LIFE Project Number

LIFE10NAT/HU/000020

Progress Report

Covering the project activities from 01/01/2016 to 31/03/2017

Reporting Date

12/06/2017

LIFE+ PROJECT NAME or Acronym

Conservation of priority natural values in Turjánvidék Natura 2000 site southern unit

Data Project

Project location	Hungary
Project start date:	01/09/2011
Project end date:	31/08/2016 **Extension date:** <31/12/2017 >
Total budget	2 730 102 €
EC contribution:	2 047 577 €
(%) of eligible costs	75 %

Data Beneficiary

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2. List of abbreviations

DINPD – Duna-Ipoly National Park Directorate

MoD DEB – Ministry of Defence Defence Economic Bureau

BFC –Budapest Forestry Company

WWF – World Wide Fund for Nature Hungary

MoA – Ministry of Agriculture

EC – European Commission

SAC – Special Area of Conservation

SR – shooting range

NCA – nature conservation area

PA – partnership agreement

IR – inception report

PR – progress report

MTR – midterm report

HD – Habitats Directive

CMP – Conservation Management Plan

IAS - Invasive Alien Species

3. Executive summary (max 3 pages).

3.1. General progress

Between 01.09.2011 and 31.12.2017. in *"Conservation of priority natural values in Turjánvidék Natura 2000 site southern unit" LIFE+ project*, *Duna-Ipoly National Park Directorate, Ministry of Defence Defence Economic Bureau, Budapest Forestry Company* and *WWF Hungary* aim the conservation and state improvement of the natural assets in the southern unit of *'Turjánvidék' SAC*, which is one of the most extensive, continuous humid and sand habitat systems of the Middle Hungarian Region. Sand steppes, juniper-poplar forests, alder-ash forests, bog meadows and Molinia meadows are present here with outstanding numbers of protected plant and animal species (e.g. flagship species Hungarian Meadow Viper).

Conservation problems of the area are the *shortage of water (Threat 1.)*, *spread of alien species (Threat 2.)*, *intensive mowing* (*Threat 3.)*, *illegal area use* (*Threat 4.)* and *lack of information* (*Threat 5.)*.

To address the threats above, we took the following **measures** and expect the **results** below during the period between 01.01.2016.-31.03.2017.:

Threat 1.: 3 *water management objects operate* (**Action C4**) in the area of Dabas Turjános NCA. This serves primarily the *conservation of the fragmented and dried-out remnants of alder-ash gallery forests*, however, it contributes also to the optimal water conditions of the habitats of the whole 'Turjánvidék' Natura 2000 site.

Threat 2.: With *gentle chemical treatment* we *post-treated invasive plant species in sand steppes and sand dune thickets (1172 ha* – **Action C1***)* and *nursed the planted native forests (42 ha* – **Action C2***)*. Thus a significant core area developed, where the repeated infection is of low probability. *Alien species were post-treated in alder-ash gallery forests* (*51 ha + 15 ha Russian olive removal*), too, and *nursing of ash* took place (*2 ha* – **Action C3**).

Threat 3.: For the protection of the *Hungarian Meadow Viper*, the size of its *habitat was extended through the conversion of arable lands into grasslands* in **Action C5** (*on 55 ha alfalfa was sown and now thinning well + 19.1 arable land was purchased in* **Action B1** - *and re-grassed representing a more complex grass structure each year*). *We introduced cattle grazing instead of intensive mowing* (by the end of 2016) as optimal viper habitat management *on 900 ha* altogether; grazing was carried out even during the reporting period (**Action C5**).

Threat 4.: To prevent illegal access to the area, numerous *dirt roads were closed by crossing gates, which have to be maintained (41 pcs)*. We *eliminated also an illegal sand pit and the tree and shrub rows connected to this action were nursed (1.3 ha*) – **Action C7.**

Threat 5.: The *website* of the program attracted 60,725 visitors altogether - **Action D1)**, we *shot also the project film* **(Action D7).** *Children of the region or laymen interested* could have visited a safe part of the military area on *'Green Days'* and got acquainted with its natural values and the project actions (*2 occasions* - **Action D5)**.

We shared information on our project site and results also on *scientific occasions (13 publications/posters/presentations* - **Action D8).**

The know-how on *defence against invasive plant species* was collected, best practices were presented in *1 international professional forum.* To disseminate further information also for professionals, *the compilation of the volume on Turjánvidék Natura 2000 site is launched* (**Action D9**).

Management monitoring takes place to document exactly the effects of habitat management (in *32 sample areas*) and *biodiversity monitoring* is carried out to survey the effects of

management on biodiversity (*survey on Hungarian Meadow Viper, Arthropoda taxa, 26,344 GIS records on flora and fauna were collected so far*, etc. - **Action E2).**

3.2. Assessment as to whether the project objectives and work plan are still viable

We applied for the extension of the original project duration to 31.12.2017 and our request was accepted by the EC on 27.07.2016 – see also Point 4.
We called for an amendment to the Grant Agreement and our request is presently under review by the EC – see also Point 4.

Generally, our project is progressing well. Some of the actions have been fulfilled even with extra content. Actions, which are delayed are now prepared and can be implemented within the project duration (see Point 3.3).
All our project aims are still viable and can be fulfilled. However, some project targets can be accomplished only with reduced content. For exact details on these, please see Point 3.3 and the relevant actions.
Our project results will be sustainable, which will be officially guaranteed by the After- LIFE CMP.

3.3. Problems encountered

Action A2 is delayed and as a consequence the construction of water management objects in Táborfalva can be carried out by 31.10.2017. (Action C4). The application for water rights implementation permit for a hydrologic engineering project was submitted to the competent authority on 09.06.2015. The permit was finally issued only on 12.07.2016., causing strong delay in public tendering and implementation of the water management objects.
Action C6 can be carried out only in a considerably smaller area than foreseen, as due to safety reasons the Military Authority completely prohibited the elimination of IAS plantations of C6. We charged an independent weapon technology expert on whose report a part of the area can be cleared of IAS in autumn, 2017.
In Action D6 the compilation of the simplified CMP of the SR took more time than foreseen. However, the development of the training material as well as the trainings for the military users were accomplished and the soldier's field card will be also issued well within the project duration.
Thus, all our project aims are still viable.

4. Administrative part

The coordinating beneficiary of the project is ***Duna-Ipoly National Park Directorate***, which is the conservation management organisation of the project area.
Associated beneficiaries are
Ministry of Defence, Defence Economic Bureau (property manager of Táborfalva SR), ***Budapest Forestry Company*** (special manager of Táborfalva SR) and ***WWF Hungary*** (responsible for communication actions in the project).

We have delivered the IR on 08.06.2012 and the 1st PR on 07.06.2013.
We submitted the 1MTR on 23.01.2015 and the 2MTR on 18.04.2016.

We applied for the extension of the original project duration to 31.12.2017 (by 16 months) and our request was accepted by the EC on 27.07.2016. (The primary reason for this was that the construction of the water management objects in Táborfalva SR was delayed.) – see Annexes 4.1.-3. on CD.

