



**LIFE06 NAT/H/000104**

**3<sup>rd</sup> Progress Report**

**Covering the project activities from 01.10.2009 to 31.10.2010**

**Reporting date 31/10/2010**

**„Conservation of the Pannon endemic *Dianthus diutinus*”**

**Data Project**

<b>Project location:</b>	Hungary
<b>Project start date:</b>	01/09/ 2006
<b>Project end date:</b>	31/08/2011
<b>Total project duration (month):</b>	60
<b>Total budget:</b>	1 630 785
<b>EC Contribution:</b>	1 223 088
<b>(%) of total costs</b>	75
<b>(%) of eligible costs</b>	75

**Data Beneficiary**

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## List of Contents and Annexes

Lists of (i) key-words and (ii) abbreviations .....	2
Executive Summary .....	2
Status of the fulfilment of deliverable products and milestones by 31/10/2010.....	3
Technical progress on project actions by 31/10/2010 .....	4
Technical development .....	7
A.1 – Preparation of Natura 2000 management plan .....	7
A.2 – Preparation of the forest management plan and the forest reconstruction actions ...	8
A.3 – Plan of the forest nature trail .....	10
C.1 – Artificial forest restructuring with indigenous species.....	11
C.2 – Install infrastructure to improve control of preserve zone.....	13
C.3 – Construction of a nature trail .....	15
C.4 – Nursery for ex-situ propagation of <i>Dianthus diutinus</i> .....	16
D.1 – Eradication of non-indigenous <i>Asclepias syriaca</i> .....	18
D.2 – Follow-up treatment of arboreal invasives: <i>Robinia pseudoacacia</i> , <i>Ailanthus</i> <i>altissima</i> , <i>Prunus serotina</i> .....	19
D.3 – Ex situ propagation and re-establishment of <i>Dianthus diutinus</i> .....	20
E.1 – Foresters informed and included.....	22
E.2 – Locals informed and included.....	23
E.3 – Installing information boards.....	24
E.4 – Project web site .....	24
E.5 – General project branding and awareness raising .....	25
E.6 – Disseminate scientific and management lessons .....	26
E.7 – Production of layman’s report .....	27
F.1 – Project management, technical and financial monitoring.....	29
F.2 – Hold technical meetings.....	30
F.3 – Independent financial auditing.....	30
F.4 – Monitoring .....	31
F.5 – Analysis and reporting of monitoring results.....	33
F.6 – Production of an after-LIFE conservation plan.....	36

## Annexes

## **Lists of (i) key-words and (ii) abbreviations**

### Key-words:

*Dianthus diutinus*, Ex situ conservation, Forest reconstruction, Habitat restoration, Hungary, Invasive species, Natura 2000, Pannon endemism

### Abbreviations:

BEN – Beneficiary (KNP)

DINP - Duna-Ipoly National Park

KEFAG Zrt - Kiskunság Forestry Incorporated Company

KNP - Kiskunság National Park

KVÖ - Local Government of Kiskunmajsa

MOL Nyrt. – Hungarian Oil Company

NEFAG Zrt - Nagykunság Forestry Incorporated Company

NBmR – National Biodiversity Monitoring System

SFS – State Forestry Service

SZTE - University of Szeged

TT – Nature Reserve Area (NRA)

## **Executive Summary**

- Project objectives

The main project objective is to stabilize the 85% of the presently known stands of the *Dianthus diutinus* and prevent/counteract the continuous decrease of the population by habitat diminuation and isolation of the subpopulations.

Since its habitats have been fragmented in the past 50 years mainly because of forestry activity, the goal of the project is to create such a habitat network with the help of the enlargement and unification of the present habitats, which won't be influenced by forestry activity at all or only at a minimal level on the three most important habitats of *Dianthus diutinus*.

Securing a potential unbroken habitat network, connecting and strengthen the fragmented subpopulations and informing the public about the importance of *Dianthus diutinus* and it's habitats, the chances of survival of this species in the long run would increase.

- List of key deliverables and outputs

## Status of the fulfilment of deliverable products and milestones by 30/09/2009

(1PR = 1st Progress Report)

(2PR= 2nd Progress report)

(MTR= Mid-term Report)

Deliverable or Milestone (description)	Reference action	Deadline	Status	Evidence of reaching deliverable/milestone	Sent to Commission (Report (Annex))
Nomination of project manager	F1	30. 09. 2006.	Completed	Contract	
Partnership agreement signed	F1	31. 10. 2006.	Completed	Signed agreements	1PR (Ann. 21)
Project staff in place at all sites (except guide)	F1	01. 11. 2006.	Completed	Contracts, Time sheets	
Project auditor contracted	F3	31. 12. 2006.	Completed	Contract	Details of auditor included in MTR
Cars, computers and monitoring equipments purchased and delivered	F1, D3, F4, F5	31. 12. 2006.	Completed	Equipments delivered	
Logo created	E5	31. 12. 2006.	Completed	Project design handbook (including project logo)	1PR (Ann. 17)
Nursery set up	C4	31. 12. 2006.	Completed	Photo document.	1PR (Ann. 8) 2PR (Ann. 26)
Species and habitat monitoring protocol elaborated	F4, F5	31. 01. 2007.	Completed	Monitoring protocol handbook	1PR (Ann. 22)
Leaflets published	E2	31. 05. 2007.	Partly completed	Leaflets	1PR (Ann. 14; 15); 2PR (Ann. 33; 35)
Gates installed at Bócsa site	C2	30. 06. 2007.	Completed	Building permit, map, photo document	2PR (Ann. 23-25)
Disintegrator purchased and delivered	C1	31. 08. 2007.	Completed	Photo document	1PR (Ann. 7); 2PR (Ann. 16, 17)
Project poster	E5	31. 08. 2007.	Completed	Designer appointed, poster printed and disseminated	Sent to Commission with letter 15/04/2009
Management Plans for the 3 pSCI site submitted	A1	30. 09. 2007.	On-going	Confirmation of submitted management plans	1 PR (Ann. 1; 2; 3); 2PR (Ann. 1)
Forest management plans for the 3 project site modified	A2	30. 09. 2007.	On-going	FMPs are ready for Bócsa and Csévharaszt project areas Minutes of the consultation (Bodoglár and Csévharaszt sites)	1PR (Ann. 5) 2 PR (Ann. 2-3)
Website developed	E4	30. 09. 2007.	Completed	<a href="http://www.tartosszegfu.hu">www.tartosszegfu.hu</a> ; <a href="http://www.longlastingpink.eu">www.longlastingpink.eu</a>	
Forest reconstruction completed in 50 % on the three project site	C1	28. 02. 2008	completed	Contracts and photo documentation for each project site	
Construction plan of nature trail prepared	A3	30.09.2008	completed	Construction plan available at BEN	
Information boards erected	E3	30.09.2008	Partly completed	Photo documentation	
Eradication of non-indigenous <i>Asclepias syriaca</i> completed in 50 % on the three project sites	D1	30.09.2008	Partly completed	Although the numbers have been reduced by more than 50%, the infected area has not been reduced that level	
Follow up treatment of arboreal invasives completed in 50 % on the three project site	D2	28.02.2009	Partly completed	It is dependent on the vigour of target invasive species, hence it must be continued until project end in most cases	

