



Conservation across European boundaries

A report by Vicky Gilson on the EuCAN placement to Hungary
10th - 29th July 2010



Aggtelek © John Black

With thanks to EuCAN, Nigel and Kathy for their hard work in organising the trip and wrangling unruly volunteers!



Vicky Gilson and Fire Salamander ©John Black/EuCAN



Wartbiter ©Vicky Gilson/EuCAN

The adventure begins

The adventure began after my partner heard about EuCAN placements from a friend of his. The European Conservation Action Network (EuCAN) was set up under European funding www.eucan.org.uk in 2007 by the Kingcombe trust based in Dorset. The European funding is provided by the Leonardo project which aims to encourage voluntary work and understanding of other European countries.

Eucan offered a fantastic range of placements, so deciding on the trip was difficult but we settled on the Hungary trip as both of us wanted to learn more about butterfly species and neither of us had been to Hungary before. We felt very privileged to be chosen, and were astonished that the trip was going to be free as it was fully funded!

Before EUCAN Hungary was a complete mystery to me, I barely knew which countries bordered it, yet alone that it has such glorious national parks. My job in site designations meant that the trip provided an excellent opportunity to see protected areas outside the UK, and see European life from another perspective off the well worn tourist trail. It was also a chance and learns more about how Hungary goes about protecting its wildlife and habitats, especially for sites that cross its borders into other countries. I was intrigued to find out what challenges faced Hungary in comparison to UK when it came to conservation. This report is about my EuCAN experience and a perspective on designations in Hungary.

Ecology is such a wide subject, and I hope this introduction to Hungarian conservation is enlightening, and also that it will intrigues you to discover more of European countries, and understand why its most valuable assets are its wildlife and landscape.

Aim of the trip:

The aim was to go to two of the national parks in Hungary to survey butterflies and moths with some national park experts in order to help them gather important data on lepidopteron populations and biodiversity, share knowledge and learn through experience about other European cultures. On this placement we were to focus on some of the European protected species of large blue butterflies. The project aimed in this way to fulfil the Leonardo projects aspirations to support Europe's people with vocational placements so that its workforce is well trained, has increased expertise, and better understanding across European boundaries. Our volunteer work centred on Fertő-Hanság and Aggtelek national parks.



EuCAN group 2010©John Black/EuCAN



A bit about Hungary

Landlocked Hungary is naturally diverse in its nature and is especially good for butterflies as they are unhindered by large sea crossings and free to disperse through its countryside, migrating across its many European borders to mix with other populations. Its climate is also excellent as it sits at the convergence of climates from the Mediterranean and the continent. Hungary has around 152 of Europe's 482 species of butterfly (the UK only has 55) and rare species are found throughout the country including species that have restricted ranges such as mountain tops. In addition to butterflies, Hungary has fantastic diversity of birdlife, which includes species such as the White stork *Ciconia ciconia* and the Saker falcon *Falco cherrug*, as well as many species of mammals and invertebrates.

The pressures of the modern world however are changing the delicate balance that has taken many thousands of years to establish in countries like Hungary and many of the amazing and characteristic species of Europe's countries are now under threat. For example according to the European Union (EU) about 9% of butterfly species are threatened in Europe and 10% are near threatened). Among the species that we are affecting are: the White stork *Ciconia ciconia*, Saker Falcon *Falco cherrug*, the favourite summer food of the Saker the Souslik (ground squirrel) *Spermophilus citellus* and the great bustard (*Otis tarda*). One way of slowing or stopping these declines is by designating protected areas. These help to define where it is most important to preserve using enforcement by law or policy and makes it easier to concentrate the conservation effort effectively whilst still allowing industry etc to continue provided they do not have detrimental impact on the interests of the site.

Protected areas

Protected areas are, in simple terms, ways of protecting what we understand is important in nature and could be or is being negatively affected by our activities. For action to be taken laws and/or policies need to be in place so that we have guidelines to follow so we have consistency in what interests we include and so that we choose the best locations so there is maximum benefit to wildlife. This can mean both protecting and enhancing the protected area. This requires the complicated task of drawing a boundary line on a map, making clear to people what harms and what helps the protected area, constantly monitoring it, and most importantly, enforcing its protection. There are different reasons why nature is under threat and therefore different designation types to try and target these more specifically. I will explain later some of the designation types that Hungary has adopted.



