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AND NATURAL HABITATS

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REPORT
OF THE VISIT OF THE INDEPENDENT EXPERT
TO THE ABRUZZO, LAZIO AND MOLISE NATIONAL PARK
(Italy)

16-18 November 2022

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INTRODUCTION

The Committee of Ministers of the Council of Europe, by means of its Resolution (67) 39, awarded the European Diploma for Protected Areas category "B", Protected Landscape, to Abruzzi National Park, at its meeting of 27th November 1967. However, the official presentation was delayed until 21st May 1972, when the Italian authorities were committed to adopt certain protection measures. The Resolution (73) 4 of the Committee of Ministers of the Council of Europe stated that further renewal should be based on an on-the-spot appraisal visit. This took place in June 1980 and the European Diploma was renewed by Resolution (82) 2 for five more years. The Diploma has been further renewed in 1987, 1992, 1997, 2002, 2007 and finally in 2012, for a period of ten years, until 26th November 2022 (Resolution CM/ResDip(2012) 10).

Having regard to the decision of the Group of Specialists on the European Diploma for Protected Areas at its meeting of 23-24 February 2022, to perform on-the-spot appraisal visits to areas subject to EDPA renewal in 2022, by letter of 11th October 2022 the undersigned was invited as independent expert to carry out the visit to Abruzzo, Lazio and Molise National Park (in combination with another protected area) in Italy from 16th to 18th November 2022. The objectives stated were to assess *“whether the condition of the site remains the same as when the Diploma was awarded and extended, or whether it has improved or deteriorated”* and *“to assess whether the conservation of biological, geological and landscape diversity, which was put forward at the time of the award of the European Diploma for Protected Areas to the area, is still of exceptional European interest and can, consequently, motivate the renewal of its European Diploma”*.

The appraisal visit took place from 16th to 18th November 2022. The programme of the visit, previously agreed, is enclosed as Annex I to this report.

The President of the Abruzzo, Lazio and Molise National Park, Prof. Dr. Giovanni Cannata, welcomed the undersigned in the Rome railway station in the afternoon of 16th November, accompanied by the Warden Marta Gagliardi and the driver Stefano d'Amico, undertaking right after the journey to Pescasseroli. In the Park's premises there was a first meeting with the main representatives of the management institutions of the Park, with the presence of the following persons:

In-person:

- Giovanni Cannata, President of the Park
- Luciano Sammarone, Director of the Park
- Cinzia Sulli, Head of the Scientific Service of the Park
- Antonio Di Santo, President of the Park's Community
- Renato Di Cola, Head of Administrative Service of the Park
- Filomena Ricci, Environmental NGOs representative in Park's Directive Council

Connected by video-conference:

- Enrico Pompei, representative of the Ministry of Forest in Park's Directive Council
- Anna Loy, representative of ISPRA and the Scientific Community in Park's Directive Council
- Daniela Gentile, representative of the Ministry of Environment in Park's Directive Council
- Carlo Rufo, representative of Park's Community for Lazio Region in Park's Directive Council

The Director of the Park, Luciano Sammarone, the President of the Park, Giovanni Cannata, and the Head of the Scientific Service, Cinzia Sulli, made all previous arrangements for the visit, paying constantly close attention to the undersigned throughout the visit. Along with the President of the Park's Community, Antonio di Santo, they were kind enough to join the undersigned for the dinner, having the opportunity to exchange views in an open and frank atmosphere.

The day after (17th November) an interesting tour was made in the company of Roberta Latini and Venusta Pietrocini, technicians of the Park, Dr. Goffredo Filibeck, from the Tuscia University, and the members of the Warden Corps Ezechia Trella, Marianna Sgamotta and Anna Grassi. The visit to Lake Barrea (integrated in the Italian List of Wetlands of International Importance of the Ramsar Convention) enabled to be informed of a recent discovery of Dr. Filibeck and his team, on certain ecological improvement occurred after an agreement with the electric company ENEL (the lake is actually hydro power plant for electric production), that will be described in section III.4. There was the chance to meet the Wardens in charge of the dog squad fighting against poison bites. An interesting visit was also made to *Casone Antonucci*, an old house used to accommodate volunteers, located in a place used by the bears as ecological corridor. Some paths across the Camosciara Integral Reserve and the General Reserve of Val Fondillo were extremely useful to know many conservation activities and the peculiarities of the Park's zoning and regulations. At late evening there was a chance to witness handing over a 4-wheel drive van from the *Comunità del Parco* to the Major of the village of Opi, for the service of their citizens.

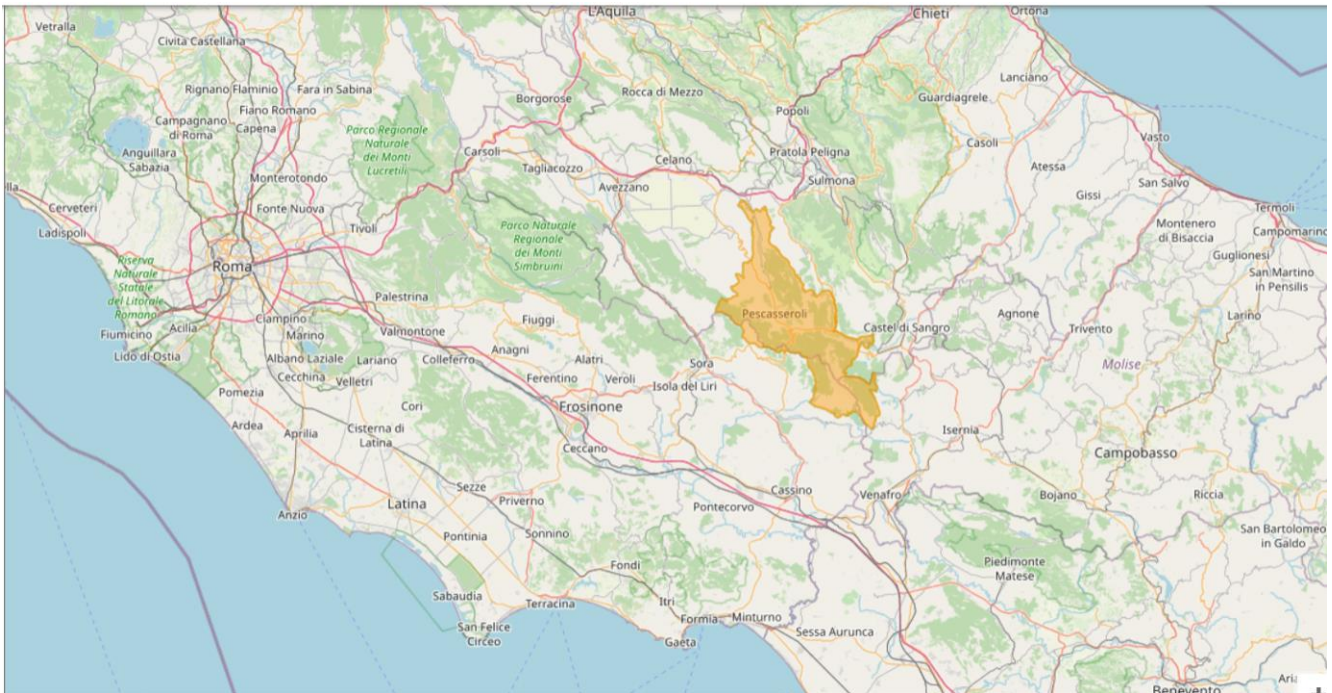
The third day in the morning an interesting visit was made to the Val Cervara Integral Reserve, with relic ancient beech forests, part of the World Heritage site "Ancient and Primeval Beech Forests of the Carpathians and other Regions of Europe" (see section VI.2.2). Scientists from the Universities of Tuscia (prof. Alfredo Di Filippo) and Naples (prof. Danilo Russo) explained their findings on the bat of Genus *Barbastella* and a few xylophage beetles like *Rosalia alpina*, with life cycles depending on senescent trees of these monumental witnesses of the past. The geologist Dr Giorgio Paglia (University of Chieti) presented the recently published Geologic Map of the Abruzzo, Lazio and Molise National Park for the use of visitors. An interesting conversation on forest management and their associated fauna and flora took place with all of them and the Park's staff, Cinzia Sulli, Carmelo Gentile, technician of the National Park, Alessandro Piazzi, Riccardo Leone and Daniel Bazzucchi, technical editors of the draft Management Plan, and the Park's Rangers Michela Mastrella and Giammarco Seritti.

In the afternoon a final meeting was held with the Park managers to sum up conclusions and farewell. On 19th November, the managers arranged the transport to Rome airport, with the Warden Massimo Stufani.

To all of them I would like to express my warmest gratitude for their help and contribution to such a productive and satisfactory visit.

I - BRIEF DESCRIPTION OF THE ABRUZZO, LAZIO AND MOLISE NATIONAL PARK

The Abruzzo, Lazio and Molise National Park is located in central Italy, south-east to Rome, taking part of the Apennines Mountains.



Location of the Abruzzo, Lazio and Molise National Park

The main figures regarding the Abruzzo, Lazio and Molise National Park are the following:

- Surface area: The National Park is 50.243 ha and is surrounded by a peripheral protected area of 85.527 ha
- Location - The National Park is located affecting three regions (Abruzzo, Lazio and Molise), 3 provinces (L'Aquila, Frosinone and Isernia) and 24 Communes.
- Perimeter: 184,83 km. The National Park covers an area of approximately 55 km long per 15-20 width
- Range of elevations: Maximum 2.247 m.a.s.l. of Monte Petroso and minimum about 900 m.a.s.l.

The Abruzzo, Lazio and Molise National Park includes part of the Apennines Mountains, a calcareous massif extending lengthwise in the middle of the Italian peninsula. Most of its territory is covered by forests, mainly beech (*Fagus sylvatica*), the most frequent species (approximately 84 % of the forest area). Other relevant forest species are ash trees (*Fraxinus excelsior* and *F. ornus*), several species of maples (*Acer opalus*, *A. monspessulanus* and *A. campestre*) and of oaks (*Quercus cerris* and *Q. pubescens*), hornbeam (*Ostrya carpinifolia*), the scarce birch (*Betula pendula*) and among the conifers *Pinus mugo* and a specific variety on dolomite soils of *Pinus nigra* in the locality of Villetta Barrea. Other important habitat type is the mountain meadows, with important communities of fauna and flora, where iconic species of the

area can be found, like the chamois (*Rupicapra pyrenaica* subsp. *ornata*) and, in specific periods of the year, the brown bear (*Ursus arctos* subsp. *marsicanus*), both of them endemic subspecies from Italy.

This territory has historically been royal hunting grounds, due to the presence of big game species like chamois, brown bear, wolf, red deer, wild boar, etc. This has probably been a key aspect for maintaining populations of declining species, disappeared in nearby areas, until the XX Century, when it was protected as National Park and these species started their recovery.

The Abruzzo, Lazio and Molise National Park has an excellent web page with a lot of information on its natural assets, on its management and on the ways for visiting the Park: <https://www.parcoabruzzo.it/>

II - EUROPEAN INTEREST OF THE SITE

The European Diploma was awarded with category B, as recognition of the exceptional characteristics of this area, both for the ecological and the landscape values. The most highlighting natural features of the site can be described as follows:

II - 1. Fauna

The animal biodiversity of the Abruzzo, Lazio and Molise National Park is quite well known. A total of 67 species of mammals, 230 of birds, 14 of reptiles, 12 of amphibians 15 of fishes and 4.764 of insects, have been inventoried so far, and new taxons are constantly discovered.

Among the mammals, the Carnivores are probably the most relevant group, due to the presence of top predators like the **Brown bear (*Ursus arctos* subsp. *marsicanus*)** and the **Wolf (*Canis lupus*)**. With regards to the first, the Central Italy population is a different subspecies from all others, including the bears of the Alps. Regarding the wolf, recent genetic studies seem to indicate that this population is not substantially different from the remaining western European populations, although some authors thought that the Apennines population was a different subspecies. As predators of large animals, they play a key role in maintaining adequate population levels of ungulates, which otherwise would become too abundant. There is good news with the **Otter (*Lutra lutra*)**, since it became extinct in the area 5 decades ago but during the last years it re-appeared spontaneously in the river Sangro. Other carnivores occurring in the area are the wild cat (*Felis sylvestris*), although it is very scarce, the red fox (*Vulpes vulpes*) and mustelids like marten (*Martes martes*), stone marten (*Martes foina*), badger (*Meles meles*), European polecat (*Mustela putorius*) and weasel (*Mustela nivalis*).