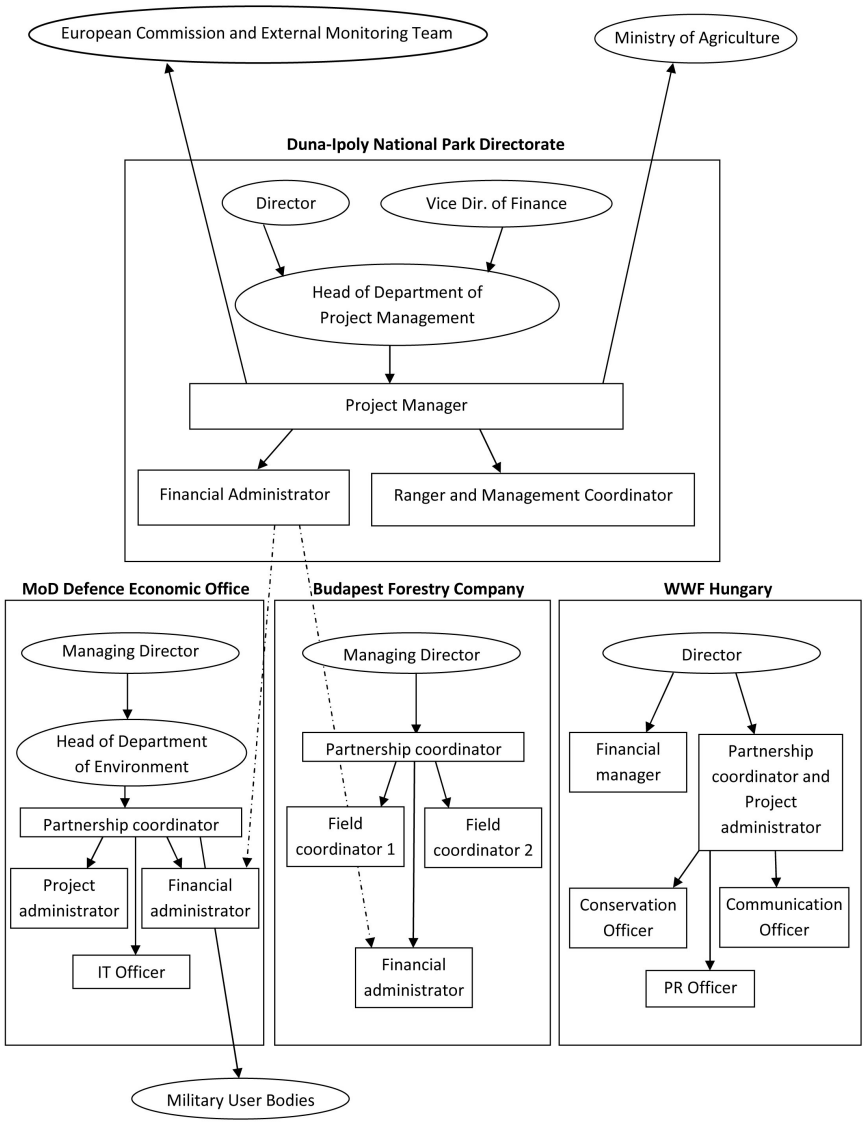
We called for an amendment to the Grant Agreement and our request is presently under review by the EC. (The reason was that the project had savings which could be effectively spent on further conservation activities in the project site.)

Due to the extended duration of the project, the duration of the PA was also updated (see Annex 4.4. on CD).

For the implementation of HUTURJAN project, we rent an office in Nagykőrös (Nagykőrös, Lőrinc pap utca 3.)

The project manager position was taken over by Mr Márton Árvay between 01.05.2016. and 01.12.2016. Following this date, Ms Annamária Csóka fills in the post again. The list of the personnel presently working in HUTURJAN project is provided in Annex 4.5.

Organigram of the project:



The project is implemented through the continuous cooperation of the project personnel of all partners. Everyday conversations via telephone and e-mail are the most characteristic (to be environment friendly and achieve cost and time efficiency). The project manager directly contacts with the project coordinators of the partners in most cases.

However, if more issues to discuss are collected, workshops are held, with the participation of stakeholder parties. If field negotiations are needed, those are organised and carried out. Regarding the latter activity, asking for entry permits to the SR is a permanent task (The project manager asks for entry permits through MoD DEB, and Bakony Combat Centre issues the permits).

The information-flow on project-related issues is always mutual between the coordinating beneficiary and the associated beneficiaries. It is the project manager who is responsible for the management of these processes.

In most cases the project manager communicates by e-mail with EC representative Mr László Bécsy Technical Desk Officer through our monitoring expert Mr András Kovács (NEEMO-EEIG). With our monitoring expert we communicate via e-mail or telephone. Major cases regarding the change of the content of the project are presented to him in e-mail. Mr András Kovács visited our project on 08-09.09.2016 (see Annex 5.1.24.5. in Action E1). On the first day the achievements of the project were presented in the main office of DINPD in Budapest as well as administrative and financial documents of the project were supervised. On the second day they visited the project area where project results were also presented.

5. Technical part

5.1. Actions

5.1.1. ACTION A1 - Preparation of forest habitat management

Action status: completed
Responsible partner: BFC
Description of the results achieved during the reporting period:
Conservation management works (IAS management, plantation nursing) were planned in details at the beginning of 2016 and 2017, from January to the end of February and included in the annual workplan of the project (for Actions C1, C2, C3 and C6). Public tendering procedures were launched.

Outputs (BFC):
- forest habitat management works are planned and prepared in details for 2016 and 2017

Time schedule: completed (deadline: 31.03.2017.)
As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as obviously this was a task for the beginning of each year of the project duration.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.
Problems: no
Modifications: no

5.1.2. ACTION A2 - Preparation of water supply regulation

Action status: ongoing
Responsible partner: DINPD
Description of the results achieved during the reporting period:

In Táborfalva SR:
The application for water rights implementation permit for a hydrologic engineering project was submitted to the National Organisation for Rescue Services, Ministry of Interior on 09.06.2015. The completion of documents was later required by the authority. As the authority did not issue the permit until the foreseen date, the contract with the planning company had to be modified three times. Parallel to this (to save time) the draft for construction and the technical documentation for the public tendering were compiled. Directorate for Rescue Services of Budapest finally issued its permit on 12.07.2016. (see

Annex XXX.) The public tendering procedure for the implementation of the water management objects of Táborfalva is just about to launch. The construction will be finished by 31.10.2017.

In Dabas Turjános NCA:
Completed.

Outputs (DINPD):
1 permitted final construction draft for Táborfalva SR water management objects
1 technical documentation for public tendering

Time schedule:
Táborfalva SR: original deadline: 31.03.2014
planned new deadline: 31.05.2017.

Consequences for other actions: Action C4 is also delayed.
As the construction date of the water management objects of Táborfalva was officially postponed, the deadline of this action should have been also modified, as it ends only with contracting for the construction.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Problems: yes
The more negotiations with the military users than foreseen and the fact that the permitting procedure of the water rights implementation permit for a hydrologic engineering project has been considerably longer than foreseen resulted in the delay of this action.

Modifications: no

5.1.3. ACTION A.3: Munition treatment planning
Action status: completed on 29.08.2012.
Responsible partner: DINPD
Please find more details in 2MTR in Point 5.1.3.

5.1.4. ACTION B.1: Land purchase in the administrative area of Dabas
Action status: completed on 27.04.2012.
Responsible partner: DINPD
Please find more details in 2MTR in Point 5.1.4.

5.1.5. ACTION C.1: Control of invasive species in sand habitats
Action status: ongoing
Responsible partner: BFC
Description of the results achieved during the reporting period:

In 2016, between April and September, the following activities took place in this action:

Control of herbaceous invasives (shoot smearing): 2nd post-treatment in 280 ha, 3rd in 350 ha, 4th post-treatment in 470 ha.
In 2016, between August and October, the following activities were implemented:
Control of arboreal invasives (shoot smearing and trunk injection): 2nd post-treatment on 280 ha, 3rd on 350 ha, 4th post-treatment in 470 ha.

For a map illustration of the implementation see Annex 5.1.5.1.

Outputs (BFC): 1172 ha of Pannonian sand steppes and inland sand dune thickets are free of alien plant species in 99%
Time schedule: on-time, deadline: 30.11.2017.
Only the ringing and cutting of the pine individuals below 4 m height is in progress. (Other parts of the action – concerning the control of black locust, tree of heaven, Russian olive, desert indigo and common milkweed are completed.)
Problems: no
Modifications: no

5.1.6. ACTION C.2: Restructuring of non-indigenous forests into indigenous ones

Action status: ongoing
Responsible partner: BFC
Description of the results achieved during the reporting period:
In 2016, between January and March 14,000 pcs native poplar saplings were purchased for supplementing. After that manual planting and cutting back were carried out.
Removal of primarily injected black locust patches was carried out on 11 ha (see photos in Annex 5.1.6.1).
From April to September, 2016, continuous machine and manual nursing of the plantations (hoeing, mowing, trunk selection, disking, etc.) were carried out.

Supplementing and nursing in 18 ha forest reconstruction with native species (complete soil preparation), in 8 ha plantation (in the surrounding buffer zones, with pit boring) and in 11 ha plantation in a new location were carried out.

From August, 2016 until the end of October, post-treatments of arboreal invasives were implemented (shoot smearing, trunk injection on 26 ha).