Souslik ©John Black/EuCAN

Life before EU

Hungarian environmental policy used to be centred on the economics of the country as it strove under its communist regimes, and much less interest was paid to the protection of its wildlife than today. The communist regime had changed the traditional feudal type farming to a much more intensive farming method as it raced towards industrialisation, so environmental impacts such as the effect of destruction of wild habitats and even the effect of pollution on its people were largely overlooked. Today Hungary's capitalist governments are still somewhat focused on economic liberalization, expanding productive capacity (particularly in industry and agriculture), and modernizing infrastructure e.g. transport, energy, and telecommunications¹. The winds of change however are blowing in nature's favour since the new republic took over in 1989 and it joined the EU in 2004. The electrified wire barrier-the iron curtain between Hungary and East Germany was brought down and the country became more open to the rest of Europe, and views changed. When Hungary went on to join the EU in 2004 it adopted its laws, and by doing so has accepted those relating to the environment making it much more accountable for damage to its wildlife and habitats and is taking more of an interest in its preservation.

Life after EU

Joining the EU has changed the way Hungary protects nature², and also how its rural environment is managed. Hungary is still relatively poor in economic terms for Europe being 51st in the world's economy with a 128.9 billion GDP however the World Bank has supported Hungary's commitment to nature and environment conservation with investments to improve conservation and decrease pollution e.g. municipal waste water project plans to reduce pollution load in the Danube River Basin and the Black Sea, which will better comply with EU standards with the Global Environment grant³.

The benefits from the changes that Hungary has experienced through its membership are that EU funds have been available to improve both productivity of agriculture through EU subsidies for intensification of agriculture, and also support towards the conservation of the countryside and species. There is a careful balance to be struck with these



Memorial sculpture © Vicky Gilson/EuCAN

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<http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/HUNGARYEXTN/0,,menuPK:302086~pagePK:141159~piPK:141110~theSitePK:302081,00.html>

² http://www.unep-aewa.org/meetings/en/mop/mop4_docs/national_reports/pdf/hungary2008.pdf

³ <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/HUNGARYEXTN/0,,menuPK:302086~pagePK:141159~piPK:141110~theSitePK:302081,00.html>

two land uses, and monitoring is essential to ensure the balance between nature and agriculture. As a way of assisting the conflicts between agriculture and nature environmentally sensitive areas within National parks have been established with environmentally friendly methods of cultivation, with grants available.

In addition to funds, joining the EU has facilitated trading between countries and businesses. The low value of agricultural has led much being sold to industry or changing to more efficient farming practises to gain maximum yields, consequently the farming is changing and becoming less sympathetic to willdife.

To strike a balance EU agri-environmental schemes aim to make more habitat suitable for protected species vulnerable to land use change such as uncultivated field species e.g the ground squirrel *Spermophilus* by providing subsidies and grants to farmers-similar to the Stewardship schemes that we have in the UK so that land is managed more sensitively, providing better habitat and connectivity. This is particularly important for less mobile species such as reptiles, amphibians and weak flying butterflies and will enable them to disperse through the landscape more easily.

Fire bellied toad © Vicky Gilson/EuCAN



An alternative to this kind of scheme is for the government to buy the land that needs protecting or that is not being managed properly. In UK we have a law that gives the government the power to compulsory purchase land in a SSSI if the there is no alternative (Wildlife and Countryside Act 1981 Part II 28N). In Hungary there is an automatic right that the government may buy any protected land when it comes up for sale prior to other buyers, however for some it is seen as the government depriving people of their liberties. Currently 92.1% of Aggtelek National park is state owned.

It is arguable that by taking land away from local people, and by preventing them access to it may alienate them against the protected areas and species, however the national park directorate doesn't need to intervene in the management or activities on the land provided they are not going to degrade interests of the site. Efforts are being made to provide educational facilities and activities for people so they can enjoy the protected areas. Any increase visitor pressure is being managed by a

much more concentrated effort to aid the survival of rare species that are sensitive to human related pressures. e.g. Ladies slipper orchid is a prime victim for collectors, the saker falcon for being illegally shot or taken for illegal falconry breeding and the scarce large blue butterfly is vulnerable to habitat destruction. To ensure the habitats are suitable and National park rangers are employed to act as the front line of defence for illegal activities such as these.