The group of the ungulates is also well represented. The most relevant species is the **Chamois (*Rupicapra pyrenaica* subsp. *ornata*)**. The Apennines population is a different subspecies, called "ornata" due to their larger horns, compared to the ones existing in the Alps and remaining European distribution areas. Other ungulates are the **red deer (*Cervus elaphus*)**, the **roe deer (*Capreolus capreolus*)** and the **wild boar (*Sus scrofa*)**. Their ecological role is of great importance, since they contribute as prey species to maintain good population levels of wolves and to a great extent also of brown bears.

Among the small mammals it is worth to mention two species of hares: the European hare (*Lepus europaeus*) and the Italian hare (*Lepus corsicanus*), endemic to Italy. Some rodents of restricted distribution

area like the hazel dormouse (*Muscardinus avellanarius*), the European snow vole (*Chionomys nivalis*) and the porcupine (*Hystrix cristata*) can also be found in the Abruzzo, Lazio and Molise National Park. The group of bats (*Chiroptera*) is very well represented, with 25 species of 4 families.

The group of birds is important, particularly the raptors. Some of them can be highlighted, like the golden eagle (*Aquila chrysaetos*) and medium-size raptors like peregrine falcon (*Falco peregrinus*), kestrel (*Falco tinnunculus*), buzzard (*Buteo buteo*), hawk (*Accipiter gentilis*) and Eurasian sparrowhawk (*Accipiter nisus*). The rare white-backed woodpecker (*Picooides leucotus lilfordii*) lives in the forests of the European Diploma holding area.

Among the amphibians of restricted distribution area the Apennine yellow-bellied toad (*Bombina pachypus*), and the salamanders *Salamandra salamandra gigliolii* and *Salamandrina perspicillata* can be found in the Abruzzo, Lazio and Molise National Park. Among the reptiles, the Orsini's viper (*Vipera ursinii*), basically feeding on insects, can be mentioned as well.

Among the Insects it is relevant to mention the xylophage beetles *Osmoderma eremita* and *Rosalia alpina*, since both of them occur in the Abruzzo, Lazio and Molise National Park thanks to the ancient beech forests and the management consisting of leaving standing up the old and dead trees. These species need at least three years to complete their larval stages inside the trunks. Consequently, the removal of senescent and dead wood would prevent them to finish their life cycle.

II - 2. Flora and vegetation

Up to now, more than 2.000 species of vascular plants have been inventoried. Among the rarest species, can be highlighted the lady's slipper orchid (*Cypripedium calceolus*), the Marsican iris (*Iris marsica*) the butterwork of Villetta Barrea (*Pinguicula vallis* subsp. *regiae*), endemic of the Abruzzo, Lazio and Molise National Park, and the very rare ghost orchid (*Epipogium aphyllum*). New plant species are continuously discovered, some of them very rare like the leguminous *Astragalus excapus*, distributed in the dry meadows of Central Asia steppes, and new localities of the phantom orchid *Epipogium aphyllum*, of *Astragalus aquilanus* and *Iris marsica*.

As described in section I, forests are the most frequent ecosystem in the European Diploma holding area. Beech forests are, by far, the most abundant and frequent. Other tree species can be found scattered among them, for instance ash trees (*Fraxinus excelsior* and *F. ornus*), several species of maples (*Acer opalus*, *A. monspessulanus* and *A. campestre*) and of oaks (*Quercus cerris* and *Q. pubescens*), hornbeam (*Ostrya carpinifolia*), the scarce birch (*Betula pendula*) and among the conifers *Pinus mugo* and a specific variety on dolomite soils of *Pinus nigra* in the locality of Villetta Barrea.

Within the forests it is relevant to mention the ancient beech forests, which have recently been included in the UNESCO World Heritage List (see section VI.2.2). The five nuclei existing at Abruzzo, Lazio and Molise National Park cover a total surface area of 937 hectares and host individuals up to 560 years old, probably the oldest of the northern hemisphere. They contain great amount of dead wood which provides a very rare ecological niche well used by some important fauna species. The amazing case of the bat *Barsbastella barbastellus*, which shelters in the small holes existing under the bark, or the beetle *Rosalia alpina*, whose larvae must spend three years inside the wood in decomposition until the emergency

of the adult, are indicative of the importance of these habitats so rare at European scale, not only for the so aged trees but also for the decision of the managers to maintain senescent and dead trees standing up allowing their decomposition.

II - 3. Exploitation of resources

The management legal instruments of the Abruzzo, Lazio and Molise National Park allow traditional exploitation of resources, like agriculture, livestock farming and forestry. The agriculture was more practised in the past and at present most of these grounds are recovered by the natural vegetation, mainly forests. At present, the agriculture in the National Park is practised at minor scale by small producers on small pieces of land, producing potatoes and vegetables by traditional methods and organic farming modalities. There is also some production of hay by mowing natural meadows.

Livestock farming is developed according to the Conservation Measures of the Grazing Management Plans of the Natura 2000 sites, since the Management Plan of the Park has not yet been approved (see section IV.1). This document specifies the livestock densities, zoning, dates of grazing, closed areas, sanitary rules, etc. It also contains the permanent prohibition of grazing in zones A (Integral Reserve), which fulfils one of the aspects of Condition 2 of Resolution CM/ResDip(2012) 10 on the renewal of the European Diploma.

We can also note a progressive change of the type of animal husbandry, as a consequence of the Common Agricultural Policy, which is encouraging the increase of beef cattle at the expense of sheep breeding. The impact on the natural ecosystems, particularly on wild pasturelands and some species, is much higher and is causing important damages in mountain ecosystems. This factor is also occurring in many other protected areas and the reason explaining the support of the EU to these incentives is quite difficult to understand, since important wild habitats are deteriorated with European public money.

Beekeeping is to some extent a relatively important activity, since it is implemented at minor scale by particular persons for family consumption and at bigger scale by companies which produce not only honey but also pollen and wax. Most of the producers use the multi-flower grounds for honey production, but there are some experimental attempts to obtain the product with one single flower species. The beekeeping infrastructure is very vulnerable to attacks of marsican brown bears and therefore it must be protected against these powerful predators. The Administration provides defence elements like electric fences and other devices for such purpose.

In relation to agriculture and livestock farming, it is of paramount importance to highlight the **policy of indemnities of damages caused by wild fauna** to the private assets. The main species causing those damages are brown bears and wolves. The indemnities of the damages are a key matter for the correct management of these species which in most areas generate serious conflicts with local farmers. In Abruzzo, Lazio and Molise area this problem is solved because there is an efficient mechanism for compensating these damages. To provide an idea of the financial amounts involved, in 2019 the total for damages caused by brown bears paid to farmers was of 92.339 € and for damages caused by wolfs amounted 180.315 €.

By means of the agreements reached with the Regions, the National Park Administration also deals with the indemnities regarding damages occurring not only in the National Park itself, but also in the

peripheral protected area. This represents an important improvement because the indemnities in the protection zone were much more complicated and slow, resulting in many complaints from the local farmers concerned. **This policy of indemnities for damages caused by wild fauna is the key element for the social peace** in the Abruzzo, Lazio and Molise National Park.

As far as forestry is concerned, the Administration carries out the activities of the kind on the public land plots. In private properties, the owners must send and get their respective forest exploitation plans approved by the Administration.

Hunting is not allowed in the National Park, but it can be practised in the peripheral protection zone ("Area Contigua"), under the regulation of the Regions.

II - 4. European Interest justifying the diploma

The European Diploma of the Abruzzo, Lazio and Molise National Park was awarded with category "B", referring to the European interest of its landscape according to the former regulation. With regard to the current "Criteria for the award for the European Diploma for Protected Areas" (see ¹), the Abruzzo, Lazio and Molise National Park meets the requirements of the group "B", equivalent to those established for Category "B" when awarded. Therefore, according to the current rules the objective of protected areas of group "B" is *"to preserve biological and landscape diversity together with harmonious and sustainable development of socio-economic and educational functions"*. The area meets the specific criteria established for them.

In addition to highlighting landscape features qualifying for category "B", the European Diploma holding area presents also outstanding fauna and flora species and habitats of European interest in a pretty good conservation status. For example, rare species at European scale, like porcupines, brown bears, chamois, wolves, wild cats and many rare plant species can be found in this protected area. For that reason, the Abruzzo, Lazio and Molise National Park fulfils the specific criteria both for group "B", as awarded, but also for group "A", since it fulfils the essential goal of these areas: *"to preserve biological and landscape diversity and ecosystems"* and meets as well as the specific criteria established for this group.

The biodiversity and the habitat types existing in the Abruzzo, Lazio and Molise National Park constitute a mountain ecosystem extraordinarily well preserved and ecologically well structured and complete, with species and ancient forest formations already disappeared in other mountain areas of Italy and Europe. This fact, along with the management implemented by the authorities and the rest of attributes described in this report, demonstrates that this protected area holds undeniable merits to deserve a particular recognition of its European interest justifying the Diploma.

¹ <http://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=0900001680479efd>

III - CONSERVATION MEASURES

III - 1. Legal protection status

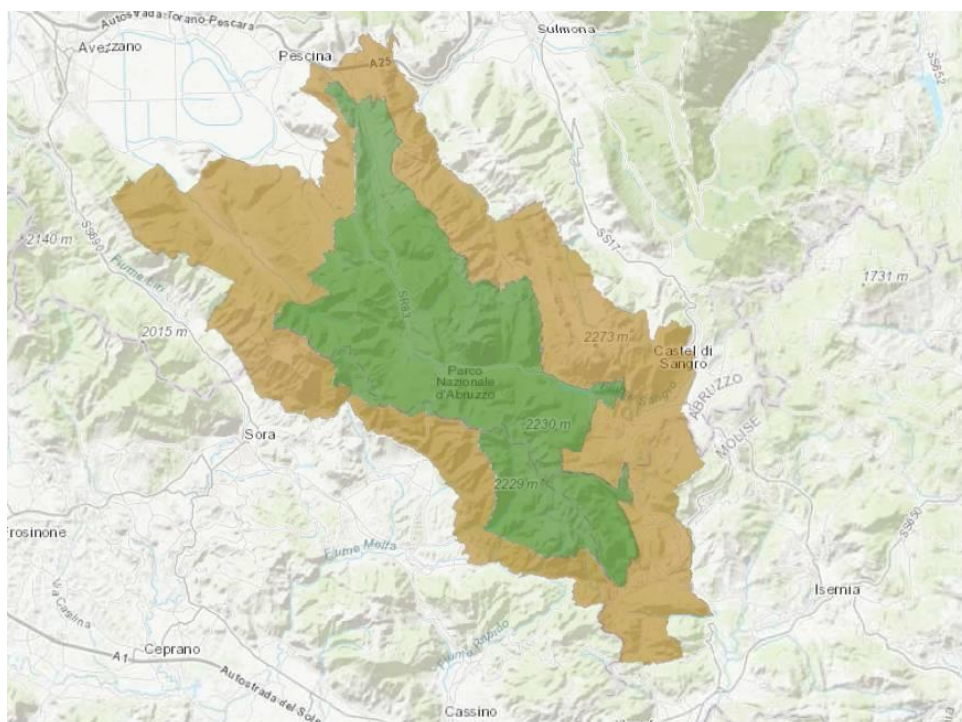
The Abruzzo, Lazio and Molise was declared National Park in 1922, simultaneously to Grand Paradiso National Park. Both are the oldest National Parks in Italy and their centenary has taken place in 2022.

