



LIFE Project Number

LIFE08 NAT/SLO 000244

**Revised Mid-term Report with Payment Request
Covering the project activities from 01/01/2010 to 31/07/2011**

Reporting Date

29/09/2011

Revision Date

28/10/2011

Acronym

SloWolf





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Data Project

Project location	Southern Slovenia – Dinaric region
Project start date:	01/01/2010
Project end date:	31/12/2013 Extension date: -
Total budget	1,017,773 €
EC contribution:	721,850 €
(%) of eligible costs	70.92

Data Beneficiary

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2. List of key-words

1. AP Action Plan
2. AB Associated beneficiary
3. CB Coordinating beneficiary
4. DS Dinaricum Society
5. EC European Commission
6. EU European Union
7. MAFF Ministry of Agriculture, Forestry and Food
8. MESP Ministry of the Environment and Spatial Planning
9. SFS Slovenia Forest Service
10. UL University of Ljubljana

3. Executive summary

3.1. General progress

The LIFE-project **Conservation and surveillance of conservation status of wolf (*Canis lupus*) population in Slovenia** (LIFE08 NAT/SLO 000244 SloWolf) has started on the 1st January 2010. This midterm report covers the project implementation period from the 1st September 2010 until the 31st July 2011, and is submitted as foreseen by the Grant Agreement. The purpose of the report is to give the necessary information for the Commission to evaluate the state of implementation of the project, in respect of the work plan, the financial situation of the project and whether the project is on track towards achieving its objectives, or whether there are serious delays. The report is sent both to the EC and to the external monitoring team Astrale. The report is delivered in paper and electronic versions.

Project's main goal is to **facilitate long-term conservation of wolves, their prey base and their habitats in Slovenia, and their co-existence with humans**. We evaluate the general progress of the project as good since the work of most of the actions for achieving the main goal of the project is being implemented as planned (see below table with the list of actions with descriptions of the progress and see chapter 5. Technical part). The project group involves 14 members that have been regularly meeting and corresponding via project's mailing list, and working together and/or independently on their actions and are all joined in the Project Steering Group. The project coordination is going on well with no complications (see chapter 4. Administrative part).

LIST OF ACTIONS WITH A SHORT DESCRIPTION OF THE GENERAL PROGRESS

Action	General progress
A1 - Surveillance methods	Action was implemented in the first 6 months of the project. Study designs and protocols for the first cycle of C1 activities were prepared. Action completed as planned.
A2 - Action plan (AP)	We organized five full day facilitated workshops with the stakeholders, including the experts and managers from the neighbouring Croatia. The participants of the workshops analyzed the problems, set goals and proposed actions for the AP. Project steering group is using the results of the workshops to prepare the final draft of the AP. The AP will be submitted to the MESP during September 2011.

A3 - Prey assessment	Field work for the estimation of prey densities with faecal pellet group count method has been completed as planned. Data analysis is in progress and we expect the action will be finished on time and the guidelines produced will be used for the implementation of the Action C2.
A4 - Damages assessment	Registered damages caused by wolves were analysed and report produced as planned. The findings from the report were extensively used in Action A2.
A5 - Farming systems	Following data collection using literature review and questionnaire implementation, analyses were completed and report produced as planned. The findings were used in the Action A2.
A6 - Public attitudes	The work has been completed as planned. Three different questionnaires have been developed and implemented and report produced. The results were used in Action A2 and to produce communication guidelines for the project.
C1 - Conservation status	In the first yearly surveillance session we detected 6 litters. During winter 455 km of transect lines were examined. Necropsy and analysis of 12 dead wolves was carried out. More than 550 wolf non-invasive samples for genetic analyses were collected. Protocols for genetic analysis were optimized and initial samples analyzed.
C2 - Ungulate management	The work has started earlier than planned. We organized a meeting to plan implementation of the action. First workshop will be carried out in November 2011.
C3 - Volunteers	The work is carried out almost through the whole year with the same budget. The reason is a big interest of the volunteers. We are especially satisfied with the response of the hunters and their participation in the project.
C4 - Damage inspectors	In November 2010 we successfully carried out the first seminar for the damage inspectors. The handbook was prepared, printed and distributed within the deadline previously approved by the EC (April 2011).
C5 - Agriculture advisory service	We started with preparation for the implementation of the educational seminar. The seminar will be carried out in December 2011.
C6 - Best practice	We installed portable electric fences at four farms. Two additional electric fences were purchased from the SFS own budget. In April 2011 guarding dog experts were hired. Four sheep farmers were chosen for the donation of the dogs, which is planned for September 2011. Overall the action has started according to the timetable and is progressing as planned.
D1 - Public awareness	We have developed the project graphic design, 1000 project t-shirts were produced and distributed to the project staff, farmers, hunters, volunteers and other interested parties. Project Bulletin "Volčja sled 1" (Wolf footprint 1) was produced, as well as brochure about wolves. Posters were produced in two motifs with the same text. We additionally designed and printed two larger posters with no additional cost to the project. We attended a hunter's fair (promotional stand). Activities in progress are: filming for a documentary film, educational lectures for the volunteers, relations with media, press releases, interviews to the media, etc.
D2 - Promotion of coexistence	We started with the preparation of the brochures about the damage prevention. Consultant hired under action C6 (livestock guarding dog experts) are helping us also with this action.
D3 - Hunter education	So far 11 lectures were organized and carried out for the hunters.
D4 - Website	The project web page www.volkovi.si is being updated regularly. Main contents and blog posts have been translated to English.
D5 - Layman's report	According to the project schedule this action has not started yet.
D6 - Thematic conference	According to the project schedule this action has not started yet.
E1 - Project coordination	Project coordination is going well with no complications. Co-financing agreement with the second co-financer was signed. Two additional meetings of the project steering group were organized.
E2 - Project evaluation	According to the project schedule this action has not started yet.
E3 - Action Plan Revision	According to the project schedule this action has not started yet.
E4 - After LIFE	According to the project schedule this action has not started yet.

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

Project is continuing to be implemented as planned. So far, there are no obvious signs that the objectives cannot be reached. All of the actions scheduled to be completed so far, have been completed and actions scheduled for implementation are being carried out. The list of key deliverables and milestones as defined in the grant agreement, are indicated below with the note of their fulfilment considered till reporting date 31st August 2010.

DELIVERABLE PRODUCTS AND MILESTONES OF THE PROJECT FOR THE PERIODE 01/09/2010 – 31/07/2011

Name of the Deliverable	Code of the action	Deadline	Fulfilment
DELIVERABLE			
Prepared report on how and why the damages happen, and the guidelines for damage prevention	A4	1/10/2010	Completed
Prepared 2 digital maps showing areas where conflicts with agriculture are more likely	A4	1/10/2010	Completed
Prepared 1 digital map showing the areas where spatial expansion of the wolf is bound to cause problems with the agriculture.	A4	1/10/2010	Completed
Prepared 1 management recommendations – summary report with the guidelines for damage prevention and actions to be taken.	A4	1/10/2010	Completed
Handbook for recognition of damages done by large carnivores on livestock and practical damage inspection, printed and distributed among the damage inspectors.	C4	1/10/2010	Completed
Yearly bulletin of the project – 700 pieces – produced and distributed.	D1	15/12/2010	Completed
Prepared 1 report with management recommendations - summarized results of case study analyses with recommendations for actions to be taken to implement best practices	A5	1/04/2011	Completed
6000 brochures produced and distributed	D1	1/04/2011	Completed
Prepared 1 report containing statistically analyzed results, published on the project web-page and passed on to the decision-makers.	A6	1/07/2011	Completed
1000 posters about the project produced and distributed.	D1	1/07/2011	Completed
MILESTONE			
First yearly surveillance session report produced	C1	30/06/2011	Completed

3.3. Problems encountered.

We are foreseeing a delay in production of printed materials about the use of the electric fences and guarding dogs for damage prevention. They are planned to be prepared by the 1st of October 2011. We are foreseeing a delay of two months because the contents of these materials need to be well prepared with as many examples of the use of efficient preventive measures as possible (gained from other LIFE projects as well as from the best-practice examples from this project during first half of year – action C.6). We would also like to include different collaborators in the preparation to add additional value to the materials. All listed above demands more time, so we foresee a delay and the materials will be prepared by the 1st of December 2011. The foreseen delay will have no influence on other actions planned in the project.

In Action A2, printing of 1000 copies of the Action plan is foreseen. Although the proposal will be prepared in time and available on the project web page, we propose to postpone the

printing of the Action plan until it is accepted by the Government. We believe that having a hard copy of the accepted Action plan (instead of a proposal) will be of better use to experts and managers. It is however difficult to foresee when this will happen, especially since current Government has resigned and we are waiting for the elections.

4. Administrative part

The project is organized as shown in the organigramme. As seen from the project team and management structure, people from many departments and institutions are involved. University of Ljubljana (UL) is the project beneficiary with two subordinate faculties and three departments involved. The associated beneficiaries (AB) are Dinaricum Society (DS) and Slovenia Forest Service (SFS). Cooperation between involved institutions has been, and still is, excellent. There is also good cooperation between scientist from the University and authorities from SFS, as well as with the volunteers from the DS.

