

LIFE Project Number LIFE07 NAT/H/000321

FINAL Report Covering the project activities from 02/02/2009 to 31/07/2014

Reporting Date 31/08/2014

LIFE+ PROJECT NAME or Acronym **EASTERN BAKONY**

	Project Data
Project location	Veszprém County / Central Transdanubia / Hungary
Project start date:	02/02/2009
Project end date:	31/07/2014 Extension date: -
Total Project duration (in months)	66 months (including Extension of 0 months)
Total budget	€ 2 238 642
Total eligible budget	€ 2 122 372
EU contribution:	€ 1 591 442
(%) of total costs	71,09%
(%) of eligible costs	74,98%
	Beneficiary Data
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Project Website





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1. EXECUTIVE SUMMARY

The implementation of project "Eastern Bakony" (LIFE07 NAT/H/000321) aimed to preserve the natural resources characterising the military owned areas of the Eastern Bakony area, by restoring previously degraded sand land habitats and population of valuable species, this way preserving biodiversity. One of the most important goals of the project is to find an optimal balance between nature conservation and military use that leads to the sustainability of conservation actions performed in the course of the project, by strengthening the cooperation between these institutions.

Conservation actions targeted the priority-listed habitats of the Eastern Bakony (HUBF 20001) and the Papod-Miklád (HUBF 20002) areas, including the Várpalota Shooting Range: (i) 6240 Sub-Pannonic steppic grasslands, (ii) 8160 Medio-European calcareous scree of hill and montane levels, (iii) 91G0 Pannonic woods with Quercus petraea and Carpinus betulus and (iv) 91H0 Pannonian woods with Quercus pubescens. Serratula lycopifolia and Falco cherrug were also targeted by the project. As the result of the project implementation the Natura 2000 network was extended by some 11.016,2 ha in the HUBF 20001 Keleti-Bakony area and by some 2.302,3 ha in the HUBF 20002 Papod-Miklád area.

Three primary types of actions were implemented in order to accomplish the objectives set in the project proposal: (i) habitat restoration and maintenance, (ii) safety measures to protect natural resources and biodiversity, and (iii) communication actions.

In the course of *habitat restoration* activities interventions aimed at suppressing invasive species (such as shrub and arboreal species) that degrade the ecological value of habitats leading to succession of biodiversity. Habitat restoration included the recultivation of anthropogenic land forms and facilities and the amelioration of the living conditions for the endangered target species (e.g. by installing nesting breed boxes).

<u>Safety measures</u> taken in the course of the project implementation aimed to protect valuable habitats and species from the harmful effects of military activities (i.e. fire). In order to meet the challenge a fast and effective fire fighting system was developed (i.e. creation of a water catchment pool on-site, reconstruction of the fire emergency road system) to manage accidental wildfires resulting from shooting practice and the development of fire breaking buffer zones around military training and testing areas (known as fire break zones).

<u>Communication actions</u> included setting up information and notice boards to describe the natural values of the area and rules for their protection, training military personnel on environmental practices, publication of informative materials on the integration of military and nature conservation interests, keeping current online content on project development and the issues addressed by the project, organizing public events (public information meetings and guided tours to areas that generally are closed for the public) to disseminate information about biodiversity in military areas and related maintenance measures.

The comprehensive and long-term monitoring of forests and environmental interactions formed an integral part of the project also.

The interventions were performed in an area of 13.318,5 ha. In the course of habitat restoration related actions invasive species were suppressed by combining mechanical and chemical methods. Shrub thicket were removed from a total of 600 ha (action C2), the primary target invasive species from which Sub-pannonic steppe grasslands and Pannonic woods with Quercus pubescens habitats were protected from are Eleagnus angustifolia, Ailanthus altissima, Robinia pseudo-acacia, and Pinus nigra (actions C8-10). Methods applied





for habitat restoration included also forest transformation (acorn placements and planting seedlings after the certain level of decrease in the closure of Pinus nigra forests), fencing around valuable areas in order to protect species from game damages. To support the presence of Falco cherrug in the area artificial nests were installed and feeding sources were provided (repatriation of ground squirrels). Abandoned mines and military buildings were recultivated resulting in the restoration of Sub-pannonic steppe grassland on some 4 to 5 hectares and also in suppressing illegal mining and waste dumping activity in the project area.

As part of the safety measures interventions to decrease the magnitude and damages caused by fires and thus protecting Quercus forests, Sub-pannonic steppe grassland habitats, a sustainable and effective fire fighting emergency system was constructed by the creation of altogether 6.000 m long fire break zones around military training areas, the restoration of 34.5 kilometers of fire emergency roads and the creation of a water catchment pool with a capacity of storing 9.300 m³ water.

Conservation actions were thoroughly monitored and documented in monitoring reports (prepared yearly), in order to demonstrate the efficiency of the methods selected and to communicate the conclusions of the project to stakeholders dealing with similar natural conservation issues.

A comprehensive Natura 2000 site management plan for the project site supporting sustainable priority habitat and species conservation was developed based on professional consensus and adapted in the course of the project.

As the first step of the implementation the management and administration of the project was set up, followed by establishing the supervising body of the Consortium (Steering Committee). The Partnership Agreement including the detailed workplans of the implementing partners was discussed and signed right after the project start.

The management and administration of the project provided a proper framework and a professional background helping the partners with their administration and management of tasks. Beneficiaries worked according to the principles set in the Partnership Agreement. Partners are well aware of their duties and work towards to achieve their goals. As a team, the Consortium operated well: partners helped each other with professional assistance, consultation, with the transfer of knowledge on best practice issues. The successful collaboration of the partners will probably result in the submission of further project proposals to be jointly implemented. The SC held their meetings regularly and the decisions for the smooth project implementation were made in time.In general, the level of communication and flow of information was excellent in the project team. Regular contact and comprehensive communication between the project team and the external monitoring expert provided good transparency for the project and a clear view of the project and its progress. Monitoring visits were implemented at least onece a year during the project implementation period.

The challenges of the project implementation were successfully managed by the partners, and none of them imposed threats for the accomplishment of the given actions, nor for the overall project:

- 1. Change in the law on procurement procedures
- 2. Limited access to the project area
- 3. Extreme weather in 2010 causing extra work and requiring more funding in certain actions
- 4. Lower spendings on some other activities,
- 5. Changes in the personnel of the Beneficiaries
- 6. Dragging re-launching the project website after the sudden breakdown of the servers
- 7. Deliberate damages in the notice boards and equipment



The activities of the project were implemented as scheduled in the revised / amended project proposal. All the actions were finished by the project end date, conservation actions show spectacular results, dissemination actions were also carried out by the project workplan.

Action A1 Making preparatory inventories of priority Natura 2000 species and habitats of the project area

The deliverables and milestones of the action are met: (i) the inventory of priority Natura 2000 species and habitats was delivered with the Mid-term Report and (ii) the aerial photograph of project area was purchased. The action served as the basis of the monitoring activities.

Action A2 Drafting of Natura 2000 site management plan for the project site

The Natura 2000 site management plan was approved and confirmed by the ministry responsible for nature conservation issues. One of the most important objectives of the project was the inclusion of the Eastern Bakony project area (HUBF 20001 and HUBF 20002) in the extended Natura 2000 network which was achieved in 2010.

Action A3 Technical investigations and planning

All technical plans and surveys necessary for the implementation of the conservation actions were developed (survey report of abandoned military facilities, field survey report, technical plans for the recultivation of quarries and mining pits, technical plan of fire break zone and technical plan of road construction).

Action C1 Machinery procurement for other conservation actions

Two pieces of high pressure, vaporizer, mobile fire extinguisher devices, a Valtra T 161 Classic tractor and AHWI FM 500-2300 mulcher and a New Holland dozer were acquired in the framework of this action by applying the appropriate public procurement procedure, in order to support the implementation of conservation actions.

Action C2 Restoration of degraded Subpannonic steppe-type grassland through removing shrub thicket Shrubs were removed from altogether 600 ha by using the equipment purchased in the course of the project. Maintenance of the treated areas are performed primarily by grazing.

Action C3 Stimulation of population growth and nesting of saker falcon (Falco cherrug)

Five artificial nests were installed in the project area to support the re-ecesis of Falco cherrug. Feeding sources were also strengthened by repatriating altogether 573 pcs of ground squirrels to the project area.

Action C4 Recultivation of illegal waste dumps, abandoned roads, quarries and military facilities on the site

Recultivation of 37 illegal waste dumps, mining pits, abandoned military objects was carried out within the project area. The action included also the transportation of debris and illegal waste which altogether amounted to 6.422 tons to official waste depositories.

Action C5 Development of fire brake zone between military training field and priority habitats

Fire break zones, altogether 6 km long, were created around the two major shooting and practice ranges of the military in the project area. The creation of the fire break zones is a good practice for all forestry companies working on military practice ranges. VERGA with the coordination of MODDEO disseminated the results and the experience gained with other forestries to be applied in the course of other projects or day-to-day operation.

Action C6 Construction of water catchment pool for fire protection

A water catchment pool with a capacity of storing 9.300 m^3 water was created, supplemented with a sludge catching area and strengthened after the extreme stroms registered in 2010. The water catchment pool proved to ensure enough water – generally until the beginning of autumn – for fire protection. Some hydrophilic living beings (water birds, grallatores) were already observed on the area (since the pool sometimes dries out, the presence of the above listed species is occurrent).

Action C7 Reconstruction of road network for fire protection purpose

Fire emergency service roads were reconstructed in altogether 34,5 km length. The extreme weather conditions in 2010 required the re-reconstruction of the previously repaired road network.



The finished network requires only maintenance and proved to be a sufficient and appropriate solution for fire protection and fire fighting tool.

Action C8 Rehabilitation of Sub-pannonic steppe grasslands and Pannonic woods with Quercus pubescens habitats through the suppression of invasive arboreal species

Three chemical treatments were carried out to suppress invasive species from the designated appr. 20 ha area. The success of the chemically treated invasive species highly depended on the type of trees (Ailanthus required repeated treatments while Eleagnus had to be chemically treated once or twice). The composition and the doses of the chemicals were registered and might be applied in other projects as well.

Action C9 Transformation of planted Pinus nigra forest cover into Pannonian woods with Quercus pubescens habitat on 35.5 hectares

The extreme wind storms in 2010 caused a larger closure decrease than planned thus threatening the already planted seedlings and the placed acorns. Therefore further acorn placements and seedling plantings had to be performed between 2011 and 2013. Nursing activities were implemented twice or three times (depending on the weather) per year. The new plants (acorns, seedlings) became stronger, but the transformation of the forest requires longer time (10 years).

Action C10 Preservation and rehabilitation of Pannonian woods with Quercus pubescens and Medio-European calcareous scree of hill and montane levels habitat and Serratula lycopifolia species through installing fence around target sites and thinning of mouflon (Ovis musimon) population

The action included habitat preservation by fencing around some 54 ha with 6.556 m long fences. After building the fences no game damages observed within the fenced area However, the mouflon population outside of the fenced area is oversized and has to be weakened by continuous hunting.

Action C11 Exchange of best practice experience through practical collaboration on concret conservation actions

The collaboration of the implementing partners strengthened and improved. As the impact of the good cooperation in the course of the project implementation, the idea of another project is being developed.

Action D1 Project website development and maintenance

The official website (www.life.keletibakony.hu) was to serve as the main information sharing tool of the project. All information on the project, its progress was available as well as photos and short news. Due to some unfortunate breakdowns the website had to be reprogrammed and all information re-uploaded. The reinstalled and reprogrammed website was of great importance when sharing information on the international conference and will serve as the main information sharing source for the after-LIFE measures.

Action D2 Installation of gates, informational and notice boards

The installation of the gates and notice boards (25) at the entryways of the project area resulted in the significant decrease of the "foreign" vehicles in the project area. The frequent deliberate damages of gates and boards require extra resources.

Action D3 Development of educational trail

A 6,5 km long educational trail with 12 stations and 2 resting places equipped with educational boards was created attracting about 40-50 visitors per day during hiking season at weekends, providing location for school events involving 2-300 pupils per event. The educational trail was also connected to the bicycle route and the forest PE trail (developed outside the project budget). The frequent damages observed in the educational boards cause extra costs.

Action D4 Publishing layman's report

The bilingual report was printed in 500 copies and is also downloadable from the website. The report was distributed in the international conference and the final public information meeting.

Action D5 Media work

Three press conferences were organised and implemented during the project. Media representatives were invited – besides the press conferences – to all public information meetings, guided tours and the international conference. Several aticles were published on the project during the project implementation period.





Action D6 Publishing of informational and educational material

Educational and dissemination materials (brochure on the species and habitats of the project area in 300 copies, leaflets on the open events of the project and guided tours in 500 copies, multimedia teaching materials downloadable from the project website) were printed and distributed in the course of guided tours, public information meetings, press conferences and the international conference. Electronic newsletters were sent to some 250 prescribers.

Action D7 Public information meetings

There were three public information meetings organised and held (two in Veszprém and one in Várpalota). The events were advertised in the local press and media, while municipalities and environmental organizations were sent direct mails.

Action D8 Guided excursions for the public

Four guided tours were organised and implemented attracting 400 participants. The guided tours were of great success: the possibility of visiting areas that – among ordinary circumstances – are closed for the general public attracted lots of people allowing conservation and communication messages easily be transferred.

Action D9 Internal training of military personnel on environmental practices

Altogether five trainings were implemented with 115 participants (both Hungarians and foreigners). 100 copies of guidelines were printed and distributed among the participants. As a result, soldiers became more environment-conscious.

Action D10 Exchange of best practice with other LIFE+ military initiatives

Partners compiled the "Military-LIFE" project database to support international dissemination. A study visit to Latvia to have best practice and knowledge transfer from the ADAZI project was implemented, but the Eastern Bakony project also was presented. The delegation of project LIFE10 NAT/HU/000020 was welcome to share knowledge on the best practices of the project. Partners organised a successful international conference in cooperation with LIFE08 NAT/H/000289 attracting 100 professionals representing 13 countries.

Action D11 Post project communication plan

The after-LIFE plan for communication activities setting out the dissemination strategy focusing on the results of the project, long-term benefits and outcome of conservation actions including best practices was developed in Hungarian and English languages.

Action D12 Exchange of best practice experience through practical collaboration on concret dissemination actions

Strong and effective collaboration and cooperation has been established between the partners in communication and dissemination issues as well.

Action E4 Monitoring

Monitoring activities were implemented and reports on the findings to be registered were prepared on a yearly basis. The purchase of aerial photos supported the updating (preparation of a new) habitat map. The impacts of conservation actions in Sub-pannonic steppe-type grassland rehabilitation became measurable.

Action E5 Post Project Conservation Plan

The After-LIFE Conservation Plan of the project was compiled in the Hungarian and English languages (different documents).

There were structural changes in the organisation of the Coordinating Beneficiary: activities related to the LIFE+ projects were transferred to the Ministry of Defence of Hungary Defence Economic Office (Ref.: INF/209-29/2013). The name of an associated beneficiary also changed. Neither modification involved the amendment of the grant agreement.

The actions remained feasible during the entire project implementation period, the work plan required only smaller adjustments; and the objectives of the project – in general terms – were delivered on time. The overall project progress proves a timely and successful project implementation.



2. INTRODUCTION

The objectives of project Eastern Bakony (LIFE07 NAT/H/000321) are:

- implementing Community Environmental policy by its integration to military practice;
- supporting the further development and implementation of the Natura2000 network;
- rehabilitate natural habitats that were degraded by neglect and past military actions;
- find a balance between military activities and natural preservationist perspectives;
- to halt natural degradation of priority habitats and to preserve priority species of the area;
- to remediate the harmful effects of military activity and carry out habitat restoration work;
- to maintain and expand grazing management;
- to create a viable After-LIFE conservation plan considering the conservation of natural resources and the needs of important stakeholders on a longer-term;
- to apply best practice for efficient dissemination of results and applied best practices targeted at the general public, NGOs, environmentalists, military, other LIFE+ military project teams; disseminate positive message about Natura 2000 and LIFE+.

The sites involved in the project is

- HUBF 20001 Keleti-Bakony extended by some 11.016,2 ha as the result of the project
- HUBF 20002 Papod-Miklád extended by some 2.302,3 ha as the result of the project

Targeted habitats and species

6240 Sub-Pannonic steppic grasslands; 8160 Medio-European calcareous scree of hill and montane levels; 91G0 Pannonic woods with Quercus petraea and Carpinus betulus; 91H0 Pannonian woods with Quercus pubescens; Serratula lycopifolia; Falco cherrug

Main conservation issues targeted

Succession of biocoenosis, Invasive species (6240 + 91G0 + 91H0 + Serratula lycopifolia) Damage by game population (8160 + 91G0 + 91H0 + Serratula lycopifolia) Routine forest management, Hunting (91G0 + 91H0 + Falco cherrug) Accidental fires, Illegal motor vehicle traffic (6240 + 91H0) Military activity, traffic, Disruption of grazing + herding, Illegal waste deposition (6240) Sport activities (mountaineering, rock climbing) (8160) Prey species shortage, Electrocution, Poisoning, Illegal animal trade (Falco cherrug)

Socio-economic context of the project

The involvement of military personnel working on nature conservation issues and natural habitat recultivation, demonstrated to the public via the website, flyers and public meetings will have a positive impact on the opinion of the role of the military.

Expected longer term results

- Natura 2000 Management Plan to set a positive example to other military training areas
- Altogether 720 ha of restored high-priority natural habitats
- Shrub thicket removed from 600 ha resulting in the rehabilitation of 6240 habitat
- 6240 and 91H0 habitats protected from invasive species (Eleagnus angustifolia, Ailanthus altissima, Robinia pseudo-acacia, Pinus nigra)
- Rehabilitated 91H0 and 8160 habitats and protected form game damage
- Population size and seed production of priority species Serratula lycopifolia increase
- Population growth of saker falcons and bats are stimulated
- Recultivated mines, military buildings result in the restoration of 6240 habitat on 4-5 ha
- Recultivated military objects suppress illegal mining and waste dumping activity
- Magnitude and damage done by fires decreased by the created sustainable and effective fire emergency system (fire break zones, fire emergency roads, water catchment pool)
- Educated military personnel and the general public
- Decreased number of trespassers and magnitude of illegal activity on the area



3. ADMINISTRATIVE PART

3.1. Description of the management system

The beneficiaries established a well-operating project management system.

For the decision making and monitoring actions, a Steering Committee (SC) was established right at the project start in February 2009. The SC consists of 1-1 representative of each Associated Beneficiary and 3 representatives of the Coordinating Beneficiary. Consultants from the Ministry of Defence and the Ministry of Agriculture (previously referred as Ministry of Rural Development) are also invited to SC meetings (have no voting rights). The SC is defined as a key decision making body of the Consortium. All three Associated Beneficiaries have nominated one-one person as an incharge project manager for their activities. They were the responsible experts for the partners' activities.

The project was managed by a project manager of the Coordinating Beneficiary, whose work was supported by a project assistant who also acted as a field coordinator, a financial manager and a financial assistant. In order to allow the beneficiaries to focus with their capacities to content-related professional activities of the project, a Project Coordinator was subcontracted (Mr István Lábodi of Lábodi Consulting Ltd.) by the Coordinating Beneficiary. The tasks and responsibilities were clearly divided between the (subcontracted) Project Coordinator and the Project Manager of the Coordinating Beneficiary. As a general rule, the Project Coordinator had a strategic project management function with contacting, communication, reporting and organising activities – which fell outside the scope of activities of the Beneficiaries. Therefore all personal meetings within the partnership and all communication with the EC and the External Monitoring Expert were organised, managed and administrated by the Project Coordinator.

For the start of the project, a project kick-off meeting was organised with the participation of all responsible managers and employees of the partners. Here the partners introduced themselves and their colleagues, drafted their workplans and agreed on the exact tasks for the year 2009, and for the coming years up to the end of the project (partners agreed to update the workplan year by year). The partners agreed on the communication procedures as well. In order to put a proper internal reporting procedure in place, a project management and reporting guide was prepared (after counselling all partners) by the end of the first month of the project. It defines the technical and financial reporting procedures of the partners.

At the beginning of each project year kick-off meetings were held (on 18.03.2010, on 08.02.2011, on 07.02.2012, on 05.02.2013 and on 14.01.2014) in the course of which partners evaluated the previous year's achievements and provided their plans for the particular year – in order to thoroughly harmonise the activities dedicated for the year.

Partners performed their project activities as per described in annex 3 to the Partnership agreement which was signed on 30th January 2009. (Please note that the Partnership Agreement was provided together with the completion to the Inception Report <Completion date: 27th October 2009>.) Yearly smaller amendments to the original workplan as per decided and agreed during the yearly kick-off meetings were also taken into account. Such amendments resulted from i.e. the weather extremities or delays





caused by deliberate damages and were usually managed during the next implementation year. Please note that in case any challenges were foreseen beneficiaries immediately informed the Project Coordinator whose task was to contact the respective body in order to find the best solution.

The implementation of workplans including the day-to-day (professional) control of the technical activities were elaborated by the respective project manager. They were responsible for all on-site activities with special regard to conservation and monitoring actions. Back-office activities – including dissemination as well – are performed in the partners' headquarters and primarily were checked by the respective project manager. Information, reports, documents and draft materials were shared by the respective project manager. Information, reports, documents and draft materials were shared by the respective project manager with the project coordinator who was in a day-to-day contact with the Coordinating Beneficiary. Beneficiaries kept contacts by using online tools (i.e. skype, email, dropbox, etc.) and mobile phones besides the traditional forms (meetings, letters, fax). Regarding important issues, Beneficiaries had extraordinary meetings announced by the Project Coordinator. Such extraordinary meetings characterised year 2013: on 10th June 2013 when the Coordinating Beneficiary shared information on the structural changes in their organisation with the Associated Beneficiaries; and on 6th September 2013 – when Beneficiaries agreed on the details of the international conference and several financial issues of partners were discussed.

