



life
Praterie

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Urgent actions for the conservation of grasslands and pastures
in the territory of Gran Sasso and Monti della Laga



Layman's Report

Dissemination text produced thanks to the contribution of the European Union LIFE program

The **LIFE PRATERIE Project** was implemented by the **Gran Sasso and Monti della Laga National Park** as the unique beneficiary and coordinator.

In the project area there are three Regions:

Abruzzo, Lazio and Marche

five **Provinces** (L'Aquila, Teramo, Pescara, Rieti and Ascoli Piceno) and forty-four **Municipalities**.

The project started on **November, 1th 2012** and ended on **December ,15th 2017**

The overall budget is € 1,680,262.00
the EU Co-financing amounts to € 840,131.00

Photos

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Gran Sasso and Monti della Laga National Park - Gran Sasso Skyrace Archives

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What is LIFE PRATERIE

"Praterie" is a project co-funded by the European Commission through the LIFE program and it has been implemented by the Gran Sasso and Monti della Laga National Park as the unique beneficiary and coordinator. Thus the project has involved all the park's operational services. The project has demonstrated the close relationship existing between grazing and biodiversity in mountain environment by promoting good breeding management practices and disseminating the awareness that breeders can be allies in the strategies of conservation.

Grasslands, especially the ones that can be found on the high plains of Campo Imperatore, have always been closely bonded to extensive sheep, goat, cattle and horse farming, an activity that has brought richness to the communities in the Gran Sasso mountain range, and which still represents one of the most significant sustainable economic activities in the National Park. The conservation of the nature value of the grasslands is strictly dependent on the sustainability of these centuries-old practices and on the adoption of appropriate livestock farming practices. However, nowadays some pastures are partially overgrazed because livestock raising has changed from sheep to cattle farming, and these animals concentrate near watering places. Contrarily, in other areas the decrease of extensive livestock farming practices might cause localized abandonment of the pastures with consequent scrub encroachment. These factors are likely to cause a decline and reduction of the nature value of the grasslands as well as of the habitats for precious plant and animal species. Moreover, due to their beautiful landscapes, the park's grasslands are constantly subject to the impact of tourism and hiking; the most used

paths are often affected by erosion and the rain water carries the gravel onto the surrounding meadows.

Therefore, considering the high number of high nature value habitats present in the area, the project aimed to encourage less impacting livestock raising and tourism management practices, by applying an integrated participatory decision-making approach. This encouraged the conservation of the grasslands and strengthen their value as an important heritage for the future generations.



The environmental problem

One of the main problems in the project area was the scarce regulation of livestock flows and the uneven use of the area, with the concentration of flocks and herds in areas close to drinking points, while, on the other hand, other distant areas used scarcely or not at all.

In overcrowded areas there are evident phenomena of erosion and loss of soil. Conversely, the scarcely used areas are subject to dynamic evolution of vegetation to structurally different and more homogeneous floristic forms (shrubbery, especially *Juniperus alpina*), which are poorer in biodiversity.

Another major consequence is the loss of environments for wildlife (mammals, birds, insects) that is adapted to the life on the grasslands. In

particular, it is possible to observe the closing of the open grazing areas because they are turning into juniper habitats, both indispensable for the survival of Orsini's viper. Poor regulation of grazing causes on the one hand excessive livestock charge on habitats 6210 *, 6230 * and 3150, and on the other the disappearance of such habitats due to grazing abandonment. At the same time, the excessive use of water sources in mountain lakes causes the destruction of habitat 3150, threatening the populations of the Italian crested Newt.

The impact of tourism causes, in the areas surrounding the paths and access areas for vehicles, a major deterioration of habitats 6210 *, 6230 *, 5130, 8210, 6170, 8120 and 7140.



Objectives

The "LIFE Praterie" project aimed at the long-term conservation of habitats and target species associated with grassland environments. In order to achieve this, the project aimed 1) to eliminate or mitigate the existing threats by harmonizing grazing systems in predominantly anthropized

areas, 2) to encourage more suitable ways of managing tourist services, and 3) to disseminate good conservation practices and a renewed culture of sustainable use. All this was done following the project's approach of full involvement of local stakeholders into decision making.



Habitats and targeted species

The project area falls into the two main areas of the Gran Sasso e Monti della Laga National Park: the Gran Sasso massif and the Laga Mountains chain. These territories are characterized by high wilderness, with several types of habitats and many animal and vegetable species of considerable interest. Flowering wealth is remarkable, with over 2,400 species, among which various endemisms in high altitude pastures and limestone screeds.

In the SCI IT7110202 "Gran Sasso", which

due to the identified threats was the main target area of the project, 26 habitat types are listed in Annex I of the Habitat Directive, eight of which are priority ones.