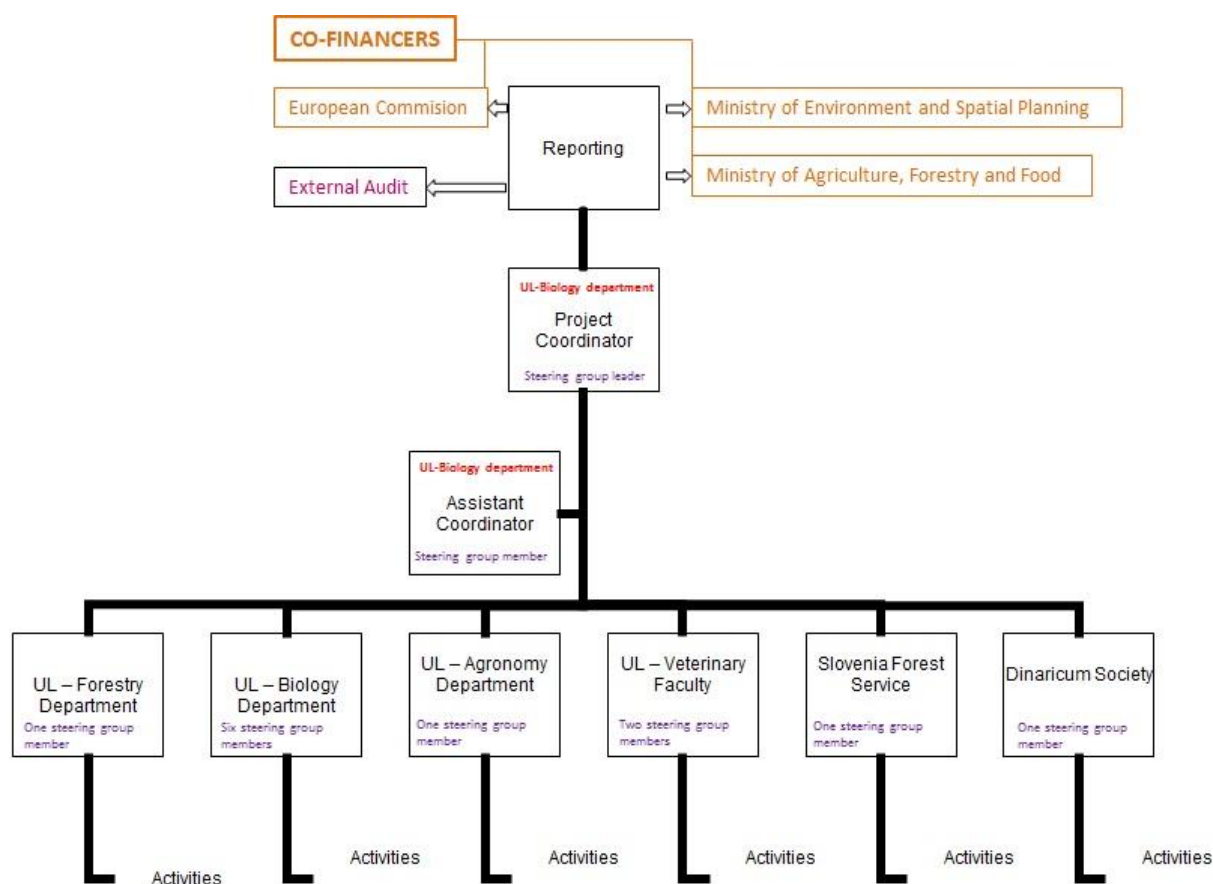
Inception Report of the project was delivered on Sep. 27th 2010 and a representative of the LIFE External Monitoring team, Mr. Mitja Kaligarič, visited the project on April 19-20th 2011 (Annex 7.3.39. – List of participants). All remarks given by the EC, following the Inception Report submission and the monitoring visit were taken into account.

At the end of May 2011 there was a change of the project coordinator. Anamarija Žagar was replaced by Aleksandra Majić Skrbinešek, who returned from maternity leave. External monitoring team was informed timely about the change. The project did not suffer any fallbacks due to the personnel change.

The project steering group has continued with meetings on a regular basis. At a meeting on Dec. 13th 2010 (Annex 7.3.1 – List of participants) an overview of the project progress was assessed and detailed plans were made for the upcoming activities. Steering group has also met on Jun. 23rd 2011 (Annex 7.3.2 – List of participants) where we reviewed the EC's feedback on the Monitoring visit. The meeting was continued with the overview of the project progress. Lastly, members of the steering group were briefed about the preparation of the Midterm report.

The project steering group also communicates using Google group application. The members of the steering group have exchanged 600 messages since the start of the project with this application (Annex 7.3.3 – Screen-print).

4.1 Organigramme of the project team and the project management structure



5. Technical part

5.1. Project progress during the reporting period

Below are descriptions of each of the actions as defined in the proposal for the period between 01/01/2010 and 31/07/2011.

5.1.1. Actions A: PREPARATORY ACTIONS, ELABORATION OF MANAGEMENT PLANS AND/OR OF ACTION PLANS

THE LIST OF DELIVERABLES AND MILESTONES FOR ACTIONS “A” AS DEFINED IN THE GRANT AGREEMENT AND STATUS OF FULFILMENT

Name of the Deliverable	Code of the action	Deadline	Fulfilment
DELIVERABLES			
Prepared protocols and guides for surveillance of conservation status activities	A1	1/7/2010	Completed
1 report: how and why the damages happen, and the guidelines for damage prevention	A4	1/10/2010	Completed
2 digital maps showing areas where conflicts with agriculture are more likely	A4	1/10/2010	Completed
1 digital map showing the areas where spatial expansion of	A4	1/10/2010	Completed

the wolf is bound to cause problems with the agriculture.			
1 management recommendations – summary report with the guidelines for damage prevention and actions to be taken.	A4	1/10/2010	Completed
Management recommendations - summarized results of case study analyses with recommendations for actions to be taken to implement best practices, 1 report	A5	1/4/2011	Completed
1 report containing statistically analysed results prepared, published on the project web-page and passed on to the decision-makers.	A6	1/7/2011	Completed
National Wolf Action Plan	A2	1/10/2011	Under implementation
1 report - evaluation of the dietary needs of the wolves in Slovenia (predation rates, species spectrum and sex/age structure of the prey).	A3	1/10/2011	Under implementation
1 report - analysis of prey species population models and habitat (simulated effects of different management scenarios with and without carnivore presence on dynamics and sizes of prey species populations).	A3	1/10/2011	Under implementation
Management recommendations - summarized results of research and models with an emphasis on management implications and actions to be taken (guidelines for Action C.2).	A3	1/10/2011	Under implementation
MILESTONE			
Wolf Action Plan produced	A2	31/10/2011	Under implementation

5.1.1.1.Action A.1: Establishment of methods for the surveillance of wolf population conservation status

This action was planned as a set of preparatory activities for starting the implementation of the complex wolf population surveillance (Action C.1) and has lasted for the first 6 months of the project. Study designs of the first cycle of the surveillance activities were prepared. Protocols and guides for collaborators in surveillance activities were prepared and finished (all Annexes were provided with the Inception Report). Training of wolf howling for volunteers was organized together with presentation of the goals and protocols of wolf howling survey at UL on 25 August 2010. Maps and census sheets for howling tests were prepared and printed before the 23 August 2010 when first surveillance session with howling started. Cooperation network between institutions responsible for wolf monitoring was established by organizing workshops and session meetings with representatives of participating hunting clubs, volunteers from DS and SFS personnel. This action was completed as planned.

5.1.1.2.Action A.2: Elaboration of wolf population action plan

We organized five all-day workshops and invited all interest groups involved in wolf management in Slovenia as well as wolf experts from Croatia (Annexes 7.3.4., 7.3.5., 7.3.6., 7.3.7., 7.3.8. – Lists of participants). Project members have held two meetings devoted to organization of implementation of the workshops (Annexes 7.3.9. and 7.3.10. – List of participants). At the first workshop (28th of January) the biggest challenges of wolf management were determined and priorities for each challenge were set. On the second and third workshop (3th and 4th of February), long-term and specific goals for each challenge were defined, while the last two workshops were devoted especially to the topic of wolf damages to livestock, which was recognized as top priority challenge regarding wolf management in Slovenia (Annex 7.3.11 – Reports from the workshops). Sheep breeders were additionally invited to the last two workshops to ensure all different point



Figure 1: Facilitated workshops for Wolf Action Plan

of views were considered. The preparation of Action Plan is in progress and coordinated with the MESP's time schedule for the formal acceptance of the plan. We plan that the Action plan will be presented to the wider public to date of the deliverable and that competent authority will accept it. Although the proposal will be prepared in time and available on the project web page, we propose to postpone the printing of the Action plan until it is accepted by the Government. We believe that having a hard copy of the accepted Action plan (instead of a proposal) will be of better use to experts and managers.