## **Technical progress on project actions by 31/10/2010**

<b>Action</b>	<b>Deadline</b>	<b>Status</b>	<b>Description</b>
A1- pSCI management plan	30/09/2008	ongoing	Habitat mapping of Bócsa, Bodoglár and Csévharaszt project sites was done in 2007. The Natura 2000 management plans are ready for all three project sites and have been submitted to the Ministry of Environment and Water.
A2 – Forest management plan	30/09/2008	ongoing	Bodoglár project site: The modified forest management plan was received from Kefag Zrt for forestry works carried out in the first quarter of 2008. Bócsa project site: Permission for ongoing forestry activities at Bócsa is included in the yearly forest management plan of Kiskunság National Park, since the property manager of the area is KNP. An official request for forest management plan modification for forestry activities to be carried out at Bócsa project site in 2009 has been submitted to and approved by State Forestry Service (SFS). Csévharaszt project site: The forest management plan of this area was prepared in 2008. There was an official anticipatory negotiation (pre-arrangements) in April, 2008. According to these negotiations, there is no difficulty replanting our treatment strategy to the forest management plan and to get the soil protecting designation of these forest subcompartments.
A3 – Plan of the forest nature trail	30/09/2008	completed	The final track of the nature trail had been identified and the plan including 530 m board-walk in two sections was designed.
C1 – Forest restructuring	30/09/2008	ongoing	Bodoglár project site: Thinning of black pine plantations carried out on a 27 hectare area in the first quarter of 2008. Maps and management methods are worked out and handed over to forestry representatives. Certain parts of the remaining 17 hectares black pine plantation will be clear-cut and their ranging will be changed to clearings which results a significantly reduced forestry work pressure. Bócsa project Cutting of non-indigenous Robinia pseudo-acacia is completed on a 13,5 hectare area. A disintegrator for project purposes was purchased operates with the supervision of a handler at this site. Csévharaszt project site: Contracts have been signed and forestry work completed on this project area on 28,5 ha.
C2 – Installation of gates	30/09/2008	completed	All six gates have been installed in spring 2008 for the protection of Bócsa project site.
C3 – Installation of the study trail	30/09/2008	completed	Construction works started in mid-October with field consultations with company representatives. A total of 530 meters long board-walk had been established in two sections leading through and over natural sandy grassland habitats.
C4 – Nursery for ex-situ propagatin	30/09/2008	completed	The nursery is surrounded by fence and the surface for the growing pots is covered by geotextile. Worn off parts have been changed, thus the nursery is operational by the end of project.
D1 – Eradication of non-indigenous Asclepias syriaca	30/09/2008	On-going	Public tender for Kiskunmajsa-Bodoglár and Bócsa project areas; contracting for the external assistance. Elaboration of the detailed working protocol and daily working routine of the contractor based on the Asclepias syriaca monitoring results (Action F4,F5), but the daily routine was largely dependent on the actual weather conditions. 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4 <sup>th</sup> year handling completed in Kiskunmajsa-Bodoglár and Bócsa project areas. Csévharaszt project site: On areas in property management of NEFAG (outside NRA) milkweed stands were precisely recorded and

			treated twice with chemicals. In 2009 and in 2010 3 treatments were applied.
D2 – Follow-up treatment of arboreal invasives	30/09/2008	On-going	At <b>areas</b> where D.2 action occurs most efficient treatment methods were selected, and chemicals to be used for the treatments were identified for different arboreal invasive species ( <i>Robinia pseudo-acacia</i> , <i>Ailanthus altissima</i> , <i>Prunus serotina</i> ). Bócsa 14,5 ha <i>Robinia</i> and 0,6 ha <i>Ailanthus</i> treated. Bodoglár 3,26 ha <i>Ailanthus</i> treated. Csévharaszt: 28,5 ha <i>Robinia</i> and 1,5 ha <i>Ailanthus</i> treated. ..
D3 – Ex-situ propagation and re-establishment	30/09/2008	ongoing	Seed collection took place in the first and second part of the vegetation period. The raising and investigation of the plants in the nursery is continuous. So far 16255 plants have been out-planted. Samples for soil seed bank investigations have been collected and are being investigated.
E1 – Foresters informed and included	30/09/2008	ongoing	5 meetings for foresters were organized. Regular meetings have been held with local foresters in order to implement forest activities properly from conservation point of view.
E2 - Locals informed and included	30/09/2008	ongoing	3000 pieces of leaflets have been printed out on the Kiskunság project sites in Hungarian, and 1000 pieces issued both in English and German languages. 12000 pieces of leaflets for Csévharaszt as well as 1000 pieces of folders with the plant picture and all relevant logos. 10000 pieces of SPA tickets were issued with the plant picture. 3 public events in Csévharaszt, 2 in Bodoglár organized.
E3 – Installing informational board	30/09/2008	ongoing	3 information boards made and installed at Csévharaszt project site 3 information boards made and installed at Bócsa project site 2 two information boards made and installed for Kiskunmajsa town 5 information boards made and installed at Bodoglár project site 1 information board made and installed for Botanical Garden of SZTE
E4 – Project web site	30/09/2008	ongoing	The website is operating and regularly updated in Hungarian language. <a href="http://www.tartosszegfu.hu">www.tartosszegfu.hu</a> ; <a href="http://www.longlastingpink.eu">www.longlastingpink.eu</a>
E5 – General project branding	30/09/2008	ongoing	Five interviews on the LIFE project were made and broadcasted on local television channels. Project film makers selected, first version produced. 1000 posters were produced and disseminated. Seven articles were published in newspapers. 30 photos were chosen for exhibition.
E6 – Disseminate lessons	30/09/2008	On-going	Participation on 7 conferences (3 in Hungary, 4 in abroad) with poster or oral presentations. First scientific article submitted.
E7 – Layman’s report	30/09/2008	Not started	-
F1 – Project management	30/09/2008	ongoing	Technical, financial and administrative arrangements were done to enable the proper running of the Project. Partnership agreement is prepared and signed. All Project staff is appointed and aware of their roles and obligations for completing the Project. Regular reports from project partners make possible the administrative and financial monitoring. Orsolya Mile had led the project until 31 March 2008. From the 1 April 2008 her task was taken over by Tibor Danyik. From 15/10/2008 the project manager is András Bankovics.
F2 – Technical meetings	30/09/2008	ongoing	Six technical meetings were held.
F3 – Independent	30/09/2008	ongoing	Auditor is appointed and an official contract was signed on 15/08/2007. Two partial audit have been carried out.

auditing			
F4 - Monitoring	F4	ongoing	<p><u>NBmR local project:</u> Based on the protocol of the monitoring, that has been going on since 1998, we prepared a point map of the individual plants of <i>Dianthus diutinus</i> in all the three fixed, 10x10 m quadrates (both divided into 33x33 cm microquadrates). The number of sprigs, the size (on a 1-3 scale), the vitality of the plant, and the number of healthy/injured capsules, flowers and buds as well, had been registered for all of the individuals.</p> <p><u>Field monitoring on the population changes of <i>Dianthus diutinus</i>:</u> Similarly to the year 2007 and 2008, in accordance with the protocol in 2009 the population of <i>Dianthus diutinus</i> was fully surveyed. Field work began in May and will last until the end of October.</p> <p><u>Monitoring of the regeneration of the vegetation:</u> In accordance with the protocol all 50x50 m quadrates assigned were surveyed on the sites of forest reconstruction and on the site of milkweed eradication as well (Action C1, D2). In the case of the Bodoglár project area forestry interventions took place before the 2008 surveys, therefore considerable changes were detected in the composition of the vegetation.</p> <p><u>Monitoring of the effect of the eradication on the invasive alien species <i>Common milkweed</i>.</u> The pattern of infected patches - registered by using GPS – was similar to the previous year's. Collection of data was full-scale, for the whole project area.</p> <p><u>Monitoring of the survival rate of the reintroduced <i>Dianthus diutinus</i> specimen.</u> The survival rate was 87 % taking into consideration the first 200 specimen reintroduced in 2007 autumn.</p>
F5 – Analysis of monitoring	F5	ongoing	<p>All monitoring activity and data handling is going according to the Monitoring protocol's instructions. GPS records are saved and handled in GIS database. Data collection for the year 2008, 2009 and 2010 have been finished, comparison of data 2008, 2009 and 2010 will be finished by November.</p>
F6 – After LIFE-conservation plan	F6	pending	-

# Technical development

## A.1 – Preparation of Natura 2000 management plan

### *Proposed start and end of the action*

10/2006 – 09/2007

### *Expected results*

SCI management plans prepared for 12 708 ha Natura 2000 area.

The Office for Nature Conservation of the Ministry of Environment and Water will approve the Natura 2000 management plans before the end of the project.

### *Achievements*

The Natura 2000 management plans are ready for all three project sites and have been submitted to the Ministry of Environment and Water. The MEW have found the Csévharaszt management plan appropriate for public hearing, while for those of Bócsa and Bodoglár some additional information was requested to be provided and included.

### *Action status*

On-going

### *Description of the progress during the reporting time*

Although the management plans were ready before reporting period they had to/have to supplemented with the latest forest units database which are already included and approved in Forestry Management Plans. The forest planning of Csévharaszt and Bócsa sites had been finished, however it is only Csévharaszt where the FMP was finalized with the signature of relevant minister (in progress at Bócsa site). The SFS will forward the documentation to national park directorates. As soon as they receive the FMPs that became absolute relevant sections could be annexed to management plans and could be sent out to relevant stakeholders to express their opinions about it.