Due to the challenges identified during the spring of 2010 (please refer to Chapter 2 of the current report and for details to the Mid-term Report and its completion <reporting dates are included in the table at the end of the current chapter>) caused by the extreme weather conditions and the cost savings detailed financial reports for the Mid-term Report, a grant agreement modification procedure commenced. The amendment request was submitted to the Commission on 16th March 2011 (please refer to the letter of the Coordinating Beneficiary to the EC) covering two main issues: (i) the expansion of certain conservation activities in technical terms and (ii) reallocation of funds not modifying the overall project budget. After the monitoring visit of the EU Technical Desk Officer (Ms Esther Pozo-Vera) and the Financial Desk Officer (Ms Païvi Rauma) together with the monitoring expert (Mr Andrej Bača) discussing also all clarification issues of the amendment on 28-29th April 2011, the completion of the request of the EC of 22nd June 2011 (please refer to ENV.E3/EPV/PR/ap Ares (2011) 670945) was submitted on time. The request was accepted and the project amendment to the grant agreement was confirmed by the EC on 3rd February 2012 (please refer to the letter of the EC, Ref.: ENV.E.3/EPV/PR/ap Ares (2012) 124789) on sending the supplementary agreement for signature.

Besides the SC meetings, the partners and their subcontractors had several bi- or trilateral meetings for the coordination of the different actions. In order to minimize travel costs, regular online or telephone conciliations were held in between the consortium members. Beneficiaries had several bilateral meetings with the Project Coordinator where all important issues and crucial points of the project implementation process were discussed including financial reporting issues as well as administration challenges or minor changes.

Although there were some structural changes in the organisation of the Coordinating Beneficiary during the project implementation period, the activities related to the LIFE+ projects were carried out by almost the same persons, however the organisational unit had changes: LIFE+ projects currently are carried out by the Defence Economic Office of



the Hungarian Ministry of Defence. The EC and the monitoring expert were informed on the changes in official letters (please refer to the letters of the Coordinating Beneficiary on (i) 24th February 2011, Ref.: INF/239-12/2011 on the transfer of activities to MOD AQO <Armament and Quartermaster Office of the Hungarian Ministry of Defence> from MODIA <Ministry of Defence Infrastructure Agency> and changes in the contact person; (ii) 21st January 2013, Ref.: INF/209-1/2013 on the change in the contact person; (iii) 10th July 2013, Ref.: INF/209-29/2013 on the disbandment of MOD AQO and transfer activities related to the LIFE+ projects to the MOD Defence Economic Office). Such changes did not involve the need for the modification of the grant agreement (although the supplement to the grant agreement – due to their coincidence – includes the name of MOD AQO).

The name of Associated Beneficiary 2 (VERGA) also changed: instead of Ministry of Defence VERGA Forest Management Corporation, the new name of the beneficiary is VERGA Forest Management Corporation - Veszprém (the abbreviation remained the same). Modifications not only on the entire organisation level of VERGA but also on the level of personnel were introduced: the project manager responsible for the implementation of VERGA's activities left the project organisation as soon the MTR was submitted. A new project manager (Mr Tibor Szedlák) was appointed from the beginning of 2011 (he was also involved as "planner" in the previous project implementation years). There were changes in the personnel of AQUA as well. From 2013 Mr Lajos Lovrencsics was substituted by Mr Tamás Nádasi as project assistant. In the case of BuNPD, a controlling expert was assigned to assist the Deputy director (zoologist), Mr Imre Petróczi with the financial reporting. (The person in charge changed several times due to maternity leave of the respective person.) There were changes in the person of the legal representatives of VERGA and BuNPD in 2011, the changes were reported in Project reports. No other notable changes in the personnel were implemented. The change did not involve the modification of the grant agreement.

The above listed modifications regarding the project management structure include only administrative changes. The organigramme below introduces the organisational structure at the end of the project:





The Beneficiaries maintained up-to-date books of account throughout the project implementation period, in accordance with the normal accounting conventions imposed on them by law and existing regulations in accordance with Common Provisions Article 6.1. For the sake of traceability of expenditure and income, an analytical accounting system (cost centre accounting) was operated. The Partners retain all appropriate supporting documentation for all expenditure, such as tender documents, invoices, purchase orders, proof of payments, salary slips, time sheets and any other documents used for the calculation and presentation of costs.

3.2. Evaluation of the management system

The project management system established for the project operated smoothly with up-todate information on the project progress and the identified challenges. Issues that required immediate intervention were discussed via "quick" means of communication (i.e. skype, emails, telephone). The project management and the performance of the professional activities were sound. The Coordinating Beneficiary (MOD DEO) had subcontracts with the external experts for project coordination and besides the regular personal meetings, had weekly reporting from the assigned expert. The project progress was monitored by reviewing the monthly reports of costs of the beneficiaries. The administration of the project was implemented as per set in the Partnership Agreement. Beneficiaries had a monthly reporting commitment which was fulfilled by sending a copy of their time sheets, travel sheets, and tables of other costs (external assistance, consumables, etc.). Beneficiaries also sent a copy of their invoices, salary slips and other documentation to justify the reported amounts. The Project Coordinator checked the reports and added the amounts in an excel table recommended by the EC. Partners discussed the financial progress and technical issues in all personal meetings. Challenges of compiling the compulsory (inception, mid-term, progress and final) reports were also touched during the respective personal meetings.

Project partners have encountered some challenges during the project implementation that required interventions from project management aspects. (Please note that none of these imposed threat for the accomplishment of the given actions, nor for the overall project implementation.)

Change in the law on procurement procedures

The changes in the law on procurement procedures as of 1st April, 2009 – causing delays in finishing the procurement procedures – resulted in the later acquisition of equipment by the Beneficiaries. Since the Consortium counted with such risks at the project proposal phase, enough buffer time was planned for the actions the implementation of which depended on the particular equipment, a reorganisation and adjustment of the initial work plan solved the problem.

Limited access to the project area

Access to the project area was limited during the regularly scheduled military training sessions. As a result of the continuous communication with the Bakony Military Training Centre (BMTC), a steady flow of information has been achieved in order to provide the project team notice on upcoming shooting practices, well in advance.

Amendment to the Grant Agreement

Reallocation of project budget was proposed due to some deviation of the actual costs from the planned budget for the recultivation of illegal waste dumps, abandoned roads, quarries and military facilities on the site. Although external experts have been involved in the planning phase, the amount of debris from the demolition of old military buildings have been overestimated which resulted in some "cost-savings". The Amendment Request concerned two main points: (i) the expansion of certain activities in technical





aspects without either involving financial sources from outside the current project partnership or increasing the overall project budget; and (ii) changes in budget lines, reallocation of funds not modifying the overall project budget or the concerned associated partner's total project budget. The request was approved by the European Commission.

Changes in the personnel of the Beneficiaries

There were some changes in the personnel of the project teams of the Beneficiaries. The new project members as well as the newly appointed contact persons and decision makers in the Beneficiaries' organisations soon gained the necessary comprehensive knowledge of the project objectives to fully support the implementation of the project activities.

Other challenges (time requirement of re-launching the project website, extreme weather in 2010, deliberate damages in notice boards and equipment) are drafted in the respective sections of Chapter 5 of the current report.

The Consortium had regular contacts and information sharing with the External Monitoring Expert, which we found very useful. The Project Coordinator provided information on a monthly basis and all challenges of the project implementation were discussed with the expert of the Team. Useful advice is frequently shared supporting the activities of the Beneficiaries. There were successful monitoring missions to the project area (20th October 2009, 26th March 2010, 28-29th April 2011, 23rd April and 26th October 2012, 5th December 2013 and 28th July 2014)) including checks of the project administration. Beneficiaries discussed his recommendations with the Monitoring Expert and performed their activities according to as agreed and suggested in the letters of the EC following the missions:

- on 14th January 2010 Ref: ENV.E.3/EPV/rm Ares (2010) 19817
- on 10th June 2010 Ref: ENV.E.3/EPV/jv ARES (2010) 323957
- on 22nd June 2011 Ref: ENV.E3/EPV/PR/ap Ares (2011) 670945
- on 26th November 2012 Ref: ENV.E3/EPV/pl ARES (2012) 1396771
- on 10th January 2014 Ref: ENV.E3/LB/pl ARES (2013) 38713

During the project implementation period the following reports and important documents were submitted:

Document	Period covered	Reporting date
Inception Report	02.02.2009 -	12.10.2009
Completion to the Inception Report	30.09.2009	27.10.2009
Mid-term Report	02.02.2009 -	28.09.2010
Completion to the Mid-term Report	31.08.2010	20.04.2011
Amendment Request to the Grant Agreement	n.a.	16.03.2011
Prograss Papart	01.09.2010 -	16.01.2012
riogress Report	31.10.2011	10.01.2012
Progress Report	01.11.2011 -	15 01 2013
riogress Report	30.11.2012	15.01.2015





4. TECHNICAL PART

4.1. Technical progress, per task

The elaboration of the tasks in most cases followed the planned timeline. The leeway caused by the weather extremities in 2010 in the implementation of the conservation actions of the project were made up, all preparatory actions are completed and the conservation actions were performed as scheduled in the modified project proposal (in line with the amendment request) with spectacular results. Please note that in action A2 significant delays were suffered but the approval of the respective ministry (Ministry of Agriculture – the successor of the Ministry of Rural Development) was provided (attached as annex to the action). Beneficiaries tried to keep deadlines and in case of problems they immediately informed the Project Coordinator and the Coordinating Beneficiary. Although some minor deviations from the work plan have occurred the project implementation can be declared being as per scheduled (apart from action A2).

All actions remained feasible and the objectives of the project can be declared to be delivered on time.

4.1.1. Action A1 Making preparatory inventories of priority Natura 2000 species and habitats of the project area

BuNPD started the action in March 2009 and implemented the activities in several steps, as follows:

1. Procurement of the equipment necessary for the action from March 2009.

Equipment necessary for the implementation of the action was procured in different phases: (i) the notebook and outer memory was procured in the course of a "centralised procurement" (központosított közbeszerzés) of BuNPD, (ii) all other equipment were purchased by introducing a "simple public procurement" procedure (egyszerű közbeszerzési eljárás) with the professional assistance of a procurement expert company. Information on the purchased equipment of BuNPD in the course of the action is included in the following table:

Equipment	Planned total costs (in €)	Actual total costs (in €)
Manual viewing binoculars (2 pieces)		
Spective with stand and a case (20-60 zoom, 75< front		
lense, gas filled fluorite lense, 30 years guarantee)		
High precision GPS instrument with computer		
compatibility, softwares uploadable, antenne, case		
included		
Digital camera		
Bat detector with computer compatibility		
Notebook with complete set of programmes, and		
accessories for field and office use		
Outer memory with housing (USB és SATA, 500 GB		
TOTAL		



2. Need for external assistance

As per the project proposal BuNPD planned to obtain the set of orto-corrigated air photos by ordering the photo-taking from a professional company in order to well base the on-site works and the surveying and to serve the monitoring of the project area (before/after status). When starting the implementation of the action BuNPD was informed that FÖMI (Földmérési és Távérzékelési Intézet - Institute of Geodesy, Cartography and Remote Sensing) – as a state-level task – had made the shots on the area relevant for the project in August 2008. Therefore BuNPD purchased the set of photos in April 2009 and there was no need for flying over the project area to take the photos. This means some cost savings in the project budget.

3. The basic status survey was carried out as scheduled.

BuNPD started the status survey in April 2009. Both own personnel and external experts were involved in the surveying. External assistance was implemented in the surveying of Arthropoda.

The survey was completed by the following experts of BuNPD: Dr Judit Cservenka (coordinator) – botany, Csaba Endre Fehér (ranger) – zoology, András Mészáros (ranger) – botany, Dr. Lajos Nagy (ranger) – zoology, Imre Petróczi (deputy director) – zoology, Pál Simon (ranger) – botany, Szabolcs Tóth (property technical rapporteur) – geo-informatics. External experts involved in the implementation of the task are: Acrida Bt. – Orthoptera; Bakonyi Természettudományi Múzeum – Coleoptera; Naturinfo Bt. and Szalkay József Magyar Lepkészeti Egyesület – Lepidoptera.

4. The report on the research result was elaborated

The report on the basic survey was delivered in September 2010 and submitted with the Mid-term Report (Annex 1 - A1).

The status of deliverables.	outputs and	milestones is	illustrated by	v the following tab	le:
The status of defiverables,	ourputs and	milescones is	mastratea o	j the following the	

Nama	Deliver	y date	Commont			
Inallie	Planned	Actual	Comment			
Inventory of priority Natura	21.07.2010	01.00.2010	Done.			
2000 species and habitats	51.07.2010	01.09.2010	Delivered with Mid-term report.			
Aerial photograph of project	20.08.2000	20.04.2000	Done.			
area	50.08.2009.	50.04.2009	Purchased from FÖMI.			

The milestone of the action was fully met, the deliverable was submitted one month later than scheduled.

The summary of the action planned and actual timetable is illustrated by the table below.

		2009				2010				2011					20)12			20	2014			
Action		Ι	II	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II
A1	planned																						
	actual																						
			plaı don	nned e																			



4.1.2. Action A2 Drafting of Natura 2000 site management plan for the project site

BuNPD started the elaboration of the Natura 2000 site management plan at the end of 2010. The action was finished in June 2014, the management plan was accepted and approved by the respective ministry (Ministry of Agriculture – former Ministry of Rural Development) in July 2014. The letter of the Ministry (in Hungarian) on the approval of the plan is annexed to the Final Report of the project (please refer to Annex A2).

There were several meetings and discussions held during the implementation period of the activities of the action. The list and detailed description of the discussions is included in the management plan. The main steps of performing the activities of the action are as follows:

- Parallel with the discussions of Bakony Military Training Centre (BMTC) the experts of BuNPD delivered the management instructions on the forest part level of the project area. The instructions were discussed and agreed by BuNPD, the Forestry Authority and VERGA (responsible organisation for the forest management) on 16th November 2011.
- The management plan was finalised during December 2011 and January 2012. (The draft version of the management plan was annexed to the first progress report for the reporting dates please refer to the table at the end of Chapter 4.2. of the Final Report.)
- On 8th February 2012, the Natura 2000 site management plan for the project area with its justifying annexes has been submitted to the Ministry of Rural Development (Dept. of Nature Conservation) for confirmation. The plan was discussed within the Ministry and has been sent back on 15th August 2012 with their comments. After the necessary clarifications BuNPD started to amend the document.
- The new version of the Natura 2000 site management plan with all required amendments was again submitted to the Ministry of Rural Development (Dept. of Nature Conservation) for comments and confirmation.
- MOD DEO and BuNPD had discussions with the Várpalota Military Troops on the map prepared for the use of the military (part of the management plan). A meeting followed by a field visit was held on 4th April 2013 with the participation of MOD DEO, VERGA, BuNPD and the military superiors (Joint Force Command - MH Összhaderőnemi Parancsnokság), in order to present the practical aspects in the final version of management plan.
- The Ministry of Rural Development studied the amended management plan and proposed further modifications in their letter of 5th October 2013. As per the instructions of the Ministry BuNPD had to adjust the management plan to the newly developed format. The plan amended accordingly was submitted again to the Ministry on 28th January 2014 for confirmation.
- As per the letter of 20th February 2014 of the Ministry of Rural Development (Dept. of Nature Conservation) the Natura 2000 site management plan was considered "ready for stakeholder discussions". BuNPD sent the plan to the relevant stakeholders (central administration organisations, entrepreneurs, NGOs, local municipalities) on 13th March 2014.
- The discussed and adjusted Natura 2000 site management plan was submitted for final confirmation to the Ministry of Rural Development. The Ministry of Agriculture (successor of the Ministry of Rural Development as of 1st July 2014) approved and



confirmed the Natura 2000 site management plan of the project on 9th July 2014. As per the confirmation letter (the Hungarian version is attached in Annex A2):

"In reference to the management plan developed in the course of project LIFE07/NAT/H/000321 'Restoration and conservation of priority habitats and species in the Eastern Bakony area' with reference number of 110-72/2014, the following information is provided, which can also be forwarded to the European Commission as my Declaration: The site management plan for the parts of the HUBF20001 Eastern Bakony and HUBF20002 Papod-Miklád sites in military use is in compliance with the instructions of Government Decree No. 275/2004 (X.8.). Discussions as per § 4 point 5) of the aforementioned decree were held. The plan is appropriate from both substantial and formal aspects and is suitable for the organisation of the site management. Based on the above, the submitted documentation as the site management plan of project

The challenges of the implementation of the action can be summarised as follows:

• BuNPD underestimated the complexity of the plan and thus the time required to compile the management plan.

LIFE07/NAT/H/000321 is approved from professional nature conservation aspects.'

- The draft plans had to be discussed several times since the concept of the military on the use of the area modified, and the plan had to be revised accordingly. However, as a result of the discussions the military field card was produced which is a useful tool.
- The instructions for the site management plan development changed during the drafting period influencing both substantial and formal requirements, the guidelines prepared by the responsible ministry was also amended several times. The final guidelines were available in June 2014, the adjustment of the site management plan to the new instructions was the basis of the Ministry's confirmation.

One of the main objectives of the project was the inclusion of the Eastern Bakony project area in the extended Natura 2000 sites. As per the edition No. 72 in 2010 of the Official Gazette of Hungary the project area of Eastern Bakony is included in the Natura 2000 network (<u>http://www.termeszetvedelem.hu/_user/browser/File/Natura2000/jogszabalyok/MK10072.pdf</u>). The list corresponds with the lot numbers included in the project proposal.

Nama	Deliver	y date	Commont			
Ivallie	Planned	Actual	Comment			
Draft of Management Plan	31.07.2010	16.01.2012	Done. Delivered with the 1 st Progress report.			
Site Management Plan	31.10.2010	30.04.2009	Done. Delivered with the Final Report.			

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone of the action was met and the deliverable was submitted but both years later than scheduled. The Natura 2000 site management plan will be assessed, evaluated and revised in 10 years.

The summary of the action planned and actual timetable is illustrated by the table below.

		2009				2010				2011				2012				2013				2014	
Action		Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II
A2	planned																						
	actual																						
			plar	ned																			

done

<u>Annex</u>: Letter of the Ministry of Agriculture on the approval of the Natura 2000 management plan (HU) Natura 2000 Site management plan (HU), table of contents translated into English





4.1.3. Action A3 Technical investigations and planning

The action included the field surveillance and technical planning tasks necessary to start the conservation actions. The beneficiaries involved in the performance of the activities were MODIA (the legal predecessor of MOD DEO) and VERGA, but "all planning actions were counselled with BuNPD and the main stakeholder, BMTC.

Landscape planning for the recultivation of illegal quarries and mining pits (action C4) and technical surveillance of abandoned military facilities (action C4) were procured by the Coordinating Beneficiary. MODIA had organised two public procurement procedures in order to find the subcontractors for the technical planning of action C4 and technical surveillance of abandoned military facilities (action C4), as well as technical inspection of activities in action C5, C6 and C7. The procedures were carried out according to the foreseen schedule, there were no delays in them.

- Oviber Ltd. was contracted for the planning activities. Following several field visits and counselling with VERGA and BMTC (main stakeholder), the plans were finalised by the previously set deadline.
- Greenlight Ltd. was contracted to provide technical inspection activities, which were carried out during the elaboration of actions C5, C6 and C7.

Technical planning for the development of fire brake zones (action C5) and emergency road reconstruction (action C7) were done by VERGA. Plans were finalised in April 2009 and were submitted to the relevant authorities for approval (though these actions require no authority permissions). For the surveillance for fence building (action C10) the partners organised field visits.

Nomo	Deliver	y date	Commont			
Ivanie	Planned	Actual	Comment			
Survey report of abandoned	31.07.2009	31.07.2009	Done.			
military facilities			Reported with the Inception Report.			
Field survey report	31 07 2009	31.07.2009	Done.			
Theid survey report	51.07.2009	51.07.2009	Reported with the Inception Report.			
Technical plans for the recultivation	20.00.2000	30.00.2000	Done.			
of quarries and mining pits	30.09.2009	30.09.2009	Submitted with the Inception Report.			
Technical plan of fine break zone	21.04.2000	21.04.2000	Done.			
Technical plan of the bleak zone	31.04.2009	31.04.2009	Submitted with the Inception Report.			
Technical plan of read construction	21.04.2000	21.04.2000	Done.			
rechnical plan of foad construction	51.04.2009	51.04.2009	Submitted with the Inception Report.			

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestones of the action were met and the deliverables were submitted by their deadline.

The summary of the action planned and actual timetable is illustrated by the table below.

		2009					2010				2011				20)12			20	2014			
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π
A3	planned																						
	actual																						
			pla don	nned e																			



4.1.4. Action C1 Machinery procurement for other conservation actions

VERGA commenced the implementation of the action right after the project start date. Two pieces of high pressure, vaporizer, mobile fire extinguisher devices, a Valtra T 161 Classic tractor and AHWI FM 500-2300 mulcher and a New Holland dozer were acquired in the framework of this action by applying the appropriate public procurement procedure. The changing law on procurement procedures (entered into force on 1st April, 2009), the 120 days long procedures caused a delay in acquiring the machines. Therefore, the implementation of actions C2 and C7 depending on the use of the equipment was delayed. Since such delays were calculated with by the Consortium in the proposal phase enough buffer time was planned. In order to not lose time in the implementation of the conservation actions, VERGA started the works on the water catchment pool earlier than scheduled (reorganisation of the workplan).

The mobile fire extinguisher was placed fully loaded to the "0-point" and "Csörlőház" shooting ranges as agreed with BMTC. The common use of the vaporizer is the most efficient way to fight fires at the early stage.

