

AFTER LIFE CONSERVATION PLAN



**Project LIFE 12 NAT/IT/000807 - Wolf in the Alps:
implementation of coordinated wolf conservation actions in core areas and
beyond**

Responsibles for contents:
Marucco F., Menzano A. and Borgna I.

May 2018



THE LIFE PROGRAMME



The LIFE programme is the Project LIFE 12 NAT/IT/000807 WOLFAPS e EU's funding instrument for the environment.

The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental policy and legislation by co-financing pilot or demonstration projects with European added value.

Website:

ec.europa.eu/environment/life

LIFE12 NAT/IT/000807



ABBREVIATIONS AND HOW TO CITE

Abbreviations:

EAM: Ente di Gestione delle Aree Protette delle Alpi Cozie

CF: Carabinieri – Forestale (ex Corpo Forestale dello Stato)

MUSE: Museo delle Scienze di Trento

PN Alpi Cozie: Ente di Gestione Aree Protette Alpi Cozie

PN Ossola: Ente di Gestione Aree Protette dell'Ossola

PNVG: Ente Parco Nazionale Val Grande

RL: Regione Lombardia

RV: Regione del Veneto

TNP: Triglavski Narodni Park

UL: University of Ljubljana

CGC: Centro referenza regionale Grandi Carnivori (Large Carnivore Centre of regional reference) – Regione Piemonte

To be cited as: Marucco F., Menzano A., Borgna I. (2018) After LIFE Conservation Plan – Technical Report
Action F4 - Project LIFE 12 NAT/IT/000807 WOLFAPS

CONTENTS

The LIFE programme.....	2
Abbreviations and how to cite.....	3
About the LIFE WOLFALPS Project.....	4
Threats.....	6
SWOT analysis.....	10
The After-LIFE Conservation Plan:	
1. Coordination.....	13
2. Monitoring of wolf population.....	14
3. Prevention.....	16
4. Antipoaching.....	18
5. Managing injured wolves and hybrids.....	23
6. Wolf ecotourism.....	24
7. Management measures.....	26
8. Communication.....	28

ABOUT THE LIFE WOLFALPS PROJECT

The main goal of the Project LIFE WOLFALPS was to **facilitate long-term conservation of wolves in the Alps of Italy and Slovenia and their coexistence with humans**, by implementing coordinated wolf conservation actions in key core areas (i.e. key areas particularly important for the species) and over the entire Alpine territory, based on identified threats for the species, from Western to Eastern Alps.

The population is increasing in density in the Western Alps, and now expanding in the territories of the Central-Eastern part. Wolves are protected both in Italy and Slovenia (Annex II of the Habitats Directive) and the populations in these Countries are expanding into areas where they have been absent for decades. In the decades when wolves were absent, Alpine shepherds lost the habit of coexistence with large predators, and lack nowadays knowledge of preventive measures, therefore the impact of the first recolonizing wolves is usually high and conflicts rise. Poaching is still one of the major causes of mortality, which indicates low level of human acceptance. Fragmentation and habitat loss are increasing, also due to the increment in tourism development. Optimal reproductive sites are diminishing and road kills increasing. An optimal coordinated management is made difficult by the high administrative and institutional fragmentation both in Italy and across the Alps. The LIFE WOLFALPS Project actions aimed to operate in this framework, as well as the activities promoted in the present “After LIFE Conservation plan”, by implementing coordinated conservation actions both in territories where the wolf has already been present for 10-15 years (Western Alps) and in areas where the process of re-colonization has just started and is currently ongoing (Central and Eastern Alps). Taking into particular account the role of communication, because coexistence is built on tolerance and “there’s no conservation without conversation” (L. Boitani).

Hence, important coordinated conservation actions had (in Life WolfAlps), and have (in the Post Life Conservation Plan), the main objective of:

- Decreasing the impact on livestock husbandry by implementing effective preventive methods
- Decreasing the level of poisoning and poaching
- Increasing knowledge on wolves among hunters, shepherds, local communities, students, and citizens
- Containing habitat loss that causes loss of reproductive sites
- Detecting and control wolf-dog hybridization events and injured wolves
- Sharing best practices and experiences over the Alps

Expected longer term benefits aim to reach the favourable conservation status for the wolf population in the Alps favoring wolf-human coexistence on the long term.

Significance and Impact of the LIFE WolfAlps Project

In five years the LIFE WOLFALPS project became the **major reference for wolf issues in the Alps** of Italy and Slovenia. On a European level, it represented an example of best practices for the management of a wolf population in areas where both its presence is long-term established, and also just returned. And importantly, **LIFE WOLFALPS succeeded for the first time in resolving issues with the population** that have been at the core of wolf-human coexistence for decades. The project brought together Institutions, managers, experts, hunters, farmers, volunteers, journalists, rangers and created **a Network of trained and informed people** essential for the future of nature conservation in the Alps. In the Post LIFE Conservation plan we aim to further maintain such Networks at the Italian and Slovenian Alpine level.



Project title:

WOLF IN THE ALPS:

IMPLEMENTATION OF COORDINATED WOLF CONSERVATION ACTIONS IN CORE AREAS AND BEYOND

Acronym:

LIFE WOLFALPS

Time frame:

Started: 01/09/2013

Ended: 31/05/2018

Coordinating beneficiary:

Ente di gestione delle Aree Protette delle Alpi Marittime

Associated beneficiaries:

Carabinieri – Forestale (ex Corpo Forestale dello Stato)

MUSE – Museo delle Scienze di Trento

Ente di Gestione Aree Protette Alpi Cozie

Ente di Gestione Aree Protette dell'Ossola

Ente Parco Nazionale Val Grande

Regione Lombardia

Regione del Veneto

Triglavski Narodni Park

University of Ljubljana

Project budget and requested EU funding:

Total project budget: 6.100.454 euro

EU financial contribution requested: 4.174.309 euro

Project website & social:

www.lifewolfalps.eu

Facebook @Progetto LIFE WolfAlps

THREATS

The natural expansion of wolves in the Alps is a great challenge for wildlife managers because the goal is to achieve a **viable wolf alpine population, while minimizing the conflict** that wolves might generate in an environment with high human densities and high levels of habitat fragmentation.

Threat 1 | Conservation and management fragmentation

The transboundary wolf population in the Alps has been considered a unique and distinct entity after the “Guidelines for Population Level Management Plans for large Carnivores” endorsed by the European Commission in 2008. Therefore, it should be monitored and managed as such over the boundaries.