Protected areas after EU

By joining the European Union in 2004 Hungary accepted obligations for the protection of species and habitats under its policy, conventions and directives⁴. Each type of protected area aims to provide beneficial protection to wildlife which in turn will benefit people by retaining their natural resources. The ten National Park Directorates are responsible for managing, monitoring and resourcing the Conservation Ranger Service. They work together with the National Inspectorates for Environment, Nature and Water to perform authoritative tasks and work together to designate, protect and enhance the countries protected areas,

EU biodiversity and nature conservation policy has directives (which have to be obeyed legally) and policy that is not embedded in the legislation but is used and recommended by governments.



Sunflowers-a big cash crop for Hungary © John Black/EuCAN

The European directives Hungary have adopted call on their Member States to designate protected areas called Special Protection Areas (SPAs) and Sites of Nature Conservation Interest (SNCI) (also called Special Areas of Conservation) to create a coherent ecological network within the EU, which is known as the Natura 2000 network. This means that Hungary has to give priority to nature conservation

⁴Home Page of the Official Nature Conservation in Hungary
<http://www.termesztvedelem.hu/index.php?lang=en>

issues over economic interests by accepting the Bonn (Migratory species) and Bern (conserving wild flora and fauna in their natural habitats in a cohesive way in Europe) Conventions. They have also adopted the Ramsar Convention (wise use of wetlands named after the Iranian capital where it was created), the Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) and the Birds Directive (Directive 2009/147/EC on the conservation of wild birds). It has also accepted other international nature conservation agreement e.g. CITES (the Convention on International Trade in Endangered Species). In practise the SPAs are created to help protect birdlife and the areas which are important to their lifecycles, SACs to protect the species and named habitat types in the habitats directive, and Ramsar's to protect wetland species (including water birds, mammals and invertebrates) and their habitats.

These laws are very important as they provide a legal measure to control the major threats to biodiversity in Hungary such as hunting, falconry and habitat destruction. One of the great benefits of the European scale approach by applying across Europe's borders is that the efforts of one country to protect its wildlife do not go to waste when their mobile species move past its boundaries, only to be shot or captured, or its rivers to be polluted by damaging activities abroad. It's better for wildlife to have freedom of movement by continuous habitat or stepping stone habitats. As Hungary is landlocked with 7 neighbouring countries (many of which it shares recent political disputes with): Slovakia, Austria, Slovenia, Croatia, Serbia, Romania, and Ukraine, this is particularly important, for example Hungary shares the Baradla Cave System and related wetlands (designated 2001), Felső-Tisza (Upper Tisza) (2004), Ipoly Valley (2001) with Slovakia, and Neusiedler See-Seewinkel (1982) with Austria.



Silver-washed fritillary ©Vicky Gilson/EuCAN

Below is a brief the main events in the history of Hungarian conservation ⁵

History of Conservation in Hungary	
1565	1 st constitution Maximiliana by king Maximilian 1 to protects his forests
1791	State duty to protect the forests- Unauthorised forest clearance illegal
1879	Law on forestry
1894	Protection of certain plants and species useful for agriculture
1876	First Hungarian Environmental Act adopted in and also the establishment of an institutional system (National Environmental and Nature Conservation Council, National Environmental and Nature Conservation Office and the basic environmental observation, information processing and research analysing systems and institutes
1902	Regional Convention on the protection of birds useful to agriculture
Wars interrupt the development of further conservation policies	
1935	Council for Nature Conservation established
1961	Law for nature conservation becomes independent of forestry establishing National Authority for Nature Conservation
1976	Hanság designated as Landscape protection area
1977	Fertő scheduled as a landscape protection area
1978	Start to designate Landscape Protection Areas-Aggtelek LPA is designated.
1979	Biosphere reserves and 1 st nature conservation law enacted-world heritage sites. Aggtelek now biosphere reserve.
1985	Began National Parks designation and Aggtelek National Park is designated
1989	Fertő designated as a Ramsar
1991	Fertő receives national Park status
1990, 1997, 2001	Aggtelek National Park is enlarged
1994	Hanság attached to Fertő national park
1995	Aggtelek National Park designated as a world heritage site for its caves
1996	The ministry responsible for environmental protection was formed in 1987 and reshaped in 1990 Nature Conservation - Act No. LIII.
2001	First Ramsar designated- Aggtelek Domica-Brardla cave system (geological)
2004	Hungary joins EU
2004	Subsidies base on UK environmentally sensitive areas becomes part of agri-environment schemes.
2009	Croatia and Hungary sign a declaration that will establish a Trans-Boundary UNESCO Biosphere Reserve