The project area is also of significant importance for the two priority habitats 6210 * - Cultivated dry grassy formations and facies covered by limestone bushes (Festuco-Brometalia) with remarkable orchid bloom, and 6230 * - Grasslands in Nardus, rich in species, on siliceous substrate of mountainous areas.

Among the animal species listed in Annex II of the HD, the ones that benefited from the project were:



the **Orsini Viper** (*Vipera ursinii*), present throughout the plateau of Campo Imperatore and on the slopes of the adjacent peaks. Its preferred habitat is made of steppes, bushy meadows and mountain pastures;



the **Italian crested Newt** (*Triturus carnifex*), the decline of which is mainly due to the progressive reduction of reproductive habitats;



the **Apennine Chamois** (*Rupicapra pyrenaica ornata*) which population, thanks to the restocking programs implemented by the Park in previous LIFE projects, today counts about 650 individuals on the Gran Sasso chain.

Main actions

The main project actions are planned to achieve two strategic goals: improved grazing practices and the increase of sustainable tourism in areas of high natural value.

Regarding **grazing** activities, the main implemented actions were:

- the collection and analysis of existing municipal grazing regulations;
- the creation of a geographic and photographic database of the land use;
- the evaluation of management problems in breeding farms;
- the redistribution of water points;
- the encouragement of homogeneous pastoral practices;
- negotiation activities with stakeholders (participatory process) for the harmonization of grazing regulations;
- the dissemination of best practices and management inputs;
- the running of territorial Help Desks for the local populations;

Regarding the control of **tourist flows**, the measures implemented are:

- the restoration and re-naturalization of the trail network;
- the creation of parking areas;
- the installation of new road signs;

All interventions were previously agreed in the framework of a participatory process that involved all the park's stakeholders.

Project area Geodatabase

One of the most important results of the LIFE Praterie project was the creation of a clear picture of the project area, from the territorial, naturalistic and anthropological point of view.

The preparatory action A4 concerned the development of a geographic and photographic database on land use, which highlights the most critical issues.

The tool was based on the national geportal of the Ministry of the Environment, which provided an initial information base, and during the project it was enriched with geo-referenced data collected by veterinarians, during the monitoring visits to livestock breeding farms, as

well as by technicians engaged in activities on the territory.

The database was then integrated with information related to administrative limits, toponyms, altitudes, hydrography and road conditions, the Natura 2000 network (data related to zoning, SCIs, SPAs and Habitats), in addition to data from detailed maps, such as the public land use.

The information coming from the monitoring action D1 was also integrated in the geodatabase, in order to highlight the success of the conservation interventions carried out by the project.





Actions for grazing

Fostering of good management practices

The assistance to livestock raisers, the dissemination of best practices and the encouragement of extensive grazing on the grasslands have been implemented through the actions A5 - Evaluation of management problems related to the extensive breeding of cattle and horses on mountain pastures, C2 - Implementation of structural interventions for encouraging homogeneous pastoralism on pastures and E1 - Itinerant dissemination of good practices and management inputs.

An in-depth evaluation of the livestock management procedures was carried out, to highlight those critical issues that are linked to the failure to adopt good breeding practices, but could be solved through direct interventions. During the surveys, information was collected, which was needed to develop a description of the holdings and to compile a database: the location of the farms and the most used grazing areas, the structures in use and the methods of running the pasture, the management of health aspects, factors related to genetics and reproduction, structural needs and watering points.

As a result of this analysis, farmers have been provided with tools for sustainable livestock management in high altitude grazing areas as well as with materials for the construction of various types of fencing, shelters for lambs, and livestock guarding dogs. Also, an experimentation of dogs for the protection of cattle has started. Project veterinarians have carried out hundreds of visits to livestock holdings, an action that has contributed to strengthen the dialogue between the Park and local communities.

THE NUMBERS OF THE ACTION

- 751** visits to livestock raisers;
- 22** birth pens for cattle;
- 3** anti-cliff enclosures for cattle and horses;
- 105** electrified fences for sheep;
- 41** mobile shelters for lambs;
- 22** guarding dogs for sheep;
- 10** guarding dogs for cattle.



Innovative practices: marquees

The project has tested the prototype of the special marquees for the lambs at high altitudes. These are temporary shelters that are installed in Spring on the mountain pastures and dismantled in fall, when the flocks return to lower altitudes. The tents are intended to favor grazing in remote areas and to make livestock grazing more independent from the seasons, but also to

improve animal welfare, to reduce the mortality of lambs and to ensure protection from weather conditions as well as from predators. This led to an increase in the quality of productions and an to an improvement of the work of the shepherds. Also, this allows livestock breeders to graze livestock in remote areas, thus encouraging a more homogeneous use of the pastures.