In Italy the protected areas, including National Parks, fall under the **Framework Law 394/1991, of 6th December, on natural protected areas**. The Title I of this Law contains the general principles and in particular article 2 defines the different categories of natural protected areas. National Parks are defined under article 2.1. The Title II concerns the national natural protected areas and contains provisions on the following key matters:

- “Ente Parco” (Park’s Entity), as the body responsible for the management of the National Park: article 9;
- “Comunità del Parco” (Park’s Community) as consultative and propositional body whose opinion on specific matters is compulsory: article 10;
- “Regolamento del Parco” (Park’s Regulation) gathering the disciplinary rules concerning the activities to be implemented on the Park: article 11;
- “Piano per il Parco” (Park’s Management Plan): article 12.

III - 2. Boundaries/zoning/buffer zones

The Abruzzo, Lazio and Molise National Park has a surface area of about 50.000 hectares and it is surrounded by the so-called External Protection Zone of nearly 76.000 ha. It is located on the regions mentioned on its name (Abruzzo, Lazio and Molise) and affects 6 provinces and 25 Communes.

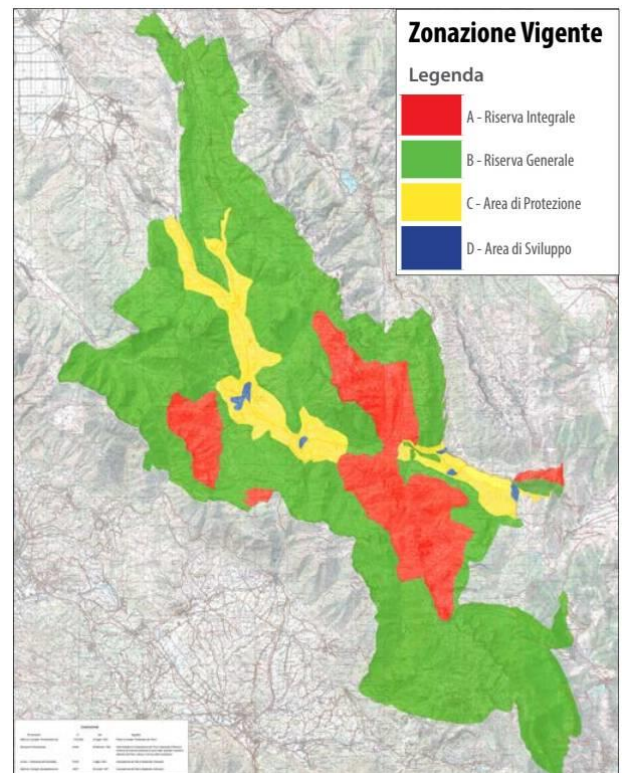


The External Protection Zone covers likewise the same Regions, who completed the legal procedure of its declaration. This peripheral area has been one of the aspects of the condition 2 of Resolution CM/ResDip (2012) 10, on the renewal of the European Diploma.



The European Diploma holding area has a specific zonation, established during the technical phase of the draft Management Plan. It has not yet been formally approved, although the zonation provisions are already applied, because they are consistent with the Management Measures of the Natura 2000 sites Management Plan, already operative.

- Zone A: Integral Reserve – 14.367 ha (28,6 %)
- Zone B: General Reserve – 31.007 ha (61,71 %)
- Zone C: Protection area – 3.599 ha (7,16 %)
- Zone D: Development area – 1.268 ha (2,53 %)



III - 3. Supervision and warding

The surveillance tasks are implemented by two different Corps, on one hand by the State Forest Corps (35 in Abruzzo, Lazio and Molise National Park), as established by the aforementioned Framework Law 394/1991, and on the other hand by the Park Rangers (Guardiaparchi) established by the Law of 1923. In the European Diploma awarded area there are 35 permanent and 12 temporary posts of the latter. At present, supervision and warding service is, therefore, rendered by 70 permanent posts.

Their functions are very diverse: surveillance of illegal activities, infringement procedures, information and support to the visitors, cooperation in monitoring and data capture on biodiversity, support to managers and scientists, etc. They are, in particular, very active in vertebrate monitoring by camera traps and also specialised in bear capture-release and follow-up by GPS-collars, census of female with cubs, close monitoring of problematic bears, etc. Wardens are essential for the different kinds of control of the whole territory, not only to avoid illegal activities and poaching, but also as early observers of wildfires and of different nature events occurring in the field.

III - 4. State of conservation of the main species and their habitats.

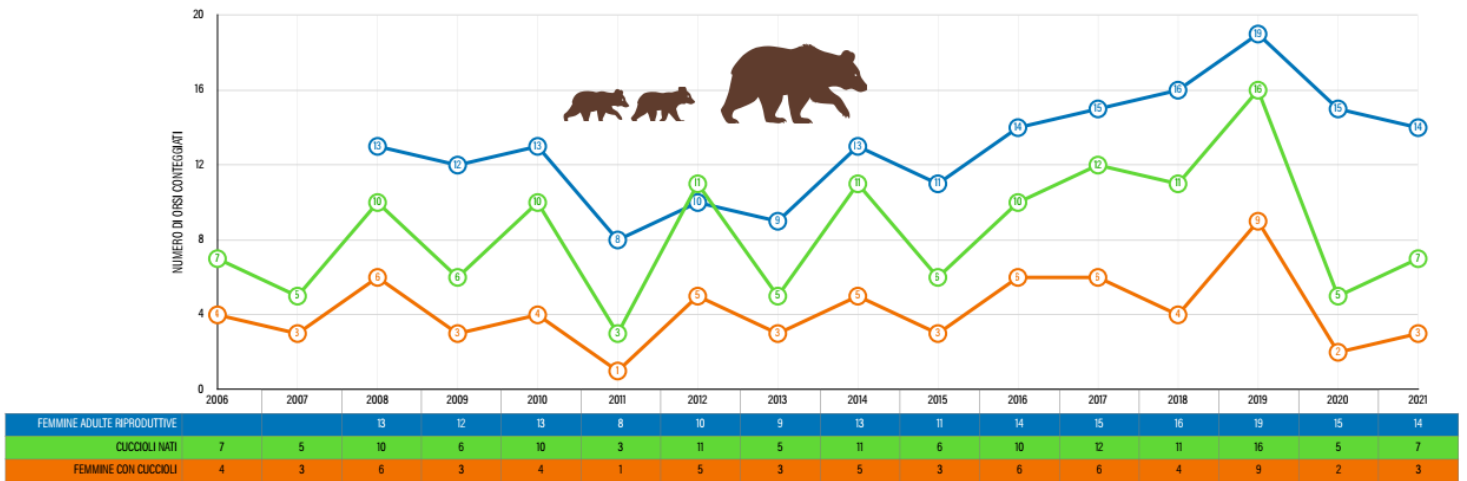
Brown bear – The Ministry of the Environment and all the Regions involved in the conservation of the brown bears (Abruzzo, Lazio, Molise, Marche and Umbria) agreed on drafting and implementing under the scientific supervision of the University La Sapienza of Rome the PATOM (Piano d’Azione per la Tutela dell’ Orso Marsicano – Action Plan for the protection of the Marsican brown bear), covering the whole population of the Apennines Mountains. Many more administrations, associations and scientific institutions have joined the initiative and its Management Authority meets periodically for the follow-up of the foreseen actions. The Abruzzo, Lazio and Molise National Park plays a key role in its implementation, since most individuals occur in the National Park and surroundings. The Recommendation 1 stated in the last Resolution for the renewal of the European Diploma concerns its immediate implementation and it has been well fulfilled.

The following website contains information on the development of the PATOM: <https://www.parcoabruzzo.it/pagina.php?id=461> and also: <http://www.minambiente.it/pagina/piano-dazione-la-tutela-dellorso-marsicano-patom>

Each year a report is issued to communicate the development of the PATOM, the so-called “Rapporto Orso” (Bear Report). The available Bear Reports (2015-2021) can be consulted and downloaded from the website: <https://www.parcoabruzzo.it/pagina.php?id=450>

According to genetic studies the total population in the Abruzzo, Lazio and Molise National Park and neighbouring areas is estimated about 50 individuals (range of 45-69), with a sex-ratio slightly favourable to females (55 % vs. 45 % of males). The following diagram shows the results of the annual censuses of females with cubs since 2006. In general, the reproductive parameters are good and the trend is increasing:

Andamento del numero di femmine e numero di cuccioli nati nel corso degli anni 2006-2021 nel PNALM e Area Contigua

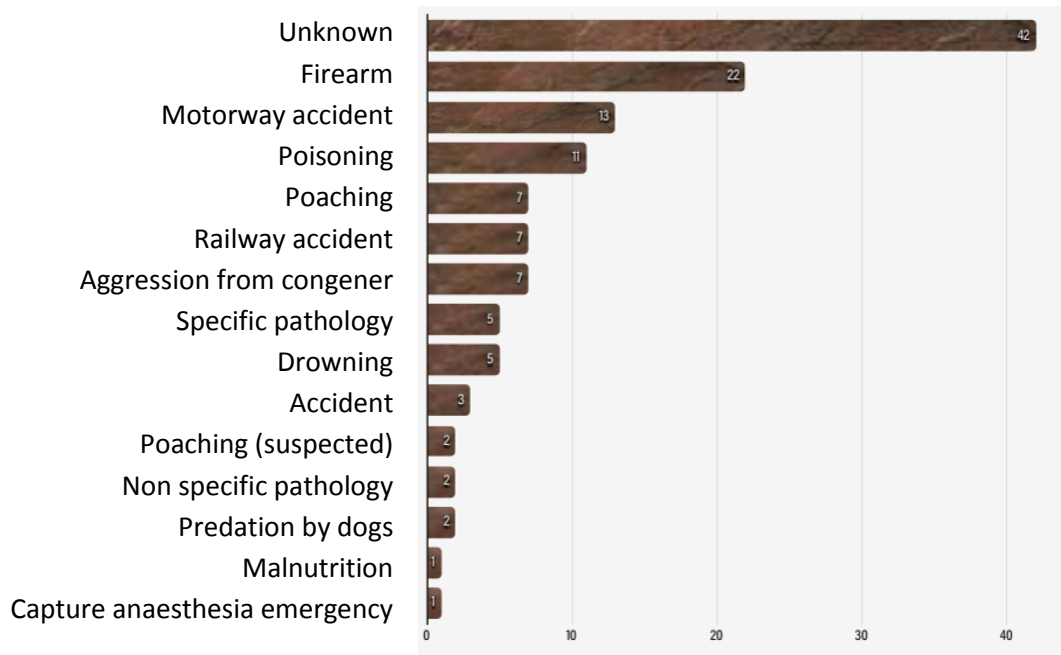


Blue line and figures: adult reproductive females

Green line and figures: born cubs

Orange line and figures: females accompanied by cubs

Some cases of non-natural mortality have been registered, with different causes.



The collision with cars is one of the most important causes of bear mortality. After two nearly consecutive hits in a nearby motorway, the company in charge of its exploitation has been obliged to install an 85 km long fence. There was also a sad case of a female and her two cubs down in a pool. Measures to cover or to make inaccessible these water storage systems have been adopted to avoid similar cases.

Wolf – The Abruzzo, Lazio and Molise National Park hosts 7-8 packs or family groups. In 2020 the scientific institution ISPRA has been engaged to draft a Wolf Management Plan.

Chamois – This species is particularly emblematic, since in early XX century it was very threatened across the Apennines because of illegal hunting and habitat loss. The species managed to maintain a small group in a very inaccessible area, the Camosciara, and since the declaration of the National Park it started to recover. At present the population is estimated about 600 individuals. The trend is increasing and they are expanding their distribution area.

Golden eagle – 7 pairs nesting in the highest cliffs of the park.

Otter – Since the first records of one individual in 2018, at least 4-5 otters have been recorded. A specific study has been initiated to assess the current real population level.