The Alps are a very fragmented and constantly changing political landscape, with high administrative and institutional fragmentation mainly present within Italy. In Italy responsibility for environmental issues is delegated down to the level of individual Regions, or even Provinces and singular Protected Areas. This management fragmentation poses an important challenge related to wolf conservation. Efficient monitoring at the wolf population scale is necessary for efficient management and conservation of wolves in face of socio-economic and landscape change. The negative effects of this administrative fragmentation can be minimized by highly coordinated conservation actions at the alpine scale. With WOLFALPS Project it was possible to contrast this threat by the implementation of national and international coordination groups, defining common and standardized approaches to enable an efficient minimization of conflicts at the wolf population scale, which has never been done before. Hence, a coordinated conservation program, shared between the different regions in the Italian Alps, has been a fundamental and innovative action of LIFE WOLFALPS. The need would be to try to maintain such a cooperation over the Italian Alps.

Threat 2 | Poaching and poisoning

Poaching is the major cause of wolf mortality in the Alps (Report Action A4, Marucco et al., 2017), which indicates a low level of human acceptance. This situation is worrying given the fact that poached wolves are very difficult to find and document. The most dangerous and used method to poach wolves is poisoning. The illegal use of poison is the most serious threat for wolf conservation and has serious negative effects also on other species, such as small carnivores and scavenger raptors, and on the overall ecosystem. Attempting to achieve a high degree of viability of the wolf population require a management regime based around reducing human-caused wolf mortality to a minimum. The WOLFALPS project has been successful in intensifying the level of detection and implemented a multidisciplinary proactive strategy enabling an efficient control of illegal wildlife crimes over the entire Italian Alps.

Threat 3 | Conflicts with livestock husbandry

Wolf persecution in retaliation for damages to livestock is widespread all over its range. This is one of the main problems for wolf expansion and long term establishment in the Alps. Livestock husbandry is widely supported by Italian, Slovenian, and Alpine governments. In the decades when wolf was absent, Alpine shepherds have lost their tradition of coexistence with large predators, and lack knowledge of preventive measures, therefore the impact of first recolonizing wolves is high. In order to increase shepherds tolerance with large predators, the WOLFALPS project operated differently in the Western Alps, where wolf packs settled for 20 years, adapting preventive measures to a case by case situation and implementing new

preventive strategies for cattle. The prevention strategies of the Western Alps has been transferred to the Central-Eastern Alps, not only through the installation of fences and the assignment of livestock guarding dogs, but also thanks to several meetings of interchanging of information and experiences between shepherds coming from the two areas. Where the prevention systems have been given by the project, a high depredation decrease has been recorded.

Threat 4 | Conflicts with hunters

Another widespread conflict is with hunters, who perceive wolves as a competitor for shared prey species. Wolves in the Alps feed mainly on large mammals, which are all game species and thus in the main interest sphere of the hunters. Hence, hunters often blame the predators for reducing the game abundance and availability. In order to increase their knowledge on wolves, as well as to consider their suggestions and discussion in any management strategy, local platforms have been organized, together with the production of an informative publication on predator-prey dynamics. Furthermore, the technicians of the Alpine hunting districts have been involved in the monitoring.

Threat 5 | Social conflicts

Beyond these conflicts there are a wide range of social conflicts that range from a direct fear for personal safety in the presence of wolves to a fear of the social-economic changes (such as changing societal values or rural-urban migration) that wolves often come to symbolise. These conflicts often lead to a very low tolerance of wolves among the rural communities with whom they have to share living space. Often, negative public attitudes towards wolves are amplified by sensationalistic media reports. Sensationalistic reporting by media directly decreases public tolerance of wolves and enforces the fear of wolves, which originates mostly from ignorance and incorrect information. There is little awareness of the ecological value of the large carnivores. Communication strategy of WOLFALPS has been characterized by the slogan “Listening before speaking” with the aim to set up a system (HD study, daily press review analysis) able to perceive attitudes of the general public and of the key stakeholders towards the return of the wolf on the Alps. Then we acted and reacted consequently: the communication strategy had the main objective to inform and to engage the public through a multi-disciplinary, multi-platform and multi-language two-ways approach to manage to efficiently reach such a diversified target and always keep in contact with the public and have a feedback. Actions of the first Wolf Alpine Coordinated Communication Group ranged from standard communication products to special initiatives as: courses for journalists, social media communication, original educational programs and tools, travelling exhibitions, theatrical plays and open air installations. At the end of five years packed with work WOLFALPS succeeded in becoming a reference for wolf issues in the Alps for journalists, stakeholders and general public.

Threat 6 | Habitat loss affect suitable reproductive sites

Fragmentation and habitat loss are increasing within the Alps, also due to the increment in mass tourism development, and optimal wolf reproductive sites are diminishing as well as road kills increasing. Human settlements and the high levels of tourism might affect wolf distribution, and can be particular important if they reduce potential reproductive sites, which are the most vulnerable place for wolves. Reproductive sites are very sensitive to human disturbance, and quite places are nowadays rare in the Alps, especially due to tourism development and other human activities (e.g. logging, spelunking, grazing). Within the WOLFALPS

Project Species-specific Conservation measures (Action A9) have been developed to protect the species reproductive sites from habitat loss in Piemonte Region, in coexistence with a wolf friendly eco-tourism development (Action C4) and human activities.

Threat 7 | Hybridization with dogs

A relatively recently recorded threat to wolf conservation is the hybridization with domestic dogs. The widespread presence of dogs and the lack of control of occasional hybrids in Italy, makes them to represent a serious threat to the conservation of the genetic identity of wolf. During WOLFALPS Project this issue has been highly monitored and no hybrids have been detected in the Alps. Furthermore, considering the importance of the topic, the hybridization has been addressed in the general Guidelines for the management of the species.

Threat 8 | Genetic isolation

Wolf long term viability needs to be addressed considering the genetically variability of the population, taking into consideration that the alpine wolf population was naturally generated 20 years ago by natural dispersal of wolves from the Apennines. Bottleneck simulations showed that a total of 8-16 effective founders explained the genetic diversity observed in the Alps (Fabbri et al. 2007). Therefore, the levels of genetic diversity in the current expanding alpine wolf population totally depends on future successful migrants from the Apennines. Moreover, an interesting slight connection has been documented with the Dinaric population from Slovenia, important because an immigrant from the Dinaric population could enormously improve the overall heterozygosity of the alpine population. Spatial analysis of potential connectivity within these areas and the Alps, and a constant evaluation of the genetic status of this new population, has been evaluated within Actions A10 and A4-D1, which had management implications especially in the drafting of the Guidelines for Wolf population Management of Action E9.