The status of deliverables, outputs and milestones is illustrated by the following table:

Namo	Deliver	y date	Commont				
INallie	Planned	Actual	Comment				
Tendering for the procurement of	28 02 2000	21.05.2000	Done.				
machinery	28.02.2009	51.05.2009	Reported with the Inception Report.				
2 fire extinguishing devices	21 10 2000	21.05.2000	Done.				
installed on vehicle	51.10.2009	51.05.2009	Reported with the Inception Report.				

The deliverable of the action (2 fire extinguishing devices installed on vehicle) was completed long before the deadline, photos were submitted with the Inception Report.

The milestone set for the action was met only after the set deadline by 31st May 2009, due to the instructions of the changed law on public procurement.

The summary of the action planned and actual timetable is illustrated by the table below.





4.1.5. Action C2 Restoration of degraded Subpannonic steppe-type grassland through removing shrub thicket

Some sites in the project area are characterized by open and closed grasslands where invasions of shrub species (e.g., Crataegus monogyna, Prunus spinosa, Rosa canina) have occurred due to successive processes evoked after the sudden decrease in military activity. The degraded grassland habitat was restored by removing shrub thickets.

One of the objectives of this action is to clear away shrub tickets from 600 ha. Since the procurement procedures of the equipment needed for this action were delayed (please refer to Chapter 5.1.4 of the Final Report) the elimination works could not be started as scheduled. The restoration of grasslands commenced in April 2009 as a test operation. As per the experience gained experience the restoration of grasslands could be accomplished successfully by the Valtra tractor and the attached AHWI mulcher.

After the test period grassland reconstruction was continued at the end of August 2009, in accordance with nature protection directives (e.g., nesting period of birds). The reason for not performing restoration activities in the summer period is that such works during the vegetation period would cause (i) disturbance in the birds' nesting activities and (ii) the possibility of re-sprouting is less if removing shrub takes place outside the vegetation period. VERGA had cover 50 ha until September 2009. On the 9th September 2009 the tractor suffered an accident (a car was overspeeding and rushed into it – fortunately nobody was harmed, but the tractor crashed seriously). Since the spare parts needed to be shipped from Finland, the tractor was able to re-enter into work in the middle of October. Due to the delays VERGA could accomplish 145 ha in 2009, but the delay was made up in 2010 by treating 155 ha. The size of the area where elimination works were performed in 2009 and 2010 is 300 ha., that includes the following sites (identified with topographical numbers): Várpalota 0145/1, Várpalota 090/1, Várpalota 0154/5, Várpalota 0154/1, Bakonykúti 067, Bakonykúti 068, Bakonykúti 041, Isztimér 0332, Isztimér 0329, Isztimér 0331, Iszkaszentgyörgy 0291, Hajmáskér 03/3 and Veszprém 0129/1.

The size of the area where work has been realized from in 2011 is about 200 ha, that includes the following sites (identified with topographical lot numbers): Várpalota 90/1, 154/1, 154/5. The restoration of grasslands have finished on some 30 ha in January 2012, and a further 35 ha has been restored in early spring of 2012. Some 10 ha was restored in November and December 2012. VERGA finished the restoration of the remaining 25 ha (Veszprém 0129/1) during the spring of 2013.

The blades of the AHWI mulcher deteriorated much quicker than expected. This was due to the huge quantity of iron waste (wire-rope, bomb fragmentation, shrapnel, others) found in the project area. In order to prevent the quick blade deterioration VERGA introduced the "two-step" procedure in mulching. As the first step the blades were slightly lifted up when working, allowing to appear the hardly-visible pieces of iron waste. After the elimination of these pieces, as the second step, mulching was done with lowered blades. Although this procedure reduced the speed of the work, also resulted in the decrease of the "undue" deterioration of blades.

The re-conquest of the territories by shrubs can be prevented by intensive herding and grazing in the area. After negotiations between VERGA and MODIA a call was announced for grazing in the area. Contracts were signed in November 2010 and are valid through 2014. As per the grazing contracts the treating and maintaining the respective areas is the graziers' task and responsibility (in case there are areas with non-grazed





shrubs, the grazier has to cut the plants <mechanical treatment>). The experts of VERGA frequently check the area and if they find untreated areas they perform the mechanical treatment. Grazing proved to be sufficient in most cases as the maintenance or the treated areas. Please note that the intensity of grazing depends on the weather conditions: (i) if the weather is dry (as it was in the summer of 2011) grazing lands require less maintenance, but (ii) in case the summer is rainier (as in 2014), even more intensive grazing would require additional interventions.

Nama	Deliver	y date	Commont
Inallie	Planned	Actual	Comment
Preparation of contract for herding	15.00.2000	15.00.2000	Done.
and grazing	13.09.2009	13.09.2009	Reported with the Inception Report.
Shrub removed from the 1 st 150 he	21 12 2000	21.01.2010	Done.
Sinuo removed nom me 1 150 ha	51.12.2009	51.01.2010	Reported with the Mid-term Report.
Shruh removed from the 2 nd 150 he	21.02.2010	21 12 2010	Done.
Sin uo removed nom the 2 130 ha	51.05.2010	51.12.2010	Reported with the 1 st Progress Report.
Shruh removed from the 2 rd 150 he	21.02.2011	21.02.2011	Done.
Sin uo removed nom the 5 150 ha	51.05.2011	51.05.2011	Reported with the 1 st Progress Report.
Showh removed from the last 150 he	21.02.2012	21.02.2012	Done.
Silrub removed from the fast 150 ha	51.05.2012	51.05.2015	Reported with the Final Report.

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestones of the action were met and the deliverables were submitted – later than scheduled.

The maintenance of the achievements and results of the action forms the part of the After-LIFE Conservation Plan. VERGA - from its own sources - will perform the yearly maintenance of the treated grasslands. The frequency of the maintenance works depends on the assessed status of the grasslands in the particular year.. As the first step VERGA will implement the first after-LIFE maintenance in Bakonykúti 040 and 042 on some 10 ha starting in August2014, followed by the maintenance of some more 70 ha in Iszkaszentgyörgy 0291, Várpalota 090.

The summary of the action planned and actual timetable is illustrated by the table below.



done

Photodocumentation Annex:



4.1.6. Action C3 Stimulation of population growth and nesting of saker falcon (Falco cherrug)

BuNPD started the implementation of the activities scheduled in the action in March 2009. The tasks performed are as follows:

1. Procurement of the equipment necessary for the action from March 2009.

Equipment necessary for the implementation of the action was procured by introducing the "three offers procurement" procedure. Information on the purchased equipment of BuNPD in the course of the action is included in the following table:

Equipment	Planned total costs (in €)	Actual total costs (in €)
Pit drill with 5-10 cm head, manual with an engine		
Trailer for a car		
Plastic barrel (1 cubicmeter)		
Light weight electricity generator		
Hutches for catching ground squirrels*		
Artifical nest for Saker Falcon		
Climbing accessories (two sets)**		
TOTAL		

* As per the national accounting rules such goods (as the hutches/traps) shall be registered as consumables, therefore the cost of the item are not calculated within the equipment cost category.

** Climbing tools are registered among equipment and accessories (i.e. rope, carbine, etc.) within the consumables – as required by the national accounting rules.

2. Placing artificial nests

Manufacturing of 5 artificial Falco cherrug nests was finished in the 4th quarter of 2009 and were installed in locations previously discussed with the experts of VERGA at the end of 2009, beginning of 2010 in the surroundings of Márkó, Veszprém, Várpalota and Csór settlements.

3. Repatriation of ground squirrels

The 1st round of the ground squirrel deployment has been successfully implemented in the last week of July and first week of August 2009. After getting the authority permissions, ground squirrels were caught at the shore of the Belső-tó (Inner Lake at Tihany peninsula by Lake of Balaton from the colony deployed in the course of another project) by using the traps that had been purchased in the course of the project. After trapping, the species were stored in cages and transferred to the area of release, which was previously cleared in the frame of action C2 by VERGA: Hajagos (a 40 ha sheep-run in the surroundings of Várpalota and Bakonykúti). As the preparatory activity of the repatriation 250 pcs of 50 cm deep holes were created (diameter: 5-8 cm). Altogether 212 animal species were deployed.

The 2^{nd} round of repatriation was finished at the end of July 2010, after obtaining the permissions. Ground squirrels were caught at the same location by applying the same methodology. The area of deployment was Fajdas (a 30 ha sheep-run in the surroundings of Várpalota). As the preparatory task of the repatriation 200 pcs of 50 cm deep holes were created with a diameter of 8 cm. Altogether 160 pcs were repatriated. The relocated population was guarded for 1 week in the fenced area to protect them from wild animals with the assistance of students.

The next populating activity took place during the last week of July 2011. Ground squirrels were caught at the shore of the Belső-tó with the collaboration of university students by applying the same methodology. Due to the unfavourable weather (cold and rainy days during





that week) only 84 ground squirrels were caught. After trapping, the species were stored in cages and transferred to the area of release (Bánta sheep-run, Öskü 03), to a fenced area with protection against carnivores. The species found their shelters easily in the previously prepared ground holes. The young, relocated population was guarded for 5 days in the fenced area to protect them from foxes or polecats. The animals were fed with apple and cereals to support them in acquiring the fat necessary for the hibernation as soon as possible.

Since the 3^{rd} populating activity was not successful and the planned number of ground squirrels were not repatriated a 4^{th} deployment activity was carried out during the second part of July 2012 (by applying the same methodology at the same catching area). 117 ground squirrels were caught and transferred to the area of release (Várpalota, Fajdas – the same location as the 2^{nd} repatriation to strengthen the colony).

Altogether 573 animals were relocated which is 95,5% of the planned figure. The success of the repatriation is measured in action E4 (Chapter 5.1.15. of the Final report).

As an "outside-LIFE" element the involvement of university students in the catching, releasing and guarding of the ground squirrels. The students were enthusiastic and committed, gained experience and deeper knowledge on the project and the action itself.

Since the results of the action are monitored in action E4, the After-LIFE Conservation Plan includes measures relating to this action. Once during the 5-year period after the accomplishment of the project max. 100 ground squirrels will be repatriated to strengthen the existing colonies or to a new location. As part of the after-LIFE monitoring activities, nesting places will be checked once or twice a year and the colonies of repatriated ground squirrels will be assessed at the end of August through 5 years (growth in the number of animals per year, changes in the size of the area used by the colony, changes in the spatial pattern of the under-ground out-lets).

Nomo	Deliver	y date	Commont
Ivanie	Planned	Actual	Comment
Acquisition of permits for ground squirrel transfer from authority	30.06.2009	30.06.2009	Done. Reported with the Inception Report.
5 artificial nests or breeding nest	31 12 2000	01 31 2010	Done.
boxes installed	51.12.2009	01.51.2010	Reported with the Mid-term Report.
200 ground squirrels deployed	31.09.2009	10.08.2009	212 animals repatriated.
200 ground squirrers deproyed	51.09.2009	10.08.2009	Reported with the Inception Report.
200 ground squirrals deployed	31.00.2010	31.07.2010	160 pcs were deployed.
200 ground squirrers deproyed	51.09.2010	51.07.2010	Reported with the Mid-term Report.
		31.07.2011	84 pcs were deployed in 2011 and 117
200 ground squirrels deployed	31.09.2011	31.07.2011	pcs in 2012
		51.07.2012	Reported with the 1 st Progress Report

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone of the action was met and the deliverables were reported. The activities of the action were declared as completed as per the letter of the EC (please refer to the letter of the EC as of 26th November 2012; Ref: ENV.E3/EPV/pl ARES (2012) 1396771).

The summary of the action planned and actual timetable is illustrated by the table below.





4.1.7. Action C4 Recultivation of illegal waste dumps, abandoned roads, quarries and military facilities on the site

VERGA started the implementation of the action in January 2010. There were 22 objects included in the original project proposal to be recultivated. Based on the first experiences gained action C4 was to be accomplished more cost effectively than planned. Therefore, the request of including further objects in the project to be recultivated formed the part of the amendment proposal. The arrangement of further 13 objects had an added value for nature protection, as it reduces unwanted land cover and increases the areal spread of Subpannonic steppe habitats. 7 out of the "newly proposed" objects (Alsóbala - mining pit, Alsóbala - bunker, Alsóbala - sauna, Bánta panel ruins, Csörlőhúzó bunker, mining pit No. 2000, Hagymatető - mining pit) have a direct connection and relationship with the "previously proposed" and already finished recultivation steps, therefore with the involvement of the above mentioned objects into the project the overall thorough and efficient recultivation on these areas was achieved. The extension of the action with 6 additional objects (Rátót mining pit I, Rátót mining pit II, Újmajor ruins I, Újmajor ruins II, Öskü mining pit) meant the involvement of new areas into the activities of this action. With such extension of the activities of the action the natural state was restored in a larger area without exceeding the project budget.

VERGA demolished/recultivated altogether 35 objects in the course of the project. Recultivation of the originally planned 22 objects and the additionally proposed 13 objects was completed according to plans. For the recultivation status of the objects per period please refer to the table below (objects with the code 'x/2010' relate to the objects originally planned and code 'x/2011' relate to newly proposed objects):

			R	RECULTIVATION	
CODE	NAME OF OBJECT	FUNCTION	FROM 2009 TO 08/2010	FROM 08/2010 TO 2011	2012
1/2010	Csóri bunker	bunker		completed	
2/2010	Baglyasi őrépület	building		completed	
3/2010	Királyszállási bánya	mining pit	completed		
4/2010	Felső-bánta 1	building	completed		
5/2010	Felső-bánta 2	building	completed		
6/2010	Felső-bánta 3	building	completed		
7/2010	Lépcső	building	completed		
8/2010	Csörlő bunker	bunker	completed		
9/2010	Bunker	bunker	completed		
10/2010	Bánta 1	mining pit	completed		
11/2010	Bánta 2	mining pit	completed		
12/2010	Torony	building		completed	
13/2010	Olasz-erőd	bunker		completed	
14/2010	Bányagödör	mining pit		completed	
15/2010	Bányagödör	mining pit		completed	
16/2010	Emlékmű	building	completed		
17/2010	Alsóballa	building	completed		
18/2010	"O" ponti bánya	mining pit		completed	
19/2010	Tribün 1	building		completed	
20/2010	Tribün 2	building	completed		
21/2010	Keleti bunker	bunker	completed		
22/2010	Nyugati bunker	bunker	completed		
1/2011	Ösküi bánya	mining pit			completed
2/2011	Hajmáskér betoncél	building	cancelled		





			F	RECULTIVATION	
CODE	NAME OF OBJECT	FUNCTION	FROM 2009 TO 08/2010	FROM 08/2010 TO 2011	2012
3/2011	Alsóballa	mining pit			completed
4/2011	Hajmáskéri rom	building		completed	
5/2011	2000-es bánya	mining pit			completed
6/2011	Hagyma-tető	mining pit		completed	
7/2011	Újmajor kelet	mining pit			completed
8/2011	Újmajor rom	building			completed
9/2011	Rátóti nagymező	mining pit		completed	
10/2011	Rátóti nagymező	mining pit		completed	
11/2011	Bántai panel rom	building		completed	
12/2011	Alsóballa, bunker	bunker		completed	
13/2011	Csörlőhúzó bunker	bunker		completed	
14/2011	Várpalota, Lőtértorony		cancelled		
15/2011	Alsóballa, szauna	building		completed	

Although object 7/2011 is outside the project area (it can be found appr. 100 m from the border of the project area) it forms the integral part of the Natura2000 territory (please refer to the map attached and the letter from the EC on 11th May 2012; Ref: ENV.E3/EPV/PR/ap Ares (2012) 575034. The concerned mining pit is located by the railway (which connects Veszprém and Győr, two significant towns of Hungary) passing through the shooting ground and was full of waste, debris and concrete. Effective recultivation of the object was justified logistically by the activities performed in the surrounding areas. Due to its relatively easy accessibility we calculated with re-depositing illegal waste in the mine but – based on our previous experience – the risk of re-depositing is significantly lower in a recultivated area. The costs of recultivating object 7/2011 amounted to 1.149.650 HUF (3.656,88 EUR) consisting of the following items:

- transportation and depositing waste: 918.288 HUF (2.920,95 EUR)
- use of the doser on 20th, 23rd, 24th, and 25th January 2012 for 27 working hours: 192.645 HUF (612,78 EUR)
- use of the Atlas rotating excavator on 24th and 25th January 2012 for 13 working hours: 38.717 HUF (123,15 EUR)

Please note that the benefit of recultivating this object cannot be precisely measured in monetary terms but is much higher than the expenses. Being its integral part, the recultivation activity significantly contributed to the Natura 2000 network. The acceptance of the related costs was communicated by the EC in the annex to their letter of of 19th April 2013; Ref: ENV.E3/EPV/PR ARES (2013) 736698.

The debris created and transported in the project implementation period amounted to 6.422,30 tons. Debris has been transported to official waste deposition places, VERGA possess the admission statements. The composition of debris and waste created during recultivation is illustrated by the annexed table.

In 2013 BuNPD placed 20 bat protection boxes in the recultivated bunker of Csór and VERGA stuffed the blow-holes with shatter. There were several deliberate damages observed in closed bunkers, especially in the Csór bunker (1/2010). After the restoration of the object (1/2010) VERGA walled up the unnecessary entrances leaving only a small entrance for bats. Frequent checking of the bunkers' state will continue to be performed (military troops and VERGA).



Nomo	Deliver	y date	Comment
Iname	Planned 31.09.2011 1 30.10.2011 1	Actual	Comment
6 illegal quarries and mining pits	21.00.2011	20.00.2011	Done.
recultivated	51.09.2011	30.09.2011	Reported in the 1 st Progress Report.
5 hunkars antry ways closed	30 10 2011	30.00.2011	Done.
5 bulkers entry ways closed	30.10.2011	30.09.2011	Reported in the 1 st Progress Report.
2 contru toward domolished	21.00.2011	20.00.2011	Done.
2 senti y towers demonstred	51.09.2011	30.09.2011	Reported in the 1 st Progress Report.

The status of deliverables, outputs and milestones is illustrated by the following table:

The deliverables were reported by their deadline. There were no milestones set for the action.

Maintenance and safeguarding the infrastructure created during the project implementation as well as transportation of illegally deposited waste form an important task of VERGA during the implementation of the set after-LIFE measures.

The summary of the action planned and actual timetable is illustrated by the table below.



<u>Annex</u>: Debris and waste created during recultivation of objects in Action C4 Photodocumentation



4.1.8. Action C5 Development of fire brake zone between military training field and priority habitats

VERGA started the action right after by initiating discussions on the track of the fire brake zones with BMTC. They have completed the plans in April 2009 and submitted them to the forestry authority. As per the information received no permit was required for the implementation of the action therefore the authority "just" acknowledged the creation of the zones.

The fire brake zones were created in the Hajmáskér 03/3 and Öskü 03 areas, the development has been finished on schedule. However, the track lines of the zones somewhat differ from the original plans and therefore their length exceeds the foreseen 4.500 m. These amendments were based on the practical experiences gained by BMTC in the course of the shooting practices.

During 2011 a further 1,5 km long zone was created (please refer to the amendment request to the Grant Agreement) in the eastern section of the shooting range. The section can be found to the north of Várpalota. The north-eastern section of the zone proved to be too narrow as the tree crowns were very close and could therefore allow the fire to spread. As per discussed during the monitoring visit and also requested in the EC letter of 26th November 2012 (Ref: ENV.E3/EPV/pl ARES (2012) 1396771) VERGA decided on widening of the narrow parts. The widening activity was performed during the spring of 2013 by cutting the trees and then ploughing the track line. As a result the width of the fire brake zone reached 8-12 m depending on the type of the ground.

After the creation of the altogether approximately 6 km long fire brake zone system VERGA's main task is to perform the yearly maintenance works. The dates of the maintenance works strongly depend on the military practices in the shooting ground. VERGA has frequent discussions with BMTC on the possible dates for the particular year. Maintenance is usually scheduled to be performed in the May-June period, but in 2012 – due to the deliberate damaging of the machinery – the activity was finished only in August. The technology applied during maintenance is the same as applied in the course of the development of the zones: removing the vegetation that is responsible for the spreading of the fire by ploughing and heavy disk plowing.

All fire brake zones were of good use during the dry weather that characterised 2011 and 2012. In 2010 and 2014 the precipitation was higher than the average which resulted in (i) decreased possibilities in the area of catching fire during shooting practices, and (ii) need for maintenance twice a year. (Please note that the second treatment of 2014 was performed in August as part of the after-LIFE activities.)

Namo	Deliver	y date	Commont				
Inallie	Planned	Actual	Comment				
Acquisition of permit for forestry operation from authority	15.03.2009	-	The activity did not require permit. Plans were submitted to the authority and acknowledged. Reported in the Inception Report				
4.5 hectares of fire break zone developed	30.08.2009	30.08.2009	Done. Reported in the Inception Report.				

The status of deliverables, outputs and milestones is illustrated by the following table:



As the creation of the fire break zones did not require permission the milestone "Acquisition of permit for forestry operation from authority" became obsolete. However, the forestry authority provided their official statement of acknowledging the interventions. The other milestone set for the action was fully met: the creation of the fire break zones was performed by the planned deadline.

The creation of the fire break zones is a good practice for all forestry companies working on military practice ranges. VERGA with the coordination of MODDEO disseminated the results and the experience gained with other forestries to be applied in the course of other projects or day-to-day operation.

The yearly maintenance of the created fire break zones will be performed twice a year by VERGA. The exact dates will be discussed with BMTC as per the usual practice of the two organisations.

	2009						20)10		2011					20)12			20	2014			
Action		Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II
C5	planned																						
	actual																						
			plan don	nned e																			

The summary of the action planned and actual timetable is illustrated by the table below.

