can also be found in seeing a beautiful landscape or sitting on a nice beach.

"We have to change perceptions and I believe LIFE projects are playing a part in this and will play an even more important part in the future. Since 1992, LIFE Nature has been financing more or less the same kind of activity, year after year, project after project. If you want to build a house and you don't have the money to buy all the bricks on day one, you buy a brick every other week and after many years of buying bricks you eventually have a house. At this stage, we have built a pretty solid foundation. In another 20 years I hope we will have a house."

The energiser

After 10 years in the LIFE unit doing "a bit of everything", Anne Louise Friedrichsen has lost none of her passion for seeing first-hand the impact of LIFE projects. "When you go on visits, it really becomes concrete what they're doing. You come back full of energy and you can see the point," she says.

Anne Louise Friedrichsen

Though her current role in the LIFE Environment and Eco-innovation Unit as Deputy Head of Unit has limited her opportunities for on-site visits, it was this contact with people on the ground that attracted her to join the team. Educated as a political scientist, Anne Louise began working for the Commission in 1995, first for DG Education and Culture. Since 2001 she has been a Desk Officer for Denmark and Sweden, both for environment and nature projects, and has been involved in the organisation of a special conference on water and the ex-post evaluation of 10 years of the LIFE programme. She also helped set up the rules for the LIFE+ financing period.

The "pioneer spirit" encouraged by the programme is especially attractive to Anne Louise. "You have people that are launching things; that are difficult. None of these projects are mainstream. They are opposing the ordinary way of doing things; saying this could be done better."

Visiting the projects has enabled her to get to know her native Denmark better than she would otherwise have done, she says. "I've had wonderful guided tours in forests, where people tell you all the names of the trees. I thought I knew about these things, but it's great to go there with a biologist."

"None of these projects are mainstream. They are opposing the ordinary way of doing things; saying this could be done better"

Working on environmental issues, however, is a mixed blessing. As well as the 'heaven' of a beautiful nature trail, there's the 'hell' of "sewage systems and the guts of society" – but Anne Louise says that she is just as interested in projects that attempt to deal with waste and introduce cleaner industrial processes as she is with nature conservation.

"Once you go to a waste treatment area and you see what they're doing there, it makes you a little bit more conscious about what you do when you go home," she says. Even though she admits that it is difficult to always be aware of environmental issues on a personal level, she points to the wide range of good LIFE projects that are raising the awareness of ordinary EU citizens. "What I am aiming for this year is for people to really start changing ways of acting, but it will take a lot of effort. The LIFE programme has very good information projects, for example, the European Week for Waste Reduction (see pp 42-43), which focus on raising awareness and changing people's behaviour."

Shaping legislation

Sometimes it is necessary to enforce such changes in behaviour, "Laws help introduce environmentally friendly practices, and that's where the projects come in: sometimes you can't make a law unless you know that it's technically possible to do a thing," she says.

LIFE projects demonstrate the feasibility of introducing new practices and thus can help usher in new legislation where needed. Anne Louise gives the example of a small detector that determines whether a particular rig at sea is leaking oil into the environment. She says that oil companies would have been reluctant to fix such a detector to their equipment if there wasn't first a legal requirement and that this requirement would not have come about unless there was the research to show its value.

The LIFE programme employs a bottom-up approach. "Sometimes projects prove that the technology works and sometimes [they prove] it fails. It may still have been a good project; they tried but it's just not feasible or it costs too much."

Policymakers, however, like to steer research, Anne Louise says. "For example, they say, 'I want to make seas cleaner and therefore I want projects on this', but that doesn't mean that the programme can deliver this – and if you try to steer too much then you won't get the other bubbles that come up.

"With the bottom-up approach, once in a while you will get these nice links between what happened on the ground and then what became law, but it is not systematic."

Nevertheless, the new LIFE programme proposal attempts to strengthen the link between policy and innovation. According to Anne Louise, "it has a part that is more top down, where a policymaker has said that what we would really like to see is this, and therefore hopefully they will get more proposals on that subject."

Moreover, the new proposal introduces the idea of integrated projects. "The LIFE programme is very small: if you really want to fund the environment it's via the structural funds. The idea is that these integrated projects will serve as a catalyst for focusing structural funds onto the environment – it's theoretically possible but it's not being done. The LIFE programme can inspire these funds to do more for the environment," she says.

Future hopes

Reflecting on the 20th anniversary of the LIFE programme, Anne Louise believes that there is still very much a need for good projects. "It's a good mechanism to fund innovative ideas. Some of them will then lead to big changes.

"I believe in the local idea: you focus on where people are. Most people are happy to preserve a green area close to them and to be informed about why it is valuable. "I hope that these little lights that we light will not be the only things that are left. We really need environmental considerations to be systematically integrated into areas such as agriculture, energy, transport and so forth. And there is a need for a programme like LIFE because it has this inspirational effect."

The good neighbour

LIFE TCY was set up in 1992 "to develop awareness and capacities in the countries bordering the Mediterranean and the Baltic seas", says Alban de Villepin, who was Desk Officer for the TCY strand. LIFE TCY was a recognition that "environmental problems don't stop at the border: if you have countries polluting these seas, then it will have an impact on neighbouring countries."

Alban believes that the strand was successful in raising awareness on environmental issues in Third Countries. "LIFE TCY was a way to invite our neighbours to consider more highly the environment and help them to develop some local and national capacities in order for them to handle better the environmental issues connected to their own development," he says.

"Thanks to this strand, there was a possibility to exchange experience and transfer of know-how from European partners to local beneficiaries and actors in the Third Country."

According to Alban, some examples of good projects include: the improvement of wastewater treatment at tanneries in Tunisia; the preservation and increase of knowledge of the ecosystem of the Sava river basin (Croatia/Slovenia); and the building of Turkey's capacity to deal with climate change.

The LIFE+ financing period, however, restricted the possibility to develop LIFE TCY and the strand was discontinued in 2006. Moreover, "there was a willingness to integrate more deeply environmental activities into EU external relations policies and programmes," he says.

Alban continues to monitor the ongoing projects, which are now all nearing completion, as well as monitoring LIFE Environment projects in Italy, Portugal and Romania. He is also the communication officer for the LIFE Environment and Eco-innovation unit. "LIFE is a learning experience," he says. "The possibility to visit a project and have direct contact with a beneficiary, so to better understand their hopes and obstacles, is always rewarding."

Alban de Villepin

Frank Vassen

The "LIFEer"

Few people hold the distinction of having been a LIFE project manager, a LIFE monitor and a Desk Officer within the LIFE Unit at the European Commission. Frank Vassen is one of this rare breed, which gives him a unique insight to the programme and to the relationships between the different stakeholders.

Born and reared in a village in the eastern, German-speaking, part of Belgium, Frank's love of nature and the environment was established at an early age. At just 12 years old, he joined a local bird watching club, which consolidated this interest and also paved the way for an early introduction to nature conservation.

"I became fascinated with birds. I was lucky because there were some people in the club that were really committed and were very good mentors. Some of the members also formed a conservation group, which I became involved in. This was the late 80s and at the time we succeeded in getting funding from a predecessor of the LIFE programme for a project to restore the habitat of the black stork. The money was used to buy land, which we then restored, working mostly at weekends as we were all volunteers.

"This land is now the core of a whole network of nature reserves. It was basically the start of a new dynamic that later developed through other funds and approaches. From just a handful of people, this group has now grown to over 700 members and manages about 450 ha."

Frank's studies then brought him to Namur, where he read zoology, specialising in freshwater ecology. "I did a PhD on salmon and trout, studying their behaviour and ecology. I even built an artificial stream in the basement of the university. It was great fun and I have very fond memories of this time."

Then, in 1995, as he came to the end of his studies, Frank got his first "real LIFE" experience, when he secured a job as the manager of a LIFE project on the conservation of the corncrake in Belgium. "At the time we thought there was a corncrake population in Belgium, but we discovered during the project that it was only singing males, with very little reproduction. But it took quite an effort to reach this conclusion. We carried out the monitoring at night, so for three years, during May and June, I could be seen driving through the countryside in the middle of the night, listening for singing birds. In the right conditions you could hear the singing more than a kilometre away, but the funny thing is, I never actually saw a corncrake, and I still haven't! Fortunately though, the restoration work we undertook was more beneficial for many other species."

Frank's next "LIFE change" came in 1999, when he was offered a position with Ecosystems Ltd, the company then contracted by the Commission to carry out the monitoring of LIFE projects. "I was mainly responsible for monitoring projects in Austria and Germany. In Austria, it was mostly river restoration and management, with some really big projects on the Danube and its tributaries. I travelled a lot during this time, to Austria and Germany, but also to visit projects in many other countries."

"What really struck me about this experience was that despite the marked differences between the areas and landscapes I visited, the challenges were often very similar. They were mainly linked to changes in agriculture and forestry, either intensification or land abandonment. It was an interesting time. I met a lot of LIFE beneficiaries, very interesting people, and very committed."

Before long, however, Frank's LIFE adventure was to take another twist, when in 2003 he received a phone call from Angelo Salsi, inviting him to join the LIFE Unit at the European Commission. "At the time the Unit was looking for a German, French and English speaker so I fitted the bill perfectly. In fact, my language skills were also one of the main reasons I was offered the job as a LIFE monitor."

Within the LIFE Unit, Frank spent a short period working on the Environment component, before eventually joining the LIFE Nature team in 2004. "I was the Desk Officer for Romania and Germany, and also the Coordinator for the project selection process. As a Desk Officer, my job was basically to decide if a project should be paid or not. This decision was based mainly on information provided by the projects and the monitors, but I also had to apply common sense. One situation is never the same as another." "My background as a beneficiary and monitor was certainly a help and it allowed for a kind of mutual trust to develop. It is true that most beneficiaries think the Commission is extremely bureaucratic and that many rules don't make sense, but I always made it a personal challenge to be able to justify

each rule. I felt this was important and I think most people understood the reasons when they were explained."

Frank says he feels privileged to have worked on three different aspects of the LIFE programme. "Each one gives you a different perspective. As a project manager you are on the ground, you have to understand the local context, talk to local farmers and other stakeholders, and take direct decisions about project actions. As a monitor, you are in the middle, between the beneficiaries and the Commission. This can be a tricky position as your main role is to gather information for the Commission, your employer, but you also get to know and have a lot of sympathy for the beneficiaries. As a European Commission official, your main responsibility is to apply the rules and, of course, make sure the money is spent correctly."

With the benefit of these different insights into the programme, Frank is even more convinced than ever of the merits of LIFE. "I am totally convinced that LIFE is the right approach: in term of its bottom-up approach; the scale of the projects, and the important recognition it gives to projects.

"Undoubtedly, there are major challenges ahead. In the coming decades the pressure for intensification of land use is likely to continue and it is vital that we secure land for nature conservation. This is the approach of LIFE and Natura 2000 and this must remain the priority. But I am optimistic. With LIFE, we manage to do a lot with very limited resources. Everyone involved feels a great sense of ownership of the programme and a culture of optimism and achievement has developed that provides a strong momentum for the future."

The helper

"The role of the National Contact Point (NCP) is to help potential applicants with applying for LIFE+ funds," says Andrzej Muter, the NCP for Poland.

The Polish NCP performs this task in many different ways. It publicises the programme through media, a dedicated website and direct advertising; once a year the NCP organises a special event for potential applicants: the 'LIFE+ Information Day'. "It gives participants the possibility to meet previous and present LIFE beneficiaries and provides an opportunity to exchange information among organisations and institutions currently running LIFE+ projects," says Andrzej.

Additionally, the NCP organises several writers' workshops during each LIFE+ call in order to provide applicants with the information they need to make a successful application. His role as an NCP has allowed Andrzej to develop professionally, both in nature protection and environmental issues. "Working contacts with potential applicants who are enthusiastic about their ideas have naturally increased my enthusiasm in several fields of interest. It is of course hard work to develop a concept into an acceptable project, but looking at the results, one can say that it is absolutely worth the effort," he says.

High points

Looking back over his time as an NCP, Andrzej says that there have been many highlights. He points to "the feeling of satisfaction after a fruitful writers' seminar, the excitement when learning that an interesting project we were working on has received LIFE+ co-financing, the feeling of pride when we see the positive impact on nature and the environment of the project activities – these are day-to-day highlights."

ANDRZEJ MUTER

One event, however, does stand out: the LIFE+ Committee meeting for the 2009 call. "Only two years after the first LIFE+ call of 2007 when Poland used up only 12% of its allocation and after a year-and-a-half of hard work as a new Polish NCP, our efforts were rewarded with the selection of 11 Polish projects, most of them in the Nature strand. This result meant that almost €12 million of LIFE+ money would strengthen the biodiversity of Polish Natura 2000 sites. It also meant that Poland, for the first time, exceeded its LIFE+ allocation by 16%. This was extremely good news for Polish nature!"

The Polish government responded to the first LIFE+ call by handing over the role of Polish NCP to the National Fund for Environmental Protection and Water Management (NFEP) in September 2008. Moreover, at the same time the NFEP took over the responsibility for LIFE+ implementation in Poland. For that reason the NFEP has not only been performing duties of the NCP, but also has developed a unique system of co-financing LIFE+ projects from its own domestic funds.

"The results have been impressive," Andrzej says. "Up to now we have signed 28 agreements for co-financing 26 Polish and three international LIFE+ projects with NFEP involvement of €24 million, and EU co-financing of €31.5 million. This is a great relief for the Polish environment."

Andrzej and his colleagues have even invented a saying: "LIFE+ and NFEP funds are a perfect fit for environment/nature."

GEORGIA VALAORAS

The monitor

Following the progress of open and closed projects is one of the main responsibilities of the LIFE monitoring team (MoT): an external team that works under contract to the European Commission for the duration of each programme.

Georgia Valaoras is a LIFE monitor and MoT regional coordinator for Greece, Cyprus and Bulgaria. She explains that the role of the MoT is to "facilitate the good implementation of projects and provide accurate and reliable information for the LIFE Unit."

To achieve this, Georgia and her colleagues have to undertake "a whole range of activities, including reading reports, visiting project sites, advising beneficiaries, dealing with local authorities, solving problems, attending events, explaining LIFE project management procedures and networking with other projects or initiatives that are relevant to the themes of the projects."

One of the biggest challenges for monitors is to assess whether a project action has actually been carried out or not. In theory, this sounds pretty straightforward, but as Georgia explains, the reality can sometimes be very different.

"Once, I was asked to quantify the planting success of more than 48 000 trees, on a rocky slope, at 3:00 pm, in temperatures of 42°C. The project team consisted of public servants who went home at 1:30 pm (it was a Friday!), so they left me alone to find and count the surviving trees! Another time, while visiting a wetland project, I could not easily access a canal dug by the project team through thick reed beds – so the beneficiary said: 'It doesn't matter, you can see it on Google Earth.'"

Despite these challenges, Georgia enjoys her work and feels lucky to be part of such a highly motivated group of people. "The best part of my job is that I get to work with such a wide range of people: research scientists, engineers, local government agents, educators and others, all of whom are working to improve the environment. Interacting with these people is very rewarding and it continually reassures me that I have chosen the right profession. Most of the people I work with are enthusiastic about their work, trying to do a good job, and striving to be professional in their endeavours. Of course there are exceptions, but here also there is an opportunity to reinforce the importance of this work, and the future benefits for their environment, their land, their future."

Georgia has been monitoring LIFE projects since 2001 and has come to recognize the valuable and sometimes indispensable contribution of the LIFE programme: "LIFE Nature projects in Greece constitute 'oases' of organised, targeted, flexible, and financially viable conservation projects. Very often, LIFE is the only source of funding for the implementation of concrete conservation actions in the field."

The monitoring team coordinator

The activities of the more than 100 LIFE monitors are coordinated by a multinational central team based in Brussels. Nicolas Tavitian is part of this team, and is responsible for coordinating activities falling under the LIFE Environment Policy and Governance component.

"I am one of six members of the 'central team'. Together, we do our best to coordinate this vast network of monitoring experts, spread across nine regional teams. That involves channelling information between the Commission and the monitors and making sure that all monitors are working according to the same standards and methodology.

"One of the greatest challenges we are confronted with is the sheer diversity of our work. Apart from environmental expertise in a great variety of sectors, we also have to advise project beneficiaries on the EU's complex rules and analyse projects' finances, so you need a good head for rules, for numbers and for accounts, as well as a somewhat meticulous disposition - and we need to be able to help the monitors on each of these subjects."

Within this large team of experts, a huge reservoir of experience and professional expertise has now been accumulated, which Nicolas believes helps to enrich the entire programme. "There are few programmes comparable to LIFE in terms of its size and scope. It is a privilege to be part of such a programme and to work with environmentalists from almost every European country.

"We have the opportunity to meet in person at our twice-yearly reunions, which is always a pleasure, even if us environmentalists are still a little jealous of our conservationist colleagues: when they visit a project, they wear rubber boots for a brisk walk into the wilderness, whereas we put on a suit and tie for meetings and visits at the factory."

NICOLAS TAVITIAN (MIDDLE) AND SOME OF THE LIFE MONITORS

MONIQUE BRAEM

The communicator

Communication is another important aspect of the LIFE programme, and in particular ensuring that the results of LIFE projects are disseminated and used as widely as possible. This task falls to the LIFE external communications team (CoT), which works in close cooperation with the LIFE Unit and the monitoring team.

Monique Braem, Assistant to the team Coordinator, explains that "the role of the CoT is to assist the Commission in promoting the LIFE programme at European level; to support the funded projects in their own communication activities and to publicise project results and achievements so that they serve as a showcase for other projects, for specific sectors of industry, nature conservation networks, and other potential user groups."

Having joined the CoT in 2002, Monique holds the honour of being the longest serving member of the team. She regrets that this doesn't make her feel any younger, but it does mean she is often looked to as the 'memory' of the team. "Because of this, and in my role of assisting with coordination, I spend a lot of time interacting with the other team members: allocating and clarifying tasks, answering queries and sorting out administrative issues. I enjoy this; it's nice to be at the hub of things, even if it's difficult sometimes to see the fruits of my labour."

> *"This job has helped me to better understand and appreciate environmental issues, but also to develop as a person and to acquire new skills"*

Monique's central role in interacting with the other 15 members of this multi-national and multi-skilled communications team is made easier, no doubt, by her impressive language skills, being fluent in English, German, French and Spanish. She also liaises with officials from the LIFE Unit and with the monitoring team, which assists in channelling information directly from the projects.

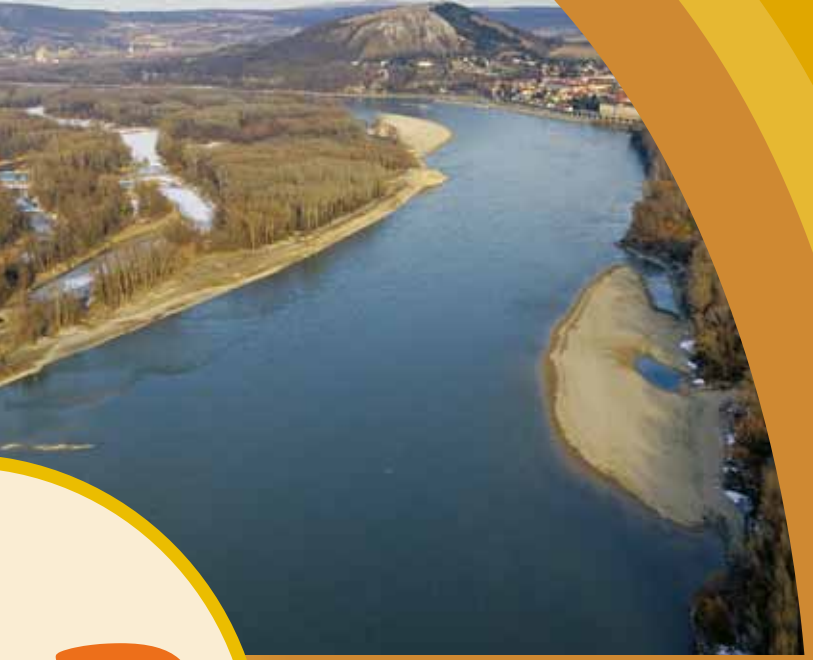
The CoT transforms this project information into a range of user-friendly products, including project summaries, fact sheets, newsletters and thematic brochures, which are published in printed format and on the LIFE website. "We pride ourselves on the quality of all our outputs. The CoT stands out for me as being a real example of team spirit and motivation. Everyone contributes to the success of what we do."

Monique adds that "it is nice to meet project beneficiaries and stakeholders at events as it gives me the opportunity to let them know about all the backstage work that goes into producing and maintaining the website, LIFENews and our printed publications.

"The feedback is generally very positive. One of the most successful publications to date has been the brochure, '*Getting more from less*', which looked at the results of LIFE projects in the area of sustainable production. This is a clearly a topical issue, but it also helps that the brochure has a catchy title, which helps to attract people's attention. And then of course there was the article, '*Actor Antonio Banderas supports Iberian lynx*', which caused a real explosion of hits when we published it on the LIFE website. Okay, maybe it was more Banderas enthusiasts than lynx enthusiasts, but it certainly helped to attract attention."

Monique has worked on other European programmes in the past, including the Leader programme, but she was glad to get the opportunity to apply her knowledge and experience to LIFE. "Like most people, I care about the environment and it is great to be able to make a contribution, however small, through my work. Generally people think I'm lucky to work in such a sector. When I am travelling it is always nice to see the LIFE logo and to know that you are part of this bigger picture.

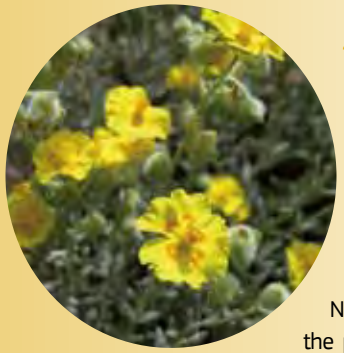
"This job has helped me to better understand and appreciate environmental issues, but also to develop as a person and to acquire new skills. A particular highlight was my first ever presentation in public, which was at a meeting of newly selected LIFE projects in Spain. The presentation was in Spanish, which is not my mother tongue, but fortunately it went very well. The only snag was that I used the word '*asistenta*', which means cleaning lady, instead of '*asistente* (assistant)'. The participants were very discreet about it, but not my colleagues, who used this for months after to force me to clean their desks."



2 MEET THE COMMUNITIES

LIFE co-funding has helped launch community-led initiatives across the EU – and in neighbouring countries. Regional and local authorities, cities, towns and villages, networks and associations have all taken part in and benefitted from projects to safeguard nature and improve the environment that simply would not have been possible without LIFE.

LIFE and the regional record-breaker



The autonomous community of Valencia in Spain ("Generalitat Valenciana") is one of the EU regions to have run the most LIFE Nature projects. Juan Jimenez, head of biodiversity services, has been at the helm for all of those projects.

"We are the European region with possibly the highest number of LIFE Nature projects – 15 since the programme was launched in 1992. I'm not sure why this is so, except that our biodiversity services department was established 25 years ago (in 1987) so that by the time LIFE was launched, we were already established: We had a lot of ideas and a vast amount of biodiversity to take care of... But we had almost no money. So it seemed as though LIFE was waiting for us.

There was so much to be done. There were no recovery plans for species and no habitat restoration actions, surveys or monitoring had been carried out. LIFE gave us the major technical know-how to make improvements and to create a species and habitats knowledge base for the Valencia region that without the projects would have taken decades more to build. Also, several of the technical experts that started worked on the early LIFE projects are still working with us today on ongoing projects.

LIFE brings stability

Within a constantly-changing political environment, such as for a Spanish region, LIFE was also a stabilising factor. For example, over the course of a five-year project we might have three or more directors with different agendas. Each LIFE project, however, was defined in advance, so the project actions and deadlines gave us an important, stable framework to continue the work.

Moreover, our [regional] budget was and is very small. But thanks to LIFE, we could increase staffing to levels that enable concrete nature conservation actions to be carried out.

Concerning our day-to-day work, there are no fixed working hours for us: we love this work. We're public sector employees and we're not paid high salaries. LIFE, however, has provided us with added motivation and the opportunities to carry out work that would otherwise have not been done. Moreover, our conservation work is seen around Europe and this is important to us.

For me personally, the most successful LIFE projects were the plant micro-reserve (PMR) projects (see box) and also the projects targeting the conservation of the Audouin's gull (*Larus audouinii*) (e.g. **LIFE02 NAT/E/008608**) . This is mainly because of the impact these projects had on people, that is, in terms of raising awareness for conservation of endemic species; and for the protection of local biodiversity 'hotspots'."

Juan Jimenez

Emilio Laguna

Pioneering plant micro-reserves

"Valencia has a very high diversity of plant species. It was therefore an ideal location for what was to become Europe's first network of PMRs: Twelve of the region's 355 endemic plant species are included in Annexes II and IV of the Habitats Directive; and 150 species are considered rare or threatened.

When the projects ended we had established 77 PMRs. Today the region has more than 285, which also means that we have protected all of Valencia's endangered plant species populations, as they are all found within the micro-reserves.

Plant micro-reserves allow a close monitoring of target species by trained staff. Thanks to LIFE we've been able to change the conservation strategy here from passive to active. Moreover, we've been able to establish ex-situ labs and nurseries in order to support the micro-reserves.

Finally, I'm very satisfied that the micro-reserve concept has now spread throughout the world and I'm especially proud that, as a result of our work, a separate initiative has resulted in the creation of a landowners' association for the micro-reserves. This is the best recognition that I have of the success of the LIFE projects."

Juanma Revuelta Pérez

A city-wide environment of innovation

Valencia has also been a pioneer at the local – as well as the regional – level. In 1999, the municipal government began ValenciaInnova, an initiative that has helped turn innovative ideas into successful LIFE Environment projects. Juanma Revuelta Pérez, who launched ValenciaInnova, explains why it has worked so well.

"In 1995 I started working as a private consultant in Spain for some LIFE projects. Four years later, I was invited to work for the recently-formed Valencia municipality innovation department (*ValenciaInnova*) to develop different types of projects, including LIFE projects.

It was very difficult for the municipality to apply for EU funds: There was almost no capacity, no know-how, and no information about LIFE funding. For that reason, *ValenciaInnova* developed a simple methodology that provided a platform to tackle Valencia's environmental problems. The motto was: "The city of Valencia is open to your ideas."

We set up information days to show some LIFE project results and examples from other EU Member States; and established partnerships in order to solve specific environmental problems. [Within four years, the number of approved projects increased exponentially…]. In just one year (2003), for example, the Valencia municipality had five projects approved, which was more than several countries combined for the year!

The innovation office was sometimes a project partner, but the main beneficiaries were public companies, or the municipality of Valencia. This successful methodology is now taught at the European Institute of Public Administration (EIPA) in Maastricht. In Valencia everyone knows LIFE – from politicians to citizens.

Number 70 bus

Thanks to LIFE, Valencia now has a better environment. For example, the LIFE ECOBUS project (**LIFE02 ENV/E/000253**) had a huge impact on people's lives.

THE PROJECTS

Valencia as a territory has been very successful in implementing LIFE Environment and Nature projects that have originated from regional and municipal authorities. The many projects include a number of award-winners (e.g. ECOBUS – a 'Best' LIFE Environment project: 2004-2005), and together the range of actions carried out with LIFE's support have had a very positive impact on Valencia's wildlife and natural resources and the lives of its citizens.

There was a huge problem with used cooking oil, especially during the 'Fallas' (a very popular fiesta), where people typically fry sweets. After use, the oil used to be thrown down the toilets. We proposed to solve the problem by recycling the used oil into biodiesel. The project was so successful among Valencians that, one day at 10 pm, I got a telephone call from the security guard at the Valencia municipality building. He told me that there was a woman outside the entrance wanting to donate a bottle of used oil to the Ecobus project. I went there and talked to her, to explain that there were special places for leaving the oil. She replied: "I know that. But I want this oil to be used on the number 70 bus that I take every day!"