SWOT ANALYSIS

We've used a structured planning method called SWOT analysis to evaluate the strengths, weaknesses, opportunities and threats at the end of the project. The analysis allows the identification of internal and external factors that are favourable or unfavourable to achieve a certain objective or a goal. The overall goal of the WOLFALPS project was to facilitate long-term conservation of wolves in the Alps of Italy and Slovenia and their coexistence with humans. A series of specific objectives and tasks were then after designed in order to ensure the contribution of the project to the abovementioned overall goal. As a result of the project structure and its objectives, the SWOT analysis was first carried out separately for each of the concrete conservation and awareness raising actions in the project. After that a meta-analysis was performed and an overarching SWOT matrix for the project produced (below).

		Helpful	Harmful
Internal origin		Strengths: <ul style="list-style-type: none"> • Coordination at the Italian and Slovenian Alpine scale on the key topic of monitoring and managing the wolf Alpine population. • Developed and implemented Conservation Measures for the Rete Natura 2000 Sites in Piedmont will permit to counteract at the local scale habitat loss and constitute a reference point for analogue development at the Alpine scale. • Established and trained institutional network (512 people) for wolf Alpine population on field monitoring including Protected Areas rangers, carabinieri forestali, hunting districts, Regions and Provinces could guarantee a long term continuity of this key activity necessary to provide a precise and realistic picture of the wolf population status, needed for an affective management. • Established, trained and enlarged anti-poison dog teams to continue and improve anti-poaching activities. • Raised awareness on harmful effects of poisoning among the wider public will help to contrast this illegal activity; • The great number of supporters and their diversity enabled wider dissemination of the project outputs. • New educational and communication tools become part of the asset of each partner will permit a better dissemination of a correct information to schools and to the general public particularly in newly recolonized areas. • Easy access to frequently updated information through project website and social channels is the basis for independent dissemination initiatives of correct information. • Durable self-sustaining wolf friendly eco-tourism products and offers will continue the effort to make the wolf a launch pad for local economy with empowering the dissemination of correct information and the increasing the acceptance of the predator at the local scale. 	Weaknesses <ul style="list-style-type: none"> • Coordination among institution at the Alpine scale still needs to be further improved and enlarged. • Unsecure funding for the implementation of a stable wolf population monitoring activity. • Unsecure funding for the implementation of a stable damage prevention support for farmers.

External origin	<p>Opportunities</p> <ul style="list-style-type: none"> • Interest for periodic update about the status of wolf Alpine population by the institutions permitted a wider diffusion of project data and results. • Discussion about the Conservation and Management Plan at the National scale raised attention among the general public on the topic of wolf conservation • Transfer of knowledge and best practices among the farmers. • Measures to support farmers who use good working lines of livestock guarding dogs (LGDs) • External support to trained LGDs by private animal food companies. Willingness and interest of the authorities to use and disseminate the project results. • Networking with exchange of experiences, knowledge and good practices among other large carnivores projects and experts in Europe. • Visibility and authority reached by the project could help the implementation of other large carnivore conservation activities and projects. • Attractiveness of the wolf theme for schools (it guarantees the implementation of project educational activities and the dissemination of correct information about large carnivores among the new generations). • Project promotion increases public awareness also for other conservation topics. • Attractiveness of the interdisciplinary wolf topic could increase and fasten the dissemination of project studies and results among scholars and technicians. • Involvement in dialogue platforms among different interest groups. • Interest of Nature Guides to continue after the end of the project to promote trekkings, hikes and event focused on a correct image of wolf. • Interest of cheese producers and farmers to further develop. • Interest of the publishing world at national scale for the wolf issue and interest in involving project staff in book writing. 	<p>Threats</p> <ul style="list-style-type: none"> • Scapegoating large carnivores for political ends during election time. • Lack of knowledge of some journalists and thus tendency to present wolf topics with alarmistic talks. • Lack of confidence in the institutions (and thus in projects which represent institutions) among part of the population, in particular in mountain and rural areas. • Political instability at the National scale (Italy) and lack of interest for conservation and environmental themes. • Legislative gap about hybrids management. • Phenomenon of the exploitation of Alpine pastures from big farmers who have no interest at all in proper using of damage prevention measures. • Lack of personnel for dissemination events and educational activities after the end of the project. • Lack of personnel for coordinating the after project initial phase of some new activities • Lack of personnel for keeping the daily press release on wolf issues.
-----------------	---	--

1 | COORDINATION

The lack of any form of coordinated management, due to the high administrative and institutional fragmentation mainly in Italy, but also among the different countries across the Alps, was one of the most crucial challenges. Therefore, the implementation of the overall organization of the LIFE WOLFALPS project, which was built up on a **shared and coordinated conservation program** implemented within the different administrative bodies in Italy and Slovenia, **was the first success of the Project** to support wolf conservation over the Alps. The partnership agreements established with each Partner and Supporter have been further enriched by new agreements, protocols and/or statements of cooperation with stakeholders, Provinces and Regions in order to establish a **coordinated network among institutions**, throughout the Alpine region for wolf monitoring and management. The complexity of this Project is its strength and we have succeeded in creating a **cohesive group of 12 Partners and 46 Supporters**, who developed coordinated strategies, comparative analysis relevant to the proper implementation of the conservation actions, and coordinated communication activities adapted to local realities. An impressive amount of silent administrative work has gone on behind the scenes to harmonize and report on the progress of a transregional team.

Overall goal: the maintenance of alpine coordination groups, defining common and standardized approaches shared between the different regions in the Alpine Countries.

Measures:

Measure	Responsible	Funding	Timeframe
Foresee regular meetings of the Italian Alpine regions Board, which has been created in the framework of LIFE WolfAlps, to plan common activities in collaboration with MATTM and ISPRA	Regione Piemonte and EAM, Regione Lombardia, Regione Veneto, all Partners	Internal budget	2018, 2019, 2020. At least one per year, meetings will be regularly hold in Milano at the Regione Lombardia. The first one has been hold in Milano on the 21/06/2018, in the framework of the After Life Plan, where every Italian Region/autonomous Province participated (Annex 1)
Overall coordination of the common activities conducted at the alpine level by the CGC	EAM and Regione Piemonte	30.000 €	2018-2019
Ensure a common approach for the conservation of the wolf in all Alpine regions	All Partners, EAM-CGC	Collaboration with internal personnel	2018-2023
Implementing coordinated conservation actions	All Partners	Collaboration with internal personnel	2018-2023

2 | MONITORING WOLF POPULATION

It is fundamental to implement coordinated actions for long term wolf conservation based on objective data collected and analyzed according to shared methods and protocols. This is what has been done on the framework of the LIFE WOLFALPS Project. In particular we evaluated the **Wolf Population Status in the Alps**. Updated data on wolf presence and on the consistency of the population are of paramount importance for effective management and communication. Hence, in 2014 one of the first steps was to organize a systematic monitoring to collect objective data on the status of the Italian and Slovenian wolf population in the Alps. The **non-invasive methodology** applied was based on snow-tracking, genetic analysis of biological samples, photo-trapping and wolf-howling. The overall objective was to document the presence of packs, pairs and solitary individuals with a stable territory. All this allowed to have **large-scale comparable data** and to implement the **first standardized monitoring of the wolf population in the Italian Alps** for year 2014/2015. The same monitoring was repeated for years 2015/2016 and 2017-2018. The staff involved was prepared through ad hoc training courses and the **Wolf Alpine Network** was constituted, collecting data and samples. It is composed of **about 512 operators belonging to 43 Institutions** distributed throughout the Alpine region (Regional and National Parks, Carabinieri-Forestale, Regions and Provinces). The Network represents **a high quality resource in the long term**. The wolf monitoring, coordinated by the Large Carnivores Center of the Maritime Alps Natural Park, also actively involved the stakeholder associations (farmers, hunters, environmentalists), Universities, Regional Health Services (A.S.L.), and the Hunting Districts.