How Hungary is doing with its European and International designations

Currently in its implementation of the Birds Directive Hungary has classified 55 Special Protection Areas that cover 13,512km² of its 93,000km area⁶ and in its implementation of the Habitats Directive 467 SCI's (we call them SACs in UK) covering 13,973km². To compare, the UK has classified 257 SPA sites covering 16,114km² of the UK's 244.800km² area (35 are marine with an area of 3,125km²) and we have designated 623 Special Areas of Conservation which cover 29,066km²

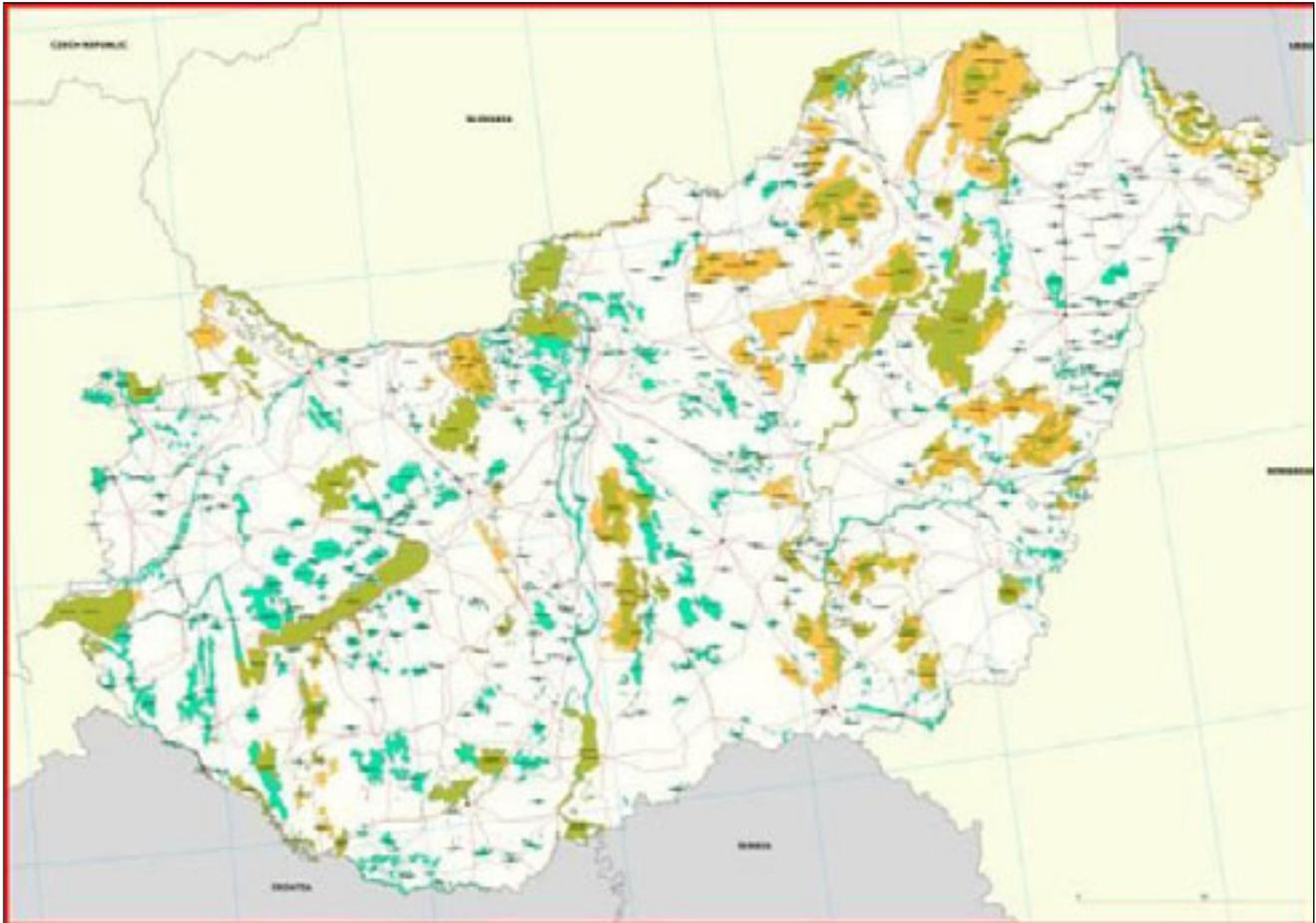
⁵ Workshop on Nature Conservation in Central and Eastern Europe, Council of Europe Council of Europe Press, Workshop on Nature Conservation in Central and Eastern Europe: present situation, needs, and role of the Bern Convention, Budapest, Hungary, 15-18 February 1993 (1994): Convention on the Conservation of European Wildlife and Natural Habitats Workshop on Nature Conservation in Central and Eastern Europe, Council of Europe Council of Europe Press,