For map on Action C2 see Annex 5.1.6.2.
For the present state of plantations see photos in Annex 5.1.6.3.

Outputs (BFC): supplementing and nursing 18 ha forest reconstruction with native species (complete soil preparation), 8 ha planting (in the surrounding buffer zones, with pit boring), 11 ha planting in a new location
37 ha planting altogether

26 ha IAS post-treatment (instead of forest reconstruction with gentle soil preparation)

Time schedule: deadline: 31.12.2017.
Problems: no
Modifications: no

5.1.7. ACTION C.3: Reconstruction of alder and ash gallery forests

Action status: ongoing
Responsible partner: BFC
Description of the results achieved during the reporting period:

At the beginning of 2016, 9,000 pcs native poplar saplings were purchased (supplementing).
Pit boring took place, following this manual planting and cutting back was carried out.
From April to September, 2016, continuous manual nursing of the plantations (hoeing, mowing, trunk selection, disking were carried out) in 2.02 ha. The nursing of the ash plantation continued (0.56 ha).
Technical handover also took place with the representative of the forestry authority. The plantations of Dabas 43 E and N forest compartments were considered as successfully implemented.

From August, 2016 until the end of September, post-treatments of arboreal invasives were implemented (shoot smearing, trunk injection) on the 15 ha size former Russian olive stand and the 51 ha size alder-ash forest patches.

For map illustration see Annex 5.1.7.1.

Outputs (BFC):

51 ha ash-alder and hardwood gallery forest is free of alien plant species (also post-treated)

15 ha area is free of Russian olive (also post-treated)

2 ha hybrid poplar stand is removed and native poplar was planted and nursing took place

in 0.56 ha large ash stand nursing is implemented

Time schedule: deadline: original deadline 31.08.2016., deadline: 31.12.2017
Problems: no
Modifications: no

5.1.8. ACTION C.4: Water control and retention in the southern unit of 'Turjánvidék' Natura 2000 site

Action status: ongoing
Responsible partner: DINPD, MoD DEB
Description of the results achieved during the reporting period:

The water management objects in Dabas Turjános NCA are in operation. According to the water supply (precipitation, water levels of source channels) it is the field coordinator who supervises and changes the water levels by the sluices. Sandbags were also deposited to certain parts of the channels to further increase the positive effect of water retention. For the positive results of water retention and the water management objects in operation see photos in Annex 5.1.8.
The compilation of the operational plan of the water management system in Dabas NCA is in progress.

For Táborfalva SR we plan to carry out the construction of water management objects by 31.10.2017.

Outputs (DINPD): 3 water management objects are completed in Dabas NCA and in working order
Time schedule:
Dabas Turjános NCA: completed: 30.10.2015.

Táborfalva SR: original deadline 28.02.2015.
planned new deadline: 31.10.2017.
Problems: yes, this action is delayed, for reasons see Action A2
Modifications: no

5.1.9. ACTION C.5: Development of potential Hungarian Meadow Viper habitats with grazing

Action status: ongoing
Responsible partner: BFC, DINPD
Description of the results achieved during the reporting period:

Planning the management of the alfalfa field (55 ha) took place by March 31., 2016 and 2017.

The re-grassing process proceeds well, the grassland completely substitutes the alfalfa in large areas. For photos see Annex 5.1.9.1. In 2016 the alfalfa field was mown four times. A negotiation on the enhancement of complex re-grassing with experts took place on 17.01.2017.

The 19.1 ha ploughland, which was purchased in Dabas in 2012, was mown once in 2016. This way we prevented weed invasion and supported the grass individuals strengthening. The favourable spontaneous process of re-grassing continues. For photos please see Annex 5.1.9.2.

The actual and potential viper habitats were grazed by cattle in 2016 with low grazing pressure, on a temporary basis, permitted by valid land leasing contracts and under the continuous supervision of the field coordinator of the project. The new type of grassland management launched in spring, 2016 on the whole known viper habitat and beyond.
In 2014, cattle grazing was already introduced in other areas of the SR as well, which were not foreseen in the project and were not leased permanently before. This tendency continued in 2016 and as a result, approx. 900 ha area is grazed now. For a photo on the positive effect of grazing of the viper habitat (originally planned to manage in the proposal), please see Annex 5.1.9.3. For the map of the action see Annex 5.1.9.4.
We also held negotiations on land lease with Bakony Combat Training Centre, user of the SR (08.02.2017.)

Outputs: 19.1 ha ploughland in Dabas NCA is changed into grassland – **DINPD**

55 ha alfalfa field is partly turned into grassland - **BFC, DINPD**

900 ha potential viper habitat is dedicated for grazing – **BFC, DINPD**

Time schedule: deadline: 31.12.2017.
As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as obviously this is a task until the end of the project.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Problems: no
Modifications: Larger area is grazed than foreseen in the proposal, area extended on even more potential viper habitats. (The size of the grazed area is 900 ha instead of 500 ha.)

5.1.10. ACTION C.6: Development of potential Viper habitats with transforming forests into meadows

Action status: delayed
Responsible partner: BFC
Description of the results achieved during the reporting period:

This action should have been launched in Autumn, 2014, based on the submitted proposal.
However, we faced a serious problem: although this action was accepted by the military users prior to project submission, it revealed that – due to ballistic safety reasons - Joint Forces Command Bakony Combat Centre (the user of the SR) doesn't support the elimination of the invasive plantation patches of C6.
To clarify the situation we drew in an independent weapon technology expert. (As it revealed that the military users of SR have no special staff to investigate the safety parameters of the SR, a weapon technology expert was needed.)
After data collection and field survey the charged expert compiled and submitted his report on 29.06.2016. This was followed by a negotiation and as a result an amendment to the special report was compiled and submitted on 17.09.2016. The report includes ballistic calculations on trajectories of used munition types and safety reasons. According to the report, the major part of the IAS patches in question serves safety purposes and for this reason their elimination cannot be carried out. However, from the planned approx. 30 ha area 4.58 ha can be removed. (For the weapon technology report and its amendment see Annexes 5.1.10.1-2. on CD, for map illustration see Annex 5.1.10.3.)
The IAS control can start in summer, 2017. Results of the planned trunk injection technique will be clearly visible immediately and the treatment can be repeated in the same vegetation period, in Autumn, 2017, during the project period.

Outputs (BFC): no so far
Time schedule: original deadline 31.08.2016., new planned deadline: 30.11.2017.
Problems: yes
The military user of the SR did not allow us to carry out the IAS control due to safety reasons. Weapon technology expert was needed, whose report showed that the planned management area has to be decreased to 4.58 ha.
Modifications: IAS control area reduced from 30 ha to 4.58 ha.

5.1.11. ACTION C.7: Moderation of general threatening factors

Action status: completed (on 31.10.2013.)
Responsible partner: BFC
Description of the results achieved during the reporting period:

Regulated closing of roads: Due to vandalism and illegal access attempts, the supervision of the crossing gates and ditches is a continuous task until the project ends.

Elimination of illegal sand pit: Manual nursing of the tree and shrub rows closing the sand pit was carried out from August, 2016 and it is a permanent task until the project ends and beyond. A photo on the actual state of the plantation is attached in Annex 5.1.11.1.

Please find more details in 2MTR in Point 5.1.11.

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as obviously maintaining and nursing are due until the end of the project.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

5.1.12. ACTION C.8: Implementation of munition treatment

Action status: ongoing
Responsible partner: MoD DEB
Description of the results achieved during the reporting period:
no

The remaining munition treatment activities will take place parallel to the construction of water management objects in Táborfalva SR, in autumn, 2017.

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as obviously this is a task during the construction of the water management objects of Táborfalva, in Autumn, 2017.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

In EC letter Ref. Ares(2016)7006986 - 16/12/2016 we were asked to give more details for this action:

Originally, the areas of the munition treatment were the following: all areas of forest reconstruction (1.64), the sites of the future water management objects (0.3 ha). However, exclusively the Hungarian Army Explosive Ordnance Disposal and Warship Regiment can implement the munition treatment tasks of our project. (It is an individual budgetary organisation and according to Hungarian legislation it is entitled alone to carry out the bomb disposal tasks.)