5.1.1.3.Action A.3: Assessment of wolf natural prey base in Slovenia, identification of the needs for specific actions and preparation of management improvements

An assessment of the natural prey base for wolves in Slovenia was done through combination of hunting bag analyses, field work (pellet group counting) and GIS and population modelling. Field work for the estimation of the prey densities with faecal pellet group count method has started in April 2010. Sampling plots were set in three research areas and cleaned of all faecal pellets. In June and August, the plots were visited for the first time, pellet groups counted and plots cleaned. We continued with the activity and sampling plots for pellet-group counting were visited for the fourth time and cleaned in early November 2010, after leaf fall and prior to first snowing. After the snow-melt, in April 2011, pellet-groups were counted for the last time. In this manner we obtained the maximum accumulation time possible, since the pellet-group decay is slowest during winter months. Field work in this action is now completed. All together, we have visited 240 sampling plots for 5 times in 3 study areas, each sampling session lasted 10 days. By sampling on a year-round basis we were able to obtain data to estimate spring, summer and winter densities of all ungulates representing main wolf prey species. Seasonal migratory behaviour is typical for ungulates in temperate zone and considering seasonal changes in ungulate distribution makes the method of pellet-group counts better and more accurate. We did not use winter linear transect counts method as planned in project application, because with the implementation of extended pellet-group count method and new available maps and data of local density indices for all indigenous ungulates in Slovenia, this was no longer needed (Annex 7.3.12 – EU Commission letter). Data analysis is in progress and we plan that all deliverables of this action will be finished as planned and management recommendations will be prepared and ready to be used as guidelines for Action C.2 (that will start after this action).

5.1.1.4.Action A.4: Assessment of damages caused by wolves to agriculture

The extent and nature of damages which wolves do to agriculture was assessed and the report finished as planned. We have analyzed all registered wolf damage cases since 1994 until 2009. The report includes six digital maps with the spatial presentation of the damages during the analyzed time period. A habitat model for the potential wolf population expansion was developed, including a map of areas where conflicts with agriculture are more likely to occur today as well as in case of spatial expansion of the

wolf population and spatial expansion of the sheep breeding (Annex 7.1.1 – Report with digital maps and management recommendations).

5.1.1.5.Action A.5: Analysis of existing farming systems in wolf areas and preparation of best practices recommendations

The action has finished as planned with the final report (Annex 7.1.2 – Report). The report presents the results from the general analysis of the 264 farms in the wolf area which were surveyed parallel to the implementation of the action A6 (Annex 7.3.13 – questionnaire for sheep farmers - damage prevention). The obtained results show, that the farmers use the farming systems which are optimized to existing agricultural production techniques and not to the coexistence with wolves. In the next step we selected 46 farms for more detailed farming system and economic analysis on linkage between existing farming systems and wolves attacks. The obtained results show that within the existing farming systems we can't identify those who are more or less appropriate from the prevention against the wolves' attacks point of view. It is much more significant, how well the farmers perform all the necessary measures within the existing farming systems. The financial analysis revealed that the existing damage compensation payment do to certain extent satisfactory compensate the damages of killed or injured sheep and goats bred for meat. When the animals are kept for dairy production this is not the case. Results of the analysis were the foundation for the management recommendations and the selection of the hot-spot locations in action C6.

5.1.1.6.Action A.6: Analysis of attitudes of the general public, hunters and sheep farmers toward wolves and preparation of management recommendations

The aim of this action was to conduct a quantitative survey of attitudes of the general public, hunters and sheep farmers towards wolves and their knowledge about the species. Three different questionnaires have been prepared and printed: 400 copies for sheep farmers, 1300 copies for hunters and 2000 copies for general public (Annexes submitted with the Inception Report). Questionnaires for hunters and general public were sent by post to a sample of potential respondents (n=3300). A special project post stamp was produced with the purpose to increase response rates (Annex submitted with the Inception Report). The return rate of the mailed questionnaires was 30.6 % for general public and 32.5 % for hunters. Sheep farmers were interviewed personally by visiting them at their home. We interviewed the total of 256 sheep farmers. The results were entered into a database and analyzed. A report, including also communication recommendations was prepared (Annex 7.1.3 – Report). Two short reports of the work on this action have been published on the project web page (<http://www.volkovi.si/en/blog/149-slovenska-javnost-je-ohranitvi-volka-naklonjena>; <http://www.volkovi.si/en/blog/100-anketiranje-rejcev-drobnice-na-terenu-je-uspeno-zakljueno>, blog). Preliminary results of the action were presented on the first workshop for the development of the National Wolf Action Plan on 28/01/2011 (Annex 7.3.14 – PowerPoint presentation).

5.1.2 Actions C: CONCRETE CONSERVATION ACTIONS

THE LIST OF DELIVERABLES AND MILESTONES FOR ACTIONS “C” AS DEFINED IN THE GRANT AGREEMENT AND STATUS OF FULFILMENT

Name of the Deliverable	Code of the action	Deadline	Fulfilment
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DELIVERABLES			
Handbook for recognition of damages done by large carnivores on livestock and practical damage inspection, printed and distributed among the damage inspectors.	C4	1/10/2010 New date proposed: 1/4/2011	Completed
Article presenting results from monitoring actions in Slovenian hunting magazine "Lovec"	C1	15/12/2011	Under implementation
Yearly surveillance session report	C1	15/12/2011	Under implementation
A detailed plan (1 document) with respect to integration of the large carnivores' requirements in prey species (wild ungulates) management – 1 report	C2	1/10/2012	Under implementation
Report on the monitoring of effectiveness of protection measures.	C6	1/10/2012	Under implementation
Popular article about the "good practice" example in an agricultural magazine.	C6	15/12/2012	Not started yet
Article presenting results from monitoring actions in Slovenian hunting magazine "Lovec"	C1	15/12/2012	Not started yet
Yearly surveillance session report	C1	15/12/2012	Not started yet
A habitat model for the wolf in Slovenia (1 digital map of suitable habitat for the wolf in Slovenia)	C1	1/7/2013	Not started yet
Article presenting results from monitoring actions in Slovenian hunting magazine "Lovec"	C1	15/12/2013	Not started yet
Yearly surveillance session report	C1	15/12/2013	Not started yet
MILESTONES			
First yearly surveillance session report produced	C1	30/6/2011	Completed
Anti-predator protection set up at selected hot-spots	C6	31/5/2012	Under implementation
Second yearly surveillance session report produced	C1	30/6/2012	Not started yet
Third yearly surveillance session report produced	C1	30/6/2013	Not started yet

5.1.2.1 Action C.1: Establishment of surveillance of wolf population conservation status

First yearly surveillance session report was produced (Annex 7.1.4). The report describes the methods and the data collected. Thorough analysis of the collected data is currently underway, so that the final Yearly surveillance report will be available by 15/12/2011, as planned.

Point 1 (Field-collected spatial and demographic parameters for surveillance of the wolf population): In August 2010 we started with the howling survey. Volunteers were trained and study design prepared (see Action A1) and on 30th August the field-surveillance has started. We carried out the first year session of surveillance of wolf population status with howling survey in major part of the study area. The final result of the session was: six litters detected and additional seven territorial howling responses of adult wolves obtained. Throughout the training period and field-work sessions we also focused on the promotion of the species and the Life+ program through direct involvement of hunters and volunteers. In December 2010 we prepared a logistic and technical design for winter transects counting of wolf packs. In January two educational workshops were prepared for 258 volunteers willing to attend the winter monitoring. Between February and March seven field transect sessions have been performed with 455 km of transect lines examined. More than 100 scats for wolf diet and genetic analyses were collected.

Point 2 (Examination and analysis of dead wolves): We have performed necropsy of 12 wolf carcasses in total (Table 2), 10 of which were culled wolves and one was a female wolf killed in a collision with a car and one was a female pup killed probably by a fox. All of the animals were in good health and physical condition. Seven species of parasites were confirmed, among which also *Trichinella* spp., (n=2) and *Oslerus osleri* which is typical for domestic dogs, but very rarely found in wolves (Figure 2).



Figure 2: Wolf lungs. Parasite *Oslerus osleri* in trachea (Photo: D. Žele).

Table 2: List of analyzed wolf carcasses).