### *Modifications is comparison to the proposal, justification of changes and delays*



## A.2 – Preparation of the forest management plan and the forest reconstruction actions

### *Proposed start and end of the action*

10/2006 – 09/2007

### *Expected results*

Preparation and authorisation of modified forest management plan for 12 708 ha Natura 2000 forest area (where relevant, according to the project's strategies) gets ready, the preconditions for the nature conservational management actions are established in form in accordance with the actual forestry management plan.

### *Achievements*

New forest management plans, valid for 10 years, are ready for Bócsa and Csévharaszt project sites. The Csévharaszt FMP has already been signed by Minister of Rural Development, while the signing procedure is in progress in the case of Bócsa FMP.

All forestry activities are carried out in accordance with relevant forest management plan modifications. A modified yearly forest management plan was approved by Kefag Zrt for forestry works carried out in the first quarter of 2008 in 27 hectare area of pine plantations.

***Bodoglár project site:*** The 10 year FMP will be arranged in 2011, as it was discussed in details on the mission of 14/06/2010.

***Bócsa project site:*** An official request for yearly forest management plan modification for forestry activities to be carried out at Bócsa project site in 2009 has been submitted to State Forestry Service (SFS).

The 10 year FMP for the site is ready although according to the information provided by the forestry authority has not been signed yet by relevant minister. The new forest units were delineated in the project area on the basis of the conservational management requirements compiled by the BEN.

***Csévharaszt project site:*** The forest management plan of this area has been prepared and officially signed by the Minister of Rural Development. The official decree which is an obligatory attachment to the plan according to the new Forestry Act has been issued by relevant SFS in October 2010.

The conservational treatment strategy is included in the forest management plan, the delineated management units had been shown in the overview map of management plan attached to MTR as Annex A2.

### *Action status*

On-going

### *Description of the progress during the reporting time*

We concentrate on forestry activity which is relevant to the Project's aims. Therefore the forest management plan will only be modified where necessary to the project.

#### Bócsa project site

The modification of the 10 year FMP had been finalized in 2010. Field works and GIS mapping were done by the staff of BEN. The compiled documentation, the GIS maps in digital format had been handed over to the Forest Planning Department of the SFS in order to have the most accurate and reliable data. On the basis of finished and future forestry works for changing the forest structure new forest units have been identified and labeled considering the project aims. Conservational strategies were discussed in details in the project are with the staff of Forest Planning Department and they were approved and included in the FMP according to the proposal. The FMP has been finalized on the Closing Meeting held in Szeged in the Office of the Forest Planning Department in May 2010. Overview map of the project area in the FMP is included in Annex A2, together with the descriptive sheets of relevant forest units.

#### Bodoglár project site:

The new 10 year FMP will be prepared in 2011 according to the new Forestry Act. It is necessary to modify certain forest unit borders and ranging on the basis of recent natural state and as a result of conservational forestry works.

Field works and GIS mapping is done by the staff of BEN. The GIS database is ready together with the maps showing exactly where the forthcoming works will be done. The whole documentation was discussed in details with Kefag (forest manager of the area) and SFS representatives on the field mission on 12 October 2010. The overview map is attached as Annex A2.

Most important issues are:

- Existing sandy grassland patches and areas designated for clear-cutting without future tree planting will be interconnected and identified as clearings. Borders of forestry units were changed, where necessary.
- In case the area designated for clear-cutting will be planted with native trees, like poplars and its future management is similar to the surrounding open forest units we proposed their merging, resulting again new forest unit borders.
- Ranging of the forest units concerning their primary use should be changed from economic to conservational in the new FMP.

#### Csévharaszt project site:

Finally, the forest management plan was officially signed by the Minister of Rural Development. The official decree which is an obligatory attachment to the plan according to the new Forestry Act has been issued by relevant SFS in October 2010. It is valid both in the Borókás TT, which part is managed by DINPD and on the areas where the forestry manager is the NEFAG Zrt. The issued decree annexed with the FMP creates the possibility of proper conservational management of the habitats in natural state (excluding Robinia and Pinus plantations) and the forcing back of invasive species. The borders of the forest management units are identical of those identified by us in our conservational strategy.

*Modifications is comparison to the proposal, justification of changes and delays*

### **A.3 – Plan of the forest nature trail**

#### *Proposed start and end of the action*

01/2008-09/2008

#### *Expected results*

A feasible construction plan for the nature trail is ready by 30 September 2008 after consultation with relevant staff.

#### *Achievements*

The final track of the nature trail had been identified after several field consultations. It can be found in the heart of the Bodoglár project area leading through natural habitats and black pine forests. Milkweed eradication and out-planted long-lasting pink individuals could also be observed along the trail. The relevant staff of particular project partners had been involved in the planning process.

The implementation of the nature trail could have started according to the plan after the vegetation period of 2009, since the property manager of the area is the beneficiary itself.

The plan deals with the sections of the nature trail where direct construction works were to be carried out. A total of 530 meters long board-walk had been established in two sections leading through and over natural sandy grassland habitats. The route itself winds along a former fire strip, which have been kept 'plant-free' by using discs at least twice annually to prevent surrounded forests from occasional fires. The first section of the board-walk ends on the highest point of a sand hill, where the contrast of the original habitat (sandy grassland with native poplars) and the non-indigenous black-pine plantations could be experienced. The second section cuts through natural grasslands, then steps are leading to the top of another sand hill with a view-point in the midst of abundant long-lasting pinks.

#### *Action status*

Completed

#### *Description of the progress during the reporting time*

#### *Modifications in comparison to the proposal, justification of changes and delays*

## C.1 – Artificial forest restructuring with indigenous species

### *Proposed start and end of the action*

10/2007-03/2010

### *Expected results*

As a result of action C1 approximately 70 ha forest area will be reconstructed according to the habitat demand of the *D. diutinus*. The canopy cover will be reduced from 100% to a maximum of 50%. Totally on 13,5 ha grassland area the non-indigenous tree stand will be eliminated. On the three project sites 455 ha interconnected potential habitat is to be created (see table below).

Project site	Tree cutting (ha)		Forest reconstructing (ha)	Interconnected potential habitat created with reduced forestry activity (ha)
	Forest area	Grassland area		
Bodoglár	44,0	0,0	44,0	160
Bócsa	17,0	2,0	17,0	100
Csévharaszt	8,5	11,5	8,5	195

These habitats will not, or just partly concerned by forestry use and will secure the ground to the long-term survival of the target species.

### *Achievements*

***Bodoglár project site:*** Thinning of black pine plantations carried out on a 27 hectare area in the first quarter of 2008.

Detailed maps were prepared for all forest units showing forthcoming forestry works to be carried out and agreed by forest managers and forest authority representatives. Maps identifying the plots of forthcoming native poplar tree plantings (2 ha in total) are ready and submitted to forest manager of the area in October 2010 for notification to Forest Authority.

***Bócsa project site:*** Cutting of invasive Robinia pseudo-acacia is contracted and completed on 13,5 hectare area by December 2009.

The disintegrator purchased from LIFE sources was used for chipping wood for the whole area with the supervision of a disintegrator handler employed by BEN.

***Csévharaszt project site:*** Forestry works implemented in 2008 and 2009 according to the technology determined by DINP experts. 28,5 ha of invasive trees have been treated (mostly Robinia with some Prunus and Ailanthus) and as a result 112 hectare area became invasive tree species free. On the place of former Robinia forests 0,8 ha was planted with native poplar trees.

### *Action status*

On-going

*Description of the progress during the reporting time*

Bodoglár project site:

A new Forestry Act had been approved by the Hungarian Parliament in 2009, which creates the possibility to increase the ratio of forests primarily dedicated to nature conservation. Compulsory forest management activities could significantly be reduced at these sites. Therefore, in the project area new forestry work methods could be implemented. Unlike the mere thinning of the 27 ha pine forest, which method was used to maintain the minimum tree coverage of 50 % within a particular forest unit, now the ‘clear-cutting’ of the non-indigenous black pine is also possible. Ranking of priority use of the area then could be changed to clearing from economical forest, where there is no obligation for forest renovation. As a result, the management level of these forest units will be minimized in the future and will be restricted to the annual clearing of shrubs and appearing invasive species. Clear cut of black pine forests in the northern part of the project area is essential to establish the adjacent, potential habitat network for long-lasting pinks. Precise delineation of the forestry works due in the forthcoming winter was done by September 2010 as a GIS database and maps and was agreed on the meeting with forestry representatives, KEFAG and SFS, on 12/10/2010.