⁶ <http://ec.europa.eu/environment/nature/natura2000/barometer>

of which 49 are marine covering 12,409km². Of the Natura 2000 sites 39% are protected at national level in Hungary.⁷

For its commitment to the Ramsar Convention (Wetlands) it has designated 28 Ramsar's covering 2354.3km², UK has 168 with a total area of 12743.2km²⁸. See the maps below to see the distribution of the Hungarian sites.⁹

Map below shows Natura 2000 sites in Hungary



Key



⁷ <http://www.cbd.int/countries/profile.shtml?country=hu>

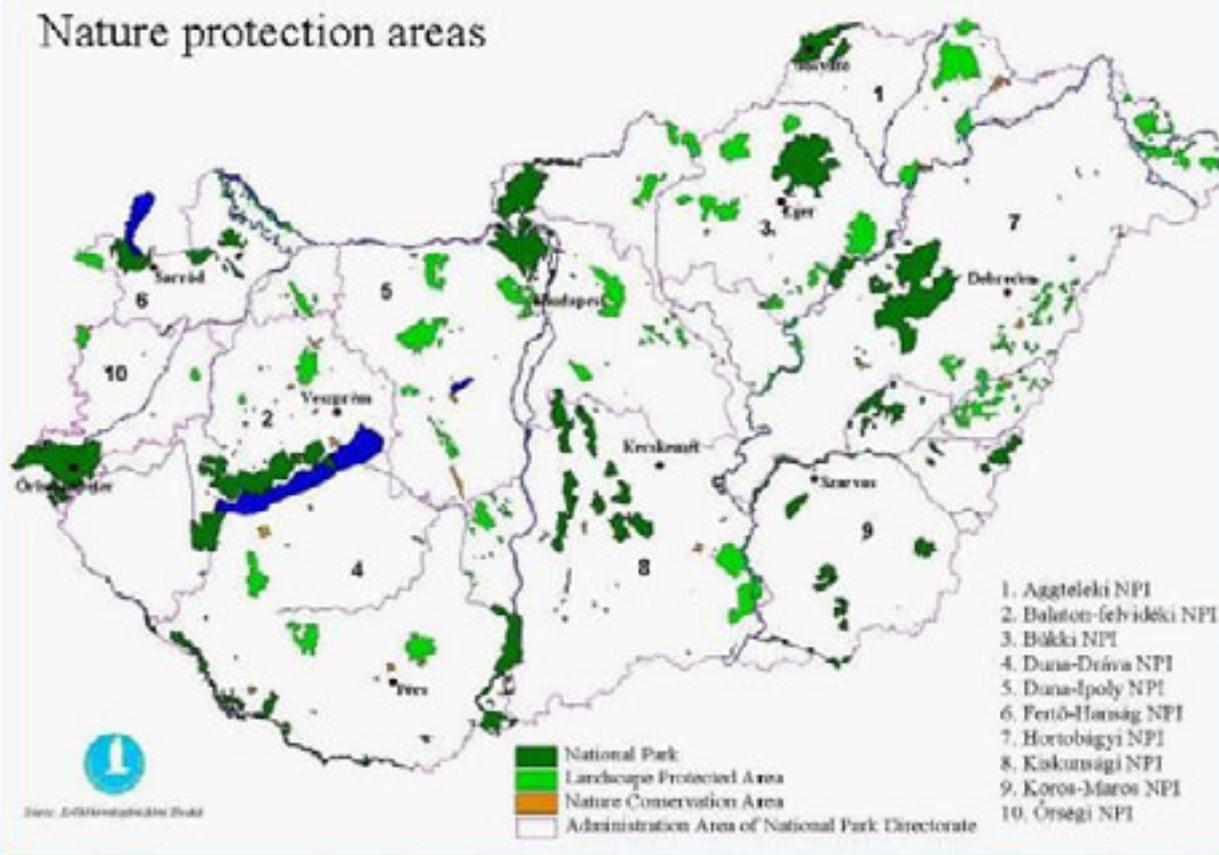
⁸ http://www.ramsar.org/cda/en/ramsar-pubs-annolist-annotated-ramsar-23851/main/ramsar/1-30-168%5E23851_4000_0__

⁹ http://geo.kvvm.hu/tir_en/viewer.htm

Ramsar Sites of Hungary



Nature protection areas



What happens if Hungary doesn't designate or enforce its sites?