Inventory of habitat types of Directive 92/43/CEE on the conservation of natural habitats and of wild fauna and flora – A complete inventory of the habitat types listed in Annex I of the mentioned Directive has been produced by the University of Tuscia. One of the most surprising results has been the discovery of carpets of submerged aquatic macrophytes in the Barrea Lake, a Ramsar Convention site very important for migratory birds. The lake is actually a hydro power plant owned by the electric company ENEL to produce electricity and, consequently, the company proceeded to release water when necessary for such a purpose. For this reason, the level of the lake was greatly fluctuating and produced damages to waterfowl, particularly at the tail end. The National Park Administration and ENEL signed an agreement to maintain the water level according to specific criteria and since then the aquatic fauna and flora benefits from water stability. When the botanists made the inventory of the aquatic plants, they found at 2-3 m deep carpets with 9 species of aquatic macrophytes, among them *Chara vulgaris* and *Potamogeton perfoliatus*, which in previous surveys had not been found. This means that the stabilisation of the water level allowed the establishment of these species of macrophytes, increasing, thus, the ecological value of this wetland. The macrophyte carpets are very valuable from the ecological point of view. They only can grow in wetlands of clear water, because they need light in the ground for growing up. These new species not only enlarge the list of plants of the National Park, they also constitute a new feeding resource for herbivore birds, notably ducks and coots.

Forests – Within the forest ecosystem it is relevant to mention the excellent state of conservation of the ancient beech forests, included in the UNESCO World Heritage List (see section VI.2.2). They contain great amount of dead wood which provides a very rare ecological niche well used by some important fauna species, like the bat *Barsbastella barbastellus*, which shelters in the small holes existing under the bark, or the beetle *Rosalia alpina*, whose larvae must spend three years inside the wood in decomposition until the emergency of the adult, are indicative of the importance of these habitats so rare at European scale. Beech forests are, by far, the most abundant but their coexistence with other forest species like ash trees, maples, oaks, hornbeam, pines and the scarce birch make them more diverse in structure, biodiversity and ecological function so important for the associated fauna and flora existing in this National Park.

III - 5. Land use planning

The existing legislation of the Abruzzo, Lazio and Molise National Park ensures the effective protection of the territory that cannot be modified by land use provisions of any kind.

All the information related to land use planning is available in the cartographic portal of the Park:
<https://sit.parcoabruzzo.it/portal/home/>

III - 6. Threats

III.6.1 - Climate change

The climate change is already more than a threat, it is a reality. There is no doubt that this is probably the most relevant risk that not only the wildlife, but also the humanity, must cope with, since the changes involved are starting to be clearly noticeable. The prediction models do not allow being optimistic, since the consequences that may appear, and are actually appearing, are devastating.

The margin of manoeuvre of the wildlife managers is very limited. However, it is worth to recommend establishing monitoring mechanisms, based on scientifically validated methodologies, to characterise the effect of these phenomena in order to obtain knowledge for the formulation of strategies, projects and methods helping the biodiversity and the ecosystem services to increase their resilience to the changes by means of adaptive management decisions.

III.6.2 - Wildfires

The risk of wildfires is always present, however in a context of quick changes produced by the climate change, this risk must be on the top of the list of priorities to be addressed. The whole Mediterranean area is predicted to be progressively more arid, both because of the reduction of the precipitation and of the increase of temperatures. Torrid summers and hyper-annual droughts will be more frequent, which will, therefore, increase the vulnerability of forest vegetation to devastating wildfires.

III.6.3 - Emergent infectious diseases and pests

In the near past some cases of tuberculosis in bears and of canine distemper in wolves were recorded. These cases have been addressed with sound judgement by the Abruzzo, Lazio and Molise National Park authorities, and preventive and healing measures have been taken. In the current context of globalisation new diseases and pests never registered before in the area, appear elsewhere. The causes may be diverse, among the most frequent there could be either careless movements of livestock or live plants for commercial exploitation, or the arrival of alien species, or native species expanding their distribution area acting as vectors.

III.6.4 - Poison bites

Some cases of poisoning with toxic bites have been registered in the Abruzzo, Lazio and Molise National Park, affecting wild and domestic fauna. This is clearly a criminal behaviour and must definitely be prosecuted, since it is likely to affect not only the human public health but also top predator species and vultures. The creation in the protected area of its own canine patrol trained to early detect poison bites in the field is of maximum interest. Their efficiency greatly increases when random, unexpected field inspections are made in hunting grounds, or in areas used by livestock. Continued dialogue and contacts

with the stakeholders susceptible to use this forbidden method of predator control (foxes, etc.) are also very useful to discourage them when the potential offender see that these illegal actions are strongly prosecuted and heavily punished.

III.6.5 - Poaching

The presence in the Abruzzo, Lazio and Molise National Park of species very appreciated by the hunters may be an incentive to try to illegally obtain trophies or big game meat. Chamois, wild boars and top predators, like brown bears and wolves, are at risk, since they are coveted pieces. This activity must be extremely prosecuted.

III.6.6 - Increasing demand for the tourism

The increase of pressures to satisfy the request for outdoor activities is very worrisome. The National Park administration has made a big effort during the recent years to provide new trails (more than 800 km) and their associated infrastructure and legal regulations. It seems that this effort is not well recognised by the tour operators and the tourists. At present, the conservation value of the Abruzzo, Lazio and Molise National Park is quite high, despite the intensive tourism and human presence. However, it doesn't mean that the pressure can continue ad-infinitum, without consequences. Opening more natural areas to public and human activity represents a threat to wild fauna, flora and ecosystems, particularly sensitive to the human presence. It is very important that the local promoters understand that the current levels of high ecological quality, benefiting their businesses, are subject to high levels of naturalness, quietness and minimum levels of stress.

IV - MANAGEMENT

IV - 1. Management Plan

The whole process for the formal approval of the Management Plans in Italy is complicated. It involves both a technical and a political assessment, at Regional and National Administration level. In the case of the Abruzzo-Lazio-Molise National Park it is even more complicated because the process involves three Regional and the National Administrations and the respective processes are not harmonised among them. According to their legislation, the Regions must carry out a Strategic Environmental Assessment, pursuant to Directive 2001/42/CE, and an Appropriate Assessment, pursuant to article 6 of Directive 92/43/CEE (habitats), in addition to the management plan drafting and approval process stated by national and regional laws. A common shared administrative pathway had to be adopted.

The management plan final draft was submitted to more than 30 regional environmental authorities for comments and technical review and the public consultation phase ended.

The three Regions have just delivered their reasoned opinions concerning the Strategic Environmental Assessment documentation and the Park Authority is going to inform the Regions and the public about the results of public observation phase and publish the management plan final version.

Within 60 days the Regions must approve the Management Plan.

The Abruzzo, Lazio and Molise National Park Management Plan will be published in the Official Journal of the Italian Republic and in the Official Bulletins of the three Regions, coming into force immediately.

During the elapsed time since the last renewal, the tasks have progressed very slowly, for different reasons, including unforeseen political events in the Regions, like early elections, etc. All these events together have delayed the successive steps for the approval of the management plan.

However, meanwhile, the Grazing Management Plan contained in the Conservation Measures of the Natura 2000 sites Management Plan, which includes provisions for a livestock farming compatible with the conservation of the brown bear and the chamois, has been approved. The procedure for the approval of such documents is much simpler, and the corresponding zoning is consistent with the foreseen zoning of the Park's Management Plan. Therefore, to a great extent the National Park has been managed according to alternative planning instruments and most areas of responsibility have been covered by them.

Not only the Park's managers, but also the responsible officers of the Regional and the National Administrations are perfectly aware of the failure to have fulfilled the stated condition. However all of them consider: i) that the process for the formal approval of the Abruzzo-Lazio-Molise National Park Management Plan is at its very final stages, ii) that there is a great consensus on its provisions at all levels iii) that (in principle) there are not reasons (elections, etc.) for further delays in the short term and, therefore, iv) it is realistic that the Management Plan be formally approved at some point in the year 2023, most likely during the early months. It has been assured to the undersigned during the appraisal visit that all parties are committed to successfully comply with all these assumptions.

IV - 2. Institutional responsibility

According to the Framework Law 394/1991 of 6th December, the Park's Entity ("Ente Parco") is a legal entity with legal and administrative premises in the Park's territory and is made up by the following organs:

- i) the President of the Park
- ii) the Directive Council ("Consiglio Direttivo")
- iii) the Executive Board ("Giunta Esecutiva")
- iv) the Council of Auditors ("Collegio dei Revisori dei Conti")
- v) the Park's Community ("Comunità del Parco")

The mandate of the different organs of the Park's Entity is of five years. A complete description of the management bodies of the Abruzzo Lazio and Molise National Park can be found at the following link:

<https://www.parcoabruzzo.it/pagina.php?id=38>

IV - 3. Capacities

The current staff of the Abruzzo, Lazio and Molise National Park (**114 posts**) is made up by:

PERMANENT STAFF:

- Legal Service: 3
- Promotion and communication Office: 3
- Protocol Office: 1
- Secretariat of President and Director of the Park: 2
- Computer Service Office: 1
- General Affairs Office: 3
- Accounting Service Office: 6
- Personnel Service Office: 2
- Veterinary Service: 3 (1 technician)
- Scientific Service: 7 (3 technicians)
- Surveillance Service: 35 (park rangers)
- Technical Service: 9
- Education and Didactic Service: 9

TOTAL: 84

TEMPORARY STAFF

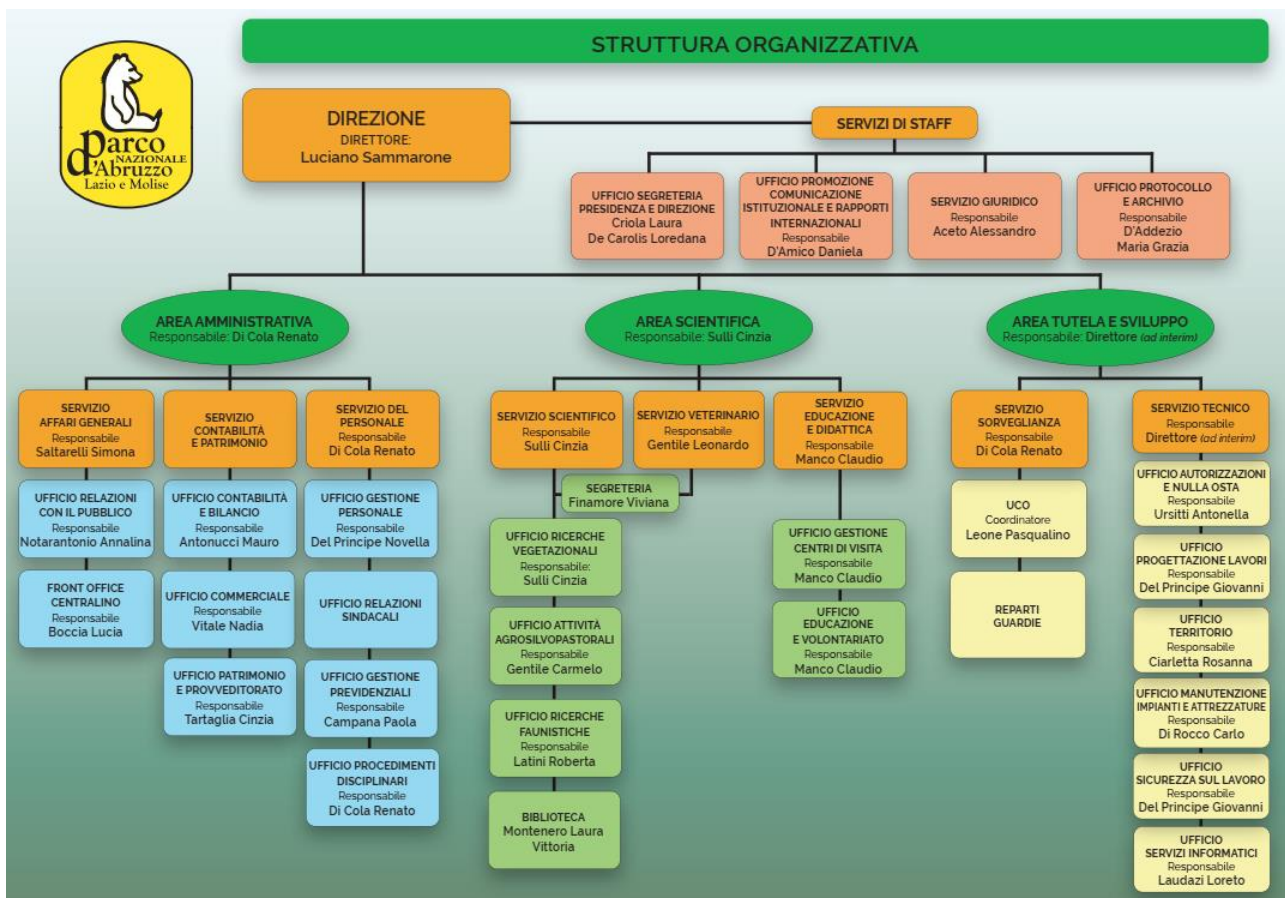
- Legal Service: 1
- Promotion Office: 1
- Veterinary Service: 1 technician
- Scientific Service: 3 technicians
- Surveillance Service: 12 park rangers

TOTAL: 18

UNIVERSAL CIVIL SERVICE PERSONNEL: 12 (4 technicians)

TOTAL: 12

The organisational chart of the European Diploma holding area is as follows:



IV - 4. Budget

During the last 5 years the total annual budgets of the Abruzzo Lazio and Molise National Park have been the following:

- Year 2018: 7.700.401 €.
- Year 2019: 8.304.017 €.
- Year 2020: 9.984.416 €.
- Year 2021: 15.812.368 €.
- Year 2022: 13.091.296 €.