The proposal can be summarized as below:

**Clear-cut of black pine to create clearings**

In forest units with relative low coverage, and on areas of utmost importance for the establishment of the *Dianthus diutinus* habitat network clear-cut of the forests will take place. In order to provide shade for the *Dianthus* individuals few rows of pines will be left standing:

1. Since we do not want to change drastically the micro-environment of the *Dianthus* individuals, that still survived in the marginal zones of the pine forest, we will leave some pine trees uncut to provide semi shadowed environment for the *Dianthus* plants. These row or few rows of trees will remain uncut along the margins of *Dianthus* living grounds to provide them shade in the scorching summer heat.
2. To improve the natural status and the habitat structure (perennial, open grasslands interspersed with *Crataegus* and *Populus* stands) of the forest units concerned, as the long-term goal of nature conservation, we plan to plant native poplar trees in spring 2011. In this case the shading effect of the remaining pine trees will also provide a better microclimate for the young poplars.

**Creating corridors and leaks in dense pine forest stands**

Inside the dense pine forests precious grassland patches survived or regenerated at certain places. In order to include them in the habitat network beneficial for the *Dianthus diutinus* small areas of pine forests (corridors, leaks) will be cut with an average extension of 0,1-0,3 ha.

Bócsa project site:

An additional 2,9 hectares of non-indigenous black locust forest has been cut in reporting period with permission from the SFS.

The disintegrator purchased in the frame of the project was operational and chipped wood material with the supervision of a handler employed by BEN. In the autumn of 2009 and 2010 the BEN employed 3 and 2 additional person for forestry works carried out by KNPD instead of signing a contract with an external company. Preliminary chemical treatments using the drill purchased from LIFE sources, shrub control and wood material chipping were/are the main tasks of the operators.

Cutting of Robinia was completed at the site on 2,9 hectares. Companies for implementation were selected on the basis of cost-efficient offers. Maps as Annex C1.

#### Csévharaszt project site:

The native poplar forests planted in two patches were kept weed-free using discs and hoes. The survival rate of the trees of the 0,5 ha forest established by pit-planting was 50 %, and an additional planting with 30 % trees will be done in November.

The technology applied was the same as described in details in the MTR.

#### *Modifications is comparison to the proposal, justification of changes and delays*

The new Forestry Act established the background to increase the ratio of conservational forests in Hungary. Since we want to increase the potential unbroken habitat network beneficial for the long-lasting pinks creation of clearings with reduced forestry activities in the future is one of the best options. According to new act there is no obligatory renovation of the clear-cut forest in case the area is protected, which is a crucial point for forest managers. Since the new act was approved in 2009, we could focus on mapping and database creation in spring and summer 2010. The arrangement of the tendering documentation is in progress, tendering of forestry works in Bodoglár will start this year, but actual forestry works could be started only in early 2011. Therefore we would like to continue with the proper implementation of this action and consecutive D2 action by the end of the project to have envisaged results achieved.

An additional 3 ha Robinia forest should be cut in the following winter to interconnect two larger grassland patches, hence the potential habitat for the long-lasting pinks could significantly increase being absolutely in line with the long-term goal of the project. Cutting of this particular forest part was not envisaged in proposal since the forestry management right of the area was handed over to DINPD only in 2010. Actual forestry works will be implemented in early 2011 after receiving official permissions.

## **C.2 – Install infrastructure to improve control of preserve zone**

### *Proposed start and end of the action*

01/2007-06/2007

### *Expected results*

Six gates will be installed at Bócsa project site by the end of June, 2007.

### *Achievements*

All six gates have been installed in spring 2008 for the protection of Bócsa project site. They were placed at illegal road junctions, where one way is going across the project area hence drivers could notice the gates in time and can continue their drive on the other road. Naturally all gates are situated inside the Natura 2000 site borders. They all were maintained in the reporting period as well, and the used light reflecting stickers were changed to avoid accidents. Since the gates could be opened with a uniform key specially made for the lock of the gates trespassing of unofficial persons became impossible. An additional fence was built around the vulnerable *Dianthus diutinus* population of Ásotthalom. The posts were donated by the local forestry company, the wire netting of the fence was provided by the beneficiary. The enclosure was made by volunteers hence no cost at all was budgeted to the project. The enclosure saved the lives of 233 *Dianthus diutinus* individuals from direct grazing of brown hares and roe deer in 2009 and 322 in 2010.

#### *Action status*

Completed

#### *Description of the progress during the reporting time*

The request to install four additional gates in the Bodoglár project site had been approved by the Commission in its letter dated 28/05/2010. KEFAG, the forestry company with property management rights concerning the forests in Bodoglár area, agreed on the installation of the additional gates, as a result of repetitive negotiations.

#### *Modifications in comparison to the proposal, justification of changes and delays*

The request to install four additional gates in the Bodoglár project site have been approved by the Commission in its letter dated 28/05/2010 in case there are sufficient funds available in the respective budget category. Unfortunately, since all incurred costs related to the construction of the nature trail had to be accounted in the budget category Durable – Infrastructure (including the external costs of implemented construction works as it was originally envisaged in proposal), these funds are no longer exists. As a result of negotiations with foresters we can state that the gates would be welcomed by them as well, since they are the property managers of the state-owned forests in Bodoglár area. Therefore, since a request for project budget modification should be submitted due to the above mentioned facts, as it was indicated in Commission's letter of 22/07/2010, the beneficiary proposes that all additional durable items should be included in the request for AC and in case of its approval the acquisition of the items can start. It also means that the request for AC should be submitted not later than February 2011, to have sufficient time for the acquisitions according to national and EU regulations.

In order to save the Csévharaszt bőtermő population counting of almost 6000 plants its fencing would be essential. The area is outside of the project area and belongs to the Local Municipality but they have no budget to cover the costs. Roads are surrounding the site from both directions however tracks of heavy machinery were seen in between them as well, across the *Dianthus* population. The costs of the timber and the working fee should be budgeted to the project, which shall not exceed 2000 Euros, in case of written approval by Commission.

### **C.3 – Construction of a nature trail**

#### *Proposed start and end of the action*

04/2009-12/2009

#### *Expected results*

The possibility to visit the site in such an organised way will reduce the chance of direct and unwanted trampling and demolition.

The number of visitors will reach 1000 people per year.

The practical nature conservation's concrete realization will present a positive example and a hopeful vision to the public.

#### *Achievements*

The public tendering for the construction works of the nature trail and for its building materials have been successfully completed in August 2009. Companies providing the best offers were selected and were contracted in October 2009. Soon after the construction of the nature trail had started and in spite of severe winter weather conditions of late December had been finished in time.

The almost one kilometre long nature trail consist a total of 530 meters long board-walk that had been established in two parts and a 350 meter long foot-path in between them leading through the pine forest and over the former fire strip. A watch-tower and a view point have been constructed at the end of the board-walk sections. The first section of planks cuts through the sand hill of the watchtower thus creating a semi-underground corridor with a height of 2,5 metres.

#### *Action status*

Completed

#### *Description of the progress during the reporting time*

Having selected the best offer for the construction of the nature trail the contract has been compiled and signed by both parties on 5 October 2009. Companies giving the best offers to provide the wood and metal materials needed for the construction of the nature trail has also been selected and contracted in October.

Construction works started in mid-October with field consultations with company representatives. A total of 530 meters long board-walk had been established in two sections leading through and over natural sandy grassland habitats. The route itself winds along a former fire strip, which had been kept 'plant-free' by using discs at least twice annually even few years ago to prevent surrounded forests from occasional fires. The first 450 m section of the board-walk ends on the highest point of a sand hill, where the contrast of the original habitat (sandy grassland with native poplars) and the non-indigenous black-pine plantations could be experienced. A watch-tower was built at this spot. From here the nature trail leads through the black pine plantation, which can give some shade in the heat of summer days, and joins in the fire strip. Then it continues on the second section of



planks that cuts through natural grasslands, then steps are leading to the top of another sand hill with a view-point in the midst of abundant long-lasting pinks.

*Modifications in comparison to the proposal, justification of changes and delays*

The total length of the wooden footpath is 530 m instead of the 300 m envisaged in proposal. Handrails were not constructed along the nature trail due to its relative small height (30-40 centimetres above ground level).

Although the semi underground corridor has been created the two panels introducing visitors with soil characteristics of the area have not been produced in reporting period due to unavailability of skilled person to do the task. They will be inserted in their wooden cabinets along the corridor by next April at the latest.

Due to the extreme rainy weather of 2010 spring and summer the roof of the corridor was leaking hence it has to be mended by next spring. In the meanwhile the wood columns are needed to be treated by some oils to prevent them from extreme weather conditions.