Creating opportunities

I see LIFE as a catalyst for companies and public authorities. For example the ECOvitrum project (**LIFE08 ENV/E/000148**) transformed an ecological problem into a business. We produced a commercial silica product that has high market value from electronic waste. I think before applying for LIFE funding it would be useful for all private companies to have a business plan in place to ensure the project is feasible after the project has ended.

From a personal point of view LIFE has had a major impact on my career. Thanks to LIFE, I work in Brussels (as Director General of the Valencian Regional Office) and everywhere I go I talk about the LIFE programme. I'm a sort of a LIFE ambassador.

One of the main advantages I see of LIFE funding is not the actual amount of money, but the opportunity to have private-public partnerships. It can be very beneficial to have, say, public companies working together with universities and private companies. Moreover, the concept is more democratic than, for example, the FP7 [The Seventh Framework Programme (2007-2013)]. LIFE (Environment) funding is available to everyone across the EU – from an SME to a multinational company, a national, regional or local authority etc. Finding 50% of co-financing is also not easy, particularly for some countries. This means you have to make considerable efforts to ensure a project is successful. LIFE, however, is a smart use of funding. It is money well spent: supporting innovation, talent and technologies; and helping to solve environmental problems.

Why Valencia?

People ask why Valencia has been so successful in receiving LIFE funding? In my opinion, it's because we have the ability to communicate very well with the population.

"LIFE... is money well spent: supporting innovation, talent and technologies; and helping to solve environmental problems"

And of course we've had the support of the mayor, Rita Barberá, for all the project objectives. Following our success, I've been approached by other European mayors asking how to go about applying for LIFE funding. I tell them they need to have an idea for a good project... LIFE in Valencia has proved to be attractive to everyone and is widely known. Now, thanks to LIFE, Valencia the city and Valencia the region are more sustainable."

For more information on Valencia's LIFE projects, please visit the online LIFE project database: http://ec.europa.eu/environment/life/project/Projects/index.cfm

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Wolfgang Hafner

Building a partnership for better city living

The City of Klagenfurt in Carinthia, Austria is showing how local authorities can build a beneficial partnership with the LIFE programme to improve the environment. Here we meet Wolfgang Hafner, the man who has led all five of the city's LIFE Environment projects to date.

Wolfgang Hafner is head of the department of Environmental Protection at the City of Klagenfurt. The department's responsibilities include "noise pollution, air pollution, soil and groundwater protection, waste management, licensing procedures for enterprises, public information campaigns and nature protection," explains Mr Hafner, before adding that for the last two years "an additional issue is climate protection – to reduce CO_2 emissions."

The City of Klagenfurt is just starting its fifth LIFE Environment project (see box), all of which Mr Hafner has project managed. He explains the genesis of a fruitful relationship with the LIFE programme: "When I became head of the department at the end of 2002, the main environmental problem in Klagenfurt was air pollution. It was also the beginning of monitoring of fine dust and particulate matter and Klagenfurt suffered from a lot of incidences [of ppm limits being exceeded] - there was bad press about this and so on. No-one in Austria, no-one in Europe, this was my feeling, knew how to tackle this air pollution, this particulate matter. Then I remembered the LIFE programme, saw that there was a call open, asked some project partners where I had contacts - Technical University Graz - and said 'hey what do you think?' We had a key meeting and we submitted a project together with the City of Graz who had already experience with LIFE projects."

This first project, KAPA GS, developed a computer model that enables identification of PM 10 particulate matter pollution at a resolution of 10 x 10 m at every location in Klagenfurt. It also developed an air quality plan for the city. "This is still the basis for our quality management," notes Mr Hafner proudly. "This was 2005. I'm quite sure we were the first city in Europe to have such a detailed plan and map," he believes.

"With the computer model we were able to calculate the effect on air pollution. This was important because then we could make a cost-benefit analysis and say to the politicians: if you do that, the result is that and so on. It's really a very important tool and it would have been impossible to create such a tool without EU funding."

The LIFE programme has been beneficial in other ways too: "I really appreciate in a LIFE project that - of course you have to submit a proposal with detailed objectives - but this is the frame, and the structure is really very flexible. You are able to make changes, to make amendments if necessary, not only in financial issues, but also in technical issues," says Mr Hafner. This has been particularly helpful with regard to the ongoing CMA+ project, which is investigating the use of liquid calcium-magnesium acetate as an alternative to gritting in winter. "Within CMA+, London contacted us, they said: we have a fine dust problem, we need mitigation options, what do you think about CMA, could it work in London? We advised them and they did a trial for half a year, [they] were successful and [they gave us] the results. It was really great because it was a very important input for us. I know other EU-funded programmes and they are so formal, so inflexible. It is really bad, because you cannot take into consideration new approaches and new knowledge."

Selling LIFE to the politicians and the people

The success of Klagenfurt's initial LIFE project made it much easier to win the support of the city's decision-makers for further projects. "The politicians, the government – local government, regional government – they like these projects because they have a platform with press conferences and international acceptance and so on," explains Mr Hafner, adding that "through these LIFE projects they understand the problem better. With a LIFE project you can transport a lot of information and acceptance on this (governmental) level."

As well as the fact that the involvement of Brussels concentrates minds, he says that for the politicians, LIFE makes it "more easy to commit mitigation options that not everyone likes, for example a traffic ban, because they can say it's only a trial and let's see if and how it works."

Klagenfurt's ongoing commitment to the LIFE as a source of funding for its environmental projects suggests that things have gone well to date, but, cautions Mr Hafner, "I have to admit that I'm only successful as long as there are no financial losses. There remains always a risk. If one of the projects would fail and we had to reimburse money... I guess then we would have a very tricky situation."

> *"It would have been impossible to create such a tool without EU funding"*

He has also learned from the initial LIFE project the importance of keeping public opinion on side. "We learned that we should start informing the public [about the aims of the project] as soon as possible." Another important lesson was to focus on the positives, rather than "negative news. It was too exhausting to always say the air quality is so bad and you can suffer from cancer and lung damage and so on - people do not like to hear this. It's better to give positive formulations, to say support us to improve and strengthen the public transport system: this might be cheaper, might be more comfortable and additionally you save the environment," recounts Mr Hafner.

This is the approach the city is taking with one of the latest LIFE+ projects, CEMOBIL, which is trialling the use of electric cars. "It's working very well, people like to test them," says Mr Hafner. "When they give back the car after one week, they really have the feeling that they have also made a good contribution to the environment. They are proud of it. They had fun and an interesting experience and also [made] a contribution too."

Klagenfurt's LIFE projects

- KAPA GS – Klagenfurt's Anti-PM10 Action Programme with Graz and South Tyrol (LIFE04 ENV/AT/000006)
- SPAS – Sound and Particle Absorbing System (LIFE06 ENV/A/000345)
- CMA+ – PM10 reduction by the application of liquid Calcium-Magnesium-Acetate (CMA) in the Austrian and Italian cities Klagenfurt, Bruneck and Lienz (LIFE07 ENV/A/000003)
- CEMOBIL – CO_2-neutral E-Mobility for the reduction of air pollutants (PM10, PM2.5 and NO_2) and noise in the European cities, for example Klagenfurt (LIFE09 ENV/AT/000226)
- POLYWOOD – Polygeneration of fuels, heat and electricity from wood (LIFE10 ENV/AT/000112)

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Geneviève Magnon

Jean-Noël Resch

LIFE the 'trigger' for two decades of restoration

Public authority managers, Geneviève Magnon and Jean-Noël Resch reflect on many years of European Union support for the restoration of the Drugeon valley, an important wetland site in Franche-Comté. Their involvement spans some 20 years, starting with the LIFE Drugeon project (1992-1996).

The Drugeon, a tributary of the Doubs in the Jura ranges, flows through a very important high-altitude wetland site in the Franche-Comté region of eastern France. It's a Ramsar wetland of international importance; and a Natura 2000 site supporting some 30 habitats – including an important (980 ha) area of bog complexes, including priority active raised bogs and bog woodlands – and outstanding fauna, notably at least 23 threatened or endangered bird species.

Despite its ecological value, the Drugeon river basin has been subjected to serious disturbances that have degraded significant areas of the wetlands.

Conservation and management programmes for the area come under the responsibility of the community of 10 small communes of the Vallée du Drugeon et Plateau de Frasne. The public authority was the co-ordinator of the LIFE Drugeon project – and the initiator of the conservation works for the whole valley. It is also responsible for the administration of all local activities for its 5 000 or so inhabitants.

THE PROJECT

The 1992-96 LIFE project was part of a comprehensive plan to manage the ecology and hydrology of the Drugeon basin in response to the degradation already apparent at the beginning of the 1990s. Engineering works were carried out to restore the river meanders to a more natural state to benefit the peat biotopes and also to increase the river's capacity to retain water during floods. The beneficiary also acquired some of the most humid sites in order to safeguard them and to restore water levels in those that had already been adversely affected. Efforts were also invested in providing information and gaining the support of local interest groups.

Geneviève Magnon

"I've been working for the community of communes in Frasne since 1993. I'm a biologist. I was hired first as a technician on the LIFE project and then later I became project manager, following the retirement of the original manager.

An important part of our work with the LIFE project involved raising awareness of the need to do something to reverse the practices, carried out over the past 50 years, which had resulted in the ecological problems, notably the drying up of the wetlands.

Importantly, you must remember that we are responsible to the electors of the communes (villages) and to be honest, back then they weren't at all interested in what we wanted to do with the project.

There was a lot of work for us to do to try to change people's negative viewpoint (this was mainly concern over the cost of the planned works). We explained that this wasn't going to cost them anything. We held numerous public meetings with local interest groups, including the farmers, foresters, fishermen and hunters. It was quite difficult and there were some extremely 'noisy' meetings. There were two farmers in particular, who remained vehemently opposed to the project. The public relations work is still continuing today, so we still haven't won over everybody.

Fortunately, Christian Bouday, the then President of the Community, believed absolutely in the project and was able to pass on this belief to the electorate. This enabled me to focus on the technical aspects of the project. For me personally, we can be most proud of the (4 km) restoration of river meanders on the Drugeon.

LIFE was also the start of many things that have continued. For example, we still organise conferences and these are attended mostly by local people. The little logo that was designed for the LIFE project has been adopted by the community – you can see it on official letterheads, car stickers etc. And the newsletter, 'La Lettre du Drugeon', which was started under LIFE, has become our community newsletter.

Finally, even though not everyone is on our side, we've made considerable progress in our relationship with the professional associations. We've seen a significant sea change, in particular, among the farmers. They ask, for example, about the environmental impact of certain planned measures on specific species... This is something that never happened in the past."

Jean-Noël Resch

"I'm a hydrobiologist. I was hired in 1999, with particular responsibility for overseeing the hydrological works that were needed in the valley. These were started under LIFE and continue today under the programme for the re-naturalisation of the Drugeon and restoration and management of the basin (1997-2013). This (€2.8 million) programme is financed by the EU, as well as by local, regional and national authorities.

I think it's difficult for the people who live here to really understand the need for nature conservation – as for them it's quite 'normal', almost banal, to have at least 250 different species of birds. I'm not from here originally. I'm from Strasbourg, Alsace. Perhaps this has helped me to better understand how 'special' it is and how important it is to maintain this biological diversity.

It was difficult in the beginning – there was considerable criticism, notably that the project was too technical. Nowadays, there's no longer big opposition to what we are doing. Also we've moved on from the phase of the major remedial works to doing some of things that make the project more visible to people such as putting up information panels and other signposting, constructing footpaths, nature trails and viewing platforms.

I'd like to draw attention to the continuation of the river restoration works after LIFE – over almost 30 km – that's an enormous achievement. And behind these works are, of course, the habitat and species' improvements we're seeing today on some of the areas that had become significantly dried-out, as well as huge improvements in water quality."

Project number: LIFE92 NAT/F/012600
Title: Natural heritage conservation of the Drugeon Basin
Beneficiary: Syndicat Mixte de la Vallee du Drugeon, now the Community of communes of the Plateau de Frasne and the Vallee du Drugeon
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LIFE's help for the forests of the Holy Community of Mount Athos

The Mount Athos peninsula in northern Greece is home to a Holy Community made up of 20 monasteries and 12 cloisters, as well as individual 'cells' and hermitages – some 2 000 monks in total. Father Gregorios Gregoriatis was responsible for a LIFE project that helped rehabilitate the oak forests on Mount Athos.

"We in the Holy Community of Mount Athos have special privileged administrative status in Greece. We follow the Orthodox Monastic faith which based on a quiet and peaceful way of life. Because we are the owners of the whole Mount Athos peninsula we have very close relations with our natural environment.

Indeed, nature conservation principles within The Holy Community's constitution date back more than 1000 years to when the first monasteries were built here. These principles are enshrined as an integral part of our lives and all of the Mount Athos monasteries operate in the same way.

We believe that the 'greater good' is more important than us as individuals and these spiritual beliefs are very much aligned with the way that the EU's environmental policy works. For us, money is not a factor that drives our exploitation of our environment. This is a fundamental principle in our constitution so we have never chosen to be organised in any commercial form as a Community to generate income from our land.

We prefer to use time-honoured land management methods and we take more account of the impact of our methods, rather than their cost in time or labour. These principles have served us well through the centuries and we expect to maintain such approaches in the long term.

However, we do acknowledge that the environment is susceptible to change and we have seen that these changes can create very real threats to our way of life from forest fire risks. Our monasteries are isolated and many are surrounded by forests. After the bad fires of

THE PROJECT

The FRAINETTO WOODS Mnt. ATHOS project achieved the long-term protection of priority forest habitats through a series of thinning measures that raised the forest canopy in order to mitigate fire risks.

the 1990s we took a decision that we would need to do more than in the past to protect the monasteries.

Forest action

A plan of infrastructure works was agreed by the Community to reduce fire risks and help fight any fires that did start. We increased the number of places to store water by creating reservoirs in the forest areas and we strengthened our supply of fire-fighting equipment. Look out stations were established at high points and we set up a kind of rapid-reaction communication network between the monasteries that could be used for raising the alarm about fire threats. In addition, roads and tracks were cut through the forests to help us reach fires quicker to stop them from spreading.

We were able to do much of this work ourselves using our own resources and we knew that if we could address the overall structure of the forest canopy this would make a big difference to reducing the risk from fire. We also knew that raising the height of the forest canopy and opening up the forest to more sunlight would have a beneficial effect on biodiversity. What's more it would improve the quality of the natural wood stock and enhance our woodlands' landscape properties.

Aesthetic features of the environment are positive for the soul and an attractive landscape possesses spiritual attributes.

We wanted to protect the natural woodland structures that had been created on the peninsula of Mount Athos. We wanted to maintain a mix of species and plants and we wanted to have a range of different ages because, as in any community, there are children, middle aged and elderly members. We wanted this for our forests and we asked LIFE to help us.

For the LIFE project implementation, I was supported by colleagues from the Greek Biotope Wetland Centre and we also gained a lot of very useful help from our subcontractors, Christos Georgiadis and Stefanos Fotiou, at Business Architects Consultancy S.A.

Common goals

LIFE's support was welcomed because we could all work together towards the same aim. We in the Holy Community were able to use the funds to manage the woodlands to meet our needs, and this could be done in a way that reinforced the long-term quality of the oak woodland ecosystem on Mount Athos. The oak forests are considered worthy of protection because few other habitants of the oak species *Quercus frainetto* and *Quercus ilex* exist on this scale in Greece.

Following the tried and tested method of other LIFE Nature projects, we first undertook a scientific study of the forests so as to ensure that our work was based on a sound foundation of environmental knowledge. The study identified areas where the most benefits could be achieved through thinning actions in the oak forests.

A lot of mathematics was applied to determine the final selection of sites for thinning and this led to a mosaic of actions across the Holy Community's land. As part of the project we organised a training programme for monasteries and forest contractors to set out a consistent approach for the habitat management plan.

I was very impressed by the management plan and LIFE's approach to funding the work we did. We had at times in the past had to deal with laws and regulations that made implementing forest management actions quite difficult, but with LIFE it was easy. We were able to follow the plan that was agreed at the start. This helped us to organise and carry out our activities through a very constructive approach.

Father Gregorios Gregoriatis

A helping hand

We were also appreciative of the flexibility that the LIFE programme provided because at first we had filled in the application form as if we were a private sector organisation. This meant that we would have had to find a large amount of financial insurance to cover the project costs before we could do any work. Our financial reserves are very limited so the forest plan could have been in jeopardy if the LIFE team had not come to our rescue and helped us change our classification on the form to better reflect our actual non-commercial status.

LIFE trusted us, accepted our special circumstances and helped us to realise what we wanted to do; this meant a great deal to us in the Holy Community. We hope that we have been able to honour their trust and we would like to find a way to work again with LIFE in the future because we still have a lot of the special oak habitat here that could benefit from further partnership approaches with LIFE."

Project number: LIFE03 NAT/GR/000093
Title: FRAINETTO WOODS Mnt.ATHOS - Rehabilitation of Coppice Quercus frainetto woods (9280) and Quercus ilex woods (9340) to high forest
Beneficiary: The Holy Community of Mount Athos
Contact: Christos Georgiadis
Email: cgeorgiadis@gmail.com

URI NUSINOW

Positive partnership memories from a neighbouring state

Uri Nusinow is financial director of the Arava Institute for Environmental Studies (AIES) in Israel. He says his involvement with a LIFE Third Country (LIFE TCY) project that promoted a trans-boundary approach to environmental issues "has made a significant difference to me and my work".

"I live on Kibbutz Ketura in the Southern Arava region of Israel, about 30 minutes north of the Red Sea resort town of Eilat. The Arava is a beautiful desert area, bordering Jordan on the east and Egypt on the south.

I am 57 years old, originally from Los Angeles and I have lived in Israel since 1977. My wife and I have six grown children and six grandchildren. Two of my daughters and their families live on the kibbutz, enabling us to enjoy three of our grandchildren close by.

My work as the financial director of the AIES involves supporting academic and research activity focused on encouraging trans-boundary environmental studies that bring Arab and Jewish students together. The aim of our work is to help us all learn how to cooperatively deal with environmental issues. The vision of the institute is based on the premise that 'nature knows no borders'.

New LIFE experiences

I worked for four years as the project manager of a LIFE project involved with developing a waste management plan here in the Southern Arava. This involved coordinating new infrastructure and constructed wetlands for the region. We also did 'coexistence' work with Jewish and Arab Israeli high school pupils, using the platform of environmental awareness and we ran a training programme for Jordanian and Israeli farmers on sustainable agriculture systems.

THE PROJECT

The SASWMP project developed a treatment strategy to effectively handle solid and liquid agricultural waste generated in a project territory taking in southern Israel and Jordan.

Work on the LIFE project gave me a lot of new experiences and engaged me and my colleagues who worked closely with organisations on both sides of the border between Israel and Jordan. Such project activity has continued to positively impact my work to this day. I have since managed an EU Peace & Environmental Partnerships Project (PEPP), and I am now also involved with an International Research Staff Exchange Scheme (IRSES) project. This is named Transbasin and the Arava Institute is leading a consortium made up of EU countries, Jordan and the Palestinian Authority.

My present work with the Arava Institute is definitely influenced by each of the LIFE project's various elements. For example, part of my tasks today include direct reporting to funding agencies, such as the EU, USAID, and others. Perhaps the greatest lesson I learned from LIFE is the importance of transparency with the funding agency. The funder wants you to succeed with your project and you need to respect their role as a stakeholder by providing them with the reporting that is needed.

As in any complex long-term project, there is a need for continuous problem solving and creative thinking. When the problems and issues inevitably arise, I soon learnt that it's critical to keep the funders engaged with the issues so that they understand the context. This transparent approach enabled me to get help from the funders to resolve potentially problematic situations.

Sense of satisfaction

One of the things that I am most satisfied about from my involvement with LIFE is the tangible results that I can see from the project. For instance, the creation of a safe and organic shelter at the constructed wetland sites for migrating birds is a major environmental benefit that reinforces the region's special character as a passageway for migration. This attracts bird watchers, thereby expanding the existing eco-tourism opportunities in the region and helps diversify the local economy. Likewise, in the project's cross border sustainable agriculture tasks, we made a real difference in moving closer towards joint ecological solutions with our neighbours in the shared desert valley. This transboundary approach with continued Jordanian-Israeli cooperation has far reaching implications for greatly increasing environmental sustainability.

Today, there is a Long Term Ecological Research cross border platform for the Arava rift valley, a joint Israeli-Jordanian water forum, and joint Israeli-Jordanian science education programme for high school students. All of these successful developments have been helped by our experiences with the LIFE project.

LIFE's contribution to the 'Common Paths programme', for instance, has led to a new programme (funded by USAID) involving four pairs of Arab and Jewish schools, and focusing on environmental education and Arab-Jewish cooperation. I personally believe that this type of cooperation is absolutely crucial for the future of our region. It is fulfilling to know that I was able to have played a part in helping to make these achievements happen.

Other positive things that have resulted from the [SASWMP] project include a local agricultural business (Ardom Regional Enterprises) deciding to take on the work we set up in composting. This company has farm interests covering eight kibbutzim and they are now managing the composting centre that we helped to launch through LIFE.

Reflecting on the benefits

Looking back, I can think of three key things that for me made all the hard work with the financial administration worthwhile. Firstly, the LIFE project has built capacity for the region. It has proven that we have the combined ability to implement complex environmental projects, involving infrastructure, education and monitoring in partnership with each other.

Secondly, the success of the project has enabled the initiation of new projects that are also further improving our environment here and thereby the quality of life for all the regions' residents, including our neighbours across the border. Through the dissemination task of the project, the municipality and our partners raised the general awareness of the region's residents and farmers about environmental issues and waste management. We did this by creating an understanding of the value of waste as an economic resource.

Lastly, I personally gained tremendous confidence and new abilities through learning how to manage an EU project. I networked with numerous individuals in Israel and Jordan in the fields related to the project.

For us here in Southern Arava, LIFE is a good thing and I can imagine there will be many others like me, who live in areas neighbouring Europe, that have benefitted from the EU's environmental programme over the last 20 years."

Project number: LIFE04 TCY/IL/000027
Title: SASWMP - Southern Arava Sustainable Waste Management Plan
Beneficiary: Hevel Eliot Regional Council
Contact: Uri Nusinow
Email: uri.nusinow@arava.org

FRÉDÉRIC HÉBERT

Combatting marine pollution in the Med

Frédéric Hébert is Director of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC). Based in Malta, REMPEC's mandate is to assist in the development of coastal states' national capabilities to respond to marine pollution incidents and in the preparation and development of bilateral or multilateral operational agreements between neighbouring states. His job has provided him with an insight into how useful EU programmes such as LIFE can be for supporting environmental actions in the wider European region.

"I have not always worked with environmental management issues. I was born in Paris and after graduating in law and politics, I joined the French Navy Supply Corps where I served up to the rank of Commander. Then I worked in the staff of the Admiral, Préfet Maritime de la Méditerranée. This was the French national Focal Point for REMPEC and it was here that my environmental career took shape because my naval duties at the Admiralty involved being in charge of pollution preparedness and response.

Moving from the navy into the civil service at France's Ministry of Finance, I retained my involvement with the management of maritime incidents. I dealt with numerous major events, such as environmental disasters caused by the oil tanker 'Erika' in 1999 off the coast of France, and the sinking of the chemical ship 'Ievoli Sun' in 2000.

During my time at the Ministry I also remember the serious environmental problems caused by oil spilling from the stricken 'Prestige' tanker. This was one of the largest environmental disasters in Europe in the last decade. It polluted thousands of kilometres of European coastline and more than 1 000 beaches on the Spanish, French and Portuguese coast were affected. As with most maritime accidents, the impacts also extended to harm local fishing and tourism industries.

REMPEC LIFE

I joined the team at REMPEC's headquarters in Malta in 2006, by which time the centre had already made good use of LIFE programme support through a number of different projects aimed at preventing and reducing environmental impacts from maritime incidents in the Mediterranean region.

For example, in 1992, the national authorities from Cyprus, Egypt and Israel asked REMPEC to help to enhance their level of preparedness to face potential major marine pollution incidents. It implied the establishment of a carefully designed mechanism to generate mutual assistance between them, and my former REMPEC colleagues, who have now retired, developed a dedicated capacity-building project proposal.

This project - **LIFE92 TCY/INT/007**, coordinated by REMPEC on behalf of the International Maritime Organisation (IMO) - focused on introducing a new sub-regional system for combating major marine pollution incidents affecting, or likely to affect, the territorial sea, coasts and related interests of Cyprus, Egypt and Israel. As the centre did not have sufficient budget, nor enough personnel to implement such a complex project, it applied to the European Commission's LIFE TCY mechanism for financial support (The European Union is a Party to the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean Sea).

LIFE funding was approved and REMPEC worked with the three countries to implement project activities between 1993 and 1995. Another project entitled 'Development of spill response capabilities of Cyprus, Egypt and Israel' (**LIFE96 TCY/INT/08**) was then also able to benefit from LIFE funds. The latter was complementing the first sub-regional LIFE project and could be considered as a kind of extension. [In 1999, this project was declared one of the 'LIFE Success Stories' by the DG Environment LIFE Unit].

Marine environment protection and management measures in Syria and Turkey were established by [later] LIFE projects - **LIFE98 TCY/TR/011**; **LIFE99 TCY/INT/017** - which helped to increase the level of preparedness of both countries to face threats from accidental marine pollution.

Such support from LIFE enabled the centre to significantly extend the scope of its activities to new areas and gain new specialised skills on issues such as sensitivity mapping.

Besides the financial support to four major projects, which REMPEC conducted on behalf of the interested Mediterranean coastal states, the LIFE programme also provided essential administrative support to the centre throughout the project implementation periods. This support resulted in successful completion of these projects. It also helped to build the centre's capacity to manage complex international, as well as national projects.

REMPEC's experiences gained through the implementation of LIFE projects were crucial for constructively managing and implementing similar projects and activities financed either from the centre's regular budget or from other external sources of financing.

The context of REMPEC's activities is a complex one because capacity building in the field of accidental marine pollution preparedness and response requires coordination of numerous national administrations, primarily those responsible for environment and maritime affairs. In addition, and very often, we also work with military services, customs, foreign affairs, etc. Therefore one of the challenges involved in ensuring the success of our activities is to ensure the full support of the various national administrations, agencies, institutions and services.

One of the lessons learnt from the implementation of the LIFE projects showed how REMPEC could overcome potential problems by involving all institutions concerned at a very early stage in the project's lifecycle. We found that this approach helps to safeguard the support of the highest ranking officials and politicians. Political will to successfully complete the capacity building projects always proves to be of paramount importance.

Sustainable experiences

We are pleased that we have been able to take on board the experiences that REMPEC gained from working with LIFE. For instance, the project methodologies which we developed during the implementation of, in particular,

tri-lateral projects involving Cyprus, Egypt and Israel were subsequently used by REMPEC in other parts of the Mediterranean.

Similar projects have since been developed and implemented in Algeria, Morocco and Tunisia, and in Croatia, Italy and Slovenia. Moreover, procedures and some of the outcomes of the national projects, such as the Syrian project, were reproduced or replicated in the development of national systems for preparedness and response to marine pollution in other Mediterranean coastal states.

It is clear that LIFE has assisted REMPEC, as well as the Mediterranean countries that we serve, to navigate towards a higher level of awareness on and preparedness for tackling threats affecting the marine environment and economy. LIFE's support made a big difference to the centre in helping it to reach out to more parts of the region as well as facilitating its technical capacities in vital environmental protection fields."

For more information on REMPEC's projects, please visit the online LIFE project database: http://ec.europa.eu/environment/life/project/Projects/index.cfm
Beneficiary: REMPEC
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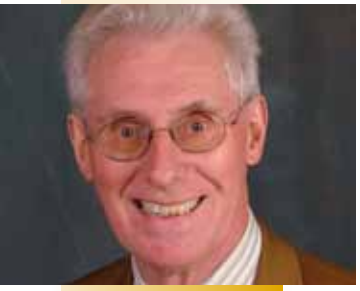
Building river restoration communities through LIFE

One of the LIFE programme's greatest achievements has been its role in capacity-building for nature conservation and environmental protection across the EU. Over the next three pages, two representatives of the river restoration community give their personal perspectives on the value of LIFE.



