



**LIFE09NAT/LT/00581**

**Progress Report**

**Covering the project activities from 01-10-2012 to 01-11-2013**

Reporting Date

**01/12/2013**

**ECONAT**

**Development of Pilot Ecological Network through Nature  
Frame Areas in Southern Lithuania**

Data Project

<b>Project location</b>	Lithuania: Alytus, Lazdijai, Varena districts
<b>Project start date:</b>	01-10-2010
<b>Project end date:</b>	30-09-2014
<b>Total budget</b>	€ 766 260
<b>EC contribution:</b>	€ 381 150
<b>(%) of eligible costs</b>	49.79

Data Beneficiary

<b>Name Beneficiary</b>	Lithuanian Fund for Nature
<b>Contact person</b>	Ms Dalia Bastyte
<b>Postal address</b>	Algirdo g. 22-3, LT-03218 Vilnius
<b>Telephone</b>	+370 5 2310700
<b>Fax:</b>	+370 5 2310441
<b>E-mail</b>	Dalia.b@glis.lt
<b>Project Website</b>	<a href="http://www.glis.lt/ekotinklas">www.glis.lt/ekotinklas</a>

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## 2. List of key-words and abbreviations

LFN – Lithuanian Fund for Nature  
LZS – Lithuanian Zoological garden  
AC – Amphi Consult  
DNP – Dzukija National Park  
VRP – Veisiejai Regional Park  
MRP – Meteliai Regional Park  
MoE – Ministry of Environment  
RED – Regional Environmental Department  
CB- coordinating beneficiary  
AB – Associated beneficiary  
E.o. – European pond turtle (*Emys orbicularis*)  
Target species - all species foreseen in the project  
H.a. – tree frog *Hyla arborea*  
B.b. – fire-bellied toad *Bombina bombina*  
P.f.- The common spadefoot *Pelobates fuscus*  
B.c - Natterjack toad *Bufo calamita*  
B.v - European green toad *Bufo viridis*  
R.a. - Moor frog *Rana arvalis*  
R.l. - Pool frog *Rana lessonae*  
L.a. - Sand lizard *Lacerta agilis*  
EPMA - The Environment Projects Management Agency

### 3. Executive summary

#### 3.1. General progress

The project has achieved a remarkable progress in the period from the beginning to the Progress Report. Majority of actions have significantly progressed, having finished major action A1 development of action plan including all the related field works, having finished other preparatory actions, e.g. A2 turtle rearing methods created; criteria for favourable conservation status developed (A3); methodology for creation of ecological network developed (A4); establishment of Natura 2000 progressed (A5); and foreseen number of permissions (A6) reached; 1 farm installed (A7); remarkable number of ponds and Eo egg laying sites under action C1 action created and ponds under action C2 restored, more than half of the foreseen dams under C3 installed; sand pit restoration started (C4); egg laying sites protected against predators and eggs in most unfavourable places collected and successfully reared ex-situ C5; major awareness raising and educational activities D1, D2, D3, D4, D6 and networking with other projects E4 implemented and results achieved; project management having in place E1 and monitoring of projects effects implemented E2.

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

Overall aim of the project is to create an ecological network in Southern Lithuania by ensuring favourable conservation status for and the saving of threatened populations of selected Annex II and Annex IV species and simultaneously enhancing the ecological value of the target area. We are on the right direction towards this aim which must be achieved by the end of the project.

Project objectives are:

**To secure the long-term viability of Annex II and Annex IV species populations**

Pond creation and restoration is already implemented by 63 % by restoring habitats and creating new habitats: digging ponds, clearing bushes, creating shallow slopes and egg laying places for E.o. Sustainable land use practice is implemented in the demonstration farm.

**To develop a pilot ecological network in Southern Lithuania**

The criteria are set and C actions implemented for creating the network.

**To save the small and isolated populations of *Emys orbicularis* and *Hyla arborea* threatened amphibians in Southern Lithuania.**

So far we have detected new European pond turtle populations within defined project areas and developed A1 action plan how to help populations survive in newly discovered areas and connect them with each other. E.o. population conservation was carried out by protection of egg clutches in situ and rearing of eggs ex situ. Also new populations of H.a. were discovered and H.a. rearing in situ was carried on.

**To raise awareness of the local population**

There is much done on education of the general public. The press releases broadcasted, which were widely accepted by the wide range of mass media, starting from the main Lithuanian television channels to the local newspapers of Lazdijai district. The numbers of

schoolchildren reached by the lessons is much higher than foreseen in the application. 9 guided tours were organized in the project area. Constant meetings with the landowners are being held. The webpage is constantly updated. The web camera is acting on the LZS webpage which can be accessed by anybody. Posters and other dissemination material produced and distributed during different events. Also extra events have been organised outside LIFE which also spread message about LIFE and the project.

### **To generate, share and exchange expert knowledge**

Project team communicates with other LIFE projects and their experts. Several visits were made, also not only life but other projects are involved. Study tours and workshops were organised.

### **Work plan:**

Work plan remains as it is defined in the application. However some actions due to different deadlines indicated in milestones and deliverables had to be adjusted by defining one deadline, but it does not have major implications on the overall project implementation and time plan.

### **3.3. Problems encountered**

Designation of new Natura 2000 areas has been delayed due to several reasons. First of all, pre-agreements with actual landowners must be done before the inclusion of area into the list of Natura 2000 sites. However due to ongoing land reform, when land is given back to former landowners, some so called state land even now does not have the actual owner. Therefore no permission to change any status of the land might be issued. From the selected state owned areas we were able to agree 4 sites, where permissions for setting Natura 2000 area and changing their status were issued by National Land Service and State Forestry Enterprise.

Second, is the private landowners, who are negative towards protected areas. We have one owner who agreed to extend the Natura 2000 site (Bestraigiske forest) on his own land, and one more area in Vilkiutinis is proposed for Ministry to be included into the list of Natura 2000. All together 6 sites shall be included by the end of this year into the updated list of Natura 2000 sites.

It took some time for a farmer of our model farm (A7) to prepare the pastures for grazing, he had to rent the land from a number of other landowners, because it had to be grazed in around the wetlands and egg laying sites in the Herpetological Reserve. The cattle started to graze in May and this delay did not hinder implementation of the other actions.

The delay in the C actions was solved by hiring a local expert, who devotes half a day for acquiring all the needed permissions and supervising the digging machines. A company, from which we have an agreement for a digging machine, could not start to work with us from August, therefore another company was contracted. Currently there are 2 companies working with 2 digging machines in the project areas LT01 and LT04.

## 4. Administrative part

- Describe what the project manager and other representatives of the coordinating beneficiary have done to organise/co-ordinate the project: meetings, seminars etc. What the associated beneficiaries have done.

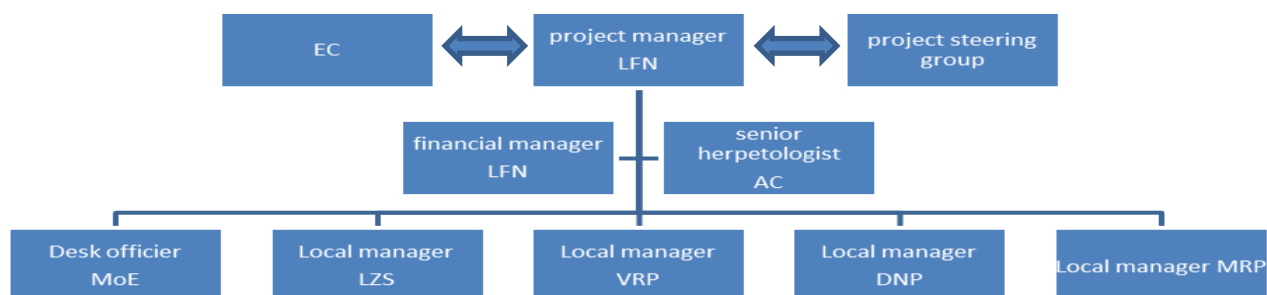
Constant contact (by phone and email at least once per week) is kept between the partners. Periodical meetings of AB with CB are held at least once per two months. The progress of the project actions is being discussed, further actions planned, the methods how to carry out the actions better discussed. Especially such meetings are important when the season changes and a new group of actions start, for example, before the field season the methods for the field inventories, population conservation, and people interviews are discussed. After the field season the results of the previous season are discussed and habitat restorations, workshops, etc are planned.

A meeting of the Steering Committee is organised once per year. So far we did 3 meetings, the 1<sup>st</sup> meeting was reported in the Inception Report, the 2<sup>nd</sup> meeting was reported in the Midterm Report (Annex 30), the 3<sup>rd</sup> was held in October 2013, the minutes are attached as Annex 9.

- Describe any changes in the project's management structure; partner withdrawn, replaced, etc. Please note that the Commission also must be informed of major modifications in separate notes (cf. CP Art 13).

Generally project management structure has not changed since the Mid-term Report.

- The organigramme of the management structure:



- Mention what reports have been delivered since the start of the project. The Inception Report was delivered on 12-06-2011, the Mid-term Report was delivered on 12-12-2012.

- Indicate if any extension of the project duration is needed or envisioned. The prolongation of the project duration is not envisioned.

## 5. Technical part

### 5.1. Actions

#### **Actions A: Preparatory actions**

##### 5.1.1 ACTION A1. Development of action plans

<i>Milestone</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
50 % of action plan prepared	01/03/2011	Completed by 30/10/2011
50 % target project areas visited	01/05/2011	Completed by 30/06/2011
All project sites visited	01/10/2011	Completed by 30/09/2011
100 % of action plan prepared*	01/10/2011	Completed by 30/10/2012
100 % of target species inventory carried out	01/10/2011	Completed by 30/07/2012
100 % of target species inventory carried out	01/10/2012	Completed by 30/07/2012

\* the meaning is to have prepared action plan for creation of ecological corridors

<i>Deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Action plans for the target species developed	01/12/2013	In progress
Produced action plan	01/02/2012	Completed by 30/10/2012

*Expected results:* One action plan for the creation of ecological corridors; 1 National action plan for tree frog prepared and submitted to MoE; Updated national plan for E.o. and submitted to MoE.

*Results of the action:* The action plans for the target areas were attached in Annex 1 in the Mid-term Report. All the project areas were visited by the project staff. During these visits the state of small water bodies and surrounding environment was evaluated, distribution of amphibian species surveyed, the landowners contacted. The species distribution is marked in the data base (Action E2).

*In the period from 01/10/2012 till 01/11/2013:* The action plans for the areas were updated according to the new knowledge accumulated constantly working in the areas. The action plans for *Emys orbicularis* and *Hyla arborea* are in progress, the draft is attached as Annex 1.

*Encountered problems:* during the summer and autumn a lot of work was done on C actions and actions, which are preparatory for the habitat restoration, i.e. A6, therefore part of the work on the action plans for the species was moved to the winter.

*Further plans:* The action plans will be updated, according to the progress and continuously growing knowledge and expertise of the stakeholders. National action plan for the target species *Hyla arborea* and *Emys orbicularis* will be finalised and submitted to

MoE by 01/04/2014. Currently, the species and habitat descriptions and methodology of habitat and population management is done, but the adaption of the methodology to each specific site and corridors are still elaborated not for all important sites.