The most important result achieved by this work is the **standardization of the monitoring of the wolf population at the Italian Alpine scale**, homogeneous and coordinated with the other Alpine countries, this should be maintained on the long term, also if conducted at a very minimal level with limited objectives (e.g. just estimating distribution) and it is one of the main goal of the After Life Conservation Plan for the monitoring of the wolf population.

In Slovenia, one of the goals within the wolfalps was to extend the national wolf monitoring to the Alps and we did it. After the project it will be continued. Slovenian Ministry of Environment is funding the monitoring. Responsible for implementation are Slovenia Forest Service, Biotechnical Faculty of the University of Ljubljana and Dinaricum Society. It is being implemented on a yearly basis.

Overall goal: the maintenance of the coordination of the monitoring of the wolf population at the Italian Alpine scale, also if realized with minimal objectives if no important funding are available

Measures:

Measure	Responsible	Funding	Timeframe
Maintenance of the coordination of the wolf population monitoring	CGC, Ente Gestione Alpi Marittime, Regione Piemonte	Internal budget and 30.000 €	2018-2019
Continue baseline monitoring activities in the framework of the LIFE WolfAlps Strategy within the Parks, in coordination with other Partners (core area 1 and 2 and 3)	EAM, PNOssola, PNCozie	Internal budget	2018-2021
Continue baseline monitoring activities in the	Regione Veneto	Internal budget	2018-2021

framework of the LIFE WolfAlps Strategy within the Regione Veneto, in coordination with other Regions and CGC			
Continue baseline monitoring activities in the framework of the LIFE WolfAlps Strategy, in coordination with other Partners over the Italian Alps	Carabinieri Forestale	Own current funds	2018, 2019, 2020, 2021, 2022
Implementation of Wolf Alpine Network in Lombardia Region	Regione Lombardia	Regional funding to be confirmed by the end of 2018 for support in monitoring and genetic analysis	2018 and 2019
Meeting to coordinate monitoring activity of the local (core area 1) monitoring network	EAM in collaboration with Carabinieri Forestali	Internal budget	One per year, from 2018 to 2020
Meeting to coordinate monitoring activity of the local (core area 2) monitoring network	PN Alpi Cozie in collaboration with Città Metropolitana di Torino	Internal budget	One per year, from 2018 to 2020
Meeting to coordinate monitoring activity of the local (core area 3) monitoring network	PNVG in collaboration with PNOssola	Internal budget	One per year, from 2018 to 2020
Collection of information on damage events	PN Ossola, PNVG, PNCozie	Internal budget	2018-2020
Systematic and opportunistic monitoring of wolf presence in the PN Alpi Marittime and surroundings	EAM	Internal budget	From winter 2018-2019 to winter 2020-2021
Systematic and opportunistic monitoring of wolf presence in the PN Alpi Cozie and surroundings	PN Alpi Cozie	Internal budget	From winter 2018-2019 to winter 2020-2021
Systematic and opportunistic monitoring of wolf presence in the PNOssola and surroundings (core area 3)	PNOssola	Internal budget	From winter 2018-2019 to winter 2020-2021
Monitoring of wolf presence in the PNVG and surroundings	PNVG in collaboration with Carabinieri Forestali	Internal budget (direct personnel costs) € 3000 (from Direttiva Biodiversità MATTM) € 2000	2018-2020
Collection of information on damage events	Regione Lombardia, with the collaboration of the regional Wolf alpine network	Regional funding to be confirmed by the end of 2018 transferred to Regional Wolf Alpine Network (Provinces) for monitoring and	2018/2020

After LIFE Conservation Plan



		management of wolf damages	
Winter monitoring of wolf presence, collection of samples in Slovenian Alps	TNP, UL	Adjusted program of work - internal budget. TNP will continue with the wolf winter monitoring according to the protocol developed in project WolfAlps. With the assistance of UL, TNP will also provide the park rangers with relevant information concerning monitoring through regular internal trainings, if needed.	2018-2023, annually. Internal workshops for park rangers are usually organized in early spring (April-May).

3 | PREVENTION

Mountain livestock farming is the economic activity on which wolf presence causes the greatest negative impact. The main damage occurs in areas of recent wolf recolonization where over time livestock management has evolved in the absence of large predators and does not include any prevention measures or defense strategies from wolf attacks. The **economic loss and the psychological and social hardship** experienced by farmers leads to local conflicts, resulting in one of the biggest threats to wolf conservation in the Alps. An extensive survey was carried out during the initial phase of the project to quantify wolf depredation on livestock and understand vulnerability of alpine pastures in Italian alpine areas to **effectively implement preventive methods**. Thanks to this survey, it was possible to identify and plan subsequent activities aimed at preventing attacks in areas of major wolf conflict, adapting them to local needs.

In the Western Alps, where the wolf has been present with stable packs for more than twenty years, the protection systems were already in widespread use by sheep and goat farmers, whereas they were less used by cattle breeders. In these areas, we developed **new specific protection measures for cattle**. In particular, permanent electrified three-wire fences have been built, associated where possible with other protection systems such as livestock guarding dogs, fladries and acoustic devices. **The experience** gained and now consolidated in twenty years of prevention systems use in the Western Alps **has been transferred** to the other Alpine areas. Not only through the installation of electric fences and the assignment of livestock guarding dogs, but also thanks to several meetings where breeders residing in recently recolonized areas could exchange experiences and information with those from areas of stable wolf presence.

