



PILOT ACTION MONITORING WORKPLAN

Parco Regionale Alto Appennino Modenese

	Version 1
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1.Introduction

The Regional Park High Modenese Apennine extends with over 15.000 hectares, from 500 meters up to 2.165 m height (peak of the Mount Cimone). The Regional Park presents a naturalistically rich and extremely varied environment. CEETO Project focus on two pilot area in Regional Park High Modenese Apennine:

1. Lago di Pratignano in Fanano that consists in a fragile and exposed moorland, with one of the biggest biodiversity values in the Northern Apennines, due to its habitats, fauna and flora.



2. Lago Santo in Pievepelago, at the foot of the steep north-eastern slope of Monte Giovo, the biggest lake in the Regional Park in which the presence of a series of shelters and services implies the presence of tourist flows, especially during the summertime, which particularly affect the mobility of the entire area.









2. Monitoring Measures

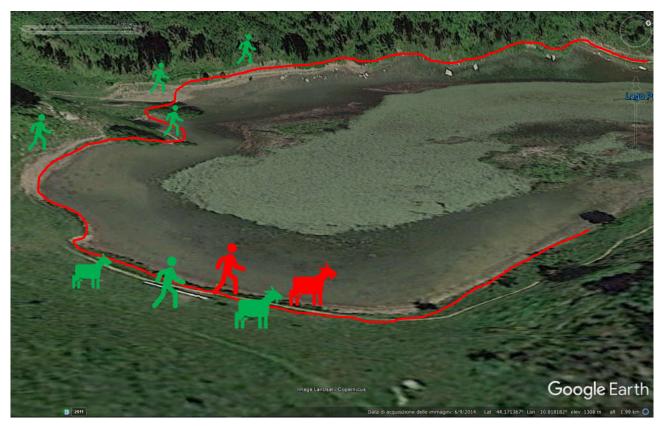
The two pilot areas have different critical issues and targets, so the pilot actions need to be monitoring by different methods and systems. It is necessary for a correct reading of this report to keep in consideration the Deliverables listed below and to be edited in the coming months:

- D.T2.4.2 "Report on the purchase of thematic equipment necessary for pilot actions", expected in spring 2019;
- D.T2.4.3 "Reports on Monitoring Workplan implementation", expected to close the activities.

2.1 Monitoring Measures in Lago Pratignano

The pilot area of Lago di Pratignano is classified with the highest preservation rate by the PA authorities (A and A1), the absence of physical barriers exposes the Lago di Pratignano to different type of invasions and damages both from domestic and wild animals and from visitors. The magnitude of the tourist presence is not so high in terms of numbers compared to other neighborhood areas, but incorrect behaviors and attitudes over the moorlands endangers habitat and biodiversity.

There is a need to monitor and understand the main threats to the moorland habitats and influence the visitor behaviors and access to the whole area, including the surrounding forests and pastures, preserving its traditional usage as mountain breeding site and its unique landscape.



Definition of a virtual boundary around Pratignano Lake (red line) and identification of proper (green) and wrong (red) behaviours, carried out by humans and animals, as will be detected by the VCA System.

The Action Plan in Lago di Pratignano concerns the implementation of an access monitoring information system by humans and wild animals (e.g. wild boar, horses, sheep...). The aim is to count the number of





incursions into the lake events and to assess the ratio Human/Animals of these events, to plan the proper countermeasures.

The monitoring information system detects attendances in the Zone "A" (integral protection zone) through at least a couple of cameras placed on trees and managed by a counting program able to identify animal or human silhouettes only in case of intrusion into the lake surface.

In addition to the monitoring information system manual monitoring will be set up in high season (in the summertime) through the presence of nature guard in the area that will intensify supervisory activity in the area.

As reporting in the DT2.2.2 Roadmap, the period of testing covers some months in 2019, from April to December but should last for some years to discover the real incursions, in particular by wild animals, in the integral protection zone.



2.2 Monitoring Measures in Lago Santo

The Pilot Area of Lago Santo is subjected to high visitors' numbers, mainly during July and August. The place is seen by visitors mainly for its recreational use, less as a treasure of natural and landscape value, especially out of the main season.