The European commission act as the police to ensure each country obeys its laws, and EU members that fail to comply with this are subject to its penalties. Recently Hungary was given a warning by the European commission regarding its failure to adequately protect an area of protected woodland on its eastern border called the Sajólád Wood, a protected area of hardwood forest. Sajólád Wood was added to the Natura 2000 network in 2004 and was a haven for many protected animals, including the scarce fritillary butterfly (*Hypodryas maturna*) which is one of the most endangered butterfly species in Europe. The logging has left it now severely depleted and no appropriate compensatory measures have been taken to offset the effects of the destruction¹⁰. It has now had its final warning and Hungary must now act or risk the European court of justice taking legal action against it and imposing a fine (a large lump sum payment and a daily penalty).

This type of enforcement is an effective way of ensuring the member states keep to the laws and to overcome obstacles with their support. In its review of its progress towards Natura 2000 Hungary concluded that more staff were needed to keep better control of the inspections, and a possible improvement to allow greater public awareness and transparency by publishing its inspection reports or provide them for public viewing.

Similar problems exist for Aggtelek national park which the European commission is investigating, so it is important for Hungary to take action or face large fines¹¹.

Hungary is not alone in being in trouble with the European Commission however, the UK for example was recently alleged to fail to transpose the Habitats Directive into domestic law adequately (into regulations), and this has since been actioned by UK¹². Feedback from countries regarding their compliance with the European laws has shown that the differences in monitoring and reporting of the condition of the designated areas differs which is a reason for some inadequacies in their implementation of the Natura 2000 sites so the European Commission provides a minimum criteria for the member states to follow: Recommendation 2001/331/EC. This is has since been reported on and consulted with the EU members and is in the process of becoming a directive itself.



Often persecuted – the Female sparrowhawk (from UK) ©Vicky Gilson

¹⁰ <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/526&type=HTML>

¹¹ http://ec.europa.eu/environment/legal/law/pdf/sec_2007_1493_en.pdf

¹² http://ec.europa.eu/environment/nature/info/pubs/docs/others/ecj_rulings_en.pdf



Emperor dragonfly ©Vicky Gilson/EuCAN

LIFE

Although the European commission must ensure strict compliance with the laws, and member countries are occasionally subject to infraction proceedings, benefits of the union for nature are clear with access to funding for nature projects. To date Hungary has had 16 projects funded by the LIFE-Nature project which fund EU projects “that contribute to the implementation of the Birds and Habitats Directives and the Natura 2000 network” for the “implementation, development and enhancement” of its environmental policy and legislation. Through this it has used the funding for projects such as wetland restoration on some of its sites the building of new educational centres.

Through the LIFE project Hungary has implemented some recommendations from the Bern Convention, CITES, Annex 1 of the birds directive and the Habitats Directive. An example is the Hungarian meadow viper *Vipera ursinii rakosiensis*, a species that is known in only in two localities- the Hanság (where we visited) and in Kiskunság. Other species benefiting from the funding through LIFE projects include: large carnivores, eastern imperial eagle *Aquila eliacal*, great bustard *Otis tarda*, red footed falcon *Falco vespertinus*, saker falcon *Falco cherrug* and the plant *Dianthus diutinus*¹³

In the UK the LIFE project has co financed 42 projects (with 17 still ongoing) helping habitat restoration, species include: bittern, capercaillie, marsh fritillary butterfly, cetaceans and atlantic salmon¹⁴. The LIFE-Nature project also funded a project that

¹³ <http://ec.europa.eu/environment/life/index.htm>

¹⁴ http://ec.europa.eu/environment/life/countries/documents/uk_en_oct06.pdf

aims to encourage farmers to adopt more wildlife friendly farming practises however this still is contradicted somewhat as farmers are currently also offered funds for intensive agricultural practises- called CAP I pillar, similar to how the UK farmers were encouraged after the war years. This means they either increase the intensity of their farming to maximise yield by spraying fertiliser etc, or just as negatively, if the farm is deemed to be unsuitable for intensification, to let the farmland convert to unmanaged scrubland. The LIFE project aims to protect 720 hectares of six grassland/steppe habitat areas by educating the farmers, encouraging wildlife friendlier practises, especially those within the buffer zone around Natura 2000 areas to improve the conflict of interests.