The contract between Hungarian Army Explosive Ordnance Disposal and Warship Regiment expired, when the original project (September 2016) had closing date too. The project has been extended to 31.12.2017. We have started the preparation for the new contract until the modified closing date, and its scheduled time is June 2017. According to the contract, during

the water management structures and forestry works will take place the Explosive Ordnance Disposal inspection.

Short description of the process of munition treatment:
Members of the Hungarian Army Explosive Ordnance Disposal and Warship Regiment get to the site prior to the launch of the earthworks. The patrol is led by a chief bomb technician and composed of max. 8 persons. The designated area is surveyed with VMH-3 type handhelp metal detector, in our case at a depth of 60 cm. If the equipment signals, the spot is cautiously dug up. If an explosive item or an equipment containing pyrotechnical material is found, this fact is reported to the MoD Bomb Technician Department on Duty. Depending on the type and the physical state of the ammunition it is eliminated on the spot or transported off the site.
Supervision by bomb technicians:
Some patrols are present parallel to the earthworks made. Their task is the identification and management of the ammunition revealed during the work.

11,433 EUR have been spent so far for this action.

5.1.13. ACTION D.1: Information to the general public – website operation

Action status: ongoing
Responsible partner: WWF
Description of the results achieved during the reporting period:

The project website www.turjanvidek.hu is live and regularly updated in two languages since 03.07.2012. Besides the overall description we publish news on the project progress and other relevant events from the field. There is a download section with all project reports and publications. The national and the international workshops on invasive plant species (Action D9) have their own pages and all the outputs are made available on the website. The first 2 parts of the military training material (Action D6) is also available on the project website. Two recent printscreens are attached in Annex 5.1.13.1.
The website has generated higher interest than planned. By March 2017 over 60,000 not unique visitors of the website have been registered. The usage statistics of the reporting period are attached in Annex 5.1.13.2.

Outputs (WWF):
an up-to-date project website in Hungarian and English with downloads, links
practical experiences can be downloaded on invasive plant management
min. 10000 visitors (well exceeded, currently 60,000)
Time schedule: on time (deadline: 31.12.2017.)

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as obviously this is a task until the end of the project.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Problems: no
Modifications: no

5.1.14. ACTION D.2: Creation of project brand

Action status: completed
Responsible partner: WWF

Please find more details in 2MTR in Point 5.2.2.2.

Outputs (WWF):
nice and consistent logo of high advertising value
cca. 3800 different promotion objects (distributed at project and public events, schools of the region, etc., see Annex 5.2.2.2.1. on CD in 2MTR)
Time schedule: original deadline: 31.03.2012., deadline: 19.06.2013.
Problems: no
Modifications: no

5.1.15. ACTION D.3: Setting up information boards

Action status: completed
Responsible partner: WWF, DINPD

Please find more details in 2MTR in Point 5.2.2.3.

Outputs (DINPD, WWF):
7 information boards set up
20 Natura 2000 demarcation boards set up
81 supplementary warning signs
Time schedule: original deadline: 31.10.2012., deadline was 31.10.2012.
Problems: Due to vandalism, some of the signs have to be replaced from time to time.
Modifications: no

5.1.16. ACTION D.4: Compilation of project brochure

Action status: completed
Responsible partner: WWF

Please find more details in 2MTR in Point 5.2.2.4.

Outputs (WWF): 3500 project brochures are issued (distributed at project and public events, etc., see Annex 5.2.2.3.1. on CD in 2MTR)
Time schedule: original deadline: 31.05.2012., deadline: 10.11.2012.
Problems: no
Modifications: no

5.1.17. ACTION D.5: 'Green Days' on Táborfalva Military Shooting Range

Action status: completed
Responsible partner: WWF
Description of the results achieved during the reporting period:

The 4th nature trail programme was held on 13th of June 2016 for a group from Bóbita Kindergarten from Dabas. During the trip, the foresters of BFC led the group of 24 children and their teachers. Promotional material for children were distributed. Photo is in Annex 5.1.17.1.
After organising at least one excursion to groups from all the four neighbouring settlements, the 5th nature trail programme was organised for a group of young adults from Budapest on the 28th September 2016. They were led by WWF staff and the project activities were also presented to them. At the end of the excursion project promotional objects and information material were distributed. Photo is in Annex 5.1.17.2.

Please find more details in 2MTR in Point 5.2.2.5.

- **Outputs (WWF):**
- 5 Green Days
- cca. 170 participants for 5 occasions
- **Time schedule:** completed on time, deadline: 31.12.2016.
- **Problems:** no
- **Modifications:** no

5.1.18. ACTION D.6: Nature conservation training for military users and environmental officers

Action status: ongoing
Responsible partner: DINPD, MoD DEB
Description of the results achieved during the reporting period:

The data collection for future updating the CMP for the SR is continuous. A record number of 26,344 new data were collected on Natura 2000, protected, strictly protected and Red Data Book species from the SR since our project launched.
The workstation operates at Táborfalva Base with QGIS database and the biotic data on the SR.
The training material on the project webpage is utilised by military users.
New, good examples of soldier's field cards are collected.

Time schedule: deadline: 31.12.2017.

Problems: no

Consequences for other actions: no

Modifications: no, except for the deadline

5.1.19. ACTION D.7: Information to the general public - Media work

Action status: ongoing
Responsible partner: WWF
Description of the results achieved during the reporting period:

In 2016 most of the media appearances (online and radio interviews) were linked to the international workshop on invasive plant species in April. The press invitation to the workshop and the list of registered journalists are attached in Annex 5.1.19.1. Furthermore, articles were published in the media belonging or related to the project partners. The complete clipping list until March 2017 includes 122 appearances. Lists are attached in Annex 5.1.19.2. on CD. The media reach value of the clippings during the 5 years has been over 8.2 million hits.
The 25-minute-long film was ready in the autumn of 2016 and then was approved by the partners and by the press offices of the MoD and MoA. The final version is attached on separate DVD, Annex 5.1.19.3. The film will be broadcast on TV in 2017. The film making professionals found the project site so interesting and valuable that they decided to create another, much longer nature documentary about it. They managed to raise additional funds for it from the national fund for movie and television production. That film will be also ready in July 2017, and then will also broadcast on a national TV channel.

− **Outputs (WWF, DINPD):**
− increased interest on the issues targeted by the projects
− 1 press conference
− press releases are issued
− press articles are collected and filed in
− special issue of WWF Magazine in 15,000 copies (for distribution see 1MTR Annex 5.2.2.7.-18. on CD)

− 1 trailer and 2 spots of the project film
− special issue of Cincér newsletter in 5000 copies distributed by the partnership to schools, libraries, environmental education NGOs and individuals at different events
− **Time schedule:** on time, deadline: 31.12.2017.
− **Problems:** Car accident of the cameraman had caused some delay in filming, but it was overcome after he recovered.
− **Modifications:** no

5.1.20. ACTION D.8: Dissemination of scientific results of the project

Action status: ongoing
Responsible partner: DINPD
Description of the results achieved during the reporting period:

On 30.06.2016 a LIFE+ seminar was held at in Nimes, France, where the Turjánvidék LIFE+ project's staff participated, and project manager Mr. Márton Árvay presented the project. 150 participants from 16 countries, gained an insight of the host, LIFE DÉFENSE NATURE 2 MIL (LIFE11 NAT/FR/000734) project. Our presentation is attached in Annex 5.1.20.1. on CD. HUTURJAN project was included also in the conference summary, see Annex 5.1.20.2. on CD. Photos of the event are in Annex 5.1.20.3.
On 09.03.2016 and 08.03.2017 the project was presented by WWF to the BSc students of Szent István Egyetem in the frame of the subject Wetland management and restoration. Presentations are in Annex 5.1.20.4. on CD.
On 25.01.2017 MoA organised a workshop on IAS (title: Idegenhonos inváziós fajokkal kapcsolatos szakmai nap), where Pál Kézdy from DINPI and László Gálhidy from WWF presented the results of our project regarding the gathering and exchange of experience on invasive plants. The 2 presentations are in Annex 5.1.20.5. on CD.