The budget includes the compensations for damages caused by brown bears and wolves. It also includes the allocation to the Scientific Service (see section IV.6) for research on specific conservation issues, mostly related to the brown bear, but also to the otter, bats, chamois, genetics, sanitary management and forests. This means that the recommendation 4 of the Resolution CMResDip(2012) 10 for the renewal of the European Diploma has been fulfilled.

IV - 5. Research and Monitoring Programmes

The scientific research is a key priority within the structure and the activity of the Abruzzo, Lazio and Molise National Park. Its organisational chart (see section IV.3 Capacities) includes a powerful Scientific Department in charge of the management of the protection of fauna and flora, including the veterinary aspects, and of the Educational Service.

An important budgetary allocation has been awarded to this Department specifically earmarked to the most complex issues requiring scientific and managerial inputs to be coped with. These financial resources have mostly been spent in activities for the conservation of the brown bear, but also on research and management of otters, pollinators, bats, forests, etc.

During the last five years, the allocations for the Scientific Service of the Park have been:

- Year 2018: 375.000 € of the Park's annual budget.
- Year 2019: 360.000 € of the Park's annual budget. Moreover, the Ministry of the Environment granted 88.000 € for biodiversity management and the Ministry of Cultural Assets 214.000 € for the management of the Italian sites of the UNESCO World Heritage Sites of Ancient Beech Forests.
- Year 2020: 275.000 € of the Park's annual budget. Moreover, the Ministry of the Environment granted 85.000 € for biodiversity management and 62.000 € for the Natura 2000 sites management. The Bear Surveillance Network granted to Abruzzo, Lazio and Molise National Park an additional budget of 120.000 €.
- Year 2021: 234.000 € of the Park's annual budget and an additional amount of 166.000 € from the so-called Fund 5 x 1000, which proceeds from the resources that the Italians can allocate for research activities and for protected areas from their tax return. Moreover, the Ministry of the Environment granted 85.000 € for biodiversity management, namely a new project on the wolf and other on pollinators.
- Year 2022: 200.000 € of the Park's annual budget. Additional 85.000 € were received from the Ministry for the project on pollinators and 88.000 € more from the Fund 5 x 1000.

The following website contains information on scientific projects and publications:

<https://www.parcoabruzzo.it/studi.php>

The PATOM (Piano d'Azione per la Tutela dell' Orso Marsicano – Action Plan for Guardianship of the Marsican Brown Bear), (see section III.4) has its own monitoring actions and the results are annually published in the so-called "Rapporto Orso" (Bear Report). The annual reports can be downloaded from:

<https://www.parcoabruzzo.it/pagina.php?id=450>

The website of the Abruzzo, Lazio and Molise National Park also has a lot of information concerning the brown bear monitoring: <https://www.parcoabruzzo.it/pagina.php?id=451>

Other species, like roe deers, hares and others, are submitted to periodic monitoring activities. The results can be consulted on:

<https://www.parcoabruzzo.it/pagina.php?id=531>

IV- 6. Relationship between the National Park Administration and other stakeholders

The history of this National Park is plenty of contentious issues among the administrations responsible for its conservation and management and the actors with socio-economic interests in the area. Fortunately, the dialogue among the parties throughout the time has provided many opportunities of mutual understanding of the principal guidelines for the conservation needs of species and ecosystems, on one hand, and the aspirations of economic and social progress among the citizens and their political representatives on the other hand. The strong involvement of the Municipalities in the management structure of the Park, the progressively increasing awareness of citizens on the environmental issues and the involvement of the scientific community, among other factors, have been essential to foster such a positive evolution of the relationship between the National Park Administration and the stakeholders of the area.

During the appraisal visit, the undersigned had the opportunity to meet and openly dialogue with representatives of the different economic and social sectors: tourism, farming, NGOs, social associations, alpine sports, etc. Many of them are associated to the European Chart of Sustainable Tourism. Almost all of them knew about the European Diploma for Protected Areas and considered that this distinction meant a strong support to the conservation and the development of a model in the Abruzzo, Lazio and Molise National Park achieved with the efforts of all the parties involved. During the conversation some interesting reflections were raised, for instance:

- There are very young people and older than 50 years living in the area. However, there are very few opportunities for people between 25 and 35 years old, to raise their children in a safe and healthy environment, developing an economic activity allowing a worthy lifestyle. It is still a challenge to improve the life conditions in order to increase such kind of opportunities for young families to improve their quality of life and avoid the need to migrate to big cities to get access to good services, like scholar and medical facilities.
- For tourism operators their experience of working in the Abruzzo, Lazio and Molise National Park is very positive. The conservation of the area is a priority, not only because it is fundamental for the environment, but also because a protected area well preserved is an incentive for the tourism.
- For the local community, the current situation of the National Park and the socio-economic actors is very positive and they believe that the role of the local society should be acknowledged and set an example emphasising that conservation is compatible with socio-economic development.
- The lack of Management Plan is perceived as a problem because it is fundamental for the economic activity of the area.
- The National Park is a consolidated area for nature conservation and nothing different from continuing being conserved can be expected from it. The Italian Alpine Club is 159 years old and from the very beginning it supported the creation of the National Park, contributing unflinchingly to its defense throughout its history.
- The tourist operators feel proud to be the immediate contact between the National Park and the visitors, helping them to discover its treasures and values. They actually function as “the face of the

Park” for visitors and the Director states that the Park trusts their educative activity and that their role is worth to be recognised. The Park is making a great effort in capacity building for tourism operators, in which the ethic and respectful behaviour of guides and public, avoiding disruptions and harassment to the fauna, is treated with special care, since it is essential for the co-existence of wild and human environments in an area highly “humanised” with top predators like wolves and brown bears and other sensitive species.

The institutional mandate of the Abruzzo, Lazio and Molise National Park established in its declaration Law concerns i) Nature conservation, ii) Promotion of compatible activity, iii) Environmental education and IV) Scientific research. As a consequence of this mandate, the management authorities have elaborated a document called **“Bilancio Sociale” (Social Balance)**, to reinforce the institutional communication under an approach of continuous improvement and openness towards the society. This has been considered an obligation of the Administrations and an indispensable citizen right within a democratic society. With this purpose, the Social Balance has been conceived as a dynamic document, which gathers not only the economic rendering account, but also analyses the environmental, social, patrimonial and organisational aspects of the European Diploma holding area.

The Social Balance has been articulated around four Strategic Areas:

1. Conservation and supervision of the biodiversity, of the nature, of the landscape and the scientific research
2. A more efficient Park
3. Development of the territory
4. Institutional communication and environmental education as fundamental instruments for public opinion awareness raising regarding the biodiversity protection.

The National Park Administration issues the periodic publication “Natura protetta”. Its number 25 (winter 2021-22) contains several articles concerning this topic. It can be downloaded from the following website: <http://www.parcoabruzzo.it/pdf/BilancioSociale.pdf>

IV - 7. Public services including waste management

The selective garbage collection has been implemented in the Communes of the Sangro (Barrea, Villetta Barrea, Civitella Alfedena, Opi, Pescasseroli). This is an important measure to eliminate this food source for vagrant bears and other wild species in the inhabited areas.

V - USES AND SOCIO-ECONOMIC ACTIVITIES

V - 1. Exploitation of natural resources

The management legal instruments of the Abruzzo, Lazio and Molise National Park allow traditional exploitation of resources, like agriculture, livestock farming and forestry. The agriculture was more practised in the past and at present most of these grounds are recovered by the natural vegetation, mainly forests. At present, the agriculture in the National Park is practised at minor scale by small producers on

small pieces of land, producing potatoes and vegetables by traditional methods and organic farming modalities. There is also some production of hay by mowing natural meadows.

Livestock farming is developed according to the Conservation Measures of the Grazing Management Plans of the Natura 2000 sites, since the Management Plan of the Park has not yet been approved (see section IV.1). This document specifies the livestock densities, zoning, dates of grazing, closed areas, sanitary rules, etc. It also contains the permanent prohibition of grazing in zones A (Integral Reserve), which fulfils one of the aspects of Condition 2 of Resolution CM/ResDip(2012) 10 on the renewal of the European Diploma.

We can also note a progressive change of the type of animal husbandry, as a consequence of the Common Agricultural Policy, which is encouraging the increase of beef cattle at the expense of sheep breeding. The impact on the natural ecosystems, particularly on wild pasturelands and some species, is much higher and is causing important damages in mountain ecosystems. This factor is also occurring in many other protected areas and the reason explaining the support of the EU to these incentives is quite difficult to understand, since important wild habitats can be deteriorated with European public money.

Beekeeping is to some extent a relatively important activity, since it is implemented at minor scale by particular persons for family consumption and at bigger scale by companies which produce not only honey but also pollen and wax. Most of the producers use the multi-flower grounds for honey production, but there are some experimental attempts to obtain the product with one single flower species. The beekeeping infrastructure is very vulnerable to attacks of marsican brown bears and therefore it must be protected against these powerful predators. The Administration provides defence elements like electric fences and other devices for such purpose.

As far as forestry is concerned, the Administration carries out the activities on public land plots. In private properties, the owners must send and get their respective forest exploitation plans approved by the Administration.

V - 2. Tourism and leisure activities

The area where the Abruzzo, Lazio and Molise National Park is located is submitted to an important tourism pressure, since it is very close and well connected with crowded cities like Rome and Naples. The National Park administration has a complete system to assist and serve the information demands of the visitors. There is a network of 30 Info-points distributed across the territory. A weekly newsletter is also produced to inform on the events that can be of interest of the visitors. All this information can be consulted and downloaded from the website: <https://www.parcoabruzzo.it/infopoint.php>

The Abruzzo, Lazio and Molise National Park has created an important network of 151 trails with a total of 817 km perfectly prepared and equipped with signals, panels and information concerning the authorised and non-authorised activities in each area. The trails are coherent with the zonation regulation of the Park, and there is a specific regulation of their use, recently updated.

The trails can be used either by foot, bike or horseback riding. Each trail has a code and the visitors can download from the website the maps and all the relevant information and can connect their smart phones by means of QR codes.



Website of the trail network: <https://www.parcoabruzzo.it/rete-sentieristica.php>

V - 3. Education and awareness raising

The Abruzzo, Lazio and Molise National Park offers the services of the Environmental Education Centre (CEA – Centro di Educazione Ambientale). In cooperation with Associations and Cooperatives of the territory, the CEA promotes and organises programmes and activities for all ages conducted by the expert team of guides and educators. For instance, the ongoing programmes have been created for schools:

- **The snakes: who has seen it?** – Understanding the importance of its role in the ecosystems and their main threats
- **Planet Earth** – Promoting the progressive use of sustainable mobility, the systems of energetic efficiency and the reduction of the fossil fuels.
- **Problematic, confident, conditioned or simply Bear?** Understanding what do these concepts mean, related to individuals approaching human settlements and what distinguishes them from those avoiding the human contact. The local people must know what to do when a bear appears next to them.

