



LIFE PRATERIE Project

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

Habitat Directive

water habitats

improving biodiversity

renaturalisation

management tools

preservation
techniques

PROJECT DESCRIPTION

The territory of the Gran Sasso and Monti della Laga National Park has an exceptional naturalistic value. These are territories characterized by high impact presence of nature, with various types of habitats and many animal and plant species of significant interest. The floristic richness is remarkable, with over 2.400 species, including various endemisms belonging to high altitude pastures and calcareous scree.

In the SCI IT7110202 in Gran Sasso, which constitutes the main intervention area of the project due to the critical issues identified, 26 habitat types listed in Annex I of the Habitats Directive are represented (e.g. 8210, 5130, 6170, 8120, 7140, 3150), including also a huge surface (10.000 ha) of priority habitats **6230*** (Species-rich *Nardus* grasslands, on siliceous substrate of mountain areas) and **6210*** (Semi-natural dry grasslands and scrubland facies on calcareous substrates) with remarkable orchid bloom.

The LIFE Praterie project area falls within the two main areas of the Park, the **Gran Sasso massif** and the **Monti della Laga mountain range** and involves the pastures and mountain meadows, in particular, the following habitats listed in the Annex of the Habitats Directive: **Grasslands**: 6210*, 6230* 6170*; **Calcareous rocky slopes and calcshist screes**: 8210*, 8120*; **Peat bogs**: 7140; **Natural Eutrophic Lakes**: 3150.



Animal species listed in Annex II of the Habitats Directive, which have benefited from the project, are:

- *Vipera Ursinii*, present throughout the plateau of Campo Imperatore and on the slopes of the adjacent peaks, whose preferred habitats are steppes, bushy meadows and mountain pastures;
- Italian crested newt, a species in decline due to the progressive reduction of its reproductive habitats;
- *Rupicapra pyrenaica ornata*, the Apennine Chamois, which now has a population of about 650 specimens on the Gran Sasso mountain, thanks to the reintroduction programs implemented by the Park within previous LIFE projects.

The grasslands of the protected area, especially the Campo Imperatore plateau, have always been used for extensive breeding of sheep, goats, cattle and horses, thus representing one of the most significant sustainable production zones of the whole protected area.

The maintenance of this centuries-old practice is strictly connected to the conservation of the good state of the grasslands and the adoption of adequate grazing methods. Some areas, in fact, are subject to a partial overload, due to the concentration of livestock around the watering points, while in the areas far from water the grasslands evolve naturally, with an increase in some herbaceous species at the expense of others. Similarly, the reduction of extensive breeding activities can cause the abandonment of some grazing sites, with consequent degradation and reduction of habitats which give shelter to precious species of flora and fauna.

Beside grazing, the grasslands give home to tourism and hiking activities which, due to the extraordinary beauty and charm of the places, attract thousands of visitors to the area. Also in this case, if not properly used and properly protected, grasslands can degrade, due to the hiking trails' erosion, their inadequate maintenance and the great attendance.

In particular, the areas with overgrazing show erosive phenomena with the elimination of the turf and loss of soil, while the areas little used are subject to dynamic evolution of the vegetation towards structurally different and more homogeneous forms in the floristic composition (shrubs, especially of *Juniperus alpina*) and consequently they become less rich in biodiversity.

Another serious consequence is the loss of environments for the wildlife living in the grasslands (mammals, birds, insects). For example the closure of open grazing areas in the juniper habitats impacts the *Vipera Ursinii*, as this habitat is essential for its survival. The poor regulation of grazing causes, on the one hand, an excessive pressure of livestock load on the habitats 6210*, 6230* and 3150, and on the other, the disappearance of these habitats due to abandonment. At the same time, excessive loads of watering cause the destruction of habitat 3150, threatening the populations of the Italian crested newt. The impact of tourism causes, in the areas surrounding the trails and vehicle access areas, a strong degradation of habitats 6210*, 6230*, 5130, 8210, 6170, 8120 and 7140.

OBJECTIVES

The "Praterie" project had therefore the priority goal of long-term conservation of habitats and target species of the grassland environments. In this regard, the project had the objective, fully shared with the territorial stakeholders, of eliminating or mitigating the existing critical issues and threats through the harmonization of the grazing systems in areas mainly of civic use and by introducing more prudent forms of tourist services management, disseminating good conservation practices and renewing the culture of sustainable use.

PROJECT PHASES

The project activities were articulated around the two strategic objectives, pasture management harmonisation and improvement of tourist services management, and were integrated by a complex series of preparatory, communication, networking and dissemination actions.

As regards grazing, the main actions implemented concerned:

- collection and analysis of the existing municipal grazing regulations;
- creation of a geographical and photographic database on the land use;
- evaluation of breeding management problems;
- redistribution of water supply points;
- concertation activities (participatory process) for the harmonization of grazing regulations;
- dissemination of the best practices and management hints;
- opening of territorial Help Desks.

As regards the control of tourists attendance, the related actions were:

- restoration and renaturalization of the trails network;
- creation of parking areas;
- creation of new trail signs and specific noticeboards.