#### 5.1.2. ACTION A2. Rearing methods for *Emys orbicularis*

<i>Milestone/deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Elaboration of rearing methods	01/03/2013	Completed by 01/03/2013

*Expected results:* Development of methods for 2 type of breeding ex-situ: 1. Egg collection and rearing of hatchlings and 2. Adult turtle rearing. Experience exchange visits: 4 visits to Latvia, 1 to Poland, 1 to Germany and 1 conference (Actions D.1 and D.3).

*Results of the action:* The methodology of rearing turtles is completed and attached as Annex 2 to the Midterm Report. 1 study tour organised for experience exchange with E.o. rearing institutions in Germany, which was described in the Inception Report. Constant contact by phone and email is kept with a LIFE+ Project LIFE-HerpetoLatvia LIFE09NAT/LV/000239.

*In the period from 01/10/2012 till 01/11/2013:* The project staff participated in a workshop – conference, organised by LIFE-HerpetoLatvia and presented our experience (please refer to the action E4).

*Encountered problems:* None.

*Further plans:* Until the turtles are grown in LZS the rearing methods will be updated based on the daily experiences.

We are considering combining the conference about the turtle rearing in LZS with the final seminar of the project. Since LZS has already acquired a lot of experience during the meetings with the German and Latvian E.o. rearing institutions, we would like to combine a study tour to Poland to see the rearing facilities with a study tour to Poland to see neighbouring populations of Eo and Ha, and possibilities of corridor creation foreseen in spring 2014 (please refer to the action D3). There are 4 people working with the turtle rearing in LZS and at the current stage of the project they have mastered the turtle rearing methods so, that one more special study tour designed for them would be excessive.

#### 5.1.3. ACTION A3. Determining the favourable conservation status for Annex IV amphibian and reptile species in South Lithuania

<i>Milestone/deliverables</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Definition of favourable conservation status for Annex IV amphibian and reptile species	01/03/2013	Completed by 01/03/2013

*Expected results:* Definition of criteria for favourable conservation status of target species: H.a., P.f., B.c., B.v., R.a., R.l., L.a.



*Results of the action - In the period from 01/10/2012 till 01/11/2013:* The criteria are attached as Annex 4. The criteria were compiled based on observations of the experts in the project sites, discussion with project partners and comparison with similar population structures in adjacent biogeographical areas (NE Poland, Latvia, Estonia). Indicative features were selected by comparing different evaluation systems of other EU countries. The criteria are accepted by the MoE as a tool, which can be used in the known habitats of the target species. The official note from MoE is attached as Annex 20.

*Encountered problems:* The target species have not been monitored neither have population been observed and analysed intensively over the last decades in Lithuania. This creates difficulties when trying to define the favourable conservation status for the species in Lithuania. Therefore, the existing data, together with recent observations gained by the project formed the basis for the formulation of the criteria for the conservation status. In order to reach the goal, data from comparable landscapes and habitats were included in the process of writing the favourable conservation status.

The lack of data about the species distribution and abundance also creates a problem for the MoE to use the criteria in practice. Therefore the specialists from MoE have asked to develop a methodology for investigating a certain data set which would be representative for the Lithuanian population.

*Further plans:* To develop the methodology for MoE, if it does not require too much effort from the project staff. Currently, AmphiConsult proposes to adapt Danish methodology and estimates that it would take 60 working hours.

#### 5.1.4. ACTION A.4: Ecological network-development

<i>Milestone</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Scenario and regulation of ecological network prepared	31/12/2012	Completed by 30/09/2012

<i>Deliverables</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Scenario for ecological network development	01/02/2012	Completed by 30/10/2012

*Expected results:* Criteria for setting the ecological network prepared 2. The management regulation prepared and proposed for MoE; 3. Implementation of demonstration example in Alytus County.

*Results of the action:* Development of the scenario for the ecological network is completed. It was attached as Annex 5 to the Mid-term report.

*In the period from 01/10/2012 till 01/11/2013:* The criteria for setting the ecological network and management regulation is prepared as “Methodology for Creating the Ecological Network for the Target Species in the Nature Frame” and proposed for MoE, attached as Annex 5. The methodology describes the legal basis for creating an ecological

network, defines the goal, objectives of planning the network and a scope of the methodology. The methodology defines criteria for core zones and ecological corridors according to the needs of the target species. It outlines the management regulation to maintain the network. The methodology also describes how the ecological network can be planned using GIS databases, to be possible to replicate the ecological network in the other regions of Lithuania.

*Reply to the External Monitor's comment:* It was foreseen that the concept of the Ecological Network will be a constituent part of the Nature Frame - a concept, which was elaborated for more than 20 years by a group of scientists and firmly embedded into the Lithuanian landscape planning system. Therefore when we proposed an expansion of the Nature Frame regulation by two thirds of its size it was noticed by the MoE, that such changes will have a significant impact to the document and as a result of this the document will lose its initial sense. Furthermore, the Nature Frame was designed for the national scale protection and the Ecological Network should be designed for the local scale species and habitats protection. Different planning scale issue makes these two concepts hardly compatible into the same document. Therefore we returned back to the original project proposal to prepare and propose the criteria and management regulation of the network to MoE.

The demonstration example is created in practice according to the action plans (A1) as described in the Midterm Report.

*Further plans:* The action A4 is completed. A handbook, according to the plans of Action D4., will be prepared.

#### 5.1.5. ACTION A.5: Establishing new Natura 2000 sites

<i>Milestone</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
All new Natura 2000 sites proposed	01/06/2014	1 area proposed

<i>Deliverables</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Local plans for new Natura 2000 sites developed	01/08/2014	Not started yet

*Expected results:* 5 new Natura 2000 sites (from several hectares up to 10-20 ha) established; 5 local management plans prepared and submitted to MoE.

*Results of the action:* up to date 5 new and 1 extension of existing *Natura 2000* site are submitted to MoE for inclusion into the list of *Natura 2000* sites. The letter of submission of new Natura 2000 sites for MoE is attached as Annex 24.

5 new sites for different target species were identified and agreed among many places after having meetings with landowners. 4 sites are located in the state owned land, and several private owners own 1 site. Agreements for state owned land were obtained from local

Division of Lazdijai of National Land Service under the Ministry of Agriculture and additionally agreed by appointed owners (Veisiejai Forestry Enterprise), which will rule the area in future. Proposals for inclusion of sites into Natura 2000 list were based on criteria for Sites of Community Importance according to the Ministerial order No.291 of 20-04-2001.

Natura 2000 site Bestraigiske LTLAZ0037 will be extended from 47 ha to 62 ha adding 15 ha of nesting sites of E.o., which were found as a result of project ECONAT actions. Additionally, State Land Foundation performs establishment of Bestraigiske herpetological reserve, which currently is in progress.

**Table.1. List of proposed Natura 2000 sites**

No.of the map	Name of the site	Area	Size , ha	Target species	Agreement issued by
LT01	Šlavantai - Aleksiejiškė	Lazdijai distr. Avižienių locality	6,7	Bombina Bombina Triturus cristatus	Division of Lazdijai of National Land Service
LT02	Vabaliūnai	Lazdijai distr. Avižienių locality	7,5	Triturus cristatus	Division of Lazdijai of National Land Service
LT03	Drapaliai	Druskininkų distr Leipalingio county Ricielių locality	2,52	Emys orbicularis, Bombina bombina	<i>Veisiejai Forest Enterprise</i>
LT04	Paveisiejai	Alytaus apskrities Lazdijų r. Petroškų k.v.	10,4	Emys orbicularis	<i>Veisiejai Forest Enterprise</i>
LT05	Vilkiautinis	Varėnos distr. Merkinės county Vilkiautinio locality	16,6	Emys orbicularis, Bombina bombina	<i>Private landowners – not agreed yet.</i>
LT06	Bestraigiske	Lazdijai distr. Seirijai locality	62*	<i>Emys orbicularis</i>	<i>Submitted to MoE</i>

\* 15 ha added.

Maps with location of these sites are attached as Annex 24.

*Further plans:* Planned update of list of Natura 2000 territories is foreseen to be made in December 2013. As soon as those sites will be approved as natura 2000 sites, the preparation of management plans will be issued. The service will be purchased as external. The main data about sites are collected by LFN, therefore preparation of plans can be done in winter time, adjustments made in spring with the submission by end of spring. Corrections will be made in summer and final submission in the end of summer.

### 5.1.6. ACTION A.6: Preparation for permissions

<i>Milestone</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
50% of permissions achieved	01/03/2012	Completed by 01/03/2012
100% of permissions achieved	01/03/2014	In progress

*Expected results:* 40 permissions for management.

*Results of the action:* The permissions were achieved for the habitat management from the private landowners and from the state institutions in the cases when the land is owned by the state. We have achieved 59 permissions from the private owners to work on their land and permission to dig 22 ponds on the state land from the state institutions.

*Further plans:* Currently the meetings with the landowners are ongoing for the habitat restoration spring 2014. We have agreed majority of the places for the actions C1 and C2, and we are working on the actions C3 and C4, for which we need to get the permissions.

### 5.1.7. ACTION A.7: Farm development

<i>Milestone</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Ecological development of 2 farms carried out	31/12/2012 (originally it was 01/06/2014)	Completed 10/05/2013

*Expected results:* 2 farms established; 10 horses, cattle or 20 sheep purchased; contribution to farm business (development) plan made.

*Results of the action:* Establishment of the 1<sup>st</sup> farm complete. 22 *Angus* breed cattle purchased. Action is completed.

*Reply to the EC's request in the letter of 13/06/13:* Grazing by the purchased cattle started on 10<sup>th</sup> of May 2013. Total grazing area today is 38 ha, which consist of 2 fenced pastures (during visit you saw fenced area of 1<sup>st</sup> pasture). The 20 ha of managed area is used for hay preparation. All together it covers about 60 ha. The map with grazing area attached as Annex 23.

*Reply to the External Monitor's comment:* The grazing aims to keep open shorelines of the turtle ponds, nesting sites and the buffer zones open. The area of enclosures encompasses the main ponds and egg laying sites of the Eo population in the Reserve. There are 4 ponds (6500m<sup>2</sup> of water surface) and egg laying sites (900m<sup>2</sup> surface), restored by previous conservation efforts inside the enclosures. Also there are 5 ponds created ( Action C1) in this project (namely Juodabalė 166, Juodabalė 206, Ročkiai 175, Ročkiai 177A and Ročkiai 178) with the water surface of 5000m<sup>2</sup>, 2 ponds restored (Action C2), i.e. Ročkiai 176 and Ročkiai 177, with the restored shallow parts of 4000m<sup>2</sup>; 2 dams (Ročkiai 2, Ročkiai 3) built (Action C3), damming creating 6500m<sup>2</sup> of wetland; and 3 egg laying sites created (Action C1), with the surface of 80m<sup>2</sup>.

The pictures illustrate the effects of cattle grazing. Grazing is performed by letting animals 0.5-1 cattle per ha. Total herd is 21 adult cows, 1 bull and 8 calves from last year. The grazing covers wetlands letting animals to graze them and abandoned areas, only 1/3 of the area is of better quality grass. Nesting sites are fenced that cattle do not trample them, especially in autumn when soil is wet and more sensible for penetration.