In the Central and Eastern Alps in particular, efforts were concentrated in areas where new packs had recently settled in, both in terms of **technical and informative support** for breeders, and in terms of providing damage prevention systems adequate to the various local characteristics; it was thus possible to provide a quick response to the needs of farmers who have suffered attacks. In both Western and Central-Eastern Alps, selected livestock guarding dogs have also been provided to selected farmers. A total of 25 **socialized LGDs** were given to livestock farmers (sheep-goats or cattle). High quality animal food company Almo Nature supported the project's dogs with a free supply of about 24,000 kg of high quality dog food. At the end of the project, a cognitive survey was conducted through specific questionnaires aimed at acquiring the opinions and the level of satisfaction of the farmers on the prevention systems received.

Overall goal: decrease the impact of wolf on livestock husbandry by implementing traditional preventive methods for goat and sheep flocks and using the information developed in the LIFE WolfAlps Project for transferring the new cattle measures both in recently recolonized and in stable areas.

Measures:

Measure	Responsible	Funding	Timeframe
Provide resources for implementation of the damage prevention measures	PNVG	Internal budget 5.000 €	2018-2020 If necessary within the park area
Ensure technical support informing farmers on which and how to use prevention systems	PNVG	Internal budget	2018, 2019, 2020
Provide resources for implementation of the damage prevention	Regione Lombardia	Regional funding to be confirmed by the end of 2018 transferred to ERSAF	2018/2020

measures		to guarantee the continuation of support to farmers in prevention methods	
Ensure technical support informing farmers on which and how to use prevention systems	Regione Lombardia	Internal personnel Regional funding to be confirmed by the end of 2018 transferred to ERSAP to guarantee the continuation of support to farmers in prevention methods; LIFE GESTIRE2020 specific information action on LC (action E14), specifically through the support of, Progetto Pasturs (volunteers will help farmers on the field in the implementation of damage prevention methods)* LIFE GESTIRE2020 other information actions on LC (action E14) LIFE GESTIRE2020, through the support of technical facilitators (action A1, C1) and promotion of specific RDF measures	2018/2023 *for summer 2018 only
Ensure correct use of the implemented damage prevention measures given by the project (fences and LGDs)	Regione Lombardia	Regional funding to be confirmed by the end of 2018 transferred to ERSAP to guarantee the continuation of support to farmers in prevention methods LIFE GESTIRE2020 specific information action on LC (action E14), specifically through the support of, Progetto Pasturs (volunteers will help farmers on the field in the implementation of damage prevention methods)*	2018/2023 *for summer 2018 only
Ensure technical support for managing and for solving problem with LGDs	Regione Lombardia	Regional funding to be confirmed by the end of 2018 transferred to ERSAP to guarantee the continuation of support to farmers in prevention methods LIFE GESTIRE2020 specific information action on LC (action E14), specifically through the support of, Progetto Pasturs	2018/2023 *for summer 2018 only

		(volunteers will help farmers on the field in the implementation of damage prevention methods)*	
Introduce measures within the agri-environment measures (P.S.R.)	Regione Lombardia, DG Agricoltura	A notification to the environmental authority who monitors the notification of changes to the RDF measures has been launched on 7 th May 2018. The funds are not granted yet	If the procedure goes on successfully, funds will be available in 2019 for a new measure for prevention methods (the actual RDF is valid until 2020)
Organize educational meetings targeting farmers on damage prevention	Regione Lombardia	Internal personnel Regional funding to be confirmed by the end of 2018 transferred to ERSAP to guarantee the continuation of support to farmers in prevention methods; LIFE GESTIRE2020 specific information action on LC (action E14), specifically through the support of, Progetto Pasturs (volunteers will help farmers on the field in the implementation of damage prevention methods)* LIFE GESTIRE2020 other information actions on LC (action E14) LIFE GESTIRE2020, through the support of technical facilitators (action A1, C1) and promotion of specific RDF measures	2018/2023 *for summer 2018 only
Promotion and installation of preventive measures over the entire Regione Veneto, acquisition of electric fences and other preventive tools	Regione Veneto	Regional fundings and Rural Development Funds (RDF) within measure 4.4.3., by DGR/CR n. 31 of 17 April (about 1.000.000 \$)	2018-2019

Promote the use of preventive systems	Regione Lombardia	Internal personnel Regional funding to be confirmed by the end of 2018 transferred to ERSAF to guarantee the continuation of support to farmers in prevention methods; LIFE GESTIRE2020, through the support of technical facilitators (action A1, C1) and promotion of specific RDF measures LIFE GESTIRE2020 specific information action on LC (action E14)	2018/2023
Ensure technical support informing farmers on which and how to use prevention systems (core area 2)	PN Alpi Cozie	Internal budget	From summer 2018 until summer 2020
Ensure correct use of the implemented damage prevention measures given by the project (fences and LGDs in core area 2)	PN Alpi Cozie	Internal budget	From summer 2018 until summer 2020
Organize educational meetings targeting farmers on damage prevention (core area2)	PN Alpi Cozie with Public veterinary office (ASLTO3)	Internal budget	From autumn 2018 to winter2020, at least one workshops
Promote the use of preventive systems	PN Alpi Cozie	Internal budget	2018-2020
TNP - Ensure comprehensive implementation of preventative measures, if needed	TNP	Internal budget. According to the TNP Act and the TNP Management Plan (2016-2025), specific additional funds are available for implementing several conservation measures including the purchase of preventative tools, if needed.	Annually, according to the program of work.

4 | ANTIPOACHING

Poisoned baits and poaching can cause **large wolf and wildlife mortality**, and be dangerous to people and pets. However, poisoning is difficult to counteract because it is silent and hard to detect. The Project has been successful in intensifying the level of detection and implemented a multidisciplinary proactive strategy enabling an efficient control of illegal wildlife crimes over the entire Italian Alps.

Five anti-poaching teams with operators of the Carabinieri-Forestale, Parks, and Provincial Police personnel, have been formed and equipped for a total of **88 agents involved**. The teams operated over the Italian Alps in a regular manner, with a total of about **480 patrolling sessions**, in many cases camera traps were used. To increase poisoning detection, 2 LIFE WOLFALPS anti-poisoning dog teams have been formed, in the Western and Eastern Alps. A total of 8 dogs have been constantly trained and prepared to find poisoned baits, to sweep contaminated areas, and to support investigations. A total of about **95 preventive interventions** and **110 urgent interventions** after the discovery of a dead wolf or other poisoned animals have been conducted. About **80 poisoned animals and baits** have been retrieved. A risky but indispensable job, and unfortunately in one case, one anti-poisoning dog, Luna, died at work. A final key step has been to increase knowledge on the topic **through awareness raising sessions**, directed at locals, general public, hunters and farmers. This incremented knowledge on the harmful effects of poisoning on ecosystems will put poachers in a tight corner: illegality can be counteracted only **with help from everyone**, and the LIFE WOLFALPS project made **an important step** in this direction. The public too can help in the fight against poisons, reporting every case to the competent bodies.