All the project interventions were previously agreed with the local communities through a participatory process that involved all the socio-economic players of the territory. These actions were preparatory for the:

- harmonization of the grazing regulations and drafting of new ones;
- improvement of the extensive farming conditions for the animal welfare (relating to logistical, health and production aspects);
- improvement of the communication with local players, by building mutual trust and sharing skills, knowledge and languages (institutional, technical-scientific, community);
- enhancement of knowledge and improvement of the grasslands and pastures management and monitoring tools, with the

aim of preserving and protecting the biodiversity and agriculture of high naturalistic value, as well as preventing soil erosion and better managing water supply points.

To achieve these objectives, the following interventions have been implemented:

Redistribution of the water supply points. The absence of sufficient and widespread watering points in the high-altitude grasslands discourages farmers from evenly distributing the movements of the livestock, which tends to be located around the few watering points with the consequence of excessive treading and sometimes serious soil degradation. Furthermore, just due to the scarcity of watering points, the cattle quench its thirst at the high-altitude lakes which constitute the habitat of the target species of the Italian crested newt, polluting the waters and causing their eutrophication. Treading causes the erosion of lakeshores and the consequent filling by mud. At the same time, the absence of water supply points, added to other infrastructural problems, makes the work of farmers difficult and discourages the maintenance of traditional grazing activities. In consideration of these problems, a better organization of the watering points allows the protection of habitat 6210 and, consequently, due to the redistribution of livestock on the pastures, also the protection of habitats 6210*, 6230* and 5130. Therefore:

- **5 high-altitude ponds** (Valle d'Ombra, Racollo, Pietranzoni and Fossa di Paganica, Lago Sfondo) **have been fenced** through removable electrified fences and 3 water supply points have been constructed and/ or renovated, fed with the waters of the same ponds through photovoltaic energy pumping systems.

The enclosure of high-altitude ponds proved to be an **innovative practice** of the project which consisted, in agreement with the stakeholders, in the erection of removable electrified fences around some ponds, and at the same time, the creation of as many watering points, fed with the waters of the same ponds through photovoltaic energy pumping systems. In addition to the practical improvements that have allowed a more balanced and efficient distribution of the watering points, rationalisation of water resources and avoidance of excessive exploitation, a significant landscape improvement has also been obtained thanks to the use of materials and techniques suitable for reducing the environmental impact and fully integrating the facilities into the landscape.

- **renovation of 8 water supply points at 1800 m altitude**, in the areas of Banconi, Racollo, Pietranzoni, Monte Cristo, Le Fontari, Fossa di Paganica (two facilities), Lago sfondo.

Implementation of structural interventions to encourage standardised grazing on pastures of high conservation value in habitats 6210*, 6230*, 5130. Previously to these interventions, an in-depth assessment of the breeding management methods was carried out, to highlight those critical issues which were related to the missed use of the best breeding practices, and thus could be resolved with direct interventions. During the inspections all the information useful for describing the activities' profiles and compiling a **database** was collected: location of the farms and the most used grazing areas, facilities and grazing methods used, management of the vulnerable categories and health aspects, information about genetics and reproduction, needs related to watering points and other facilities.

On this basis, breeders have been assigned tools and infrastructures for the sustainable management of livestock on high altitude pasture areas and for the construction of fences, shelters for lambs, calving fences as well as purchase of watch dogs for the cattle and horses.

The standardisation of the grazing practices has led to the creation and purchase, with assignment to the breeders, of facilities, equipments and dogs for the livestock's protection in the pasture areas. These facilities include:

- **22 calving fences for cattle;**
- **2 cliff-avoiding fences for cattle and horses;**
- **3 experimental grazing fences for equidae;**
- **105 electrified enclosures for sheep;**
- **41 mobile tents for lambs;**
- **22 whatch dogs for sheep-keeping;**
- **10 whatch dogs for cattle;**
- **about 900 veterinary examinations performed at the farms.**

The use of working dogs in the breeding activities has proved to be **one of the best practices of the project**. This use has raised interest far beyond the borders of the Park, particularly in the Alpine area, spreading among breeders who consider it an

excellent resource for defending livestock from predators.

Dissemination of the best practices and management hints. Veterinarians have made over 900 visits to agro-livestock farms to examine livestock and evaluate the causes of mortality, as well as transfer good management practices, while ensuring qualified and continuous health care. This practice has also allowed to strengthen dialogue between the Park and local communities.