Bart Fokken

Launching an ongoing European network

Bart Fokken is a retired civil servant from the Netherlands. He has been Chairman of the European Centre for River Restoration (ECRR) since 2005, an organisation that was launched in Silkeborg, Denmark in 1999 with the aid of LIFE funding.

The ECRR has "come a long way from where we started in the late 1990s," believes Mr Fokken. "We have recently been asked to lead a team in the World Water Forum 2012, developing know-how on river hydro-morphology and river restoration. When we started I never imagined I would become Chairman of an important pan-European network or that we would achieve so much!"

The ECRR story really started back in the mid-1990s with an initial LIFE river restoration project, 'River Restoration: Benefits for Integrated Catchment Management' (**LIFE93 ENV/DK/002504**). This worked on restoration of the Rivers Skerne and Cole in the UK and the River Brede in Denmark and developed cooperation and networking between bodies within and between those countries.

Informal networks also existed between research departments. "I was involved because I worked at RIZA - the Netherlands National Institute for Integrated Water Management and Wastewater Treatment. We started to talk about the possibility of creating a formalised European river restoration network," Mr Fokken remembers. Research was important – particularly when there was so much still to learn. "But we wanted to go beyond just researchers and bring in all the key practitioners on river restoration including public and private bodies and NGOs."

Giving networking a kick start

The European Centre for River Restoration was launched in 1999 with a LIFE project of the same name (**LIFE99 ENV/DK/000619**). The idea was to create a network to exchange information and experiences on river restoration. "We had a major five-day international conference in Wageningen, Netherlands in 2000 with over 100 participants. We were able to promote our networking idea and encourage people to both join and cooperate with the ECRR," recalls Mr Fokken.

The LIFE funding was used to set the foundations for the centre, including the creation of an ECRR website. By the end of the project, ECCR had around 350 members, including public bodies, research institutes, NGOs and individuals. It had also established good working contacts with organisations such as the European Centre for Nature Conservation, WWF, IUCN and Ramsar.

Part of the ECCR concept was to foster national networks and the LIFE project produced guidelines for this. By the end of the project, there were national networks in the UK, Denmark, Italy, Romania, Russia and Spain. "Today we have 11 national centres and another four or five informal networks," says Mr Fokken with pride. "We have over 500 members and direct contact with up to 2 000 people. We aim to cover the whole of Europe from the Atlantic to the Urals and even external territories.

"The LIFE funding really helped us get started and now we continue through the engagement of the members. We take it in turns to run the secretariat from a different country for around three years. In some ways the name is a bit misleading, because we don't have a 'centre' – we are very much a network of equals. However, when we set it up, networking was not so well recognised and you had to be an 'institution' to be taken seriously."

Mutual benefits and future goals

Mr Fokken explains the method of working that the LIFE project helped establish: "We hold two board meetings a year and every meeting is one day of discussions and one day making a study visit of river restoration projects. It has been incredible the big differences that we have seen in approaches to river restoration and how these have changed over the years.

"When we started, river restoration usually meant physically restoring rivers to how they were in the past. Nowadays, we have learnt that you cannot try to freeze a river at one moment in time - rivers change naturally as well as because of human interference. The important thing is that the river dynamics are natural so that it can fulfil its ecological functioning as it did in the past." However, says Mr Fokken, "The most important factor in successful river restoration is always the human factor."

"The most important factor in successful river restoration is always the human factor"

ECCR partners are now involved in another LIFE project (RESTORE - **LIFE09 INF/UK/000032**) which aims to harmonise existing databases on river restoration to create a web-based tool informing users of best practices in this field. The project hopes to meet the challenge of establishing something that is useful both for countries that already have developed databases and those that are looking to create one for the first time.

"We have achieved so much in Europe thanks to the initial support from LIFE, but I still have another ambition," enthuses Mr Fokken. "Our European model had led to the creation of similar associations in Australia and Asia – between China, Korea and Japan – as well as contacts in North America and the Middle East. I dream that one day we will have a World Centre (or Network!) of River Restoration."

For more information on ECRR's projects, please visit the online LIFE project database: http://ec.europa.eu/environment/life/project/Projects/index.cfm
Beneficiary: European Centre for River Restoration
Contact: Bart Fokken
Email: info@ecrr.org

Waiting for the flood

Georg Frank fondly recalls the highlights of his time as a LIFE Nature project manager in Austria.

Georg Frank

"I was employed by the Donau-Auen National Park as project manager for its second LIFE river restoration project, 'Donauufer – Restoration of Danube river banks' (**LIFE02 NAT/A/008518**). River restoration is always an investment for the future: you remove the embankment, you see there is a lot of work going on, but you don't see the benefit. Then the moment comes when you finalise the implementation of the restoration, then you have to wait for the coming of the first flood. And that was definitely a very fascinating moment.

I remember it very well because it was a small flood and we decided to go with the motor boat to the restoration site because we were not patient enough to wait till the next day for the water level to come down! We were there on the spot and you could feel - yes - that great things were going on. And then two or three days later the flood was gone, the water level dropped down and when we returned, instead of these big stones of the embankment you have this big gravel bank. So, within a few days the landscape has changed totally, and instead of this artificial, hard embankment, you have a natural river bank.

THE PROJECT

The project implemented large-scale restoration works on a major European river. These greatly improved river dynamics and the ecological status of floodplains habitats and species.

The great thing is that the processes are permanently going on, so after each flood, each low water condition, the situation will change totally. You return after 10 years and it's fascinating to see what is going on. That's the good thing with our LIFE projects - they are designed with a very long-term perspective, so nature is doing the job of managing this dynamic river.

When my colleagues first proposed the idea of removing the embankment it was seen as a dream, as a vision that was not so realistic, and then they planned it and it got more and more realistic, and then they applied for this LIFE project and [that] enabled them to bring this vision to reality, and what was illusion or a vision before the project was completely realistic, completely normal after the project: it was state-of-the-art of river restoration.

When you plan a LIFE project you have to bring together a lot of ideas and stakeholders. This LIFE project was a platform for water management, navigation and nature conservation stakeholders. Without this platform, maybe you would not work so intensively together. If you have such a big project you are forced to cooperate, that creates a trust and joint experiences which enable you to go on with these cooperations. And that's quite visible in our area. We had one LIFE project dealing with river restoration, then a follow-up project; the projects got more and more ambitious and as a follow-up from this, or a life-after-LIFE result maybe, the water management company, the Wasserstrassendirektion implemented one of these river restoration projects, financed by funds from the Ministry for Transport. It was nearly the same methodology and it was the same vision and the same objective. So LIFE built the platform, the cooperation was successful, each one of the stakeholders was proud of the result and that motivates you to go on with this process.

The LIFE project was for sure a milestone in my personal career. The LIFE projects were also a milestone in the development of our national park and I think LIFE is also a milestone for nature conservation in Austria. It is the tool for large-scale nature conservation. For me LIFE is a synonym for 'Large-scale Implementation of Nature Conservation – For Everyone'."

Project number: LIFE02 NAT/A/008518
Title: Donauufer - Restoration of Danube river banks
Beneficiary: Nationalpark Donau-Auen GmbH
Contact: Georg Frank
Email: g.frank@donauauen.at

Biomass boilers improve village life in Slovakia

Peter Dávidík, Anton Bríš and Ladislav Šimo

A pioneering LIFE project in Central Slovakia has helped replace old, unreliable and polluting heating systems with a biomass-based alternative. We meet some of the villagers whose lives have been improved as a result.

Ľubochňa is a small village (1 100 inhabitants) in the picturesque Veľká Fatra mountains in the Žilina region of Central Slovakia. Founded in 1287, the village was once a centre of wood and metal processing and, in the 19th century, a popular holiday resort for the Austro-Hungarian aristocracy. Today, the main employer in Ľubochňa is the National Institute for Endocrinology and Diabetes, where some 200 people work and more than 30 000 patients a year receive treatment for their ailments. In common with many villages in the region, Ľubochňa is not connected to the gas mains and so relies on other methods of heating in the often harsh winters. However, as the Mayor, Peter Dávidík explains, prior to the installation of biomass boilers as part of the LIFE Environment ILUBE project, keeping Ľubochňa warm came at a cost: "the old heating systems burned coal and sludge and they produced so much pollution."

They also tended to be somewhat unreliable. "It was very cold in the kindergarten, in the primary school, in the municipal authority: children had to go to school wearing lots of clothes," remembers Anton Bríš, head of the investment department at the Endocrinology and Diabetes institute.

At the institute itself, where the boiler ran on heating oil, "the old system was very complicated and not very efficient," recalls the organisation's Deputy Director, Ladislav Šimo.

Thanks to the intervention of BIOMASA, the beneficiary of the LIFE ILUBE project, two new biomass boilers (each generating 0.7 MW) were installed in the basement of the endocrinology institute, providing heat for the seven buildings of the institute and five other municipal buildings, including the primary school and kindergarten.

The LIFE project also installed double-glazing in the schools and local authority offices, and added insulation material to retain heat. The work was done over three or four months, between "heating seasons", explains Mayor Dávidík. "The reconstruction work wasn't as difficult as the managing of the project; making plans: all the bureaucracy."

"Biomass was totally new to us," says Mr Bríš, but his organisation immediately saw the benefits: "The financial cost was only 50% of the cost of using heating oil." Equally importantly, patients also appreciated the results: "The climate here is very cold and the institute has old buildings, but our in-patients are very satisfied with the heat," adds Mr Šimo.

Pollution has also been noticeably reduced: "The air and environment are much clearer and have been improved radically," observes Mr Dávidík. "The situation is at least twice as good as before in terms of pollution and the smell of everything – it's very good for the village and for the people."

The villagers now see renewable energy sources as an important part of their future. "There is a lot of potential for biomass because there are so many woods around Ľubochňa. If you use it rationally there is a big opportunity to create new job possibilities for the village," believes Mr Dávidík.

THE PROJECT

ILUBE – Integrated Logistics for Use of Biomass Energy (LIFE03 ENV/SK/000577) – replaced polluting and unreliable village heating systems in Central Slovakia with wood pellet boilers and stimulated a demand for biomass in the country. The project beneficiary is continuing to reconstruct old boiler rooms as part of an ongoing LIFE+ Environment project, CHEFUB (LIFE08 ENV/SK/000240).

Beneficiary: BIOMASA Association of Legal Entities
Contact: Radovan Harant
Email: projectmanager@biomasa.sk.

José Fernando Robles

Helping agriculture to innovate

José Fernando Robles works for ASAJA-Sevilla, the Young Farmers' Agricultural Association of Seville, in southern Spain.

"I have always had links with the countryside and agriculture. I come from a family of farmers and a few years ago I took over the running of the family farm. Nevertheless, farming has not always been my career. I started out as a lawyer in Seville, specialising in European Union law and the environment.

Photo: Audrey Thénard

Today, I am active in the Young Farmers' Agricultural Association of Seville and have recently been elected Vice-President of the European Council of Young Farmers. I am therefore lucky enough to be in direct contact with the latest developments in Europe. I see first-hand how policies such as the Common Agricultural Policy (CAP) or EU environment policy are continually evolving with changing realities on the ground.

Young Farmers and LIFE

More than 3 000 farmers have taken direct part in actions undertaken in the context of our projects over the past 10 years. We learnt a lot from our first project (Sustainable Doñana - **LIFE00 ENV/E/000547**) which had the ambitious plan to establish demonstration plots covering a wide variety of situations on the ground. This took up so many of the project's resources that we were restricted in our dissemination work. In the second project (Sustainable Wetlands - **LIFE04 ENV/ES/000269**), we had a better adaptation of the tasks to the resources available and were able to carry out an awareness campaign that reached thousands of farmers and ensured a multiplier effect. What both our LIFE projects had in common was the aim to introduce innovative techniques for the efficient and effective management of agricultural land within protected areas. Since 2010, we have also participated as a partner of another LIFE Nature project:

Humedales andaluces (**LIFE03 NAT/E/000055**). This project is aiming to develop strategies to benefit both farmers and biodiversity.

Some of the challenges we faced were also quite surprising. I remember that during the first project, we were trying to convince farmers to leave a vegetative cover in their olive groves. We were able to explain the ecological benefits, notably to the soil. However, many farmers came back to us explaining that they couldn't do what we were asking because their neighbours would think they had abandoned their grove!

We chose LIFE funding because we wanted to address problems that we shared with other European countries.

The best aspect of the LIFE programme is that it has such a wide scope it offers possibilities to fund the demonstration of a whole range of good environmental ideas that different types of organisations may have. It is the reference programme for environmental funding for private organisations like ours.

I think that our projects have been successful because we have direct knowledge and understanding of farmers' needs on the ground. This has enabled a bottom-up approach to project design, which has in turn assured a high level of participation. We have also had a very clear focus on developing innovative strategies that benefit the farmers as well as benefitting the environment. This makes it much easier to work together to find solutions.

Many farmers who have participated in our projects probably would not otherwise have introduced the changes that the LIFE funding made possible. The programme really helped the introduction and development of processes that are well adapted to the reality on the ground and therefore provide genuine solutions for farmers.

LIFE projects want to demonstrate measurable successes to justify their funding. Yet our projects achieved many things that it is hard to measure. It's not easy to assess the value of a tonne of soil that does not erode away or an increase in the rabbit population that provides food for endangered species. Yet these benefits are very real.

The most satisfying and important achievement of all was changing the mentality of so many farmers that took part in the project and getting them to see, for example, that the weeds and other plants that compete with their crops can be managed effectively to be an essential element in protecting their basic resource – their soil.

Another ongoing benefit of the LIFE projects has been the informal networks that we were able to create with different farmland stakeholders. Many of the farmers that took part continue to share their experiences and talk about any new problems they are facing. This provides the inspiration for even more new initiatives.

Personal rewards

LIFE gave me the opportunity to work in the development of new strategies and their direct application in the field. I think there is often a gap between farmers' everyday concerns and discussion and decisions that take place in Brussels. LIFE provides a means of translating 'Community theory' into something understandable and useful at local or regional level. I therefore believe that LIFE is an essential instrument for the development of EU environment policy. Particularly in the current situation of economic crisis, it is more important than ever to invest in 'green development' and to show the innovative solutions that are possible to meet economic and environmental needs.

LIFE also gave me the incredibly enriching experience of meeting and getting to know many people and professionals from across Europe who are working in similar fields. I not only developed a better understanding of the complexity of European environmental issues, but also made friends and acquaintances that I still have today."

"LIFE provides a means of translating 'Community theory' into something understandable and useful at local or regional level"

For more information on the projects, please visit the online LIFE project database http://ec.europa.eu/environment/life/project/Projects/index.cfm
Beneficiary: Asociación Agraria Jóvenes Agricultores de Sevilla (ASAJA-Sevilla)
Contact: José Fernando Robles
Email: jfrobles.life@asajasev.es

3 MEET THE CITIZENS

Protecting our planet starts with the individual. Here we meet a selection of European citizens – including, amongst others, schoolchildren in Bulgaria, a volunteer viper conservationist in Hungary and a firefighter in the UK – who have been inspired and motivated to make a difference by their involvement in LIFE Nature and Environment projects.

LIFE involves residents in initiatives to meet Kyoto obligations

Denise Lancia

Denise Lancia is president and founder of residents' association, Palocco per Kyoto, a participant in the LIFE ROMAPERKYOTO project to encourage local initiatives to reduce greenhouse gas (GHG) emissions.

"I used to manage a video shop in the area of Casal Palocco (a residential area of Rome) and it was right there that the idea of the *Palocco per Kyoto* association was born. One of my customers wrote an article for our local newspaper in which he explored the idea of transforming our area into one that would use solar energy. I found this idea very interesting and thought: instead of just talking or writing about it, why don't we try to do it?

I already had some knowledge and interest in environmental issues. So, together with a handful of friends we decided to host a first meeting meeting in the local hall. We expected about 60 people, but over 500 turned up!

We had also invited some technical and financial people to come and speak to us about renewable energy and to explain how we should go about installing solar panels. Thankfully, they were willing to give up their free time and help us as, looking back, I realise we didn't really know anything about the issues involved.

Humble beginnings

That first meeting was a little naïve: I recall that the microphone was actually a small karaoke machine we had borrowed from an 8 year-old girl! Following the expressions of interest, the association was officially launched in May 2007.

We didn't have an office. At first it was my video shop, but later I sold-up in order to put all my energy into the association. We are non profit-making, with the aim of informing local people about greener energy options and ways of implementing and financing them.

Around this time I heard about the LIFE RomaperKyoto project. The project manager, Claudio Baffioni, invited me to participate in the round table discussions towards the voluntary agreement among stakeholders. I participated in the meetings to try to bring the focus on the residential sector and to emphasise how important it is to involve citizens and small communities.

I think that participating in the LIFE project has positively influenced our own initiative. It put us in contact with people working in the sector with the institutions that are working towards the same objectives.

I believe that projects such as this can be of immense value. At these round tables I found myself working alongside people from the institutions and managers from the petroleum industry. This is very important in helping to bring the citizens closer to local administration and also to industry.

Moreover, thanks to our participation in the project, our objectives were included in the City of Rome's environmental action plan (72/2009) towards meeting the Kyoto climate and energy targets."

THE PROJECT

The ROMAPERKYOTO project developed an integrated planning process for the reduction of greenhouse gas (GHG) emissions in Rome. Following a number of pilot actions, a local action plan was developed to reduce emissions by 6.5%, in line with the Kyoto targets for Italy, and setting an example for other municipalities across Europe.

Project number: LIFE04 ENV/IT/000453
Title: Realization of Rome's Action Plan to achieve the Kyoto's Protocol objective of green house gas reduction
Beneficiary: City of Rome
Contact: Claudio Baffioni
Email: segretaria@romaperkyoto.org

Ákos Baracsy

Snakes Alive!

Ákos Baracsy is a volunteer with MME-BirdLIFE Hungary, helping this LIFE project beneficiary with its programme to conserve the critically endangered Hungarian meadow viper (Vipera ursinii rakosiensis).

Thirty-nine year-old Ákos Baracsy is an engaging man with several interesting hobbies (playing the synthesizer, model trains, photography), and one very unusual one: snake conservation. A native of Budapest, Ákos attributes the start of his long interest in reptiles and amphibians to a chance encounter at the age of five: "I found a common toad in my grandmother's garden. It was bigger than my palm and it looked exciting. We closed him up in a jar and I looked at him for hours," he recalls fondly.

This initial encounter led to a passion for photographing amphibians and reptiles, which in turn led to an encounter with LIFE. "I had a project to find and take photos of all amphibian and reptile taxons (both species and subspecies) living in Hungary. Since *Vipera ursinii rakosiensis* is extremely hard to find and dwells exclusively on strictly protected, and thus prohibited, fields I was happy to have found this project that dealt with the species," he recalls. As a result he went along to a field event organised by MME-BirdLife Hungary and it was there – sometime in 2003 – that Ákos met the LIFE project manager, Bálint Halpern, who invited him to more events. "Since then it has become a regular part of my life."

Ákos's main work as a project volunteer involves writing a viper inventory computer programme (IT is also his profession). "We have quite a lot of snakes and it is not always easy to find them - to know where they are, their previous history. Sometimes we try to confine them to specific terraria but they can change their mind and change their terrarium as well! It is easier to find them if you have a database." The identification programme has two distinct functions: the first helps to identify the snakes according to the number of specific scales; the second helps to construct an 'ID card' for each snake. "For this you need photographs of the left face, the right face and the top of the head.," explains Ákos helpfully.

He also helps to measure the snakes at the viper centre that was set up as part of the first LIFE project. "The meadow viper is certainly not a big species – it doesn't usually grow beyond 65 cm - and usually the ones we see are newborn or one or two years old and they rarely exceed 30 cm," points out Ákos. "Sometimes we have to measure the

bigger ones, which is exciting and in captivity they really grow fast. Sometimes I have the impression that they actually like to be there: they get food. Sometimes I can feel, oh, this thing is quite fat. It likes it here," he says smiling.

"It is also interesting how different the character of each individual can be," he adds. "Coming from the same terraria or an hour later from the same sack or bucket, with the same size and perhaps the same familial background, one seems to be bored with the measurements, while I can hardly separate the other one's fangs from my glove! Another interesting thing is the smell. In my opinion they smell like green peas, which I do not find unpleasant at all! Bálint always laughs when I say this."

LIFE in the field

Field trips are a particular highlight of volunteering, says Ákos. "I like roaming in the fields, you cannot believe how different it can be from week to week, at all times of the year."

Field work can involve anything from examining known and suspected viper habitats to monitoring free-roaming vipers and helping to monitor insects and small rodent holes, also important research underpinning the viper conservation actions. "It feels good to contribute to scientific programmes," says Ákos. "I have learned a lot of biology."

He has also learned some good tips about wildlife photography, although, as he recalls, one field trip was rather more eventful than planned: "I love to spot lizards and I like to photograph them. Once I found a very attractive-looking lizard and I wanted to photograph it. I lay down and took pictures for five to 10 minutes and then Balint said 'freeze. Don't move. There is a snake just next to you'. And it was there all the time and we didn't notice it even though we were there for 10 minutes! [Meadow vipers] are very secretive."

Ákos says that "one of the best things about being a volunteer is it's fun. You can do it when you have free time, when you feel like it; it's not like a job." A field trip is usually a "50:50" mix of "old faces" and "new volunteers; sometimes students who are writing a thesis. It's good meeting people with the same interest," he believes. "To anyone else thinking of becoming a volunteer I say do not hesitate: it is worth every minute you spend here."

As well as "good company", another benefit of being a volunteer is "seeing and making regular trips to the Hungarian lowlands, which were previously not only nearly unknown to me, but are as good as unreachable with public transport." The lowlands, says Ákos, are "nothing special" at first sight, "but once you get deep inside on a field trip you start enjoying what it is like. In the lowlands they say that if something is 3-5 m high then it's a hill, if it's over 5 m then it's a mountain!"

> *"To anyone else thinking of becoming a volunteer I say do not hesitate: it is worth every minute"*

For Ákos, LIFE projects can have an important role to play in improving public awareness of and involvement in nature conservation. "The key is education, which is done well within [the LIFE-backed meadow viper conservation] programme. Children who have spent a pleasant day at the centre will have positive memories about nature. Those who have seen the snakes and the people handling them will see that these animals are not at all evil and certainly not dangerous. By introducing children who have probably only lived in urban environments to wildlife it will forever plant the love of nature in them."

The love of nature is certainly strong in Ákos Baracsy: "We have to mend what we have ruined. It is our responsibility. Nature keeps us alive, not the banking system or industries." With that, our interview comes to a close. As we shake hands and head off into the Budapest night, he says "it's funny, I mentioned that I wanted to take photographs of every species of reptile that lives in Hungary. There are very common species that I have never seen or photographed and then there is this meadow viper which is the rarest reptile in Europe and my hard drive is full of photos of it!"

HUNGARIAN MEADOW VIPER PROJECTS

LIFE began supporting the viper conservation work of MME-BirdLIfe Hungary in 2004, with € 324 500 of co-funding for the HUNVIPURS project (**LIFE04 NAT/HU/000116**). This LIFE Nature "Best of the Best" project laid the groundwork for saving the species from extinction, including taking all of the small number of sites where the species was found into state ownership and establishing the Hungarian Meadow Viper Conservation Centre, where captive breeding of the Hungarian meadow viper takes place. Further funding for this crucial conservation work came from LIFE+. The ongoing CONVIPURSRAK project (**LIFE07 NAT/H/000322**) has received some € 1.67 million for grassland habitat reconstruction work and continuation and expansion of captive breeding prior to a reintroduction into the wild.
Contact: Bálint Halpern. **Email**: balint.halpern@mme.hu

Art for LIFE's sake

Artists Christina Diana Wenderoth and Alois Steger were invited by the Technical University of Munich (Weihenstephan campus) to participate in the LIFE FLOODSCAN project by producing works for the Fluss Werke Land Art Park. The park, which is located in the Isar river floodplains in Moosburg, has been designed not only to have an aesthetic appeal, but also to make people think about the possibility of flooding occurring, an important and innovative dissemination tool for a project dedicated to flood risk management.

Alois Steger

Alois Steger

"This project followed a previous collaboration with the climate workshop of the Technical University of Munich: I took part in an art project, 'Labyrinth - Climate Change'. I then received a call from Maria Hagemeier-Klose of the Department of Forest and Environmental Policy at the university about this new project, and we arranged a meeting at Chiemsee to get to know one another and establish an approach and rough schedule.

The aim of this project was to generate interest in art, raise awareness, develop ideas, promote dialogue and strengthen cooperation. My hope was that the students would seek my suggestions and I could help them develop their ideas.

"Art offers new images to aid understanding and highlight the vulnerability of nature"

For me personally it is always interesting to explore new landscapes and natural areas, and to respond artistically. Working in nature is a constant challenge because the atmospheric conditions change constantly. They complicate and enrich the work.

I grew up in a small mountain village in Tyrol (Austria), and from an early age I was deeply rooted in nature, and the understanding of nature plays a central role in my work. The art works are in constant flux as the forest changes.

Art offers new images to aid understanding and highlight the vulnerability of nature. A changed perception of the natural and supernatural reality can arise if we encounter nature and its forces in a mindful and meditative way. The artistic component provides the necessary motivation to express the good in one's soul.

Since the implementation of this project, new job opportunities in other areas have opened up. My career has changed. I am invited more often to go to places to carry out land art projects. By addressing nature, I gain inner strength for new ideas. How the land art park in Moosburg will evolve is uncertain, but I am available for future artistic initiatives."

THE PROJECT

FLOODSCAN successfully demonstrated in Bavaria a new technology that enables fast and cost-effective identification of present and future flood hazard areas. FLOODSCAN's technology uses hydraulic 2D-modelling of flood hazard areas.

Christina Diana Wenderoth

"A student had found me on the Internet (www.naturkunstundspiel.de). Because there are many female students at the university they wanted to have a woman on the team alongside Alois Steger.

This project was very interesting because it was a big project and a team project. The aim was to create an arts trail that would last for a long time. My normal way of working is to produce ephemeral works, so it was a great challenge to create something that would be permanent. I work exclusively with natural materials and rarely use foreign materials and tools, so that was another challenge.

For me personally, it was easiest to address the realities of nature directly and capture them. So often works are impermanent and are soon gone with the breeze. But a different focus was needed for the land art park.

It was a very valuable experience for me to participate in this major project, and it was very exciting to work in a team with academics, other artists and students. Nature conservation has always been very important to me even before the project.

Land art is an especially wonderful opportunity to reconnect people with nature and with themselves. Through this intensive contact, from my experience, you gain a new appreciation of nature that may lead to a raised level of environmental awareness and subsequent action.

Christina Diana Wenderoth

Land art is used extensively in Germany as a tool for environmental education and in teaching the importance of sustainable development. I have incorporated these ideas in the art classes that I give. While I don't know about the future of the land art park, I would be willing to participate again, should the opportunity come up."

Project number: LIFE06 ENV/D/000461
Title: FLOODSCAN - Large scale adjustment of new technology for fast, precise and cost-efficient hydraulic 2d-modelling of flood (hazard) areas by combining laser scanning with remote sensing data
Beneficiary: LfU (Bavarian Environment Agency)
Contact: Dieter Rieger
Email: dieter.rieger@lfu.bayern.de

A special week for waste reduction

Mireia Padrós works for the Catalan Waste Agency (ARC) in Barcelona, Spain, one of the partner organisations involved in the LIFE-backed European Week for Waste Reduction.

Mireia Padrós

"The European Week for Waste Reduction has been really inspiring. It is really making a difference in showing people what can be achieved by thinking more about waste reduction. At a personal level it has also changed the attitudes that my family and I have to the waste we produce at home.