The main problem is related to traffic jams, overcrowded parking spaces and lack of safety along the access roads (both for trekkers and drivers). Moreover, the behaviour of visitors which is not always adequate (illegal camping), contributes to a general sense of chaos and disorder. There is a need to try to control these tourist flows and to



distribute them a broader period of time(seasonal adjustment), especially during autumns and winters, and to develop some activities in order to enhance a more conscious use of the territory, sustainable and low carbon transportations, and promote the tradition and hospitality in the whole area of Tagliole valley.

The experimentation of alternative routes will concern in the summertime, in the period of maximum tourist influx:

- Bus shuttle service from Tagliole to the Lago Santo Parking and for the connection with Val di Luce;
- E-bikes rental;
- Enhacement of walking trails.

So the implementation of the access monitoring will test the reduction of the motor vehicles in the Tagliole Valley and, at the same time, the implementation of responsible and sustainable behaviour in the areas of the greatest protection.





The monitoring access in the parking area of the Lago Santo will be confirmed by parking tickets and by people who will benefit of alternative routes to arrive to the Lago Santo area.

Also the connection by trail from Tagliole to Lago Santo will affect the reduction of the vehicles in the Lago Santo parking so it will be significant monitoring how many kilometers of paths have been secured and connected to the exisisting trail network in Tagliole valley.

Additionally, extensive questionnaires could be filled in by tourists. The goals of this activity are to gain



information of tourists about their knowledge in relation to allowed/prohibited behaviour in protected areas, to the way they rise to the Lago Santo and eventually other proposals. Some demographic information was also asked to identify the groups of tourists to be targeted in the Pilot Action.

At last, but not least, it will be strategic the definition of the communication and educational Program for a correct use of the area (Santo Lake, Baccio Lake, Giovo and Rondinaio Mountain) involving local stakeholders through

the reinforcement of the Infopoint in the Lago Santo Parking.

3. Data Collection and evaluation

3.1 In Lago di Pratignano



The aim is to obtain the most data that document the main threat factors for the Lake, in support of possible defensive actions that currently would not be feasible (e.g. numerical limitation of boars in the protection zone).

The implementation of the monitoring information system will be realized by connection with underground cables (small excavations immediately covered with recovery of the turf) up to the small technical room (3 sqm), initially located within a temporary prefabricated structure and, subsequently, on the basis of funds obtained from the Rural Development Program - PSR Mis. 8.5, obtained from the recovery of a former stable building located near the lake and currently in a state of neglect.

Within to the CEETO Project, data analysis will be referred to the 2019 year, from April to September, to permit an evaluation of results in support of possible defensive actions.

3.2 In Lago Santo

The aim is to obtain the most data referring to the tickets parking area in different years, before actions plan in comparison with next summertime, July and August, in support of possible alternative routes and actions to consolidate access in Lago Santo area without motor vehicles also to rediscover the local landscape and natural aspects typical of Tagliole Valley.

In addition to tickets parking, is necessary to monitor how many people benefit of alternative routes to arrive to the Lago Santo area: data about use of bus shuttle service, rented e-bikes and kilometers of paths secured and connected to the exisisting trail network in Tagliole valley.





Within to the CEETO Project, data analysis will be referred to the 2019 year and in particular when tourist flows are more significant, July and August, to permit an evaluation of results in support of possible alternative routes.



On the left, high view of the Santo lake, from the path to Monte Giovo. On the right, effect of traffic pressure on the local wildlife.





4. Monitoring Plan

		20	18	2019				2020				2021			
	Tasks	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4
1	Monitoring Plan														
1.A.	Fanano - Pratignano Lake														
1.A.1.	Project and installation of the monitoring system based on an VCA - Video Content Analysis software;														
1.A.2.	Monitoring of tourist/animal presence and identification of Zone A crossing events, identifying the relevance of animals/people and recording events														
1.A.3.	Intensification security checks performed by security guards and volunteers														
1.A.4.	Data analysis														
1.A.5.	Evaluation of results														
1.B.	Pievepelago - Santo Lake														
1.B.1.	Identification and experimentation of alternative routes (e.g.electric bike rental, definition of the public transport system, enhancement of walking trails)														
1.B.2.	Monitoring of the accesses														
1.B.3.	Data analysis														
1.B.4.	Evaluation of results														