Setting up the grazing took longer because of land acquisition process. Land must be agreed by farmer since he is responsible for management of the land. LFN is just facilitator in this process. However negotiations performed by the farmer about purchase or rent take longer than estimated. The last planning period of land reform is almost finished, but still some pieces of land do not have real owner. Or some pieces of land are rented to farmers, having priority to use the land. Fence instalment is an infrastructure investment, which cannot be built on the land without agreement. The fenced area today is 38 ha, still farmer negotiates with other land users about grazing their land.

The Liudas farm is showing as good example how to manage wetlands, install cheap cowsheds, how to feed cattle and other things. Neighbouring farms come to visit his farm, and start to copy his grazing methods, e.g. fencing type, letting the animals to enter the wetlands. In coming summer 2014 the research must be done in one of the neighbouring farms, falling within the corridor LT06 to search for target species, identify most important areas to be either fenced against grazing, for example, the nesting sites, or grazed more intensively, for example overgrown ponds.

We decided to work on model of this farm without establishing the second farm. There are few reasons for this.

First of all, bigger budget for A7 is already used to establish one farm. According to model calculations it was needed to purchase more cattle to have cost-efficient farm, which can ensure long-term management. For example, in previous project LIFE05NAT/LT/000094 in 2006, 2 extensive farms were installed providing them with 4 and 2 cattle each. Today none of those small-scale family farms were capable significantly extend grazing area because of too small parental flock. They continue for almost 8 years to exist with the same number of cattle because calves are solved every year just to make farmers at least some earnings, especially in such fluctuating market with unpredictable prices of agriculture production.

That's why background of our model is a middle size (more than 50 ha) and big farmer (more than 500 ha) which is economically viable and carrying diverse agricultural activities. The diversification of production not only reduces risks but also ensures sustainable circulation of nutrients, for example locally grown grain is used for animal fodder. There are more requirements to be fulfilled for any farm: instalment of cowsheds, proper manure treatment, water and food supply, veterinary service, other animal welfare conditions etc. All this is already ensured in Liudas farm starting since 2012 when animals were purchased. So, it is not only wetland grazing, it is a complete model to show for Lithuanian farmers how to start and manage beef cattle. Partly because of focus only on grazing during previous life project, farmers were very wrongly informed that wetland grazing is only to bring cattle to wetland and leave them there just to come time to time to harvest them.

Therefore now education series of field days has been performed in 2013 for farmers, agriculture consultants, students and society to showcase good example of extensive beef farm. There is an informal network of 15 beef farmers and practicing grazing

(administrations of protected areas) in different parts of Lithuania established by LFN. We have regular meetings to exchange grazing experiences, learn new beef care things, discuss possibilities to market so called pasture beef. There is close contact to Association of Lithuanian Beef Farmers and Lithuanian Agriculture Advisory Service. The farmers of the network learn and copy for example grazing and fencing techniques from Liudas farm and apply them in their pastures, which meet the criteria of High Nature Value (HNV) grasslands, e.g. those grasslands which were not reseeded at least 5 years, or mosaic landscapes with grasslands and wetlands. There is already one innovative farm in the same region like Liudas farm, which will start grazing of wetlands while previously wetlands were fenced not to let cattle inside to avoid helminths. After discussion farmer became not so worried about parasites, and understood the need to manage wetlands in a way favourable for amphibians and turtles.

The handbook about beef cattle and grazing of high nature value grasslands in favour for turtles and amphibians was printed in 3000 copies and presented on 21<sup>st</sup> of November. The chapter in the handbook describes how grazing helps project target species providing case study from Liudas area. The whole idea was to approach the farmers and agriculture consultants explaining about beef cattle and highlighting attractiveness to start such farming in environmentally friendly way. If the handbook would be only about amphibians, it would not attract agricultural people - therefore we have chosen different approach.

*Further plans:* Distribute handbook and model how to organise grazing of high nature value grasslands, organise seminars for interested farmers.

### **Actions C: Concrete conservation actions**

#### **5.2.1. ACTION C.1: Habitat management for target species in the project area**

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
50 % of ponds, hibernation sites and nesting sites established	01/03/2013	Completed 15/10/2013
100 % of ponds, hibernation sites and nesting sites established	01/03/2014	In progress

*Expected results:* 100 ponds restored (average size 800m<sup>2</sup>), 40 nesting sites created and/or restored. Two or three sites for mirror populations of tree frogs will be created.

*Clarification:* We would like to ask for an extension to finish this action until 15/04/2014. We had experience during the last 2 years that the period in spring from the snow melt approximately 15<sup>th</sup> of March until 15<sup>th</sup> of April, when the herpetofauna emerges from hibernation, is much more suitable for the habitat restoration than January and February, when it is difficult to carry our habitat restoration actions because of thick snow cover. This extension will not have an impact on implementation of the other actions.

*Results of the action:*

**Aquatic habitats**

**Table 2. Number and surface of newly created ponds according to the project sites**

Project site	Foreseen number of ponds (total surface m <sup>2</sup> ) according to the revised targets	Number of ponds (total surface m <sup>2</sup> ) Implemented until 01/11/2013	Further plans – number of aquatic habitats, planned to be created in each target area, in period of time
Juodabale LT01	35 (28000)	10 (9700)	15 ponds until 15/12/2013, 10 ponds in the period 15/03/2014 – 15/04/2014
Bestraigiškė forest LT02	8 (6400)	0	8 ponds in the period 15/12/2013 – 01/01/2014
Kučiliškė LT03	10 (8000) + 9 (7200)	19 (15600)	Finished
Stračiūnai LT04	10 (8000) +8 (6400)	2 (1900)	16 ponds until 01/01/2014
Dainava forest LT05	10 (8000)	10 (6900)	Finished
Petroškai Forest LT06	15 (12000)	15 (12000)	Finished
Baltoji Ančia LT07	12 (4200)	12 (4200)	Finished
<b>In total</b>	<b>117 (88200)</b>	<b>68 (50300)</b>	<b>49 (37900)</b>

In 2011 December 12 water habitats for H.a. were created in the project area LT07. The photos and a table with coordinates of new habitats were attached as Annex 11 to the Midterm Report. 15 ponds for E.o. were dug 2012 March and April in the project area LT06. 1 pond for E.o. was dug 2012 April in the project area LT01. The photos and a table with coordinates of new habitats were attached as Annex 12 to the Midterm Report.

*In the period from 01/10/2012 till 01/11/2013:* 3 ponds for Eo, Ra, Rl were dug in the project area LT05 in 2013 March and 2 ponds for Eo, Pf, Ra, Rl were dug in the project area LT04 in 2013 April. 7 ponds for Eo, Bb, Ra were dug in the project area LT05 in 2013 August and 19 ponds for Eo, Bb, Tc, Bv, Bc, Pf, Ra, Rl were dug in the project area LT03 in 2013 August – October. 9 ponds for Eo, Bb, Pf, Bv, Ra were dug in the project area LT01 in 2013 October. The photos and a table with coordinates of new habitats are attached as Annex 10.

### E.o. egg laying sites

**Table 3. Number of created/restored Eo egg laying sites according to the project target areas**

Project area	Number of egg laying sites created/restored
LT01	4
LT03	8
LT04	2
LT05	1
LT06	6
<b>Total</b>	<b>21</b>

6 egg laying sites restored for E.o. 2012 April in the project area LT06. The photos and a table with coordinates of the restored egg laying sites were attached as Annex 13 to the Mid-term Report.

*In the period from 01/10/2012 till 01/11/2013:* 2 egg laying sites for Eo were created in the project area LT04 in 2013 March. 1 egg laying site for Eo was created in the project area LT05 in 2013 August. 8 egg laying sites were created in the project area LT03 and 4 in LT01 autumn 2013. The photos and a table with coordinates of new habitats are attached as Annex 10.

*Reply to the External Monitor's comment:* Creating egg laying sites is combined with the pond digging and we plan to finish it in the same period as pond digging.

### Amphibian hibernation places

**Table 4. Number of created amphibian hibernation sites according to the project target areas**

Project area	Number of amphibian hibernation places created
LT01	3
LT03	10
LT04	1
LT05	1
LT06	8
LT07	2
<b>Total</b>	<b>26</b>

11 hibernation places for amphibians described in the Midterm Report.

*In the period from 01/10/2012 till 01/11/2013:* 1 hibernation place for amphibians created in the project area LT05 in August 2013 (nearby pond 11M described in Annex 10). 10 hibernation places for amphibians created in the project area LT03 in 2013 autumn (nearby ponds 23, 25, Kučiuliškė 4, Karklynai 3, Karklynai 4, Karklynai 5, Karklynai 6, Drapaliai 1, Drapaliai 5, Drapaliai 6 described in Annex 10). 3 hibernation places for amphibians created in the project area LT01 in 2013 autumn (nearby ponds Juodabalė 165, Juodabalė 166, Juodabalė 206 described in Annex 10).



*Further plans:* Currently two digging machines and two shrub cutting brigades work in the project areas LT01 and LT04. After these areas we continue in LT02. Work plan for the actions of habitat restoration is weather dependent, according to our experiences we predict that January and February we will pause these actions and continue further in March until the middle of April (Table 2).

#### 5.2.2. ACTION C.2: Renovation of ponds, mitigation of predation on target species

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
50 % of ponds renovated	01/03/2013	Completed 15/10/2013
100 % of ponds renovated	01/03/2014	In progress

*Expected results:* Renovation of ponds, mitigation of predation on target species in 40 sites implemented.

*Results of the action:*

**Table 5. Number of restored ponds according to the project target areas**

Project area	Number of restored ponds
LT01	5
LT03	17
LT04	1
LT07	10
Total	33

15 restored water habitats were described in the Mid-term Report.

*In the period from 01/10/2012 till 01/11/2013:* 1 pond was restored mainly for Eo in the project area LT04 spring 2013. The overshadowing shrubs were cut and shallow slopes created. 15 ponds were restored for Eo, Bb, Tc, Bv, Bc, Pf, Ra, Rl in the project area LT04 autumn 2013. 2 ponds were restored for Bb and young Eo in the project area LT01 autumn 2013. The photos and a table with coordinates of restored habitats in the project areas in the period from 01/10/2012 to 01/10/2013 attached as Annex 11.

*Further plans:* The habitat renovation activities are carried on the project area LT01 and LT04. The remaining 7 ponds will be restored in the project areas LT01, LT02 and LT03 until 15/04/2014.

#### 5.2.3. ACTION C.3: Restoration of wetlands

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
50 % of wetlands restored	01/03/2013	Completed 15/10/2013
100 % of wetlands restored	01/03/2014	In progress

*Expected results:* 20 sluices installed; 10 ha of wetlands restored and recurring measures implemented.

*Results of the action:* For implementation of the project action C3, experience was shared between the project partners LFN and AC. In particular, the AC experts for practical herpetological habitat management Florian Bibelriether, Lars Hansen and Lars Briggs undertook several trips to the project sites in order to meet the Lithuanian experts. Together, potential places for sluices and/or the blocking of smaller ditches were pointed out in the field and thoroughly discussed under the viewpoint of their suitability for the project's goals.