My background is in biology and environmental engineering. Previously I worked at the Regional Office for Latin American and Caribbean Countries of UNEP as a fundraiser for environmental projects. This gave me the chance to work on some interesting international projects. In Mexico I worked to raise judges' understanding and awareness of environmental laws and their implementation; I also worked there trying to find financial support for markets selling eco-design products.

I came to the ARC specifically to work on the European Week for Waste Reduction. It has opened my eyes to all the good ideas and actions that are out there for reducing waste. The initial idea for the European Week came from France, where they organised a first edition in the north of the country, followed the next year by a nationwide week.

Launch of the European Week

The French National Agency for the Environment and Energy Management (ADEME) successfully applied for LIFE funding to launch the European Week for Waste Reduction (**LIFE07 INF/F/000185**). ARC is one of four partner organisations involved in the project (along with ACR+, LIPOR and IBGE). In the pilot edition of the week (2008), we had about 30 different actors organising around 100 different waste reduction actions. A big part of my role has been to go out and encourage people to take part. There is no funding for their activities, so I have to convince them that it is also in their own best interests to do something.

It is relatively easy to go into a school or local municipality and get them to take action – they are usually open to the idea. However, a bigger challenge can be to convince businesses to do something special for the week since they sometimes want an immediate return on any activities. We can offer them excellent dissemination of their efforts and I try to show them that reducing waste is not just good for the environment and their public image, but can also help them cut costs.

By 2011, we had more than 500 activities taking place. I have seen some really great ideas here in Catalonia. My favourite was probably a project that saw designers turning old clothes into totally new designs. It was amazing to see the fantastic new clothes that they were able to create from clothes that nobody wanted any more. I saw a similar activity with furniture. Sometimes people's

THE PROJECT

The LIFE EWWR project established the European Week for Waste Reduction, a major initiative to promote waste reduction actions and awareness across Europe.

creativity can create new solutions for waste that you might never think possible.

I love working with these kinds of projects. They are concrete actions, which can make a big difference locally and internationally. You cannot help but think differently about your own waste production. When I have clothes that I don't want anymore, I think about taking them to an exchange market or giving them to someone who can make use of them. Even my two daughters always think about whether they can make use of something again before they throw it away.

Rewarding good ideas

A key aspect of what the European Week does is raise awareness of the activities that people are carrying out. This is both to reward people who have implemented good ideas, but also to inspire people who might not know what is possible or where to start to reduce their waste. Focused dissemination such as this is so important in enabling people to learn from one another.

People should be reducing their waste all year round, but the European Week provides a special opportunity to give more profile to a particular action or event. This could be anything from establishing a market for unwanted goods, a company paper-free day or a food-waste-reduction challenge in a school.

We do a lot of press communication in Catalonia and try to highlight all the actions that register to take part in the European Week. We want to show people that every action is important, from the largest company to the smallest individual project. We have also chosen 10 activities in the region to film so that we can highlight their efforts through audio-visual media.

We select what we consider to be the best, most interesting or innovative activities and nominate them for the European Awards that have been given annually since 2010 by an independent international jury. There are different prizes for each of five categories of project developer: public authority; association/NGO; private business; educational establishment; and 'other', which could be anything from a hospital to a cultural centre.

The Awards ceremony is a great occasion. For the first two years, it has been held in Brussels in March. In 2012, it will be in Paris (19 June). It is usually combined with a conference so that people working on waste reduction issues can come together to share experiences and ideas. I have been each year and it is so motivating to meet people from across Europe who are coming up with new ideas and solutions on waste reduction all the time.

> *"It is so motivating to meet people from across Europe who are coming up with new ideas and solutions on waste reduction all the time"*

In the two years of the awards we have had three European prize winners from Catalonia: the clothes redesign project; a broad waste prevention campaign in Barcelona; and a project to reduce glass packaging in the cava sector. It is always exciting to see whether a project from my region can win a European prize. We can really use it to highlight their success and motivate other people in Catalonia.

The current LIFE project closes soon and we have applied for more funding to develop the Week even further. We want to look at and promote the three Rs of: reduction; reuse; and recycling to achieve the primary goal of waste reduction. Everyone has been so inspired so far that hopefully we will find a way to make it happen and continue the development and impact of this inspirational European Week."

Project number: LIFE07 INF/F/000185
Title: EWWR - European Week for Waste Reduction
Beneficiary: French National Agency for the Environment and Energy Management
Contact: Valerie Jouvin
Email: valerie.jouvin@ademe.fr

A Finnish household embraces LIFE waste prevention

Mirva Merimaa and her husband Antti Kuivalainen live in Helsinki in Finland. They played an active part in the LIFE WASTEPrevKit waste prevention project.

Mirva Merimaa and Antti Kuivalainen live in Vikki Latokartano, a residential area of Helsinki of some 6 000 inhabitants. They've always participated in voluntary groups, especially those dealing with environmental issues. They readily agreed to participate in the LIFE WASTEPrevKit project, as one of 14 families who would put into practice the guidelines developed by the project beneficiary, Helsinki Region Environmental Services Authority (HSY).

THE PROJECT

Led by the beneficiary, the LIFE WASTEPrevKit project developed and disseminated a wide range of waste prevention tools that were implemented by schools, households, public administrations and enterprises with the overall goal of reducing waste in four Finnish municipalities.

Ms Merimaa had always considered that she was conducting her life in an environmentally friendly way. However, when she started receiving information from the beneficiary on how to reuse and prevent waste, she says she realised how much more could be done – not just by her own family, but also within the community. For example, at that time she was also involved in the organisation of a music event that involved a large number of pregnant women and toddlers: "I helped in providing everyone with information on using washable nappies, instead of the disposable ones. I also tried to make the idea sound more attractive, as disposable nappies are very polluting and expensive, whereas the washable and reusable one are environmentally friendly and cheaper."

Meanwhile, for her own family, an expert from HSY came to explain the methods that they should adopt for a year: "We weighed the bags of waste (organic, plastic, paper) and kept a diary. At the end of the period, we had reduced the amount by 33%," she says.

Changing mind-set

At first, it was quite a struggle to follow the advice to 'waste less food'. "We had to change the way we thought and bought," she says. For example, the family bought less, asking themselves if they were really were going to eat all the food. They also bought products in bigger containers in order to reduce waste packaging, or better quality products that would last longer.

In the beginning, she says, the family found that this "new way of thinking" took up a lot of their time, but eventually it started to become a routine way of life: "Now whenever I go to somebody's house and I see that they are wasting food, or throwing away a lot, I tell them some of the 'tricks' that we have learnt on waste prevention," she says. She adds that some of their friends have also started doing the same things, following discussions they've had together.

Says Mr Kuivalainen: "It was also very surprising to see how little organic waste we could produce." However, he adds that eliminating packaging waste is more difficult, as there is not enough choice in shops and supermarkets.

Finally, the family considers that LIFE projects of this type are important as they are able to reach the general public and are helping to influence the way people live and behave. They say as a result of the project they've really changed their ways and are far more informed about waste issues in general.

Project number: LIFE05 ENV/FIN/000539
Title: WASTEPrevKit - Waste Prevention Kit for enterprises, education and households
Beneficiary: Helsinki Region Environmental Services Authority (HSY)
Contact: Riitta-Liisa Hahtala
Email: riitta-liisa.hahtala@hsy.fi

Turning rivers into a classroom

Rona Dixon

Mrs Rona Dixon is a teacher at Holbeach Primary School in Catford, London, UK. Her school participated in the LIFE QUERCUS project.

"I knew when I was 10 years old that I wanted to be a teacher and I've been teaching at Holbeach Primary School for about 13 years. In the past, environmental issues would not have been talked about with the children. Today they are not only talked about, but we work practically with the children to achieve goals such as reducing our carbon footprint and minimising waste. Sustainability is now part of the curriculum and is integrated into literacy and topic lessons.

Opening up access to a local river

There is a park next to the school called Ladywell Fields and, although people always knew there was a river there, it was not ever something you thought about using with the children. There was a lot of ground cover, so you could not actually see it very well; it was behind iron gates and you could not access it very easily. It was not a safe area to take a class of children and a lot of litter had built up in and around the river.

The father of one of the pupils was involved in developing the LIFE project, QUERCUS. He asked if we would like to get involved and we did! We already had a connection with the park in two areas. There is an old ticket office for the train station on the edge of the park and it was transformed into a classroom, which was available to schools in the area to use for lessons. We also had an area that the school was officially responsible for looking after, but which was padlocked up and unusable for many years.

The project totally re-routed the river. It took about a year to change the channel so that it now comes right through the middle of Ladywell Fields and is no longer hidden behind iron gates. They also put in a lot of bridges and meanders so that people could walk across and see more wildlife and have easier access to the river.

We could not get too involved with the children when it was being re-routed - it was a lot of work with heavy machinery. However, we built it up so that a variety of classes in the school went to the ticket office classroom and worked with the QUERCUS project school liaison officer. They took part in fieldwork, saw the re-routing work being done and learnt about the river and its surroundings.

The children played an important role clearing rubbish from the area. One of the most exciting aspects of the project was seeing the children in the water cleaning it up – many of the children had never been in a river before.

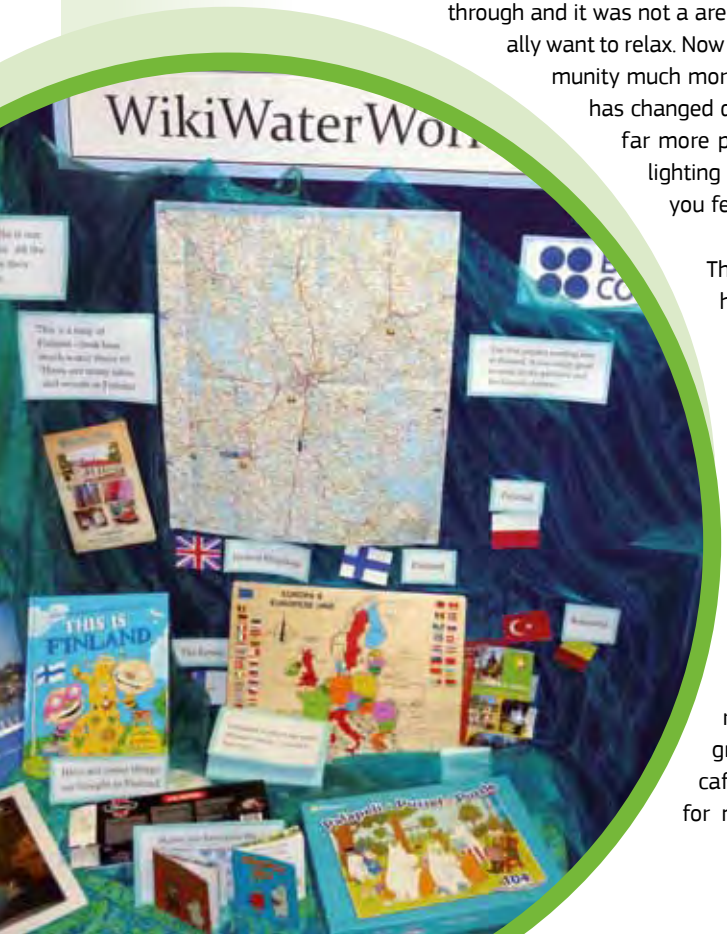
When the project was up and running, we worked with QUERCUS to open up the area of park that we were re-

THE PROJECT

The QUERCUS project was a partnership between the London Borough of Lewisham, Chester City Council in NW England and 's-Hertogenbosch in the Netherlands. The project's actions have enhanced river corridors in each of the three cities, turning problem areas into an attractive feature of an urban environment.

sponsible for. The school council (made up of two representatives from each class, who hold that position for one year and represent their class in meetings which influence decision-making affecting the school) was asked how they would like to use it. The children decided to create an outdoor classroom, with logs to sit on. The project also helped dig a pit and the school paid for a pond lining to be installed as we discovered that toads have a route from that area down to the river. The project gave a new impetus to use that area.

Before the project, the park often felt dangerous to walk through and it was not a area where you would really want to relax. Now [it] is used by the community much more and the atmosphere has changed dramatically. There are far more people around and the lighting seems much better so you feel much safer.



The children have helped, because once they have gone there with staff, afterwards they tell their families and take them there and point things out to them.

It has taken a few years for the shrubs and planting around the river to fully develop, but now the river is totally integrated into the park. A cafe, which was closed for many years, has reopened close to the river and it is an area where people want to meet. Near the cafe is a very shallow area of the river and a small under-fives play area has been installed alongside.

New learning opportunities

The LIFE project dramatically changed the school's use of open spaces for teaching. It has made learning more meaningful to the children. In the past, when we studied rivers we organised a trip to see the river Darent in Horton Kirby. We had to hire a coach - our time at the river was short and it was an expensive day.

By making the local river Ravensbourne accessible, it has made local learning in and outside of the classroom more exciting. Now we have safe access to an area where we can lean about the scientific and geographical aspects you associate with rivers. We can measure the width of the river in different places, the speed that something moves down the river and so on.

The work that we do on habitats, animals and plants and everything that lives in and around a river has now become something we can do from close observation, including samples, rather than just from a book or the Internet. Even things like the water cycle, which we always used to teach in the classroom, can now be taught by the river with practical reference to parts of the cycle.

We have even started investigating other aspects of the river, such as tracing it back upstream to its confluence with the River Pool and taking walks up there as well. That is purely based on the access that is now available.

The children's direct engagement with the river has started lots of interesting discussions about issues such as the river's biodiversity and how the rubbish got into the river. It helps the children extend their thinking about what is right and wrong: you question more and analyse better when you can interact with the space rather than from a book or the Internet.

> *"The LIFE project dramatically changed the school's use of open spaces for teaching. It has made learning more meaningful to the children"*

The children have continued to be involved in decision-making about the river. [They] are still active in cleaning activities and also worked on an exciting project to restock the river with fish.

We think and hope the local community will continue to protect the area and the school will continue to contribute through cleaning activities with the children. The major work has been done to improve the river and hopefully now it will sustain itself. Local people are definitely more aware of the changes in Ladywell Fields and some of the primary schoolchildren involved in the project are already in the secondary schools and hopefully retaining their positive connection with the space."

Project number: LIFE05/ENV/UK/000127
Title: QUERCUS - Quality Urban Environments for River Corridor Users and Stakeholders
Beneficiary: Lewisham Municipal Authority
Contact: Paul Chapman
Email: Europe@lewisham.gov.uk

Children's friend Boo

Keis Todorov, Maria Dimitrova, Vladimir Angelov

Keis, Maria and Vladi are 8-9 year-old children from Sofia, Bulgaria.

The Eco-Animation project (**LIFE07 INF/UK/000950**) used LIFE funding to create 'My Friend Boo' (www.myfriendboo.com) – a series of animated stories designed to educate, entertain and inform European children about water consumption, pollution and waste. The project understood that creating sustainable long-term solutions to our environmental challenges requires engaging and educating our young people about what all of us can do to make a contribution.

We asked Keis Todorov (aged 8), Maria Dimitrova (9) and Vladimir Angelov (8) – who attend the 120th Primary School, Georgi St. Rakovski, Sofia – to watch the videos and give us their reactions to the stories and the messages they contain. They watched the cartoons for the first time and gave their views afterwards to teachers at the children's centre Art Land in Sofia, January 2012.

All three children said they enjoyed watching My Friend Boo, with Maria in particular saying she enjoyed it "very much". The My Friend Boo stories use key sequences that repeat in each programme so that there are parts the children recognise and look forward to, in amongst the new messages. The success of this approach was demonstrated during the project development through testing the cartoons on children aged 5-8 in five EU countries: Italy, Ireland, Belgium, Poland and Bulgaria.

My Friend Boo captures children's attention and imagination through the use of situations the children can understand, magic and humour. In each story, the children consider a real life issue around water use and turn to Boo for help. Boo is a magical teddy bear who lives in the attic. When the children turn a magic key in his back, Boo comes to life. With his catchphrase "All aboard!" he then invites the children to ride a magical carousel on a journey of discovery that will answer their questions.

Children enjoy Boo's adventures

The children watched the three episodes on water and took on board messages from each. Each child had their favourite. Both Vladimir and Keis liked the episode "The

THE PROJECT

The Eco-Animation project created a cartoon series and teaching materials to explain key issues around water consumption, pollution and waste to young children. The 'My Friend Boo' videos have been made available and broadcast in many languages across Europe.

Big Picture" best. In this story, Boo turns his magic carousel into a kind of boat which takes the children along a river to see how farming and industrial activities threaten river-based ecosystems. Maria explained its core message succinctly: "Water is important and everything depends on people. Where we are polluting the water, we need to make filters".

The characters in the story learn how everyone's actions impact on water supplies and how we all need to work together to protect them. The story helps children understand that, as Vladi puts it, "it is very important to keep water clean. If we pollute water, the rivers, seas, lakes, plants and birds will die." They see that creating a wetland could filter the water and create a home for wildlife.

Maria's favourite story was "Victoria's Wetlands" in which Boo takes the children on a magical journey to meet Victoria, a line-dancing water vole! Victoria is sad and lonely because pollution from a paint factory has driven all the other plants and animals away. The children find the guilty factory and help its owner install a filter and create a wetland to clean the water before it enters the river. Boo helps the children understand that pouring paint down the sink at home also causes pollution. Maria is convinced. "I won't throw paint into the sink!"

In the episode "It's Only Water" the children leave a tap running, so Boo takes them to another planet where they see that wasting water by leaving taps on, dripping taps and overwatering of gardens can lower water levels in rivers and lakes. As Vladi understood, "Boo says that we needed to save water because the rivers will become dry." Keis remembered the key message that "If you leave the tap on, there won't be enough water."

"It is very important to keep water clean. If we pollute water, the rivers, seas, lakes, plants and birds will die"

Children understand Boo's messages

My Friend Boo succeeds in getting important environmental messages over to children in a fun and entertaining way. The children particularly remembered avoiding wasting water as something tangible that they can do in their own lives. "We need to make big efforts to save the water resources," highlighted Keis after seeing the cartoons. "I want to do some of the things [Boo says]." Vladi also said, "I remember that I need to save water."

Boo explained that such waste can cause water shortages in dry seasons and is also a threat to habitats and the species that depend on them. Maria picked up on the message that "we need to save water, because this would be better for the natural environment." Vladi understood that everyone needs to be careful with water "because we keep the world for the others around us". The children have clearly retained the key message at the end of each story that reducing consumption, pollution and waste of water "means a better world for you and me, and all the plants and animals!"

Boo and the other characters also give some practical ideas for saving water, including more efficient showerheads and toilet flushes – much to the amusement of the child characters! Boo explained and Vladi remembered that "we should water the plants with rain water" to protect the valuable clean supplies in our taps.

The interviews with the children highlight that children not only take on board Boo's messages for themselves, but are keen to take the messages back into their homes to change their family's habits – a key added-value of educating children. Maria was clear that, "I will tell my mother [about the things Boo said]". Vladi and Keis also said that they would tell their families what they had learned.

Finally, having understood "The Big Picture" from the Boo stories, Maria was excited to hear that the videos were also being shown to children across Europe and are available in more than 15 languages: "Great! Now they will also know to save water!" Whilst Vladi had his own particular contribution that he wanted to make to saving water, which his parents might not be so pleased about: "Yes, I won't wash my hands for so long!"

Project number: LIFE07 INF/UK/000950
Title: Eco-Animation: A cutting edge cartoon to raise awareness on climate change and sustainable use of natural resources among European children
Beneficiary: Business Solutions Europa Limited
Contact: Luigi Petito
Email: luigi@bs-europa.eu

LIFE builds relationships to tackle heath fires

Tim Spring

The LIFE Nature Dorset Heaths project in southern England is "the most fulfilling thing I've been involved in in 25 years in the fire service", says firefighter Tim Spring.

Tim Spring is the Service Delivery Manager for Bournemouth, Poole and Christchurch for Dorset Fire and Rescue Service. "I'm responsible for all of the front-facing outcomes of our service, whether it's prevention, protection or actual response." he explains. Bournemouth, Poole and Christchurch is "a conurbation of around about a third of a million people - it fluctuates as a tourist destination - and we've currently got seven fire stations in the conurbation, with 10 front line pumping appliances, plus Land Rovers, that kind of thing."

Mr Spring has been with the Dorset Fire and Rescue Service for 10 years, joining around the time that the Urban Heaths Partnership began the LIFE Dorset Heaths project (July 2001-June 2005).

Heath fires were a particular problem in the area covered by Redhill Park Fire Station in Bournemouth where Mr Spring was station commander for six-and-a-half years: "232 in 2002, I think, when I took over. With 200 heath fires, 200 car fires a year there was a clear focus that needed to be put on prevention."

Education was an important part of that focus. "I'm a fire investigation officer and heathland fires are probably the most challenging in terms of proving what went on," says Mr Spring. "But if you just look coincidentally at the school opening hours and the school holiday times, the vast majority were arson."

Heath fires are not just a nuisance; they can also be deadly. "I'm not a scientist, but what I have been is caught out a couple of times by heath fires," recalls Mr Spring. "The amount of radiated heat which can be generated by the vegetation, particularly the gorse is really, really scary. The last firefighter in Dorset to die in flame was putting out a heathland fire on the Overcliff down by the seafront. They are incredibly dangerous, they're incredibly fast-moving; they are very, very difficult to manage."

To get across the fire prevention message, Mr Spring built on fledgling partnership work established by Steve Shuck, Dorset Fire and Rescue's area manager for Poole, and the LIFE project beneficiary, Urban Heaths Partnership (UHP). In terms of education, Mr Spring says modestly, "all I did was piggyback on the work that Tess [Cross – LIFE project education officer] and Heather [Tidball – LIFE project manager] were doing. Tess had written some really good presentations - we went and did joint deliveries with them. Tess had been employed as a teacher, so had a brilliant way of engaging with the young people, but to support that

by having a fire engine and fire fighters there it just really made the kids engage," recalls Mr Spring. "It just worked really well: we gave her credibility; she gave us the ability, if you like."

Engaging Dorset's schoolchildren was one important outcome; perhaps even more significant was the role LIFE played in establishing strong working relationships between the UHP, fire and rescue, police, local council, friends of the heaths and other stakeholders and community groups. Mr Spring well remembers his first visit to a meeting of the local heaths crime reduction partnership: "It was the first time I'd ever actually seen a 30-way domestic (dispute)! Everyone had a different view and everyone felt very passionately about the heathland."

Finding something that all parties could agree on ("we want to see a reduction in heath fires and we hate off-road motorcyclists"), Mr Spring went along to the next partnership meeting and made a suggestion: "We all lay down our arms and we work on the heath fires, we work on the off-road motorcycling, and if we can tidy those up it would be nicer for everybody...[Illegal] off-road motorcycling was a massive problem when mini motos were all the rage."

With the LIFE project providing a framework, new relationships were built between the various parties to achieve these common goals. For instance, by requesting support from the police for 'traffic management', rather than 'heath fires', a lower priority response, the Fire and Rescue Service were able to tackle fires quickly and without massively inconveniencing commuters, as had been the case. Similarly, a scheme was set up to train volunteer wardens, who would be able

to accurately inform the firefighters of the location of a heath fire, and of any special features that were a priority for conservation (e.g. colonies of sundews; breeding sites of protected fauna).

> *"It was a really, really enjoyable thing to be part of: the outcomes were fantastic"*

"It was very, very effective," recalls Mr Spring. "We got accurate calls, we could deploy the right resources, we knew where the best access point was, we could prioritise the most important environmental risks."

The LIFE project was essential to this process, he believes: "I wouldn't have met these people, wouldn't have had that close working relationship, wouldn't have been able to have the frank conversations with the police inspectors had it not been for the LIFE project. It's been a very, very useful framework."

The effectiveness of the framework is shown in his station's heath fire statistics: "The outcome of all this is that the stats went from 232 to 32. In 2006, the hottest, driest summer, 40 degree heat, I think we had something like 11 fires on the heathlands. The following year we got it down to four," says Mr Spring proudly.

"It's nice to get the outcomes like that, but what was massively satisfying for me, and it's still the most fulfilling thing I've been involved in 25 years in the fire service, was the relationships that were built around that work across disparate groups that clearly weren't getting on before. There isn't anyone on that group that if they rang me at 3 o'clock in the morning I wouldn't go and help them; six years on I know the same would apply to others."

Building on LIFE's legacy

The partnership approach established during the LIFE project has become "mainstream now", adds Mr Spring. "The local community heathland meeting's going on at the fire station, the police are fully engaged in it. It was a really, really enjoyable thing to be part of. And yeah, the outcomes were fantastic!"

The seeds sown by LIFE are still bearing fruit in other ways, including an annual training session run by Dorset Fire and Rescue with the volunteer group and the heath wardens. The fire and rescue service also supports a current UHP education scheme called the 'arson courtroom drama', where the UHP Education Officer visits schools and runs a drama session based around the trial of a pupil caught setting a heath fire, with the children playing the parts of the police, judge, firefighters and so on. "Both my children have been through it and it has changed their perception" says Mr Spring. "Heath fires were just something that happened when I was a child and now it's definitely seen as a very, very grubby crime."

As well as the satisfaction of being involved in a very successful project and in seeing active hostility between people turn into a strong partnership, Mr Spring says it has also changed some of his views on nature conservation: "I went to a fire in May, a 10-pump heath fire, and I got put on the spot to do a live radio interview. One of my colleagues, his wife is an environmental protection officer, and she came back with some very positive feedback because I actually felt comfortable, I knew what I was talking about. We'd lost a section of heathland that was on a southern facing upslope and I was able to expand on that as a very healthy environment for some of the protected reptiles and all that kind of thing. I'm not an environmentalist - previously I was an avid off-road motorcyclist (!) - as far as I'm concerned animals are things you have with chips! I'd never shown any interest; now I'm very keen on that kind of thing."

THE PROJECT

The Dorset Heaths project pioneered a new approach to conserving urban heaths, revolving around educating schoolchildren, improving the ability of the Dorset Fire and Rescue service to tackle the fires and developing a volunteer warden scheme.

Project number: LIFE00 NAT/UK/007079
Title: Dorset Heaths – Combatting urban pressures degrading European heathlands in Dorset
Beneficiary: Dorset County Council, Planning Division (Urban Heaths Partnership)
Contact: Heather Tidball
Email: urbanheaths@dorsetcc.gov.uk

Christina Böckl

LIFE lays a foundation for renewable building

The S-House is a remarkable building, but what's it like to work there? Or to design or build houses made from straw or other renewable materials? We meet two of the building's residents, a man who has built a house insulated with straw bales and two students learning about using renewable materials in construction.

The S-House is a multi award-winning demonstration building in Böheimkirchen, Austria constructed with the support of the LIFE programme (**LIFE00 ENV/A/000243**) by the Centre for Acceptable Technology (GrAT). Designed to improve energy efficiency, promote use of renewable energy, and find efficient uses for renewable raw materials for an office building, notable features of the building include the widespread use of straw bales in construction, an innovative "straw screw" for mounting wooden planks on bales used for insulation, stone flooring to capture and retain heat and a biomass storage stove. The S-House continues to go from strength to strength as an exhibition and information centre and is currently being used as a training base for actions forming part of the LIFE+ project, RENEW BUILDING (**LIFE08 ENV/A/000216**). This seeks to disseminate know-how about construction methods that use renewable resources and natural materials to architects, builders, planners and others in the trade.

The residents

Christina Böckl is a secretary with GrAT and has recently started working in the S-House part-time following the birth of her daughter. "It's an interesting building because it's totally renewable and ecological," she says. "It's much better than the place I worked before - a large office with a lot of people inside. [That] was often very noisy and the air was very bad because you couldn't open any windows, so it's much better here."

Ms Böckl also says it is "interesting because there are always a lot of people coming to have a look and to get some information about this kind of building... we had some people from Slovakia...a Korean group...mostly from Austria but also a lot of international visitors." Large numbers of visitors do have one drawback however: "Sometimes it's a little stressful when you have 50 people all wanting something to eat with our little kitchen, but yeah, it's quite good," she smiles.