Outputs (DINPD):
− 10 conference, 27 participation
− 13 scientific publications – presentations
− **Time schedule:** on time, deadline: 31.12.2017.
− **Problems:** no
− **Modifications:** no

5.1.21. ACTION D.9: Best practices in the defence against invasive species

Action status: ongoing
Responsible partner: WWF, DINPD
Description of the results achieved during the reporting period:

The international workshop on invasive management was held on the 19-21st of April 2016, in Hotel Benczúr, Budapest.
The workshop contributed to the on-going Biogeographic Seminar process of the Pannonian eco-region as an official follow-up event, approved by the Commission. For this reason, CEEWeb for Biodiversity became a co-organiser of the event.
We did not ask for a registration fee from the participants, and the accommodation and meals were covered from the project budget for all presenters and maximum 1 additional participants per organisation. Travel costs by default were covered by the participants,

but in case of a few valuable contributors in need, our organising partner, CEEWeb supported travel.

The first 2 days were dedicated to presentations and discussions and the 3rd day we held a field trip to Szigeti homokok Natura 2000 site in Szigetmonostor (HUSK/1101/2.2.1/0052/01-suppressing invasive alien plant species on sand and floodplain habitat). There we could show similar habitats and interventions that are characteristic of the Turjánvidék project site as well. It was not possible to visit the project site because the security check of the high number of foreign participants would not have been possible with a reasonable deadline. Also the calendar of military use could not be foreseen for April in the time of finalizing the date and programme of the workshop.
From 15 countries 134 registered experts participated, and 30 of them held a presentation on their experience regarding invasive plants. Also a representative from DG Env. Biodiversity Unit participated and held a presentation. For the scanned registration sheet see Annex 5.1.21.1.1. on CD.

At the end of the workshop the participants compiled a recommendation document for the European Commission to support the Biogeographic Seminar process and the implementation of the Directive on IAS. The final recommendations, the programme of the workshop, the presentations and the posters presented and the abstract booklet are attached in Annex 5.1.21.1.2-5. on CD. The language of the event was English, with simultaneous translation into Hungarian.
The presentations were recorded on video and published on-line for further reference. All the results, including the videos and the attached materials are available publicly on the event pages that we created on the project website:
http://turjanvidek.hu/?/invasive_plants_workshop/results
Photos of the workshop and field day are in Annex 5.1.21.1.6.

The compilation of the Turjánvidék Rosalia volume is in progress, the article list was completed by 03.2017. (see Annex 5.1.21.2.1. on CD). For a photo of a field negotiation see Annex Annex 5.1.21.2.2.

Outputs (WWF, DINPD):
1 national experts' forum was held
1 international experts' workshop was held
Time schedule: deadline: 31.12.2017.

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as there are tasks left in this action.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Problems: no
Modifications: Both expert seminars has been upgraded with more participants and more days since the interest among professionals is high and the topic offers large amount of experience to be exchanged.

5.1.22. ACTION D.10: Compilation of the Layman's report

Action status: not due yet

5.1.23. ACTION D.11: Networking with other LIFE projects

Action status: ongoing
Responsible partner: DINPD
Description of the results achieved during the reporting period:

We are in contact with staff members of other LIFE projects, both in Hungary and abroad.
For exact data on the communication occasions during the reporting period see table in Annex 5.1.23.1. on CD.

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as obviously this is a task until the end of the project.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Outputs (DINPD):

exchanged experiences in the topic of invasive management, viper monitoring, military in conservation areas, communication, project administration, etc.

3 field visits to related projects, and experience exchange meeting with project coordinators of 10 projects

- **Time schedule:** on time, deadline: 31.12.2017.
- **Problems:** no
- **Modifications:** no

5.1.24. ACTION E.1: Technical and financial implementation of the project, coordination

Action status: ongoing
Responsible partner: DINPD
Description of the results achieved during the reporting period:

The information flow is continuous within the partners of the project regarding the project implementation. The submission of the administrative and financial reports to the coordinating beneficiary is a permanent task of the partners.

Each year, workshops are held to help compiling the actual annual workplans.
In 2016, workshops were organised to negotiate with BFC (11.01.2016), with WWF (13.12.2016.), with MoD DEB (26.01.2017. - list of participants is in Annex 5.1.24.1.) with BFC again (02.02.2017.), with Bakony Combat Training Centre (20.02.2017.) and finally with with MoD DEB again (09.03.2017. - list of participants is in Annex 5.1.24.2.)

For the signed annual workplans for 2016 and 2017 see Annex 5.1.24.3-4 .on CD.

Mr András Kovács visited our project on 08-09.09.2016. On the first day the achievements of the project were presented in the main office of DINPD in Budapest as well as administrative and financial documents of the project were supervised. On the second day they visited the project area where project results were also presented (see Annex 5.1.24.5.)

Outputs (DINPD):
1 partnership agreement
min. 4 newly employed persons
min. 5 project workshops
4 accepted project reports so far
continuous and smooth project implementation
continuous contact between partners
quick and concrete answers to raising problems
continuous contact with the responsible persons of LIFE monitoring, MoA and EC

Time schedule: on time, deadline 31.12.2017.

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as there are tasks left in this action.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Problems: no
Modifications: no

5.1.25. ACTION E.2: Conservation management and communication monitoring

Action status: ongoing
Responsible partner: DINPD
Description of the results achieved during the reporting period:

Management monitoring:

Elimination of invasive species:

The field coordinator, Mr György Verő implemented the monitoring action in each year between 2012 and 2016.
Results of invasive plant management monitoring show that the established management is highly effective. The majority of managed plots represent 100% efficiency, and all of them above 90% after one season of management. For detailed data see table in Annex 5.1.25.1. on CD.

Reconstruction of forests:

Planted saplings show high vitality and survival rate in most of the forest reconstruction plots. Although complete soil preparation has a devastating effect on any natural vegetation, it seems to be an effective way to transform highly degraded forest stands to that of native species. However, in case of Action C3 where partial soil preparation was implemented (drilling), survival rate of saplings were below 10 percent of all saplings.

For detailed data see table in Annex 5.1.25.1. on CD.

Structural development of potential habitats of viper:

The field coordinator carried out the monitoring even in 2016.

The development of Molinia spp. tussocks seems to be a slow process and needs the contribution if certain ant species as well. Till date, there are no characteristic tussocks after four years without mowing. The well-prescribed grazing removed the surplus grass biomass from the area, however, the quantity of Orthoptera and rodents increased.

For detailed data see table in Annex 5.1.25.1. on CD.

Effects of water retention:

The only staff gauge in the area is just above the junction of Channel XX. and Channel XX. "árapasztó", cca. 7 km from the SR along Channel XX. Regarding the Dabas Turjános NCA, the closest staff gauge is cca. 4 km from the target site. For these reasons we have not collected any data on the present hydrology of the area. However, regular visual observations and geodesic data confirm the need of water management objects.
For detailed data see table in Annex 5.1.25.1. on CD.

Biodiversity monitoring:

The research report on Lepidoptera was submitted in the frame of biodiversity monitoring in December, 2016. As this research concerned the final stage of the project the 'before management' and 'after management' data were evaluated. It revealed that the habitat management largely contributed to the diversity and quantities of the Lepidoptera fauna of the project area. Compared to the data of 2012, the number of butterfly and moth species (including protected species of these taxa) increased. The density of the Lepidoptera specimens (occurrence density, probability) also increased considerably. The report contains habitat management recommendations for Natura 2000, protected or rare Lepidoptera species, which can be taken into consideration in the CMP.
(For research report see Annex 5.1.25.2. on CD.)

In 2016, with the help of our project, the monitoring of Montagu's harrier continued (documentation of home ranges and territories). As a result, it revealed that the population of the SR is among the largest ones in Hungary, 12 territories were found. For the research report see Annex 5.1.25.3. on CD and photos are in Annex 5.1.25.4-5.

Short toed eagle is known to be one of the rarest raptor species in Hungary. As a potential predator of the Hungarian Meadow Viper, it is important to gain as much knowledge on the local breeding pairs as possible without causing any disturbance. A nest camera was purchased and installed at one of the known nesting sites in Táborfalva SR in March 2016 (before the birds arrive back from their wintering). Initial footages were promising showing a female replacing twigs in the nest, but unfortunately no breeding occurred in 2016. Two GPS loggers were also purchased by the project in order to track the feeding behaviour and migration routes. A previously rehabilitated immature specimen was tagged with one of the loggers and released in the project area. The bird flew a long track above Hungary captured in Poland two month later in a bad condition. Further efforts will be made in 2017.