As it was described in details on the mission of 14/06/2010 all incurred costs related to the construction of the nature trail had to be accounted in the budget category Durable (Infrastructure) including the external costs of implemented construction works as it was originally envisaged in proposal. Therefore, a request for project budget modification should be submitted due to the above mentioned facts, as it was indicated in Commission's letter of 22/07/2010, not later than 3 months prior to the end of the project.

## **C.4 – Nursery for ex-situ propagation of *Dianthus diutinus***

*Proposed start and end of the action*

01/2006-12/2006

*Expected results*

The result of the action is a 576 m<sup>2</sup> nursery in the Botanic Garden of the University of Szeged available for growing and handling 15000 plants provided a safe site for the ex-situ propagation.

*Achievements*

The nursery is surrounded by fence and the surface for the growing pots is covered by geotextile. A shade is provided by the nets purchased.

*Action status*

Completed

*Description of the progress during the reporting time*

The worn off parts of the nursery have been changed. New nets and geotextile have been purchased, the leaking parts of the watering system had been changed. The new chambers

and greenhouses constructed from other sources in the Fűvészkert were home for the seedlings and young plants in early 2010, as it could be experienced on mission 14/06/2010. This was a win to win situation since the plants in the nursery with worn off state probably would not have survived the extreme wet weather conditions of 2010 with downpours. They have been put out to the nursery prior to their out-planting.

*Modifications in comparison to the proposal, justification of changes and delay*

## D.1 – Eradication of non-indigenous *Asclepias syriaca*

### *Proposed start and end of the action*

06/2007-08/2010

### *Expected results*

Clear away the whole stand of *Asclepias syriaca* from the infected areas.

Project site	Bodoglár	Bócsa	Csévharaszt
Infected area estimated in the project documentation (ha)	16	20	17

### *Achievements*

Public tender was done for all project sites in order to contract for the external assistance. Elaboration of the detailed working protocol and daily working routine of the contractor based on the *Asclepias syriaca* monitoring results (Action F4, F5), but the daily routine was largely dependent on the actual weather conditions.

Second year chemical handling was completed in Kiskunmajsa-Bodoglár and Bócsa project areas. Third year and fourth years' repetitive treatments were made at all project sites.

### *Action status*

On-going

### *Description of the progress during the reporting time*

#### Bócsa and Bodoglár sites:

Precise GPS data of the infected areas were collected in late April and May 2010. Results show that at Bócsa project site 4 ha was infected with *A.syriaca* compared to the 2,8 ha of 2009. This slight increase is probably due to the high precipitation level of 2010. The infected area have further decreased at Bodoglár project site from 13,3 ha of 2009 to 11,6 ha of 2010 due to repetitive handling. However, density of certain patches has increased with increased germination of seeds already in the soil for years. Although the trend is positive, further treatments are necessary for high-percentage eradication of the invasive species by the end of project period. Maps and tables Annex D1.

Chemical treatment was carried out in Bócsa and Bodoglár sites three times in 2010 by a selected company providing the best offer for *Asclepias* and *Ailanthus* eradication.

#### Csévharaszt project site:

NEFAG treated *Asclepias* similarly to previous years. Spraying with Medallon was done three times in May, June and August in 2010. *Asclepias* occurs in Csévharaszt in scattered, smaller patches inside the indigenous vegetation. Outside the NRA altogether 1,2 ha of *Asclepias* was treated in 2010. Inside the NRA 1,5 ha area was treated by Pannonpark Kft.

in 2010. Since probably due to the weather conditions *Asclepias* appeared in the marginal parts of project area, these intruders have also been treated by chemicals.

*Modifications in comparison to the proposal, justification of changes and delays*

## **D.2 – Follow-up treatment of arboreal invasives: *Robinia pseudoacacia*, *Ailanthus altissima*, *Prunus serotina***

*Proposed start and end of the action*

07/2007-03/2011

*Expected results*

On the whole territory the forest reconstruction and the grassland restoration activities regarding arboreal invasives will be completed. On the whole project territory the reconstruction of approximately 46, 5 ha area will be completed by the follow-up treatments of arboreal invasives, according to the following data:

Project site	Area (ha)
Bodoglár	2,0
Bócsa	17,5
Csévharaszt	27,0

*Achievements*

At areas where D.2 action occurs most efficient treatment methods were selected, and chemicals to be used for the treatments were identified for different arboreal invasive species (*Robinia pseudo-acacia*, *Ailanthus altissima*, *Prunus serotina*).

10,6 ha was treated once mechanically in September 2009 in Bócsa site. In 2010 altogether 14,5 ha received both mechanical and chemical treatments.

Altogether 3,86 ha *Ailanthus* was treated in Bócsa and Bodoglár project sites in 2010.

At Csévharaszt mechanical and chemical treatment of *Robinia* stands with sprouts have started according to schedule in 2008. The estimated area where post-treatments were done in 2010 is around 30 ha, including the 1,5 ha *Ailanthus* stands.

*Action status*

On-going

*Description of the progress during the reporting time*

Bodoglár project site: The 3,27 ha *Ailanthus* was treated with chemicals. Large trees with a trunk diameter exceeding 6 centimeter were drilled and the chemicals were injected into the tree. Leaves usually have been dropped a week after. The treatments were implemented in August 2010 by external assistance. Maps and photos Annex D2.

Bócsa project site: The 10,6 hectare clear cut Robinia forest have raised sprouts in 2010 again. Sprouting of the 2,9 ha Robinia cut in December 2009 also have been experienced in spite of previous chemical handling. Their extension was largely dependent on the efficiency of preventive chemical treatment. Sprouts were much smaller and fewer at the latter area compared to control areas. The mechanical treatment of the sprouts was done on a 14,5 ha area twice in 2010 followed by a third chemical treatment in September. The dried off stems were cut off as well.

The 0,6 ha Ailanthus occurs in Bócsa was treated similarly to the Bodoglár stands by the same company in August 2010.

Csévharaszt project site:

Robinia sprouts were cut down to ground level similarly to previous years. Mechanical handling was executed once, and was followed by two chemical handlings in 2010.

The total work area where stands of arboreal invasives were found and treated is 112 ha. The estimated area covered with sprouts reaches 30 ha, including the 1,5 ha Ailanthus.

*Modifications is comparison to the proposal, justification of changes and delays*

### **D.3 – Ex situ propagation and re-establishment of *Dianthus diutinus***

*Proposed start and end of the action*

09/2006-08/2011

*Expected results*

The result of this action will be approximately 15 000 newly out-planted *Dianthus diutinus* individuals of different age with the appropriate genetic diversity and reproductive capacity. These plants make the existing small population fragments into large units to assure the successful survival of *Dianthus diutinus*.

*Achievements*

Seed collection took place in 2008, 2009 and 2010.

The raising and investigation of the plants in the nursery is continuous.

16255 ex-situ raised plants have been already out-planted to all project sites.

Samples for soil seed bank investigations have been collected and are being investigated.

*Action status*

On-going

*Description of the progress during the reporting time*

6600 seeds from Bodoglár, 3600 seeds from Bócsa and 600 seeds from Csévharaszt sites have been sown in February 2010 into trays similarly to the previous years. Young plants were raised in the light-chamber of the Fűvészkert until their 5 leaves stage, then they were relocated to the breeding house in pots. The germination rate was 70%, and most of the

plants survived by August, when they have been translocated again, this time to the open-air nursery to facilitate adaptation to the ‘natural circumstances’.

9994 individuals were out-planted in reporting period at all three project sites. Since the individuals planted out in spring have survived in relatively small numbers due to extreme spring draught of 2009 the best time for out-planting was determined as mid-autumn, greatly dependent on the actual weather conditions. In 2009 October and November were both ideal to do the job, and the same can be told for the year 2010. This year there are still few hundred plants in the nursery, so the action has not been finished yet. Exact locations and numbers out-planted per site can be found under Annex D3.

#### **Out-planted individuals per project sites in reporting period**

	<b>Bodoglár</b>	<b>Bócsa</b>	<b>Csévharaszt</b>	<b>Total</b>
<b>2009 autumn</b>	1510	759	735	
<b>2010 autumn</b>	3851	2574	565	
<b>Total</b>	5361	3333	1300	<b>9994</b>

Appropriate populations were marked out for seed collection at all project sites then the necessary quantity of seeds was collected. Seed collection was done at two different time intervals in 2010.