Moreover, the Park Entity (Ente Parco) organises trainings for groups of students, Associations, Entities, etc. Different didactic modules at different levels of specialisation are offered to deal with the principal aspects of the National Park functioning, like the following:

- General aspects of the National Park - geography, geomorphology, orientation, history of the Park, management and conservation, etc.
- Technicians on administrative aspects of the National Park management
- Technician on Urban aspects of the National Park management
- The scientific management of the National Park
- Communication, education and environmental interpretation
- Promotion and dissemination of the National Park

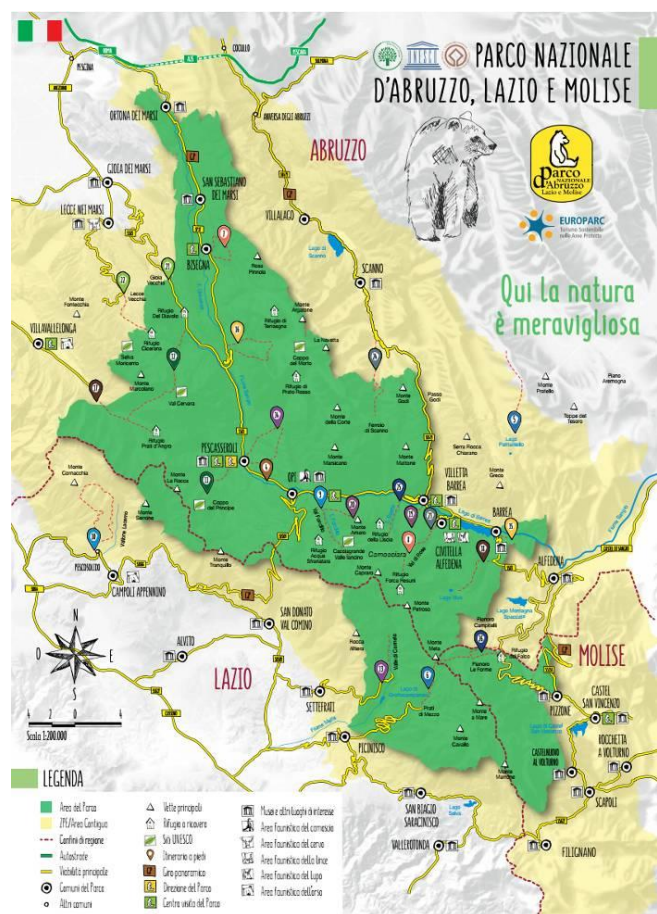
The Abruzzo, Lazio and Molise National Park issues a periodic publication called **Natura Protetta**, where all kind of events, articles and information are disseminated without cost. The published issues can be consulted and downloaded from the following website:

<https://www.parcoabruzzo.it/pagina.php?id=427>

The National Park offers an excellent opportunity to get interested citizens acquainted with the protected area by means of the activities organised with volunteers which cooperate in different activities under the supervision of the Park's staff. Several Volunteer Programmes have been set up: Junior, Senior, Specialists, Family, International and Natura Camps. The participants can be accommodated in facilities provided by the Park's Administration, like the venerable Casone Antonucci.

V - 4. Traffic and public access

The territory of the Abruzzo, Lazio and Molise National Park is crossed by roads open to the public, since there are some villages inside the National Park. The most important are Pescasseroli, where the premises of the Park's Entity (Ente del Parco) are located, Opi and Villetta Barrea.



V - 5. Hunting/fishing

Hunting is not allowed in the Abruzzo, Lazio and Molise National Park, although it can be practised in the peripheral protected area (Area Contigua), in compliance with the regulation of the respective Regions. In this peripheral area some measures have been adopted with the aim of reducing the effect of hunting on the most sensitive wild species. In particular measures have been taken to avoid disturbances to brown bears when at the end of autumn, they look for their caves to spend the winter hibernation. This is a critical moment and their vulnerability recommends absolute calm. For that reason, both the modality of wild boar hunting (using the “girata” method) and the dates of the events (not before the 1st November) have been changed.

The “girata” method replaces the former one, in which many dogs sweep the plot making the animals to come out and escape, being at the reach of numerous hunters. The “girata” method consist of 1 or 2 dogs trained and certified by the National authority on dog certification, the ENCI (Ente Nazionale Cinofilia Italiana), an association in charge of the certification of the production and breeding of purebred dogs, competitions, Studbook, etc. The dogs accompany a small group of hunters (10-12), reducing in this way the annoyances to wild fauna in general and to bears in particular. Other measures are the reduction of the number of hunters that the Lazio Region was interested in, since the Italian Law allows in these cases that hunting in the “Areas Contiguas”, the peripheral areas of the National Parks, the local hunters have exclusive hunting rights. Therefore, the number of candidates to participate in the hunting events is much more restricted.

V - 6. Human occupation

The resident human population in the 24 Communes of the Abruzzo, Lazio and Molise National Park has been decreasing since the years of its declaration. On average, the current total population has decreased from 59.107 inhabitants in 1921 to 24.178 in 2021, representing approximately 41 % of the initial population in this period. It has been more severe in the Molise region, passing from 8.898 in 1921 to 3.039 in 2021 (31 %). In Abruzzo region the population dropped from 25.341 to 11.563 (45,6 %) and in Lazio from 24.868 to 9.576 (38,5 %).

The decreasing demographic trend seems to be less intense during the last 10 years, and the population seems to stabilise, although it is also becoming older.

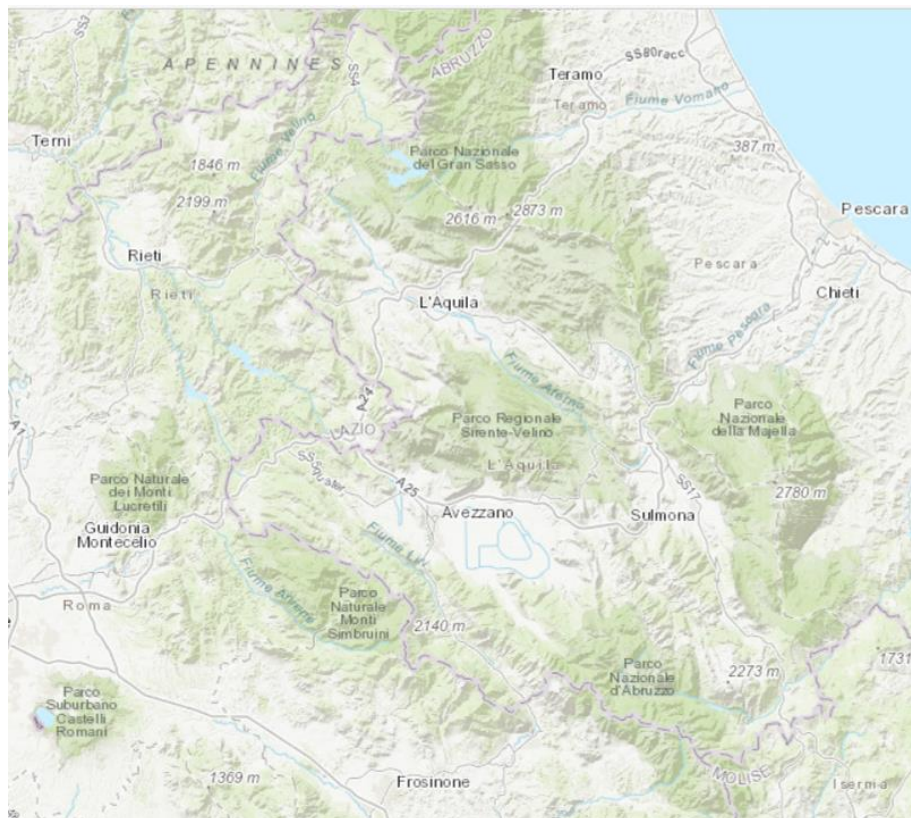
VI - CONNECTIVITY OF THE AREA

VI - 1. Ecological connectivity with other areas

The Abruzzo, Lazio and Molise National Park is located in the mountain calcareous massif of the Apennines, in central Italy. Other protected areas are also located in these mountains, sharing to a great extent most of the wild species and habitat types. The administrations responsible for their management and conservation very often work together for elaborating measures, projects and strategies of common

interest and, therefore, they function like a network. The most frequent and intense connexions with the European Diploma holding area occur with the following natural areas:

- Gran Sasso National Park
- Maiella National Park
- Sirente Velino Regional Park
- Monti Sibilini National Park
- Monte Simbruini Nature Park
- Other areas with brown bears included in the PATOM: Monte Genzana Alto Gizio Regional Reserve, Zompo lo Schioppo Regional Reserve, Gole del Sagittario Regional Reserve and Lago di San Domenico e Lago Pio Regional Natural Reserve



In relation with connectivity, it may be worth to mention the new LIFE project approved in 2021 called Bear Smart Corridors (<https://webgate.ec.europa.eu/life/publicWebsite/project/details/5785>). It aims at creating favourable conditions at socio-cultural level to promote the occupation by the bears of areas in good ecological conditions. It will, consequently, contribute to improve the connectivity between the European Diploma awarded area and the ecologically well-preserved surrounding zones.

VI - 2. Other forms of recognition awarded

VI.2.1 Ramsar Site Lake Barrea.

- Site number 131
- Surface area: 241,4 ha
- Designation date: 14/12/1976



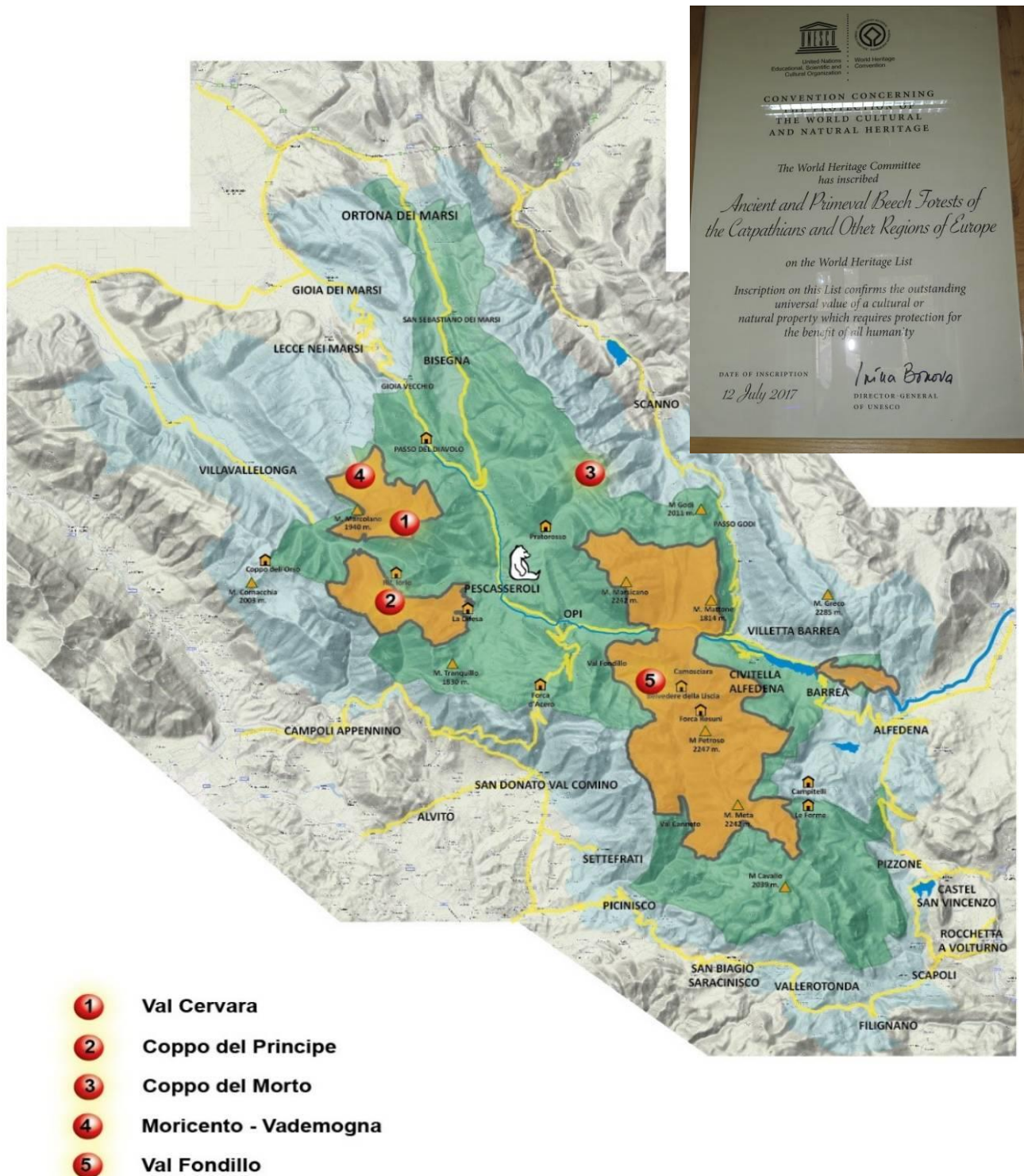
Source: Ramsar Convention database:

https://rsis Ramsar.org/RSapp/files/37363623/pictures/IT131_map210323.%203%20Zona_Ramsar_A4.jpg

VI.2.2 – UNESCO World Heritage Site “Ancient and Primeval Beech Forests of the Carpathians and other Regions of Europe”.