Annex: Actions C5-C6-C7on one map as requested in the letter of the EC on 22nd June 2011



4.1.9. Action C6 Construction of water catchment pool for fire protection

VERGA started the works on the water catchment pool on time, as per scheduled in the project proposal. The creation of the infrastructure was challenged by the following cases:

- 1. Unexploded ammunition found in the area designated for the water catchment pool: the ammunition found in the course of the activity could be eliminated only after the necessary evaluative research by the military experts. The ammunition was exploded onsite. This kind of "treatment" posed a challenge to the Consortium by significantly slowing down the creation of the water catchment pool. However, the infrastructure was finished by the end of October 2009. The
- 2. Intense rainstorms in May 2010: Large precipitation came in a very short time period accompanied by very strong winds. The plans of the catchment pool - according to requirements in Hungary - were made taking into account the last 100 years' characteristic precipitation intensities. The amount of rain during the storm strongly exceeded these earlier values. The fallen rain, which was collected by the catchment pool could not be canalized by the flood-gates and the gathering water overstepped the dams. The earthwork of the dam well resisted the erosion effect of the overstepping water, but due to continuous raining, the destruction of the whole catchment pool was envisaged. Therefore, at one section the earthwork and the fire protection tracks had to be cut through, in order to decrease pressure on the dams. VERGA has experienced large losses in the infrastructure and forest population due to rainy and stormy weather. The water catchment pool was restored and re-built after the storms according to the technical requirements. Outlet water pipes were laid down in order to drain any confluent water, on the saved side of the dam. Although original plans did not contain, the building of a ford connected to a flood reducer to avoid similar situations was also performed. The development of the protective grating around the flood-gate to catch driftwood trees was also performed in order to avoid plugging of the flow-through hole. The grassing of the dam was also carried out.
- 3. *Strengthening needs of the dams*: As per the Amendment Request, some reinforcement works were implemented: (i) insulation of flood reducer, (ii) restoration of flood gate, (iii) reconstruction of gutters, (iv) post-coating of bed, (v) embankment and (vi) creation of the sludge catching area.

The technical taking-over of the catchment pool took place on 4^{th} January 2010. The Middle-Transdanubian Environmental and Hydrological Directorate provided the requisition permission to VERGA on 24^{th} November 2010 (Reg No.: 97/8296-17763 – provided with the completion documentation to the Mid-term Report).

The sludge catching area proved to be an excellent solution to ensure that (in normal circumstances) only water gets into the water catchment pool to provide good quality water for fire-fighting. The methodology applied for getting water for fire fighting purposes is as follows: fire extinguishers are filled with water by parking the machines at the lower paved part of the dam where the pipes of the fire extinguishers are put into the catchment pool and water is pumped directly in the fire extinguishers.

The water catchment pool proved to ensure enough water during 2011, although this year was extremely dry (430 mm/year) with some short and heavy rains and storms during summer (please note that the end of July the weather was extremely rainy). Both in 2012 and 2013, the water catchment pool stored significant amount of water until the end of summer. In 2014, the stored water was available until the beginning of August.

The presence of the water catchment pool is an oddity and specialty in the middle of the dry shooting range: some hydrophilic living beings were observed on the area, such as





water birds, grallatores (i. e. Ardea alba, Ardea cinerea, Anas platyrhynchos). Since the water catchment pool sometimes dries out, the presence of the above listed species is occurrent, not permanent yet.

The general maintenance activities (scything, cleaning the catchment-gate) are necessary to be performed every year.

The status of deliverables, outputs and milestones is illustrated by the following table:

Namo	Deliver	y date	Commont
INallie	Planned	Actual	Comment
Water catchment pool constructed	15.10.2009	31.10.2009	Done. The technical takeover of the pool was performed at the beginning of January 2010, the water right permit was obtained on 24.11.2010.

The deliverable set for the action was achieved two weeks later than the deadline. There were no milestones set for the action.

The summary of the action planned and actual timetable is illustrated by the table below.

			20)09		2010					2011				20)12			20	2014			
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II
C6	planned																						
	actual																						
planned done																							

Annex: Photos of the LIFE logo on the infrastructure



4.1.10. Action C7 Reconstruction of road network for fire protection purpose

Due to a delay in the procurement procedures of the machinery needed for this action (please refer to Section 4.2 and 5.1.4), VERGA could start the reconstruction of the fire emergency road network with a 3-month delay. The poor quality roads used for fire fighting purposes were reconstructed and upgraded in several phases:

- Out of the proposed 35 km long service road network 10 km was reconstructed resulting in a higher quality service road by the end of September 2009.
- A further 7 km was reconstructed by the end of the first year of the project implementation (end of December 2009).
- The yearly maintenance of the reconstructed service road network was scheduled for the spring of each year in order to perform the repairs resulting from (possible) winter damages. After the maintenance of the previously reconstructed 17 km in the spring of 2010, the extreme rainstorms at the end of May 2010 seriously damaged the (reconstructed) fire protection road network. The large amount of precipitation could not be absorbed by the soil. The water-flows damaged the surface of the roads, the ditch systems and other built structures. The flowing water cut channels through the roads with even over 1 m depth. Ditches and flow-through pipes, that were meant to dive precipitation away, were completely clogged in longer sections. The diameter of the flow-through pipes was inadequate to let through the enormous amount of water/precipitation the amount of which exceeded all records of the last 100 years. In some cases, even the flow-through pipes were washed out.
- After the storm, the road network was inadequate to fulfil its purpose as fire protection routes. Taking the schedule of the military shooting practices into consideration, VERGA immediately started the elimination of the damages and continued the reconstruction of further sections of the service road network. By the end of the 3rd quarter of 2010, the reconstruction of approximately 26 km (about 75%) of the proposed fire protection service road network was completed.
- VERGA continued the reconstruction works in 2011. The yearly maintenance activities were carried out during the spring eliminating winter damages. The more intensive military use of the already reconstructed road network than foreseen resulted in more maintenance work than expected. The reconstruction of the entire fire protection service road network was completed by the end of September 2011. As a result of the activities of the action the length of the completed fire protection road network is 34,5 km.
- The necessary maintenance works after the winter damages have been performed in March 2012 (no significant damages were observed). Related parts of the service road network were repaired after the transportation of waste created during the performance of Action C.4 activities in July 2012.
- VERGA could start the repairs of the service road network scheduled for 2013 later than planned due to the lasting winter period (significant snow was even in March). The repairs were delayed also by the military (shooting) practices and were finished during the autumn 2013.
- The yearly maintenance works of 2014 were carried out as scheduled. No serious damages were observed.





After completing the reconstruction of the road network the Coordinating Beneficiary (the legal predecessor of MOD DEO) as the representative of the owner and managing the area, VERGA as the company responsible for the reconstructions during the project implementation, and the BMTC as the main user of the road network started negotiations on the use of the road network. Accordingly, the main purpose of the area is to be used by the military, the owner is the Hungarian State, the management body is the Ministry of Defence, therefore the organisations agreed that no special agreement is needed.

Since shooting practices and other military activities take place regularly at the surroundings of area where the road maintenance works shall be carried out, the implementing partner, VERGA has frequent discussions on the possible dates of the assessment of the maintenance needs as well as the possible dates of repairs with BMTC in order to perform the activities as effective as possible.

Regarding the costs of the action, due to other flood related forestry tasks to be performed by the Associated Beneficiary required the resources (equipment and human resources) to be used in other activities, VERGA involved subcontractors in the implementation of the action resulting in the increase of external assistance costs compared to the figure foreseen in the project proposal.

As part of the implementation of the after-LIFE conservation measures VERGA (financed from their own budgets) will perform yearly maintenance of the service roads in the forthcoming period as a necessary action to be carried out.

Nama	Deliver	y date	Commont
Ivallie	Planned	Actual	Comment
Fire emergency road reconstructed	30.08.2010	30.09.2011	Done.
(35 km)	50.08.2010	30.09.2011	Reported in the 1 st Progress Report.
First phase of road construction	21.00.2000	21 12 2000	Done.
executed (17 km)	51.09.2009	51.12.2009	Reported in the Mid-term Report.

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone of the action was met later than scheduled. The reason for the delay is twofold: (i) the necessary machinery was not available at the time of starting the activities of the action (please refer to section 4.2 and 5.1.4 of the current report) and (ii) the dates of the pre-scheduled military shooting practices allowed not to perform any activities on the related sites.

The deliverable set for the action was met more than one year later than planned. The extreme weather conditions caused serious delays and required the re-reconstruction of the previously repaired road network. Please note that the finished network requires only maintenance and proved to be a sufficient and appropriate solution for fire protection and fire fighting tool.

The summary of the action planned and actual timetable is illustrated by the table below.

		2009				2010				2011					20)12		2013				2014	
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II
C7	planned																						
	actual																						
			plan don	nned																			



4.1.11. Action C8 Rehabilitation of Sub-pannonic steppe grasslands and Pannonic woods with Quercus pubescens habitats through the suppression of invasive arboreal species

VERGA started the implementation of the action by selecting the proper contractor. The activities commenced in the spring of 2011, earlier than it had been scheduled in the project proposal. Activities were carried out with the cooperation and collaboration of BuNPD.

Although the treated area covers only 20 ha but adjacent areas will benefit also from the preventive effect of the action. The activities were completed in the following plots: (i) near Hajmáskér on 0,2 ha, (ii) in Öskü on 1,5 ha, (iii) on the sheep-run on 11 ha, (iv) at Várvölgy on 0,5 ha and (v) in Bakonykúti on 7 ha. Chemical treatment experiment was performed on the aforementioned plots to investigating the effects of treatments differing in the composition and doses of chemicals. Experiments were carried out for the treatment of Elaeagnus angustifolia in Várpalota by applying one of the following treatments: (i) dispersing Casper 1 kg (1,7%) together with Silwet adhesion enhancer, (ii) dispersing Casper 0,75 kg (1,25%) – Tomigan 2 1itre (3%) together with Silwet adhesion enhancer, (iii) dispersing Tomigan 2 litre (3,3%) – Mezzo 100 g (0,16%) together with Silwet adhesion enhancer.

The result of chemical treatment has been measured during spring 2012 at sprouting. Considering the results of the first treatment, a repeated treatment has been performed. The chemical treatment of Elaeagnus was successful while Ailanthus required more treatment. Therefore, although the treatments were scheduled for 2011 and 2012, some additional treatment was performed in 2013 in the Öskü plot and the Bakonykúti plot. In both cases chemical treatment was performed, based on the level of the spring sprouting, involving methods successfully applied by the subcontractor in other LIFE+ projects. A mechanical treatment was scheduled for autumn 2013 but could be implemented only in the Bakonykúti site. VERGA had to perform a third phase of the chemical treatment in the Öskü area in 2013 (the species were treated twice in 2013 in Öskü). The third treatment of the Öskü area can be declared successful, since the species dried out and were cut and could be ground.

Based on the assessment of the status of the rehabilitated areas and habitats performed after the completion of the project activities VERGA will implement frequent control of the re-sprouting as art of the after-LIFE conservation measures.

There were no milestones and deliverables set for the action.

The summary of the action planned and actual timetable is illustrated by the table below.

Action C8		2009			2010			2011			2012				2013				2014				
		Ι	II	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	II
	planned																						
	actual																						
			pla don	nned																			



4.1.12. Action C9 Transformation of planted Pinus nigra forest cover into Pannonic woods with Quercus pubescens habitat on 35.5 hectares

VERGA started the activity in 2009 with decreasing the closing of the Pinus population and removing the shrub level at the designated areas which were then fenced around. When performing the preparatory activities for planting, benches were formed manually in steep areas at plots that required such activities. After removing the shrub level from the steep morphology areas, the twigs were used to make wattles, which were laid down parallel to the morphology contours on the downhill side of the benches. In plane or moderately steep areas, the twigs were removed. The implementation of benches and wattles supported the prevention or mitigation of soil erosion. Planting nests were created on the benches after their being filled with rich soil. Both Quercus pubescens and Quercus cerris were planted in the designated areas. On the steep areas and the ones with shallow fertile layer, the acorn of Quercus pubescens was used, whereas in piedmont areas, with thicker fertile soil the acorn of Quercus cerris was planted in the planting nests.

Storms of Cyclone "Zsófia" in May 2010 have brought down almost 30% of the remaining Pinus population which caused a lower closing of the pine population (higher trees were mainly brought down by the wind). The worst situation could be observed in the Várpalota 39/J, I sections where approximately 500 m³ of Pinus nigra had been damaged. Since this area is popular among tourists due to the closeness of the town and the educational trail, VERGA intended to eliminate the damages soon by lumbering. Trees endangering hikers were removed immediately.

The risk that germens beneath the corona of the pines do not get enough sunlight or fail to find their way and therefore perish was high. In order to eliminate all damages and thus lower the risk, VERGA – based on discussions with BuNPD – initiated a procedure which is not often applied in Hungary, the cableway technology. Since the intensive storms affected almost the entire territory of Hungary, all cableway capacities were engaged. Based on the negotiations with Hungarian and Austrian enterprises the initial idea had to be modified: due to the shape of the affected forests (length: 2 km, width: 50-100 m) the cableway technology could not be properly applied. Fortunately the frost and snow in the winter period allowed VERGA to access woods and gentle dragging was applied to remove the pines that were blown down. This method caused minimal damages on the area. On other areas where "scattered" damages were observed traditional methods were applied.

The extreme weather caused further challenges:

- the heavy rain made the surface of the rich soil stiff and the ventilation of the soil was reduced, therefore germens were unable to break through the crust. The perished seedlings were replaced;
- some of the trees brought down by the storm damaged the fence built earlier. These fenceparts had to be replaced.

The elimination of the damages and the restoration of the area were completed in 2011. As the result of the falling of the trees caused by the heavy winds, the pine stock became weaker, the corona level was lower (the higher trees had been mainly affected), and there were some spots where even no trees were found. This resulted in an increased luminous output in the area creating better circumstances for weeds to spread. Therefore a more time-demanding restoration process involving more manual work in the course of nursing was required.

Generally, acorn placements or plants require replacements since the success rate of the propagators' germination is never 100%. – this statement relates to Quercus pubescens which is a slow-germinating and extremely slow-growing plant.



VERGA placed acorns twice in 2011 followed by nursing and cultivation activities. Usually nursing is performed twice a year. The first nursing activities were performed in the summer of 2012. Due to the unfavourable weather (hot summer and the small amount of precipitation in 2012 <Hungarian average between January and August 2012: 225-350 mm compared to the average of 386 mm between 1971-2000>) further acorn replacements were required to be carried out in 2012-2013. In 2014 the spring-summer period was characterised by significant precipitation, therefore VERGA performed nursing activities three times before the end date of the project.

The legislation regarding the renewal of forests is included in Chapter V of Law No. XXXVII of 2009 on forests, forest protection and forest management. The law shall be read together with the Decree of the Minister of Agriculture and Rural Development No. 153/2009. (XI. 13.). The renewal of an old forest is a lasting procedure, taking at least 8-10 years (please refer to point a) of par. 29 in the Decree of the Minister).

The technical take-over of the afforestation is acknowledged by the certificate issued by the afforestation authority. The official document declares the status of the forest transformation based on the minutes that were made during the on-site visits of the authority. The certificate that provides information on 10 forest parts concerned by the action was issued in September 2014 and attached to the Final report.

Please note that since the costs of the action showed a significant decrease compared to the originally planned budget, the budget reallocation of the action was proposed (please refer to the Amendment Request to the Grant Agreement). VERGA has not reported any income or costs from logging (neither the costs nor the income of selling wood is reported) in the course of the project (Please refer to the question raised by the EC in their letter of 22nd June 2011, Annex B, point 14.).

During the project implementation period vandalism related to stealing fence-panels near the city of Várpalota was another challenge the project has to face. Although VERGA multiplied their efforts to avoid such damages during the project implementation period, only the removal of the fences at the last months of the project proved to be a solution. (Please note that these fences were built only to avoid game damages until the planted acorns and seedlings strengthen.)

The activities of this action last longer than the project implementation period. As part of the after-LIFE conservation measures, VERGA – financed from their own budget – will continue the replacement of Quercus pubescens and Quercus cerris, if required. The implementation of forest transformation activities, nursing will also be a part of the long term activities.

Nama	Deliver	y date	Comment				
Ivanie	Planned	Actual					
Decreasing closure by 30%	15.09.2010	15.09.2010	Achieved.				

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone for the action was met as scheduled. There were no deliverables for the action.

		2009			2010				2011			2012				2013				20	014		
Action C9		Ι	II	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	II
	planned																						
	actual																						
			plaı don	nned e																			

The summary of the action planned and actual timetable is illustrated by the table below.

Annex: Certificate of the forestry authority on the status of forest transformation



4.1.13. Action C10 Preservation and rehabilitation of Pannonic woods with Quercus pubescens and Medio-European calcareous scree of hill and montane levels habitat and Serratula lycopifolia species

The activities of the action started by the preliminary field visit of the personnel of VERGA and BuNPD in 2010 to support the designation of the locations of monitoring quadrates. The activities planned to be performed in the course of the action required permissions. The request for permits for wood cutting, and fence building was submitted to the relevant authorities in 2011. Getting the permission was a long-lasting process and involved several authorities: VERGA received the necessary permits in April 2012. The work started immediately. The characteristics of the fenced areas are as follows:

Name of the area, forest part	Fence length (m)	Surface (ha)
Tobán 1 – Hajmáskér 18/A, B, C	1.882	19,90
Tobán 2 – Hajmáskér 19/A, B	1.600	12,05
Tobán 3 – Hajmáskér 20/C	1.589	13,15
Esztergáli valley – Márkó 13/C	1.485	8,92
Total	6.556	54,02

The official acceptance of the fence-building is properly documented and was provided with the 2^{nd} Progress Report. With the fencing of the plots included in the above table all the target habitats and species are protected.

The risk of game overpopulation around the fenced areas is high. In order to reduce the overpopulation VERGA carries out intensive shooting activities. The intensity is shown by the following table (please note that the 2013 data were not available yet):

	2007	2008	2009	2010	2011	2012
Total game shot	1.110	1.228	1.372	1.140	1.362	1.475
out of total:						
Ovis musimon shot	140	149	155	150	220	225
(female)	(97)	(101)	(104)	(93)	(147)	(155)
% of Ovis musimon shot to total shot	13%	12%	11%	13%	16%	15%

The number of shot Ovis musimon species shows a higher increase (160%) than the total number of game shot (130%) therefore VERGA performs its shooting activity more intensively in order to reduce the overpopulation around the fenced areas. The impacts of fencing the area on the target habitats and species are monitored in the course of action E.4 - please refer to Section 5.1.15 of the current report.

As activities in the after-LIFE conservation period, VERGA will perform the frequent control of the fences built in order to prevent game damages, and implement the necessary maintenance works depending on their assessed status. The status of deliverables, outputs and milestones is illustrated by the following table:

Nama	Deliver	y date	Comment				
Ivanie	Planned	Actual					
Fence built around action target sites (7000 m)	30.06.2012	13.07.2012	Done. 6.556 m fence was built (93,66%). Reported in the 2 nd Progress Report.				

The deliverables were reported slightly after their planned deadline. Please note that the date included in the above table is the date of the official take-over of the fences. The actual length of the fences is 93,66% of the proposed length. The reason for the deviation is that during the designation of the itinerary of the fence the track-line proposed by BuNPD was also considered to include all habitats and target species within the fenced areas. There were no milestones set for the action.


		•				-											•						
			20)09			20)10			20)11			20)12			20)13		20	14
Action		Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π
C10	planned																						
	actual																						
			plan don	nned e																			

The summary of the action planned and actual timetable is illustrated by the table below.

Annex: Photos of the LIFE logo on the infrastructure



4.1.14. Action C11 Exchange of best practice experience through practical collaboration on concrete conservation actions

The activities of the action started right after the project start date. The collaboration of BuNPD as an expert in partners' actions included continuous consulting and advisory to VERGA in Actions C2, C8, C10. The methods and level of communication varied case by case including (i) management level meetings, (ii) expert-level discussions on field works, (iii) personal contacts, mails, telephone, emails. Such meetings were regularly held in the headquarters of the Beneficiaries but on-the-field discussions were often organised. Some particular dates of significant meetings and events are as follows:

5 th October 2009:	Conciliation between project partners in Budapest
20 th October 2009:	Field visit of LIFE+ external auditors in the project area
15 th February 2010:	Discussions on the military use of the shooting ground, Várpalota
18 th March 2010:	Discussions of the partners on project results in 2009 and plans, Várpalota
2 nd June 2010:	Assessment of storm damage on the project area
10-11 th June 2010:	Introduction of the LIFE+ project area to the delegation of Thüringia
17 th June 2010:	Discussions between project partners, Csopak
31 st August 2010:	Discussions between BUNPD with VERGA on the conservation actions
19 th October 2010:	Initial field visit and advisory on forest transformation
22 nd November 2010:	On-site monitoring of activities previously performed by VERGA
28 th November 2010:	Advisory on the location of building fence against game
21 st January 2011:	On-site discussions on elimination of invasives to be carried out by VERGA
24 th January 2011:	Providing documents on effective methodologies for IAS elimination
30 th March 2011:	On-site inspection of the location of fence against game
28 th April 2011:	Participation at the visit of the EC Delegation on site
16 th May 2011:	Modification of the location of building fence against game
6 th June 2011:	Proposing on the treatment of Natura 2000 grasslands
Several dates in 2012:	VERGA and BuNPD discussed issues regarding fencing (C10) and discussed
	the possibility of placing bat protecting tools into recultivated bunkers (C4)
12 th July 2012:	Fence building (C10) has been monitored at completion
February 2013:	Several phone conversations on the elimination of damages caused by
	breaking the bunkers by unknown persons, the possibilities of closing the
	bunkers and on other safety measures
19 th September 2013:	Public take-over ceremony of the view-tower on the project area (restoration
	of the object was financed from other sources).
September 2013:	Several discussions (online, telephone) on the international conference,
	preparation for the monitoring visit, etc.
6-10 th October 2013:	BuNPD was the member of the delegation visiting Dresden in the event in
	the framework of Saxon-Hungarian Environmental Cooperation.
	Presentations made by the Hungarian delegation included 2 slides on the
	project (invasive species) presented to the Ministry of Environmental
	Protection in Saxony and Environment Authority of the City of Dresden.
14-15 th October 2013:	BuNPD participated in the conference in Bugyi (Hungary) on the suppression
	of invasive species. Project Eastern Bakony was presented by a poster.
2-4 th December 2013:	Discussions on the proposed itinerary of the monitoring visit.
22 nd May 2014:	Discussions on possible further cooperation projects with VERGA.