Best practices: livestock guardian dogs

The distribution of guardian dogs for the protection of livestock from predators proved to be one of the best practices disseminated by the project, which has also successfully tested the use of dogs for the protection of cattle.

An exceptional result was obtained through a good selection and a special form of imprinting, which starts from birth, when the pregnant bitch is placed in a box inside the barn with the cattle.

This way, from the first moments of life, the puppies receive an olfactory and sensorial conditioning that leads them to recognize the smell of the cattle as the maternal one.



Actions for grazing: redistribution of watering points

The absence of sufficient and widespread water sources on the grasslands discourages farmers from evenly distributing the movements of livestock. The animals therefore tend to concentrate around few water points, thus causing excessive soil degradation.

Moreover, because of the scarcity of water the cattle enter high-altitude lakes, which are important habitats and are inhabited by the Crested newt, one of the target species of the project.

The trampling causes the erosion of the

edges of the lakes and the consequent filling with mud and eutrophication of the water. At the same time, the absence of drinking troughs, added to other infrastructural problems, makes farmers' work difficult and discourages the maintenance of traditional pastoral activities.

To address these problems, the project provided for a more harmonious and efficient distribution of watering points through renovation and reconstruction of water troughs, and the fencing of some freshwater ponds to meet habitats conservation objectives.



THE NUMBERS OF THE ACTION

5 recinzioni di laghetti in quota:
Valle d'Ombra, Racollo, Pietranzoni
Sfondo e Fossa di Paganica.

**8 construction or restoration
of 8 water troughs:**
Banconi (1800 m), Racollo, Pietranzoni,
Monte Cristo, Le Fontari,
Fossa di Paganica (2), Lago Sfondo

Innovative practices: the fences of the high-altitude lakes

Upon agreement with farmers, some high-altitude lakes have been fitted with removable electrified fences to prevent the access of cattle. Simultaneously the functioning of drinking troughs was ensured near the lakes. They are fed with the water from the ponds, which is pumped with the aid of solar power.

These activities have allowed a more harmonious and efficient distribution of watering points, rationalizing water resources and avoiding waste. Besides this, there has also been a significant improvement in the landscape thanks to the use of materials and techniques suitable for reducing environmental impact and that guarantee full integration of the constructions in the landscape.



Actions for grazing: the participatory process for the harmonization of grazing practices

The project adopted a participatory approach (Action C3) for the mitigation of tensions between the local communities and the Park regarding the management, use and conservation of pastures. To this end it involved the main local stakeholders: institutional actors (Municipalities,

provinces, regions, ASBUC, State Forest Administration, Public Health Service, Park Administration), economic actors (farmers) and social actors (livestock raiser associations, tour operators, territorial organizations and citizens).

The participatory process was launched in

December 2012 and lasted for five years. It involved the development of 25 meetings, including plenary workshops in the institutional offices and territorial meetings in the most remote areas of the protected area.

For this purpose, four "Help Desks" have been located on the territory in the frame of the programme "Here the Park is listening". It has been an intense and often tiring process, which has revealed the local tensions and conflicts. It was attended by over 400 participants who had the opportunity to express their points of view and to highlight the main problems related to live-stock grazing.

These includes predation, the need for sufficient and well-distributed watering points, the harmonization of rules of grazing assignments and the lack of presence of the institutions. The process has helped to build mutual trust among the parties, and the involvement of facilitators, geographers and lawyers has led to the drafting of Guidelines for the regulation of grazing activities.

The Guidelines have been adopted by the Park Authority and welcomed by 11 municipalities, (two more than the 9 initially foreseen) which used them for the drafting of their own grazing regulations.



This way the project has been able to demonstrate how the contribution of local communities can become an opportunity for the development of shared rules and collective growth.

In addition to the project staff, the participatory process has engaged experts of municipal regulations and civic rules, facilitators of participatory processes, experts in acting dynamics in situations of environmental conflicts, for the scientific validation of the process, and lawyers for the elaboration of the grazing Guidelines.

Actions for tourism: control of tourist flows

Considering the consequences that uncontrolled tourism has on the habitats of high altitude grasslands, especially in some areas, the project has implemented a row of activities (action C4 - Control of tourist flows) to eliminate or mitigate the threats of this impact, proposing a more careful organization and management of tourism infrastructures.

The interventions involved the improvement

THE NUMBERS OF THE ACTION

25 participatory meetings
250 stakeholders
11 grazing Regulations

of 90 km of trail network through naturalistic engineering work, including trail marks and information panels, in order to protect biodiversity and increase the safety of hikers.

Parking areas have also been marked by wooden or stone posts. In order to lead the tourist flows to the designated areas, these areas have been provided with signs and information boards that encourage the correct behavior to





be adopted. This aims to protect the grasslands from the threat of access of vehicles, unregulated parking and abandonment of waste.