> *"I think it's always good if you have the possibility to buy local, it doesn't matter if it's about food or if it's about construction materials"*

"My father is a carpenter so I know a lot about wood and wood construction, but I have learned a lot about straw bales and ecological building facilities here," explains Ms Böckl. She adds that her father is "very excited about the place because of the wood construction and all the other projects we do here." Her family's main concern though is that she has a good working environment, "but they also think that it's good that I work for a company that takes responsibility for ecological issues," she says proudly.

Since starting work in the S-House, Ms Böckl is very much a convert to the cause of straw bale construction, in fact, if she was building or renovating her own home, "as far as what I know now I would think of it and also try to use it as far as possible," she says.

"I think it's always good if you have the possibility to buy local, it doesn't matter if it's about food or if it's about construction materials. I think that's a very good thing to strengthen the region itself: to create new jobs, to secure existing jobs; also because of the transport, the CO_2 emissions," believes Ms Böckl, before adding "It's not only the construction sector that should think green, I think the whole EU should think about the future of our children and future generations, and I think that's an important thing also to construct green buildings to leave a better environment for our children."

Originally from Bavaria, Stefan Prokupek studied architecture at the Technical University of Munich before transferring to the Technical University of Vienna, where he was first introduced to the theory and practice of sustainable building. He enjoyed this so much that he came to work for GrAT in 2007 as a Scientific Assistant/Trainer. He is now based in the S-House "two or thee days a week on a regular basis", helping to deliver training sessions as part of the LIFE+ RENEW BUILDING project.

For Mr Prokupek, working in the building is a pleasure, because of "the seeing and the smelling...the colours...the surfaces... This is something very special because of all the mostly natural surfaces - that you can see, for example the fibres inside the walls." Although he splits his time between Böheimkirchen and GrAT's office in Vienna, he says "I just like being here much more."

This "seeing and feeling" is a major benefit and legacy of the LIFE S-House project, Mr Prokupek believes: the difference between understanding it's a good thing to use renewable materials and the "wow" factor of being in a building that uses them. "If you really have something they can walk into, they can see, this is just the best thing to convince people. With this one example we have the chance to show them not just the plans, but what is here in reality."

This, he believes, will be particularly important when it comes to enabling budding architects to feel confident about using straw bale construction and other renewable approaches. "If you see people getting their hands on the materials and understanding how this type of construction works, then they can really support it. Then they can go to owners of buildings and tell them: this is a good solution, I know about it, I tried it, I know that it works."

Mr Prokupek is confident that the demonstration work of GrAT, realised through the LIFE S-House and RENEW BUILDING projects, will lead to concrete results: "I am convinced that some of [the architecture students] will definitely use [straw bale construction]. I hope I can tell you next time about the 15 buildings that were done like this."

Stefan Prokupek

One barrier to growth of the sector is cost. "These materials don't have a huge industry behind them, so they are just a little more expensive," laments Mr Prokupek. However, he concludes that it is getting easier for architects to persuade clients of the value of straw bale construction and that even worries about cost can be overcome. "If you really start planning in such a sustainable way, it doesn't actually need to be much more expensive, because if you know the materials and know about the combinations, then you could get to about the same price. That's why we want to teach the planners as well as the craftsmen - if they know where they have to work together then everything is much easier."

The home-builder: Josef Petschko

Straw, one might say, is in Josef Petchsko's blood. Raised on a small farm near St. Polten and having studied at agricultural college, in 2007 he began working for AGRAR PLUS, a company dedicated to the successful realisation of agricultural projects around heat from biomass and the manufacturing and marketing of agricultural products, including straw bales.

When it came to building a new family home close to his parents' farm, Mr Petschko was thus very interested in the possibilities of using straw bales for insulation. After speaking to colleagues who had been involved in straw bale insulation project, he attended an open day

Photo: Monique Braem

> *"We have to stop climate change. I think you can use this kind of construction or straw as insulation all over Europe"*

at the S-House in Böheimkirchen. "They were very interested in my project and they helped us with different measurements from the harvest through to the installation of the straw bales."

With this advice and working together with his carpenter, Mr Petschko adapted the design of his planned new home to enable the use of straw bales for insulation. The bales came from his parents' farm, the important thing being to achieve "good strong bales with a high density."

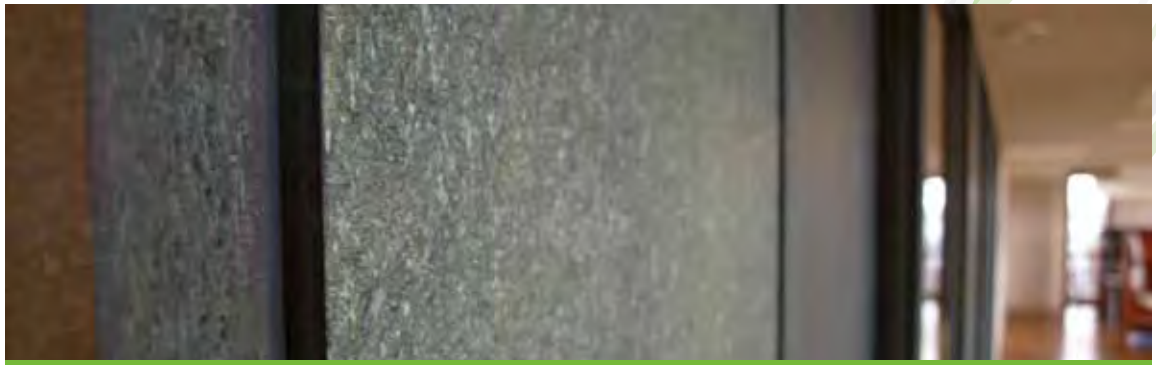
In all, some 1 000 bales were needed, with standard dimensions of 36 cm x 50 cm x 80/90 cm. Installation "was quite easy", recalls Mr Petschko, with the pre-planning meaning that most bales fitted easily into the wall. For those more awkward corner positions, a chainsaw was used to cut the bales down to the correct size.

Construction of the house began in October 2009 and Mr Petschko and his family have been living there since August 2011. "We enjoy it very much: it's a good climate in the house. A small pellet boiler is the only heating source we use."

Mr Petschko says that "friends are not at the stage to build their own houses but they are very interested" in what he has done. "Neighbours and members of the family came to have a look during construction and they are also interested in how to live in a straw house; it's not so common."

He adds that "in my working field it's also interesting because AGRAR PLUS has done a project on straw bale insulation and we are looking for further projects in this direction. The S-House team has got the certification for the straw bales for common use and I think we should keep in contact to get a complete chain from the farmer to the customer. We have the link to the farmers, we have a broad network over Lower Austria and further. I think this could be a way to bring straw bales into common use."

If someone builds a house in a city or town, they wouldn't have the links to a farmer who can supply straw bales or to carpenters willing and able to work with straw, points out Mr Petschko. "And so it's necessary to build up a community or a network that can offer this." EU support for renewable building initiatives such as the S-House through programmes such as LIFE is very important, he believes. "We have to stop climate change. I think you can use this kind of construction or straw as insulation all over Europe."



The architects (of tomorrow)

What do the architecture students think? Here's what two students from the Technical University of Vienna (TUW) who were doing practical training at the S-House had to say:

BIRGIT SCHWARZENBERGER
"Straw is a cool material - it's funny to work with it, but in Lower Austria there are lots of farmers, so it makes sense to use local materials. It's really cool using clay and straw and reed; I think there's so much concrete and polystyrene in the world, and these are materials that are sustainable."

PETER SEDLAK
"[On this load-bearing wall], this reed mat is fixed on a piece of wood and between there's an air gap, so it works like ventilation. It's two years old and there's no signs of any problems. For some simple building next to your house, it's very good, very fast. So for simple purposes, straw and reed particularly, even without a clay finish, I find very, very good actually."

Project number: LIFE00 ENV/A/000243
Title: S-House: innovative use of renewable resources by means of an office and exhibition building
Beneficiary: GrAT (Gruppe Angepasste Technologie)
Contact: Robert Wimmer
Email: rw@grat.at

4 MEET THE GUARDIANS

Guardians of land and sea: shepherds, graziers, farmers, fishermen and landowners have played a key role in demonstrating, through the LIFE programme, new and effective ways of marrying the demands of food production with those of nature conservation and environmental management. This chapter gives their personal perspectives on how LIFE has helped.

A passion for conservation with ponies

MARC PHILIPPOT

Marc Philippot from Wallonia, Belgium spends half his time as a teacher in a technical college in electronics and mechanics; "the other half of my time I spend on my land".

"My wife's family has a house in the Ardennes; I bought land nearby in 2000 for conservation purposes and I contacted administrations and associations to see what we could do to preserve it. I discovered Natura 2000 and a LIFE project. After they saw my land, they enlarged the project area because they thought that my land was very interesting. The valley has a rich biodiversity.

I have been interested in nature conservation since I was very young. I am a civil engineer by training, but I follow courses in nature conservation at the University of Liege. I saw that there was a way of managing the land with horses and cattle and so I bought the land with the idea of doing this. It was very fortunate that the LIFE project was taking place at this time. It was good for my initiative to receive the support of LIFE.

I learned with the project. I thought that when I bought the land that I would wait before cutting down the pine, but the project wanted to cut the trees immediately. It was a fast action to restore the habitat.

They had experts that I could benefit from, especially concerning the butterfly. We adapted the number of horses by hectare. I have three ponies. At the beginning I was concerned that there were so few animals; I thought that we could put more horses on the land. But I saw the value of their approach. They also introduced an abandoned area. It was a good learning experience.

Expanding horizons

At the beginning of the LIFE project I had six hectares and now I have 25 ha. I bought my neighbour's land when they cut down the pines, and also the Walloon government gave me some land that it had bought to manage with ponies.

THE PROJECT

The Tailles Plateau, which has altitudes of 500-650m, is the highest plateau in Wallonia. It contains several types of bog habitats, forests and grasslands and gives shelter to many rare and endangered species. A LIFE project was carried out to enhance the connectivity of these habitats.

Landowners sold land because it was not interesting to them without the pines (a hectare of pines is worth roughly €13 000). I was surprised by the lack of interest of some other landowners. The region gives money if they maintain the land in an environmental way, but they weren't interested.

When I bought the land, I wasn't aware of all the wildlife there, but I saw over the first year its tremendous richness. We discovered many plant species, including orchids, as well as birds such as red kite. The impact of the project is already observable in terms of biodiversity. They dug little ponds, which are benefitting dragonfly species. Deer are also more prevalent than before, and the large egret now comes every winter.

It's important to have a good relationship with the hunters. At the beginning they were very sceptical but now they are happy to see many deer on the site, so relations are good. It's necessary to regulate the numbers of wild boar and deer on the land because they destroy the grassland.

Stranger in a strange land

For the people in the village, I am ET – a strange being – because the land is not good for putting animals on. But they are surprised that I have such beautiful ponies.

"The impact of the project is already observable in terms of biodiversity"

The thing that surprised me also was the need for money. The first couple of years I made a loss, the third year I broke even and after that I made a small gain, which is enough to pay for the work. It takes a large investment of time to cover your costs. Maintaining barbed-wire fences and inserting posts in order to control the ponies takes me one or two days a week.

I bought two more hectares this year. I want to connect sites. But the LIFE project has finished, so it's taking a lot longer. I have contacted some local landowners who have agreed to sell me their land when their pines are cut down in 10, 15, 20 years' time. I want to have a good area of land where I can put the horses in spring time and not disturb plants and butterflies. The bad lands were easy to buy, but good land is much more difficult. I aim to have 40 ha; which is a good amount for a half-time teacher, half-time farmer."

Project number: LIFE05 NAT/B/000089
Title: PLTTAILLES - Rehabilitation of natural habitats on the Tailles Plateau
Beneficiary: Walloon Region represented by the General Directorate of Natural Resources and the Environment (DGRNE)
Contact: Pierre Gérard
Email: p.gerard@mrw.wallonie.be

Fostering a fondness for nature

A landowner from Denmark and a farmer from Portugal reveal how their involvement in LIFE projects has furthered their love of nature.

Carl Christian Rasmussen and Lisbet Kruse Banke

A butterfly flaps its wings

Carl Christian Rasmussen and Lisbet Kruse Banke are retired biology teachers and landowners in Jutland, Denmark.

"We have a well-known biologist in Denmark who specialises in butterflies and it was just by chance that he was in our area, and he thought that he'd try our road to see if he could find this specific butterfly: the marsh fritillary butterfly (*Euphydryas aurinia*). And there suddenly it was on our land.

The butterfly lays its eggs on a specific plant (Devil's bit scabious – *Succisa pratensis*) and a lot of habitat protection was necessary. We were contacted by the environment ministry. The local authority made a plan of how to take care of the area together with us. The whole plan was finished but there was no money. Two or three years later the LIFE project came up with the money.

We have always been interested in nature; that's why we bought the land 30 years ago. We have 120 ha and it's beautiful. The Natural Conservation Association lists rules on how to treat the area in order to maintain and increase the range of the butterfly – for example don't use fertilisers. We never used a lot of chemicals on the land so the conservation measures that the project carried out were easier for us.

But we can no longer make winter feed for cows – we have to buy it from other farmers. You can't plough grass fields any more. There are a lot of things that we can't do any longer. We are living in a land which is more sand than soil, but we were aware that the land was valuable, however. We have an extremely rare plant here.

We learnt a lot from the project because we followed it very intensely. Everyday we talked with the man who was in charge. We didn't understand why we had to remove those trees or do this thing whatever it was, so it really has been an eye-opener. We learned how to remove trees in a wood without damaging the other trees.

THE PROJECT

The ASPEA project achieved a favourable conservation status for the endangered target species through the strengthening of habitats: it protected more than 500 ha of existing and potential marsh fritillary butterfly habitats within three Natura 2000 sites in northern Jutland. The project serves as a good demonstration of restoration followed up by recurring activities such as grazing.

Project number: LIFE05 NAT/DK/000151
Title: ASPEA – Action for sustaining the population of Euphydryas aurinia
Beneficiary: Danish Forest and Nature Agency
Contact: Søren Kjær
Email: skn@nst.dk

We had a very clever forestry worker on the project. We learned a lot from him. We told him that we didn't want the remaining trees to stand like soldiers in the field – to be too vertical – and he understood what we meant.

There was a large area with a lot of pine wood and we thought that one day when we can afford it and we have time to do it ourselves, it would be so nice to get rid of that. And suddenly it happened. It became very beautiful, a much more beautiful area.

Developing interests

The initial biologist made the butterfly species sound so interesting. He brought pictures and explained why it was important to preserve this particular butterfly. In fact, we began to study butterflies, and all the kids in the area also became interested.

But we had one neighbour who wasn't interested in it at all. They wanted to raise the water level on his land, and there were many harsh words. Nobody was able to convince him of the worth of the project, so now he has sold his property.

We've also become interested in bird life because of the project and look out for birds every year. We count their eggs: it's a hobby. We've visited a LIFE project in Extremadura (Spain), through the bird watching organisations.

Since the project we've continued to look out for the special butterfly. We can see it moving around and growing steadily in number. When they found the butterfly it was only on a very small area, and now it's over a much larger area. The biologist told us that it's very dangerous if they are only found on a small area, therefore it's a success that it's now found in several sites.

Julio Canas

We've counted 40 different butterflies on our land. The place in Denmark where there are the most has 41. We need to find one more!"

One farmer's love of lesser kestrels

Julio Canas is a farmer in Castro Verde, southern Portugal, whose sheep graze on semi natural dry grasslands rich in steppe avifauna. He speaks with pride about his involvement in LIFE projects to conserve the endangered lesser kestrel.

"I have more than 1 500 sheep [mostly raised for meat – see box - but some wool is produced too]. I try to keep the grasslands 'healthy'. I always saw lesser kestrels in my farm, but I never paid attention to them. I loved to watch them getting out of their nests in my barn and hunting grasshoppers in my field. I did not even know their correct name.

But one day I saw two ladies (they were from the LIFE project) wandering around my property and I asked them: "What are you doing here? This is private property!" They said that they were looking for lesser kestrels, the ones you have nesting in the barn. "Ah! Ok, if it is that, there is no problem. I like those little fellows." They replied: "We would like to ask you whether you want to have more nests in your barn for free?" I immediately said yes!

I was the first one to have LIFE birds nests (in 2002), and immediately my neighbour farmers also wanted kestrel nests. I had two or three pairs and now I have 12 pairs. In Portugal, there are only 350 breeding pairs, and according to the LIFE project workers my property is the best area in Portugal for them to breed! I am proud to have these birds around.

If it wasn't for LIFE I would never have taken care of the birds or placed nests on my farm. I never received a 'dime' for allowing the nests to be placed or maintaining the good management of the habitats for the birds on my 700 ha inside the Natura 2000 network site. I don´t want money from CAP agri-environmental measures; it is too bureaucratic and not flexible. I can have more birds as things are."

THE PROJECT

The initial LIFE Nature project made a significant contribution to the Natura 2000 network and greatly benefited the target species lesser kestrel (*Falco naumanni*). It also helped draw up preliminary zonal plans for two of the three SPAs identified for action under the project, Vale do Guadiana and Campo Major.

Project number: LIFE02 NAT/P/008481
Title: Peneireiro - Re-establishment of the Lesser Kestrel (Falco naumanni) in Portugal
Beneficiary: Liga para a Protecção da Natureza
Contact: Rita Alcazar
Email: lpn.natureza@lpn.pt

THE PROJECT

The follow-up LIFE+ project, EstepÁrias, has built on this work and is extending farming and game management practices for steppe bird conservation and introducing a new kestrel breeding site. The project also targets the great bustard (*Otis tarda*) and little bustard (*Tetrax tetrax*).

Project number: LIFE07 NAT/P/000654
Title: EstepÁrias - Conservation of Great Bustard, Little Bustard and Lesser Kestrel in the Baixo Alentejo cereal steppes
Beneficiary: Liga para a Protecção da Natureza
Contact: Rita Alcazar
Email: lpn.natureza@lpn.pt

Developing nature products

The sale of meat from herds grazed on nature conservation areas is a potentially important additional income stream for farmers in many parts of Europe.

"Reviving a niche market really was what persuaded me to go ahead. I believe there are opportunities for a niche market for beef products," explains Robert Pritchard, a farmer who is grazing cattle on the Anglesey Fens SAC in the UK as part of an ongoing LIFE Nature project (**LIFE07 NAT/UK/000948** – see page 79). "You need long-term security to develop that through cattle breeding... With a long-term plan for grazing you would be able to develop that market," he believes.

One of the lasting outcomes of the Diljevallei project in Belgium (**LIFE98 NAT/B/000571**), which concluded in 2003, has been the development of a market for "Nature Meat" (*natuurvlees*) from the cattle grazed on the project sites. The cattle, which are not treated with antibiotics, graze on the unfertilised former wetlands in the summer and are fed with hay grown on the farm in the winter.

Marc Arnalsteens, one of the graziers involved, who sells the meat directly to consumers via his farm shop, believes that the presence of the cows in the nature reserve serves as a good marketing tool: "most customers are regular walkers in the area."

Arne Jönsson

View from a Swedish plateau

Arne Jönsson is a landowner and cattle farmer in Kinnekulle, Sweden.

"The LIFE project organisers said that we should go back to how the land was 200 years ago, when there were cows and grazing on this land, and I thought that this was interesting.

We agreed that whatever action was taken should be agreed on my side. This has worked out very well indeed. We have a meeting, we talk and we say that maybe we should cut down these trees and do so and so. This contact has continued after the project; every month we talk.

Some of the land was just bush, which is good for shooting game, but nothing more. Then we got the money to repair the land. This has been very helpful, and the objective now is to keep cattle. This has worked out for the best for both parties.

Most [fellow landowners] thought that it would be negative to have a nature reserve, because the value of the farm would go down. But the positive side was that they paid me a certain amount of money for starting the project...and we have made a profit out of it. We keep cattle on the land, and we had not hitherto thought of doing this, because we didn't have the possibility to clear the land of all the bushes.

It is profitable if you run it in the correct way, but it's not easy. It's requires a lot of effort and a lot of investment in building (infrastructure for the cattle): I got 25% from the EU but 75% I had to pay myself.

Nature in bloom

This alvar land contains very little soil on top of a limestone base. Cows compact the ground and the grass starts growing. But don't forget we also have all these flowers coming up, especially orchids, which were under the bushes and couldn't grow. And now they can open up and we have a lot of beautiful orchids on the land.

I learnt how this all could be done successfully. This bush land turned into very good grazing land in two years and is still improving. I was sensitive about conservation issues before the project, but maybe not as much as I am today. In the water holes we have found salamander. It's one the animals that is benefitting [from the project], but there could be many, many more.

We have had a lot of tourists walking on the trails here on the farm and also on the whole mountain. Since we opened up the land, they can see all around and down to the lake. It's nice for them to see this type of landscape. It's easy to come here; there are parking spaces. [built as part of the project]. New lodgings should be provided. I've been thinking about it, but there must be some interested person who can run a bed and breakfast."

THE PROJECT

Kinnekulle is a 265 m high plateau in southern Sweden that hosts a particularly rich and diverse set of habitats and species thanks to centuries of extensive grazing and mowing. However, small-scale farming has lost much of its economic viability in the last century and a LIFE project was established to restore habitats that depend on grazing or hay-making for their favourable conservation status.

Project number: LIFE02 NAT/S/008484
Title: Kinnekulle plateau mountain - restoration and conservation
Beneficiary: Västra Götaland County Administrative Board
Contact: Maria Thordarson
Email: maria.thordarson@lansstyrelsen.se

Crofting is a LIFE choice

Archie MacDonald is a working crofter on the island of Benbecula in the Outer Hebrides, Scotland.

ARCHIE MACDONALD

Benbecula is an island off the Atlantic coast of Scotland. It had a resident population of just 1 249 according to the 2001 census and many people on the island depend on traditional forms of farming activity along with developing sources of income such as rural tourism. The island is typified by crofting activities – a type of farming unique to the Scottish highlands and islands.

THE PROJECT

This ongoing LIFE project is working to secure and improve the conservation status of 70% of the world's machair habitat and associated species by marrying the interests of conservation with local agricultural practices, particularly the crofting tradition.

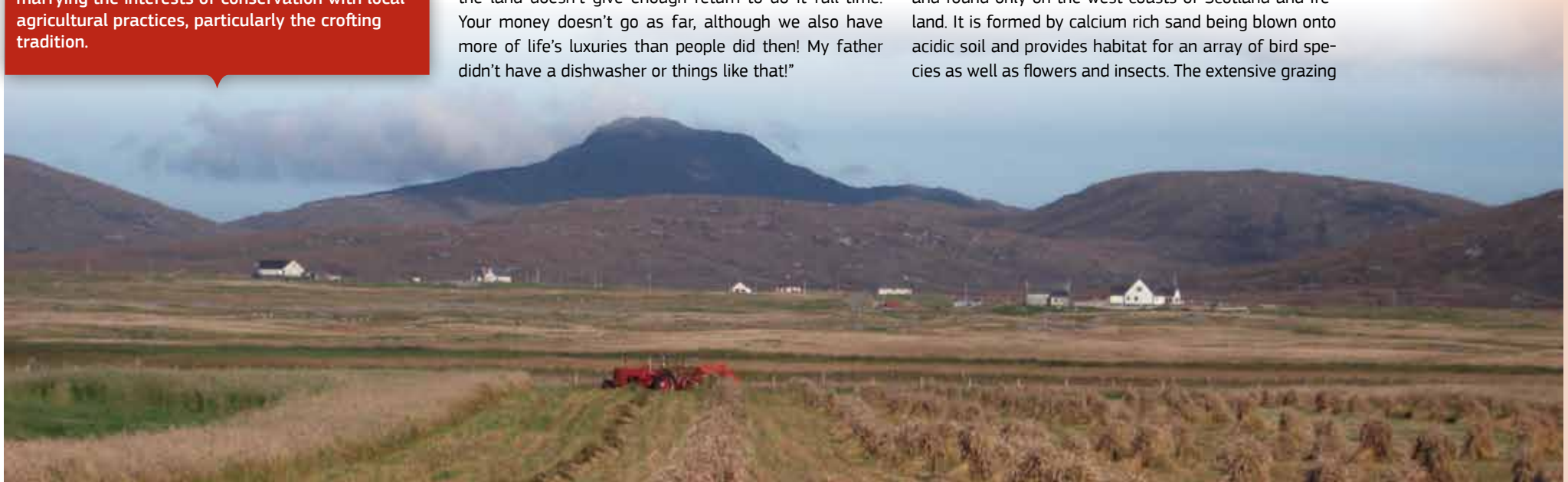
Archie MacDonald is a typical crofter. "I was born in Benbecula and went to school here, then I went to college in mainland Scotland and learned to be a joiner. I came back in 1978 to help my father with his crofts when he became ill and I've been here ever since. As well as the crofts, I run a small building business, which I've had since I returned to the island."

Archie's father was a full-time crofter with four crofts and he raised a family of four children with what he earned off the land. But times have changed. "I now personally run seven crofts. I inherited two on the east side of the island from a grandfather and I bought one. These days, the land doesn't give enough return to do it full-time. Your money doesn't go as far, although we also have more of life's luxuries than people did then! My father didn't have a dishwasher or things like that!"

The value of crofting

Crofting has tremendous heritage value on Hebridean islands such as Benbecula. It evolved as a means of sustaining populations after turbulent social periods in the 18th and 19th Centuries. It is estimated that today around 10% of people in the islands and highlands of Scotland live in crofting households. An individual croft is usually a smallholding of around 2-5 ha of land used for growing cereals for feeding livestock.

Benbecula is typified by the machair, which is a unique coastal habitat listed in Annex I of the Habitats Directive and found only on the west coasts of Scotland and Ireland. It is formed by calcium rich sand being blown onto acidic soil and provides habitat for an array of bird species as well as flowers and insects. The extensive grazing



and low intensity crop rotations of crofting also contribute to creating the conditions necessary for many ground-nesting birds such as the corncrake (*Crex crex*) and corn bunting (*Miliaria calandra*).

Archie explains the particularities of the land. "The soil here is very light and sandy and manganese deficient. We have tried growing mainland varieties of oats and barley here, but they only grow if you spray them with manganese and whatever else they are deficient in. The traditional island varieties of oats, rye and bere – a type of barley - can grow here without any additives. The soil here is also very unstable and doesn't hold the water, so we need more rainfall. Luckily we usually get it!"

Despite the strong traditions, important changes were starting to take place in crofting. People were using more heavy machinery – notably combine harvesters – to do the work rather than more labour-intensive practices. More people were keeping sheep, as cattle became harder to keep and more expensive. People also favoured big-bale silage processes - for generating fermented, high moisture fodder for feeding animals - where crops are wrapped in plastic.

Many of these practices were reducing the opportunities for birds such as the corncrake or corn bunting to breed successfully. They also had social disadvantages that threaten the future of the traditional way of life. "Because there is so much heavy machinery involved in crofting these days, we tend to keep children away from it, whereas in the old days the kids would have been more involved, learning about the practices as they grew up."

"The project has helped local crofters maintain some of their traditional activities and supported people who were on the brink of abandoning some practices"

Crofting on LIFE support

"The first I heard about the LIFE project was that I saw a meeting advertised. All the crofters were invited to talk with the leaders of the project. It sounded interesting, but we were also wondering what it was all about and what the catch was! They explained that they wanted to encourage the traditional ways of harvesting and cropping, rather than going totally mechanised.

"The project has helped local crofters maintain some of their traditional activities and supported people who were on the brink of abandoning some practices. I kept a hectare of crop for seed and the project cut it for me, which was a help. The traditional reaper-binder that the project bought means that you can cut the crop when the grain has a higher moisture content and leave it to dry and ripen. Bundles of cut crop are formed into a stack, known as a stook, to dry."