ID code	Mortality date	Location	Gender (M/F)	Estimated age (years)	Weight (KG)	comments
3/10	4.6.10	LD Podgorje	f	6 weeks	1.9	Interruption of the spinal cord
4/10	20.10.10	LD Videž-Kozina	m	3	40	Culling – Brin (collared wolf)
5/10	20.10.10	LPN Snežnik Kočevska Reka	m	adult	20	Culling
6/10	15.11.10	LD Lož-Stari trg	m	1	46	Culling
7/10	11.12.10	LPN Jelen	f	13	31	culling
8/10	12.12.10	LD Kozlek	m	4	36	culling , skin lesions
9/10	19.12.10	LPN Jelen	f	3	33	culling
10/10	19.12.10	LPN Jelen	m	5	44	culling
1/11	12.1.11	LPN Snežnik Kočevska Reka	m	2	37	culling
2/11	17.1.11	LPN Medved	m	4	41	culling
3/11	28.1.11	LD Trnovo	m	5	35	culling
4/11	7.3.11	LD Cerknica	f	4	34	car collision

Point 3 (Conservation genetics status of the wolf population using non-invasive genetics): In spring 2010 we visited five damage cases on sheep attributed to wolves in four different pastures (in Beka twice, in Palčje, in Knežja Lipa and in Črnelice) and have altogether collected 37 samples of saliva from carcasses. On the basis of these visits, protocols for collecting of saliva at damage cases were prepared and are now preformed by SFS damage inspectors. In October 2010 our article about the genetic monitoring of grey wolf in which hunters will be participating in the next three years of the project was published in hunting magazine “Lovec”. In autumn 2010 we distributed approximately 6000 flasks for collection of non-invasive samples to hunters (108 hunting grounds) and foresters, and organized presentations of the project and noninvasive wolf sampling for representatives of all hunting grounds (11 presentations). Noninvasive genetic sampling was presented also to other volunteers

that joined the project through the snow tracking action. Before the presentations project members have held a meeting to organize activities of non-invasive genetic sampling action (Annex 7.3.15. – List of participants). During the first sampling season (from 1.7.2010 to 30.6.2011) all together 555 non-invasive samples were collected (176 of saliva, 255 of scats, 124 of urine). We prepared a map of collected samples and published it in the hunting magazine Lovec (Annex 7.3.16., article). Extraction and PCR protocols were optimized, and all scat, urine and 100 saliva samples were genotyped. We also collected and genotyped additional 28 hair and tissue samples of dogs, foxes and jackals to build-up a genotype database for species diagnostics. Genetic data is currently being analyzed. We can evaluate the current status of work as: in progress, proceeding as planned.

Point 4 (Surveillance of individual wolves using GPS-GSM telemetry):

Up to now, 4 wolves were captured and equipped with gps/gsm collars. In October 2010 GPS collared wolf has been accidentally but legally killed during an attack on sheep in a fenced pasture near village Petrinje. During the six months of tracking period we got 1322 GPS locations of the wolf/pack movements. Wolf's GPS locations were spread on 442 km² (100% minimal convex polygon) (e.g.

<http://www.volkovi.si/blog/103-celotno-spremljanje-volka-brina>). In 2011 up to date of 31/07/2011 two other male wolves (Figure 3 and 5) from different wolf packs have been equipped with a GPS-GSM radio collar. All together we received 782 GPS locations. Maps showing spatial use and home range were prepared and used as educational and promotional material published on the project internet page (e.g. <http://www.volkovi.si/sl/blog/152-gibanje-z-ovratnico-opremljenih-volkov-v-juliju>) and Wolf Monitoring Portal. Wolf from Vremščica pack crossed motorway in last three months more than 16 times. All wolves got their personal identity cards on the project internet page (e.g. <http://www.volkovi.si/sl/o-volkovih/osebne-izkaznice-volkov>).



Figure 3: Male wolf, named Slavec, was captured on 17.7.2011. (Photo: H.Potočnik)

Two wild prey remains have been found as a direct result of near-real-time GPS surveillance data in the field. Additionally, all livestock attacks within the pack's territory have been analysed and cross-checked with the wolf. Reproduction has been detected in the pack of the radio-tracked wolves using stimulated howling and inspection of den sites. The litters have been confirmed in both packs and at least five pups have been detected in the Vremščica pack (Figure 4). We continue with the capturing activities until end of October.



Figure 4: Wolf litter found on 23.6.2011. (Photo: N.Ražen)

Point 5 (Wolf Monitoring Portal): The Wolf Monitoring Portal has been developed with external assistance and has passed through the test phase and is currently available and used by the project partners. The database is being filled with different wolf-related data (genetic samples, damages to livestock,



Figure 5: Male wolf named Vojko was captured 6.5.2011. (Photo: M.Krofel)

telemetry data, howling survey data, snow tracking data). We will make the portal available to the wider public by the end of the year, when we will also integrate it with the project website. It is available at <http://portal.volkovi.si/>.

5.1.2.2 Action C.2: Improvement of management of wild ungulate species

The main aim of this action is to produce prey species management guidelines that will include the requirements of wolves. The first 2-day workshop will be carried out in November 2011.

5.1.2.3 Action C.3: Involvement of hunters and volunteers in the wolf population monitoring activities

In this action we involve hunters and other volunteers in surveillance activities carried out under Action C1. We planned inclusion of the volunteers in snow-tracking and sample collection. The work has started earlier than planned because of a big interest among hunters and other potential volunteers to participate in other project activities (howling). Because of that, activities of this action are in progress with a slightly different time schedule as planned. Instead of periods from 1st October to 1st April each season (except the last season: till 31st of December) the work of this action is carried out almost through the whole year with the same planned budget. The reason is a big interest of volunteers to participate in different wolf population monitoring activities also in summer and not only in winter time and that opportunistic non-invasive genetic sampling of wolf scats by hunters is performed all year and therefore we keep contact with interested hunters all year round. We are satisfied with the response of hunters to participate on a voluntary basis as well as with general public's interest. Last winter season (2010/11) altogether 569 volunteers (128 were hunters) applied to participate in winter snow tracking via e-mail, telephone or personal communication to project team members. All were registered in our data base and invited to an educational seminar (Annexes 7.3.17 and 7.3.18 – invitations) that was obligatory before going to the field. It was organized on two dates in January 2011. There were 258 volunteers educated at the seminars (each volunteer filled in an A4 questionnaire kept in the project archives) and then added on the mailing list of SloWolf volunteers and regularly up-dated about dates of field activities in which they could participate. Instructions for volunteers were prepared, printed and distributed (Annex 7.3.19 - instructions). Non-favourable weather conditions prevented us to carry out a big cross-country winter snow tracking of wolves that could involve most of the volunteers, but instead they were able to participate in local snow tracking in which more than 60 volunteers participated on seven different dates in February and March 2011 (see report of Action C.1, chapter 4). Volunteers (including hunters) got feedback about the results through several channels – project web page, articles in hunting magazine “Lovec” (see action D.1) and directly with personal communications on the field. In July 2011 preparations for summer howling surveillance activities have started. All year round opportunistic sampling of non-invasive genetic samples of wolves has been done by hunters with which we had regular communication (for results of collected samples see report of Action C.1, chapter 3). Currently a new surveillance season has started and we invited last-year's

trained volunteers and hunters to participate (Annexes 7.3.20 and 7.3.21 – invitations) in an educational seminar and field trip for howling that will be carried out at the beginning of August 2011. Howling sessions will be done in late August. In the frame of this action we have also purchased all planned and necessary equipment for field work (GPS devices and snow shoes) and organisational activities (lap-top computer) in December 2010. Other expenses were petrol, food and drink expenses for participants. All involved volunteers got a promotional T-shirt. On the whole the action is continuing well and as planned.



Figure 6: Participants of educational seminar for snow-tracking volunteers. (photo: N.Ražen)

Faculty in Zagreb, Croatia. In the first part of the seminar experts on large carnivore damages gave us lectures how to distinguish damage cases done by different wild animals and which for human dangerous diseases wild animals can have. The second part of the seminar has taken place in the anatomization room, where gathered knowledge has been tested on carcasses of animals killed by the wolves. The seminar was attended by 55 damage inspectors (Annex 7.3.22 – Lists of participants). Handbook for recognition of damages done by large carnivores on livestock (Annex 7.1.5. – handbook) with damage inspection protocols has been finished and distributed among damage inspectors. This part of the action started as planned, but was prolonged. It was planned that the handbook will be finished and distributed 01. 10. 2010, but was finished and distributed in April 2011 as planned in the prolonged date, which was previously approved by the EC.



Figure 7: Training of inspectors for recognition and evaluation of LC damages

The second seminar for damage inspectors will take place in the second part of the year 2012.

5.1.2.5 Action C.5: Training of agriculture advisory service in damage prevention measures

The activities of this action have started at the beginning of July 2011 and are currently in progress as planned. First training seminar for interested employees of agriculture

advisory service will be carried out in December 2011. The participants will be educated about livestock damage prevention measures with an emphasis on the use of guarding dogs and portable electric fences for night enclosures. Lecturers have been found and contacted to prepare the contents. Other organisational activities (preparation and sending of invitations, arranging the lecture place, etc.) will be done in September and October 2011. An organized visit to one of the hot spot farms where best practice damage prevention measures are implemented within action C.6 will be organized. This action is planned to continue again in the period between 01.04.2013 and 30.09.2013 when the second training seminar will be performed.

5.1.2.6 Action C.6: Best practice demonstration of damage prevention measures at selected wolf damage hot-spots

In this action we are demonstrating “best practice” examples of livestock protection against wolf attacks at “hot-spot” locations. Based on the results of action A.4, hot-spot areas with frequent conflicts between wolf presence and animal husbandry were recognized. Six sheep breeders with recurring wolf attacks and willingness to cooperate with us were selected. Upon discussion with breeders and field visits to chosen hot spots, we decided about the most effective measures to protect their flocks from wolf depredations (portable electric fence, guarding dog or both). On four farms portable electric fences were installed, 170 cm high electric netting (Annex 7.3.23 – contracts with sheep breeders), used as night enclosures inside large sized pasture or mobile pasture for smaller herds. Two additional sets of mobile electric fences, 145 cm high electric netting, were purchased by Slovenian Forest Service. Daily sheep confinement represents additional work for breeders and lack of motivation for doing so seems to be the main problem we can foresee regarding the use of portable electric fences. Until now, one of the breeders resigned using the equipment. However, we immediately found a new breeder who agreed on using the electric nettings to protect his flock. To keep motivation high and to make sure the fences are used and maintained in a proper manner, we keep in touch (personal visits or via telephone) with all the chosen breeders.