*In the period from 01/10/2012 till 01/11/2013:* 12 dams were made, affecting a total area of 27900 m<sup>2</sup> (2,79 ha). The places and design of the dams were chosen by the experts from Amphi Consult. The dams were built on the small ditches draining natural wetlands. In the most cases the excessive vegetation and mud were cleaned from the wetlands creating shallow ponds. Because of the low water pressure to the dams in the chosen places, the dams were constructed of natural materials, i.e. clay and soil. The dams were built together with C1 and C2 actions, using the same digging machines in summer – autumn 2013. These flooded areas will improve the conditions for E.o. migration in the named corridors. They further represent a valuable habitat for all amphibians present at the site (as migration corridors, foraging or breeding areas). They will complement the newly dug and restored habitats, creating small, swampy water habitats or increase the depth of drained and overgrown wetlands. The coordinates, descriptions and pictures for the places already dammed are in the Annex 12.

*Further plans:* The negotiations with the landowners are still being carried out in order to do 20 sluices/dams and flood 10 ha.

A new approach will be to target not the state melioration ditches, but instead private melioration systems and state-owned melioration ditches draining only state land. Many discussions with owners and tenants in the field show a promising start - successful actions are compiled in the Annex 12 – 12 dams are built keeping water in small wetlands, which previously were drained. Currently under negotiation are a number of ditches in the project area LT01. The action is expected to be successfully completed by April 2014.

#### 5.2.4. ACTION C.4: Habitat and population management in sandpits

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Habitat management actions in 50 % sandpits done	01/03/2013	In progress
Habitat management actions in 100 % sandpits done	01/03/2014	

*Expected results:* 5 sand pits restored; 1 exploited sand pit re-cultivated as demonstration site.

*Results of the action:* Changes to the Methodology for Reclamation of Damaged Lands submitted to the MoE, was attached as Annex 15 in the Mid-term report. Exploited sand

and gravel pits in the project areas inventoried. A study tour to Denmark “Danish Experience in Amphibian Conservation – Prevention Of Road Mortality And Restoration Of Exploited Gravel Pits” was carried out 2012 April 17 – 20 (please refer to Action D.3).

*In the period from 01/10/2012 till 01/11/2013:* One small sand pit restored in the project area LT01 autumn 2013. An egg laying site for Eo created instead of a pit with small landfill. The photo is attached as Annex 21.

*Further plans:* Currently the sand and gravel pits considered for restoration in winter 2013 are (WGS):

LT01:

54.204407, 23.744438 – a sand pit (0,7 ha), which does not hold water, but is in the area inhabited by La and Pf, species, which need sandy surfaces. Currently the slopes are too steep and their exposition is not towards the sun.

LT03:

54.148595, 23.925153 – a small exploited sand pit (area 0,37ha) is nearby a big, still functioning Margai sand pit. There are water bodies, inhabited by B.b. which should be improved.

LT05:

54.24546, 24.05397 – a small illegal sand pit, which does not hold water, but can be a good habitat for L.a.

54.126123, 24.039523 – a small illegal sand pit, which does not hold water. E.o. lays eggs there. The garbage has to be cleaned, the slopes made more inclined. The problem is that local people are still using the pit, hence the agreement with the people has to be found.

LT07:

54.06131, 23.65678 - a small illegal sand pit, which does not hold water, but can be a good habitat for L.a.

The permissions from the landowners of the sandpits are under the process of negotiation.

The action is expected to be completed by 01/05/2014.

#### 5.2.5. ACTION C.5: Population management of *Emys orbicularis* and *Hyla arborea*

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
1 <sup>st</sup> young <i>Hyla arborea</i> released	01/09/2012	Completed by 30/07/2011
50 young turtle released	01/09/2013	In progress
two new <i>Hyla arborea</i> populations established and 8 small and extinct <i>Emys orbicularis</i> populations by release of juveniles improved	01/09/2014	In progress

*Expected results:* Nest protection (no quantitated indicator), 3 enclosures (1 of 8 m2 size for adult turtles and 2 of 2 m2 size for juveniles) and 1 laboratory for rearing installed; 60 eggs incubated; 50 hatchlings per year reared; 30 juveniles per year released (120 juveniles in total); 3000 eggs of tree frog released and 2 mirror populations created.

*Clarification*

*The action has these sub-activities:*

- Nest protection
- Rearing of Eo.
- Instalment of enclosures and laboratory
- Radiotracking
- Rearing of tree frog

*Results of the action:*

**Nest protection** – in the spring 2011, 2012, 2013 all the known nesting sites were protected from predators observing the females during the nesting period and covering the fresh nests with the metal net against foxes and raccoon dogs. Predation of such nests is very high in the project areas, therefore this action is a priority action for protection of E.o. populations. Staff from all the project partners, excluding LZS, was on duty in the egg laying sites in the evenings and at nights during the egg laying periods in 2011, 2012, 2013. 26 nests were protected 2011, 31 in 2012.

*In the period from 01/10/2012 till 01/11/2013:* 56 young turtles released to the ponds in 2013 April (from the eggs laid in 2012). 25 clutches covered against predators in 2013 May – June.

*Reply to the External Monitor's comment:* We are describing protection of the egg clutches in situ in the “Nest protection” sub-activity above. These eggs are laid in the places considered safe for their development (not on the roads), they are not transported to the LZS, they are only protected against predators. Only from unsafe places egg clutches are collected and incubated ex situ, i.e. in LZS, The numbers from this activity are in the sub-activity “Rearing of Eo” below.

**Rearing of Eo** - also the egg clutches laid on the roads were collected and brought to the LZS.

*In the period from 01/10/2012 till 01/11/2013:* 4 clutches, 46 eggs, 35 turtles hatched in 2013. Currently there are 29 turtles from 2011, 70 from 2012 and 35 from 2013, 134 in total.

*Reply to the External Monitor's comment:* An adult turtle female seriously infected by a fungus disease was found in Kučiuliškė Reserve in 2012 spring. We brought the female to LZS where she was treated from the disease and released back to the Reserve. We have not planned this activity in advance therefore we did not have a permission from MoE to take an adult turtle to the captivity. This case has raised some discussions, but finally we decided that the eggs laid by the female in LZS also will be incubated together with the clutches we brought from the wild in 2012 and the hatchlings will be raised together with the whole group. These turtles genetically are from Kučiuliškės Reserve, only the way they came to LZS was different. Therefore there is an increase in the numbers of young turtles from 2012.

**Instalment of enclosures and laboratory** (in application referred as turtle rearing place) **and rearing of E.o.** – described in the Mid-term report. A special room for the turtle hibernation was installed in autumn 2012. A biology student Dovydas Vičius from Vytautas Magnus University successfully defended his bachelor thesis about development of these turtles.

Two enclosures were installed in the LZS spring 2012. The area of each enclosure is 20m<sup>2</sup>. One of the enclosures was divided into two in the year 2013, 4 new pools were installed. The photos of the enclosures are attached as Annex 17. A camera for the direct translation to internet is installed in the enclosure (please refer to the Action D.4). It can be seen here: <http://zoosodas.lt/c/gyvos-transliacijos/transliacijos/>

*Reply to the External Monitor's comments:* 1. The European pond turtles, as it is noticed in their name, most of their time spend in the water, therefore, together with increase of the young turtles raised in the LZS, the new pools were installed in their enclosures. 2. There is a description how to open the player to see the online streaming from LZS in the website of LZS. The turtles are about to go to hibernate, but the camera is still functioning.

**Radiotracking** – 6 turtles from Vilkiautinis turtle population (LT05) were radiotracked, it was described in the Mid-term Report.

The remaining 4 transmitters were decided to be used for investigation of small turtle populations. The places were chosen according to the information we had – presence of several turtles during summer is confirmed, but not known how many and where they are during the other part of the year. Turtles were caught in the project area LT01, in a wetland 54.213985, 23.780648 (WGS) in MRP spring – summer 2012. Young turtles were caught, but they were too small to attach the transmitters.

*In the period from 01/10/2012 till 01/11/2013:* The efforts to catch turtles were continued 2013 spring – summer in the project area LT01 in the other population 54.174013, 23.616489 (WGS) not far away from VRP. Ecologist from VRP has observed 2 turtles there, we assumed that the population should be bigger and we were interested to know where they lay eggs and hibernate. However, the efforts to catch the turtles were not successful.

**Rearing of the tree frog** – rearing of H.a. in 2011 and 2012 was described in the Midterm report. 283 young H.a. were released in the summer 2011 and 1644 young H.a. were reared and released in 2012.

*In the period from 01/10/2012 till 01/11/2013:* The eggs were collected from the same pond as in the previous years in 2013 – the biggest known population, no. 16 in the table 6. Having no more possibility to borrow cages from AmphiConsult, 10 cages were acquired. 872 froglets were raised and released into 8 ponds to strengthen populations existing there. This activity was carried out in the project area LT07, the release area no. 18 is the project area LT06, where the tree frogs appeared after habitat restoration. The methodology how to rear Ha was adjusted to the Lithuanian situation.

**Table 6. Distribution of reared *H.arborea* into the wild populations**

No.	Village	Amount of froglets released	Coordinates (WGS)
	<b>2011</b>	<b>In total 283</b>	
1	Kapčiamiesčio miestelio apylinkės	28	54.013755, 23.652711

2	Kalvelių km.	127	54.108164, 23.661602
3	Kalvelių km.	128	54.107341, 23.682055
4	<b>2012</b>	<b>In total 1644</b>	
5	Kapčiamiesčio miestelio apylinkės	164	54.013755, 23.652711
6	Bugieda	132	53.942097, 23.806705
7	Bugieda	178	53.941934, 23.80856
8	Kalvelių km.	258	54.107344, 23.663416
9	Kalvelių km.	274	54.106907, 23.664209
10	Kalvelių km.	320	54.107288, 23.682069
11	Kalvelių km.	318	54.107953, 23.679639
	<b>2013</b>	<b>In total 872</b>	
12	Kalvelių km.	41	54.107935, 23.679689
13	Kalvelių km. (prie A. Truskos sodybos)	225	54.107037, 23.6642
14	Jančiulių km.	143	53.995591, 23.682913
15	Semoškų km.	45	54.050457, 23.649808
16	Kapčiamiesčio miestelio apylinkės	53	54.013755, 23.652711
17	Kapčiamiestyje	76	54.009277, 23.65402
18	Petroškų km.	229	54.106605, 23.607996
19	Valentų km.	60	54.011047, 23.707027
<b>In total:</b>		<b>2799</b>	

*Further plans:* It is planned to protect the turtle nests next egg laying period, collect E.o eggs from the roads, release the first young turtles in 2014 catch turtles and attach transmitters if the batteries will still work, rear H.a and release them the same year.

According to the rearing methods the first young turtles will be released to the restored habitats. Each batch of turtles will be released close to their maternal populations to the habitats where is data that the turtle populations previously (before the habitat degradation) existed there. The habitats were restored, the whole complex of shallow ponds for young turtles, deeper ponds for adults, hibernation places and egg laying sites, so that a population could live there for a long term. The event for mass media, specialists and broad public will be organised on the release date. The young turtles will be observed during the first summer in the wild.

## **Actions D: Public awareness and dissemination of results**

### 5.3.1. ACTION D.1: Experience exchange workshops

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
First experience exchange workshop organised	01/12/2010	Completed by 28/02/2011
second experience exchange workshop organised	01/06/2011	Completed by 31/05/2011
Third experience exchange workshop organised	01/11/2012	Completed by 17/04/2013
Forth experience exchange workshop organised	01/11/2013	

*Expected results:* 4 informative workshops and 1 kick off meeting organised. Up to 30 participants in each. 2 staff members participate in regional kick off meeting.