By encouraging the late harvesting of crops, reducing the amount of arable crop undersown with grass and favouring best practice cultivation techniques, including leaving bundles of stacked crops in the fields, the project hopes to provide better opportunities for ground-nesting birds.

"Now people are seeing that others are benefiting from the project and understand what the project is doing. They think, 'rather than put everything in big bale silage, I'll leave a wee field myself and do that'. The project has also got people asking questions about how we can maintain our traditional practices and, for example, where we can source the traditional machinery that we need.

"Most people here keep an eye on the number of corncrakes because we're still rather fond of them. People talk about what date they heard the first corncrake of the year. They're still there, but you don't hear so many of them and it's not to the same extent as when I was younger. Personally I try to help them and, for example, I harvest from the inside of my field outwards so that if there are any chicks, they can escape from the field.

"Through an agri-scheme we don't cut anything before 1st August, but the problem then is that on that date everyone is cutting and it is difficult for the birds to find an escape. We try to stagger it and delay some of the cutting. This is easier to do with the corn crops. But the grasses start to lose some of their nutritional value much sooner.

"Another area where the project really did help was in collecting more seaweed, and laying it on the crofts with their new spreader which is beyond the reach of the average crofter. Before artificial fertilisers came along seaweed was always what crofters used as it worked very well with the type of nutrient-poor soil we have here. However, a lot of manpower was needed, with people going down to the beach and forking the seaweed into carts to bring back to the crofts.

"I'd like to use more seaweed because the price of fertiliser keeps going up. The main obstacle is the amount

of work involved in collecting it and you have to be there at the right time, usually after bad weather, and before the weather changes and it gets swept back out to sea. I have my own spreader but it certainly doesn't have the same output capacity as the one the project introduced."

Remaining challenges

The LIFE project will run until the end of 2013 and although it is helping to change attitudes and understanding of traditional crofting practices, there are still challenges to be faced. "A particular challenge we have here is the grey-lag goose. Numbers have really increased in the past 10 years. I think it started with a local nature reserve and also with local gamekeepers doing such a good job of getting rid of the hooded crow which used to take the goose eggs.

"We don't think that the RSPB are keen on reducing the numbers of the goose, but on a bright night, a flock of geese can totally destroy a crop. Twenty years ago a large flock would have been 50 geese. Now you can get a visit from two or three hundred geese in one night and that's your crop gone."

The project has experimented with local goose-scarers, who physically move to where geese have been spotted to scare them away from crops with gunfire. It is also demonstrating the validity of cheap fencing as a long-term and sustainable protection of crops from goose damage. This seemingly simplistic method works because the geese cannot land in a field of crops and so have to enter along the ground. Finding methods that are affordably sustainable beyond the duration of the project is a key hope from the project for crofters such as Archie.

Project number: LIFE08 NAT/UK/000204
Title: Scottish machair – Conserving machair habitats and species in a suite of Scottish Natura sites
Beneficiary: The Royal Society for the Protection of Birds (RSPB)
Contact: Rebecca Cotton
Email: Rebecca.Cotton@rspb.org.uk

LIFE's graziers of the Hungarian grasslands

As part of an ongoing LIFE Nature project – LIFE07 NAT/H/000324 – the project beneficiary, the Hortobágy Environmental Association, is encouraging farmers in the town of Balmazújváros to start grazing again with native curly-horned Racka sheep. Here we meet four of the farmers that have taken up the challenge.

János Király

"I have been living in this area of Hungary for 61 years and working with livestock for 40 years. I had heard about traditional methods from my grandfather, who said the Hortobágy grassland has to be grazed, but I had no experience of traditional grazing before the LIFE project. I had been an intensive pig farmer and also kept horses.

I live close to the project site at Balmazújváros and I saw the long-horned grey cattle and Racka sheep and I was curious, so I found out more and decided to get involved in the LIFE project, keeping Racka sheep.

Racka are not particularly difficult to keep, but they need more space because of their long, twisted horns. They are also quite shy; it is not that easy to herd them with sheepdogs. They are not shy of people though and are very tolerant. We have a saying that sheep are biting in the front, kicking in the back and bucking in the middle, but I still love to sit on them!

The Hortobágy Environmental Association, has been a great help. Now I am thinking about getting more sheep and I also have my horses out on the project site. I like being involved in anything to do with the grassland here. I can travel on horseback all the way to Hortobágy village, 25 km away, just on grassland: that is wonderful.

I am looking into the possibilities of starting horse-riding tours of the grassland and the Racka sheep would be something good for people doing the tours to look at. So, indirectly they would be a source of income. I have been riding horses and competing in horse-riding events for a long time. I would love to pass on my knowledge of horses to visitors to this area.

The LIFE project has changed my view of nature conservation. Even smaller things like litter: now I tell people to pick up rubbish and not to drop it! I feel like a warden of the grasslands, not only maintaining the habitat, but also looking after it.

I would most certainly recommend to other farmers to try traditional, extensive grazing if there is enough grassland available. That is the only way to maintain the habitat - people cannot maintain the grasslands, if there is no livestock on it, it will go wild.

All being well, I am going to keep farming Racka sheep after the project. The meat from the sheep will go to my family. We really like Racka meat - it tastes better than meat from other sheep."

Ferenc Oláh

"I have been living in this area for 21 years and a farmer for the last 20 of those. I had been working as a warden around Balmazújváros prior to this project, so I was already thinking about nature conservation. I had been helping to protect birds, install nest boxes and all sorts of things. I am also a member of the Hungarian Ornithological Society.

I heard from the shepherd of the LIFE project about the possibility of keeping Racka sheep and other traditional breeds. I know the project area very well and I have some Racka sheep already, so I thought it would be a good idea to increase the number. I had 13 Racka sheep before the project.

I usually start work at 6 o'clock in the morning. In winter, I leave fodder for the sheep outside and also water and more fodder in the barn. I also go and check the sheep several times a day, especially during the lambing season. I then leave more fodder and water in the evening. Springtime is the least enjoyable time as I have to clean the barn after the sheep have been in there for several months. It takes two full days to clean up after them.

I much prefer keeping native livestock. With Racka sheep, even if the grassland is not as good, this breed can make better use of it than non-native breeds, such as Merino. The Italian market is looking for Racka meat. I am also thinking about using the milk, cheese and other products from the Racka for additional income.

"I would recommend traditional grazing to other farmers – the original livestock native to an area makes the best use of its grassland"

I would recommend traditional grazing to other farmers – the original livestock native to an area makes the best use of its grassland. Traditional grazing methods have evolved in such a way that it is a good way of farming."

István Szanka

"I live in Balmazújváros, where I was born. My family grows crops: corn, wheat and sunflowers. We started our involvement with the LIFE project this year [2011]. My grandfather used to keep Racka sheep when he was younger, so my parents know something about traditional grazing through him.

We live near to the project site, so the shepherd contacted us and asked if we would like to be involved and we said yes.

We are starting an agri-tourism business - my parents have built a guest house, so it will be really good to show tourists traditional Hungarian animals of the Puzsta, like the Racka and the 'szürke szarvasmarha', the Hungarian Grey cattle.

This project will help because if tourists come to stay with us, going to see the sheep will be one extra thing they can do. Maybe we can buy some traditional sheep-herding costumes, which the tourists could wear and take photos of themselves with the sheep. I think they would be really happy with that.

Visitors will also be able to eat the meat of the Racka sheep and know exactly where it comes from and it will be better-tasting than meat bought in a store.

My second degree is in agriculture and environment, so I think it is really important to look after nature. But you have to show and teach farmers first and tell them the rules after, rather than the other way round.

I think it's a good idea for farmers with the time and money to invest in traditional grazing, because they can get closer to nature. This will also stop urbanisation and allow people to stay in the village; that's important for everybody."

THE PROJECT

A high level of grazing is fundamental to the Pannonic salt steppe and marsh habitat targeted by this project, which is building upon the habitat management successes of an earlier LIFE project in Hortobágy: LIFE02 NAT/HU/008638. Long-term protection of this endangered habitat requires a sustainable grazing system which can only be achieved by getting the locals involved again and generating a long-term interest in keeping livestock.

József Bodnár

"I have been living in this area for 34 years; I was born here. As a child, my family was involved in farming, but I worked as an Internet radio DJ until three years ago, when I came back to traditional farming. This is really the continuation of my childhood.

I farm poultry and goats, as well as keeping Racka sheep. It's quite easy to work with the Racka, even though they are wilder than merino. They tolerate circumstances better, they are hardier: they were born to graze these grasslands.

The most enjoyable thing for me is continuing what I saw in my childhood - the cultural heritage. I stopped deejaying because it was not very rewarding culturally. I really enjoy reading about the shepherd life and culture and I find it a rewarding experience. Shepherd culture is our cultural heritage, especially in the Hortobágy region. Traditional grazing is a way of maintaining our culture.

The Hortobágy Environmental Association has helped me to increase my numbers of sheep. I really want to start generating additional income from cheese and milk from the Racka and my goats. The LIFE project has been perfect timing because it has helped me to increase Racka sheep numbers. I want to keep all the ewes and sell the meat of the males.

The LIFE project hasn't changed my views about the Hortobágy area, but it is helping me live out the traditional way of life that I like. In this area extensive grazing is very important.

The best thing about being involved with this LIFE project has been being able to get in touch with other people in the area with the same interests - both in cultural heritage and in keeping livestock such as Racka sheep. I plan to keep increasing the size of my Racka flock after the project ends."

Project number: LIFE07 NAT/H/000324
Title: HORTOBAGY SODIC LAKES - Restoration of sodic lake sub-type of the Pannonic salt steppe and marsh habitat in the Hortobágy
Beneficiary: Hortobágy Environmental Association
Contact: Zoltán Ecsedi
Email: hortobagy.te@chello.hu

Living with the wolf at the door

Local stakeholders – a dog breeder and two sheep farming families – share their experiences of participating in two Italian-led LIFE Nature projects that aimed to conserve endangered populations of wolves and bears while reducing conflict between humans and these large carnivores.

Wolves (*Canis lupus*), bears (*Ursus arctos*) and other large carnivores are usually perceived as a dangerous problem. People who make a living from the land (as well as the general public) see these animals as threats to themselves or their livelihood. These challenges are particularly severe in parts of southern Europe (Italy, Spain, France etc) where the species are re-colonising after absences of tens of years.

The LIFE projects – COEX (**LIFE04 NAT/IT/000144**) and the still ongoing EX-TRA (**LIFE07 NAT/IT/000502**) – have aimed to raise awareness and demonstrate a more positive coexistence between local stakeholders and these animals. Practical measures have included providing farmers with fencing and specially-bred livestock guard dogs to help limit damage from attacks by large carnivores.

Freddy Barbarossa is a policeman and part-time dog breeder in the Province of L'Aquila in Abruzzo, Italy

"I'm President of the Abruzzo sheepdog association – an organisation that was founded many years ago but in 2005 became a specialist in the rearing of Abruzzo sheepdogs – a special breed that can be used to protect livestock from wolf or bear damage. (These dogs grow up alongside their flocks and form strong bonds with the sheep.) Although the species has been in existence for over 2000 years, it had started to lose its working dog traits, as it was becoming more a breed for dog shows or a pet.

Abruzzo pups

We were slightly involved with the LIFE COEX project; we gave a couple of puppies to one of the farmers. Under the EX-TRA project, however, we're participating more actively. The aim initially was to establish a network of dogs for the farmers of L'Aquila; and now we're expanding the network to include Frosinone (Lazio), Tuscany and Orvieto (Umbria).

We've already gained a good deal of positive experience under LIFE in terms of trait selection through DNA screening and cross-breeding, in order to get exactly the type of dog that we need. LIFE has allowed us to carry out further DNA research that has enabled us to provide better guarantees of a [typical Abruzzo] dog than in previous years. We've also received feedback from the original shepherd and this has been very helpful for us.

We've produced a manual with the basic guidelines and we also run training courses, started under LIFE, for the farm-

THE PROJECT

The COEX project implemented a series of practical measures to stimulate the use of tools to prevent the damage caused by wolves and bears on livestock in five European countries. A key result was an improvement in attitudes and knowledge of stakeholders about large carnivores.

Freddy Barbarossa

THE PROJECT

The EX-TRA project aims to transfer the best practice and lessons learned from COEX into new areas. In particular, it is seeking to expand the use of damage-prevention tools – such as guard dogs and electric fences to protect livestock – and to provide the relevant authorities with the necessary knowledge about conflict management.

ers, especially at the moment when we hand over the dog for the first time.

A major challenge was to find sheep farmers who were willing to participate in the scheme. Once we had worked with them and they'd seen that the experience with the dogs was good, they then started talking about it to their colleagues. It's all word of mouth. They take a long-term view and realise that if they invest in the dogs, it will help in avoiding any further damage or problems in the future."

Simonetta Basili, Angelo De Planu

Angelo De Planu and his wife Simonetta Basili are sheep farmers in Orvieto, Umbria (Italy)

"We got involved in the LIFE COEX project as we were having some problems with a wolf. Before [the species] reappeared in the Orvieto area, the sheep could graze freely day and night. Since the wolf started appearing and killing our sheep, however, the only way for us to protect the flock was to stay and watch over the sheep during the night. We had made formal complaints for compensation to the authorities on two to three occasions. However, this is a long procedure and doesn't fully cover the value of the sheep that have been lost.

Sleepless nights

We decided to participate in the LIFE project as; frankly, our quality of life had really been lowered." ('I hadn't slept properly in the last four years," says Angelo. "I would stay awake all night in the truck and the sheep were all around me, as they knew I was protecting them. But when I did occasionally fall asleep, the wolves would manage to come and kill some of the sheep, or start worrying them.")

"When the ewes become scared their adrenaline level rises and this can cause miscarriages later in the year. Moreover, the ewes produce less than half their usual amounts of milk, or it can even go to zero, due to the high stress they suffer. So we have another economic loss.

We decided to try the electric fencing and the sheepdogs. We were a bit sceptical about the fencing: we couldn't believe that a 1m fence could actually keep a wolf away, but we noticed the difference immediately. We also have five dogs that were bred from the dogs that were donated during the LIFE project. These dogs have integrated perfectly and immediately with the flock and they've protected the sheep from attacks very well.

"[The] dogs have integrated perfectly and immediately with the flock and they've protected the sheep from attacks"

Afterwards everything has changed for the better. We've found that the lambs are no longer disappearing, that is, we would sometimes lose some 30 to 70 lambs during the breeding season. An occasional sheep still goes missing, but not the lambs.

Wily wolves

Later on we discovered that the wolf had learnt how to jump the fence, so we added an extra strip to make it higher. We advised the beneficiary that it would be useful to have the fencing made higher from the start. With this extra height, the attacks have stopped and we no longer have to submit compensation claims to the province!

I wish there were more projects such as these; they bring about positive changes to the land and to all those who live on it. People's attitude changes too and they start to see that it is possible to improve their lives in harmony with nature and with the authorities."

Project number: LIFE04 NAT/IT/000144
Title: Improving coexistence of large carnivores and agriculture in S. Europe
Beneficiary: Institute of Applied Ecology

Project number: LIFE07 NAT/IT/000502
Title: Improving the conditions for large carnivore conservation - a transfer of best practices
Beneficiary: Gran Sasso and Monti della Laga National Park
Contact: Annette MERTENS
Email: mertens.annette@gmail.com

Turning the tide on sea turtle conservation in Sardinia

Giuliano Fara, Laura Pireddu, Daniele Denurra

LIFE Nature support (2004-2008) helped to establish a centre for rehabilitating injured sea turtles on the small island of Asinara, just off the coast of Sardinia (Italy). Outreach work with fishermen and other marine sector stakeholders, as well as the general public, has been an important part of the centre's conservation work.

"Being the only recovery centre in Sardinia, we receive sea turtles that need assistance from all over the region and from Corsica," explains Laura Pireddu, Manager of the Loggerhead Sea Turtle Recovery Centre of Asinara. "The animals we help are mainly those that have been found in distress on the coast, or which have collided with boats. We also care for turtles that become caught up in fishing gear but incidents like this are less common nowadays following our awareness campaigns with the fishing sector. Thanks to LIFE funding we have a well equipped centre and we can deal with different turtle problems. We have a veterinary surgery and a series of rehabilitation sea water tanks which are used to house the turtles while they recover."

Turtle rehabilitation

One of the most common turtle problems that the recovery centre deals with is 'floating syndrome', an inability to dive for food. This condition can be caused by the animals swallowing plastic or other objects which block intestines, or by a bacterial infection from pollution. Internal and external cuts associated with fishing gear can also reduce the animals' strength to dive for food. Malnutrition and hypothermia can then follow.

Turtles suffering from these sorts of ailments and injuries have different periods of hospitalisation at the recovery centre. Some only need to stay a few months but others have been looked after for several years. Giuliano Fara from the centre's technical team describes how their longest staying turtle first arrived, "A sailing boat had found two turtles trapped together in a fishing line. They were fighting each other and by the time the animals arrived at the centre one had an eye missing, a broken fin and fractured skull."

Daniele Denurra, a vet at the centre, continues, "That turtle stayed with us for nearly three years and he was actually healthy enough to go back to the sea after the first year of rehabilitation. However, we did not know how well he

THE PROJECT

The Tartanet project enlarged the geographical scope of actions taken to protect the loggerhead turtle (*Caretta caretta*) in Italian seas. It established a sea turtle conservation network through five new rescue centres located in national parks and marine reserves, including on Asinara.

Inspiring change in the fishing community

"My name is Antonio Salis. I am a fisherman from Italy and I have spent all of my adult life working in the seas around Sardinia. When I was younger I remember there were many sea turtles in our area. We would see them regularly but they did not have any value to us as a catch so we did not think too much about them.

My feelings about the turtles changed though about 30 years ago after I accidentally caught one on my fishing lines. It had got hooked but apart from that it seemed to be unhurt. I'll never forget that day because I was wondering what to do with the turtle and whether I should take it home for its shell or if we could use its meat. Then I looked into the turtle's eyes and I had a huge change of heart. I knew that I had to free such a beautiful animal and that was the moment I think that I became a true environmentalist.

So I was very glad to be asked to be involved with the LIFE project, which was encouraging fisherman to take greater care of turtles and providing advice about how to rescue the animals if they were found in trouble. Laura from the project together with her colleague Giuliano from the national park authority gave me some extremely useful information about how best to make sure we keep our turtle population safe here in this part of Italy.

Turtle rescue techniques

I think one of [the project's] most important benefits was in raising awareness among younger generations from the fishing community about why and how to help the turtles. A handbook on different aspects of turtle assistance was produced and LIFE also helped us in other practical ways too, such as by paying for special kits that could rescue injured turtles without causing them additional harm.

Antonio Salis

These kits include a net which we use to protect the animals while taking them to the Sea Turtle Recovery Centre. In the past I would normally have used ropes to bring injured turtles on board the boat; the nets reduce stress for turtles and I have seen how well they work. I am especially proud of the last turtle that I brought back to Laura and Giuliano, because they named the animal after my boat, Cristina. This was a great honour for me personally!

When my son and I found Cristina we could see that she was having problems with her breathing and she looked in bad condition. We took her to the Tartanet Centre and they discovered that she had swallowed something bad which would have probably killed her if we had not rescued her. Thankfully she survived and I even got mentioned in the local newspaper which was a new and nice experience for me.

We had a big celebration, the "Tarta Day", when Cristina was released a couple of months later. I think the more people know about turtle conservation work, the better. I am very keen to tell people about what we have done and what they can do to help the turtles. I particularly like talking about the turtle protection work with my friends and colleagues from the fishing boats. Our discussions have definitely made a difference in the way we act towards these wonderful animals."

would cope with just one eye and one fin. We could not find comparable cases in the veterinary literature and we were advised to give him to a zoo. Of course we wanted to avoid this so we spent a long time getting him familiar with the sea again before we finally fully released him. A small satellite tracker was attached to him and this showed that he had survived because four months later he was recorded in waters off the coast of Tunisia."

Many similar good news stories have occurred at the recovery centre, including the significant example of a rare female green turtle (*Cheloniamydas*). "Some bathers had found her on a beach," recalls Ms Pireddu. "Her hind leg was badly injured so we were relieved when we learnt that it should recover naturally given the right type of care. She was named Green and we also attached a small tracking device to monitor her recovery after her release. Unfortunately she still had some problems and the tracker was helpful since we could identify her location and bring her back to the centre to treat her for hypothermia. Happily, her second release into warmer waters had better results."

Developing a partnership with fishermen

Operations at the recovery centre began in September 2006 when the first turtle was brought in by a local fishing boat crew. Ms Denurra points out that, "More than 70% of the turtles we see are either recovered or reported by fishing crews. The relations we have now built up with local fishing boats are really useful. Crews have been given the information they need to help us save the animals and because they are always at sea the fishing boats provide us with a constant look out for turtles at risk. We would not be able to be as effective as we are without the fishing sector's support."

"The communities here have given us good support and they like being part of the turtle protection programme"

Laura Pireddu agrees and recalls, "We did a lot of communication and awareness-raising activities with the fishing boats from all over Sardinia. We would go to the ports to talk to the crews in person. We also organised some group meetings to explain the recovery centre's activities, promote the use of turtle-friendly fishing hooks, and provide training in how to use protective nets as well as equipment for removing obstructions caught in turtles' throats. This helped us to develop good links with the fishing fleet. I think they feel involved in the activities of the centre and through the LIFE project they have become more sensitive about environmental issues" (see box).

Pierpaolo Congiatu, Director of the Asinara National Park notes that previously, "the fishing community were quite indifferent to turtles and it was unthinkable that a crew who had caught a turtle in their nets would phone a conservation body to report this. Nowadays it happens often. So the project helped in changing their ways... they increasingly recognise the turtle as an animal that they can share the sea with."

Communication outreach

A great deal of publicity and awareness raising work was carried out during the LIFE project. In addition to the aforementioned focus on fishing communities, this information campaign also reached out to a wide audience of other local residents and businesses, plus a large number of visitors. Schools were targeted and pupils received education in practical things to do if they found a turtle in trouble.

Through its PR work, "the project has helped us in the National Park Authority to gain close and strong support from local citizens," says Aldo Zanello, who is responsible for marine resources in the Asinara National Park. "This is appreciated and it makes life easier when local people are on your side. The communities here have given us good support and they like being part of the turtle protection programme."

Pierpaolo Congiatu reinforces LIFE's long-term benefits, emphasising that, "previously turtles were a bit of a myth but now they are real to people. The centre's viewing areas mean that everyone can now connect with turtles and this gives them a greater interest in looking after the environment. We are starting to build on this advantage through an expansion plan for the recovery centre that will assist more turtles and lead to even more public support for nature conservation."

Project number: LIFE04 NAT/IT/000187
Title: Tartanet, a network for the conservation of sea turtles in Italy
Beneficiary: Centro Turistico Studentesco e Giovanile (CTS)
Contact: Stefano Di Marco
Email: ambiente@cts.it

Helping a Rhine fisherman achieve a lifelong dream

Rudi Hell celebrated his 75th birthday in January 2012 and has been fishing the Rhine for as long as he can remember. Here he explains how LIFE has helped return a fish to the river he had not seen since childhood.

Rudi Hell

"I come from an old family of fishermen in Germany and my ancestors have been fishing on the Lower Rhine at Kalkar for more than 300 years. Both my grandfather and my father were fishermen. They taught me how to fish with nets and traps when I was very small - so you could say that my fishing 'craze' has been with me almost since I was born.

Although I have not been directly involved with a LIFE project, I have benefitted from LIFE funding which helped to support the fishing community in the Lower Rhine. This LIFE project has been important for me because it has helped to make sure that people will still be able to keep fishing on the Rhine in my part of Germany.

THE PROJECT

Cooperation between French and German conservation bodies led to the breeding and successful re-introduction of the protected fish species, allis shad, into the Rhine basin in Germany.

As a boy I can remember how important the Rhine's fishery was for local populations here. Back then, salmon and allis shad (*Alosa alosa*) could be caught in large numbers. Shad in particular were highly prized. News about good shad catches would spread like wildfire through the neighbourhood, spreading from one village to another. I recall how women from the villages would come running with baskets to try and get the best of the shad from the nets.

Those were different days to now though and my life as a fisherman has seen many changes in the numbers of shad and other fish caught on the Rhine.

Pollution problems

We started to notice a difference soon after the war as problems from water pollution began to rapidly alter the size of fish stocks. By the 1960s and 70s, there were significantly fewer fish. We would frequently see dead fish floating in the river and the water was often frothy with a disgusting smell. People stopped eating local fish and this had a major negative impact on the fisheries sector.

For example, one of my first jobs involved fishing, but as the fish stocks dwindled and demand fell, I had to find different work, so I became a bulldozer driver for a gravel company - but I never stopped my fishing.

Fishing is 'in my blood' so I continued to find time to keep fishing with creels (baskets) and nets on the Rhine, as well in the backwaters and the numerous local lakes. Thankfully, things started to improve in the 1980s as more wastewater treatment plants were built to tackle the pollution problems. As a result we started to catch fish again that we had not seen for a very long time. These were fish that I knew only from my childhood memories.

When I retired I was able to devote more of my time to my fishing. I found that it was possible for me to use the knowledge I had gained over the years to work with researchers from the University of Cologne who were exploring ways to get the fish stocks back up to their natural levels. I have now been 'fishing for science' for quite a few years and it is something I find very interesting.

Fishing science

For me I think that the people who spend a lot of time fishing are in a good position to understand fish and the fisheries. We may not consider ourselves as actual conservationists but we do know a lot about the fish and what is needed to maintain good fish stocks. We know that if we harm the fish stocks they cannot easily recover on their own.

For instance, during my science fishing I see lots of eels that have been injured by hydro energy turbines and I doubt many of these will ever make it to the Sargasso Sea to migrate. No wonder that these eels are now so threatened.

My scientific fishing means that I get special permission to use particular techniques to catch and monitor the stocks of different species. This is how I heard about the LIFE project. People from the university's research station had told me how the EU was helping to fund a project that was bringing together fishing experts from France and Germany to try to restock the Rhine with shad. This sounded like a much needed and very welcome project to me.

We had not found shad in the Rhine for a long time so the LIFE project was using shad that were still surviving in French river systems. They took the larvae from adult shad and then transported these to restock the Rhine. Their approach was successful because one day while I was out on my boat netting fish I looked down and I saw the first wild shad that I had seen in decades.

At first I couldn't believe my eyes, but I recognised it straight away as a young shad. I remembered how popular they had been in the past and the sight of the young shad bought back memories for me.

Having a young shad in my net was obviously a very important catch so I phoned the university straight away. They were all as delighted as I was that I had caught the first ever reintroduced shad on the Rhine. We of course were not just celebrating my personal catch but the fact that the shad was now living again in the river and this was a very positive sign for the Rhine's future.

Without the LIFE project it seems that the shad may not have returned for a long time but now I am seeing more and more young shad when I go out fishing these days. The LIFE project manager, Dr. Andreas Scharbert, told me that during the project they had introduced nearly five million shad larvae into the Rhine river system.

I think that it is good the way that the EU has helped to make this happen. I suspect without LIFE's help to set up the cooperation with the French, the 'Maifischprojekt' would have remained just a dream. Dr Scharbert was very appreciative of the support he had received from his French colleagues in the Gironde river area where the shad larvae were born.

Dream come true

Our dream has come true now and we are waiting for the next big step which will be when someone catches the first adult shad after it has returned from its migration to the sea. I look forward to that day a great deal.

This year I will be keeping a close look out to see if the first adult shad has come back to spawn again. As a person with a lot of good memories of Rhine fisheries, and someone with a lot of hope for the future of the river's fish stocks, the day that the first adult shad finds its way safely back to this part of Germany will be a good day in my life."