In April 2011 guarding dog experts were hired (Annex 7.3.24 – report of the experts) to educate the breeders how to train and care for their dogs. We have chosen two guarding dog breeds, Karst shepherd and Tornjak, both typical for Dinaric region. Dogs will be donated to four sheep breeders, three of them are also using our portable electric fences, while one will protect the stock with dogs only, since sheep are used spending the night inside the stable. This action is still in progress and first dog donations will take place in September. Overall, this action started according to the timetable and is continuing as planned.



*Figure 8: Electric fence erected in a pasture.
(Photo: I. Kavčič)*

5.1.3 Actions D: PUBLIC AWARENESS AND DISSEMINATION OF RESULTS

THE LIST OF DELIVERABLES AND MILESTONES FOR ACTIONS “D” AS DEFINED IN THE GRANT AGREEMENT AND STATUS OF FULFILMENT

Name of the Deliverable	Code of the action	Deadline	Fulfilment
DELIVERABLES			
Yearly bulletin of the project – 700 pieces – produced and distributed.	D1	15/12/2010	Completed
6000 brochures produced and distributed	D1	1/4/2011	Completed
1000 posters about the project produced and distributed.	D1	1/7/2011	Completed
1000 T-shirts with project logo	D1	1/10/2011	Completed
6000 brochures about damage prevention measures.	D2	1/10/2011	Under implementation
Yearly bulletin of the project – 700 pieces – produced and distributed.	D1	15/12/2011	Under implementation
500 copies of the produced documentary films + PowerPoint presentation.	D1	1/10/2012	Under implementation
Yearly bulletin of the project – 700 pieces – produced and distributed.	D1	15/12/2012	Not started yet
50 educational kits for high schools produced and distributed to biology teachers	D1	1/7/2013	Not started yet
Yearly bulletin of the project – 700 pieces – produced and distributed.	D1	15/12/2013	Not started yet
Layman's report	D5	15/12/2013	Not started yet
Proceedings of the thematic conference	D6	15/12/2013	Not started yet
MILESTONES			
Project web site produced	D4	30/06/2010	Completed
Seminar about wolf conservation for teachers organized	D1	16/12/2012	Not started yet

5.1.3.1 Action D.1: Public awareness and education campaign about wolves on national and local levels

Status of activities of this action is diverse. Activities already started and complete are: design of the project logo (already presented in Inception report); design and print of four different motifs together with project logo on all together 1000 T-shirts (Annexes 7.1.6, 7.1.7., 7.1.8. in 7.1.9 – photos of T-shirts) distributed to the project staff (60), farmers (10), volunteers (420) and other interested parties (45); preparation and distribution of the first number of project bulletin entitled “Volčja sled 1” (“Wolf footprint 1”) in 700 copies with 12 pages (Annex 7.1.10 – project bulletin); the bulletin was distributed to all of the libraries in the wolf area (241 copies to 85 libraries), 80 copies were distributed among professional hunters and foresters of SFS, 40 copies among the participants of the workshops for the development of The Wolf Action Plan, 30 copies were distributed among visitors of our stand at a promotional event called “Biotska raznovrstnost, v tem smo skupaj”, 150 copies were distributed among volunteers; preparation and distribution of the brochure about wolves in 6000 copies with 20 pages (Annex 7.1.11 – brochure) – so far we distributed 1613 copies - 200 copies was taken to Triglav National Park, approximately 50 copies were given to Hunter's Association of Slovenia, 500 copies to foresters and professional hunters of SFS, 10 copies to sheep farmers, the rest was distributed among volunteers, hunters during the field work and co-financers of the project; design and print of 1000 copies of the project poster carrying main facts about wolf and objectives of the project (Annexes 7.1.12 and 7.1.13 - posters). Posters were produced in two motifs with same cover text and will be distributed among school children in the wolf areas and other interested parties. So far, we distributed 50 posters to the volunteers that participated in the howling sessions. We additionally designed and printed two larger posters with no

additional costs to the project. The posters are in one copy in dimensions 100 cm x 200 cm and are including summary contents of the brochure about wolves in Slovenia (Annexes 7.2.1 and 7.2.2 - posters). These two posters were used in promotional display at a hunter's fair to which our project was invited from the Slovenia hunting society in April 2011 in Gornja Radgona. We will use these posters in future similar promotional events.

Activities already started but still in progress are: filming of a 27 minutes long popular educational film about wolves in Slovenia (we have footage of workshops for preparation of the wolf action plan, educational lectures for volunteers joining for winter wolf snow tracking, GPS-GSM telemetry field work and setting up preventive measures at farms used as best-practice examples); relations with media: preparing press releases at all major occasions with regards to the project implementation and one letter with démenti to media (Annexes 7.3.25, 7.3.26, 7.3.27, 7.3.28 and 7.3.29 – press releases and letter with démenti), giving interviews to interested media, publishing monthly short notes in hunters magazine etc. In the period from 01.09.2010 to 31.07.2011 35 news items (articles, interviews, short project news) have been published in national and local written printed media, two interviews were given for radio talk shows, 8 TV news items or documentaries were broadcasted including project activities and/or project members, and at least 51 news items were published on internet (internet media, blog, etc.) (Annex 7.3.30 – List of media work with clips and sources). The project was also presented to public through a promotional event called “Biotska raznovrstnost, v tem smo skupaj” (www.vtemsmoskupaj.eu) with participation on a stand in Ljubljana on 24.03.2011.

The action is continuing as planned and all deliverables were and are planned to be finished up to dates planned in the project proposal. Next planned activities are preparation of the second number of the project bulletin, production of 500 copies of the documentary film and preparation of PowerPoint presentation used in school kits. Main objectives of this action are being achieved with current more positive attention paid to the wolves and their conservation as well as to the project itself in the media in comparison with the past years. There is also a big interest of public to participate in wolf management and project activities (high number of participators in workshops of action A.2 and high number of volunteers involved in winter snow tracking). Quantitatively all expected results were reached as planned and even more (two additional posters).

5.1.3.2 Action D.2: Promotion of coexistence of wolves with agriculture

The activities of this action are closely linked to several activities of C.5 (Training of agriculture advisories) and C.6 (Best-practice examples) actions and have started as planned in March 2011. Educational-promotional printed materials about the use of the electric fences and livestock guarding dogs for damage prevention are planned to be prepared by 1st of October 2011. We are foreseeing a delay of two months because the contents of these materials need to be well prepared with as many examples of the use of efficient preventive measures as possible (gained from other LIFE projects as well as from the best-practice examples from this project during first half of year – action

C.6). We would also like to include different collaborators in the preparation to add additional value to the materials. All above demands more time, so we foresee a delay and the materials will be prepared by 1st of December 2011. The second part of this action is organisation and implementation of workshops for farmers in the project area. First workshop about the use of livestock guarding dogs for flock will be carried out on the 3rd of September 2011. The participants will be educated about proper care and training of livestock guarding dogs. We plan to continue this action until the end of the project by organizing two workshops in 2012 and two in 2013.

5.1.3.3 Action D.3: Education campaign on wolves for hunters in wolf areas

The aim of this action is to provide education of hunters in the wolf range through a series of lectures about wolf biology and conservation. With the help of Slovenian Hunters Association, we already carried out 11 lectures exclusively for hunters (Annex 7.3.31. – Report from the Slovenian Hunters Association). So far, 112 hunters attended the lectures. The lectures included information about wolf, its biology and role in ecosystem, about wolf population in Slovenia and also about our project and ways of including the hunters in the project activities (Annex 7.3.32 – PowerPoint presentation). With intensification of this action in the beginning of its implementation, we wanted to additionally motivate hunters to participate in the population surveillance activities (action C1).

5.1.3.4 Action D.4: Project website

The project web-site was set and published on June 30th 2010 on the web address www.volkovi.si. It is monthly updated with the progress of the project's activities and its products and deliverables.. Main contents and blog posts have also been translated to English that can be turned on by clicking on a flag in the top right corner of the page. If the content is not translated in English they appear in Slovene. The results of the page visit monitoring with automatic open-source tool Google Analytics for the period from 01.09.2010 to 30.07.2011 show that the page had 17307 visits by 8833 different visitors (Annex 7.3.33 – report from Google Analytics). Project web-page has a good recognition among interested public and good visit rate. We plan to regularly continue updating and adding the contents to the page.

5.1.3.5 Action D.5: Layman's report

In this action we will prepare a report for wider public produced at the end of the project. According to project schedule this action has not started yet.

5.1.3.6 Action D.6: Networking through organization of a thematic conference

At the end of the project an international thematic conference to share knowledge and experiences that can considerably increase effectiveness of wolf conservation will be organized. According to the project schedule this action has not started yet.