*Results of the action:* 3 workshops and 1 kick off meeting organised; regional LIFE kick-off meeting attended. Kick-off the project was organised on 19th November 2010. The programme and list of participants was attached as Annex 12 to the Inception Report.

The first workshop “Establishment of ecological networks – experiences and perspectives” was aimed to discuss the methodology for establishing ecological network and corridors. It was organised on 23-24 February 2011. Minutes, participants, agenda, pictures of the workshop were attached as Annex 13 to the Inception Report. The 2nd workshop “Inventory, habitat restoration and monitoring of protected amphibian and reptile species” was organised on 24-26 May 2011. Programme and list of participants of the workshop were attached as Annex14 in the Mid-term Report.

*In the period from 01/10/2012 till 01/11/2013:* The target group of the 3<sup>rd</sup> workshop was the specialists of the Regional Environmental Departments (REDs), responsible for Environmental Impact Assessment (EIA) in the area of biodiversity. The workshop “Aspects of biodiversity in the process of environmental impact assessment with the special focus on protected reptiles and amphibians” was carried out 2013 April 16 – 17, with 36 participants. The programme and list of participants are attached as Annex 18. The audience listened to the presentations about the project target species and their needs, habitat restoration and arising impacts, their mitigation.

*Further plans:* the 4th workshop will be organised in spring 2014, when it is possible to see the target species and to visit their habitats. It will present our experience about developing ecological network for the target species and also foreign experiences of creating ecological networks. The target audience will be landscape engineers, architects and planners.

### 5.3.2. ACTION D.2.a: Dissemination and cooperation with local players

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Instalment of 7 notice boards	01/12/2010	Moved to D2e
50 % of meetings implemented	01/11/2012	Completed by 01/12/2011
100 % of meetings implemented	31/03/2014	Completed by 01/10/2013

*Expected results:* 40 meetings and agreements, press articles published. 7 information boards erected.

*Clarification:* As it was agreed in the letter on 13/06/2013 – 7 notice boards in the Action D2a (with budget 2700 EUR) and 7 information boards in the action D2e (with budget 350 EUR) are combined into one action and moved into D2e.

Under this action we have additionally included reportages in television, radio broadcasts and two events we have organised for the 20<sup>th</sup> LIFE anniversary.

*Results of the action:* Even though this action was foreseen to be started from the autumn 2011 it has already started in the spring 2011. 40 meetings with the landowners are carried out. Some landowners were convinced to carry out habitat restoration actions, the others were not. Some were only informed that rare species live on their land and about the requirements of the species. A list of the meetings, which were carried out during the previous reporting period was attached to the Mid-term report Annex 20. A list of meetings, which were organised after the Midterm report, is attached as Annex 19.

*Reply to the External Monitor's comment:* We work mainly in the land, owned by private owners, and the meetings are constantly continued, but they are not documented anymore after we reached the number we promised.

Two events for the LIFE 20<sup>th</sup> anniversary were organised, which were described in the Mid-term Report.

Project publicity – we have not ordered professional monitoring of the mass media after our press releases, which is an expensive service, therefore the numbers are only of those broadcasts, which we have found. In reality the project was mentioned more times. There were 11 press releases, 7 TV reportages, 5 radio programmes about the project, which were described in the Mid-term Report.

The list of the articles and broadcasts until 01/10/2012 was attached as Annex 34 to the Mid-term Report.

*In the period from 01/10/2012 till 01/11/2013:* 13 articles were written about different project activities after 01/10/2012. The articles were taken into different webportals. The list of the articles and broadcasts is attached as Annex 16. The articles and broadcasts researched different project activities, i.e. Eo and Ha rearing; habitat restoration; seminars, which were organised; invitation to participate in the photography contest after which traveling exhibition was created; and invitation to visit the exhibition.



An event for the general public was organised in Verkiai Regional Park 9 May 2013. During the event the public was introduced to the species of protected reptiles and amphibians, their habitats, listened to their voices and voted for the most beautiful voice. It is estimated that few hundred people participated in the event. Two TV channels filmed the event.

*Further actions:* The meetings with the landowners happen all the time, when inventorying the habitats and getting ready for the habitat restoration and restoring the habitats. We work mainly on the private lands and communicate with the local people a lot. The meetings will continue to happen. The publicity events will continue to happen too, the biggest event we plan when we release the turtles reared in LZS.

#### 5.3.3. ACTION D.2.b: Installation of nature educational trail

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Educational trail established	01/09/2014	In progress

*Expected results:* 1 km long education trail

*Results of the action:* While planning the project the educational trail was planned to be established in the project area LT05, near Merkinė town, by Ilgabalė wetland.

*In the period from 01/10/2012 till 01/11/2013:* An educational path by Ilgabalė wetland is planned. A scheme of the trail by that wetland is prepared by DNP, attached as Annex 13.

*Reply to the EC's request in the letter of 09/04/2013:* After considering the alternatives, we decided that originally planned locality is the best choice. DNP, as AB, which is responsible for the action D2b, plans the educational trail in the locality, which was planned in the revised application. The locality is in a nice landscape, enriched by wetlands, depressions and ponds, the actions C1 and C3 carried out there. There is few years old data about turtle population from local people, which was not observed recently because of overgrowth of aquatic habitats. Currently we are discussing if we should release some of our reared Eo there, since we restored the habitats. It is on the edge of historic town Merkinė, frequently visited by tourists. The map of planned trail is attached in Annex 13.

*Further actions:* The trail will be established in summer 2014 according to the plan.

#### 5.3.4. ACTION D.2.c: Guided tours in Meteliai Regional Park

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
5 guided tours implemented	01/07/2014	In progress

*Expected results:* 5 guided tours for 100 people.

*Results of the action:* 1 guided tour was carried out in MRP 31 August 2012. A list of the participants was attached as Annex 23 in the Mid-term Report.

*In the period from 01/10/2012 till 01/11/2013:* 3 guided tours “Ecological corridors, conservation of species and habitats in Meteliai Regional Park” were carried out spring and summer 2013. The participants of the guided tour were introduced to the habitats of the target species and restoration works carried out in Juodabalė Herpetological Reserve. 15 schoolchildren and 2 teachers participated in the first study tour, 10 teachers participated in the second study tour, 43 schoolchildren participated in the 3rd study tour. The lists of participants are attached as Annex 14.

*Further actions:* 1 guided tour is planned in spring 2014.

#### 5.3.5. ACTION D.2.d: Guided tours in Veisiejai Regional Park

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
5 guided tours implemented	01/07/2014	Completed 05/06/2013

*Expected results:* 5 guided tours for 100 people.

*Results of the action:* 5 guided tours were carried out in VRP. The 1<sup>st</sup> was a bicycle orientation competition “Do not be slow as a turtle” organised on 30<sup>th</sup> July 2011. 2<sup>nd</sup> guided tour was for the schoolchildren from Veisiejai Gymnasium. It was about amphibians in Veisiejai town on 25 April 2012. 3<sup>rd</sup> guided tour was also organised as a bicycle orientation competition on 25 August 2012. They were described in the Mid-term Report.

*In the period from 01/10/2012 till 01/11/2013:* The 4<sup>th</sup> guided tour was for schoolchildren and teachers from Šeštokai school on 22 May 2013. 14 children and 3 teachers participated in the tour. The tour was guided around Kapčiamiestis in the habitats restored for Ha. The children and teachers were introduced to the tree frogs ecology, habitat restoration and activities of the project in general. The list of participants is attached as Annex 22.

The 5<sup>th</sup> guided tour was for the employees of Kaunas Botanical Garden, which were carried out on 05 June 2013. 6 participants were guided through restored habitats of Eo, Ha, introduced to the informational board and activities of the project. The list of participants is attached as Annex 22.

#### 5.3.6. ACTION D.2.e: Installation of notice boards

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
Instalment of 7 notice boards	01/12/2010	Completed

*Expected results:* 7 notice boards

According to the regulations of the Regional Parks, all the information boards, which are erected in the area of the Parks, have to comply to the certain standards. According to the experience of the project partners DNP, VRP and MRP, when they carry out the procedures of public procurement, such information board costs around 1000 EUR. It took some time for the project team to find a cheaper version, which would not exceed our foreseen budget for the information boards.

*Results of the action:* Currently 7 information boards are already installed in the project areas LT01, LT02, LT03, LT05, LT06, LT07 and 1 information board in LZS (was attached as Annex 25 to the Mid-term Report). Under this action we prepare big (1x0,7m text space) information boards with detailed descriptions of the project actions, target species and their habitats. Pictures of an information boards and map, where they are in the project localities are attached as Annex 7.

*Further actions:* Even though we have already built the number of informational boards we have promised, we still plan to build 1 additional information board in the project area LT04 in winter 2013.

#### 5.3.7. ACTION D.3: Study tours

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
1 <sup>st</sup> study tour organised	01/06/2011	Completed by 03/04/2011
2 <sup>nd</sup> study tour organised	01/05/2012	Completed by 08/04/2011
3 <sup>rd</sup> study tour organised	01/06/2012	Completed by 01/05/2012
4 <sup>th</sup> study tour organised	01/10/2013	In progress

*Expected results:* Two 4-5 days study tours for 30 people.

*Results of the action:* 2 study tours were organised in spring 2011. 1 study tour aimed for experience exchange by E.o rearing institutions. The report about visited places attached in annex 16 of the Inception Report. Second study tour was organised for farm development. The programme and list of participants attached in annex 17 of the Inception Report. The report attached in Annex 26 to the Mid-term Report. 3<sup>rd</sup> study tour was on “Danish experience in amphibian conservation – prevention of road mortality and restoration of exploited gravel pits”. A list of the participants, the programme and the report of the study tour were attached as Annex 26 to the Mid-term Report.

*Encountered problems:* A study tour was planned in spring 2013 to see the habitats of Eo and Ha across the border and plan the possibilities for their connectivity with the Lithuanian populations. Belorussian herpetologists, who work with Eo and Ha, were contacted. However, the herpetologists could not devote their time during spring, explaining that they are busy with their fieldworks. The study tour was moved into summer

2013, but the Belorussian herpetologists were still unavailable. Therefore we plan to organise a study tour with the same objectives 2014 spring to Poland.

*Further actions:* a study tour 2014 spring to Poland. We plan to visit Ha habitats near Wigry National Park, E.o. habitats near Baranowo- north-east Polish population, protection of egg laying sites for for E.o. as well as rearing and releasing E.o. in Poleski National Park, and to meet Polish colleagues to discuss the possibilities of creating ecological corridors between the two countries.