Additional genetic investigations have been carried out with 10 primers, since samples from different project areas were more heterogeneous than expected. As a result of the new method, sample individuals showing typical pattern have shown different patterns. The procession of the data obtained is in progress.

#### *Modifications in comparison to the proposal, justification of changes and delays*

Due to the relative low survival rate experienced with plants out-planted in spring 2009, after consultation within the project team, it had been decided that young plants will be out-planted again in the spring of 2011. Hence we can reach the target envisaged in proposal taking into consideration the number of individuals survived in the wild. The out-planting will take place at all project sites presumably in April 2010. Personal needed for the proper implementation is contracted by SZTE.

## **E.1 – Foresters informed and included**

### *Proposed start and end of the action*

10/2006-08/2011

### *Expected results*

There will be 5 meetings at all projects sites until 2011  
1000 pieces of stickers will be produced and distributed among target groups  
300 pieces of badges will be produced in 2006

### *Achievements*

The KEFAG Zrt. property manager of Bodoglár site organized a national meeting for foresters on 22<sup>nd</sup> July 2007 with the participation of project team (Annex 55). (<http://www.kefag.hu/vandorgyules/index.html> See: Program 7th) Forest parts involved in the forest restructuring have been visited and applied management method discussed.

A special meeting was organized at Bodoglár project area on 15<sup>th</sup> January 2008 prior to actual forestry works. The third meeting with foresters was organized on 12/12/2008 at Csévharaszt. The fourth meeting was organized in Kecskemét on 12 February 2010, the fifth meeting was held in Bodoglár on 12 October 2010.

Regular meetings have been held with local foresters in order to implement forest activities properly from conservation point of view.

Stickers have been produced and disseminated at organized meetings.

### *Action status*

On-going

### *Description of the progress during the reporting time*

The 4<sup>th</sup> meeting with foresters was held in Kecskemét at the headquarters of the SFS. Conservational management of Bócsa and Bodoglár sites had been discussed together with forest managers. Attendants were also informed about the forest management planning schedule of the SFS in line with new Forestry Act.

The 5<sup>th</sup> meeting with foresters was held in Kiskunmajsa on 12/10/2010 and followed by a field trip to the Bodoglár site. Representatives of the SFS, Kefag and BEN were present. Conservational strategy of Bodoglár site had been discussed, maps and tables arranged by national park staff were handed over and served as the basis of discussions on the forthcoming forestry works in the site.

Two designs were selected for the stickers from 50 photos of the plants and its habitats. Naturally both the LIFE and Nature2000 logos appeared on the stickers.

### *Modifications in comparison to the proposal, justification of changes and delays*

## **E.2 – Locals informed and included**

### *Proposed start and end of the action*

10/2006-08/2011

### *Expected results*

- 15000 pcs of leaflets for Kiskunság project sites in Hungarian
- 4000 pcs of leaflets for Kiskunság project sites in English and German
- 10000 pcs of leaflets for Csévharaszt project site
- 200 boxes of puzzles
- plant picture appear on the back of 25000 spa tickets
- 100 pcs of fridge magnet.

### *Achievements*

3000 pieces of leaflets have been printed out on the Kiskunság project sites in Hungarian, and 1000 pieces issued both in English and German languages.

12000 pieces of leaflets for Csévharaszt were produced as well as 1000 pieces of folders with the plant picture and all relevant logos.

10000 pieces of SPA tickets were issued with the plant picture.

The design of the fridge magnet has already been started.

Three public events in Csévharaszt, two in Bodoglár project site in 2008 and 2009 were organized and dissemination of project products was done and the project was introduced to locals at all venues.

An Ombudsman Meeting was held at Ócsa Military Base in the organization of Infrastructural Agency of Ministry of Defence on 12/09/2008 aiming to introduce the connection between nature conservation and military training for the Ombudsmen and the Minister. DINPD presented a photo exhibition and a special exhibition tent while the director of the national park held a short lecture and underlined the importance of natural values found in the training area including *Dianthus diutinus*.

### *Action status*

On-going

### *Description of the progress during the reporting time*

The exhibition organized by LIFE project STEPPICOAKS and held in Nagykörös had *Dianthus diutinus* images shown as photographs and poster, since the species is present, although in small numbers, at one of the most popular excursion site of the locals.

The fridge magnet was produced and disseminated in recent reporting period. It was very popular and the 100 pieces were not enough. We would like to produce another 200 pieces in case Commission agrees.

Leaflets, folders and posters have been disseminated at all public events respectively.

### *Modifications is comparison to the proposal, justification of changes and delays*



### E.3 – Installing information boards

*Proposed start and end of the action*

04/2008-09/2008

*Expected results*

Kiskunmajsa-Bodoglár	6 information boards maintained by KVÖ
Bócsa	3 information boards maintained by KNP
Csévharaszt	3 information boards maintained by DINP
Botanic Garden Szeged	1 information boards maintained by SZTE
Kiskunmajsa town	2 information boards maintained by KVÖ

*Achievements*

3 information boards made and installed at Csévharaszt project site  
 3 information boards designed and installed at Bócsa project site  
 2 information boards made and installed for Kiskunmajsa town  
 5 information boards made and installed at Bodoglár project site  
 1 information board made and installed for Botanical Garden of SZTE

*Action status*

On-going

*Description of the progress during the reporting time*

4 boards as part of the nature trail for Bodoglár project site and 2 boards for Kiskunmajsa were designed and installed in recent reporting period.  
 All information boards are maintained properly and the wooden frames are handled with natural oils and preservatives every year.

*Modifications is comparison to the proposal, justification of changes and delays*

### E.4 – Project web site

*Proposed start and end of the action*

01/2007-08/2011

*Expected results*

An up-to-date web site informing the broad public about the project will be created by September, 2007. It will help networking with similar plant conservation projects, and disseminate information on project results.

We expect 10 000 visitors to the website over the project period.

#### *Achievements*

The website is operating and regularly updated in Hungarian language.

#### *Action status*

On-going

#### *Description of the progress during the reporting time*

The website is regularly updated with a direct link to all dissemination products (leaflets, conference posters and TV interviews).

Invitation on the events organized in the framework of LIFE-Nature project is also appear on the website, thus informing the general public.

#### *Modifications is comparison to the proposal, justification of changes and delays*

## **E.5 – General project branding and awareness raising**

#### *Proposed start and end of the action*

10/2006-08/2011

#### *Expected results*

- 2 background materials
- 1,000 pcs posters
- 1000 pcs DVDs
- exhibition of 50 pcs photos
- 2500 pcs postcards
- 2 press conferences and 5 press releases
- 20 articles

#### *Achievements*

The start-up press conference was organized in the House of Nature in Kecskemét.

Posters were designed and printed in 1000 pieces in March 2009.

Film makers have been selected and the production of project film has started in 2008.

Five interviews on the LIFE project were made and broadcasted on local television channels, the latest was informing about project mission of 12/03/2009.

Seven articles were published in local newspapers called Halasi-Tükör and Csévharaszi Hírharang and in regional daily newspaper Petőfi Népe. Two additional articles were published in Cincér and Két víz köze periodicals of the DINP and KNP.

30 photos were chosen for the exhibition.

*Action status*

On-going

*Description of the progress during the reporting time*

There was a children's drawings competition in spring 2010. Best works have been selected and prized with books on illustrated plant guides. *Dianthus* plants and its habitat appeared on best works. They will be printed on postcards and shown among the photos of the exhibition.

The posters produced in 2009 together with leaflets have been disseminated in public schools and Tourinform agencies of the region.

The production of the project film continued and the first version has already been cut and was shown for project partners.

Two articles were published in recent reporting period in local newspapers. A radio interview was recorded in the studio of Kiskunmajsa Radio in October 2010.

The two background materials are also designed in recent reporting period by professional designer.

The local government of Kiskunmajsa town has contracted a tourist guide for 3,5 months in July to introduce visitors to the natural heritage along the study trail in Bodoglár. Her main tasks were to provide information to visitors, to promote the possibility of study tour to local schools and kindergartens, as well as to tourists visiting the area. She also actively took part in the dissemination of products made in the frame of the project (posters, leaflets, fridge magnets, stickers).

*Modifications is comparison to the proposal, justification of changes and delays*

## **E.6 – Disseminate scientific and management lessons**

*Proposed start and end of the action*

04/2007-08/2011

*Expected results*

- 5 scientific articles
- Presentations are held at least ten times on workshops and conferences
- Direct networking with other LIFE projects on conferences

*Achievements*

Results of the project have been presented on **7 scientific events** both in Hungary and abroad:

- Participation on the 8th National Conference on Actual Flora- and Vegetation Research in the Carpathian basin with two poster presentation.
- Poster presentation: 2nd World Scientific Congress – Challenges in Botanical Research and Climate Change.