We have however started networking activities in order to use the knowledge already gained in other Life Nature projects. We are primarily cooperating with experts that were working on LIFE04 NAT/IT/000144 project and LIFE02 TCY/CRO/014 project (Annex 7.3.35. – Participant lists).

5.1.4 Actions E: OVERALL PROJECT OPERATION AND MONITORING

THE LIST OF DELIVERABLES AND MILESTONE FOR ACTIONS "E" AS DEFINED IN THE GRANT AGREEMENT AND STATUS OF FULFILMENT

Name of the Deliverable	Code of the action	Deadline	Fulfilment
DELIVERABLES			
Report outlining project actions effectiveness with regards to the project objectives.	E2	15/12/2013	Not started yet
Revised National Wolf Action Plan (After LIFE Conservation Plan)	E3	15/12/2013	Not started yet
MILESTONE			
Revised Action Plan produced (After LIFE Conservation Plan)	E3	30/9/2013	Not started yet

5.1.4.1 Action E.1: Coordination and administration of the project by the coordinator and the project steering group

In this action overall coordination of the project is being done. The work is continuing as planned. The co-financing agreement with the MAFF was, due to the difficulties in public finances, signed with delay at the beginning of September 2011 (Annex 7.3.34 – co-financing agreement).

As presented in Chapter 4 of the report, the project steering group is meeting on a regular basis (Annexes 7.3.1. and 7.3.2. – Participant lists). Apart from the meetings of the project steering group, there has been a number of smaller meetings targeted to deal with specific project actions or issues (Annexes 7.3.9. and 7.3.10. – Participant lists). Members of the project steering group attended a meeting with colleagues from Croatia (State Institute for Nature Protection and researchers from the Veterinary Faculty, University of Zagreb) where we discussed possibilities for cooperation and networking (Annex 7.3.35. – Participant lists).

5.1.4.2 Action E.2: Overall evaluation and monitoring of the project conservation achievements

Evaluation of the project achievements will be done at the end of the project and presented in a report. According to the project schedule this action has not started yet.

5.1.4.3 Action E.3: Revision of Wolf Population Action Plan

In this action we will do a revision of the Action Plan at a facilitated workshop with participation of all interest groups in order to produce a new, revised Wolf Population Action Plan. According to the project schedule this action has not started yet.

5.1.4.4 Action E4: After LIFE Conservation Plan

The main goal of this action is to prepare the After LIFE Wolf Population Conservation Plan Project in cooperation with the authorities based on the results of the project. According to the project schedule this action has not started yet.

5.2. Envisaged progress until next report.

In the table below the implementation of the proposed and planned actions is illustrated in the Gantt chart. The space in light gray and marked with “x” denotes proposed actions in the period of project implementation. The space in dark grey and marked with “o” denotes actual implementation of the actions, while “x” in blank background denotes planned progress.

Action		2010				2011				2012				2013			
Number/name		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
Overall project schedule																	
		• Expected start												Expected end •			
	Proposed	X															X
	Actual	O															
A. Preparatory actions, elaboration of management plans and/or action plans :																	
A1 S. methods	Proposed	X	X														
	Actual	O	O														
A2	Proposed		X	X	X	X	X	X									
Action plan	Actual		O	O	O	O	O	O									
A3	Proposed		X	X	X	X	X	X									
Prey ass.	Actual		O	O	O	O	O	O									
A4	Proposed	X	X	X													
Damages a.	Actual	O	O	O													
A5	Proposed			X	X	X											
Farming syst.	Actual			O	O	O											
A6	Proposed	X	X	X	X	X	X										
Public attit.	Actual	O	O	O	O	O	O										
C. Concrete conservation actions :																	
C1 Cons. status	Proposed			X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Actual			O	O	O	O	O									
C2	Proposed								X	X	X	X					
Ungulate m.	Actual																
C3	Proposed				X	X			X	X			X	X			X
Volunteers	Actual			O	O	O	O	O									
C4	Proposed			X	X							X	X				
D. inspectors	Actual			O	O												
C5	Proposed							X	X						X	X	
A. adv. service	Actual							O									
C6	Proposed						X	X	X	X	X	X	X	X	X	X	X
Best practice	Actual						O	O									
D. Public awareness and dissemination of results :																	
D1	Proposed	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Public awar.	Actual	O	O	O	O	O	O	O									
D2	Proposed						X	X	X	X	X	X	X	X	X	X	X
Prom. of coex.	Actual						O	O									
D3	Proposed				X	X								X	X		
Hunter educ.	Actual				O	O											
D4	Proposed	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Website	Actual	O	O	O	O	O	O	O									
D5	Proposed															X	X
Layman's r.	Actual																
D6	Proposed													X	X	X	X
Thematic conf.	Actual																
E. Overall project operation and monitoring:																	
E1	Proposed	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Project coor.	Actual	O	O	O	O	O	O	O									
E2	Proposed				X	X	X	X	X	X	X	X	X	X	X	X	X
Project eval.	Actual				O	O	O	O									
E3	Proposed													X	X	X	
A. P. Revision	Actual																
E4	Proposed																X
After LIFE	Actual																

5.3. Impacts

Nature & Biodiversity:

We have made considerable progress with regard to one of the main conservation threats to wolves: insufficient knowledge about the population conservation status, which led to inadequate management and conservation actions. We are just concluding the first yearly population surveillance session, and we already know much more about the wolf population in Slovenia than we did before the project, already providing a concrete base for management decisions, and also showing to the various interest groups that previous estimates and opinions about the size of the wolf population were exaggerated. This will be improved further during the following months when all analyses are completed and the final report of the first yearly surveillance session is presented.

The attitudes of humans, and also the country's budget for nature conservation, are considerably impacted by damages wolves do to agriculture. A significant progress has been done on that front. Possibly the most important has been the realization that the vast majority of damages are paid to a very small number of livestock breeders, which showed that the problem of wolf damages, which seemed uncontrollable and growing out of all proportions, should be a relatively simple one to solve. We demonstrated this in our "best practice examples", where at some of the most problematic spots the damages were considerably decreased. One of the sheep farmers claims that since he started using the electric fence, the damages on his farm decreased to only 7% in comparison to the previous year. While our activities already directly decreased both the number of wolf-human conflicts and the financial consequences of these conflicts, with possibly important consequences for tolerance of humans towards this species, we feel the demonstration value of these examples to be of even higher importance for future of wolves in our landscapes.

Environmental Policy & Governance:

We consider an important achievement that we managed to get all stakeholders to participate in drafting of a Wolf Action Plan, effectively starting a dialogue regarding this conservation issue where no dialogue existed before. The Action Plan, if and when adopted by the Slovenian Government, should provide a firm foundation for wolf conservation and management.

Our analysis of damage compensations paid and the effectiveness of our best practice examples in reducing wolf damage to livestock have started a discussion regarding a change of the damage compensation policy. An expert group (which also includes members of the SloWolf project team) was formed with the mandate to draft new legislation governing this issue. If the recommendations that we proposed through the project and which are demonstrated in the best practice examples would be followed, we believe that currently unacceptably high wolf damages could be reduced to an acceptable level. This should reduce the conflicts with agriculture and increase "social carrying capacity" for wolves, effectively enabling a larger, less disturbed wolf population in our landscapes.

On the opposite side, we demonstrated ineffectiveness of the current culling practices for reduction of conflicts with agriculture.

Information and Communication:

The project, and with it wolf conservation, became very visible in the media and has been featured in a number of articles in major and local newspapers and magazines, as well as in a number of television pieces on Slovenian National Television and private television stations. The project web page is very visible, and our campaigns attracted a very large number of volunteers. So far the visibility of the project and the issues connected with wolf conservation has exceeded the expectations.

The actual impact on the main target audiences is, however, at this point difficult to assess. An answer to that will be provided after implementation of a human dimension research questionnaire planned near the end of the project, where both the visibility of the project and its impact on the target audiences will be objectively assessed.

Indirect impacts:

Project partner Slovenia Forest Service, inspired by the success of the best practice examples demonstrated in the project, decided to donate further two sets of electric nets for livestock protection, hopefully making this a regular practice in the future.

Project partner Dinaricum Society provided a well written opinion, supported with referenced scientific facts, on the wolf cull planned for this year, trying to influence the decision of the competent ministry (Annex 7.3.36 – Opinion of the Dinaricum Society). This is a concrete example of the civil society getting directly involved in wolf management, and an encouraging step forward in implementation of the Aarhus Convention in Slovenia.

Slovenian National Television decided to produce two documentaries about wolves in Slovenia (their titles are “*Volk*” and “*Človek in zver*”: (Annex 7.3.40. Documentaries)), inspired by our project. Both films were produced in close cooperation with the project team and feature the project team members. Both films are of a high production quality and have been broadcasted during prime-time hours, and we feel they’ve served an important role for public awareness rising and support for wolf conservation in Slovenia.

5.4. Outside LIFE:

MPSP is undertaking the revision of the regulations related to the damage compensation procedures. Experts from SFS are closely cooperating on the development of the new regulations, thus ensuring that the knowledge gathered in the scope of the project is being used in the process.