A photo on the research and a map of the track of the tagged bird can be found in Annex 5.1.25.6-7.

In monitoring and data collection activities other specialists of DINPD are drawn in (no personnel costs are budgeted for them).

We did Hungarian Meadow Viper monitoring on two occasions on potential habitats with favourable weather conditions for this species **(**16.03., 30.03.2017.). For a photo see Annex 5.1.25.8. (Unfortunately no specimen was found.)

(This activity is also out of the direct tasks of HUTURJAN.)

For a photo of Arthropod data collection see Annex 5.1.25.9.

The number of data collected on species during the project is quite high (well above the 3000 GIS data proposed in our application): 26,344

We went on with the capture-recapture research on the Hungarian ground beetle (*Carabus hungaricus*) population of the SR in 2016 and 2017. (For a photo see Annex 5.1.25.10.) (This activity is out of the direct tasks of HUTURJAN.)

We placed out also 14 nest boxes for the European roller and kestrel nest boxes in spring, 2017 with the help of 1000 Odú Association. (See photos in Annex 5.1.25.11.) (This activity is out of the direct tasks of HUTURJAN LIFE.)

Results of D actions:
Regarding communication monitoring the indicator numbers are as follows (31.03.2017.):

- number of visitors of webpage: 60,725
- number of participants in project events: cca. 450
- number of delivered materials: cca. 27,000
- number of media events: 122

Outputs (DINPD):

direct indicators for management actions C1, C2, C5

direct indicators for communication actions D1-D9, D11

management monitoring data series for 32 sample areas

3 biodiversity monitoring summaries

2 research reports on raptors

26,344 GIS data records
Time schedule: on time, deadline 31.12.2017.

As the overall duration of the project was prolonged, the deadline of this action should have been also modified, as there are tasks left in this action.
The prolongation of this action is not officially accepted (thus it is not illustrated in the timetable), however, it is very reasonable.

Problems: no

Modifications: no

5.1.26. ACTION E.3.: After-LIFE conservation management plan

Action status: not due yet

5.2. Envisaged progress until next report.

5.1.2. ACTION A2 - Preparation of water supply regulation

Public tendering procedure and contracting for the construction of water management objects of Táborfalva is completed by the end of July, 2017.

5.1.5. ACTION C.1: Control of invasive species in sand habitats

Pine individuals below 4 m height are ringed and cut by the end of November, 2017.

5.1.6. ACTION C.2: Restructuring of non-indigenous forests into indigenous ones

The nursing of the plantations take place by the end of November, 2017.

5.1.7. ACTION C.3: Reconstruction of alder and ash gallery forests

The nursing of the plantations take place by the end of November, 2017.

5.1.8. ACTION C.4: Water control and retention in the southern unit of 'Turjánvidék' Natura 2000 site

14 pcs water management objects are completed in Táborfalva SR by the end of October, 2017. In November, test operation begins.
The water management objects in Dabas NCA work in order and serve the planned water retention purposes in the area.

5.1.9. ACTION C.5: Development of potential Hungarian Meadow Viper habitats with grazing

The re-grassed area in Dabas will be mown once in 2017.
In 2017 the alfalfa field will be mown three times.
Grazing is carried out in 900 ha potential Hungarian meadow viper habitat by the end of 2017.

5.1.10. ACTION C.6: Development of potential Viper habitats with transforming forests into meadows

In the reduced areas of IAS management, we control invasive plant species by the end of November, 2017.

5.1.11. ACTION C.7: Moderation of general threatening factors

Crossing gates are maintained by the end of 2017. Manual nursing of the tree and shrub rows closing the former sandpit is carried out by the end of November, 2017.

5.1.12. ACTION C.8: Implementation of munition treatment

Munition treatment is implemented within the place of the earthworks connected to water management object construction in September-October, 2017.

5.1.13. ACTION D.1: Information to the general public – website operation
The website will be kept operational and up-to-date.

5.1.17. ACTION D.5: 'Green Days' on Táborfalva Military Shooting Range
One more nature trail excursion is planned to be held.

5.1.18. ACTION D.6: Nature conservation training for military users and environmental officers
The conservation training material for the military using the Táborfalva shooting range will be compiled in a CD-ROM. Soldier's cards of the zone map will be published. The second field trip will be carried out for military users in Autumn, 2017.

5.1.19. ACTION D.7: Information to the general public - Media work
During the final year a closing press conference and field trip is planned on the project site.
The project film will be broadcast on TV in 2017.

5.1.21. ACTION D.9: Best practices in the defence against invasive species
Publication on invasive plant species for the general public will be published.
Rosalia volume on Turjánvidék will be published.

5.1.22. ACTION D.10: Compilation of the Layman's report
Layman's report will be published.

5.1.23. ACTION D.11.: Networking with other LIFE projects
Networking activities will be performed with other relevant LIFE projects.

5.1.24. ACTION E.1: Technical and financial implementation of the project, coordination
Workshops are carried out with project partners. Administrative and financial reports are submitted to the coordinating beneficiary. The external monitoring expert visits our project within its duration.

5.1.25. ACTION E.2: Conservation management and communication monitoring
Management monitoring is carried out also in 2017 and as an evaluation of the results, a final report is made by the end of the project. Biotic data collection continues.

5.1.26. ACTION E.3: After-LIFE conservation management plan
After-LIFE CMP is compiled and signed by 31.12.2017.

Photos were taken by Ms. Annamária Csóka, Mr. György Verő, Mr Márton Árvay, Ms Éva Zanin, Ms. Klára Kerpely, Mr János Szeghalmi, Mr Péter Hencz, Mr Golen Gerhardt, Mr Gábor Papp
Photos on military can be publicized only with further permission from the Ministry of Defence, Press Office.

Maps were compiled by Mr. György Verő and Mr Márton Árvay.

Thanks to the project staff helping the compilation of this report and project implementation.

TIMETABLE

In the timetable, deliverables and milestones tables progress made so far is coloured in green.

(In the timetable the original schedule is in the first row by each action, the second row represents the actual timing.)

Action	2011		2012				2013				2014				2015				2016				2017			
Number	09	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A. Preparatory actions, elaboration of management plans and/or action plans :																										
A1	✓	✓	✓				✓	✓	✓	✓	✓			✓	✓			✓	✓							
		✓	✓	✓			✓	✓	✓	✓	✓			✓	✓			✓	✓							
A2			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
A3	✓	✓	✓	✓																						
		✓	✓	✓	✓																					
B. Purchase/lease of land and/or rights :																										
B1	✓	✓	✓	✓																						
		✓	✓	✓	✓	✓																				
C. Concrete conservation actions :																										
C1					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
C2									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
C3									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
C4									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
C5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
C6													✓	✓		✓	✓			✓	✓		✓	✓	✓	✓
																								✓	✓	✓
C7					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
C8					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓												
															✓	✓										
D. Public awareness and dissemination of results :																										
D1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					✓			
D2	✓	✓	✓																							
		✓	✓	✓	✓	✓	✓	✓																		
D3	✓	✓	✓	✓	✓	✓																				
			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓														
D4	✓	✓	✓	✓																						
			✓	✓	✓	✓	✓																			
D5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D8										✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
D9									✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓				
								✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
D10																		✓	✓	✓			✓	✓	✓	
																		✓	✓	✓						
D11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
E. Overall project operation and monitoring:																										
E1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
E2				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
E3																		✓	✓	✓			✓	✓	✓	

DELIVERABLE PRODUCTS OF THE PROJECT

Name of the Deliverable	Code of the associated action	Deadline
Min. 4 newly employed persons for conservational tasks	E1	31.12.2011
Preparation of 3000-3500 copies of different promotion materials	D2	19.06.2013.
2 clearing saws with seed collection adapter	C5	31.03.2012
2000 copies of A4 format, full-colour brochures in Hungarian and English, printed on recycled paper	D4	10.11.2012
6 information boards set up	D3	31.10.2012
20 out placed boards of demarcation and further 10 items as replacement	D3	31.10.2012
Elaborated guide on conservation management monitoring and report on the habitat fundamental status	E2	31.12.2012
adaptation of the conservation management plan for land users and environmental officers	D6	02.12.2015
1 training CD-ROM for military users 300 pcs	D6	31.05.2013.
2000 pieces of laminated pocket cards in Hungarian and English	D6	31.05.2013.
41 crossing gates	C7	31.07.2012
Research report of management monitoring of Actions C1, C2, C3 and C5	E2	31.12.2013
Dabas water management objects and 1 observation well for indicate groundwater table are built and have	C4	31.12.2017.