#### 5.3.8. ACTION D.4: Printed educational material, touring exhibition

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 01/11/2013</i>
The folder about the project produced	01/12/2010	Completed by 01/12/2010
Educational material for schools prepared	01/05/2010 Another date in deliverable table is 01/13/2013	Completed by 01/10/2011
All educational material printed	01/05/2014	In progress
The folder about the project (brochure) produced	01/12/2010	Completed by 01/12/2010;
Posters printed	01/01/2012	Completed by 01/10/2012
T-shirts produced	01/01/2012	Completed by 01/05/2012
Touring exhibition	01/09/2013	Completed by 01/09/2013
DVD produced	01/09/2014	In progress
Handbook on Natural Frame published	01/08/2014	In progress
Informational material (pocket guide)	31/12/2013	Completed by 21/11/2013

*Expected results:* Folders about the project (1000 copies in LT and 1000 in EN), posters (100 copies in LT and 100 in EN), educational material for schools (1000 copies), one exhibition, a DVD film (1000 copies), T-shirt (500 copies) on the issues of ecology of the target species and ecological corridors will be produced. Informational material (pocket-guide) for the management of the target species for agricultural advisors will be produced (500 copies). Non-stop web streaming will take place for 3 years in the warm season (starting by April and finishing in September). 4 Turtle days organized in Lithuanian Zoological Garden.

*Clarification:* Brochures has no description neither in the application text, nor in the budget, they were meant to be the same as the folders.

*Results of the action:*

- a) Informative folders on the main target and umbrella species and the main goals of the project for general distribution were produced in 1000 copies each. Both versions were attached as Annex 18 to the Inception Report. Distribution details of all dissemination materials attached in Annex 15.
- b) Educational materials for schools – was prepared and distributed in 5 schools (two types of the material: for the 2<sup>nd</sup> and 3<sup>rd</sup> grades and for the 10<sup>th</sup> grade) in the project area as foreseen in the application. The educational material was attached as Annex 27 to the Mid-term Report.

Also LZS carries out educational lessons called “Does European Pond Turtle live in Lithuania?” for the schoolchildren about the target species, especially E.o., and the project activities. The contents of the lessons and list of schools where such lessons were carried out were attached in the Annex 27 to the Mid-term Report. 9 lessons were in LZS and 10 lessons were in the schools in 2011, 453 listeners in total. 1408 listeners participated in this education activity in their schools and universities and 254 in LZS in 2012.

*In the period from 01/10/2012 till 01/11/2013:* lessons were taught to 37 groups 667 participants in total in LZS.

- c) Posters – two versions of posters (in Lithuanian and in English) are produced (were attached as Annex 28 to the Mid-term Report).
- d) T-shirts – 200 T-shirts produced. The t-shirt was added to the Mid-term Report.
- e) Touring exhibition - the exhibition has visited: Lazdijai Public Library, Alytus Regional Environmental Department, the exhibition hall of Dzūkija National Park in Merkinė, Emilija Pliaterytė Museum in Kapčiamiestis, Vilnius University, Young Naturalists Centre, Botanical Garden in Vilnius, Lithuanian Road Directorate and Veisiejai Museum. Currently the exhibition is in the Lithuanian Agricultural Service. The exhibition was opened in all the institutions named telling about the project and its target species, showing filmed material. According to the plan demonstration of the exhibition is finished, but since many institutions want to demonstrate it in their exhibition halls, the exhibition continues to travel.

**Table 7. Travelling of the exhibition**

No.	Exhibition hall	Date of our exhibition
1	Lazdijai Public Library	30/10/2012 – 21/11/2012
2	Alytus Regional Environmental Department	22/11/2012 – 14/01/2013
3	Visitors centre of Dzūkija National Park	15/01/2013 – 28/02/2013
4	Emilija Pliaterytė Museum in	01/03/2013 – 01/04/2013

	Kapčiamiestis	
5	Vilnius University	03/04/2013 – 03/05/2013
6	Young Naturalists Centre	06/05/2013 – 17/05/2013 and 23/05/2013 - 30/07/2013
7	Botanical Garden in Vilnius	18/05/2013 – 22/05/2013
8	Lithuanian Road Directorate	31/07/2013 – 12/09/2013
9	Veisiejai Museum	18/09/2013 – 18/10/2013
10	Lithuanian Agricultural Service	08/11/2013 -

- f) Camera in LZS – installed in the outdoor enclosure, when the young turtles are moved to the laboratory in the autumn, the camera is moved there. The translation is stopped when the turtles hibernate. The link to the translation is <http://zoosodas.lt/c/gyvos-transliacijos/transliacijos/>  
The young turtles can be observed having VLC player installed. The instructions how to open the view are on the webpage.
- g) DVD film– was started spring 2011 after tender procedure. All film episodes are already filmed, the material will be edited during the winter. The film scenario was attached as Annex 35 to the Mid-term Report. The raw filmed material is available upon request.
- h) Handbook – some chapters for the handbook are already started to develop, for example, suggestions for the habitat management of the target species.

*Reply to the External Monitor's comment:* The deadline for publishing the handbook is 01/08/2014, we plan to finish it earlier.

- i) Informational material about beef cattle and grazing of high nature value grasslands in favour for turtles and amphibians is prepared. Informational material (pocket-guide) on beef farming and management of high nature value habitats was printed in November 2013. The pocket guide is called “Handbook for beef farmers” and describes various aspects of beef farming, e.g. which cattle breeds suit best for grazing of different habitats, animal welfare, manure handling and other things related to proper and nature friendly beef husbandry. It is the first handbook on beef and nature in Lithuania. We focused on projects species and habitats presenting examples how to organize grazing in favour for turtles and amphibians. The handbook was made in cooperation with experts from WWF and Uppland Foundation in Sweden, and Lithuanian Agriculture Advisory Service (LAAS). The book has 120 pages, printed in 3000 copies, which will be distributed among agricultural advisers (40 branch offices of LAAS); farmers who are interested in starting beef farming; local communities, protected areas, which implement management plans and others who are interested in knowing more about beef. Since the material is targeted not only to the agricultural advisers, but also to the farmers we have increased the foreseen number of copies from 500 to 3000. The material will be useful in the project areas and other areas of Lithuania where the habitats of protected reptiles and amphibians are overgrowing. It will be distributed

to the agricultural advisers and farmers encouraging them to keep extensive cattle and graze valuable areas. The material is added to the Report. The material was presented for the agricultural advisors and farmers on 21st of November 2013.

- j) We would like to report “Turtle Days” here, which belong to the activities of LZS. 1 festival was organised in 12/06/2011, 2<sup>nd</sup> 07/10/2012, they were described in the Mid-term Report. The third turtle day is planned 30 November 2013, it is called “A day when the turtles are going to hibernate” having in mind the young turtles, which are raised in LZS in the framework of the project.

*Further actions:* The lessons in LZS will continue. Touring exhibition will continue travelling in the project areas. The film will be edited. Handbook on the nature frame and ecological network will be prepared in 2014.

#### 5.3.9. ACTION D.5: Best practice guidelines

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
Best practice guidelines published	01/10/2014	In progress

*Expected results:* Best practice guidelines published in 500 copies (250 in Lithuanian and 250 in English).

*Results of the action:* Some chapters of the Best Practice Guidelines are already prepared, for example, E.o. rearing methodology, and a draft version of restoration of aquatic habitats for amphibians.

*Reply to the External Monitor’s comment:* Handbook about the nature frame and ecological network will be a shorter publication than the best practice guidelines, it will be designed for the landscape planners and architects.

*Further actions:* Best practice guidelines will be published in 2014.

#### 5.3.10. ACTION D.6: Web page

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
Web page developed	01/12/2010	Setting up completed by 31/04/2011; update ongoing

*Expected results:* Webpage prepared

*Results of the action:* The main project webpage is created, its address is <http://www.glis.lt/ekotinklas/index.php/lt/>. The webpage is located under the main website of the CB guaranteeing long term support for the domain. Website is available in two languages: Lithuanian and English. Project website is of a good quality and frequently

updated both in Lithuanian and English languages. Other AB have the links to the project website:

<http://www.am.lt/VI/index.php#a/11110>

<http://zoosodas.lt/informacija/veikla/projektai/bandomojo-ekologinio-tinklo-rytu-lietuvoje-sukurimas/>

<http://gamta.cepkeliai-dzukija.lt/18735/projektai.html?read=12467>

<http://www.meteliuparkas.lt/index.php?id=127&hh=cHJvamVrdGFp>

<http://www.veisiejuparkas.lt/node/180>

<http://www.amphi-consult.dk/index.php/dk/projekter/life-econat.html>

*Further actions:* The webpage will be continuously updated.

#### 5.3.11. ACTION D.7: Final project seminar

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
Final project seminar organised	01/10/2014	Not started yet

*Expected results:* Final project seminar of 2 days for 40 participants organised

*Not to be started yet*

*Further actions:* The final project seminar will be organised in the end of the project. It is planned to organise it in the premises of LZS.

#### 5.3.12. ACTION D.8: Layman's report

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
Layman report published	01/10/2014	

*Expected results:* Layman report 5-10 pages printed in 100 copies in Lithuanian and 100 copies in English.

*Not to be started yet*

*Further actions:* The Layman report will be published in the end of the project.



## **Actions E: Overall project operation and monitoring**

### 5.4.1. ACTION E.1: Project management and accountancy

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
Project Management Team and Project Director appointed	01/10/2010	Completed by 31/12/2010
Project's Steering Committee established	01/10/2010	Completed by 31/12/2010

*Expected results:* Well running project management established.

*Results of action:* All needed personnel employed and structures set up. There is one local manager in every AB, who delegates project tasks to personnel and ensures proper running of the project.

DNP, VRP, MRP, LZS dedicated a bit more personnel to the teams as foreseen in the revised application – accountants of AB were not foreseen in the application. List of project personnel shown in table 3. Higher demand for personnel was raised because of more input needed in the fieldwork.

**Table 3. List of personnel**

<i>Foreseen</i>	<i>Employed</i>				<i>Occupation</i>
	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	
LFN					
international project manager national manager assistant, and accountant	Project manager Manager's assistant local accountant	Project director national manager public relations specialist projects accountant local expert	Project director/financial manager Project manager projects accountant	Financial manager Project manager Projects accountant Local expert	Part time  Full time Part time Part time Part time temporarily
AC					
Senior project manager Senior herpetologist		Senior project manager Senior herpetologist Experts , 2 people	Senior project manager 3 senior herpetologists Accountant Administration officer	Executive manager, Senior project manager 3 senior herpetologists Accountant Administration officer	Part time Part time Part time Part time Part time
DNP					
Local manager Local ecologist		Local manager Biologist Senior biologist accountant	Local manager Biologist Senior biologist accountant	Local manager Biologist Senior biologist accountant	Part time Part time Part time Part time
MRP					
Local manager Biologist		Local manager Ecologist Accountant	Local manager Ecologist Accountant	Local manager Ecologist Accountant	Part time Part time Part time
VRP					
Local manager Local biologist		Local manager Ecologist Accountant	Local manager Ecologist Accountant	Local manager Ecologist Accountant	Part time Part time Part time
LZS					
Director Local manager		Local manager Herpetologist	Local manager Herpetologist	Local manager Herpetologist	Part time Part time

Specialist Veterinarian Emys keeper Educational worker Worker		Animal keeper, 3 people Educologist, 2 people Accountant	Animal keeper, 3 people Educologist Public relations spec. Accountant Technical workers, 2 people	Animal keeper, 3 people Educologist Public relations spec. Accountant Technical workers, 2 people	Part time Part time Part time Part time Part time
	MoE				
Biological Desk Officer			Biological Desk Officer	Biological Desk Officer	Part time

#### 5.4.2. ACTION E2: Monitoring of the effect of project

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
The programme	01/06/2011	Completed by 01/06/2011
Database	28/02/2012 (from the Inception Report)	Completed by 01/02/2012

*Expected results:* Updated database prepared; preliminary monitoring reports to be sent in the end of each season to MoE; final report prepared and submitted to MoE.