6. Financial review by actions

Associated beneficiaries are regularly submitting timesheets and copies of all invoices and travel orders to the project coordinator. Associated beneficiaries have also submitted their VAT certificates (Annexes 7.3.37. and 7.3.38.), while for the coordinating beneficiary, we are still waiting for the certificate to be issued. We have been informed that a representative The Tax Administration of the Republic of Slovenia will visit the coordinating beneficiary within the next two weeks, in order to check that the VAT accounting is in line with the regulation, following which we will be issued the requested VAT certificate.

Overall, we evaluate the financial flow of the project as appropriate and in line with the foreseen costs of the project.

Following table shows the costs for each of the project actions incurred since the beginning of the project until 31/07/2011:

Action number and name	Foreseen costs	Spent so far	Remaining	Projected final cost
Action A.1 Surveillance methods	24.207	23.570	637	24.207
Action A.2 Action plan	23.354	18.915	4.439	23.354
Action A.3 Prey assessment	28.432	21.413	7.019	28.432
Action A.4 Damage assessment	13.100	11.608	1.492	13.100
Action A.5 Farming systems	12.450	11.258	1.192	12.450
Action A.6 Public attitudes	44.126	42.246	1.880	44.126
Action C.1 Conservation status	308.136	161.339	146.797	308.136
Action C.2 Ungulate management	27.274	638	26.636	27.274
Action C.3 Volunteers	17.970	10.669	7.301	17.970
Action C.4 Damage inspectors	74.649	40.030	34.619	74.649
Action C.5 Agriculture Advisory Ser.	6.381	500	5.881	6.381
Action C.6 Best practice	139.087	32.566	106.521	139.087
Action D.1 Public awareness	66.530	22.084	44.446	66.530
Action D.2 Promotion of coexist.	10.821	500	10.321	10.821
Action D.3 Hunter education	8.315	98	8.217	8.315
Action D.4 Website	22.900	9.883	13.017	22.900
Action D.5 Layman's report	5.700	0	5.700	5.700
Action D.6 Thematic conference	0	0	0	0
Action E.1 Project coordination	55.951	30.186	25.765	55.951
Action E.2 Project evaluation	58.126	0	58.126	58.126
Action E.3 Action Plan Revision	2.954	0	2.954	2.954
Action E.4 After LIFE	0	0	0	0
Action E.5 Audit	10.000	0	10.000	10.000
TOTAL	960.463	437.502	522.961	960.463

6.1. Comments to financial report

6.1.1. Personnel cost

Cost of work of the employees at the University of Ljubljana is linked directly to their education / academic status and years of experience and the terms are set in a collective contract. During the preparation of the project proposal, it was difficult to foresee who exactly will carry out each task and under which payment. That is why we have approximately evaluated the workload and the finances necessary to carry out the tasks. In a table below we are giving the information necessary for linking the personnel reported for the project (function) with the description of the personnel in the proposal.

Beneficiary number	Action number	Type of contract	Category/Role in the project	Position (from the financial report)	Name of person(s)
1	A1	temporary contract / part time	field work wolf conservation expert	Researcher	Miha Krofel
1	A1	temporary contract / part time	non-invasive monitoring, genetics and GIS expert	Researcher	Tomaž Skrbinšek, Maja Jelenčič
2	A1	temporary contract / full time	wolf monitoring expert		Rok Černe
1	A2	temporary contract / part time	facilitation of the elaboration of wolf action plan and writing up of the plan	Researcher	Irena Kavčič
1	A2	temporary contract / part time	participation at the workshops and working on the plan	Researcher	Hubert Potočnik
2	A2	temporary contract / part time	participation at the workshops and working on the plan		Rok Černe
1	A2	temporary contract / part time	participation at the workshops and working on the plan	Researcher	Miha Krofel
1	A2	temporary contract / part time	participation at the workshops and working on the plan	Professor, researcher	Ivan Kos
1	A2	temporary contract / full time	organization of the workshops	Researcher	Irena Kavčič
1	A3	temporary contract / part time	preparation, analysis and writing	Researcher	Irena Kavčič
1	A3	temporary contract / part time	field work and coordination of field work data collection	Researcher	Irena Kavčič
1	A4	temporary contract / part time	analysis, preparation of report, maps and recommendations	Researcher	Irena Kavčič
1	A5	temporary contract / part time	data collection, analysis and preparation of recommendations	Researcher	Andrej Udovč, Matej Vidrih
1	A6	temporary contract / part time	planning, preparation of questionnaires, sampling, analysis and writing of the reports	Researcher	Urša Marinko, Aleksandra Majić Skrbinšek
1	A6	temporary contract / full time	mailing questionnaires, interviewing	Researcher	Urša Marinko
1	C1	temporary contract / part time	field work wolf conservation expert	Researcher	Miha Krofel, Hubert Potočnik

1	C1	temporary contract / part time	non-invasive monitoring, genetics and GIS expert	Researcher	Tomaž Skrbinšek, Maja Jelenčič
1	C1	temporary contract / part time	technical assistance in the field	Researcher	Nina Ražen, Franc Kljun
1	C1	temporary contract / part time	technical assistance for the laboratory work	Researcher	Maja Jelenčič
1	C1	temporary/part time	examination and analysis of wolf carcasses	Researcher	Diana Žele
2	C2	temporary/full time	organization of the workshops, writing up of the plan		Rok Černe
1	C2	temporary contract / part time	facilitation of the workshops and writing up of the workshop results	Project coordinator	Aleksandra Majić Skrbinšek
1	C2	temporary contract / part time	participation at the workshops and working on the plan	Researcher	Irena Kavčič
1	C2	temporary contract / part time	participation at the workshops and working on the plan	Researcher	Irena Kavčič
2	C4	temporary/full time	organization of the seminars, writing up of the handbook		Rok Černe
1	C4	temporary contract / part time	preparation and teaching at the seminars, preparing content for the handbook	Researcher	Maja Jelenčič
1	C4	temporary contract / part time	preparation and teaching at the seminars, preparing content for the handbook	Researcher	Tomaž Skrbinšek
1	C5	temporary contract / part time	preparation and teaching at the seminars	Project coordinator, Professor, researcher	Aleksandra Majić Skrbinšek, Ivan Kos, Hubert Potočnik
2	C5	temporary/full time	preparation and teaching at the seminars		Rok Černe
1	C6	temporary contract / part time	field work - setting up and monitoring of the effectiveness	Researcher	Irena Kavčič
1	C6	temporary contract / part time	preparation of effectiveness monitoring system, planning of the demonstrational activity (choosing the location), field work, analysis and reporting	Researcher	Irena Kavčič
1	C6	temporary contract / part time	preparation of effectiveness monitoring system, planning of the demonstrational activity (choosing the location), field work, analysis and reporting	Researcher	Irena Kavčič

2	C6	temporary/full time	assistance in planning and setting up the demonstrational protective measures at the hot spots; communication with the farmers; fieldwork; preparation of the presentation for farmers, writing of a popular article in an agricultural magazine.		Rok Černe
1	D1	temporary contract / full time	development and dissemination of educational materials	Researcher	Anamarija Žagar
1	D1	temporary contract / part time	development and dissemination of educational materials	Researcher	Anamarija Žagar
1	D2	temporary contract / part time	preparation of the brochure and workshops for farmers, carrying out of the workshops	Researcher	Anamarija Žagar, Matej Vidrih
1	D4	temporary contract / part time	working with designers on development of the web site, maintenance of the web page with the information about the project and project results	Researcher	Anamarija Žagar
1	D5	temporary contract / part time	preparation and writing of the layman's report; dissemination of the layman's report	Project coordinator	Aleksandra Majić Skrbinšek
1	E1	temporary contract / part time	overall coordination of the project, reporting and communication with the EC, coordination of actions A6, D4, D5, E2, E3, E4 and E5	Project coordinator	Aleksandra Majić Skrbinšek, Anamarija Žagar
1	E1	temporary contract / full time	assisting the project coordinator in coordination of the project and preparation of reports, coordination of actions: D1, D2 and D3	Researcher	Maja Jelenčič, Urša Marinko
1	E1	temporary contract / part time	coordination of actions: A2, A3, A4	Researcher	Irena Kavčič
1	E1	temporary contract / part time	Coordination of actions: A1, C1 and C6	Researcher	Hubert Potočnik
1	E1	temporary contract / part time	Coordination of actions A5 and C5	Researcher / Project coordinator	Andrej Udovč (A5), Aleksandra Majić Skrbinšek (C5)
1	E1	temporary contract / part time	Partly responsible for action C1, namely "Physical examination and analysis of dead wolves"	Researcher	Diana Žele
2	E1	temporary contract / part time	Responsible for coordination of actions: C2 and C4; and partly C1 (field collection of data)		Rok Černe
1	E2	temporary contract / part time	carrying out follow - up surveys of public attitudes toward wolves, overall evaluation of the project effectiveness.	Project coordinator	Aleksandra Majić Skrbinšek

1	E2	temporary contract / full time	carrying out follow - up surveys of public attitudes toward wolves,	Researcher	Urša Marinko
1	E2	temporary contract / part time	Analysis of damages, wolf mortality, and wolf prey species and evaluation of wolf population status.	Project coordinator	Aleksandra Majić Skrbinšek
1	E3	temporary contract / part time	Facilitation of revision of the action plan and writing up of the revised action plan	Project coordinator	Aleksandra Majić Skrbinšek

6.1.2. Timesheets

Due to a very intensive field work related to capturing and tracking animals, howling sessions which are carried out during night time and involvement of volunteers in these activities, the number of hours worked in a single day can sometimes exceed the usual working hours (i.e. 12, sometimes even 14 hours). For the same reasons, work is often carried out outside of the normal office hours (i.e. on weekends and public holidays, during night time).