Project number: LIFE06 NAT/D/000005
Title: LIFE-Projekt Maifisch - The re-introduction of allis shad (*Alosa alosa*) in the Rhine System
Beneficiary: Landesamt für Natur, Umwelt und Verbraucherschutz Nordrhein-Westfalen, LANUV
Contact: Andreas Scharbert
Email: scharbert@rhfv.de

Solving a biogas problem

Giuseppe Cazzani is a crop farmer in the Emilia-Romagna region of northern Italy.

Giuseppe Cazzani

"I have a degree in Agronomy and I've been farming in the area of Medicina (Province of Bologna) in Emilia-Romagna since I was young. This whole 'adventure' started before the LIFE Seq-Cure project. I first became interested in the potential of biomass crops – maize, triticale and sorghum - back in 2001, through some German friends of mine. I went to visit these friends in Germany to learn more about how to set up a biogas plant on my own farm.

I was the first in the province of Bologna to do this and being a pioneer meant we probably suffered in the beginning, especially from a financial point-of-view. We had various choices to make but in the end, we opted to go for a bigger plant – producing over 1 MW of electric power. Today, this choice seems justified as we are producing more than 2.8 MW (of electric power). We also decided to go for a larger-size digestate tank – in retrospect this was another good decision; as this has allowed us to produce more high-quality fertiliser and has given us a competitive advantage.

We started producing regular biogas that could be sold on the energy grid in February 2008. In the beginning everything worked very well, but these plants are very delicate from a biological point-of-view. So, if you don't know exactly how the plant should function, and you push it to produce more and more, it can start to malfunction: It is a biological process a bit like our own digestion system, so it all needs to work perfectly, especially if you have to make it work to the maximum of its efficiency to avoid eroding the machinery.

At this time (i.e. in 2008) we got in contact with CRPA SpA (LIFE project beneficiary) and we learnt that they were carrying out the LIFE Seq-Cure project, whose aim was to set up demonstration energy farms and to analyse the potential of the biogas, wood fibre and raw vegetable oil chains.

We agreed to participate as one of the (13) pilot energy farms. The beneficiary was very responsive to our problems and followed us step-by-step, bringing us through this biological 'crisis'. Moreover, we worked with them in order to optimise our yields.

The LIFE project helped us in providing all of the scientific and practical assistance that we needed in order make the plant produce more efficiently. Nowadays I don't make a move until I get CRPA's advice. The collaboration between us continues, even if it is not so intense any more – thankfully! The aim is to prevent further problems so, whenever there is a doubt, we contact CRPA and ask them for their advice."

THE PROJECT

Seq-Cure successfully demonstrated that it is possible to implement three short production chains for renewable energy by respecting as much as possible sustainability criteria, while enabling the optimisation of energy production and increasing farmers' incomes. The project established 13 demonstration energy farms where various biomass crops were grown using different organic waste residues.

Project number: LIFE06 ENV/IT/000266
Title: Seq-Cure Integrated systems to enhance sequestration of carbon, producing energy crops by using organic residues
Beneficiary: Centro Ricerche Produzioni Animali - CRPA SpA.
Email: seq-cure@crpa.it

Pig farming cleans up its act

Francisco Esteve is a pig farmer in the village of Peñarroya de Tastavins, located in the province of Teruel, Region of Aragon, north-east Spain.

Francisco Esteve

"My parents kept pigs, so pig farming is something I've known all my life. We probably had around 20 pigs in a farrow-to-finish system where we bred and raised the pigs, feeding them up to market weight. That's how villages like ours worked, with pens next to each house making use of whatever land and space was available. My father took other work as a labourer - whatever was available - but the pig farming was an essential source of income for the family.

As I grew older, I started to help out; I got used to working with the animals and I enjoyed it. When I finished my studies, I went to work on a farm to learn more about the industry, then I made the step to doing everything myself.

When my father retired, I stopped breeding pigs and made the switch to feeder-to-finish farming. Other people send me piglets and I feed them up to 100 or 110 kg. When the owner decides, the animal is sent to the slaughterhouse and sold. I get paid a certain amount per pig.

An environmental challenge

I started to realise that we had a problem with pig slurry in our municipality. We had about 40 000 pigs, but only about 1 500 ha of useful arable land where we could spread the slurry. What is more, at any one time, particularly between May to September, up to 80% of the land would already be cultivated; so all the slurry would be tipped onto the remaining 20% of land. At times people were just trying to get rid of the slurry any way they could.

The ground could not absorb all the nutrients, which then drained off into the water courses. In rainy winters it was terrible. The river was filling with vegetation. Especially in the summer, when the water level was low, it was green with algae. The smell in the fields was also an issue. It was clearly environmentally unsustainable.

The existing environmental legislation was not able to provide a solution for managing the pig slurry. If we had suddenly enforced anti-pollution legislation then we might all have been in prison! You need to show people what they can do first and that it is affordable, and then you can enforce the legislation.

For the past eight or nine years I have also been mayor of my municipality, Peñarroya de Tastavins. As the council of Peñarroya, we went to the regional government of Aragon to explain our problem and see what solutions could be possible. Other localities faced the same challenges but farmers were not speaking out because they were clear that dealing with the challenge would mean greater costs and effort for them.

The Government of Aragon introduced us to SODEMASA – a public company that works to improve environmental management and sustainable development in the region. They suggested applying for a LIFE programme. I didn't know much about such European programmes, and when they said how much co-funding we needed to provide it seemed impossible. But the engagement of the regional government made it feasible.

THE PROJECT

The ES-WAMAR project has developed treatment processes and management systems for the environmentally friendly management of swine waste.

"These changes are essential if pig farming is going to have a future in a village like ours"

A management solution

Through the LIFE project we have introduced a management model for the slurry that demonstrates that it is possible to both avoid pollution and provide valuable fertiliser to agricultural farmers. Through some fairly simple organisation you can treat the slurry in a plant or take it directly to different areas where it is needed, reducing the nutrient burden on small areas of land.

Here in Peñarroya, we [built] a treatment plant that separates slurry into liquid and solid waste so that the solid part can be transported in a more concentrated form to farms, thus reducing costs. We have also introduced pipelines so that the slurry can be transported directly to the treatment plant from some of the farms even more cheaply.

Through all these approaches we are aiming to make it more affordable for farmers to deal with their pig-industry waste more appropriately. This does not have to mean fining people - the various subsidies that are paid to farmers could be made dependent on meeting waste management criteria. You have to reward those that are making the effort to do things in the right way otherwise they end up losing out.

Unforgettable experience

Through the project we have shown, for example, that it is possible to manage 300 000 m^3 of slurry per year in Tauste and Maestrazgo just by setting up a management system to bring agreements between pig and arable farmers. Everyone's attitude has changed from thinking that environmental concerns would be their ruin, to seeing that everyone benefits. The arable farmers save lots of money on fertilisers that are as good if not better than the ones they were buying before. The pig farmers are seeing that the slurry can have a value and that it doesn't have to cost them lots of money to dispose of it - and in some cases they can even make some money from it.

The project was an unforgettable experience. I saw it from the point of view of the farmer and of the mayor. The most complicated part was convincing local people that we needed to change the way that we operated and that we would need to invest in these changes. But these changes are essential if pig farming is going to have a future in a village like ours.

I'm very happy with the progress we made. At times it seemed almost impossible, when we saw some of the costs and when we were still looking for solutions. The day we inaugurated the treatment plant was a really special day because we had been working hard for a long time and now we were seeing the results!

Since the project we have worked to set up a biogas plant so that we can sell electricity to subsidise the treatment of the pig slurry and keep costs down for farmers. The idea is to combine pig and olive waste to generate biogas, and both solid and liquid fertilisers as before.

We have introduced standards for the sustainable application of pig slurry to the land. Analyses have already shown that we have reduced the amount of nitrate pollution on the farmland, but the problem is that the earth is still full of the excess nitrates from the past, which continue to affect the surface water. It will take years for these nitrates to return to their natural levels. Thanks to LIFE we have hopefully turned the corner."

Project number: LIFE06 ENV/E/000044
Title: ES-WAMAR - Environmentally-friendly management of swine waste based on innovative technology: a demonstration project set in Aragón (Spain)
Beneficiary: SODEMASA – the Aragon Rural Development Association
Contact: Arturo Daudén Ibañez
Email: adauden@sodemasa.com

Linking LIFE to the farm on Anglesey and Lleyn

Dewi Jones

Dewi Jones has the task of linking farmers with a LIFE fens restoration project in North Wales.

"I was born and bred on Anglesey. I studied agriculture in Aberystwyth many years ago, worked as a dairy herd manager, expanded from there to have my own animal husbandry contracting business and then for the last 14 years I've been the joint manager of Cadwyn Cymru - Link Wales: we're a machinery ring, a farmer's cooperative - one of many throughout Europe.

We've secured three contracts with the LIFE project: we're doing the grazing management and grazing husbandry and we're supplying the drivers for the cutting machine on the fen; we're also doing part of the small ground works - we've been carrying the cut vegetation from here, supplying bog mats and so on. We've given a lot of the cut material to farmers for use as bedding for their stock. We've also carried a lot of stuff to a local farmer who is composting it.

The grazing management is basically about finding graziers to come here: sorting out the contracts and acting as the go-between between LIFE and the local farmers. It's been very well received in the area: the story's got through the grapevine and we're getting more and more people asking if there is any more grazing.

This year [2011] we've had five farmers involved. We're hoping for the 2012 season there'll be more areas of land becoming available. On the whole it's worked well. The problem we had this first season was we wanted to put stock on there straight away. At least for next season we've got more time and the farmers have got more time to select appropriate stock. Ideally we'd like to see some more native [cattle] breeds: Welsh Blacks, things like that, which are more able to graze in an area like this.

I hadn't worked with a nature conservation programme on this scale before. It's been an eye-opener, especially for somebody who's been through college doing agriculture, where it's all to do with meat production. You're actually using the animals to manage conservation rather than using the land to manage meat. It's a very interesting project - hopefully we'll get some really good outcomes.

It's been easier to marry the demands of farmers and nature conservation than I expected. Once I'd accepted what LIFE wanted out of it, it was easier then to get over to the farmers and say 'look, you're getting this land free of charge for grazing it but this is the way we want you to graze. And you can only put X amount of cattle here and you're going to have to accept that they're not going to fatten up as well as they would at home'. A lot of them, rather than putting finishing cattle on here, have put cattle which have got maybe another 12 months of growing time. They're not going to finish them off here, but it's a good place for younger stock just to get them started. The ones that have been with stock here, I think they are all surprised as to how well they have done from what is actually here."

THE PROJECT

The goal of the project is to restore EU Habitats Directive-listed alkaline and calcareous fens through ground works followed by extensive grazing.

Project number: LIFE07 NAT/UK/000948
Title: Anglesey and Lleyn Fens
Beneficiary: Countryside Council for Wales
Contact: Justin Hanson
Email: j.hanson@ccw.gov.uk

5 MEET THE BUSINESSES

The LIFE programme has played an important role in stimulating the private sector: helping new, nature and environment-friendly businesses get off the ground; helping existing businesses develop innovative and ecologically-sound products; and helping to 'green' entire sectors of enterprise. Here are the stories of some of the people involved.

Building the BASTA

Henrik Jansson

Henrik Jansson is president of the Swedish Adhesive and Sealants Association. As end users of the database developed by the BASTA system, the association's members have greatly benefitted from the work of this LIFE Environment project that ran from 2003 to 2006.

"The situation in the late 1990s/early 2000s was quite horrendous. Every stakeholder [in the construction industry] had their own blacklist or database of substances that they didn't want to see in building products. As a result, manufacturers had to adapt to a number of different blacklists and systems in order to survive. It was difficult for them to sometimes be persistent in environmental work, because they didn't know which way they should go.

We sat together with the entrepreneurs of the big four [paints and adhesives] manufacturing companies in Sweden – Alcro-Beckers, Bostik, Akzo Nobel Byggrim and Akzo Nobel Decorative Coatings –and said: 'Look we've got to do something to sort this mess out'. We tried to find some kind of common solution. We didn't want to go looking into

specific substances; we more wanted to look at the intrinsic properties of the substances in order to capture everything.

THE PROJECT

The project successfully set up the BASTA system, a pre-cursor of REACH that has helped speed up the phasing out of hazardous substances in construction.

The LIFE project gave the initiative a well-needed boost. It's always difficult when you try to be self sustained, but LIFE funding was enough to give it a fresh start. The buyers know that when they get a BASTA product, it will not contain anything that has proven to be carcinogenic or toxic. This is accepted by every stakeholder in Sweden now. We have established a steering committee and this would not have been possible without the LIFE project.

When I first became involved in 2001-2002, I was tasked with going to the chemical authorities in Sweden and getting a feeling for what they thought about it. And their first comment was that it was a forerunner to REACH...we like it: go ahead. It takes the same basic principle of meeting the demand for more knowledge about the product: the basic demand of the companies is that you should have good knowledge of your products, you should know what you put in it, you should have good procedures for handling the paperwork and you should have a good relationship with your suppliers.

When the LIFE project happened, you could see BASTA take off. It's always a question of funding and trying to get everything together, but LIFE gave it more of a steering push. Now it's flying on its own. It has a steady budget; it's working fine.

For us [Swedish Adhesive and Sealants Association] it was really a chance to excel and show the purchaser, our customers, that we are serious, we are working hard to provide the best products. The industry has gone from using lots of volatile organic compounds in adhesives to more water and that goes for paints and lacquers too. We try to be one step ahead of the customers' demands - to be on the technological forefront providing good quality environmentally sound products in the market."

Project number: LIFE03 ENV/S/000594
Title: BASTA – Phasing out very dangerous substances from the construction industry
Beneficiary: NCC Construction Sverige AB
Contact: Johanna Fredén
Email: johanna.freden@ivl.se

Cooling off the greenhouse gases

JØRGEN MODVIG

Jørgen Modvig is technical manager of REMA 1000 (a chain of supermarkets in Denmark). Mr Modvig's employer trialled the use of trans-critical carbon dioxide refrigeration systems as part of the LIFE CO_2REF project.

"In 2007 cooling equipment based on hydroflurocarbon (HFC) gases was banned in Denmark, Norway and Sweden. We didn't know what we had to do when we opened a new store. Companies had different solutions, but they weren't so good. So therefore we were very interested in participating in the project because it would speed up the search for an alternative, and there the LIFE project had great value for my company. We could make a trans-critical plant two years earlier than if we had done nothing.

Today all major producers of cooling equipment all over Europe can make trans-critical equipment, but they couldn't in 2007. The LIFE project initiated a new company called Advansor, with Kim Christiansen, a former employee with the Danish Technological Institute. He used his experience from the project to start his own company and now he's selling a lot of trans-critical systems in the UK, among other countries. Cisco is buying a lot of his equipment, and Danfoss, which makes valves, produced a complete unit that it could sell afterwards.

THE PROJECT

The CO_2REF project demonstrated the environmental and commercial benefits of trans-critical CO_2 refrigeration systems for use in supermarkets and similar areas. The project designed an optimised CO_2-based system, which was tested in a REMA 1000 supermarket store.

At the start of the project, there were no alternatives to HFCs because there were no compressors and valves that could manage the high pressure. During the development process, Danfoss (project partner) needed a store to test the new system [Rema 1000 came on board]. You can test a lot in a laboratory but in the real world things happen. I took a chance, because when you have customers visiting a store it must be operational 24 hours every day. There's no place for error, and we took a big risk.

It cost a lot of money because it didn't operate perfectly from the start. We tried it in one store and tested for a year. The compressors overheated and the tubes couldn't manage the pressure – they exploded. The safety valve opened

"The EU funding for our project speeded up the development process"

and the CO_2 got out. The EU funding for our project, however, speeded up the development process. If we hadn't got the funding, it would have taken two or three years longer to get a trans-critical plant that was operational.

Towards greater energy efficiency

The project was interesting because no one had done it before. Some other companies were half a year behind us. It's always interesting to develop new equipment and it was an exciting process to participate in. I attended a lot of meetings in Aarhus Technological Institute with a lot of engineers. At the beginning I didn't understand what they were talking about. I'm not an engineer, but it was my responsibility to make sure that we could open the store at the time when the building was finished and you can't open it without a cooling system.

The incentives were commercial. It's most cost-efficient [using the new system]; we save energy – approximately 20%. In a cold summer, we save more energy. Energy consumption is much higher in the summer than in the winter. The time period where we had an advantage was very short. We were a year ahead of our main competitors. It has been routine in new stores since 2009 for all major companies to use trans-critical cooling equipment.

We are looking at using LED lighting in our stores instead of traditional lighting, but for the time being it's too expensive. But you can use LED in signs, and there you have a great value because they last longer. You have 40 000 hours in LED lighting. In traditional lighting you have 10 000-20 000 hours. We are always looking at new technologies. When I buy something for my company it must be energy efficient because energy prices are going up and up.

I have children, and we have to make sure that they have the same opportunities growing up that we had. But every time I see the LIFE sign, I think positively, because the EU is making a difference. It's supporting projects all over Europe. We won a prize and went to Brussels for the awards ceremony, and the variety of the projects was impressive. When I hear about a project, I always think, "Where's the value?" But afterwards I think, "Of course, in this area, in this region, it makes sense – not in the short term but in the long term."

Project number: LIFE05 ENV/DK/000156
Title: CO_2REF – Development and demonstration of a prototype transcritical CO_2 refrigeration system
Beneficiary: Knudsen Koling
Contact: Torben Olsen
Email: torben.olsen@knudsenkoling.dk

Distributing healthy food without causing harm

Gianni Bonora is managing director of CPR System, the beneficiary of the LIFE Usa e riusa ("Use and reuse") project. The goal of the project, which ran from 1999 to 2002 was to promote environmentally-friendly fruit and vegetable distribution in Italy through the use and reuse of recyclable boxes for packaging.

Gianni Bonora

CPR System is "an Italian company which is proud of its commitment to the environment," says managing director Gianni Bonora. "We are part of the nation's large fruit and vegetable distribution chain. Our respect for nature thus not only comes from our hearts, but it also makes good business sense, because the raw materials for our work here at CPR System rely heavily on a healthy environment."

The firm's commitment to the environment is evident in the beautifully landscaped gardens of its premises. Such a sight is rare in most industrial areas but Mr Bonora's company has strong green credentials, and these received a boost through being a beneficiary of a LIFE project promoting sustainable approaches to waste management.

"We work with a wide range of businesses in the fruit and vegetable sector, providing technical support and guidance", explains Mr Bonora. "We were aware that a great deal of disposable packaging products were used in the sector and, for both environmental and economic reasons, we wanted to try to find a suitable solution for reducing the amount of single-use packaging that was thrown away."

THE PROJECT

Use and ... re-use developed an innovative system to avoid the substantial amounts of waste generated in the packaging of fruit and vegetables. The project designed recyclable plastic boxes, which can be folded and re-used up to 30 times. The scheme included a processing centre to handle the cleaning, re-use and recycling of the boxes, and computer software to track their journeys.

A reusable response

A solution was identified that involved reusable plastic packaging boxes. "The physical system was quite simple, involving the introduction of new packaging lines. My main challenge however lay in persuading people that the new environmentally sensitive technology was worth their while participating in", explains Mr Bonora.

"Communication therefore proved to be an extremely important tool for us and the LIFE project helped us get our message across to the people that mattered in our supply and distribution chain. We explained that replacing a disposable system with a reusable plastic system could help save energy, reduce waste management requirements and most crucially it could cut up to €150 off the costs of distributing each tonne of fruit or vegetables."

Despite such potential positives, Mr Bonora's partners in the distribution network, as well as his Board of Direc-

tors, were not automatically convinced that they should switch to the new system. "The LIFE funds provided an incentive that helped overcome some of these barriers. I think that because we received support from the EU through LIFE it gave the project a kind of credibility and momentum that might have been much more difficult to achieve otherwise. People saw that if LIFE believed in the project then it was not just a crazy environmental idea.

"Having said that though, I remember there were still quite a few people who were surprised that LIFE had agreed to help us make the shift to minimise our environment impact. In fact, to tell the truth, I think some of my Board were a bit terrified at the fact that we would have to make the shift once the funding was confirmed. I was even scolded for winning the funding by some people, but I guess fears like this are natural in such a situation and every business person can experience such cautionary thoughts when embarking on a change."

"[Support from LIFE] gave the project a kind of credibility and momentum that might have been much more difficult to achieve otherwise"

Behavioural change

"Communication was the key to our success in changing people's behaviour to use the more environmentally friendly packaging system. Ever since I was a child, which was some time ago now that I have turned 63 years old, I always believed in the power of communication. For me it is rarely sufficient to just be good in what you do, you also have to know how to communicate well."

Based on these principles, the LIFE beneficiary took a prudent look to see how it should implement an effective communication campaign. "We focused on highlighting the cost savings and this seemed to be very helpful. Money is often the most vital factor in business people's environmental decisions. Hence we invested a lot of time in explaining the fact that if more people and companies got involved, the greater the savings could be because the overall operation would become more cost effective.

"We knew that asking competitors to work collectively would probably not be straightforward, as they are often more tuned to spar with each other rather than cooperate, but we managed to find a way to get people talking. Our technique was to bring everyone together so they could all know they were all being told the same thing 'in their own language' and that they could all hear each others' points of view. This approach was very, very useful. It was a winning method for us. It meant we could all understand the 'bigger picture' and we all identified together the things that we had in common which needed to be addressed."

Mr Bonora stresses how, "listening was one of the most important skills that we used during these meetings. I certainly learnt how beneficial just listening can be. The LIFE project was a good school for this and the lessons that I learnt from my time with LIFE have stayed with me. Today I make a point of opening my ears to listen to other peoples' ideas and perspectives. I still find this is particularly useful for me during my board meetings."

Success story

The board of CPR System is now fully supportive of the switch to the reuseable packaging system and they can see that it has been a success.

"In 1998, we were nine founding members of CPR System who each invested half a million lira, which is equivalent to about €250, in getting our company started. The company's capital value is now around €25 million and we feel sure that LIFE's €0.5 million grant made a big difference in helping us," observes Mr Bonora.

"At the start of the LIFE project we had nearly 50 companies involved along the supply and distribution chain. This has now increased to over 950. The first processing centre working with the new re-useable packaging was built in Gallo (Ferrara), after which we were able to expand our coverage throughout Italy. Some 15 different food processing and packaging centres across the country are using the re-useable boxes that LIFE helped to introduce."

He points to further benefits that the work started by LIFE is delivering over time. "More people are realising that we were telling the truth when we said we could save them money by re-using boxes. They can see that we are able to help them reduce their running costs and many are pleasantly surprised because they never believed that could happen."

Mr Bonora looks back on the achievements of the LIFE project as "very satisfying and very encouraging for the environmental challenges faced here in Italy. I believe that we made the right decision to start on our 'adventure' and I can say that it was a good one which has made everyone involved happy in the end. LIFE was definitely instrumental in making the success happen. Without the EU funding we would not have been able to afford to dream of achieving so many ambitious results, but the combination of LIFE's financial assistance and moral support made the project happen."

Expansion plans

Taking a walk around the CPR System premises, Mr Bonora points out that the company now use different coloured plastic crates. "CPR System's successes in Italy's fruit and vegetable sector have encouraged us to think that there may be new green business opportunities for us in other sectors, as well as other countries too. For instance, soon we will be moving to provide services for charcuterie and dairy businesses. We are already expanding towards the meat sector and we use the different coloured boxes for different types of products.

"Alongside these growth plans we also want to venture into new countries. Our intention is not to try and colonise Europe but we want to try and find partners from other countries that can do business with us using the same environmentally-friendly distribution systems."

Mr Bonora credits LIFE with helping his business deliver a lot of know-how in a specialist area and is happy to share this positive experience more widely. "We tell other companies about how LIFE has helped us and we are pleased to keep the LIFE logo on our delivery vehicles. People tend to forget their origins. I will always remember that the origins of the CPR System project was the LIFE project and that's why we continue using the logo on all of our trucks."

Mr Bonora concludes by saying that "LIFE has helped us reduce our impact on the environment. This has been good for both our hearts and our bank balances. I absolutely hope that LIFE will continue for another 20 years in order that more people can benefit and learn from its achievements."

Project number: LIFE99 ENV/IT/000034
Title: Usa e riusa – Use and...reuse. The processing centre in the logistics of packaging of fresh fruit and vegetable products
Beneficiary: CPR System
Contact: Marco Salvi
Email: cprsystem@csoservizi.com

A breakthrough 'biotyre'

European manufacturers are increasingly aware that greater resource efficiencies can bring economic as well as environmental gains. Giulia Gregori and colleagues at Italian bioplastics company, Novamont, were at the heart of an innovative partnership project to develop greener materials for tyres.

Giulia Gregori

Giulia Gregori is responsible for R&D strategic projects at Novamont – a position she has held for the past 10 years. She explains that the company began work into reducing the polluting materials used in the production of tyres – whilst also improving their performance – in 1995.

Coordinated by tyre manufacturer, Goodyear (the project beneficiary – see box), Ms Gregori explains that Novamont's main role in the 2005 to 2009 LIFE BioTyre project was to produce a biofiller that could be used to produce tyres with less rolling resistance, greater durability and a reduced braking distance. The project partner also evaluated the dispersal properties required when designing a tyre and analysed the product's environmental impact.

Extremely enthusiastic about the "LIFE experience", Ms Gregori says the BioTyre project provided her and her colleagues with the opportunity to "perfect, implement and demonstrate" the biofiller. "[It] accelerated the production and dissemination of the positive results to other companies, who are now showing interest in the product." From a more personal point of view, she reflects that involvement in the project provided a sense of being part of a network, of belonging to a larger community. The LIFE project enabled collaboration with partners across Europe, the creation of durable partnerships and a feeling of being "part of something bigger", particularly when participating in Green Week in Brussels in 2011, which generated interest in the project and useful business contacts. "Being part of the project made us understand the importance of such an event," she believes.

THE PROJECT

Coordinated by Goodyear Luxembourg, the partnership LIFE BioTyre project had three main components. Firstly, it developed an alternative to traditional non-renewable fillers used in tyres for their reinforcement properties; secondly it analysed and modified the tyre structure to minimise energy loss through rolling resistance when in motion; and finally it optimised the tyre structure for the development of new tyres.

Ms Gregori and colleagues are continuing their work on the greening of products for the chemical industry. Novamont's biodegradable bio plastics and bio lubricants are one outcome of this research. "The LIFE project has also been beneficial in opening us up to new possibilities and synergies for future projects", says Ms Gregori.

Finally, commenting on the 20th anniversary of the LIFE programme, Ms Gregori hopes that projects can continue to be pioneers of good practices and that the programme will continue to support projects targeting "waste as a valuable resource" and encouraging environmentally responsible behaviour among Europe's citizens. "The richness of Europe's territory and its competitiveness can only be preserved if all stakeholders (companies, the academic world, public institutions and citizens) act responsibly over the long term in promoting processes and innovations with a low environmental impact," she believes.

Project number: LIFE06 ENV/L/000118
Title: Development and validation of ultra low rolling resistance tyres with environmentally friendly resources
Beneficiary: Goodyear Luxembourg SA
Contact: Georges Thielen
Email: georges.thielen@goodyear.com

Research and reuse of winery ‘wastes’ continues to grow

Serkos Haroutounian

Serkos Haroutounian is Professor of Chemistry at the Agicultural University of Athens. The research he led into reuse of winery wastes for the LIFE Dionysos project promises to deliver new business opportunities for winemakers across the EU.

“My main research interest concerns the exploitation of plant derived natural products as a rich source of bioactive molecules and extracts that may be used by pharmaceutical or cosmetic industries as raw materials, or as food supplements. I’m also involved in research about the reuse of agro-industrial wastes.

I worked for three years as the project manager of the LIFE Dionysos project with partners the University of Athens (department of Pharmacy), the Goulandris Natural History Museum and Terra Nova, an environmental consulting firm.

The AUA chemistry laboratory team during the LIFE project consisted of me and four young scientists (mainly PhD students). The driving force of our involvement was the growing scientific interest and public demand for the production of potent natural antioxidant compounds or extracts in connection with numerous scientific reports on the significant antioxidant properties of grapes and wines polyphenols.