On 12th July 2017 five areas have been inscribed in this property, shared with comparable sites located in other European countries:

See: <http://www.parcoabruzzo.it/pagina.php?id=506>
<http://www.parcoabruzzo.it/pdf/Depliant-Foreste-Vetuste.pdf>

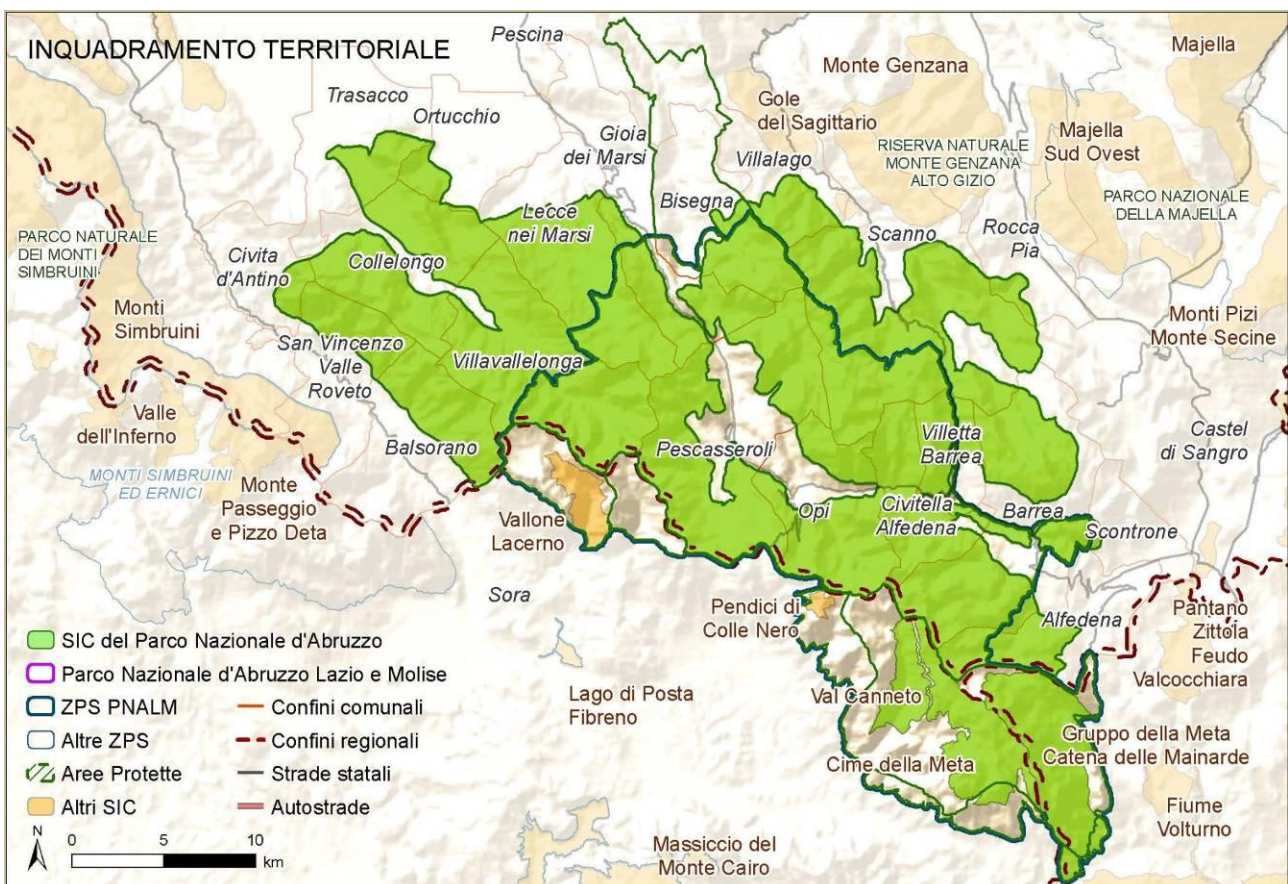


VI.2.3 – Natura 2000 Network of the European Union

CODE	NAME	SURFACE AREA (ha)	BIOGEOGRAPHIC REGION	ADMIN. REGION
IT6050018	SAC Cime del Massiccio della Meta	2541	Alpine	LAZIO
IT6050020	SAC Val Canneto	990	Alpina	LAZIO
IT7110205	SAC Parco Nazionale d'Abruzzo	58880	Alpina	ABRUZZO
IT7212121	SAC Gruppo della Meta – Catena delle Mainarde	3548	Mediterranean	MOLISE
IT7120132	SPA Parco Nazionale d'Abruzzo, Lazio e Molise ed aree limitrofe	51149	Alpina	ABRUZZO, LAZIO AND MOLISE

SAC: Special Area of Conservation, pursuant to Directive 92/43/CEE on the conservation of natural habitats and of wild fauna and flora

SPA: Special Protection Area, pursuant to Directive 2009/147/EC, on the conservation of wild birds



Source: Abruzzo- Lazio-Molise National Park

VI.2.4 – European Charter for Sustainable Tourism in Protected Areas

The National Park Abruzzo, Lazio and Molise joined the European Chart for Sustainable Tourism in Protected Areas, promoted by EUROPARC, in 2011, renewed in 2018 for five more years.



VII - IMPLEMENTATION OF PREVIOUS CONDITIONS AND RECOMMENDATIONS

When the European Diploma was renewed in 2012, Resolution CM/ResDip(2012) 10, set 2 conditions and 8 recommendations. According to the information collected during the appraisal visit and from relevant sources, the undersigned could draw the following conclusions:

Assessment of CONDITION 1 – *That the PNALM management plan be finally adopted within a maximum period one year, i.e. before the meeting of the Group of Specialists in 2013.*

As indicated in section “IV.1 – Management Plan”, not only the Park managers, but also the responsible officers of the Regional and the National Administrations are perfectly aware to have failed fulfilling the condition, however all of them consider: i) that the process for the formal approval of the Abruzzo, Lazio and Molise National Park Management Plan is at its final stages, ii) that there is a great consensus on its provisions at all levels iii) that (in principle) there are not reasons (elections, etc.) for further delays and, therefore, iv) it is realistic that the Management Plan be formally approved during the year 2023. The condition has not been fulfilled within the

required timeframe. Nevertheless, alternative planning instruments have been developed and are operative. Therefore, **the condition has not been completely fulfilled**. The expectative for the approval of the Management Plan in a short delay is very high.

For the forthcoming renewal, **this condition should be maintained**.

Assessment of CONDITION 2 – that strenuous effort be taken so that:

- *In pursuance of Italy's Framework Law on Protected Areas, peripheral zones are created on the territories of Abruzzi and Molise regions by the end of 2013, and that regulations on hunting which take account of the need to minimise disturbance to bears during the autumn, are introduced in these zones and applied with effect from, at the latest, 2013-2014 hunting season;*

In relation to this issue, in 2021 the unique adjacent protection zone surrounding the National Park has definitely been established, after the approval of the Lazio sector. The three regions have established hunting regulations which will still need to be harmonised once the Lazio region has changed its legislation to allow the necessary measures. The modalities vary from the start of the hunting season from 1st November, the reduction of hunters due to the exclusive hunting rights for local hunters in the peripheral protection zone, the change of the hunting modality towards the system "girata" (= battue), involving only 1-2 dogs (trained and certified by the Italian entity of certification of dogs, ENCI – Ente Nazionale di Cinofilia Italiana), and one team of 10-12 hunters, to reduce the disturbances to the local fauna, notably the bears. Lazio and Abruzzo have contracted a study to check the potential and real disturbances to bears by the hunting activity using GPS on dogs to verify the distances to critical bear areas. The harmonised regulation for hunting will continue to be negotiated when Lazio approves the above mentioned changes in their regional legislation.

- *The regulations prohibiting livestock farming within zone A of the National Park are applied absolutely and without delay, and the local elected representatives are made aware of this matter*

Since 2013 a special operational surveillance of Zone A has been established by the Park Rangers to let this area free from livestock grazing. Moreover, a Grazing Management Plan was elaborated by the University of Tuscia as part of the Conservation Measures of the Natura 2000 sites Management Plan. This document, already operative, constitutes a true regulation of the Park, in complement to the one derived from the future Park's Management Plan, and allows the Park Administration to engage in infringement procedures in cases of non-compliance.

- *Consultations begins without delay with the municipal authorities of the National Park municipalities on physical closure of those access routes to the diploma-holding area which are most critical from the viewpoint of the conservation of large animals; this consultation should lead to closure arrangements and appropriate regulations, taking account of the rights of local third parties, being adopted by the end of 2013.*

In the framework of project LIFE ARCTOS, 7 routes were definitely closed in 2013 and 13 more in 2014. Barriers placed on the 20 routes prevent non authorised transits and have a specific

regulation for those needing their use. No conflicts have arisen for the implementation of this measure.

The three aspects of this condition have, therefore, been **fulfilled**.

For the forthcoming renewal, **this condition should be dropped**.

Assessment of RECOMMENDATION 1 – *Begin the implementation of the PATOM action plan for the protection of the bear population as soon as possible, facilitated by the administration of the PNALM.*

The implementation of the PATOM has been initiated in 2013 and it is progressing very well all over the distribution area of the Marsican brown bear, beyond the territory of the Abruzzo, Lazio and Molise National Park. The Management Authority and its Technical Board meet regularly and follow up the development of the works. The Ministry of the Environment has taken an active role in promoting a legal framework allowing the adoption of the necessary measures and in requiring the participation of the Regions. The webpage of the Park contains a lot of updated information concerning all details of the Action Plan. The recommendation has, therefore, **satisfactorily been fulfilled**.

For the forthcoming renewal, **this recommendation should be dropped**.

Assessment of RECOMMENDATION 2 – *Continue discussions on the inclusion within the diploma holding area of the sectors adjacent to the PNALM deemed to be of major biological interest for large carnivores, especially the brown bears and wolves.*

Outside the National Park and in the adjacent protection zone, the technical services of the Park have identified the areas with good conditions to host large carnivores and have, consequently, provided a detailed cartography. Moreover, following an agreement with the regions, the Park Administration has ensured the mechanism for the compensation to the farmers of damages caused by wild fauna, notably the wolf and the brown bear outside the National Park. This agreement speeds up the arrangements and improves the collection of the indemnities. New LIFE projects (like Bear Smart Corridors – see sections III.4 and VI.1) also contribute to a great extent to identify the crucial areas and to define the adequate conservation measures. Additionally, the National Park Administration is also responsible for the management of some of the Natura 2000 sites outside the Park which have its own Regulation. They are, therefore, entitled to intervene in part of the territory affecting external areas where an expansion was thought to be convenient (see site IT7110205). For the time being, the National Park managers consider that the political conditions for the expansion of the European Diploma holding area are no longer met. The recommendation has, therefore, been **mostly fulfilled**.