Project timesheets are being filled and signed on a regular basis. However, in September 2011, we were warned by the External Monitor that the hours reported in the timesheets should not include the 0.5 hours of daily break. We were also instructed to correct the timesheets, which we did. Now we are submitting the copies of the original timesheets (Annex 7.3.42).

6.1.3. Travel costs

Some of the travel orders were issued for the personnel not hired by the project. For the Action A3 (Assessment of wolf natural prey base in Slovenia, identification of the needs for specific actions and preparation of management improvements) Danijel Borkovič, Matija Stergar and Uroš Videmšek were participating in the field work. The faecal pellet counting necessary to evaluate the densities of the prey species was carried out in three smaller study areas. Since it was necessary to carry out the measurements in the three study areas simultaneously (in order to get the directly comparable data), additional help for the field work was needed. Field work was carried out each time by 6 persons at the same time. That is why additional personnel from the Department of Forestry was included in the field work. Travel costs were covered by our project, personnel costs were charged to “programme financing - ,unallotted funds for financing of the permanently employed researchers” (Ministry of Science’s funds). By using the additional resources (and enlarging the study area) we managed to considerably improve the quality of the results obtained in this action.

The second case when travel orders were issued for the personnel not hired by the project is at partner SFS. Most of the travel orders on SFS are issued for the personnel not hired by the project. Most of the travel cost used for SFS personnel (which are partly working on the project but are not having an extra contract and their working hours are not paid from the project) are on the actions A1, A2, A3, C1, C2, C4, as planned in the application. In these actions SFS personnel is participating in different workshops, is monitoring the wolf population, or is participating on the planned education lectures. Same damage inspectors and other personnel of the SFS also help in choosing and inspecting good practice cases in agriculture.

6.1.4. Declaration of interest

In the financial report we have made a mistake and wrongly reported the interest yielded on the pre-financing amount. The correct amount for the reporting period is 604.76 EUR (Annex 7.3.43 – bank reports).

7. Annexes

7.1. Deliverables

- 7.1.1. Report of the assessment of damages caused by wolves to agriculture (action A.4) including three digital maps showing areas where conflicts with agriculture are more likely (p. 13 and 18) and two digital maps showing the areas where spatial expansion of the wolf is bound to cause problems with the agriculture (p. 17 and 19). Management recommendations with the guidelines for damage prevention and actions to be taken are embedded in the report as an annex (after p. 33).
- 7.1.2. Report of analysis of existing farming systems in wolf areas (action A.5).
- 7.1.3. Report of analysis of attitudes of the general public, hunters and sheep farmers toward wolves (action A.6).
- 7.1.4. First yearly surveillance session report for season 2010-2011 (action C.1).
- 7.1.5. Handbook for recognition of damages done by large carnivores on livestock and practical damage inspection (action C.4).
- 7.1.6. T-shirt with project logo (photo, action D.1).
- 7.1.7. T-shirt with project logo and motif »I've tracked wolves« for volunteers (photo, action D.1).
- 7.1.8. T-shirt with project logo and motif: »Wolf surveys 2010-2013« for hunters participating in project activities as volunteers (photo, action D.1).
- 7.1.9. T-shirt with project logo and motif – cartoon of a radio-collared wolf representing activities of Action C.1 of the project for project staff members (photo, action D.1).
- 7.1.10. Yearly bulletin of the project – First number »Volčja sled 1« (action D.1).
- 7.1.11. Brochure about wolves »Volk v Sloveniji« (action D.1).
- 7.1.12. Poster with motif 1 (pdf, action D.1).
- 7.1.13. Poster with motif 2 (pdf, action D.1).

7.2. Dissemination materials

Most of dissemination materials were also planned as deliverables and are therefore already listed in the previous chapter (see 7.1.: Annexes 7.1.6, 7.1.7, 7.1.8, 7.1.9, 7.1.10, 7.1.11, 7.1.12 and 7.1.13). Other additional dissemination materials are:

- 7.2.1. Smaller copy of additional informational poster 1 (pdf, action D.1).
- 7.2.2. Smaller copy of additional informational poster 2 (pdf, action D.1).

7.3. Other

- 7.3.1. List of participants of the meeting of steering group on Dec. 13th 2010.
- 7.3.2. List of participants of the meeting of steering group on Jun. 23rd 2011.
- 7.3.3. A screen-print of steering group communication activities using Google group application.

- 7.3.4. Lists of participants of the all-day workshop for elaboration of wolf population action plan on 28th January 2011 (A.2).
- 7.3.5. Lists of participants of the all-day workshop for elaboration of wolf population action plan on 3rd February 2011 (A.2).
- 7.3.6. Lists of participants of the all-day workshop for elaboration of wolf population action plan on 4th February 2011 (A.2).
- 7.3.7. Lists of participants of the all-day workshop for elaboration of wolf population action plan on 17th February 2011 (A.2).
- 7.3.8. Lists of participants of the all-day workshop for elaboration of wolf population action plan on 18th February 2011 (A.2).
- 7.3.9. Lists of participants of the meeting for organization of workshops for elaboration of wolf population action plan and implementation of the action best practice on 29th September 2010 (A.2 and C.6).
- 7.3.10. Lists of participants of the meeting for organization of workshops for elaboration of wolf population action plan on 7th October 2010 (A.2).
- 7.3.11. Reports from the workshops for elaboration of wolf population action plan (A.2).
- 7.3.12. EU Commission letter for Action A.3.
- 7.3.13. Questionnaire for sheep farmers – damage prevention (A.5)
- 7.3.14. PowerPoint presentation of preliminary results of the action A.6 at the first workshop for the development of the National Wolf Action Plan.
- 7.3.15. Lists of participants of the project meeting - noninvasive genetic sampling (C.1)
- 7.3.16. Article in the hunting magazine Lovec that includes map with collected samples
- 7.3.17. Invitation for an educational seminar for volunteers participating in winter snow tracking.
- 7.3.18. Invitation for hunters (sent to hunting clubs) for participating in winter snow tracking and at the educational seminar.
- 7.3.19. Instructions for volunteers for winter snow tracking.
- 7.3.20. Invitation for an educational seminar for volunteers participating in howling sessions.
- 7.3.21. Invitation for an educational seminar for hunters (sent to hunting clubs) participating in howling sessions.
- 7.3.22. Lists of participants of the seminars for damage inspectors (action C.4).
- 7.3.23. Contracts with sheep breeders receiving electric nettings (action C.6).
- 7.3.24. Work report of the guarding dog experts.
- 7.3.25. Press release about the release of project web page www.volkovi.si, 17.08.2010 (action D.1).
- 7.3.26. Press release about workshops for preparation of the wolf action plan in Slovenia, 01.02.2011 (action D.1).
- 7.3.27. Letter of complaint and démenti about miss-informations regarding project published in newspaper for farmers »Kmečki glas«, 10.03.2011 (action D.1).
- 7.3.28. Targeted press release for interested media about a she-wolf ran over with a car near Cerknica, Slovenia, 07.10.2011 (action D.1).
- 7.3.29. Press release for press conference organized by Slovenia hunter society, »PROJEKT SLOWOLF: Varstvo in spremljanje varstvenega statusa populacije volka (*Canis lupus*) v Sloveniji«, 07.12.2010(action D.1).
- 7.3.30. List of media work with clippings (action D.1).
- 7.3.31. Report from the Slovenian Hunters Association (D.3)
- 7.3.32. PowerPoint presentation about the project and activities which include hunters participation

- 7.3.33. Internet page visit monitoring report from Google Analytics (action D.4)
- 7.3.34. Co-financing agreement from Ministry of Agriculture, Forestry and Food
- 7.3.35. Meeting between project group members and colleagues from Croatia
- 7.3.36. Opinion of the Dinaricum Society on the wolf cull planned for this year
- 7.3.37. VAT certificate for Slovenia Forest Service
- 7.3.38. VAT certificate for Dinaricum Society
- 7.3.39. List of participants of the 2nd visit of project monitor
- 7.3.40. Documentaries about wolves in Slovenia “Volk” and “Človek in zver” on DVDs
- 7.3.41. Signatory authorization.
- 7.3.42. Original timesheets
- 7.3.43. Bank reports

*Report by: Aleksandra Majić Skrbinšek, Project Coordinator and
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Financial information: Jurij Dernovšek, Project Accountant and
Aleksandra Majić Skrbinšek, Project Coordinator
With support of all project members*