Concertation activities (participatory process) and joint drafting of the Guidelines for grazing activities in the Park. The project adopted a participatory approach for the mitigation of tensions and conflicts between local communities and the Park on the issues of management, use and conservation of pastures. The participatory process started in December 2012 and lasted in three distinct phases for the five years duration of the project. It involved over 200 stakeholders including: institutions (44 Municipalities, Provinces, the 3 Park Regions, separate Administrations of Goods for Civic Use, State Forestry Corps, local Veterinary Health Authorities); economic players (breeders and farmers); social partners (trade associations, tour operators, local organizations and citizens). The process encountered different problems, such as: poor grazing infrastructure (shelters, water supply points, fences, etc.); conflicts between breeders, municipal administrations and the Park; inconsistencies in the grazing management regulation levels; predations. Finally the process ended with the joint drafting and adoption of the **“Guidelines for the regulation of grazing activities in the Park”**. These Guidelines reorganized regulatory aspects which were inconsistent at different territorial levels (State, Regions, Municipalities, separate Administrations of Goods for Civic use) and set the general principles relating to the modalities of sustainable grazing, the conservation and maintenance of the grazing supporting structures, as well as the enhancement of the products of extensive breeding.

Tourism infrastructure improvement and management actions. In consideration of the consequences that uncontrolled tourism has on the habitats of the Campo Imperatore plateau, in particular in some areas and trails favored by hikers and the general public, interventions have been carried out to eliminate or mitigate the threats of this impact, through a more prudent organization and management of the tourism infrastructure. The interventions were aimed at:

- improving the traceability of trails by the installation of **trail signs and noticeboards**;
- halting erosive phenomena through redevelopment and naturalistic engineering interventions (**10 km of the total of 90 km of trails have been renaturalized**);
- **delimiting 14 parking places** in the areas already used for this purpose. More than the initially planned 8 parking places have been delimited by wooden or stone enclosures and marked with information signs and noticeboards, in order to suggest to the tourists the correct behavior in respect of the habitats. The correct use of the trails and parking places has favored the conservation of habitats 6210*, 6230*, 8210, 5130, 6170, 8120 and 7140.

PROJECT RESULTS

The main achievements were:

- Confidence building and involvement of facilitators and expert evaluators in the cooperative process that led to the drafting of the **Guidelines for the regulation of grazing activities**. These guidelines were **transposed by the Park's Board of Directors and adopted by 11 municipalities** - compared to the 9 initially envisaged - which used them for the drafting of the **Grazing Regulations** ([Grazing regulations for civic use](#) or [Technical regulations](#)). In this way, the project was able to demonstrate how the **contribution of local players** can become an occasion for the shared adoption of rules and the collective growth. The adoption of the Guidelines also contributed to the conservation of all the habitats already mentioned, but above all those related to pasture: 6210*, 6230* and 5130. It is not possible to precisely quantify the surface which has benefited from the project actions, but it concerned at least 19.400 hectares within the SCI Gran Sasso.

The implementation of the new Grazing Regulations drafted within the project could mitigate the main factor that has limited the access of farmers to the financial resources of the RDP 2007-2013, namely the lack of tools and methods of assigning collective pastures: now, thanks to the new grazing regulations, local agricultural entrepreneurs will be able to make investments that make their businesses environmentally and economically sustainable.

- Development of a **geo-database relating to land use**, which highlights the emergencies and major problems of the project area. The geographical and photographic database has utilised, as basis, the information available in the [National Geoportal](#) of the Ministry for Environment and, updated and enriched it with the georeferenced data, collected during the various project actions, concerning administrative boundaries, toponyms, altimetry, hydrography and roads/

trails, as well as - in regard to the Natura 2000 Network – identification of areas of Sites of Community Interest, Special Protection Areas and habitats; and finally incorporated also further data deriving from detailed maps, such as that for Civic Uses.

- Set up of a [photographic database](#) with FileMaker Pro Advanced 12 with information fields, provided for each photo, containing: ID, Toponym, Trail (identified by the 2 coordinates), Image, Phase_1, Data 1, PHOTO PHASE 2, PHOTO PHASE 3, PHOTO PHASE 4, TYPE.
- The Geodatabase, operating in the **Territorial Information System called "TIS_LIFEPRATERIE"**, is hosted on the server of the Park Authority of Gran Sasso and Monti della Laga National Park and it is getting continuously updated through the QGIS software. The tool runs also with Google Earth to offer a friendly interface for consulting map data. The print layout data were produced by QGIS in the various paper size formats and in the JPG, SVG, PDF file formats, while the Google Earth images were obtained through a 144 dpi screen video (Attachment 1 bis of the MTR). The data is sorted and recorded according to the INSPIRE system.

The innovative elements introduced by the Life PRATERIE project include, in particular, the adoption of participatory processes to draft the regulatory tools, thus overcoming the usual top-down approach, and the integration of the "expert knowledge" with "local and widespread knowledge". The implementation of these innovative elements has produced a concrete action of deliberative democracy in the moment of co-decision on specific rules. This best practice adopted by the project can be applied in all areas of rural development which require a participatory/ cooperative structure.

In addition, the participatory methods introduced can be applied to concertation and conflict management in many fields, from nature conservation to agriculture and animal farming.



Acronym

LIFE PRATERIE

Number of reference

LIFE11 NAT/IT/234

Reference Programme

LIFE



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EU contribution

840.131

Call Year

2011

Start Year

2012

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2017

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Region

Abruzzo

Description

Gran Sasso e dei Monti della Laga