*Results of action:* Online database prepared, 2 reports to the Ministry have been sent, the form used as defined in the Methodology for Use of Protected Species, Annex II. The 1<sup>st</sup> report was attached in Annex 37 to the Mid-term Report, the 2<sup>nd</sup> attached as Annex 6.

Monitoring programme prepared, attached as Annex 21 to the Inception Report. Presence/absence of the target species was checked in all the created and restored habitats. H.a. is the fastest coloniser, it was found in the following habitats just next spring after creation or restoration (please refer to the Actions C1 and C2): 1a, 13, 14a, 15.1, 13c1, 21 and 601. B.b and T.c. were found in: 13 c1, 14a and 601. B.c. and P.f. were found in 14a. Eo were observed in ponds 101, 102, 601, 602, 608, 614, 616. The proportion of inhabited ponds is high for Eo, since this species is a slow coloniser.

The data base is created using ARCGIS maps. The target species are marked in the project area and described which year it was observed, who is the observer, notes about the amount of individuals, life stage and their habitat. It can be found: <http://www.arcgis.com/home/item.html?id=37c1143de0a04c3995578a71a0a7d464>  
The data base currently is not a shared version, it can be connected only with one user name: bastyte, password: dalia5.

Further actions: Species data will be transposed to the Ministries official database enabling species protection. This will be done in 2013.

#### 5.4.3 ACTION E.3: After Life Strategy

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
After Life Strategy	01/09/2014	

*Expected results:* After Life conservation plan prepared.

Preparation of some parts of the plan have started, for example it was agreed with MRP, VRP, DNP about protection of the turtle eggs against predators after the project, covering with the metal nets of the nests, which are laid in the safe places, collection of the clutches, which are laid on the roads and transportation of these clutches to LZS. LZS has agreed to rear several clutches a year; currently the budget is being calculated for this activity.

#### 5.4.4. ACTION E4: Networking with other projects

<i>Milestone /deliverable</i>	<i>Deadline according to the project</i>	<i>Status 30/09/2012</i>
Networking with other projects	31/12/2013	

*Expected results:* 3 two-three day meetings with the other projects.

*Results of the action:* 4 meetings with other projects implemented: 3 of them with other LIFE projects, 1 with non EU financed.

1 exchange meeting with a Project LIFE08NAT/EE/000257 described in the Inception Report under the Action E4. The programme of the workshop, the presentation of the manager and the workshop book of abstracts was attached as Annex 31 to the Mid-term Report. The project manager and project director participated in Wetland study trip 22-23 May 2012 in Finland, organised by WWF Finland. This trip showed possibilities for damming of the drainage ditches and creating wetlands instead. The programme of the trip was attached as Annex 32 to the Mid-term Report. A group of Polish foresters had a study tour in 20-22 August 2012 in the project areas in the framework of a project LIFE08NAT/PL/000510. The programme and photos of the study tour was attached as Annex 33 to the Mid-term Report.

*In the period from 01/10/2012 till 01/12/2013:* The staff from our project participated in the workshop – conference “RESEARCH AND CONSERVATION OF EUROPEAN HERPETOFAUNA AND ITS ENVIRONMENT: BOMBINA BOMBINA, EMYS ORBICULARIS, AND CORONELLA AUSTRIACA”, organised by LIFE-HerpetoLatvia, which took place in Daugavpils, 2012 October 8-9. The staff of our project made there 3 presentations about the project activities, namely Dalia Bastytė “Ecological Network for the European Pond Turtle (*Emys orbicularis*) in Lithuania”, Jonas Šimkus „The Assessment of the Methodology for the Feeding of the European Pond Turtles (*Emys orbicularis*) Juvenile up to one year“, Dovydas Vičius and Alma Pikūnienė „Growing of European Pond Turtle (*Emys orbicularis*) Juveniles in Lithuanian Zoological Garden“. The book of abstracts of the conference is attached as Annex 3.

The manager of the project Dalia Bastytė participated in a symposium „On Freshwater Turtles Conservation“, 22 – 24 May 2013, where she gave two talks: “Development of an ecological network for *Emys orbicularis* between protected areas in South Lithuania” and

“Rearing of *Emys orbicularis* for conservation of the wild populations in Lithuania.”. The book of abstracts is attached as Annex

*Further actions:* Currently not foreseen.

## 5.2. Envisaged progress until next report

The action plans (A1) will be updated, according to the progress and continuously growing knowledge and expertise of the stakeholders. National action plan (A1) for the target species *Hyla arborea* and *Emys orbicularis* will be finalised and submitted to MoE by 01/04/2014. Until the turtles are grown in LZS the rearing methods (A2) will be updated based on the daily experiences. Planned update of list of Natura 2000 territories (A5) is foreseen to be made in December 2013. The management plans (A5) will be prepared in spring, corrections will be made in summer and final submission in the end of summer. Permissions (A6) for the action C3 and C4 will be acquired during the winter. The model (A7) how to organise grazing of high nature value grasslands will be spread, seminars for interested farmers will be organised.

15 ponds (C1) will be created in the target area LT01 until 15/12/2013, 10 ponds in the period 15/03/2014 – 15/04/2014, 8 ponds will be created in the target area LT02 in the period 15/12/2013 – 01/01/2014, 16 ponds will be created in the target area LT04 until 01/01/2014. 19 egg laying sites (C1) will be created until 15/04/2014. 7 ponds will be restored (C2) until 01/01/2014. 8 dams (C3) will be built in winter – spring and floodings will be created. 4 sand pits (C4) will be restored in winter – spring. Eo nest protection (C5) will be carried out in situ and ex situ, Ha will be reared spring – summer 2014. First Eo from LZS will be released summer 2014.

The 4th experience exchange workshop (D1) will be organised in spring 2014. The meetings with the private land owners (D2a) will continue, the publicity events will continue to happen too. The nature educational trail (D2b) will be established in summer 2014 according to the plan. 1 guided tour in MRP (D2c) is planned in spring 2014. 1 information board (D2e) in the project area LT04 will be installed in winter 2013. A study tour to Poland will be organised 2014 spring. Handbook on nature frame and DVD (D4) will be produced in spring 2014, lessons in LZS will be continued, as well as online streaming of the young turtles, the exhibition will continue to travel. Best practice guidelines (D5) will be published in 2014. The webpage (D6) will be continuously updated. Final project seminar (D7) will be organised in the end of the project. Layman report (D8) will be published in the end of the project.

Project management (E1) will continue until the end of the project. All restored and created habitats will be monitored and report sent to MoE (E2). After Life conservation plan will be prepared (E3).

## Time table

Activities		2010				2011				2012				2013				2014					
		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T		
Overall project schedule	Proposed			Start date				Inc.R.				Mid-Term				1 <sup>st</sup> P.R.				End date			
	Actual																						
Action A1 Species inventories and action plans for the project areas	Proposed					■	■	■	■	■	■	■	■										
	Actual																						
Action A1 Action plans for the species	Proposed					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
	Actual																						
Action A2 Rearing methods for Emys orbicularis	Proposed						■	■	■	■	■	■	■	■	■								
	Actual																						
Action A3 Determining the favourable conservation status	Proposed						■	■	■	■	■	■	■	■	■	■							
	Actual																						
Action A4 Ecological network-development	Proposed					■	■	■	■	■	■												
	Actual																						
Action A5 Establishing new Natura 2000 sites	Proposed									■	■	■	■	■	■	■	■	■	■	■	■		
	Actual																						

Tasks/ Activities		2010				2011				2012				2013				2014			
		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T
Action A6 Preparation for permissions	Proposed								■ ■ ■					■ ■ ■			■ ■ ■				
	Actual																				
Action A7 Farm development	Proposed							■ ■ ■ ■ ■ ■ ■													
	Actual																				
Action C1 Habitat management	Proposed							■ ■ ■					■ ■ ■				■ ■ ■				
	Actual																				
Action C2 Renovation of ponds, mitigation of predation on target species	Proposed							■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■													
	Actual																				
Action C3 Restoration of wetlands	Proposed							■ ■ ■					■ ■ ■								
	Actual																				
Action C4 Habitat and population management in sandpits	Proposed							■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■													
	Actual																				
Action C5 Population management	Proposed							■ ■													
	Actual																				
Action D1 Experience exchange workshops	Proposed					■ ■		■ ■				■ ■				■ ■				■ ■	
	Actual																				
Action D2a Dissemination and cooperation with local players	Proposed					■ ■				■ ■ ■				■ ■ ■			■ ■ ■				
	Actual																				
Action D2b Installation of nature educational trail	Proposed																		■ ■		
	Actual																				
Action D2c Guided tours in Meteliai Regional Park	Proposed							■ ■				■ ■				■ ■					
	Actual																				

Tasks/ Activities		2010				2011				2012				2013				2014			
		1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T	1T	2T	3T	4T
Action D2d Guided tours in Veisiejai Regional Park	Proposed							■	■			■	■			■	■				
	Actual							■	■		■	■				■	■				
Action D2e Installation of notice boards	Proposed					■	■														
	Actual							■	■		■	■	■								
Action D3 Study tours	Proposed						■	■			■	■									
	Actual						■	■	■		■	■							■	■	
Action D4 Printed educational material, touring exhibition	Proposed				■	■	■		■	■	■		■	■	■		■	■	■	■	■
	Actual				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action D5 Best practice guidelines	Proposed																		■	■	■
	Actual																		■	■	■
Action D6 Web page	Proposed				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action D7 Final project seminar	Proposed																		■	■	■
	Actual																		■	■	■
Action D8 Layman's report	Proposed																		■	■	■
	Actual																		■	■	■
Action E1 Project management and accountancy	Proposed				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Actual				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Action E2 Monitoring the effect of the project actions	Proposed										■	■	■	■	■	■	■	■	■	■	■
	Actual										■	■	■	■	■	■	■	■	■	■	■
Action E3 After Life Strategy	Proposed																		■	■	■
	Actual																		■	■	■
Action E4 Networking with other projects	Actual										■	■	■		■	■	■				
	Proposed						■	■		■	■	■			■	■	■				

### 5.3. Impact:

**Nature & Biodiversity:** Indicate as appropriate for each site of the project and overall, the impact of your project so far on the species/habitats targeted, and on the other/species/habitats present on the site(s).

The habitat restoration actions in the project area LT07 and Ha rearing increased significantly abundance of H.a. in Lithuania. Before the project it was known in 12 ponds in the project area LT07, which is the main area of distribution of H.a. in Lithuania. Currently it is found in 7 new ponds too.

Also habitat restoration actions in the project area LT06 widened distribution of H.a. in Lithuania towards the north west 5 km further than they were observed before. The other species are also noticed in the restored and created habitats, but they do not spread so fast and the impact for them will be after 2 – 3 years.

Eo were noticed spreading to the newly restored habitats, Eo were noticed in the project area LT06, where the ponds were totally overgrown before restoration and the turtles were not observed for several decades.

Population conservation actions had an undoubtedly strong impact on E.o. breeding success – 69 egg clutches were protected from predators in situ and 16 egg clutches from all the negative impacts ex situ. With the current size of E.o. population in Lithuania it is a significant proportion of offspring saved.