Overall goal: decrease the level of poisoning through an efficient detection of illegal activities by using the formed Anti-poisoning dog teams. This will significantly contribute to the conservation of wildlife in general and also of many endangered species, besides the wolf, particularly rare raptors and vultures.

Measures:

Measure	Responsible	Funding	Timeframe
Coordination of the Anti-poaching Dog Team of the Western Alps, composed by different bodies: EAM, Carabinieri Forestale, PNCozie, Città Metropolitana Torino by CGC	EAM - CGC	Internal budget and 10.000€	2018-2019
Continue activity of anti-poisoning dog team to contrast illegal practices	Carabinieri Forestale	Own current funds	2018, 2019, 2020, 2021,2022
Continue activity of anti-poisoning dog team of the Eastern Alps to contrast illegal practices	Regione Veneto	Own current funds	2018, 2019, 2020, 2021,2022
Full operationality of anti-poaching teams	Carabinieri Forestale	Own current funds	2018, 2019, 2020, 2021,2022
Extra-ordinary	Carabinieri Forestale	Own current funds	2018, 2019, 2020,

campaigns in Italy, organized in sessions of 5 days with 10-15 operators, at least 2 times a year			2021,2022
Inform general public about the importance of denounce poisoning events	Carabinieri Forestale	Own current funds	2018, 2019, 2020, 2021,2022
Continue activity of anti-poisoning dog team to contrast illegal practices	PN Alpi Cozie with CC FOR	Internal budget	Until the dog will be able to work
Inform general public about the importance of denounce poisoning events	PN Alpi Cozie	Internal budget	2018-2023
Enhance cooperation within Institution (Istituto Zooprofilattico di Torino)	PN Alpi Cozie with CC FOR	Internal budget	2018-2023
Ensure support to anti-poison activities	Regione Lombardia, PNVG, PNOssola, PNCozie, EAM	Internal personnel, collaboration with CF and provinces	2018-2023
Inform general public about the importance of denounce poisoning events	Regione Lombardia	Internal personnel, collaboration with CF and provinces LIFE GESTIRE2020 other information actions on LC (action E14)	2018/2023
Enhance cooperation within Institution	Regione Lombardia	Internal personnel, collaboration with CFF and provinces LIFE GESTIRE2020 action A16 on managing of wolf in the Appennines	2018-2023

5 | MANAGING INJURED WOLVES AND HYBRIDS

In Italy, hybridization between wolves and dogs is a source of concern and the scientific community considers it as a severe threat to wolf conservation. During the LIFE WOLFALPS project this issue has been **highly monitored**, and no hybrids have been detected in the Alps, however the issue has been addressed in the **general Guidelines for the management of the species**.

At the same time, it is important to manage accidentally injured wolves correctly, they can display undesired behavior, occasionally approaching villages and people. These animals are removed and cured, also for maintaining **the correct perception of the wolf** by the general public and to avoid accidents. A **general protocol of intervention** has been agreed on, and 6 accidentally injured wolves in Piedmont have been immediately monitored and/or removed and cured. In such cases correct species perceptions have been maintained through correct communication of the events. An official captive wolf facility, the “Men and Wolves” Centre, is hosting those wolves and **5 communication campaigns** have been developed starting from the true stories of the injured wolves to further increase knowledge on the species. These campaigns had huge publicity: each appeared not only on the web and social channels of the Project but also in national newspaper with a circulation of **over 200,000 copies**. Every year the experience of **over 20,000 visitors** to the “Men and Wolves” Centre have confirmed the importance of the structure as an element of dissemination and awareness.

Overall goal: to prevent, detect and control wolf-dog hybridization events in order to prevent loss of wolf genetic identity and widespread contamination in the wolf alpine population; to detect and control injured wolves in order to promptly intervene for maintaining the correct perception of the wolf by the general public and to avoid accident with animals that can display a not correct behavior.

Measures:

Measure	Responsible	Funding	Timeframe
Monitoring wolf presence in order to intervene in case of suspected hybrids	PN Ossola and EAM	Internal budget	2018-2020
Enable the moving of a injured wolf or hybrid in EAM captive facility center	EAM, Centro Faunistico Uomini e Lupi	Internal Budget	2018,-2019, 2020
Ordinary management of captive wolves/hybrids in the Centro Faunistico Uomini e Lupi	EAM, Centro Faunistico Uomini e Lupi	Internal Budget and 20.000 £ per year	2018,-2019, 2020
Enable the intervention of a team expert in wolf capture and moving the injured animal in the facility center (core area 2)	PN Alpi Cozie in collaboration with other competent public bodies	Internal budget with external contract with a veterinary or public veterinary	2018-2020

6 | WOLF ECO-TOURISM

The **improvement of the socio-economic conditions of local communities** through eco-tourism initiatives which use a positive image of the wolf is important to increase the level of acceptance and tolerance towards the predator, becoming a concrete tool to support conservation.

Among the various initiatives implemented by the LIFE WOLFALPS project, one of the most ambitious was to use cheese produced by breeders impacted by the wolf as a communication vehicle to support conservation. With the **"Terre di Lupi" ("Land of Wolves") brand**, the LIFE WOLFALPS project has promoted and accompanied the birth of **the first wolf friendly pilot product of the Italian Alps**. The pioneers of the initiative are six producers with local distribution (5 in the province of Cuneo and 1 in the Province of Trento), who actively participated in the genesis of the brand, coordinated with the bear friendly line promoted by the LIFE Dinalp Bear Project. They actively participated to the development of a brand message that succeeds in expressing **all the pride of creating quality products in conditions made more difficult by the presence of a predator**.

In summertime, **39 hiking days** were organized for walkers to experience the complex and fascinating issue represented by the **"mountains with wolves"**. WOLFALPS organized both one day trip to Alpine pastures, to meet the shepherds who put in place effective measures to prevent damages. The goal was not to see wolves, but to perceive its presence through its signs, discovering at the same time the biology of the wolf and a correct **culture of respect for wildlife**. Treks have **become self-sustaining eco-tourism products** which will continue in the after LIFE period, thanks to the Alpine huts' managers and to the Park nature Guides trained during the project.

Winter is the ideal season to follow animal tracks on snow without disturbing them: a precious opportunity to discover in an engaging way the biology and ecology of the wolf and to use its charm as a catalyst to talk about other species important for the Alpine ecosystem. In many cases, snow-tracking hikes have inaugurated **a new eco-hiking tradition** with good perspectives, which local operators will maintain in the coming years with a double positive effect: the economic fallout and the enrichment of the local eco-tourism offer, without disturbing the species.

Overall goal: to increase the level of acceptance and tolerance both of shepherds and general public towards the predator using eco-tourism events and products.