It is well known that during the winemaking process a significant amount of solid waste, accounting the 15% of the total grape biomass, is generated (grape pomace). Only a small fraction of this waste is processed or used for activities of limited economic interest such as the production of ethanol, alcoholic drinks, seed oil and dietary fibre. The remaining biomass is usually disposed of onto nearby open land, without any prior treatment. The large volume and increased organic (polyphenolic) load of this waste material, which is phytotoxic and toxic for aquatic organisms, constitute significant environmental pollution problems, especially for surface and groundwater in the areas where they are being dumped. In Greece, every year we process around 550 000 tonnes of grapes and produce more than 120 000 tonnes of waste.

We were intrigued by the possibility of exploiting this grape pomace as a rich source for the recovery of high added-value natural polyphenols (or their ex-

THE PROJECT

The Dionysos project successfully developed an economically feasible and environmentally friendly process for the integrated management of the waste generated by the winemaking industry. Specifically, the project demonstrated at a pilot-plant scale, technology for processing of winery solid waste to enable the recovery of high added-value polyphenols and to enable the use of the remaining waste for the production of high nutritional value animal food or natural organic fertiliser.

tracts), because most grape polyphenols remain in the pomace. This activity combines the profitable venture with a significant advance in environmental protection around the wine-producing zones.

Money-making opportunities

One of our main interests with the LIFE project was to demonstrate that someone can make money by processing this waste in an efficient, practical and environmentally friendly manner. Winemaking is an activity that occurs in most areas of Europe, so it's a problem and opportunity for everyone.

One of our main achievements is the continuing – and growing – interest about the project. This is something that I never imagined: more than four years after the end of the project, I'm busier than ever with enquiries about our research. For example, I still get a lot of emails from people asking me for details. I've sent the feasibility study and the layman's report to more than 20 different interested companies from all around Europe. Of course, there's a lot of interest in Greece. Just two weeks ago there was an event about the project results held in northern Greece, while within the next two weeks I will present the project's findings to a cooperative of wine producers interested in investing in this wineries waste management process.

LIFE experiences

Looking back at my LIFE project experiences, there are three things that I would like to highlight. Firstly, during the three years of the project implementation a technology was produced that is currently applied by some companies for the recovery of the high added-value wine polyphenols/extracts from this waste material and the production of marketable products. For example, in northern Greece a company is producing flour and other bakery products enriched with wine polyphenolic extracts (recovered from wineries wastes). The plan is to expand this business to dairy products and to produce yoghurt containing extracts of wine polyphenols. Also, there are some cosmetic companies using these extracts. For example, a new beauty cream is currently being tested. Finally, some wineries produce compost in the manner developed during the project and use it for the production of organic wines.

Secondly, the solution developed is really attractive, since is technically simple, transferable and applicable everywhere. The investment cost is low and therefore adaptable by most wineries (mainly SMEs). It is also important to point out that the whole process is 100% environmentally safe, since only water and alcohol (which are fully recycled) are used for the recovery of polyphenols and there are no emissions to the environment.

Thirdly, a very positive achievement concerns the continuation of this research by young scientists to transfer/apply the waste management technology to other agro-industrial wastes, e.g. from the peach and tomato processing industries. The final goal is the development of an economically feasible and environmentally friendly process for the recovery of high added-value bioactive natural compounds or extracts.

I don't know why the project was so successful. Maybe because it's about wine and health, issues that interest and affect many people.... I must underline, however, that a very special ingredient was the interaction with the LIFE people. They really inspired and supported us throughout the project implementation, offering solutions and advice. I've been involved in various projects, funded by other European or Greek authorities, and I can say that the LIFE programme works in an ideal way; it's well thought out, functions well and the rules are very clear. We also had very good support from the monitoring team and the LIFE Unit.

This [project] was just the beginning. Now we are working with grape stems that are also considered as wine 'wastes'. We have already obtained some interesting scientific results on their polyphenolic content, biological properties (as antioxidants and angiogenesis inhibitors in cancer prevention) and potential application for the production of food supplements."

Project number: LIFE03 ENV/GR/000223
Beneficiary: Agricultural University of Athens
Contact: Serkos Haroutounian
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The brewer: A toast to nature conservation

Whilst many conservationists appreciate the restorative properties of a good beer, especially after a hard day in the field, for Dirk Geysels and colleagues at the Liereman nature reserve in Belgium, the link between nature conservation and beer has taken on a whole new significance.

"It all started in 1995," recalls Dirk, a volunteer at the reserve for over 27 years. "At the time, we were developing the visitors' centre and we were looking for something that would make the experience more interesting and memorable. Being Belgian, I guess it was inevitable that the discussion would eventually come around to beer. In fact one of our colleagues, whose father was a brewer, suggested the idea; that we brew our own beer and sell it on-site."

Photo: Lenneke Schot, Biojournaal

DIRK GEYSELS (RIGHT) AND COLLEAGUES

Although not all the members of the conservation group were immediately convinced, Dirk and four other volunteers liked the idea and decided to take it further. "We thought it could be fun, and a good way to generate some revenue for the reserve, but we felt it was important that there should be a strong link between the beer and the local environment."

The first step was to enlist the help of a local brewer and to try out some different recipes. After some very thorough tasting sessions, which Dirk concedes, "probably went on a bit longer than necessary," they finally narrowed it down to three options. At this stage a close group of friends and family were drafted in to help with the final selection. "We organised a blind tasting and the result was very clear: over 90% of those who participated favoured the beer we had colour coded red, and which we later named Gageleer."

The name Gageleer comes from the Flemish word for bog myrtle (gagel), an indigenous plant that grows throughout the reserve and a key ingredient in the beer. "It gives the beer a very distinctive flavour but you have to know which part of the plant to use and how much," says Dirk, with a twinkle in his eye.

THE PROJECT

The LIFE Liereman project involved the restoration of the 'Landschap De Liereman', a nature reserve situated in the north of Antwerp Province. The project succeeded in purchasing and carrying out restoration work on 141 ha of land. It also secured the engagement of local stakeholders in drawing up a coherent management plan that has enabled ongoing preservation of the target heathland habitats. A key aspect of the project was to explore opportunities to develop the economic potential of the reserve, including through the production and sale of beer, using ingredients harvested sustainably on site.

The five friends established a cooperative and between them they invested €30 000 in the fledgling business. "This was just about enough to pay for the first brews, and for the bottling, packaging and other set-up costs. Rather than brewing ourselves, we decided to use the services of the contract brewer, *Proefbrouwerij*. This avoided the need for major up-front investment and made the whole venture more feasible."

In the first year, total production came to around 5 000 litres, all of which was sold on-site, in the small bar in the visitor's centre. Today, annual production has increased to over 100 000 litres, which is sold throughout Belgium, as well as in the Netherlands, France, Sweden, Denmark, Italy, the UK and even the USA.

"In the US, a very interesting opportunity has opened up in California. I guess this is the home of the hippy and it seems that they like our story."

But this story is only beginning, with Dirk and his colleagues busy planning what they hope will be some major new developments. "We're currently speaking to some other local breweries, one (of) which also has a social objective. We have a project in mind, but I can't say too much about it for now, I don't want the big breweries to know about our plans," says Dirk, checking over his shoulder. "But if it comes to fruition it will be big. It might even be part of the LIFE+ bid we are currently putting together."

New developments are also underway in the sourcing of ingredients. Gageleer is brewed using only natural, organic ingredients. However, at present the organic hops have to be imported from New Zealand and the grain comes from a major supplier based near Antwerp. But Dirk has plans to produce both crops locally. Discussion with local farmers has already led to contracts for the supply of organic barley. In 2011, a total of 7 ha was planted, producing over 30 tonnes of organic barley, but Dirk hopes to increase this significantly in the coming years.

Photo: Lenneke Schot, Biojournaal

"We would need around 120 ha to supply enough barley for our current production, so we are talking to more farmers about getting involved. This is a win, win, win situation: firstly, we get a local supply of organic barley, which further strengthens the narrative of the Gageleer; secondly, the farmers get a better price for their crops; and thirdly, the conversion of more and more land around the reserve to organic farming also contributes to the goal of nature conservation."

But the good news does not end there: the success of Gageleer has also created an important new revenue stream for the Liereman nature reserve, which receives a minimum of 2 euro cents from the sale of every bottle. "This is becoming an important source of income for the reserve, which we hope to continue to grow in the future, but we have to get the right balance between conservation and reinvesting in the business. To date, the emphasis has probably been too much on the former. In fact, one year we gave so much to the reserve that we ended up making a loss, so our accountant wasn't too happy. This is mainly why we have now set a minimum fixed contribution per bottle. If at the end of the year we make a profit, we can also supplement this."

Beer and brewing may not be synonymous with nature conservation, but the financial and other benefits for the Liereman nature reserve have gone a long way towards convincing those who were initially sceptical, of the merits of Gageleer. "In the beginning there were a lot of people who objected to the idea; they felt our business was nature conservation and not brewing, which they saw as a distraction. But things have changed since then. More people now recognise that public subsidies cannot be relied on forever and we have to take more responsibility for our own future. As a result, we now have more people in favour than against."

> *"This is becoming an important source of income for the reserve, which we hope to continue to grow in the future"*

Project number: LIFE04 NAT/BE/000010
Title: Liereman - Habitat restoration in Landschap De Liereman
Beneficiary: Natuurpunt Beheer v.z.w.
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LIFE marks 'turning point' for rural tourism in Latvia

Asnate Ziemele

Asnate Ziemele is President of the Latvian Country Tourism Association and of the tour operator, Baltic Country Holidays.

"I am one of the founders of the Latvian Country Tourism Association, which was started in 1993 to promote rural tourism in Latvia. I was also the project manager of the LIFE Green Certificate project, started by the association in 2000, to promote sustainable rural tourism.

I was elected president in 1993, and I've been re-elected every four years since. So you could say I'm a kind of 'mother' to the association, which started shortly after the Soviet Union broke up (Latvia attained full independence from the U.S.S.R. in 1991).

Rural tourism didn't exist at all at this time, as during the Soviet times there was no-one really going on holiday to the countryside. However, we knew that it was becoming quite popular in western European countries. So we started the association to involve all those people living in rural areas who had spare rooms. The tour operator, Baltic Country Holidays, a Limited company (owned by the association), was launched in 1998 to handle the holiday reservations.

No phones

It's quite funny when I look back and compare the situation today with how it was back then. When we started we were really very naïve. And it was not easy from a practical point-of-view. On the other hand, people were very open and willing to do something new in the countryside. Few of us had telephones, so, in order to contact the accommodation owners we had to leave messages with the local post office, or shop.

The business started with farmers. It was mainly bed and breakfast-style accommodation. Self-catering cottages didn't really exist, because there really weren't any empty buildings in the countryside. The first members of the association joined in 1994. Today we unite more than 300

THE PROJECT

The Green Certificate project developed the 'Green Certificate' environmental quality eco-label for tourism establishments in Latvia and then applied it to a number of small rural tourism providers (mainly small businesses offering accommodation). A 'Green Holidays' brand was also developed and promoted.

small businesses throughout Latvia. They pay an annual fee and receive a variety of assistance, such as help with marketing or with the creation of the 'green certificate' –environmental quality eco-label for tourism establishments – that was started under the LIFE project.

Something new

The idea of the LIFE project came at a time when in our (eastern European) countries, the concept of 'sustainability' – sorting garbage, saving electricity or water, promoting local values and the values of nature protection etc – was really something new and it was not popular. We understood, however, that it was one of our strengths in the countryside and especially in terms of rural tourism.

We developed the project ourselves, that is, we never had any consultants writing and submitting projects on our behalf. I think this is one of its main strengths and the reason for its continued success: When we finished the project in 2004, we had 54 green certificate holders. These are mainly small businesses with accommodation. Now we have 75, which means that around 10% of all accommodation providers in the countryside are really green-thinking.

Generally speaking the certificate was, and is, logical for rural tourism establishments – the main challenge was to persuade the providers to get into the ideas and put more energy into resource-saving and promoting the local cultural heritage etc.

For the main part, the providers are very positive and believe we are doing a good job and that this is our strength. We try to be honest with them and to tell them exactly what we think. We told them this is not just a European project, but it is the ideology of the rural tourist. And those who get the green certificate are only the best ones, who have understood the message.

"Something we're really proud to have achieved is that the certificate developed under LIFE has today become the national eco-label for rural tourism outlets"

Sense of pride

Importantly, this message is also supported by the Ministry of the Environment. Something we're really proud to have achieved is that the certificate developed under LIFE has today become the national eco-label for rural tourism outlets. Moreover, the Minister visits each newly labelled establishment. This is very much appreciated by the certificate holders. Also, the fact that this is continuing afterwards is the true confirmation that the project was correct - needed not only for us, as the project developers, but for the rural communities.

The LIFE project was a turning point for rural tourism in Latvia and also for many other countries that have followed what we did. It was more than just the creation of the green certificate; it was an initiator of sustainable tourism. At that time, no-one believed that it could work. But the LIFE programme listened to us and believed in what we could do.

Comparing our society with, for example, the UK or Germany, the understanding of green issues is less developed. It's a step-by-step advance. You're talking about a society where a large proportion can hardly afford a vacation at all. So price is the first choice when people are selecting their holidays. However, when visitors are in the countryside, they like what they see around them and then they start to understand and appreciate more the importance of saving water or electricity and of sorting and managing their waste.

One of my main pieces of advice is that communication is actually the key to everything. And if the communication is correctly done, we find most of our visitors are happy to follow the greening advice promoted by the small businesses. But if the communication about sustainability is wrong, or doesn't work for the businesses in the protected areas, or just those who are influencing the environment and nature, then it will also go wrong for the customers and travellers. Communication (messages) about greening issues should be simple, close to reality and economically viable.

One thing we did under the LIFE project that was particularly successful was to use a series of cartoons to illustrate some of the environmentally friendly practices in the tourism accommodation. We gave our greening ideas to the artist Romāns Vitkovskis and then he interpreted them (see p. 92). This has really worked; so much so that we recently ordered some more to cover some other topics such as for the outdoor activities (e.g. boating, cycling). The tourists love them - they're really funny - and, of course, when you look at the cartoons, you understand the message. It says so much more than just 'green advice'".

Project number: LIFE00 ENV/LV/000959
Title: Green Certificate – Development of the criteria for the Green Certificate, implementation and control in rural areas and small towns in Latvia
Contact: Asnate Ziemele
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Restoring national pride in North Karelia


Photo: Markku Tano

LIFE actions in Finland's Koli National Park are inspiring new business opportunities. Here we meet two entrepreneurs that have benefitted.


Photo: Markku Tano

Irja Tanskanen

Irja Tanskanen is the owner of a local guided tour company

"I was born in the Koli national park area in North Karelia, Finland. My partner and I are local entrepreneurs and own Koli Activ Oy (www.koliactiv.fi), a company that organises trips and provides tourist services in the park. I have been providing guided tours and snow-walking/hiking services for more than 15 years.

Before the LIFE to Koli project we had no nature trails and people had almost no information on the park´s ecology, habitats and species. Koli attracts around 140 000 visitors every year; the majority are Finnish but we also have foreign visitors (manly Russians) during winter.

Koli is the heartland of Finland, and has been an inspiration for such great artists as the composer Jean Sibelius. It is a magical place for us. On my guided tours, I usually sing to give some ambience to the landscape. This scenery is so meaningful for everyone that I have seen people cry when we get to the hilltops.

In 2003, when the LIFE project started, Koli had fewer visitors than it has today and lacked proper forest habitat management. Therefore, one of the main actions that makes me proud is the restoration of the Finnish agroforestry tradition of 'slash-and-burn' in Koli. Burning and sowing using traditional rye and turnip seeds has made the big difference for me. It was carried out in a 17 ha area with the involvement of the local community.

I now have the pleasure of showing the slash-and-burn areas to all of my customers by doing the trails where these actions took and still take place. Along these trails, I also show the restored meadows and grasslands habitats and grazing introduced by LIFE. I and other tour guides received training from the LIFE project.

Before LIFE I was a freelance guided tour operator and now two families make a living from this business. LIFE has made Koli more accessible to tourists and numbers are steadily rising."

THE PROJECT

The LIFE to Koli project implemented long-term management plans for the boreal forest, bog woodlands, herb-rich forests, as well as reintroducing the practice of slash-and-burn and the management of semi-natural grasslands. Some 107 ha of cultivated forests were restored.

Project number: LIFE03 NAT/FIN/0035
Title: LIFE to Koli
Beneficiary: The Finnish Forest Research Institute
Contact: Kari Mielikäinen
Email: kari.mielikainen@metla.fi

Ilkka Aula runs nature training for schools and team-building exercises

"My wife and I moved last June (2011) from Helsinki to Koli. We wanted to start a new life closer to nature. And we decided to set up nature training for schools and leadership and team-building courses using the nature around us (www.elontila.fi). We rented the cottage for our guests just where one of the LIFE trails starts, so we are directly benefiting from the project. And, of course, I try to explain the project to our guests and schools. The restored forests are just behind the house, and Metsähalllitus (the park authority) will carry out a slash-and-burn next year. I am really proud to be able to show the site to my guests."

Camping: "It's a way of life!"

Campsite owners Wendy and Richard Curtis run the Beau Rivage eco-campsite in Navarrenx, a town in Aquitaine, southwest France.

Richard and Wendy Curtis

"We moved to France from Jersey at the end of 1991 to build a campsite in the Deux-Sèvres, which we ran until we sold up and moved south. In 2004 we bought this campsite (Camping Beau Rivage) a former municipal site in the fortified town of Navarrenx in the region of Aquitaine. Today, we have 70 'pitches' for tents, caravans and camper-vans and 16 wood chalets.

THE PROJECT

The overall objective of the LIFE Eco-camps project was to improve the environmental performance of campsites. The project developed a voluntary 'eco-label' for new campsite constructions and renovations that was tested by five pilot campsites in the region of Aquitaine, including the featured, Camping Beau Rivage.

Although we love what we do, running a campsite is not for everyone. It's a way of life! We work seven days-a-week from March through to mid-October. Then, when we 'close', we take a short holiday, before tackling all the off-season maintenance. It's something we can do together and it's fantastic. But you have to be available 24 hours-a-day and you never know what's going to happen – blocked toilets, breakdowns, even a heart-attack (well, it turned out to be a stroke): these are all things we've had to deal with during the 2011 season.

Participation in the LIFE Eco-camps project enabled us to work with various consultants to advise at all stages of the development of the environmental profile of our campsite – which as well as the camping pitches and serviced chalets, includes a swimming pool and children's play area, solar panels on two shower blocks, a water-recovery system and a waste disposal system. The idea was to ensure that the building work has as little impact as possible on the environment by taking measures to control all aspects of the process. There is no magic list available to tell you which products or methods are more environmentally friendly than any other. So it becomes a process of consideration, comparison and justification.

LIFE savings

We're especially grateful for the help we received from LIFE concerning the installation of the solar panels on the two communal shower blocks. We wanted to install the panels to pre-heat water in conjunction with our existing gas-fired water heaters. LIFE really saved us here, as we had become so confused with the conflicting information we were getting from the 'experts' who were trying to sell us their systems. We kept being told that what we wanted to do was impossible and we would have to replace the existing system and start from scratch. As you can imagine the quotes for this were horrendous. Thanks to LIFE, we were able to use the services of a consultancy firm, whose independent experts provided an environmental impact study and detailed analysis of how the panels could be most effectively used with the

existing equipment. We were then able to ask for a more realistic quote and also to request a (50%) grant from ADEME – the French Agency for the Environment and Energy Management. This suddenly made this part of the project feasible. With the increase in gas prices looking likely to continue, we hope to have recovered the cost in 12 years easily.

By installing low-debit push-button taps everywhere, we have found that we were able to reduce general water consumption on the site. Even having put in the swimming pool and the 10 'eco-chalets' (installed during the LIFE project), our water consumption has only increased by about 30% since our first years. We have also installed a recirculation pump on one of the shower blocks to reduce the amount of water wasted while people wait for hot water to arrive.

The construction of the chalets was an issue that had to take into account a lot of conflicting interests. We were able to make use of the environmental impact study, as well as the expertise of Olivier Hantz, our LIFE project organiser. The chalets had to be a certain height above the ground in order to leave enough fall for the drains. So a certain amount of terracing work had to be carried out. There was a need to ensure that that the people sitting on the terraces would not be overlooking other holidaymakers, and also a need to ensure that the terraces were angled in such a way that they did not overheat in the height of summer. We wanted to avoid the necessity for air conditioning and so made use of the trees as much as possible, to provide shade in the hottest part of the day.

"Participation in the LIFE Eco-camps project enabled us to work with various consultants to advise at all stages of the development of the environmental profile of our campsite"

Because of its location in the historical town of Navarrenx, with its magnificent ramparts, we also had to take into account the restrictions imposed by the *Architectes des Bâtiments de France* (responsible for protecting France's urban and environmental architectural heritage). The ABF, wanted to ensure that the chalet section did not look like a housing estate! We were told, for example, that we couldn't include individual parking in the new-build chalet section. This would have meant asking new arrivals to carry all their suitcases and belongings right across the campsite. In the end, the ABF relented, and we were allowed to provide onsite parking in the chalet section.

Looking back over the six years since the project ended, we would still have implemented the environmental changes started under the LIFE project. But LIFE showed us a process of evaluating every stage and justifying each choice made along the way.

Of the eco-innovations, campers seem to love the idea of the solar panels. But we've noticed that they don't always let us know if, say, the temperature of the water is not hot enough. We think some people think it's because there's not been enough sun. Whereas of course, it's us who control the temperature and we just need to turn the gas up!

We give all our campers information on the environmental efforts we have made. While they do appreciate the work we have done, we are not under any illusion that it in any way influences their decision as to where they take their holidays. When we give people the recycling information, some are very enthusiastic and extremely careful about getting it right, while others will throw up their hands and say: 'Oh, but I'm on holiday', as though it is all too much of an effort. On the whole though, we think it makes people feel better if they think things are being done in a way that respects the environment."

Project number: LIFE04 ENV/FR/000340
Title: Eco-design and eco-engineering of buildings, amenities and accommodation in campsites
Beneficiary: Conseil Regional d'Aquitaine
Contact: Laurent Beaussoubre
Email: Laurent.Beaussoubre@aquitaine.fr

LIFE 20 years competition

To mark the 20th anniversary of the LIFE programme in 2012, the LIFE Units organised two competitions open to all beneficiaries and project partners, past or present: a photo competition and a competition to sum up, in 20 words or less, what LIFE means to you.

From the numerous entries received, a panel of judges had the hard task of selecting the 20 "Best" photos and 20 "Best" texts. This long-list of "Best" entries was then whittled down to select the three "Best of the Best" photos and texts, which are presented below. All the winning entries can be found on the LIFE 20th anniversary website: http://life20.eu

"Best of the Best" **photographs**

- **Submitted by:** Farkas Szodoray-Parádi
- **Project beneficiary:** LIFE08 NAT/RO/000504

- **Submitted by:** Adriano De Faveri
- **Project beneficiary:** LIFE00 NAT/IT/007215

- **Submitted by:** Heinz Wiesbauer
- **Project beneficiary:** LIFE04 NAT/AT/000002

"Best of the Best" **texts**

"Thinking how, to save our water first. Thinking now, to quench our future thirst"

- **Submitted by:** Suzy McEnnis
- **Project number:** LIFE07 ENV/E/000845

"Era il tempo migliore, era il tempo peggiore' per i nostri paesaggi rurali. Misurarsi con la contraddizione, il progetto LIFE."

(Translation: "'It was the best of times, it was the worst of times' for our rural landscapes; facing up to the contradiction: LIFE.'")

- **Submitted by:** Anna Natali
- **Project number:** LIFE95 ENV/IT/000154

"LIFE to więcej niż fundusz. LIFE to filozofia, która łączy ludzi i przyrodę. Niemożliwe czyni możliwym."

(Translation: "LIFE is more than a fund, it's a philosophy that connects people and nature. The impossible becomes possible.")

- **Submitted by:** Artur Wiatr
- **Project number:** LIFE09 NAT/PL/000258

WINNERS

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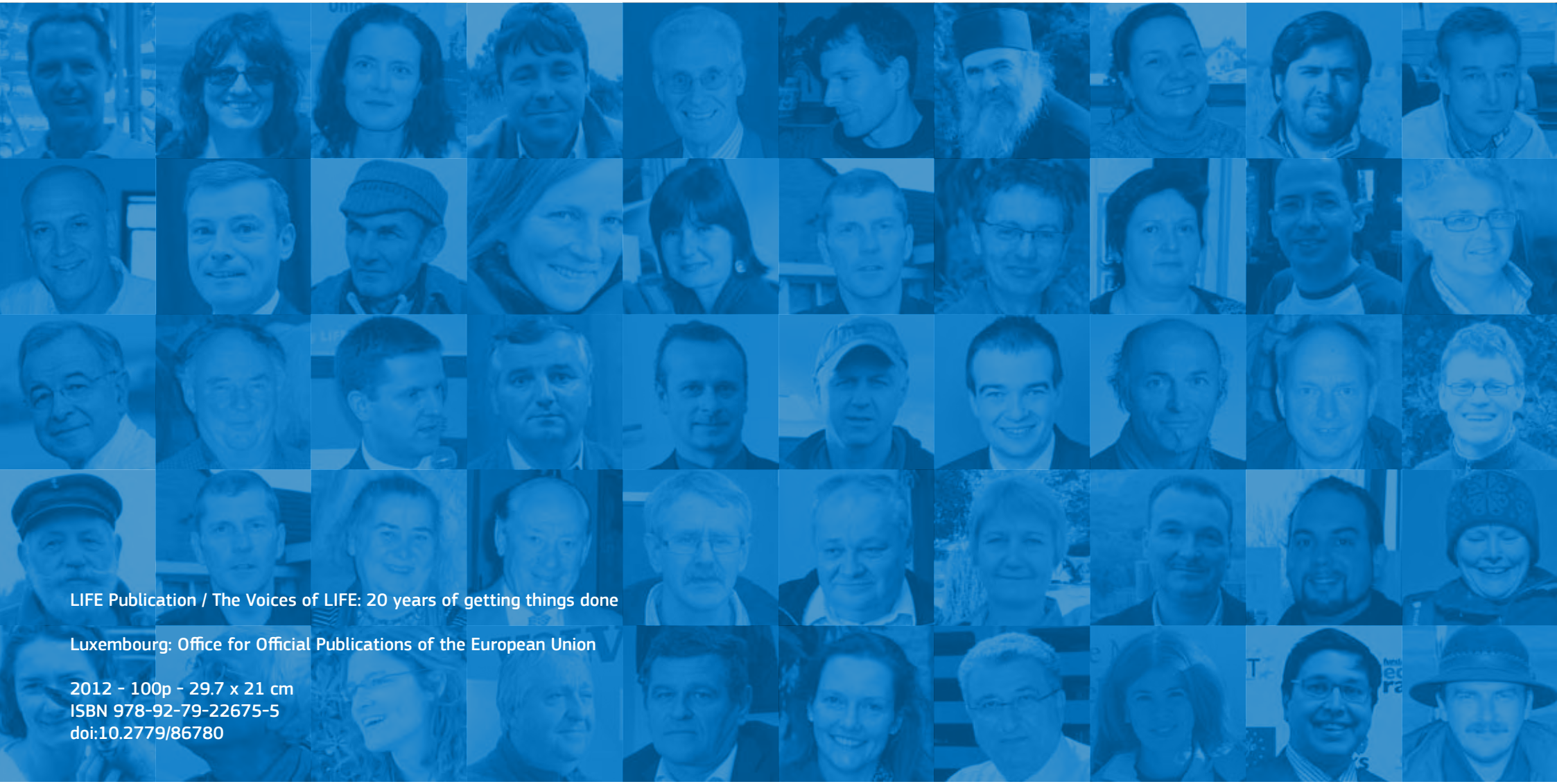

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