There were no deliverables and milestones set for the action. The summary of the action planned and actual timetable is illustrated by the table below.





4.1.15. Action E4 Monitoring, assessment and evaluation of project impact on target species and habitats

BuNPD started the activities of the action by setting up of the monitoring methodologies for the concerned conservation actions (C2, C3, C4, C5, C8, C9, C10) in the 4th quarter of 2009 which was finished by the beginning of 2010. The monitoring activities and methodologies applied are the following:

Action C2 Basic research (Assessment of the distribution and population size of Natura 2000 species)

Habitat mapping

Action C3 Breeding success of nesting species and the proportion of occupied nest-boxes three times a year (end of March, May and June) Prior to the capture and reintroduction of the ground squirrel population estimation is carried out in the target areas The number of entrance holes is counted according to the methods published in

The number of entrance holes is counted according to the methods published in scientific literature to assess the population size

Base-line assessment is scheduled either at the beginning of April (in case of spring capture-reintroduction) or any time between April and early July (in case of summer capture-reintroduction).

The number of the holes is recounted in the entire previously investigated area at the end of August to monitor the success of the reintroduction.

Further monitoring of the reintroduced population is implemented twice annually. Monitoring at late April shows the number of successfully overwintered individuals. Surveying in the second half of August indicates the yearly population growth and the time-dependent spatial distribution of the colony.

- Action C4 Habitat mapping Braun-Blanquet method: 50 pieces observation quadrates with a size of 2x2 m each are placed in treated areas. Another 20 observation quadrates are sampled in the adjacent natural subpannon steppe habitats.
- Action C5 GPSing fire clearings (i.e. their size), assessing the coverage of plants (e.g. weeds) with random sampling.
- Action C8 Distribution map of invasive plant species before and after elimination
- Action C9 Counting tree seedlings of *Quercus pubescens* in three quadrates with a size of 30x30 m (each). Within one 30x30 m quadrate 50 smaller ones (1x1 m) are placed randomly. The general condition of the seedlings has to be investigated as well if necessary.
 - Comparison to the number of *Pinus nigra* trees.
- Action C10 Point-mapping of *Serratula lycopifolia* plant species by 20 observation quadrates with a size of 20x20 m (each) using Braun-Blanquet method. 5+5 quadrates twice (altogether 20) was botanically surveyed both outside and inside the fenced area.

The activities of the action can be divided into two categories: (i) activities performed by external experts and organisations, and (ii) activities performed by the staff of BuNPD.

The monitoring activities carried out during the project implementation period can be summarised by actions as follows:

Monitoring Action C2

The basic research (Investigation on the ranges of stocks of Natura 2000 species) was completed in 2010. The habitat map of the area was delivered in 2010.





50 pieces of 2x2 m permanent quadrates on areas where shrub was removed from and for controlling purposes 20 pieces of 2x2 m permanent quadrates in natural grasslands were designated by applying the Braun-Blanquet methods in 2010 and in each project implementation year afterwards. The quadrates were monitored twice a year, the data gained per visit were added up and this aggregated figure is considered as the result of the particular sample taking.

As per the control quadrates in Fajdas and Hajagos the decrease in the coverage observed stopped in 2012 which might be the consequence of the more favourable precipitation data in winter and spring. The background of the quantifiable increase is primarily the growth of surface coverage of perennial species of grasses and sedges.

In the samples of the spots from which shrub was eliminated in 2010 a clear, unambiguous coverage-growth is observable. After the shrub removal the area was characterised by torn-up, bare ground surfaces, which – since then – were colonised by the surrounding grass and the slowly regenerating shrub species.

The habitat map made in 2010 was updated in 2014 by using the observations during on-site visits and the air-photos of 2012. The coverage of the grassland habitats increased on areas where the monitoring activity was performed but the results of the single (or sometimes multiple) shrub removals and grazing vary. The majority of the areas from where shrub was removed requires repeated elimination activities and more intensive grazing, as planned in the After-LIFE conservation plan.

Monitoring Action C3

BuNPD placed five artificial nests which were controlled (monitored) yearly at the nesting period of Falco cherrugs. The monitoring activity was performed with the use of binoculars in the course of which the status of the artificial nests were also followed with attention. During the project implementation period no Falco cherrug sedentation was observed in the nests. The monitoring of the stocks of raptor species underpin the presence of Falco cherrug species but these animals seem to be individuals appearing periodically or wandering in the area. (On 27th July 2012, university students guarding the recently relocated ground squirrels observed a Saker Falcon capturing a ground squirrel at the bottom of Fajdas near Várpalota.)

As per the monitoring results of BuNPD the habitat of repatriated and "natural" ground squirrel colonies and the movement zones (mozgáskörzet) of Falco cherrug significantly overlaps. The first nesting Falco cherrug pair within the project implementation period was registered in Veszprém county appr. 15 km to the southeast of the project area (around Csajág).

The increasing needs for habitats of the strengthening Falco cherrug stocks in the Great Plain of Hungary might be the engine of the migration of the species in western parts of the country. The growth in the number and the stability of the stocks of the repatriated ground squirrels provides appropriate feeding source for the birds.

During the monitoring of the action BuNPD observed and registered the colonisation of 2-3 Falco peregrinus and a nesting Circaetus gallicus pair.

Repatriations performed in the surroundings of Bakonykúti, Várpalota and Öskü (please refer to Section 5.1.6 of the current report) were frequently monitored by BuNPD. Stocks have been assessed since the beginning of the project by counting the holes in the entire colonised territory in August or beginning of September each year.





The holes were located by measurement with the use of the GPS equipment. This methodology provides the possibility of comprehensively monitoring the increase and spreading of the repatriated colonies. In the course of the spring monitoring phase the after-hibernation status of the colonies are assessed. During the monitoring activities performed in 2013 the replacement places of ground squirrels near Bakonykúti and Várpalota it was found that the hibernation of both colonies was only partly successful, based on the hole-counting in August we can declare that both colonies had losses. The reason for the decrease in the number of animals is probably the mortality caused by the cold and rainy weather at the end of winter and beginning of spring. Despite of the aforementioned decrease the repatriations to areas near Bakonykúti and Várpalota can be declared successful since the number of ground squirrels significantly exceeds the number of animals repatriated, and the surface area of the habitat used by the susliks also increased. In the course of the monitoring the area of the 2011 repatriation in Bánta near Öskü no animals were found. However, 1.300 m away from the repatriation location, in the grasslands of Aranyos-kút near Öskü 14 ground squirrel holes were found. The habitat designated for the repatriation and the habitat of the small colony forms a single pasture. The fact of the newly relocated colonies' migration is not unique and is the result of searching for the most appropriate habitats. The population found in Aranyos-kút might be the descend of the repatriated colony.

The monitoring data of the checks of repatriation sites is summarised in the following table:

Voor of repotriction	Number of holes counted at the location of repatriations											
rear of repairiation	Bakonykúti	Várpalota - Fajdas	Öskü - Bánta									
2009	379											
2010	281	84										
2011	665	221	0									
2012	942	589	0									
2013	508	300	14									

Monitoring Action C4

BuNPD implemented the monitoring of mining pit recultivation during the spring of 2014 by randomly selecting 10 pieces of $2 \ge 2 \mod 2$ m quadrates (Braun-Blanquet method).

Significant surfaces without vegetation were developed in the area of monitoring 4-5 years before performing the activities. In the course of the monitoring the revegetation of the surfaces was assessed. The appearance of plant species of the surrounding areas was found, but the "species-pool" (fajkészlet) and the "pictorial view" (állománykép) of harsh rocky surfaces differs from that of surrounding natural grass vegetation. In the nutrient-poor environment the dominance of Fabaceae (Papilionaceae) species and the rare, point-wise appearance of Poaceae or Gramineace species is observable.

As a summary, 52% of the plant species appearing in the area represent species of the natural states, 70% represent species characterising dry and semi-dry rocky and steppe grasslands (Festuco-Brometea).

Invasive plant species were not found at sample takings or on-site visits. In the longer term BuNPD expects the development of steppe meadows characterising recultivated areas.





Experts performed the monitoring of the "bat-friendly" closing of the Csóri bunker (object 1/2010) during the winter period of 2011-2012, 2013 and 2014. The number and types of bat species were assessed by meshing, ultrasound detectors and applying visual methodologies. It was found that closed bunkers are not significant from the aspects of bat-accommodation during summertime. In the course of winter monitoring more species were registered but unfortunately with lower number.

Monitoring Action C5

The created fire break zones and their maintenance is yearly monitored. In the course of their development BuNPD registered the location and characteristics of the zones by GPS. During the performing of the monitoring activities photos were taken and the spread of fires were discussed with BMTC and VERGA. The monitoring activities underpinned that fires developed in grasslands have not spread to forests. After the creation of the fire break zones only one forest fire was registered as the consequence of military training. This fire was not spread from the grasslands but was the result of an accidental shot into the woods.

Monitoring Action C8

The map on spots of invasives (point map) was prepared in 2010 before the commencement of the chemical treatment and was updated in June 2014 after the end of the treatments.

BuNPD performed the monitoring of the locations of the action during June 2014 and prepared a comprehensive photo documentation on their findings. As per the investigations chemical treatment (injection) of Eleagnus angustifolia at location (iii) and (v) – please refer to section 5.1.11 of the current report – can be regarded successful. The risk of re-sprouting is low in case of applying the traditional grasslands management of the area (grazing, scything once a year). There are a few seedlings observed in location (iii) and (v) whose mechanical treatment (cutting once a year) is the appropriate applicable method.

Regarding the chemical injection of Ailanthus altissima species in three locations, the monitoring underpinned the almost 100% elimination rate of the trees in location (ii), while in case of location (i) and (iv) the chemical treatment was not so successful. Since the latter locations are very small areas the elimination of the invasive species would have to prevent the spreading of the species which shall be performed in the course of the after-life conservation activities.

Monitoring Action C9

BuNPD performed the oak seedling counting from 2010 in the autumn periods in the designated 3 permanent quadrates (size: 30x30 m). The borders of the quadrates were marked by painting the trees that were located in the corners of the quadrates. The autumn monitoring resulted in more reliable data since the species dried out in the summer periods were not counted. Counting was performed in 50 pieces of 1 m² areas randomly selected. The general maturity of seedlings was investigated by counting leaves and measuring height.

Based on the findings of the monitoring, it can be declared that the transformation of Pinus nigra stocks into Quercus pubescens habitats is a long term process in case of which a 4-year monitoring cannot be considered decisive. It can be declared that the Pinus nigra stock suffered great losses in the storms of May 2010 which resulted in





significant amount of fallen-down trees endangering the shadowing of young seedlings. During the hot and dry years significant seedling-losses were observed in all three quadrates.

The number of seedlings monitored in the quadrates during 2012 showed a double quantity in 2013 as the result of the continuous replacement (acorn placing) activities performed by VERGA. The only exception is in quadrate 1 where the number of seedlings remained the same. However, the number of leaves and the height of seedlings increased in all quadrates with the exception of quadrate no. 3 where – due to the large number of young seedlings – no significant changes were observed.

Monitoring Action C10

BuNPD applied the quadrate-method in the course of the assessing Quercus pubescens habitats: Braun-Blanquet methodology was applied in forests designating 20x20 m quadrates. The borders of the quadrates were marked by painting the trees that were located in the corners of the quadrates. The quadrates were monitored twice a year, the data gained per visit were added up and this aggregated figure is considered as the result of the particular sample taking.

The aim of the forest quadrate monitoring is the assessment of the impacts of game exclusion in large areas. Therefore the designation of the areas was made by taking into consideration territories in which game damages in the valuable Quercus pubescens forests was visible. Altogether 20 forest quadrates were monitored which can be found in two separates locations (10-10 quadrates by location). "Sample-pairs" were monitored: 5 quadrates were designated per location within the fenced area and 5 other quadrates outside the fenced area neighbouring the fenced quadrates.

Summing up the findings of the monitoring it can be declared that spectacular, tendency-like changes in the fenced areas cannot be observed. The building fences around the designated area was finished in 2012. In the first year of monitoring after fence-building (in 2013) the underwood plants in terms of the species-composition and the coverage minimally changed or did not even changed at all compared to the composition registered in the previous year.

The extreme hot and dry summer from July until September, even after the favourable winter and spring weather characterising 2013, had a negative impact on the regeneration of the vegetation. The extremity is well illustrated by the fact that leaves have fallen off from several thermophilic and drought-resistant tree and shrub species (i.e. Fraxinus ornus, Cornus mas, Crataegus monogyna), but even in case of Quercus pubescens stress-impacts were observable.

As per the results of the monitoring it seems that within the fenced area Ovis aries are not present, the exclusion is successful.

The stock of Serratula lycopifolia at Tobán is some hundred pieces. The dependence of the generative multiplication of the species is a problem which was observed during the monitoring years. This is not a local characteristic: the populations in Bakony mountains generally include smaller proportion of the blooming pieces within the population.

The re-assessment of the stocks of Serratula lycopifolia in the Bakony Mountains was carried out in 2013. There were no blooming pieces found in the Tobán. Changes in the stocks of Serratula lycopifolia in Tobán is illustrated by the following table:



	2010	2011	2012	2013	2014
Total pieces	436	546	354	385	not available
Blooming (out of total)	8	0	0	0	yet

The after-LIFE conservation measures will be implemented by BuNPD as follows:

- Action C2:
 - Preparing the habitat map of the respective area in 2018 or 2019
 - Designation of 50 pcs of 2x2 m quadrates at areas where shrub had been removed twice in 5 years' time
 - Designation of 20 pcs of 2x2 m quadrates at areas covered by Sub-pannonic natural grasslands neighbouring the shrub-eliminated areas twice within 5 years
- Action C3:
 - Nesting places will be checked once or twice a year
 - Colonies of repatriated ground squirrels will be assessed at the end of August through 5 years: growth in the number of animals per year, changes in the size of the area used by the colony, changes in the spatial pattern of the under-ground out-lets.
- Action C4:
 - Plant coenological survey in 2018 or 2019 at designated sample areas (not all locations!)
- Action C5:
 - Plant cover (%) assessment on some spots of the trace of the fire break zones once a year through 5 years.
- Action C8:
 - Preparation of the habitat map of the respective area in 2018 or 2019
- Action C9:
 - \circ Counting tree seedlings in 3 designated quadrates of 30x30 m, by random sampling in 50 pcs of 1 m² areas twice within 5 years
- Action C10:
 - Point-wise mapping of Serratula lycopifolia 3 times during 5 years
 - Coenological designation of 20 pcs of 20x20 m quadrates by applying the Braun-Blanquet method twice in 5 years.

The status of deliverables, outputs and milestones is illustrated by the following table:

Nama	Deliver	y date	Commont
INAILIE	Planned	Actual	Comment
Habitat map on priority habitats and	15 08 2012	02 07 2014	Ready.
species	13.08.2013	02.07.2014	Reported with the Final Report.
Dataset on priority species	15 08 2012	02 07 2014	Ready.
population	15.08.2015	02.07.2014	Reported with the Final Report.
Coenological profile of priority	15 08 2012	02 07 2014	Ready.
habitats	13.08.2013	02.07.2014	Reported with the Final Report.
Second set of aerial photographs	20.06.2012	12 04 2012	Purchased.
acquired	30.00.2013	12.04.2013	Reported with the Final Report.
Bapart of hotania survey	20.06.2012	02 07 2014	Ready.
Report of botanic survey	50.00.2015	02.07.2014	Reported with the Final Report.

The deliverables were reported one year later than planned in the project proposal. The reason for the delay is that the beneficiaries wanted to have the most update situation to be reported with the Final report. The investigations and related deliverables thus include 2013 data, even 2014 data where available.



The milestones set for the action were partly met: (i) the second set of aerial photographs was purchased within the set deadline, (ii) the botanical survey was provided one year later in order to register the most update situation.

The summary of the action planned and actual timetable is illustrated by the table below.

			20)09			20)10			20)11			20)12			20)13		20	14
Action		Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	II
E4	planned																						
	actual																						
			plaı don	nned e																			

<u>Annex</u>: Habitat map on priority habitats and species – Report on the monitoring of action C2
Dataset on priority species population – Report on the monitoring of action C2, Report on the monitoring of action C3, Report on bat monitoring and Report on habitat monitoring Coenological profile of priority habitats – Report on the monitoring of action C2, Report on the monitoring of action C4, Report on the monitoring of action C5, Report on the monitoring of action C8, Report on habitat monitoring
Report of hotanic survey – Report on the monitoring of action C2

Report of botanic survey – Report on the monitoring of action C2, Report on the monitoring of action C4, Report on the monitoring of action C5, Report on the monitoring of action C8, Report on habitat monitoring



4.2. Dissemination actions

4.2.1. Objectives

One of the most important objectives of project Eastern Bakony is to disseminate the long-term results and present best practices applied during the implementation of the conservation and monitoring actions. The project aims at sharing information not only with the local inhabitants who might benefit directly from the project impacts, but also with the management of other LIFE+ projects, in order to raise their level of awareness and prevent harmful activities due to lack of information and understanding.

Besides the "traditional" dissemination tools (i.e. project website, newsletters) several innovative communication actions served the spread of the idea, results and achievements of the project. Military personnel and the general public was educated on environmental protection practices.

Military personnel using the project area was one of the dissemination target groups of the project. In order to best assist their nature responsibility even during military trainings an educational package in the course of trainings made by the environmentalists was developed to communicate the most important messages. All widely applicable learning was disseminated on an international level, in particular to stakeholders of other military and nature LIFE+ projects. Exchange of best practice with LIFE+ military initiatives taking place in other EU countries was supported by an international conference. Communication with the general public was implemented via information tables, flyers and multimedia documents.

4.2.2. **Dissemination:** overview per activity

4.2.2.1. Action D1 Online communication

AQUA started the implementation of the action by registering the domain of the website (www.life.keletibakony.hu). Although the first version of the website was already bilingual (HU and EN) as planned in the project proposal, the contents were limited to the description of the project area, the actions, partners and their contact details. The photo gallery and the news section were also installed. The reason for this is that the website was to be hosted by the Coordinating Beneficiary's server planned to be procured in the course of the project - but the procurement procedure was postponed. Partners decided to temporarily transfer the hosting activities to AQUA (until the installation of the purchased server) but - due to the technical restrains of AQUA's server - the introduction of certain functions (i.e. chat, forum and the digital library) was delayed. Despite of the above challenges the website was online and operational by the end of the first 6 months of the project start. After the installation of the Coordinating Beneficiary's server in May 2010 the homepage was transferred and the events calendar, the multi-media educational material, the brochure were uploaded. The online collaboration tool was also set up - as reported in the Mid-term Report. The website was updated biweekly or monthly (news and project progress). The amendments proposed by the Commission or the monitoring expert were implemented (i.e. refreshed photo gallery, translations - please refer to the letter of the EC on 11th May 2012 (Ref: ENV.E3/EPV/PR/ap Ares (2012) 575034).



The server of hosting the project website broke down in the middle of August 2012. After its repair a more serious breakdown (affecting the motherboard) challenged the partnership at the end of September 2012: it involved the disappearance of the project website and its entire content (the problem was reported to the monitoring expert by email). The recovery of the website required re-programming of the total homepage, and since there were no safety copies made on the contents of the website – it took much longer time than expected: all the documents, data and all kind of information should be uploaded again. Since the projected costs for the action had been already used up by that time (i.e. by implementing the tasks as per the project proposal), Beneficiaries had to find the appropriate financial solution. The costs of the repairs of the server breakdown in August were borne by AQUA outside the project budget. The second breakdown required more financial resources which are reported in the Final Report (some 790 EUR).

After the re-start of the website the registration platform for the international conference (please refer to section 4.2.2.10 of the current report) was installed. This part of the website served as the main communication tool of the conference (agenda, list of participants, information on the conference venue, presentations, photos, etc.).

The number of the website visitors could be also counted before the server breakdown. The respective data were included in the 2nd Progress Report.

In the framework of the action a software for editing and sending electronic newsletters was purchased. AQUA decided not to purchase the two pieces of notebooks planned in the project proposal (the colleagues used their own equipment)

Nama	Deliver	y date	Commont				
Ivanie	Planned	Actual	Comment				
Internet domain name registration	15.02.2009	06.03.2009	Done. Reported in the Inception Report.				
Functional project website	15.03.2009	31.05.2009	Done. Reported in the Inception Report.				

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone set for the action was met two weeks later than planned but did not influence the date of the deliverable set for the action: the website was functional two weeks earlier than the date planned in the project proposal. Please note that the original date of the deliverable (15.03.2009) was mistyped - as reported in the Inception Report and should be read as 15.06.2009.

The tasks of the after-LIFE period relating to the website are detailed in the post project communication plan (please refer to action D11) and in the after-LIFE Conservation Plan (please refer to action E5). AQUA will maintain the website for 5 years after the project end date.

			20)09			20	010			20)11			20	12			20)13		20	14
Action		Ι	Π	Ш	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π
D1	planned																						
	actual																						
			plan don	nned e																			



4.2.2.2. <u>Action D2 Installation of gates, informational and notice boards</u>

VERGA started the activities of the action by preparing the plans of the informational and notice boards right after the project start date. The contents of the boards were discussed with the beneficiaries and their re-design was agreed. The final design and the preparation of notice boards were accomplished by the end of September 2009. The proposed locations were discussed and agreed by BMTC as well. The installation of the 25 informational and notice boards as well as the 10 gates has been carried out at the end of October 2009.