For the forthcoming renewal, **this recommendation should be reformulated, in the sense that the peripheral protection area of the National Park (the “Area Contigua”) be included in the European Diploma**, since it has already been declared as a unique protection area that will shortly have a harmonised hunting regulation.

Assessment of RECOMMENDATION 3 – *Complete the preparation of the economic and social development plan by the end of 2012, as scheduled by the PNALM administration, with a view to its early implementation.*

The **Economic and Social Development Plan** for the Abruzzo, Lazio and Molise National Park was approved in 2013 and implemented since then. Within the frame of the elaboration of the new Parks Management Plan, the Economic and Social Development Plan for the Abruzzo, Lazio and Molise National Park will be revised and updated.

Moreover, in October 2019, The Minister of the Environment approved the **Environmental Economic Zones** (in Italian **ZEA-Zone Economiche Ambientale**), a recent initiative of the National Government, aimed to recognise the efforts of the local communities and dwellers of the territory coincidental with the National Parks. Favourable conditions and fiscal advantages can be obtained by Municipalities and private companies for sustainable and durable businesses or initiatives.

Additionally, the Ente Parco (Park Entity) has issued the document "**Bilancio Sociale**" (Social Balance) aimed to report to the society on the environmental, social, patrimonial and organisational aspects of the Abruzzo, Lazio and Molise National Park (see section IV.6).

The recommendation has, therefore, been **fulfilled**.

For the forthcoming renewal, the support to local economic and social initiatives compatible with the conservation of the Park is worth to be promoted. Consequently, **this recommendation could be maintained but reformulated in other terms, like continuing the efforts in this direction**.

Assessment of RECOMMENDATION 4 – *Substantially increase the human and financial resources earmarked for scientific activities in the PNALM and tailor them to the complex problems which the Park will be facing over the next few years; ensure that its general capacities are such that it can carry out its conservation and monitoring assignments appropriately.*

The National and the Regional authorities have made an important effort to finance scientific activities in the Abruzzo, Lazio and Molise National Park (see section IV.5). The recommendation has, therefore, been **fulfilled in financial terms**. With respect to the staff, it seems that there are at national level difficulties to increase the personnel.

For the forthcoming renewal, **this recommendation should be maintained**, due to the important future challenges requiring updated scientific basis and sufficient professional trained staff.

Assessment of RECOMMENDATION 5 – *Consider the possibility of instructing all technical personnel to record any violations of the PNALM regulations.*

According to the Italian legislation only the official Surveillance Corps are legally entitled to pursue violations to the regulations and the Laws. Consequently, this recommendation cannot be even promoted. The recommendation has, therefore, not been **fulfilled**, because it is legally impossible to fulfil.

For the forthcoming renewal, **this recommendation should be dropped**.

Assessment of RECOMMENDATION 6 – *Launch discussions on the need for controlled management of red deer, linking this to improving the state of conservation of the chamois population*

Every two years the Park carries out a red deer census. The results show that the densities of the species are within acceptable limits and in parallel, the population trend of the chamois is increasing. The recommendation has, therefore, been **fulfilled**.

For the forthcoming renewal, **this recommendation should be maintained, although reformulated in terms of maintaining within the General Monitoring Programme an appropriate periodic follow-up of ungulate populations to early detect possible rises in populations that could affect the chamois and other relevant species.**

Assessment of RECOMMENDATION 7 – *Make a special effort to support rural tourism activities around the PNALM*

The management authorities have made important efforts to support the tourism activity in general, maintaining a constant dialogue with promoters. Most of them are associated to the European Chart of Sustainable Tourism in Protected Areas promoted by EUROPARC (see section VI.2.4) and actively participate in its forum. The recommendation has, therefore, been **fulfilled**.

For the forthcoming renewal, **this recommendation should be dropped.**

Assessment of RECOMMENDATION 8 – *Launch discussions with local majors on the issue of stock and wildlife feeding*

The practice consisting of dumping food in the field for the livestock is already forbidden within the geographic scope of the National Park. A few farmers continue with this practice outside the National Park, where its Administration has not capacity of action but this remains marginal and it doesn't seem to cause problems. The recommendation has, therefore, been **fulfilled**.

For the forthcoming renewal, **this recommendation should be dropped.**

FINAL APPRAISAL

The preliminary conclusion of the undersigned is **to recommend the renewal of the European Diploma for Protected Areas to the Abruzzo, Lazio and Molise National Park for 10 more years, since the area is of exceptional European interest and it is managed in an exemplary way.**

For the renewal of the European Diploma to **Abruzzo, Lazio and Molise National Park the following condition and recommendations are proposed:**

CONDITION: Facilitate by all means the finalisation of the adoption of the Management Plan by the regions of Abruzzo, Lazio and Molise.

RECOMMENDATION 1: Reinforce the existing Monitoring Programmes by including the existing monitoring protocols under a common approach and scientifically validated methodologies, in order to i) assess the effect of the climate change, ii) early detect undesirable consequences on species (specially the most vulnerable like chamois and brown bear), ecosystems and ecological functions, iii) characterise the rate of

changes (if any) and iv) develop predictive models that could be of help to anticipate possible adaptive management needs;

RECOMMENDATION 2: Maintain and reinforce the financial resources to increase the scientific knowledge and improve the management and conservation measures, projects and strategies in the National Park;

RECOMMENDATION 3: Reinforce the human, financial and material resources for wildfire prevention and fight. Continue the criminal prosecution of poison bites and poaching;

RECOMMENDATION 4: Continue the efforts to support the sustainable socio-economic development without jeopardising the conservation of biodiversity and of the ecosystems, particularly, by monitoring tourism indicators and alert thresholds of excessive human presence, in order to prevent possible overcrowded sites and damages to the environment;

RECOMMENDATION 5: Ensure that the harmonised hunting regulation to be implemented in the peripheral protected area (“Area Contigua”) aims to: i) eliminate disturbances to the brown bear during the critical phase of selecting the caves for wintering; ii) contribute to maintain the densities and sex ratio of the whole population of the red deer and the wild boar within acceptable limits that do not affect the feeding habitats of the chamois and the brown bear; iii) select the hunting modalities more compatible and less invasive of the natural habitats in coherence with the weight capacity of game species within the hunting grounds;

RECOMMENDATION 6: Explore the possibility to encourage sheep and goat farming, allocating specific pastureland sectors where appropriate for this kind of husbandry, better suited than cattle breeding to the mountain wild vegetation.

RECOMMENDATION 7: Explore the feasibility and opportunity to extend the European Diploma area to the peripheral protection area of the National Park (the “Area Contigua”).

ACKNOWLEDGEMENTS

The undersigned wishes to warmly thank the whole staff of the Abruzzo, Lazio and Molise National Park for its availability. In particular, the President of the Park, Mr Giovanni Cannata, the Director Mr Luciano Sammarone, the Head of the Scientific Department Mrs Cinzia Sully, and also Ms Helena Orsulic from the Secretariat of the Council of Europe for the perfect organisation of the visit and their constant support.

All the members of the Park's staff have been extremely kind and helpful. The Rangers, the technicians and the ancillary staff have been all time paying attention to all needs, much beyond the simple rules of politeness. To all of them a huge THANK YOU!!!

The participation of the scientists of the Universities of Tuscia, Naples and Chieti has been extremely useful for obtaining updated information on key issues during the visit, which was also very welcome and appreciated.

Some members of the Directive Board of the Abruzzo, Lazio and Molise National Park and the President of the Park's Community were interviewed, offering the chance to dialogue on the situation and the values of this protected area. All of them expressed their commitment and full support to the aims of the European Diploma, looking forward to its renewal. Thanks a lot for their availability.

Many stakeholders participated in the meetings and provided useful and pertinent comments and opinions. Thanks a lot to all of them, since their contribution was needed to assess whether or not possible relevant conflicts and/or disruptions were potentially or really acting against the conservation of the Park. All of them have shown their maximum cooperation and honest opinions. It could be seen that most past conflicts have progressively turned into a general atmosphere of agreement and confidence among all concerned parties.

For all these reasons, the undersigned wishes not only to acknowledge the attentions received but also AND ESPECIALLY to send all partners the warmest congratulations for overcoming the obstacles occurring in the past, having achieved a model of socio-economic development compatible with the magnificent conservation of the Abruzzo, Lazio and Molise National Park. It has been a collective success worth of recognition.

Granada, Spain, January 2023

Blanca Ramos
Conservation Biologist

ANNEX I

AGENDA OF THE APPRAISAL VISIT

DAY		PROGRAM	
Wednesday 16 november	12,00 am Roma Termini	Transfer to the Park, arrival and accommodation in the hotel	Stefano D'Amico, Marta Gagliardi
	16,30 pm	Meeting with the President of the Park, the Director of the Park, the Administrative area manager, the Scientific area manager The President of Park Community, Members of Park Council	President Cannata Director Sammarone Renato Di Cola Cinzia Sulli Antonio Di Santo
	18,00 pm	Meeting with mayors of the Park	
	20:00 pm	Dinner with President, Director, President of Park Community and Scientific Area manager Sulli	
Thursday 17 november	8,00 am	Excursion to learn about habitats and species, management organization, any critical issues	Sulli, Latini , prof. Filibeck, Park Rangers
	17,00 pm	Meeting with Stakeholders (NGO, local association, tour operators)	President Cannata, Director Sammarone, Sulli, D'Amico D., Education Service
	20:00 pm	Dinner at the hotel	
Friday 18 november	8,00 am	Excursion to the UNESCO site of ancient beech forests to talk about ancient beech forests, habitat and species management, research activities	Sulli, Gentile C., Latini, Russo D., Di Filippo, Belmaggio, Ciabò, Piazzì, Giorgio Paglia Park Rangers
	16,00 pm	Meeting with Technical staff off the Park to talk about: -Park Plan -conclusion off the inspection visit	Director Sammarone, Park technical staff (Sulli, Latini, Gentile C.), Piazzì, Abruzzo Region
	20,00 pm	Dinner at the hotel	
Saturday 19 november	Departure at 7,00 am	Transfer to the airport	Park staff

ANNEX II

LIST OF PARTICIPANTS TO THE MEETINGS

Wednesday 16 November 2022

On-site:

- Giovanni Cannata, President
- Luciano Sammarone, Director
- Cinzia Sulli, Head of Scientific Service
- Antonio Di Santo, Park's local community President
- Renato Di Cola, Head of Administrative Service
- Filomena Ricci, Environmental NGOs representative in Park's Directive Board

Online:

- Enrico Pompei, Ministry of Forest representative in Park's Directive Board
- Anna Loy, Scientific Community representative in Park' Directive Board
- Daniela Gentile, Ministry of Environment in Park's Directive Board
- Carlo Rufo, Park local community representative for Lazio Region in Park's Directive Board

Thursday 17 November 2022

- Maurizio Caniglia, park tour operator
- Antonella Ciarletta, park tour operator
- Bernardino Paglia CETS operator
- Ettore Rossi, CETS operator
- Lucia Tarquinio, park tour operator
- Paolo Cellupica, park tour operator
- Mariapia Graziani, park tour operator
- Elisa e Sandra Cedrone, park tour operator
- Maura Giallatini, park tour operator
- Giovanna del Greco, park tour operator
- Giorgio Cimini, CETS operator
- Bruno Pandolfi, CETS operator
- Gaetano Tarquinio, CETS operator

Friday 18 November 2022

- Giovanni Cannata, President
- Luciano Sammarone, Director
- Cinzia Sulli, Head of Scientific Service
- Sabatino Belmaggio, representative of the Abruzzo Region
- Roberta Latini, technician of the National Park
- Ing. Daniel Bazzucchi, technician of the National Park
- Ing. Riccardo Leone, technician of the National Park
- Biol. Alessandro Piazzi, technician of the National Park