### 5.4. Outside LIFE

*Summarise the different actions taking place outside the framework LIFE project (i.e. not financed by LIFE) but that are complementary to the project and add to its impact (if applicable).*

After the Froglife seminar (please refer to the Action E4) and study tour to Denmark (please refer to the Action D3) the staff from VRP were introduced that the Road Directorate can help them to prevent amphibian road mortalities. Autumn 2012 fences and passages for amphibians are being built (in cooperation of VRP, the Road Directorate and AmphiConsult with the help of the project team) to strengthen the connectivity of the population in Lazdijai district, where the amphibian mortality during the migrations was very high.

The lessons for the schools prepared in the project framework, are being continued in the other schools outside the project area, which express a wish to have such lessons.

A workshop for the students from Vilnius University was organised. The students were introduced to the target species ecology, the activities of the project, afterwards they helped to protect the E.o. egg clutches and restore the ponds overgrown by *Typha* sp. The workshop was held 8-10 June in the project areas LT01, LT05, LT06, LT07, 8 students participated.



3 students have defended their theses on target species and habitats, which they wrote in the framework of the project (1 undergraduate student from Vytautas Magnus University and 2 Master students from Vilnius University). 2 new students have started their theses autumn 2013 (1 undergraduate and 1 master student from Vilnius University).

A workshop about Ha, Eo rearing, habitats and their restoration was organised with Lithuanian Herpetological Society in VRP on 10 – 11 August 2013.

Some of the activities described in the technical part were not financed by LIFE, for example “Bombina song contest” organised for the 20<sup>th</sup> Anniversary of LIFE (please refer to the Action D2a) did not require any financial resources from the project (even no working time, because it was organised in the evenings after working hours).

## Financial part

*Table 8. Budget breakdown.*

Budget breakdown categories	Total cost in €	Costs incurred from the start date to 30 10 2013 in €	% of total costs
<b>1. Personnel</b>	296,906	198,025	67%
<b>2. Travel and subsistence</b>	81,351	45,690	56%
<b>3. External assistance</b>	175,257	106,508	61%
<b>4. Durable goods</b>		0.00	
<b>Infrastructure</b>	52,468	0.00	0%
<b>Equipment</b>	76,673	15,212	20%
<b>Prototype</b>	0	0.00	
<b>5. Land purchase / long-term lease</b>	0	0.00	
<b>6. Consumables</b>	33,500	30,650	91%
<b>7. Other Costs</b>	0	993	
<b>8. Overheads</b>	50,105	27085	54%
<b>TOTAL</b>	<b>766,260</b>	424,163	55%

The overall consumption from the project beginning until 31/10/2013 is shown in table 8. Totally 55% of the total budget (comparing to 34% to the consumption by the Midterm Report) has been spent. The remaining 39% will be spent within the last project year.

**General comments on categories:**

According to our estimation, the total budget will be decreased by some 10 000- 15 000 Eur. Such decrease occurs because of savings under Infrastructure and Equipment. However we estimate increase under External service.

**Personnel:** biggest consumption among budget categories. It is estimated to have more expenditures because of more technical personnel employed by Beneficiaries, e.g. LFN employed half time person to organise and supervise pond digging and bush clearing.

**Travel:** will be used as foreseen.

**External:** we expect increase under this category. First of all, cattle purchase (A7) – 27 000 EUR- were moved from equipment into external. Another question is about services listed in the Application under Consumables category, however according to their nature they would belong to External. If we are supposed to report those foreseen expenditures under External, then it will cause substantial change. Therefore we would like to ask you to consider reporting these items under Consumable as foreseen.

**Infrastructure and Equipment** are underspent because results of actions were achieved by cheaper purchases or installing infrastructure by own capacity using for example former facilities at LZS. In future infrastructure will not be used completely because dams will cost less – instead of 30.000 Eur they might cost about 10.000 -15.000 Eur depending on the physio-geographic conditions for the rest of chosen places. Now dam instalment is performed as part of external work of pond digging. Education path will cost as foreseen – 10.000 Eur. All together this action will cost about 20.000 Eur thus, saving about 30 000 Eur, but they will be used by increased External budget.

**There is special case to consider under Equipment. Action C3.**

According to project application we intended “to buy for action C3 a full set of equipment which could access wet and moist areas with tussocks. For that purpose we planned to purchase a new 4WD-tractor with more than 100 kW power, which could be able to run mowing equipment and a hay-bailer reel.”

However we have to adjust changes of this action.

First of all, when we wrote the application, it was not known that project beneficiaries will receive tractors. John Deere 5070M tractors of 60 kW power were purchased by the main Authority of Protected Areas in 2013 and were handed over to project beneficiaries MRP, VRP and DNP. These tractors are equipped with instruments to work in meadows: trailer, frontal loader, mower, tedder, bush crusher.

Therefore there is no need to purchase one more the same size and power tractor for foreseen amount – 25.000 EUR. Thus, this amount is saved.

But we want to ask for permission to purchase a hydraulic mower instead of mower and hay-bailer reel. The main reason is that wet places, which are created by installing dams, and which will be finished in the beginning of next years, are not suitable for hay making. These areas will become entirely wet and mosaic, covered by tussocks, some swampy areas. However preparation of hay in these places would require penetration into soil making it flat and even, what will destroy habitats. Instead clearing of regrowth of scrubs and bushes, cutting wetland grasses like sedges, reed, or some water vegetation, is the most suitable way in managing these sites.

Therefore hydraulic mower with 5-8 meter long “arm”, which could be mounted to tractors, is the most suitable maintenance equipment in our conditions. Also this mower could be used for maintenance of restored water bodies cutting vegetation on their slopes, also inside of the ponds, managing vegetation on steep slopes of nesting sites. After cutting

mown grass, bushes and scrubs will be collected by workers employed by Project Beneficiaries and transported away by trailer.

The equipment will be owned by CB. According to agreement it will be used by all Project Beneficiaries to maintain project sites, especially dammed areas. Mowing will be performed in late summer and wintertime when areas become easier to access.

The cost of hydraulic mower would be about 15 000 Eur.

**Consumables.** Slight increase because of turtle food, which overall consumes more than expected. Also, change might be caused by items, which were foreseen under Consumables (see External description).

#### *Letter after Monitoring visit*

Papers requested about tax paid by AC were sent to financial DO.

#### Financial review by actions

Action number and name		Spent so far	Foreseen costs	Remaining	Projected final cost
A1	Action plans	34434.00	30581.00	-3853.00	48282.00
A2	Rearing methods	2893.26	9941.00	7047.74	3000.00
A3	Favourable conservation status	1985.80	5304.00	3318.20	6567.00
A4	Network-development	7263.92	18361.00	11097.08	10528.00
A5	Natura 2000 sites	8167.19	12176.00	4008.81	10416.00
A6	Permissions	8357.47	8113.00	-244.47	12670.00
A7	Farm developement	36421.70	13278.00	-23143.70	36072.66
C1	Habitat management	82059.82	129196.00	47136.18	136513.00
C2	Renovation of ponds	12451.30	23012.00	10560.70	26095.00
C3	Restoration of wetlands	1940.22	92222.00	90281.78	50791.92
C4	Sandpit management	373.06	32779.00	32405.94	10234.00
C5	Population management	73344.53	108503.00	35158.47	102542.30
D1	Experience exchange workshops	24242.59	28498.00	4255.41	33299.58
D2a	Dissemination, cooperation	5305.01	4627.00	-678.01	7928.00

D2b	Nature educational trail	1272.48	12539.00	11266.52	14600.00
D2c	Guided tours in MRP	123.84	1762.00	1638.16	160.57
D2d	Guided tours in VRP	508.20	1762.00	1253.80	1712.00
D2e	Notice boards	2205.85	750.00	-1455.85	2258.69
D3	Study tours	16174.50	35470.00	19295.50	29575.50
D4	Educational material	31411.04	25964.00	-5447.04	48601.00
D5	Best practice guidelines	0.00	13375.00	13375.00	9747.00
D6	Web page	1989.53	3251.00	1261.47	3800.00
D7	Final seminar	0.00	14777.00	14777.00	7181.00
D8	Layman's report	0.00	3100.00	3100.00	4100.00
E1	Project management	38700.46	68836.00	30135.54	69063.00
E2	Monitoring	1266.98	13165.00	11898.02	7329.78
E3	After Life strategy	0.00	0.00	0.00	0.00
E4	Networking	4185.79	4813.00	627.21	6931.00
<b>TOTAL</b>		<b>397078.54</b>	<b>716155</b>	<b>319076.46</b>	<b>699999</b>

### Comments:

More expenditures will be in action A1 because of more efforts in personnel by all AB because of investigations of area , and plan preparations for individual sites, which will be put together in one national plan.

More in A6 because of permissions and negotiations with land owners.

3 times more expenditures in A7 but because of external – cattle cost 27 258 eur and personnel used to develop the farm. Also expert costs are included here, which consulted on farm establishment. Therefor the cattle herd was purchased bigger than initially planned. Also other costs , e.g. personnel, travel is spent more because of more efforts made into farm development.

Less than in expected in midterm report will be used for C1. We can conclude that 1 pond cost about 780 Eur to dig or restore, therefor for the rest of ponds 46 we will need about 35 000 in external. C2 will cost less because of not so expensive site works.

C3 is reduced because of equipment which was not purchased.

C4 – sand pit reduced (described in MTR).

C5 almost all foreseen budget will be used because of many efforts in finding the nesting sites.

D actions:

D2b – we would like to increase the budget for nature educational trail by 5000 eur, it could be more elaborated with the higher budget.

Notice boards cost more because of personnel used on elaboration of texts and layouts, and more external used to produce wooden material.

D4 – increase by some 25 000 eur because of more professional authors and making services more professional, for example, the dvd creation – instead just making dvd, we hired high skilled film maker, which will be written into dvd. More handbooks on high value nature farmland were printed, experienced author was hired from WWF.

#### List of Annexes

1. Eo and Ha species action plans
2. Eo rearing methodology
3. Abstracts from the conference organised by LIFE HerpetoLatvia
4. Criteria for favourable conservation status
5. Methodology for Creating the Ecological Network for the Target Species in the Nature Frame
6. Reports about use of the protected species submitted to MoE after the field season 2012
7. Pictures of Informational boards and a map with their locations in the project locality
8. Abstracts of a symposium „On Freshwater Turtles Conservation“,
9. Minutes of Steering committee meeting
10. The photos and a table with coordinates of new habitats and egg laying sites in the project areas (C1)
11. The photos and a table with coordinates of restored habitats in the project areas (C2)
12. The coordinates and descriptions for the places, where the dams were built
13. A scheme of the educational trail
14. Lists of the guided tours in MRP
15. Distribution details of all dissemination materials
16. Informational materials about beef cattle and grazing of high nature value grasslands in favour for turtles and amphibians
17. Photos of turtle enclosures in LZS
18. List of participants and programme of the workshop “Aspects of biodiversity in the process of environmental impact assessment with the special focus on protected reptiles and amphibians”
19. Meetings with local people (D2a)
20. Note from MoE about the criteria of favourable conservation status
21. Photo of a sand pit
22. Lists of the guided tours in VRP
23. The map and photos of the project farm A7
24. Maps of proposed Natura 2000 areas and a letter of submission of new Natura 2000 sites for MoE