As the result of the instalment of the gates the number of "foreign" vehicles decreased in the project area. However, notice boards are regularly broken in almost all places. There were three-four occasions when even the supporting structures were seriously damaged. Accusation was made in relation to the damage; the perpetrators were never captured. VERGA continuously replaces damaged signs and supporting structures.

Nama	Deliver	y date	Commont
Inallie	Planned	Actual	Comment
Preparation of notice boards	31.05.2009	30.09.2009	Ready. Reported with the Inception Report.
25 notice boards and gates installed	15.07.2009	31.10.2009	Ready. Reported with the Inception Report.

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone and deliverable set for the action were reported some months later than planned in the project proposal. The reason for the delay is the need for re-designing the boards.

As part of the after-LIFE measures VERGA will replace the boards and gates if necessary.







4.2.2.3. <u>Action D3 Development of educational trail</u>

VERGA started the implementation of the activities by discussing content- and location related questions with the partners and the relevant stakeholders (Municipality of Várpalota and BMTC). Based on the negotiations, the educational trail was developed and created in "Várvölgy" (Vár Valley – topographic number: Várpalota 09/1). The length of the major track is 6.5 km and reaches 11.4 km including secondary routes. The development of the educational trail, manufacturing and installation of signs and equipment, were carried out by a subcontractor. The maintenance and operation of the trail is performed by VERGA. Twelve stations and two resting places were developed. The resting places are equipped with benches, tables and barbecue places. Each station of the trail is marked by an informational sign showing the valuable natural protection and historical features, silviculture and military activity in Várvölgy by photos also. The storms in May 2010 damaged the educational trail: a tree fell on the starting sign and trees were fallen down onto the track-line. The damages were repaired and the educational trail was soon re-opened for the public.

Since the educational trail is not fenced around and is open for everybody with no admission fees, the number of visitors could hardly be estimated. VERGA assumes that during hiking season (spring-autumn) there are 40-50 visitors per day at the week-ends, but there are some 10-20 visitors during weekdays also. During spring and autumn the educational trail provides location for school events (1-1 in spring and autumn) with 2-300 pupils per event. The trail also serves as the location of the local quiz of the Earth Day (22nd April each year). Schools in the neighbouring settlements are also contacted offering location for outdoor programmes.

Before the hiking season litter is collected from the area and information boards are restored. The communication of the educational trail is mainly through the local tourism office, they were provided with information material and maps. The trail is also communicated by the information boards that can be found in the town and the neighbourhood.

The damaging of information signs and vandalism are unfortunately observed frequently. VERGA replaces these damages at own cost. In the autumn of 2013 they completely restored the educational trail parallel with connecting it to the newly created bicycle route and physical training trail (bicycle route and PE trail were financed from other sources).

Nama	Deliver	y date	Commont					
Ivallie	Planned	Actual	Comment					
Preparation of material to be displayed on educational boards	31.01.2010	03.05.2010	Ready. Reported with the Mid-term Report.					
15 educational boards installed	28.02.2010	10.05.2010	Ready. Reported with the Mid-term Report.					

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone and deliverable set for the action were reported about 2-3 months later than planned in the project proposal but were ready by the beginning of the hiking season.

As part of the after-LIFE measures VERGA will implement maintenance works and the replacement of educational and information boards, the restoration after damages.

			20)09			20	010			20)11			20)12			20)13		20	14
Action		Ι	II	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π
D3	planned																						
	actual																						
			plan don	nned e																			



4.2.2.4. Action D4 Publishing layman's report

The layman report was compiled with the coordination of AQUA in the spring of 2014. All partners contributed to the contents of the report which was published as a bilingual (HU-EN) document. The report is a 24 pages document describing and illustrating the project, its results and achievements compared with the objectives and aims. The project area, the protected species and habitats, activities implemented and threats imposed are also detailed. A short "What can I do? – to preserve the current improved status" chapter is also included in the report.

The first event of dissemination was the international conference $(14-16^{th} \text{ May } 2014 - \text{please refer to section } 4.2.2.10 \text{ of the current report})$. The final public information meeting (please refer to section 4.2.2.7 of the current report) served as an opportunity of distributing the report to the participants. The copies not yet disseminated were distributed among the project partners to support their after-LIFE activities.

Nama	Deliver	y date	Commont					
Ivallie	Planned	Actual	Comment					
Draft of Layman's report	30.11.2013	31.01.2014	Ready. Reported with the Final Report.					
Layman's report	15.01.2014	10.05.2014	Ready. Reported with the Final Report.					

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone and deliverable of the actions are reported some two-four months later than planned in the project proposal. The reason for the delay is that the beneficiaries wanted to disseminate the report in the final international conference.

The layman report – after the end of the project – will be disseminated in conferences and during guided tours.

The summary of the action planned and actual timetable is illustrated by the table below.





<u>Annex</u>: Layman report of the project



4.2.2.5. Action D5 Media work

AQUA started the implementation of the action right after the project start by compiling the media contact list (relevant local and national journalists, editors in nature protection, environmental issues, etc.). The direct contacts with media were established through phone calls. AQUA sent a "media brief" to interested journalists and editors on the most important characteristics of the project (start date, activities, information on the public info meeting, etc.). The first press conference was organised at the beginning of the project by the Coordinating Beneficiary.

Journalists were invited to the guided tours (please refer to section 4.2.2.8 of the current report) by sending them direct invitations and also advertising the event on the project website. Information on the guided tours were published in several means of online media focusing mainly on those reaching nearby audience (i.e. the official website of the city of Várpalota, Csór, Hajmáskér or the county daily papers' online version: www.naploonline.hu). The guided tour organised to celebrate LIFE20 was held on 12th May 2012 to which the journalists of national and local press have been invited.

The project results and achievements were disseminated through a press conference (press-breakfast – saitóreggeli) in Budapest on 3rd December 2013. The event served also as an opportunity of advertising the international conference in May 2014.

On the first day of the international conference (Nature protection in military areas -14^{th} May 2014) a press conference was held in Veszprém disseminating the project results and best practices. A press release has also been published. Based on the information shared in the press conference and by the press release several online and printed media published articles on the event and the project: Greenfo, Veol.hu, Honvedelem.hu, National Forestry Association, Raketaezred.hu, Veszprémi Napló, Veszprém TV, Echo TV).

AQUA compiled the press dossier of the project for each year. The dossiers were attached to the project reports: press dossiers of 2009-2010 to the Completion documentation to the Mid-term Report, press dossier for 2011 to the 1st Progress Report and press dossier for 2012 to the 2nd Progress Report. The press dossier of 2013-2014 is annexed to the current report.During the project implementation period the project was disseminated via the following means:

- Press releases made by the project: 5;
- General public article in national press: 4;
- General public article in local press: 9;
- Internet article: 66;
- TV news/reportage: 4; •
- Radio news/reportage: 2. •

The status of deliverables, outputs and milestones is illustrated by the following table:

Nama	Deliver	y date	Commont
Indille	Planned	Actual	Comment
5 articles propared for madia	20 11 2012		Ready.
5 articles prepared for media	30.11.2012		Reported with the Final Report.
1 st pross conforance guide	15.03.2011		Ready.
1 press conference guide	15.05.2011		Reported with the Final Report.
2 nd pross conference guide	15 12 2012	15 05 2014	Ready.
2 press conterence guide	13.12.2013	15.05.2014	Reported with the Final Report.



Both the milestone and the deliverables were reported much later than planned in the project proposal. The reason for the delay is as follows: (i) the first press conference was planned to be implemented with the international conference scheduled for 2012 (as reported in the 2nd Progress Report) but due to the postponement of the conference, the 1st press conference guide was also delayed to be published; (ii) the second press conference guide was published together with the international conference. The milestone set for the action was partly met: the articles were published later than planned in the project proposal.

The summary of the action planned and actual timetable is illustrated by the table below.





4.2.2.6. <u>Action D6 Publishing of informational and educational material</u>

AQUA started the implementation of the activities by compiling and printing 500 psc of flyers. This kind of dissemination material included basic information on the project and served as an advertising platform of open events and guided tours. Flyers were distributed to local municipalities, schools and other public institutions during the first public information meeting (please refer to section 4.2.2.7 of the current report). The rest was shared among the partners for further distribution.

AQUA started the preparation of the multimedia teaching material by initiating a discussion with the consortium partners in order to define the target group, contents and technical issues in 2009 but the multimedia teaching material was finished only by the end of June 2010 instead of 31st March 2010. (The delay resulted from the dragging procurement procedure of the server hosting the project website and the need for several discussions on the technical issues.) The teaching material consists of the following elements:

- dictionary (providing a short introduction about the project aims and objectives, LIFE+ and Natura 2000, the relevant species and their habitats described in an easily understandable way even for children) compiled with the professional assistance of BuNPD,
- fly-in videos (helping to better understand the characteristics of target habitats in detail by photos and videos) compiled with the professional assistance of BuNPD and the editing work of an expert,
- tests (on two different levels with three types of questions).

The multimedia teaching material was published on DVD and is available on the project website as well. The DVDs were distributed among schools of cities neighboring the project area. Partners decided to distribute the DVDs as follows:



- Guided tour (1st occasion) there were 110 DVDs distributed among the participants
- NGOs in the surrounding towns (average 5-5 pcs of DVDs per NGO, altogether 100 pcs)
- Schools in Várpalota (6) and Veszprém (24), altogether 600 pcs (20 pcs each)
- Other occasions (i.e. further guided tours) and tourism office of Várpalota.

The feedbacks received from the organisations to whom the multimedia teaching material was distributed was positive: teachers used the quiz during eco-days, in completing the compulsory teaching materials. Persons participating in the (next) guided tours were asked to provide their views on the material, they liked the language of the material which is for the general public.

AQUA purchased the software required for editing and sending electronic newsletters in July 2009. Altogether nine newsletters were compiled in Hungarian, distributed and also uploaded in the project website (http://www.keletibakony.hu/hirlevelek). English versions of the newsletters were published four times during the project implementation period (http://www.keletibakony.hu/en/newsletters). There were 261 Hungarian prescribers to the newsletter until the end of the project, out of which 30 can be declared stakeholders (educational institutions, local municipalities, national parks, nature protection organisations, associations, nature-lovers, media). In July 2014 (at the very end of the project implementation) there were 256 active prescribers. The number of foreign prescribers to the English version of the newsletter was 107, including national parks and representatives of countries participating in other LIFE+ projects (Romania, Lithuania, Latvia, Belgium, Finland, Italy, Czech Republic, Estonia, Poland) and international organisations engaged in nature protection.

A brochure was also prepared in the framework of the project. This 16-page long dissemination material introduces the project itself, provides information on the LIFE+ Program and NATURA 2000 network, target habitats and species of the project and all factors endangering the natural values, appointed tasks in order to preserve these values. The brochure was prepared by the end of May 2010 in 500 copies on recycled paper.

The informational and educational materials were distributed during guided tours, public information meetings, press conferences and the international conference.

Nama	Deliver	y date	Commant
Inallie	Planned	Actual	Comment
Draft of project brochurg propaged	15 02 2010	30.04.2010	Done.
Draft of project brochure prepared	13.02.2010	30.04.2010	Reported with the Mid-term Report.
Project brochure (500 copies)	28.02.2010	31.05.2010	Done.
rioject biochure (300 copies)	28.02.2010	51.05.2010	Reported with the Mid-term Report.
Educational multimedia material	20.02.2010	20.06.2010	Done.
(CD-ROM)	30.03.2010	30.00.2010	Reported with the Mid-term Report.

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone and the deliverables were reported two-three months later than planned in the project proposal.

			20)09			20)10			20)11			20)12			20)13		20	14
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π
D6	planned																						
	actual																						
			pla don	nned e																			



4.2.2.7. <u>Action D7 Public information meetings</u>

AQUA organised three public information meetings during the project implementation period. The first public information meeting was organised in Veszprém, on 26th March 2009. Articles in the local media, flyers distributed in the centre of the city and direct mails to 200 local civil organisations with the help of the local municipality were the tools to attract interested parties to this event. Presentations were made on the objectives and actions of the project. The presentation was followed by an open discussion. Flyers were distributed during this meeting. The second public information meeting was held in Várpalota on 16th June 2011 with the title of "The Bakony Shooting Range and Nature Protection". The representatives of the Beneficiaries informed the participants on the activities and actions in progress. The final public information meeting was planned to be implemented at the end of 2013 but was postponed to a date following the international conference in May 2014. The reason for this was to provide a comprehensive picture on the actions and activities performed in the course of the project. The final public information meeting was implemented on 3rd June 2014 in Veszprém, the presentations provided information on the project results and achievements. Invitations were sent to the local civil organisations and the settlements affected by the project activities. The layman report on the project was distributed among the participants.

The status of deliverables, outputs and milestones is illustrated by the following table:

Nama	Deliver	y date	Commont
Ivallie	Planned	Actual	Comment
Flyers for opening public event	15.02.2000	26.03.2000	Ready.
distributed	13.02.2009	20.03.2009	Reported with the Final Report.
Flyers for closing public event	31 12 2013	03.06.2014	Ready.
distributed	51.12.2015	05.00.2014	Reported with the Final Report.

The milestones set for the action were partly met: (i) the opening public information meeting – due to organisational issues \langle finding the proper date \rangle – was implemented approximately one month later, (ii) the closing public event was organised five months later in order to share all important information with the public (layman report, relevant issues from the post-project communication plan, etc.). There were no deliverables set for the action.

			20)09			20)10			20)11			20)12			20)13		20	14
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π
D7	planned																						
	actual																						
			plan don	nned e																			

Annex: Documentation of the final public information meeting



4.2.2.8. <u>Action D8 Guided excursions for the public</u>

BuNPD started the implementation of the action in April 2010 by discussing the possibilities with the consortium members and compiling a leaflet which was published in May 2010 in 2000 copies. The leaflet provides basic information on the project and the project area. The production of altogether 600 pcs of T-shirts (80 pcs in size S, 150 pcs in size M, 200 pcs in size L, 120 pcs in size XL and 20 pcs in size XXL) with the LIFE and Natura2000 logos was also implemented by BuNPD (the sample of the T-shirt was attached to the Completion documentation of the Mid-term Report).

As per the project proposal, two guided tours with altogether 100 participants were scheduled. But due to the popularity of the events BuNPD organised two extra tours in 2012 and 2013 (costs were financed from outside the project budget).

All guided tours were advertised in several forums, i.e. the project website, partners' websites, direct emails, advertisements in printed newspapers. The tours were organised and guided by BuNPD in close cooperation with VERGA, and the representative of the commandership of the shooting range was also present. Altogether four guided tours were implemented, the number of participants reached 400. The guided tours were implemented in various parts of the project area:

Nr.	Date	Number of participants	Itinerary
1	25 th Sontombor 2010	110 persons	The new educational trail in Várvölgy, near Várpalota
1	25 September 2010	divided into three groups	appr. 6,5 km
			Veszprém – Jutaspuszta (213 m elevation) – Rátóti
2	8 th October 2011	38 persons	Nagymező – Kis-Papod hegy (509 m elevation) and
2	8 October 2011	due to the unfavourable weather	back
			appr. 12 km
	12 th May 2012	150 persons	Bakonykúti – Baglyas-hegy – Bakonykúti
3	as part of the	divided into three groups	appr. 12 km
	LIFE20 celebrations	arriada into an de groups	uppi: 12 mil
		102 persons	Hárskút - Borzás-hegy – Papod-hegy – Hárskút
4	19 th October 2013	information was shared on the	including the viewtower reconstructed by VERGA
		nature protection importance of	appr. 6 km
		forests	TT

The participants of the tours were mainly teachers and pupils of schools in the neighbouring towns (Várpalota, Veszprém-Gyulafirátót) but tourist associations, representatives of civil societies (i.e. "Otthonunk Bakonykúti Egyesület") and local municipalities, nature protection experts, as well as families with little children also participated in the tour.

All guided tours were followed by publishing short news on the project official website. Partners (especially BuNPD) have also uploaded such information on their websites.

T-shirts and leaflets produced in the course of the project were also distributed among professionals visiting the project area (i.e. colleagues from the Duna-Ipoly National Park Derectorate or foreign professionals) studying the project achievements and best practices.

The action had challenges only in case of the first tour implementation: the tour was scheduled for 29th May 2010 and all invitations were sent out, media representatives were informed (both printed and online). Altogether 90 persons were previously registered. Just before the date of the tour a hundred-year record breaking storm hit the area (please also refer to other sections of the current report). Several hundred millimeters of precipitation was associated with storms in the region resulting in lots of trees' falling down. Therefore



the forestry authority has initiated visiting prohibition, and the tour was postponed. The tour was held in September (please refer to the table above).

There were no deliverables and milestones set for the action.

BuNPD in close collaboration with VERGA and f BMTC plans to implement at least one guided tour within five years after the project end date - as part of the after-LIFE activities.

			20)09			20)10			20)11			20)12			20)13		20)14
Action		Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II
D8	planned																						
	actual																						
			plan don	nned e																			

<u>Annex</u>: Documentation on the 4th guided tour



4.2.2.9. Action D9 Internal training of military personnel on environmental practices

The partner responsible for the implementation of the action, BuNPD started the activities by collecting professional inputs to compile the training material.

BuNPD contacted the Latvian LIFE+ project ADAZI to gain information on the similar action carried out. The project coordinator of ADAZI invited the delegation to an ADAZI project event between 15-18th September 2009. The aim of the event was the knowledge and best practice sharing among three military-environmental projects.

Based on the knowledge gained in Latvia, BuNPD compiled the educational booklet by the beginning of 2010: Educational booklet for military personnel about environmental protection for the Shooting and Training Ground of Várpalota. The topics of the booklet are as follows:

- Environmental regulation of Hungary and the European Union
- State of the environment in Hungary
- Nature protection status of Hungary
- Environmental protection activities in Hungary
- Former use of the shooting-ground, formation of the current landscape
- Introduction to the natural values of the area
- Use of the area
- Challenges in environmental protection, factors threatening natural values
- Project Eastern Bakony
- Appropriate behavior in nature
- What can a soldier do for nature?

The contents were discussed with the partners and then the booklet was printed at the beginning of April 2010. The following training events were implemented in the course of the project:

The <u>first training</u> took place on 19th April 2010. The training agenda included both lectures and field visit. The training event was supported by the annual educational course of the MOD organisations on updating environmental protection knowledge of the military personnel. The training was attended by officers of environmental protection serving in the Ministry of Defence and its "back-office" institutions as well as other military organizations of the Hungarian Army. Some 40 military personnel was provided with the general overview focusing on the shooting-ground and the project area. The educational booklet was distributed to all participants. As a part of the training a field visit to the location of the educational trail in Várvölgy was also implemented in the course of which the participants gained first-hand information about the project, its progress.

The <u>second training</u> was implemented on 20th January 2011 in the barracks of Várpalota. There were 30 participants attending, all representing BMTC Várpalota troops. The training included lectures only (the participants know the shooting range and the project area very well), and the educational booklet was distributed. During the morning session participants were informed on the nature protection situation and activities of Hungary, the content, actions and activities of project Eastern Bakony, and they were also informed on Natura 2000 sites. The afternoon session included information sharing on the nature treasures of the shooting range, the former use of the range and the emergence of the current landscape. The education also included the proper behaviour on the site as well as possibilities of military personnel to protect the nature and the area.





The *third training* was held in Balatonkenese on 6th November 2012. BuNPD focused the training on the harmonisation of military use and nature protection and conservation issues for environmental officers (29 persons). No field visit was implemented this time.

The <u>fourth training</u> was held for foreign military persons in English: 12 Dutch officers attended. An international manoeuvre took place in the Várpalota shooting and practice range between 12th March and 22nd April 2014. The aim of the training foreign military personnel was to provide information on the nature and environment protection issues and requirements of the entire practice range (being the part of the project area). The training was implemented on 17th March 2014. Two English-speaking experts of BuNPD presented project Eastern Bakony, the natural values and treasures of the area, threaths imposed and the importance of nature conservation.

The *fifth training* was implemented as the continuation of the previous educational event: the newly arrived military personnel were trained on 4th April 2014. Six officers attended, the topics covered by the presentations were similar to the previous occasion.

All training events were followed by a summary article published in the project and BuNPD's websites.

Five trainings were implemented in the course of the project with 115 participants (as per the project proposal five trainings were planned with 30-60 attendants). Although 200 educational booklet was foreseen but only 100 pcs were printed.

As part of the after-LIFE measures BuNPD will implement at least one training for the military personnel within five years after the project end.

Nome	Deliver	y date	Commont
Ivanie	Planned	Actual	Comment
Draft of booklet on guidelines on	28 02 2010	28 02 2014	Ready.
environmental practices prepared	28.02.2010	26.02.2014	Reported with the Mid-term Report.
Cuidalinas on anvironmental			Only 100 booklets were printed due to
restises (200 backlets)	31.03.2010	16.04.2010	the number of participants attending
practices (200 booklets)			the trainings.

The status of deliverables, outputs and milestones is illustrated by the following table:

The milestone set for the action was fully met: the draft booklet was prepared in time. Regarding the deliverable of the action, it was partly delivered: (i) the guidelines were printed two weeks later than planned, but (ii) the number of printed copies is oly the half of the foreseen figure. The reason for this is that the number of Hungarian participants altogether was 100 and therefore no further booklets were printed (the contents of the booklet may be updated).

The summary of the action planned and actual timetable is illustrated by the table below.

			20)09			20)10			20)11			20)12			20)13		20	14
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	Π
D9	planned																						
	actual																						

<u>Annex</u>: Documentation of the 4th and 5th training held for the military personnel



4.2.2.10. <u>Action D10 Exchange of best practice with other LIFE+ military initiatives</u>

AQUA compiled the "military-LIFE" project database in order to have the base for the international dissemination actions. Several LIFE projects were contacted (LIFE03 NAT/B/000024, LIFE05 NAT/B/000088, LIFE05 NAT/FIN/000104 and LIFE06 NAT/LV/000110) to exchange information. Partners organised a visit to study the practices of ADAZI project (please also refer to section 5.2.2.9 of the current report). Project Eastern Bakony was also introduced to the Latvian and Slovakian colleagues.