harmonized operation plan		
New forest management plan, that includes conservational interests that come off by the new habitat status that exist because of the project's actions	A1	31.03.2014
Research report of management monitoring of Actions C1, C2, C3 and C5	E2	31.12.2014
Water management objects and 2 fountains for indicate groundwater table are built in Táborfalva Military SA and have harmonized operation plan	C4	31.12.2017.
Special issue of newsletter 'Cincér' on the project, 5000 pcs	D7	09.07.2015
26 minute long film on 'Turjánvidék' Natura 2000 site southern unit	D7	31.08.2016
1 thematic 'Rosalia' volume in Hungarian, in 500 copies about elimination of invasive species	D9	31.12.2015.
Research report of management monitoring of Actions C1, C2, C3 and C5	E2	31.12.2015
1 thematic (IAS) WWF booklet in Hungarian and English, in 1000 copies altogether	D9	31.05. 2016.
min. 2500 conservational data collected in field by military users and elaborated	D6	27.05.2015
8 scientific publications/posters/presentations	D8	21.05.2015
1000 copies of Layman's report in Hungarian and English languages	D10	end of project
After LIFE management plan	E3	end of project

MILESTONES OF THE PROJECT

Name of the Milestone	Code of the associated action	Deadline
Technical implementation of the project established (Recruitment of new personnel, acquisition of office equipment, Kick-off meeting, partnership agreements)	E1	22.02.2012
Design of the project brand including logo	D2	31.01.2012
Project website set up	D1	28.02.2012
Land purchase: 19,1 ha arable land for conservational management purposes	B1	30.06.2012
1 permitted construction drawing and contracts for construction of management objects on 'Dabasi Turjános' NCA	A2	15.12.2014
45+19,1 ha conversion of enclosed arable land into grassland started, (alfalfa and grass seed sowing)	C5	31.08.2013
1 field trip in the frame of environmental officer training 1.	D6	15.05.2013
Press conference with press trips held for the national media, 1. for introduct the project	D7	20.06.2013

1 national and 1 international experts' forum, platform for sharing experiences on invasive species	D9	21.04.2016.
1 permitted construction drawing and contracts for construction of management objects on Táborfalva Military Shooting Range	A2	31.03.2014.
Munition treatment plan is compiled	A3	31. 05. 2012
Elimination of an illegal sand pit on 1.3 ha	C7	31. 10. 2013
End of implementation of munition treatment	C8	30.11. 2014
1 field trip in the frame of environmental officer training 2.	D6	31.12.2015
In 500 ha potential Viper protection area the gradual introduction of extensive grazing instead of machinery mowing, combined with mowing in a mosaic pattern (15%)	C5	31.12.2016.
5 'Green Days' on Táborfalva Military Shooting Range during the project	D5	31.12.2016.
Press conference with press trips held for the national media, 1. about the results of the project	D7	end of project
1100 ha Pannonic sand steppes and Pannonic inland sand dune thickets are free of invasives in 95%	C1	30.11.2014
42 ha non-indigenous forests (primarily Black Locust) restructured into indigenous forests	C2	31.12.2015
56 ha alder and ash gallery forest (91E0) is free of invasives	C3	30.11.2014
15 ha buffer zone for 91E0 forests is free of Russian Olive	C3	30.11.2014
Restructuring of 4.5 ha Hybrid Black Poplar plantation into ash gallery forest	C3	30.11.2014
Development of 30 ha potential Viper habitats with transforming forests into meadows (clearings) and grazing	C6	end of project

5.3. Impact:

Nature & Biodiversity:

We are in the final phase of the project implementation, so our conservation management activities have already had many positive effects on the natural and native semi-natural habitats and species of the project area.

IAS elimination was carried out in more than 1000 ha sand habitats, thus the conservation status of Pannonic sand steppes, Pannonic inland sand dune thickets HD habitats and the connected HD species, *Iris arenaria, Colchicum arenarium, Carabus hungaricus, etc.* was directly improved. IAS management cleared also 66 ha humid habitats (favourable conservation status improved in alder-ash forests). With forest regeneration (changing the IAS plantations into native forests) the unity of the natural habitats was restored (in both dry and humid HD habitats). The water management objects of Dabas Turjános NCA improved the water conditions of the alder-ash forests with the prolongation of the surface water cover in time and increased water quantity. This contributed also to the favourable conservation status of the Molinia meadows of the area. Introduction of grazing has many conservational benefits, for instance for the Hungarian meadow viper, our flagship species. (In its species conservation plan, grazing is the only preferred habitat management type indicated.). With the re-grassed 19.1 ha large ploughland in Dabas and the re-grassing alfalfa field (55 ha) the unity of the landscape and natural grassland habitats is restored, creating favourable opportunities for precious species to strengthen their populations (e.g. Hungarian meadow viper). The moderation of illegal access with placing out crossing gates, development of ditches and setting up supplementary warning signs had clearly beneficial effects on all the HD habitats and species as their direct devastation or disturbance is moderated. With the compilation of the CMP of the SR the natural assets of the SR and their protection (parallel to the military use) is in focus.

Indirect impacts:

In general, synergistic effects of joint cooperation and partnership of military, forestry, agricultural and conservational stakeholders within the frame of HUTURJAN project can be observed. Although these land use sectors generally have some major on-going conflicts of interests, the project partnership has created a proper atmosphere to find the common interests and win-win situations as well. Local governments in the project area are also more interested in conservation issues since the project started.

5.4. Outside LIFE:

There are numerous additional positive effects of HUTURJAN LIFE+ project, connected to the following actions:

C5: The extension of the grazed area by 400 ha (900 ha instead of the proposed 500 ha).

One very important positive additional result is the re-introduction of grazing to Táborfalva SR and its surroundings in such a large area. Grazing was once the main land use form here, maintaining those priority habitats and species the project aims to conserve.

Preparing the implementation of Action C5, introduction of grazing has turned to be a common interest of most stakeholders. Besides its conservational benefits, military stakeholders recognized the role of grazing in fire control, while for forestry stakeholders and most farmers land leasing and grazing is a source of income. The project partnership has attracted the stakeholders to the same table, so the common interest has emerged. As a result of this process, grazing was re-introduced to the project area in a much broader scale than

proposed. All this was sort of a side-effect of the project, with nearly no need of its financial contribution, besides the personnel and travel costs of the project staff.

C7: A rangers' action was held to keep the illegal enduro motorcyclists out of the SR (on 30.12.2016.) which highly contributed to the moderation of the general threatening factors.

D7: A nearly 1-hour-long nature documentary has been shot on the natural values of the project area. The staff of our project-financed short film found the project site very precious and worth presenting to the wider audience so they decided to make a new film (from a different fund, with no financial charge on HUTURJAN project). The film will come out in August, 2017 and will be presented in national TV channels at first.

E2: As our project staff is present in the target area, DINPI colleagues and other experts of botany and zoology visited the project area more often, making valuable contributions to biotic data collection and monitoring.
Representatives of birding NGOs contacted our field coordinator and made important field observations. They also provided and outplaced numerous pieces and different types of nest boxes to the project area.