- GISDATA International Users Conference 2008. Opatija, Croatia – Poster presentation on the conference titled 'Cooperation, as the key of sustainable development'.
- Participation on the Biannual (2008) Conference of Hungarian Nature Conservationists Society at Nyíregyháza organized by The Parliament Environmental Committee, Hungarian Nature Conservationists Society with poster presentation.
- Participation on the Botanical (2009) Conference organized by Szent István University, Gödöllő with a poster on Pollen and seed production of a *Dianthus diutinus* population.
- Participation on the 2<sup>nd</sup> European Congress of Conservation Biology 'Conservation biology and beyond: from science to practice' with poster presentation titled Studies on temporal changes in several reproductive traits in an ex situ population of *Dianthus diutinus* Kit. In Prague in May, 2009.
- Oral presentation: Conservation of the Pannon endemic *Dianthus diutinus* Kit. with ex situ and in situ methods on the „Botanic gardens in the age of climate change” EuroGard V Congress, Finland, pp. 70.

The **first scientific article** has been submitted to the periodical Biodiversity and Conservation.

#### *Action status*

On-going

#### *Description of the progress during the reporting time*

Collected data is processed and writing of second scientific article has been started in October 2010.

Workshops and conferences will be attended in the last year of the project.

*Modifications is comparison to the proposal, justification of changes and delays*

We have already reported in MTR, that the printer of the SZTE has gone wrong hence they would like to purchase a new colour printer from LIFE sources. It would be used for LIFE purposes, compiling and printing reports, scanning essential documents needed for technical and financial reporting and most importantly producing scientific papers in appropriate quality. The total cost of the equipment would be around 750 Euro, which will be budgeted under durable cost equipment category in case of written approval of purchase by Commission.

## **E.7 – Production of layman’s report**

#### *Proposed start and end of the action*

04/2011 – 08/2011

#### *Expected results*

- 2000 copies of layman’s report in Hungarian and English languages

- A comprehensive publication informing the general public on the objectives, aims, and lessons of the project and species conservation.
- Increased awareness towards the subendemic plant species *Dianthus diutinus*, its habitats and its threatening factors.

*Achievements*

*Action status*

Not started

*Description of the progress during the reporting time*

*Modifications is comparison to the proposal, justification of changes and delays*

## **F.1 – Project management, technical and financial monitoring**

### *Proposed start and end of the action*

09/2006 – 08/2011

### *Expected results*

Technical, financial and administrative arrangements are in place to enable the proper running of the Project. All Project staff is appointed and aware of their roles and obligations for completing the Project. High quality technical reports will be prepared and submitted on time.

All the activities described in this application will be implemented on time and within budget.

### *Achievements*

Technical, financial and administrative arrangements were done to enable the proper running of the Project. Partnership agreement is prepared and signed. All Project staff is appointed and aware of their roles and obligations for completing the Project.

Regular reports from project partners make possible the administrative and financial monitoring.

The beneficiary submitted an official request on 09 July 2008 concerning the use of a floating exchange rate since the HUF/EURO exchange rate decreased significantly with more than 10% since 1<sup>st</sup> pre-financing payment. The Commission approved our request in its answer of 28 July 2008.

### *Action status*

On-going

### *Description of the progress during the reporting time*

A guide for introducing visitors to the natural heritage along the study trail in Bodoglár was employed between July and October 2010. Her main tasks were to provide information to visitors, to promote the possibility of study tour to local schools and kindergartens, as well as to tourists visiting the area. She also actively took part in the dissemination of products made in the frame of the project (posters, leaflets, fridge magnets, stickers).

The beneficiary and its partners maintain up-to-date book-keeping systems which conform to the national law and regulation and can clearly identify the expenditures and incomes related to the project. The beneficiary applies different codes for the EU contribution, the co-financer's contribution and its own contribution in its books-keeping.

Mr Jan Sliva in the representation of External Monitoring Team visited our project on 14/06/2010. Ex-situ conservation measures applied for the species have been demonstrated by project partner SZTE in Szeged, followed by lectures and a field trip to Bodoglár project site.

### *Modifications is comparison to the proposal, justification of changes and delays*

For the proper operation of the purchased disintegrator the personal contract was renewed and costs budgeted under personnel costs for the handler, Mr Téli Sándor. Certain monitoring tasks have been contracted until the end of project with , monitoring expert Mr. Gál Attila. Monitoring activities were finished in the last days of October, afterwards field arrangements for forthcoming forestry works were identified as his task.

## **F.2 – Hold technical meetings**

### *Proposed start and end of the action*

09/2006-08/2011

### *Expected results*

Scheduled meetings will be held with good attendance and on time (7 times in the whole project period), which will help to secure the high priority of the project work for project staff and authorities.

### *Achievements*

Altogether six technical meetings have been held with good attendance. The sixth technical meeting was held in recent reporting period (13 October, 2010).

### *Action status*

On-going

### *Description of the progress during the reporting time*

The 6th technical meeting was held on 13 October 2010 in the House of Nature in Kecskemét. The actuality of the event was out-planting. Results from previous years have been demonstrated on power point presentations followed by discussions. Potential localities for the out-planting have also been discussed and delineated on maps of all three project areas.

### *Modifications is comparison to the proposal, justification of changes and delays*

## **F.3 – Independent financial auditing**

### *Proposed start and end of the action*

10/2006-08/2011

### *Expected results*

The auditor will be appointed until the end of 2006. The financial revision of the project will be carried out by an independent auditor, whose audit report will be part of the final report.

### *Achievements*

Auditor is appointed and an official contract was signed on 15/08/2007. The first partial audit had been carried out covering project activities by 31/12/2008. In the meantime the VAT of almost all services (including audit) has been changed from 20 % to 25 % from the 1<sup>st</sup> July 2009, hence the contract had to be modified respectively. The second partial audit had also been carried out covering project activities and incurred costs by 31/12/2009.

### **Details of the auditor:**

**Name:** Kolbe Könyvvizsgáló Kft.  
**Address:** 1137 Budapest, Szent István park 14.  
**Tax number:** 10807891-2-41

### *Action status*

On-going

### *Description of the progress during the reporting time*

Similarly to previous years, the incurred costs and financial administration of different project partners have been checked by the auditor according to audit protocol at the premises of the beneficiary with the help of project staff. In recent reporting period the second partial audit has been carried out by the independent auditor, who audited the incurred project costs by 31/12/2009.

### *Modifications is comparison to the proposal, justification of changes and delays*

## **F.4 – Monitoring**

### *Proposed start and end of the action*

09/2006-08/2011

### *Expected results*

This action will produce results after the data are analyzed under F.5 about the following:

- Distribution area
- Permanent square sample plots



Monitoring results will summarize the impact of the concrete project actions on the species and its habitat:

- Regeneration process of the reconstructed and restored areas (action C1, D1, D2)
- Results of the ex situ conservation (action C4, D3)
- Stopped further fragmentation of the populations (C2)

### *Achievements*

#### NBmR local project:

Based on the protocol of the monitoring, that has been going on since 1998 we prepared a point map of the individual plants of *Dianthus diutinus* in all the three fixed, 10x10 m quadrates (both divided into 33x33 cm microquadrates).

The number of sprigs, the size (on a 1-3 scale), the vitality of the plant, and the number of healthy/injured capsules, flowers and buds as well, had been registered for all of the individuals.

The three plots, differing from each other by the habitat conditions:

- A.) intact natural open grassland vegetation
- B.) edge of native poplar grove
- C.) edge of *Pinus nigra* plantation.

#### Field monitoring on the population changes of *Dianthus diutinus*:

Similarly to the previous years of the project (2007, 2008), in accordance with the protocol in 2009 the population of *Dianthus diutinus* was fully surveyed. Field work began in May and lasted until the end of September.

BEN colleagues were lucky to find a new, huge population of *Dianthus diutinus* in the vicinity of Nemesnádudvar, South-Hungary. There have been no previous data available about this isolated population counting 10495 individuals in 2009. This number is huge and the whole population can be found in a relatively small (1 ha) area. This newly explored population had largely contributed to the **significant increase of long-lasting pink individuals from 22.840 in 2008 to 46.460 in 2009.**

Another, however much smaller population was found in 2009 in the vicinity of Pusztavacs counting 15 long-lasting pink individuals.