In 2010 visiting experts arrived from the German Federal Ministry of Forestry, Environment and Nature on 10th June 2010, starting the accomplishment of their LIFE+ project "Conservation of Thüringia grass lands, habitat development". Furthermore an Austrian partner, who is a LIFE+ manager of a project dealing with the conservation of Pannonic loess grasslands and sub-Pannonic steppe participated on a presentation about the EASTERN BAKONY project and field excursion.

Duna-Ipoly National Park Directorate, the Coordinating Beneficiary of project LIFE10 NAT/HU/000020 initiated a field visit to the project area of Eastern Bakony to study the applied methods in conservation actions and have personal discussions on 20th September 2012.

The international conference with the title "Nature protection in military areas" was implemented between 14-16th May 2014. The conference was organised together with the partnership of project Hungarian Little Plain (LIFE08 NAT/H/000289). There were about 100 participants from 13 countries attending the conference who could gain information on the results and achievements of the two projects, the changes implemented for the 2014-2020 period of the LIFE Programme. Presentations were made on the results so far achieved by Hungarian organisations financed from the LIFE financial tool. In the course of the military and environmental sessions more tha 20 presenters shared information on their projects: rehabilitation-restoration activities performed were described by biologists, ecologists and environmental experts while military and NATO experts in their presentations focused on military aspects of project activities. The presentations are uploaded in the project website (http://www.keletibakony.hu/en/node/234 in section "Posters and fliers" - please note that the section is linked to the website of project Hungarian Little Plain). The 2nd and 3rd day of the conference was dedicated to field visits to the areas of the two hosting projects. Although the weather was not favourable and therefore only the morning part of the field visit could be implemented, the flexible organisation allowed the participants to enter into discussions on the future possible project ideas in the barracks of the Várpalota Troops.

Nama	Deliver	y date	Commont
Inallie	Planned	Actual	Comment
LIFE+ and military" international	28.02.2000	28.02.2000	Ready.
email listserv functioning	28.02.2009	28.02.2009	Reported with the Inception Report.
International workshop on the management of LIFE+ military sites held	15.10.2012	16.05.2014	Ready. Reported with the Final Report.
International seminar abstract volume	15.07.2012	16.05.2014	Ready. Reported with the Final Report.

The status of deliverables, outputs and milestones is illustrated by the following table:



The milestone set for the project was met: the email list of military LIFE+ projects was compiled by the deadline. The deliverables of the action were partly met: (i) although both the international workshop (conference) and the abstract is reported ready and done, (ii) the date of delivering them is almost two years later than set in the project proposal. The reason for this is that (i) project results and achievements might be presented better, with more figures, trends and tendencies before the end of the project, and (ii) the proposed dates for conferences showed a better opportunity to implement successfully the event in 2014 than in the previous years (LIFE+ calendar and NATO calendars provided much better opportunities for 2014). Although a separate conference was planned in the project proposal the joint organisation with the Hungarian Little Plain project proved to be a successful idea both in terms of contents (similar topics to similar professional target audience) and timing.



Annex: Documentation of the international conference held in Veszprém on 14-16th May 2014





4.2.2.11. Action D11 Post project communication plan

AQUA drafted the post-project communication plan in the final period of project implementation. The plan summarises the results and achievements of the activities and describes the communication actions planned for the five-year project maintenance period. The basic aim of the document is to introduce the measures of the after-LIFE communication of the project which are as follows:

- Online communication
 - Project website periodically updated for five years
 - Project summary in Hungarian uploaded in the Beneficiaries' own websites by the end of 2014
- Social media
 - Project facebook page creation to contact the general public
 - LinkedIN network for the project to keep contacts with the professional network
- Networking
 - Promoting the project and its results in conferences and professional events
- Media work
 - $\circ \quad \text{Publications} \text{on the project website on the results of after-LIFE monitoring}$
- Printed materials
 - Dissemination materials printed in the course of the project (layman report, brochure, etc.)
- Events organised in relation to the project
 - Guided tours
 - Training for the military

The implementation of the post-project communication plan itself serves as an after-LIFE measure which will be coordinated by AQUA. They will also perform website maintenance and refreshing, creating facebook page of the project, and advisory in event organisation to the project partners.

The status of deliverables, outputs and milestones is illustrated by the following table:

Nama	Deliver	y date	Commont
Ivallie	Planned	Actual	Comment
Draft of post project communication plan	30.11.2013	15.06.2014	Ready. Reported with the Final Report.
Post project communication plan	15.01.2014	30.06.2014	Ready. Reported with the Final Report.

Both the milestone and the deliverable set for the action were reported about six months later than planned in the project proposal. The reason for the delay is that the beneficiaries were active in organising the international conference (please refer to section 5.2.2.10 of the current report) and therefore postponed the delivery of the post project communication plan after the implementation of the conference.

			20)09			20)10			20)11			20)12			20)13		20	14
Action		Ι	Π	III	IV	Ι	Π	III	IV	Ι	II	III	IV	Ι	II	III	IV	Ι	Π	III	IV	Ι	Π
D11	planned																						
	actual																						
			plan don	nned e																			





4.2.2.12. <u>Action D12 Exchange of best practice experience through practical</u> <u>collaboration on concrete dissemination actions</u>

The activities performed by the action cover the dissemination assistance of BuNPD in the relevant actions (actions D2-10). The main activities of BuNPD in the action were: (i) review of informational materials, (ii) participation in events organised by other partners in the course of the project. Some particular dates and locations of significant project meetings and events during the project implementation period are as follows:

18 th March 2010:	Conciliation between project partners about results of 2009 and plans of 2010 in Csopak			
10-11 th June 2010:	Introduction of the LIFE+ project area to a delegation from Thuringien; Csonek + project area			
17 th June 2010:	Conciliation between the project partners in Csopak (review and preparation of the brochure)			
7 th June 2011:	Mini-conference in Bakonykuti – introduction of the project			
16 th June 2011:	Public information meeting in Várpalota			
3-6 th November 2011:	7 th Hungarian Conference of Nature Protection and Biology (Poster on the			
	repatriation of ground squirrels) – Debrecen, Hungary			
17 th May 2012:	Participation in the workshop of the "Celebration of the Habitats Directive and the LIFE programme" organised by the Ministry of Rural Development			
	(the project was presented by MOD AQO) – Budapest			
20 th May 2012:	Participation in the event "20 Years Anniversary of LIFE-program! - show			
	up of our most prized natural values", presented a film on the project area -			
4	Budapest			
3-6 th June 2012:	Participation in the international conference "Steppenlebensräume Europas – Gefährdung, Erhaltungsmaßnahmen und Schutz" and compiled a poster			
th -	introducing the results of the project – Erfurt, Germany			
5-7 th September 2012:	Participation in the European Ground Squirrel Conference and presenting a poster on "Overview of the results of european ground squirrel reintroduction in the operational area of the Balaton Uplands National Park			
NA 1 1 0012	Directorate" – Kamien Sląski, Poland			
March-June 2013:	Discussions on the organisation of the international conference (the			
C	Discussion date of the conference was finally postponed)			
September 2013:	(participation in meetings, email and phone discussions) in collaboration (participation in meetings, email and phone discussions) in collaboration			
3 rd December 2013.	Participation in the press conference on the project results and			
5 December 2015.	achievements in Budanest			
January 2014	Proposing amendments to the layman report			
January-April 2014	Providing professional inputs to the dissemination materials for the			
Junuary April 2011.	international conference			
28 th April 2014:	Participation in the final preparatory meeting for the conference			
Periodically:	Participation in the preparation of newsletter, articles online			
aiouiij.	communication			

There were no milestones and deliverables set for the action. The summary of the action planned and actual timetable is illustrated by the table below.







4.3. Evaluation of Project Implemention

As a summary of the project implementation the Consortium declares that the project objectives and aims were achieved within the timeframe set in the project proposal – with some smaller deviations – and no project implementation prolongation requests were to be submitted. All deliverables set in the project proposal were provided.

During the project implementation the applied methodologies included both traditional and innovative procedures.

Traditional methods combined with innovative methodologies were applied in the course of actions A1 and E4, i.e. in case of habitat mapping since on-site investigations and research was coupled with the use of ortocorrigated air photos which resulted in the delivery of maps usable in GIS systems as well (ArcView). The same methodology was applied at species sample takings. Since ortocorrigated photos taken in 2008 and in 2012 on the entire territory of Hungary were available for the project actions, BuNPD could buy the photos instead of involving external experts to take the photos, which resulted in cost savings in both actions.

Regarding the implementation of the conservation actions the combination of traditional and innovative methods, best practices were also applied:

- in the course of action C2 the so-called two-step procedure was applied (please refer to section 5.1.5 of the current report) which although was more time-consuming but more cost effective (blades deteriorated later than compared to occasions when applying the traditional scything methods)
- regarding action C3, the best practices available from other projects (i.e LIFE06 NAT/H/000096) were applied and fine-tuned:
 - Preparation of the area for repatriation: designation of large open areas with intensive grazing activities, holes for the ground squirrels shall be created in the center of the designated area, diameter of the holes is preferably 5-6 cm and shall be located at least 30 m from the borders of the neighboring area with unproper habitats for ground squirrels, the area with holes shall be fenced to prevent the migration and the attack of mammal predators.
 - Aftercare activities: feeding the repatriated animals for five days, frequent monitoring after removing the fences.
- in the case of action C4 traditional methods were applied: demolishing buildings by machines, selection of debris and waste by hand and machines, transportation of waste to official depositories. The closing down of bunkers transforming these facilities to bat-friendly objects was welcomed by environmental specialists. However, the damages caused by unknown persons in the entrances of the transformed bunkers caused some extra costs.
- the mehod applied during the implementation of action C5 served as a best practice for other organisations active in military shooting and practice ranges: MOD implements the applied methods of VERGA in other areas as well (i.e. in case of project LIFE10 NAT/HU/000020) to prevent the valuable areas from accidental fires.
- in the case of action C8 some experimental spots were designated to find out the effects of chemicals in different composition and doses than traditional.





When performing activities with the use of external assistance, offers were requested by the beneficiaries in almost all cases from several experts in order to comply with the value-for-money principle.

Dissemination actions included also the application of traditional and innovative methods:

- by initiating guided tours (action D8) to areas previously closed for the general public was a great success. Conservation messages could be very well communicated: the different nature protection issues tailored to the characteristics of the respective audience (participants) and the habitats and species of the visited area attracted and increased the knowledge of the attendants;
- the education of the military personnel was also a successful innovative method applied to share conservation messages: those gained new or deeper information and knowledge who use/operate the project area on a day-to-day basis. As per the experience gained by BuNPD in the course of the trainings the combination of theoretical lectures and field visits proved to be much effective from the aspects of knowledge transfers to the military personnel than the presentations only;
- in case of other dissemination actions, mostly traditional methods were applied.

Comparing the results achieved against the objectives, the following table was compiled (next pages):



COMPARISON OF THE RESULTS ACHIEVED AGAINST THE OBJECTIVES

Task	Foreseen in the revised proposal	Achieved	Evaluation
A1 - Making preparatory inventories of priority Natura 2000 species and habitats of the project area	Aerial photograph of project area Vegetation cover map (with special respect to invasive species) Point mapping of priority species Inventory of priority bird species Data on the population and dwellings of bat species and colonies Inventory of ground squirrel and selected indicative invertebrate species	Ortocorrigated aerial photos were purchased Habitat map was prepared Occurance of invasive species was registered Point map of priority species developed Baseline registration of bat species completed Stocks of ground squirrels and invertebrate species assessed	All tasks foreseen in the project proposal were performed within the planned timeframe.
A2 - Drafting of Natura 2000 site management plan for the project site	Adoption of a well-constructed management program based on professional consensus, and therefore the realization of successful nature conservation actions	The site management plan for the two Natura 2000 sites involved in the project is completed, accepted and approved.	Although the management plan of the Natura 2000 sites is approved by the relevant ministry (Ministry of Agriculture), the document was delivered much later than scheduled. The changing guidelines and the several needs for amending the draft plans resulted in the lasting procedure.
A3 - Technical investigations and planning	Field surveillance and the preparation of technical plans for the conservation actions	Survey report of abandoned military facilities completed Field survey report ready Technical plans for the recultivation of quarries and mining pits completed	Based on the tasks carried out in the course of the action all necessary permits for the implementation of the conservation actions could be developed.
C1 - Machinery procurement for conservation actions	Acquisition of machinery necessary for the implementation of the concrete conservation actions	Procurement procedures were successful and legally compliant. Two high pressure, mobile fire extinguisher devices, a Valtra T 161 Classic tractor, AHWI FM 500-2300 mulcher and a Shantui doser was procured. VERGA possesses the equipment necessary for performing the actions of the project.	The action is completed 100%: all equipment was purchased and used in the implementation of the conservation actions.



Task	Foreseen in the revised proposal	Achieved	Evaluation
C2 - Restoration of degraded Subpannonian steppe-type grassland through removing scrub thicket	Shrub thicket removed from a total of 600 hectares The return of invasive shrub thickets prevented by grazing	Shrub was removed from 600 ha between 2009-2013 Maintenance of the treated areas to avoid re-sprouting by grazing (external) and cutting performed by VERGA Deterioration of mulching blades was decreased by introducing the "two- step" method Grazing contracts are valid through 2014	The shrub was removed from the areas set in the project proposal. The procedure applied during removal resulted in a smaller deterioration rate and costs. Deliberate damages in the equipment could not be prevented which resulted in some delays but not affected the project end date. Besides grazing – as an after-LIFE measure – treatment of the area will be required.
C3 - Stimulation of population growth and nesting of Saker Falcon (Falco cherrug)	Installation of 5 artificial nests New ground squirrel population repatriated to 3 sites within the project area	Artificial nests (5 pcs) were installed Altogether 573 pcs of ground squirrels were repatriated to three different sites Nesting Falco cherrug was not observed in the project area	Due to the unfavourable weather conditions (rainy weather during the collection of ground squirrels) only 95,5 % of the planned pieces was accomplished. The growth in the population shows an increasing tendency, however the result of the repatriation around Öskü is visible otside the project area (the animals migrated to better grazed areas in the neighbourhood but outside the project area). The artificial nests and the repatriated ground squirrel colonies (as feeding sources) highly contribute to the possibility observing nesting Falco cherrug species in the coming years (eating Saker Falcons in the project area were observed).
C4 - Recultivation of illegal waste dumps, abandoned roads, quarries and military facilities on the site	Recultivation of abandoned mines and buildings Termination of illegal mining and waste dumping Sub-pannonic steppe habitat area increased by 4 to 5 hectares Increase in the size of bat populations	Recultivation of 37 illegal waste dumps, mining pits, abandoned military objects in the project area Transportation of altogether 6.422 tons of waste from the project area Sub-pannonic steppe habitat on increased surface	The action was successful: all planned recultivation was performed within the planned timeframe. The transportation of the illegal waste created favourable conditions for the habitats to increase, however, the efforts to prevent the areast from the restart of illegal waste dumping requires more efforts than planned in the project (besides installing / replacing gates



Task	Foreseen in the revised proposal	Achieved	Evaluation
			and notice boards, frequent visits (~continuous presence) of the beneficiaries would be required during the after-LIFE period The increase of bat population will be observable in longer term – considering also the damages caused by humans in the "bat- hotels": entryways of closed bunkers are frequently broken.
C5 - Development of fire brake zone between military training field and priority habitats	Creation of fire break zones in three plots of the project area mostly endangered by fires	Creation of three fire break zones (altogether 6 km long) with an average width of 8-10 m to prevent the spread of fire (accidental or result of shhoting practices)	The creation and maintenance of the fire break zones was a successful action. Since the creation of the zones only one accidental fire was registered (the target spot was missed during the shooting practice and the missile directly hit the trees). The concept and the know-how of the creation of fire break zones were adapted by other military shooting ranges as well.
C6 - Construction of water catchment pool for fire protection purpose	Creation of a water catchment pool with a capacity of storing 9.300 m ³	Water catchment pool created and strengthened to fight against extreme precipitation	With the creation of the water catchment pool (together with fire break zones <c5> and service roads <c7>), as well as the purchase of the mibile fire extinguishers <c1>) the risk of fire-spreads significantly decreased. The presence of the water catchment pool is an oddity and specialty in the middle of the dry shooting range: some hydrophilic living beings were observed. Since the water catchment pool sometimes dries out, the presence of the species is not permanent yet.</c1></c7></c5>
C7 - Fire emergency road construction and reconstruction	Reconstruction of the old road network in 34.5 km by condensing, grading and completion with side gutters. Creation the connections between potential fire sites and water catchment sites	Reconstructed fire emergency road network in 35 km Connections created/improved between potential fire sites and catchment areas	The reconstructed road network highly contributes to the fire prevention activities improved within the project by the creation of fire break zones and the water catchment area. The mobile fire extinguishers (purchased in the course of the project) can be filled with water on site and the distance to the shooting areas is shortened.



Task	Foreseen in the revised proposal	Achieved	Evaluation
C8 - Rehabilitation of Sub- pannic steppe grasslands and Pannonic woods with Quercus pubescens habitats through the suppression of invasive wooden stem species	Chemical treatment and / or cutting invasive arboreal species from appr. 20 ha	Three chemical treatments applied Invasive species cleared off	The success of the chemically treated invasive species highly depended on the type of trees (Ailanthus required repeated treatments). The composition and the doses of the chemicals were registered and might be applied in other projects as well.
C9 - Transformation of planted Pinus nigra forest cover into Pannonian woods with Quercus pubescens habitat on 35.5 hectares	Cutting Pinus nigra stocks (closure to be decreased by 70%) Quercus pubescens ans Quercus cerris acorn placements and planting seedlings	The extreme wind storms in 2010 caused a larger closure decrease threatening the planted seedlings and the placed acorns. Acorn placement s and seedling plantings were performed between 2011 and 2013. Nursing activities were implemented twice or three times (depending on the weather) per year. Official takeovers by the forestry authorities year by year, certificate provided in 2014.	Although – due to the windstorms in 2010 – the activities could not be performed as planned in the project proposal, the action was completed: acorns were placed, seedlings were planted, nursing activities were performed. As per monitoring the area (not only by BuNPD but also by VERGA) the new plants (acorns, seedlings) became stronger, the fences defending them from game damages could be removed. However, the transformation of a forest requires longer time (10 years).
C10 - Preservation and rehabilitation of Pannonian woods with Quercus pubescens and Medio-European calcareous scree of hill and montane levels habitat and Serratula lycopifolia species through installing fence around target sites and thinning of mouflon (Ovis musimon) population	Fencing around approximately 60 hectares, total length 7.000 m Hunting mouflons	The length of fences built is 6.556 m (94% of the foreseen) The area fenced around is 54,02 ha. No game damages observed within the fenced area The mouflon population outside of the fenced area is weakened by continuous hunting.	The activities of the action were implemented within the foreseen timeframe. The fences are of good use regarding the area from game. As the preservation of the habitats and Serratula lycopifolia, the short term observations show the success of the action but longer term monitoring is also needed.
C11 - Exchange of best practice experience through practical collaboration on concret conservation actions	Highest possible impact rate of concrete conservation action	Strong and effective collaboration and cooperation has been established between BuNPD and VERGA.	The collaboration of VERGA and BuNPD strengthened and improved. As the impact of the good cooperation in the course of the project implementation, the idea of another project is being developed.
D1 - Project website development and maintenance	Internet domain registration Development of project official website	The domain was registered The official project website was	The official website was to serve as the main information sharing tool of the project.



Task	Foreseen in the revised proposal	Achieved	Evaluation
	Regular updates of the contents	installed (www.life.keletibakony.hu) Regular updates were performed	Unfortunately the website was not accessible for a lot of time and all information had to be uploaded again after the reprogramming of the website. Some pieces of information were completely lost, therefore the primary aim of the website was only restrictedly achieved. However, the reinstalled and reprogrammed website was of great importance when sharing information on the international conference and will serve as the main information sharing source for the after-LIFE measures.
D2 - Installation of gates, informational and notice boards	Installation of 25 gates and notice boards Maintenance	25 gates and notice boards installed Maintenance and replacements frequently implemented	The installation of the gates and notice boards at the entryways of the project area resulted in the significant decrease of the "foreign" vehicles in the project area. But the frequent deliberate damages of gates and boards requires extra resources from VERGA.
D3 - Development of educational trail	Educational trail with 12 stations and 2 resting places Educational boards with information on habitats and species of the project area	Creation of a 6,5 km long educational trail with 12 stations and 2 resting places All stations are equipped with educational boards 40-50 visitors per day during hiking season at weekends, 10-20 visitors during weekdays Location for school events attracting 2- 300 pupils per event	The educational trail became popular very soon among hikers of the surrounding settlements, school pupils and families. The educational trail was connected to the bicycle route and the forest PE trail (developed outside the project budget) attracting more and different types of visitors. The frequent damages observed in the educational boards cause extra costs for VERGA.
D4 - Publishing layman's report	Publishing layman report in 500 copies	Layman report printed in 500 copies and downloadable version from the website	The bilingual layman report was distributed in the international conference and the final public information meeting. Partners have enough copies to distribute among interested individuals, organisations, etc. The first feedbacks on the report are positive (easily understandable text, nice outfit, beautiful pictures, etc.)
D5 - Media work	Implementing 2 press conferences	Three press conferences implemented	Despite the efforts of organising press related



Task	Foreseen in the revised proposal	Achieved	Evaluation
	Sending invitations to media representatives to opening and closing events of the project At least one article published per year on the project	(opening press event in February 2009, press breakfast in December 2013, closing press conference in May 2014) Media representatives were invited to public information meetings, guided tours and the international conference Several aticles were published on the project during the project implementation period	events and advertising or promoting in several types of media, in Hungary the general media has less interests in topics as nature conservation in military sites.
D6 - Publishing of informational and educational material	Brochure on the species and habitats of the project area – 300 copies Leaflets on the open events of the project and guided tours – 500 copies Electronic newsletters Multimedia teaching materials downloadable from the project website	Educational and dissemination materials were printed and distributed in the course of guided tours, public information meetings, press conferences and the international conference Approximately 250 prescribers to the electronic newsletters Multimedia teaching material was distributed in DVDs as well (besides the downloadable version.	Both printed and online dissemination materials had positive feedback from those interested in the project. However, materials available online have a better reach-rate since they can be downloaded at any time while printed materials can be easily thrown away.
D7 - Public information meetings	An opening and a closing public meeting e held in Veszprém Events advertised in the local press and media, municipalities and environmental organizations.	Opening public information meeting in Veszprém on 26 th March 2009. Mid-term public information meeting in Várpalota on 16 th June 2011. Closing public information meeting in Veszprém on 3 rd June 2014.	Presentations made at public information meetings were followed by a discussion forum. Only a limited number of the general public is interested in nature conservation issues – despite of the advertisments in local media, sending direct mails to local civil organisations or the municipalities.
D8 - Guided excursions for the public	2 guided excursions with at least 100 attendants.	Organisation and implementation of four guided tours with 400 participants	The guided tours were of great success. The possibility of visiting areas that – among ordinary circumstances – are closed for the general public attracted lots of people. Conservation and communication messages could be easily transferred to the target audience.