6. Financial part
6.1. Costs incurred

Budget breakdown categories	Total cost in €	Costs incurred from the start date to 31.03.2017 in €	% of total costs
1. Personnel	622 713	536 890	86,22%
2. Travel and subsistence	88 750	56 602	63,78%
3. External assistance	862 268	637 427	73,92%
4. Durable goods			
Infrastructure	682 815	110 754	16,22%
Equipment	120 736	105 336	87,25%
Prototype			
5. Land purchase / long-term lease	88 147	72 905	82,71%
6. Consumables	46 022	32 086	69,72%
7. Other Costs	67 100	27 141	40,45%
8. Overheads	151 551	62 424	41,19%
TOTAL	2 730 102	1 641 566	60,13%

Action number and name	Foreseen costs	Spent so far	Remaining	Projected final cost
Action A1 "Preparation of forest habitat management"	32 351	17 732	14 619	32 351
Action A2 "Preparation of water supply regulation"	60 982	43 964	17 018	60 982
Action A3"Munition treatment planning"	12 732	5 199	7 533	12 732
Action B1 "Land purchase in the administrative area of Dabas"	88 557	74 795	13 762	88 557
Action C1"Control of invasive species in sand habitats"	116 256	158 861	-42 605	116 256
Action C2 "Restructuring of non-indigenous forests into indigenous ones"	351 583	346 889	4 694	351 583
Action C3 "Reconstruction of alder and ash gallery forests"	71 359	49 960	21 399	71 359
Action C4 "Water control and retain in the southern unit of 'Turjánvidék' Natura 2000 site"	794 343	115 512	678 831	794 343
Action C5 "Development of potential Hungarian Meadow Viper habitats with grazing"	130 153	64 324	65 829	130 153
Action C6 "Development of potential Viper habitats with transforming forests into meadows"	68 405	20 185	48 220	68 405
Action C7 "Moderation of general threatening factors"	28 451	24 021	4 430	28 451

Action C8 "Munition treatment"	73 146	11 433	61 713	73 146
Action D1 "Information to the general public – website operation"	29 171	25 308	3 863	29 171
Action D2 "Creation of project brand"	11 629	20 242	-8 613	11 629
Action D3 "Setting up information boards"	11 128	11 579	-451	11 128
Action D4 "Compilation of project brochure "	3 466	2 233	1 233	3 466
Action D5 "'Green Days' on Táborfalva Military Shooting Range"	32 233	21 430	10 803	32 233
Action D6 "Nature conservation training for military users and environmental officers"	50 969	35 264	15 705	50 969
Action D7 "Information to the general public - Media work"	39 355	38 740	615	39 355
Action D8 "Dissemination of scientific results of the project"	9 879	8 477	1 402	9 879
Action D9 "Best practices in the defence against invasive species"	39 049	35 636	3 413	39 049
Action D10 "Compilation of Layman's report"	11 669	0	11 669	11 669
Action D11 "Networking with other LIFE projects"	26 783	25 006	1 777	26 783
Action E1 "Technical and financial implementation of the project, coordination"	598 116	437 416	160 700	598 116
Action E2 "Conservation management monitoring"	26 057	47 360	-21 303	26 057

Action E3 "After-LIFE conservation management plan"	12 280	0	12 280	12 280
TOTAL	**2 730 102**	**1 641 566**	**1 088 536**	**2 730 102**

7. LIST OF ANNEXES

4. Administrative part

4.1._letter_to_EC_amendment_No.1_on_CD.pdf

4.2._letter_amendment_No.1_to_GA_accepted_by_EC_on_CD.pdf

4.3._amendment_No.1_to_GA_on_CD.pdf

4.4._PA_prolongation_on_CD.pdf

4.5._personnel_HUTURJAN_03_2017.xls

5.1.5. ACTION C.1: Control of invasive species in sand habitats

5.1.5.1._map_of_C1_2016_Vero.jpg

5.1.6. ACTION C.2: Restructuring of non-indigenous forests into indigenous ones

5.1.6.1_photos_on_eliminated_black_locust_patch_Csoka

5.1.6.2_map_of_C2_2016_Vero.jpg

5.1.6.3_photos_poplar_plantation_Csoka

5.1.7. ACTION C.3: Reconstruction of alder and ash gallery forests

5.1.7.1._map_C3_2016_Vero.jpg

5.1.8. ACTION C.4: Water control and retention in the southern unit of 'Turjánvidék' Natura 2000 site

5.1.8._C4

photo_water_management_objectNo.2._in_operation_Csoka.JPG

photo_effect_of_water_management_objectNo.2._Csoka.JPG

photo_water_management_objectNo.3._in_operation_Csoka.JPG

photo_effect_of_water_management_objectNo.3._Csoka.JPG

5.1.9. ACTION C.5: Development of potential Hungarian Meadow Viper habitats with grazing

5.1.9.1._photos_re-grassing_alfalfa_field_Csoka

5.1.9.2._photos_re-grassed_ploughland_Csoka

5.1.9.3._photo_grazed_viper_habitat_Csoka.JPG

5.1.9.4._map_of_C5_map_2016_Vero.jpeg

5.1.10. ACTION C.6: Development of potential Viper habitats with transforming forests into meadows

5.1.10.1._amendment_to_special_report_weapon_technology_expert_on_CD.pdf

5.1.10.2._special_report_weapon_technology_expert_on_CD.pdf

5.1.10.3._map_of_C6_2016_Vero.jpg

5.1.11. ACTION C.7: Moderation of general threatening factors

5.1.11.1._photo_on_arboreal_plantation_at_former_sandpit_Csoka.jpg

ACTION D.1: Information to the general public – website operation

5.1.13.1._webpage_examples

5.1.13.2._Usage Statistics for turjanvidek 2017.04.07.docx

5.1.17. ACTION D.5: 'Green Days' on Táborfalva Military Shooting Range

5.1.17.1._photo_nature_trail_20160613_kindergarden.jpg

5.1.17.2._photo_nature_trail_20160928_younggroup.jpg

5.1.19. ACTION D.7: Information to the general public - Media work

5.1.19.1._press_IAS_conference

5.1.19.2._turjanvidek_clipping_final_2016_on_CD

5.1.19.3._projectfilm_on_CD

5.1.20. ACTION D.8: Dissemination of scientific results of the project

5.1.20.1._presentation_Turjanvidek_Nimes_on_CD.pdf

5.1.20.2._summary_with_TurjanvidekLIFE_Nimes.pdf

5.1.20.3._photos_Nimes

5.1.20.4._presentations_Szent_István_University_on_CD

5.1.20.5._presentations_MoA_2017_on_CD

5.1.21. ACTION D.9: Best practices in the defence against invasive species

5.1.21.1._IAS_conference

5.1.21.1.1._registration_sheet.pdf_on_CD

5.1.21.1.2._posters_and_presentations_on_CD

5.1.21.1.3._IAS_WS_Bp_2016_April_program_final_on_CD.pdf

5.1.21.1.4._Abstracts_booklet_IAS_ws_Bp_LIFE_2016.pdf_on_CD

5.1.21.1.5._IAS_PLANT_workshop_recommendations_final_on_CD.pdf

5.1.21.1.6._photos

5.1.21.2._Rosalia_monograph

5.1.21.2.1._Turjanvidek_Rosalia_list_of_articles.xlsx_on CD

5.1.21.2.2._photo_field_program_Rosalia_Csoka.jpg

5.1.23. ACTION D.11: Networking with other LIFE projects

5.1.23.1._table_LIFE_networking_on_CD.xlsx

5.1.24. ACTION E.1: Technical and financial implementation of the project, coordination

5.1.24.1._list_of_participants_negotiation_MoDDEB_26.01.2017.jpg

5.1.24.2._list_of_participants_negotiation_MoDDEB_09.03.2017.jpg

5.1.24.3._annual_workplan_2016_on_CD.pdf

5.1.24.4._annual_workplan_2017_on_CD.pdf

5.1.24.5._photo_monitors_visit_2016_Zanin.jpg

5.1.25. ACTION E.2: Conservation management and communication monitoring

5.1.25.1._E2_management_monitoring_report_on_CD.xls

5.1.25.2._research_report_butterflies_moths_on_CD

5.1.25.3._research_report_Montagues_harrier_on_CD

5.1.25.4._photo_biodiv_monitoring_group_Montagues_harrier_Hencz_Peter.JPG

5.1.25.5._photo_biodiv_monitoring_Montagues_harriers_Golen_Gerhardt.jpg

5.1.25.6._photo_released_tagged_short-toed_eagle_Papp_Gabor.jpg

5.1.25.7._map_track_of_tagged_short-toed_eagle_Arvay.jpg

5.1.25.8._photo_viper_monitoring_Arvay_on_CD.JPG

5.1.25.9._photo_biodiv_monitoring_Arthropods_DINPD_Csoka.jpg

5.1.25.10._photo_Carabus_hungaricus_research_Vero.JPG

5.1.25.11._photo_nest_box_Szeghalmi_Janos.JPG