Charities/joint projects

In addition to EU funded projects like LIFE further work is going on to compliment the protected sites and projects, for example Birdlife Hungary is working with the Ministry of Environment and Water to prevent bird strike as a result of electricity poles and pylons. They estimate 30,000 birds are killed every year in Hungary and they are a “significant source of mortality” for protected birds such as the globally threatened saker falcon *Falco cherrug* with one in eighteen pylons killing a raptor. The pylons also threaten other birds such as the white storks *Ciconia ciconia* (80% of which nest on electricity poles in Hungary). The project aims to reduce the risk of electrocution by putting an insulating plastic cover on the metal crossarms of electricity poles¹⁵. The government and power companies have signed the “Accessible Sky” agreement that aims to apply the covers to all dangerous power lines in Hungary by 2010¹⁶.

An unfortunate little bittern killed by overhead power line (picture taken in Greece) © John Black



White storks in Hungary ©John Black/EuCAN



¹⁵http://www.birdlife.org/eu/pdfs/Nature_Directives_material/BHDTF__Position_Power_Lines_and_birds_2007_05_10_.pdf

¹⁶ BirdLife International (2010) Safer power lines for Hungary's birds. Presented as part of the BirdLife State of the world's birds website. Available from: <http://www.biodiversityinfo.org/casestudy.php?r=&id=222>. Checked: 2nd November 2010

Protecting species

Hungary's duty to protect its wildlife has meant it has to prioritise where it puts its effort and money. Hungary has developed a ranking system in order to prioritise its expenditure on the conservation of each species and thus its value to the state. This system however is reliant upon up to date research on the status of that species, something that the understaffed Hungarian National Park Directorate struggles to do (much of the research is conducted by volunteers). The system is not perfect, and the ranking of species is subject to biases such as the popularity and use of the species rather than solely on its actual conservation needs, for example pest species may be given a lower rank than their conservation status actually dictates and by the same measure more prominent charismatic species such as storks or great white egrets given a higher status rank.¹⁷

They currently use an adapted version that was written by Millsap et al¹⁸ which uses a criteria based on the value of the species e.g. taxonomic uniqueness, populations size/trend, occurrence (if unique for a country). The threat to each species also varies with species such as otter (*Lutra lutra*) and European lynx (*Lynx lynx*) subject to different persecution types e.g. by those with interest in fisheries/livestock. Other threats such as so egg collectors and the pet trade also vary in intensity depending on fashions. The original grouping variable was the legal status of the species,



according to the Hungarian Nature Conservation Act (Anon. 1993, 1996), a special Hungarian law that prescribes protection of wildlife on four different levels: not protected, partly protected (hunting allowed), protected (minor offence) and strictly protected species (criminal offence and nearby habitat is protected) this is still informs today's wildlife management in Hungary.

Some game species are classified with partial protection so that they may still be hunted however this is controlled with short hunting seasons and limitations such as maximum quota per hunter per day. The Ministry of Environment and Water are the government body that controls hunting practices. Hungary has a history of hunting as our EuCAN trip confirmed with large hunting platforms proving as visible references of the activities in the open season for game shooting. The progress towards better

environmental practices is demonstrated by Hungary's the adoption of the Ministerial Decree 56/2005 (VI.25.) outlawing the use of lead shot on wetland sites.¹⁹

The management of hunting has to be balanced carefully and recently the EU Commission had issues with the hunting of roding²⁰ woodcock *Scolopax rusticola* in Hungary (males which are making displays involving display flights and calling to advertise to females). Hungary was allowing the shooting of males between 1st

¹⁷ BÁLDI A, CSORBA G and KORSÓS Z (2001) Setting priorities for the conservation of terrestrial vertebrates in Hungary Biodiversity and Conservation 10: 1283–1296

¹⁸ Millsap BA, Gore JA, Runde DE and Cerulean SI (1990) Setting priorities for the conservation of fish and wildlife species in Florida. Wildlife Monograph 111: 1–57

¹⁹ http://www.unep-aewa.org/meetings/en/mop/mop4_docs/national_reports/pdf/hungary2008.pdf

²⁰ <http://onlinelibrary.wiley.com/doi/10.1111/j.1474-919X.1980.tb00888.x/abstract>

March to 10th April, and a quota of four individuals allowed per hunter per day using firearms only. In total 8,986 Woodcock (Annex II/1), were allowed to be shot through a derogation of Hungarian hunting law that granted hunting during the breeding period of this species. This caused concern over the impact on this derogation on the species breeding success and implications on this species as it is migratory in Hungary.