Measures:

Measure	Responsible	Funding	Timeframe
Support the production of cheese "Land of wolves"	EAM - Centro Grandi Carnivori	Internal budget: temporary part-time personnel will be charged to follow the development of the brand for one year to ensure the launch of the initiative.	1/6/2018 – 31/5/2019
Support hiking initiative to discover the "Mountains with wolves"	EAM, Regione Lombardia	EAM: Trained Park Guides and Huts' managers will propose the eco-tourism events on their own. The Park will support and promote these events on its own as part of the personnel ordinary activity. RL: Internal personnel: Support and promotion of wolf eco-tourism events	2018, 2019, 2020

		though ERSAF, Regional Parks and local associations LIFE GESTIRE2020 information actions on LC (action E14)	
Support snow-tracking hiking initiatives	EAM, Regione Lombardia	No budget. Trained Park Guides and local operators will propose the eco-tourism events on their own. The Park will support and promote these events on its as part of the personnel ordinary activity. RL: LIFE GESTIRE2020 information actions on LC (action E14)	2018, 2019, 2020
Support hiking initiative to discover the "Mountains with wolves"	PN Alpi Cozie	Internal budget. Trained Park Guides and Huts' managers will propose the eco-tourism events on their own. The Park will support and promote these events on its as part of the personnel ordinary activity.	Continuously
Support snow-tracking hiking initiatives in Slovenia	UL, TNP	Internal budget (UL), adjusted annual programme of work - internal budget (TNP). Trained field personnel will provide support to 1-day hiking snow tracking events.	Yearly

7 | MANAGEMENT MEASURES

In the framework of the LIFE WOLFALPS Project, **Species-Specific Conservation Measures** have been developed for the Sites directly involved as beneficiaries of the Project, and subsequently extended to the entire Natura 2000 sites of the Piedmont Region. They have been based on the critical conservation needs for the species, such as the protection of reproductive sites from habitat loss at the local scale, in coexistence with tourism development and human activities. To be effective on this complex evaluation, we developed an **habitat suitability model of reproductive site (MIASIR)**. This is an important innovative example of **adaptive management**, where the Natural Protected Areas Department of Piedmont Region used robust science for management decisions. On the basis of the information provided in the Species-Specific Conservation Measures, Piedmont Region **has integrated the Site-Specific Conservation Measures of the Sites of Community importance (SCIs)**, necessary for the process of designation of the Special Areas of Conservations (SACs), required in accordance with the Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. This has a very important impact for the conservation of the species at the regional level. Site-Specific Conservation Measures **are structured in obligations, prohibitions and good practices** adapted to different ecological and socio-economic characteristics of the sites, identified and selected to maintain a favourable conservation status for species or habitats of Community interest. Important management discussions have been conducted not only at the regional level, but also **at the Italian alpine level**. The LIFE WOLFALPS Project, with the lead of the Piedmont Region, organized 4 Alpine workshops relevant to the discussion of the Wolf National Action Plan. During these workshops, **the Alpine Regions board (Tavolo delle Regioni Alpine) has been constituted** and worked on the definitions of the common **“Guidelines for the management of the wolf alpine population”**, and it will continue to work in our country in the future. Its legacy will continue to improve the fragmented management present in Italy.

Overall goal: to protect the wolf and its reproductive sites from habitat loss by the official adoption of the Species-Specific Conservation Measures in Piemonte Region, in coexistence with tourism development and human activities. Continue the Italian Alpine Regions Board.

Table Abbreviations:

RP: Regione Piemonte

RP-A1601A : RP – Direzione Ambiente Governo e Tutela del territorio – Sett. BIODIVERSITÀ E AREE NATURALI

RP-A1701A: RP – Direzione Agricoltura – Sett. PRODUZIONI AGRARIE E ZOOTECNICHE

CGC: Centro di Riferenza “Grandi Carnivori” - RP – EAM

CBV: Centro per la Biodiversità Vegetale “Emile Burnat”, RP – EAM

Measures:

Measure	Responsible	Funding	Timeframe
Annual meetings of the Italian Alpine Regions Board	Regione Lombardia, RP-A1601A – other Italian Alpine Regions - CGC	Internal personnel, internal budget, EU-funds	2018, 2019, 2020, 2021, 2022. 1 meeting for each year
Meetings to define a common approach for the application of Site and Specie specific Conservations Measures in Piemonte Region	RP-A1601A – SACs managing bodies – CGC – CBV - EAM – PN Alpi Cozie – PN Ossola	internal staff, internal budget	2018, 2019, 2020, 2021, 2022, 1 meeting every two years
Implementation of Site-	RP-A1601A – SACs	FEASR - PSR 2014-2020 –	2018, 2019, 2020, 2021,

After LIFE Conservation Plan



specific Conservation Measures, review and updating SACs and Protected Areas management plans	managing bodies – CBV – CGC – EAM – PN Alpi Cozie – PN Ossola	internal staff, internal budget	2022
Apply the Specie-specific Conservation Measures: Spatial Model and MIASIR implementation	RP-A1601A - RP-A1701A - SACs managing bodies - CGC	FEASR - PSR 2014-2020 – internal staff, internal budget	2018, 2019, 2020, 2021, 2022
Supporting breeders for implementation of prevention/protection mandatory strategies	RP-A1601A - RP-A1701A - SACs managing bodies - CGC	FEASR - PSR 2014-2020 Mis.a 4, Op.4.4.2 –internal staff, internal budget	2018, 2019, 2020, 2021, 2022 – first step before the end of 2018

8 | COMMUNICATION

Successful conservation of large carnivores requires favourable ecological conditions as well as a tolerant socio-political landscape. **Wolf management is a highly controversial issue**, because of many associated conflicts involving many different stakeholders and because of the high (positive or negative) symbolic value of the species. Understanding the social and cultural dimension is thus of paramount importance for the effectiveness of the dissemination actions. That's why WOLFALPS's Communication strategy was solidly grounded in the scientific analysis of Human Dimension (Action 8). On this sound basis WOLFALPS diversified its languages and communication tools to address to the identified key stakeholders and categories:

- **Hunters:** the key actions were ad hoc meetings with hunters as speakers, direct involvement of trained hunters of the Alpine Hunting Districts in the wolf population monitoring to increase correct information about prey-predator dynamics and positive wolf perception. Hunters' Associations representatives were involved in **dialogue platforms**. Tools: brochure and posters written by hunters (and researchers) for hunters.
- **Farmers:** the key actions were ad hoc meetings with technicians (mostly veterinaries) as speakers, direct exchange of knowledge and best practices about preventive methods from farmer to farmer from Western to Eastern Alps. Farmers' Associations representatives were involved in **dialogue platforms**. Tools: brochure on preventive methods.
- **Schools:** coordinated and shared new educational activities were the key actions: drawing contests, workshops and visits to the Parks involved the young future decision makers of tomorrow. On the other side coordinated training activities involved teachers and environmental education operators as to create a permanent trained "army" of wolf ambassadors across the Alps. Tools: children book, board game, posters.
- **Media:** the main threats were the lack of knowledge and the looking for the false scoop of (too) many journalists. That's why key actions were ad hoc courses for journalists and the direct production of an objective and scientific communication about wolf. The **first Alpine Wolf Press Office** was created to daily collect and archive the press review and to write press releases. A special **Crisis Unit** was formed to quickly react to emergencies seven days a week and h24. Tools: press releases.
- **General Public:** "anything goes" a wide range of activities have been realized ranging from hundreds of information events to photo contests, travelling exhibition, street art exhibition, public conferences, theatrical play. Tools: brochures, posters, flyers, videos.
- **Local public (inhabitants of wolf areas):** in newly recolonized area much effort was focused in contrasting fear for personal safety, in areas where wolves are already have been present for years WOLFALPS focused on the message that "wolf presence and wolf predations on wild animals are absolutely normal". Updated data about wolf presence diffusion was of utmost importance everywhere. Tools: posters about local packs, brochures, posters, flyers.

Overall goal: Increased awareness about wolf ecology, wolf population status and management in the Alps and positive attitude towards long term wolf conservation through wolf-human coexistence.

Measures:

Measure	Responsible	Funding	Timeframe
Quick reaction to biased reporting in the media by sharing objective information	EAM - Centro Grandi Carnivori EAM – MUSE Regione Lombardia	Internal budget	2018-2019

	(collaboration)		
Divulgence of project final results	all partners	Internal budget. Partner's own communication channels + Project web and social channels Internal budget. LIFE GESTIRE2020 information actions on LC (action E14) Regional communication channels + Project web and social channels	2018, 2019
Implementing the project educational activities in the school	Regione Lombardia	Internal budget Support and promotion of educational activities on wolf through Regional Parks and Area Parchi	2018-2019-2020
Yearly training for teachers and trainers	Regione Lombardia	Internal budget Support and promotion of educational activities on wolf through Regional Parks and Area Parchi	2018-2019-2020
Implementing the project educational activities with the school in particular related with "Tempo di lupi" exhibition	PNVG	Internal budget 5.000 € (from Direttiva Biodiversità MATTM) 6.000 €	2018 2019-2022
Information events towards general public related to "Tempo di lupi" exhibition and Carneval in Vogogna	PNVG	Internal budget 2.000 € (from Direttiva Biodiversità MATTM) 2.000 €	Almost one activity each year 2018 2019-2022
Information event towards stakeholders (in particular farmers and hunters)	PNVG in collaboration with PNOssola	Internal budget	2018-2020
Maintain website and Project Social channels	EAM - Centro Grandi Carnivori	Internal budget. and 7.000 €. One update/week. Implementation of new contents by Park's personnel, contents provided and supervised from CGC's personnel.	2018, 2019
Keep in touch with media, be a point of reference about wolf issues in the Alps	EAM - Centro Grandi Carnivori	EAM – CGC will keep in contact with interested journalists at national and local scale to keep sending press releases about most important "wolf Alpine updates"	2018-2023
Implementation of the project educational activities in the school and dissemination of the educational tools	EAM - Centro faunistico "Uomini e Lupi"	Internal budget. EAM and the "Men and Wolves" captive facility will include new educational activities and the educational kit/books created by the project in their standard	2018-2023

		educational programs. Posters and other dissemination tools will be distributed to visiting schools.	
Formal and informal trainings for teachers and trainers	EAM - Centro Grandi Carnivori	EAM will include lessons about wolves and teas with teachers about wolves within the training courses for teachers, educational officers and Park guides organized by the Park. The lessons will be held by Park's or CGC's personnel.	2018-2023
"Vita da Lupi" and "Uomini, orsi, lupi" in the MUSE Institutional educational portfolio.	MUSE	The two wolf educational activities developed in the framework of action E4, "Vita da Lupi" and "Uomini, orsi, lupi", will be included in the official MUSE educational portfolio: a widespread tool edited yearly in September, that teachers use to book the activities for their classes when they plan their visit to MUSE.	2018 - 2023
"Lupinella" available at the MUSE shop	MUSE	MUSE shop will maintain the illustrated book "Lupinella – La vita di una lupa nei boschi delle Alpi" (Editoriale Scienza, 2018) on stock in its "after life" edition.	2018 - 2023
"Rendez-vous 2200" available for third parties	MUSE	MUSE will coordinate the contacts between the theatre company "Trento Spettacoli" and interested third parties in order to facilitate the traveling of the play in other venues.	2018 - 2023
Continuation of the meetings of the regional Platform instituted during the Life Wolfalps project, called "Tavolo regionale di partecipazione ed informazione per la gestione del lupo e dei grandi carnivori" with the farmer association, for the implementation of preventive measures	Regione Veneto	Internal Budget	2018-2021
Meetings with stakeholders to spread information collected with monitoring	PN Ossola in collaboration with PNVG	Internal budget	Yearly meetings from 2018 to 2020.

Quick reaction to biased reporting in the media by sharing objective information (core area 2)	PN Alpi Cozie	Internal budget	Continuously
Keep in touch with media, be a point of reference about wolf issues in the core area 2	PN Alpi Cozie	Internal budget	2018-2020
Implementation of the project educational activities in the school and dissemination of the educational tools (core area 2)	PN Alpi Cozie	Internal budget	2018-2020
Education workshops with school children, scouts, Ljubljana ZOO visitors	UL	Internal budget and materials. UL staff will implement workshops targeting children in schools and at events.	2018, 2019, 2020, Opportunistically
Incorporation of activities developed through the project into regular educational thematic events for interested public	TNP	Internal budget and materials. TNP will (in corporation with UL) organize workshops and other educational events focusing primarily on schools (primary, secondary), hunters and local communities (if needed) within the protected area and its surroundings (UNESCO MaB Julian Alps).	2018, 2019, 2020, Opportunistically according to the annual programs of work.

ABOUT THE AFTER-LIFE CONSERVATION PLAN



At the end of their projects, all LIFE Nature beneficiaries are obliged to produce an After-LIFE Conservation Plan. The plan sets out how conservation activities are planned to continue and to develop after the end of the project, and how the longer-term management of the project site(s) will be assured. It should give details regarding what actions will be carried out, when, by whom, and using what sources of finance.

This publication was produced in 2018 with support from the Partners
of the Life WolfAlps Project
in the framework of LIFE-Nature - Project LIFE 12 NAT/IT/000807 WOLFALPS