#### Monitoring of the regeneration of the vegetation:

In accordance with the protocol all 50x50 m quadrates assigned were surveyed on the sites of forest reconstruction and on the site of milkweed eradication as well (Action C1, D2).

In the case of the Bodoglár project area forestry interventions took place before the 2008 surveys, therefore considerable changes were detected in the composition of the vegetation.

#### Monitoring of the effect of the eradication on the invasive alien species Common milkweed.

Due to the extreme rainy weather of 2010 the areas of infected patches were increased at all project sites.

### *Action status*

On-going

*Description of the progress during the reporting time*

#### Csévharaszt project site:

In the area of the Duna-Ipoly National Park Directorate the survey of *Dianthus diutinus* populations at Csévharaszt, Ócsa and Nagykőrös was carried out in the same way as in previous years, by using high accuracy GPS. In November 2009 a new populations of *Dianthus diutinus* have been found in the surroundings of Pusztavacs.

The monitoring of the vegetation with András Kun has been continued in 2010 and the 3rd recording of the 7 habitat-management and the 3 biodiversity monitoring quadrates were made by using the same protocol as in the Nagykőrös Steppe Oakwoods (HUNSTEPPICOAKS) Life programme. Therefore the 2<sup>nd</sup> recording following the interventions were made, the list of plants increased. Monitoring of certain insect groups have also been carried out in the area (Lepidoptera, Curculionidae).

The GPS system purchased in the beginning of the project by the BEN for precise monitoring of *Dianthus diutinus* individuals have gone wrong in reporting period. It had to be sent out to Germany to find the problem with the equipment, since there is no company which deals with problem detection of the GPS brand in Hungary. It turned out that the main-board of the GPS have gone wrong hence it had to be changed to a new one. Mending the equipment was the most cost-efficient way to have a proper GPS ready to work, since the incurred costs of fixation were much cheaper compared to the purchase of a new similar GPS system.

*Modifications is comparison to the proposal, justification of changes and delays*

## **F.5 – Analysis and reporting of monitoring results**

### *Proposed start and end of the action*

10/2006-08/2011

### *Expected results*

Monitoring protocol is ready and available for all project partners to standardize data collection.

All monitoring information gained during action F.4 is stored and available in a GIS database.

### *Achievements*

All monitoring activity and data handling is going according to the Monitoring protocol's instructions.

GPS records are saved and handled in GIS database.

Data collection for the year 2008, 2009 and 2010 have been finished, data process is I progress.

### *Action status*

On-going

### *Description of the progress during the reporting time*

#### NBmR local project

At sample area I counts in 2010 revealed higher numbers (82 individuals) compared to those of 2009 with relative peak individual numbers of the last few years. It is probably due to the rainy weather of 2010, however besides weather conditions other factors also influence *Dianthus* populations like the quantity of litter of poplar trees, stronger concurrence of grass, phytophag insects.

At sample area II continuous decrease of the population was characteristic until the year 2007. In 2008 and 2009 the number of individuals was increasing due to rainy spring and in 2009 a new plant also have appeared (10 individuals total). In 2010 there were only 3 *Dianthus* plants, which is a negative record. Among the reasons of this decline the high density of grazing wild animals and complete lack of shading trees could be identified.

At sample area III the population have decreased and 51 plants were counted in 2010. Although earlier the shading effect of growing pine trees was beneficial for the *Dianthus*, by 2010 the trees grown so much, that almost  $\frac{3}{4}$  of the sample area is covered by dense pine canopy and piles of dry needles cover the ground beneath. Here the *Dianthus* population has decreased, while grass species characteristic of the habitat had also disappeared.

#### Field monitoring on the population changes of *Dianthus diutinus* (Annex F5)

Due to weather conditions of 2010 with relative high precipitation the **number of long-lasting pink individuals** significantly increased again from **46.460 in 2009 to 58.307 in 2010**.

Monitoring revealed greater numbers in almost all subpopulations, hence by 2010 a significant increase has been experienced as it can be seen in the following table.

Site	2007	2008	2009	2010
Ásotthalom	101	103	233	228
Bodoglár	5 007	8 590	12 906	16 928
Bócsa	1 753	1 845	3 791	5 710
Csévharaszt TT	1 500	1 138	1 782	1 744
Csévharaszt belterület	1 769	1 353	5 803	5 900
Harkakötöny	7 255	8 483	9 036	10 080
Nagykőrös, Strázsa-hegy	90	68	25	31
Nagykőrös, Száraz-dűlő	1 046	704	988	1 196
Ócsa-Üllő katonai lőtér	508	556	1 386	1 156
Nemesnádudvar*	-	-	10 495	15 262
Pusztavacs*	-	-	15	72
<b>Total</b>	<b>19 029</b>	<b>22 840</b>	<b>46 460</b>	<b>58 307</b>

\* Previously unknown populations found in 2009

All wild plants were counted in the vegetation period by monitoring expert contracted by BEN and financed from LIFE sources. His work was also helped by permanent staff of national parks. As it can be seen from the table the numbers of *Dianthus* individuals are continuously growing, and naturally the time needed for proper counting increased as well,

hence field works have been finished only by late October in 2010. The report for 2010 is compiled and can be seen as Annex F5.

#### Monitoring of the regeneration of the vegetation (Annex F5)

##### *Bodoglár, eradication of Common milkweed:*

There have not been significant changes experienced in the grassland quadrates compared to 2009. Similarly to previous years, the applied herbicide caused only few grass damage. The extension of the area covered by weed has been further decreased, native species characteristic of grasslands have also appeared. The coverage of Common milkweed is reduced, no living individual was found in the course of monitoring.

##### *Bodoglár, forest reconstruction:*

There have not been significant changes experienced compared to 2009. The extension of the litter covered area is decreasing continuously, hence results the growth of open surfaces, since the vegetation of sandy grassland can not regenerate that fast. Coverage of weed species (*Setaria viridis*, *Chenopodium album*, etc.) together with pioneers (*Corispermum nitidum*) decreased, species occupying open surfaces are present in natural grasslands, like *Euphorbia seguieriana*, *Centaurea arenaria*, *Festuca vaginata*.

##### *Bócsa, eradication of Common milkweed:*

In the area of quadrate I occurrence of milkweed was reduced to zero and no living individuals were found in the field. The coverage of *Robinia* reduced to zero in the shrub level, while the size of the area where shoots appeared has decreased again. *Calamagrostis epigeios* dominates the area of former *Robinia* stands (narrow stripe of the quadrate).

In quadrate II, where eradication of the dense stock of milkweed has seriously worn down the grass stock, the regeneration was spectacular in the rainy year of 2010. Although *Bromus* species are still abundant, their coverage has been reduced slightly, while moss and lichen coverage significantly increased together with those of *Euphorbia seguieriana*, *E. cyparissias*, *Artemisia campestris*, *Potentilla arenaria*. The numbers of *Festuca vaginata*, *Stipa capillata* and *Alkanna tinctoria* also have slightly increased. Among the pioneers the extension of *Polygonum arenarium* increased significantly. Although *Erigeron canadensis* and *Setaria viridis* are still present, their numbers have been decreased.

##### *Bócsa, forest-reconstruction:*

The withdrawal of *Chenopodium album* and *Amaranthus retroflexus* could be experienced in both quadrates, while they were replaced by *Erigeron canadensis* with a coverage of 20-25 % in 2010.

In quadrate one the coverage of *Ligustrum vulgare* and *Rubus caesius* has significantly increased.

#### Monitoring of the effect of the eradication on the invasive alien species Common milkweed.

The vegetation period of 2010 was rich in precipitation. As a result the *Asclepias syriaca* infected area and the coverage both were increased compared to 2009 at all project sites in spite of repetitive chemical management of previous years.

*Modifications in comparison to the proposal, justification of changes and delays*

The project ends in August 2011, hence monitoring activities together with reporting and analysis have to be finished by that time. Taking into consideration the increased number of plants to be counted and the decreased timeframe available it is very probable that a monitoring assistant will need to be contracted by BEN, whose costs would be budgeted as personal and financed from EU sources. This way correct analysis of records will be made possible and the quality of work would not be deteriorated.

**F.6 – Production of an after-LIFE conservation plan***Proposed start and end of the action*

07/2007-08/2011

*Expected results*

An after-LIFE conservation plan will be produced and will be supplemented with the final report to guarantee long term conservation efforts and the continuation of recent programme.

*Achievements**Action status*

Not started

*Modifications in comparison to the proposal, justification of changes and delays*