THE NUMBERS OF THE ACTION

90 km of trails:

100 D for the Duca degli Abruzzi refuge,
215 A for Vado di Corno,
212 for Fossa di Paganica and S. Maria del Monte,
225 for Lago Racollo and Fonte Macina,
200 E for Fonte Vetica

8 parking areas



Networking activities

In the frame of the "LIFE Praterie" project there have been many exchanges of experiences with different initiatives at national and international level. In particular, the staff has exchanged expertise with the Life + project "RI.CO.PRI" by participating in the international event "Dry Grassland Meeting" (May 2013) and

with the Metla Forest Research Institute - University of Oulu (Finland), taking part in the European Conference on Ecological Restoration (August 2014).

Exchanges of experience have also been made with the LIFE Val.Ma.Co. Project. (September 2014) and with Coldiretti of Macerata

(May 2015). Of particular significance, for the issues dealt with, was the study visit to the Spettabile Reffenza dei Sette Comuni di Asiago which, in addition to the project staff, also invol-

ved a group of farmers and administrators of the Park (September 2015), with the purpose of comparing grazing management practices in the two territories.

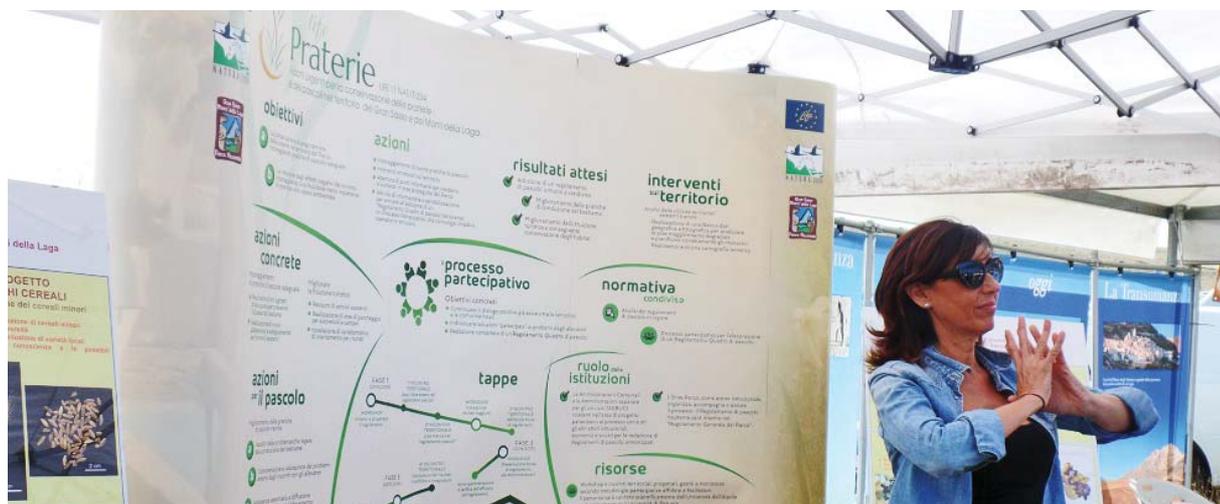


Communication and dissemination activities

Communication activities have played a central role in the project. The staff has been intensively active in information and awareness initiatives through the website, social media, the production of leaflets and brochures, newsletters, information boards and “wall” structures, as well as the sending of text messages to a database of over 800 stakeholders.

In addition to news and articles, all project actions have been documented by **professional videos**, many of which have been broadcasted by national and regional TV channels.

In addition, a **multimedia exhibition** was set up thanks to a QR code linked to the project web site. The communication and dissemination activities have been accompanied by the opening



of **Information Centers**. On the one hand these have guaranteed the presence of the project on the territory through the local information points (Help Desk), on the other hand they have promoted activities of dissemination and cultural animation on the project topics by organizing workshops and educational initiatives in schools. The qualified help desk staff also organized and managed the participation of the project to the main public events and exhibitions.

The project was also presented at national events such as "Cheese" (Bra, 2015) and Expo 2015.

In 2016 the project staff was contacted by the non-profit organization **CIWF** (Compassion In World Farming) whose director Philip Lymbery

visited the project area and made interviews with the staff, which contributed to his book "**Dead Zone**" and to the movie "A land without animals".

Significant, in order to communicate the values and objectives of the project, was also the twinning dedicated to the Ursinii viper and the collaboration with the "**Gran Sasso Skyrace**", a national event which is held annually on the high altitude trails of the project area.

Also following a **press tour**, which was held simultaneously with the closing events, the project was rewarded by a great interest of the media, which have dedicated several and qualified reports on national and regional press and television networks.





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