For this reason the European Commission conducted an infraction²¹ procedure. Hungary recently were sent warnings from the European Commission due to this insufficient application of the Birds Directive for this species e.g. Article 7.4 which says member states “shall see in particular that the species to which hunting laws apply are not hunted during the rearing season or during the various stages of reproduction “. The Commission sent a first warning letter in April 2006²² and a further warning letter shortly afterwards, Hungary have since reacted and now woodcock is no longer allowed to be shot. This is a good demonstration of the power of European law, and its effectiveness.



The conservation of species can be a complex issue, and data is vital for a society that demands evidence. The difficulties associated with cryptic (camouflaged) species or those that are difficult to ID are particular difficult to overcome if accurate population data is to be gained. On our trip for example, a silver washed fritillary turned out on closer inspection to be a similar looking and rarer Pallas fritillary-which really highlights the need for careful ID. Similarly during our stay we helped with recording the presence/absence of large blue *Maculinia* sp food plant *Gentiana pneumonanthe* to determine the management of the sites and their condition.

A lot of work needs to be done to assess these plants as they are the main foodplant of the species and must be regularly surveyed. Maes et al 2004²³ describe the method of recording the presence/absence data on the butterflies food plant as somewhat difficult as the plant is slow growing and can live in conditions that are not suitable for reproduction (recruitment) so while a surveyor may observe the plant in an area it does not mean the habitat is adequate for that plant or indeed the butterfly, moreover there may be a delay between habitat deterioration and decline of the

²¹ http://ec.europa.eu/environment/nature/knowledge/rep_birds/docs/derogation_report_2005.pdf

²² <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/525#fn1>

²³ Maes D., Vanreusel W., Talloen W., and Van Dyck H., 2004, Functional conservation units for the endangered Alcon Blue butterfly *Maculinea alcon* in Belgium (Lepidoptera: Lycaenidae) *Biological Conservation*: 120, 2, pp. 229-241

species.²⁴ The survey work therefore needs careful analysis to establish the presence absence and the ecology of the species to be known and taken into account.

The future

Hungary is making good progress towards its Natura 2000 designation, for example over the past fifteen years from 309 sites in 1986 covering 14,518km² it has increased its designations to 5,315 sites covering 593,486 km² of its 4,290,102 km² area (13.8%). The SCI (called SAC in UK) stand at 22,529 sites covering 719,015 km² (16.8%). This means Hungary is around 86% and the towards reaching sufficiency for the Habitat Directive Annex I habitats and Annex II species²⁵, the UK is slightly ahead at 94% sufficiency.

External pressures and in country problems such illegal killing and taking of wild birds, intensification of agricultural practises and industrialisation will, unless its wildlife is protected, leave Hungary poorer in a way more devastating than any economic down turn. Pollution, industrialisation, alienation of people from the natural environment and, most importantly overpopulation are all contributing to a global decline in the worlds wealth of nature. Only a dramatic change that will alter out thinking so we see ourselves as guardians rather than users with perhaps some sacrifice to our lifestyles will bring a sufficient change to stop the current trends of decline. We are moving in the right direction however.

Recently (September 2009), Croatia and Hungary signed a declaration that will establish a Trans-Boundary UNESCO Biosphere Reserve to protect their shared biodiversity hotspot along the Mura, Drava and Danube Rivers. This paves the way to create Europe's largest river protection area. This agreement, which was signed by the Ministers of Croatia and Hungary, Božo Biškupić (Minister of Culture) and Imre Szabó (Minister for Environment and Water) is a real testament to Hungary's commitment to nature conservation across European boundaries. EuCAN has helped to widen the minds of the volunteers but also aid the circulation of new ideas and gather data that will help this beautiful county to retain its wealth of nature. Many thanks to EuCAN for the fantastic opportunity to learn more about this wonderful country and I hope readers find inspiration through this article to volunteer and help experiences of nature like this to continue.



Tree frog © Vicky Gilson/EuCAN

²⁴ Oostermeijer, J.G.B., den Nijs, J.C.M., Raijmann, L.E.L. and Menken, S.B.J., 1992. Population biology and management of the marsh gentian (*Gentiana pneumonanthe* L.), a rare species in The Netherlands. *Botanical Journal of the Linnean Society* **108**, pp. 117–130.

²⁵ http://ec.europa.eu/environment/nature/natura2000/barometer/index_en.htm#newstat