Task	Foreseen in the revised proposal	Achieved	Evaluation
D9 - Internal training of military personnel on environmental practices	30-60 military personnel trained on nature conservation issues 200 copies of guidelines for environmental practices	Altogether five trainings implemented with 115 participants (both Hungarians and foreigners) 100 copies of guidelines printed and distributed.	Hungarian Army pays attention to implement the military activities by considering nature protection and conservation aspects. Stict rules shall be kept during military activities. Presentations made during trainings supported the above principle. Soldiers became more environment-conscious.
D10 - Exchange of best practice with other LIFE+ military initiatives	Organisation and implementation of an international seminar on military and LIFE+ issues, with approximately 30 participants The two day seminar followed by field trip to the project site Professional networking of LIFE+ site managers and military personnel	Compilation of the "Military-LIFE" project database to support international dissemination. Implementation of a study visit to Latvia (15-18 th September 2009), best practice and knowledge transfer from the ADAZI project, presentation of the Eastern Bakony project Welcoming the delegation of the DINPD (LIFE10 NAT/HU/000020 on 20 th September 2012) Organising international conference (14-16 th May 2014) in Veszprém in cooperation with LIFE08 NAT/H/000289 attracting 100 professionals representing 13 countries The second day of the conference was dedicated to a field trip to the project area.	Project visits and the international conference provided good opportunity for networking with professionals engaged in LIFE+ projects with similar but somehow different challenges. Experience and contacts gained during the implementation os the action will be used during forthcoming challenges. (Please note that questions relating to the use of chemicals during conservation actions as possible good practice were registered, and invitations to several conferences with similar topics were received.)
D11 - Post project communication plan	Development of the after-LIFE pan for communication activities setting out the dissemination strategy focusing on the results of the project, long-term benefits and outcome of conservation actions including best practices.	The plan was produced. The document (available in Hungarian and English) details the planned communication and dissemination activities for the maintenance period.	The post-project communication plan provides a guideline in information sharing and dissemination after the project end date.
D12 - Exchange of best practice experience through practical collaboration on concret dissemination actions	Highest possible impact rate of dissemination actions achieved.	Strong and effective collaboration and cooperation has been established between BuNPD and AQUA	The collaboration of AQUA and BuNPD strengthened and improved.



Task	Foreseen in the revised proposal	Achieved	Evaluation
E1 - Establishment of the Steering Group and monitoring of project development	Establishment of the Steering Committee Decisions made by the Steering Committee Submission of project reports	Preparation and signature of the Partnership Agreement (no modifications) Steering Committee established with 6 members All project reports submitted Amendment to the Grant Agreement was approved	Please refer to section 4 of the current report.
E2 - Administration of the project	Proper administration of the project – both in technical and financial terms	Continuous support of the project coordinator	
E3 - Auditing of the project	Audit report	Audit report compiled	The audit report was compiled based on the findings of the auditor.
E4 - Monitoring of project impact on target species and habitats	Aerial photographs of vegetation cover of project area. Habitat map of priority habitats Data gathering on Falco cherrug and ground squirrel population dynamics Coenological profile of reconstructed priority habitats	Aerial photos procured Habitat map prepared Despite of the frequent monitoring no Falco cherrug nestings were observed Repatriated ground squirrel colonies were monitored by applying the "hole counting" method. Botanical surveys prepared (sample areas + control areas)	Impact of Sub-pannonic steppe-type grassland rehabilitation action became measurable.
E5 - Post Project Conservation Plan	Compiling the after-LIFE conservation plan of the project	After-LIFE Conservation Plan is compiled in Hungarian and English versions (different documents)	Beneficiaries decided on how the continuation and the conservation of the project results and achievements will be implemented. Required sources were also discussed.




The results of the project activities – from the point of their appearance – can be divided into two groups:

- Project results immediately visible:
 - Action A1: documents prepared served as the basis of the conservation and monitoring actions
 - Action A2: site management shall be implemented considering the principles incuded in the document
 - Action A3: Technical plans served as the basis of the implementation of conservation actions
 - Action C1: procured equipment was immediately used in the implementation of the conservation actions
 - Action C2: the elimination of shrub species is visible immediately
 - Action C3: the growth and strengthened ground squirrel colonies (number of holes counted)
 - Action C4: changes in the landscape are immediately visible
 - Action C5: no fire spread to valuable forests
 - Action C6: water catchment pool created, immediate water supply for fire fighting (in case of normal precipitation)
 - Action C7: reconstructed fire emergency road system
 - Action C8: elimination is immediately visible
 - Action C11: cooperation improved in the course of the project
- Results becoming apparent after a certain period of time:
 - Action C2: success of the elimination of shrub species will be observable in a later period considering resprouting
 - Action C3: nesting of Falco cherrug in the artificial nests
 - Action C4: increased surface cover of the Sub-pannonic steppe habitat
 - Action C6: permanent presence of hydrophilic living beings
 - Action C8: success of treatments considering resprouting also is visible in longer terms
 - Action C9: success of transformation within 10 years at least
 - Action C10: strengthening of the Serratula lycopifolia species
 - Action C11: new project ideas developed together
 - Action E4: Experience on the implemented conservation actions will be gained in longer terms.

There was an amendment request submitted to and approved by the Commission. The request included (i) the expansion of certain activities in technical aspects without either involving financial sources from outside the current project partnership or increasing the overall project budget; and (ii) changes in budget lines, reallocation of funds not modifying the overall project budget or the concerned associated partner's total budget.

Reallocation of project budget was proposed due to some deviation of the actual costs from the planned budget for Action C4: although external experts have been involved in the planning phase, the amount of debris from the demolition of old military buildings have been overestimated which also caused an error in the projection of related waste deposition fees.

As per the approved amendment the following additional technical results were registered:

• the recultivation of additional 13 military objects increasing the possible surface area for the sub-pannonic steppe habitat to spread (action C4)





- additional 1.500 m long fire break zone in another part of the project area (Csörlőházi shooting range action C5)
- Strengthened water catchment pool completed also with a sludge cathing area (action C6)

Other parts of the amendment request related to financial issues (reallocations to finance the recovery from the 2010 storms – i.e. budget reallocation for the reconstruction of the fire emergency road network including the already repaired sections damaged by the storms).

The success of the dissemination within the project is twofold: (i) certain actions reached the targets easily and feedbacks were gained without any special efforts, while (ii) other actions were challenging in terms of success.

Questionless, the most successful dissemination events were the international conference (Action D.10), the guided tours (Action D.7) and the education of the military personnel (Action D.9). Among major drawbacks the disappearance of the project website caused by the breakdown of the server and the slow recovery can be mentioned together with the articles published.

As described in the relevant sections, the project website was un-accessible for several months due to the two separate breakdowns of the server. The majority of the information included and uploaded was lost and this resulted the reprogramming of the website. The re-produced materials were similar to the originals but the communication messages were in delay (in order to reproduce the website all news were re-uploaded but some of them did not reach the target on time). However, the website challenges were met by the time of the organisation of the international conference and the website was used for the registration etc. The articles that were published were not "paid advertisements" therefore the EU logo and the Natura 2000 logo could not be published. The Life finance is mentioned in the articles.

As the impact of the implementation of the international conference the partnership was offered several networking opportunities, participation in other LIFE initiations' conferences. The details of best practice methods applied in invasive elimination activities were requested from Slovakian and French participants.

As for the guided tours: the success of the first tour resulted in attracting more than 100 participants to each forthcoming event (except one which was challenged by bad weather). All partners registered some interests in future guided tour opportunities.

The impacts of the military trainings can be measured by the organisation of trainings for foreign military persons and by considering environmental and nature conservation issues and impacts in the organisation of international shooting practices in the project area.

4.4. Analysis of long-term benefits

In the course of the habitat mapping the following priority species and habitats were registered in the project area:

Keleti-BAKONY

Myotis emarginatus	Isophya costata	Spermophilus citellus		
Phyllometra culminaria	Mustela eversmannii	Callimorpha quadripunctaria		
Euphydrias maturna	Myotis bechsteini	Rosalia alpina		
Stenobothrus eurasius	Cerambix cerdo	Iris humilis ssp. arenaria		
Lignioptera fumidaria	Lycaena dispar	Pulsatilla grandis		
Morimus funereus	Barbastella barbastellus	Seseli leucospermum		
Myotis blythi	Eriogaster catax	Dianthus plumarius sub		
Rhinolophus hipposideros	Cucujus cinnabarinus	regis-stephani		
Myotis myotis	Lucanus cervus	Serratula lycopifolia		
Euphydrias aurinia	Mannia triandra			

Habitats serving as the basis of the registration:

40A0 - Subcontinental peri-Pannonic scrub 6190 - Rupicolous pannonic grasslands (Stipo- Festucetalia pallentis) 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)	 9130 - Asperulo-Fagetum beech forests 9150 - Medio-European limestone beech forests of the Cephalanthero-Fagion 9180 - Tilio-Acerion forests of slopes, screes and ravines
6240 - Sub-Pannonic steppic grasslands	91G0 - Pannonic woods with Quercus petraea
8160 - Medio-European calcareous scree of hill and montane levels	91H0 - Pannonian woods with Quercus pubescens
8210 - Calcareous rocky slopes with chasmophytic vegetation	91M0 - Pannonian-Balkanic turkey oak –sessile
8310 - Caves not open to the public	

The major threatening factors identified are as follows:

Code	Negative impacts	Importance (H = high, M = medium, L = low)	Size of area affected (%)	Priority habitats of species affected, impacts
Antropo	genic issues			
A04.03	Termination of herding, lack of grazing	Н	20	Shrub increase in 6210, 6240 habitats The lack of grazing would result in the decrease or extinction of ground squirrel stocks.
В	Forestry, siviculture	Н	30	Short term forest restorations characterizing large areas in 9130, 91G0, 91M0 habitats.
E03	Waste, garbage	М	1	Illegal waste dumping is habitat- independent, but is observed mainly in the surroundings of settlements and by roads
F03.01	Hunting	Н	30	Game management (shooting overpopulation) has unfavourable impacts on forest habitats (9130, 9150, 9180, 91H0, 91M0)
G01.03	Motorcycling	Н	30	Grasslands and low forests on steep hillsides (6190, 6240, 91H0). Wheel tracks create uncovered surfaces.

subsp.





Code	Negative impacts	Importance (H = high, M = medium, L = low)	Size of area affected (%)	Priority habitats of species affected, impacts
				Several priority species are endangered (Seseli leucospermum, magyar gurgolya, Dianthus plumarius subsp. regis-stephani, Iris humilis subsp. arenaria).
G01.04	Mountaineering, rock- climbing, caving	L	1	Activities causing pointwise damages. Negative effects are by visiting caves (8310) serving as hibernation and breeding places for bats.
G04.01	Mlitary use	Н	30	Military activities affect mainly grasslands (i.e. 6190, 6210, 6240). Habitats in dolomite rock-beds regenerate well.
J01	Fire and the reduction of fire	М	40	Grassland habitats (6240) are affected less significantly, forest habitats (91H0, 91M0) are affected more significantly and their regeneration is more difficult. Several priority species might be damaged by side-spread fires but populations generally regenerate well.
Natural l	piotic and abiotic processe	s		
K02	Natural habitat transformations, succession processes	М	10	Shrub increase in 6210, 6240 habitats Resulting in the decrease or extinction of ground squirrel, Anthus campestris and Caprimulgus europaeus stocks.
K04.05	Damages caused by herbivora	Н	30	Damages caused by wild animals have unfavourable impacts on forest habitats (9130, 9150, 9180, 91H0, 91M0)

As the result of the project activities the level of threats decreased, the conditions for priority species improved. The area covered by priority habitats will increase as the result of the succession and the persistent treatment. The Natura 2000 site management plan will be decisive in future activities. The major objectives for the future:

- Preserving natural and natural-like habitats by harmonising military use and farming activities appropriate from environmental aspects
- Creating variable forest structures by avoiding large scale forest transformation resulting in similar age forests in large areas
- In the longer term mosaic structured, small (1-3 ha) areas shall form forest parts
- In priority habitats of forests supporting natural restorations would be preferred
- Suppression of non-indigenous species (e.g. Ovis aries, Dama dama) on the area
- An important objective in case of forests attacked the most by climate change to create stocks with smaller vulnerable potentials
- The cutting age should be at least 100 years in case of 9130 and 91G0 and at least 80 years in case of 91M0
- Maintenance of grasslands in good state.

Supporting system proposed for achieving the above objectives:





- In case of forests, forcing silviculture experts to implement the interventions in case of habitats and species of community interest is extremely difficult, since subsidies cannot be drawn by state-owned silvicultural organisations.
- Primary interest is that state-owned silvicultural organisations could claim the Natura 2000 subsidies in order to have the opportunity to introduce nature conservation measures.
- In case of grasslands, extensive grassland management or ecological grassland management grants should be applied beyond area-based subsidies and subsidies for KAT20 areas.

Partly as the result of the project, areas previously not included in the network became Natura 2000 territories resulting in the significant extension and the increase of coherence of the two affected Natura 2000 sites. The Natura 2000 site management plan was developed by considering the relevant EU and national rules. The principles of the plan shall be taken into consideration when planning and using the relevant areas. The implementation of the project allowed more grasslands to be included in the land-based supporting system.

The Consortium discussed and summarised the after-LIFE conservation measures of the project in a document which included the identified threats in the current status analysis and conservation activities decided to be performed in order to sustain the project results. (Please refer to Annex 16 of the current report.)

The attitude of military personnel to nature and nature protection / conservation has positively changed. As the result of the trainings (action D9) soldiers and officers gained deeper knowledge on protected and priority species and habitats and their importance and thus strive to reduce the size of their carbon and ecologic footprint. The attention of the military personnel present in the project area only temporarily before entering the field is called to act environment-consciously. As a result, natural values are protected by the military and the population of protected species (both animals and plants) shows an increasing tendency.

The project, its objectives, result and achievements as well as the after-LIFE and longterm measures became familiar to the local inhabitants and stakeholders – as the result of the social actions implemented in the course of the project. The environment-conscious attitude of the locals could be identified and observed during personal meetings (action D7 and D8). Nature conservation messages were successfully transferred. The multimedia teaching material serves as checking opportunity of persons' knowledge on nature conservation issues related especially to the project and project area.

The international conference organised in the framework of the project and attended by the representatives of numerous organisations facing similar challenges was an excellent networking and knowledge-sharing event. The knowledge gained on the best practices of the project will be applied in other projects as well (i.e. questions relating to the use of chemicals during conservation actions as possible good practice were already posed, and invitations to several conferences with similar topics were received).

The project actions and activities will be continued as foreseen in the after-LIFE conservation plan and the post-project communication plan. Not only the beneficiaries but other stakeholders will also contribute to the continuation of the activities.

BMTC as one of the main stakeholders will pay special attention to preserving priority or protected plants in the project area. The military field card produced in the course of the





project provides information on nature conservation issues and the procedure to be applied in case of challenges.

The project team built cooperation with local companies implementing parts of the most complex field works. Habitat management contributes also to preserving or increasing the employment rate in the region. Community workers (unemployed people set to work by the local governments – coming from socially disadvantaged groups) might be employed during field works in the future.

In the course of the project implementation the following best practices were identified to disseminate:

- *creation of fire break zones* as part of the safety measures taken by the project. Such zones were created between military training fields and the surrounding priority habitats proved to be useful to prevent the spread of fire to the valuable stocks of woods. The applied technology included the removal of the vegetation that is responsible for the spreading of the fire by ploughing and heavy disk plowing in the designated trackline, allowing a 8-12 m wide "plant-free" sector. The maintenance shall be performed 2-3 times a year depending on the weather (in case of more precipitation maintenance shall be carried out more often). The best practice was shared with other organisations operating and managing sites nearby military shooting or practice ranges.
- *chemical treatment of invasive species* as part of the habitat restoration actions carried out in the project. The experiments with the composition and doses of chemicals was a "popular topic" of the international conference. Several questions tackling this issue were registered.
- *repatriation of geound squirrels* as part of the habitat restoration activities. Best practice characters of the action include the following (please also refer to the section describing the innovative characters): the timing of repatriation, the preparation of the location of deployment (number and diameter of holes, fences), after-care.
- *organising and implementing guided tours for the public* as part of the communication activities. As environmental practicioners usually are involved in trainings focusing on sharing environment-conscious aspects the conservation messages could be fine-tuned and custom-tailored to the particular audience.

The Natura 2000 site management plan includes the rules of the military use of the areas. The map illustrating the categories was developed with the collaboration of BMTC. There are 6 categories applied: category 1 refers to areas on which any military activities can be performed, while higher numbers refer to more and more strict rules to be kept. (Of course in case of havaria and pyrotechnical protection activities, the rules might be countermanded.

Military activity		Land category					
		2.	3.	4.	5.	6.	
Land-works for maintaining and creating fire-positions at shooting and practice ranges	+	+	-	-	-	-	
Building activity, excavations and other land-works, building new roads		-	-	-	-	-	
Land-works aiming at the maintenance or ensuring easy running of existing roads		+	+	+	+	-	
Storage and trans-shipment of fuel, oil		-	-	-	-	-	
Premises for ordinary and fighting vehicles, operating repairing points		-	-	-	-	-	

The document is an innovative plan and the map on the area used during international military practices is based on this map.





Another innovative and demonstration characteristic of the project is related to the repatriation of ground squirrels:

- Dates of repatriation: relocations were implemented between the 3rd week of July and the end of the 2nd week of August since as per experienced young population reaches the maturity to be deployed.
- Original location of repatriated animals: ground squirrels were caught at the shore of the Belső-tó (Inner Lake at Tihany peninsula by Lake of Balaton) by using traps. This area is from environmental aspects managed by the extensive grazing of B. primigenius Taurus (Hungarian Grey cattle).
- Preparation of the area designated for repatriation: the most important aspect for the designation of the repatriation areas is to be large open areas with intensive grazing activities. The holes for the ground squirrels shall be created in the center of the designated area with a diameter of the holes preferably 5-6 cm. The depth of the holes shall reach 50-60 cm depending on the land. The repatriation area shall be located at least 30 m from the borders of the neighboring area with unproper habitats for ground squirrels. The area with holes shall be fenced to prevent the migration of the ground squirrels and the attack of mammal predators.
- Aftercare activities: guarding and feeding the repatriated animals (melon, apples, sunflower, etc.) for five days after their relocation date. The animals were frequently checked after removing the fences.

The innovation and demonstration characteristics of ground squirrel repatriations were shared at conferences (the most important was the 4th European Ground Squirrel Meeting in Kamień Śląski <Poland> where a presentation on "25 years of translocation programmes on EGS in Hungary" was made and a poster was exhibited with the title of "Overview of the results of European ground squirrel reintroduction in the operational area of the Balaton Uplands National Park Directorate".

The long-term indicators of the project success are as follows:

- The area of HD habitats: 6240 Sub-Pannonic steppic grasslands, 8160 Medio-European calcareous scree of hill and montane levels, 91G0 Pannonic woods with Quercus petraea and Carpinus betulus, 91H0 Pannonian woods with Quercus pubescens
- Appearance and growing of populations of HD and/or protected species (mainly Falco cherrug and Serratula lycopifolia).
- The cover of invasive species
- Long-term and continuous grasslands management
- Remanence (survival) of fire break zones, water catch ment pool and fire emergency road network, the number of fires spread to valuable wood
- Succession of restored areas (i.e. mining pits)





5. ANNEXES

5.1 List of keywords and abbreviations used

Abbreviation	DESCRIPTION
MODIA	Ministry of Defence Infrastructure Agency (name of the legal predecessor of the Coordinating Beneficiary at the proposal phase)
MOD AQO	Ministry of Defence Armament and Quartermaster Office (name of the legal predecessor of the Coordinating Beneficiary; until 23.06.2013)
MOD DEO	Defence Economic Office of the Ministry of Defence of Hungary (name of the Coordinating Beneficiary; effective from 24.06.2013)
VERGA	VERGA Forest Management Corporation (Associated Beneficiary 2)
BuNPD	Balaton Uplands National Park Directorate (Associated Beneficiary 3)
AQUA	AQUAPROFIT Engineering, Consulting and Investment Corporation (Associated Beneficiary 4)
HUF	Hungarian Forint (national currency)
EUR	Euro
AB	Associated Beneficiary
СВ	Coordinating Beneficiary
SC	Steering Committee
BMTC	Bakony Military Training Centre