



16° MEMORIAL DANILO RE Triglavski Narodni Park

- «Rangers' work
- Concrete actions for the application of the Alpine Convention »

RANGERS: ALL-ROUND PROFESSIONALS

- abstract -

Italy and its history are intimately linked to the mountains. Italian territory is mostly mountainous (over 54% according to Istat figures).

In 1975 **Piedmont Region** instituted **63 protected areas** covering a total surface area of 210,625 hectares and managed by 35 authorities. 20 of these protected areas, covering around 77,000 hectares safeguard alpine territory.

Besides the regional protected areas, Piedmont also has **two National Parks** Gran Paradiso and Val Grande, both alpine parks, covering a total area of 48,500 hectares.

In 2009 the Region instituted the **regional ecological network** made up of:

- a) the protected areas (parks and nature reserves) in Piedmont;
- b) the Natura 2000 network areas;
- c) ecological corridors.

The authorities which manage the protected areas for Piedmont Region together employ around 400 people, of these about 180 are rangers.

Rangers

In the public imagination rangers go for long walks in the woods or in the mountains, or sit alone watching the wildlife and have an intimate knowledge of the plants that grow in their area.

Partly this idea of the job is true, but it should be updated. The tasks and professional activities asked of the Piedmontese rangers make them "nature professionals" occupied daily in the application of the Alpine Convention.

To support this statement we will quickly go over some of the aspects of the day to day activities of rangers in Alpi Marittime Nature Park.

The objective set out in art.2 of the Convention consists of ensuring a global policy for conservation and protection of the Alps, the signatory Nations have undertaken to take adequate measures, in particular in the following fields:

a) **Population and culture** – to respect, preserve and promote the cultural and social identity of local populations

For over 20 years Alpi Marittime rangers have been carrying out or collaborating with projects to collect information and memories even objects linked to the Occitan culture, language and traditions, typical of the valleys in southern Piedmont and the south of France.

This constant work of gathering and documenting has led to a noticeable re-evaluation of the Occitan culture, benefitting both visitors to the area and the local population, who have reclaimed the values and traditional ways that were almost forgotten.

Some examples of this rediscovery and re-evaluation:

1. the place-name atlas of the valle Gesso, produced using the memories of the older locals, collected by rangers;
2. the construction of the rye museum, dedicated to the cereal that was emblematic of mountain economy in southern Piedmont;
3. the rediscovery of feasts and popular traditions that had been forgotten, along with abandoned traditional recipes. The locals now feel that these features distinguish them and create a cultural belonging.

d) **Soil protection** – to reduce the quantitative and qualitative degrading of soil, limiting erosion and compacting.

In Alpi Marittime Nature Park two rangers are responsible for

- ✓ making and maintaining way-marking signposts on
- ✓ planning the yearly work load,
- ✓ producing a photographic archive and map of signposts in place.

Several rangers collaborate with the maintenance workers in path clearing, and maintaining footbridges, pic-nic areas and other visitor facilities.

e) **Water ecology** - to conserve or re-establish the natural quality of the waterways, in particular safeguarding the quality.

Alpi Marittime Nature Park has been monitoring water quality in its area for many years, both with rangers and with the help of volunteers. This includes several activities:

1. Monitoring the fish populations in lakes and rivers by electric fishing, the biometric data is collected and state of health is ascertained;
2. Monitoring of water quality both at springs and in the rivers, physical and chemical measurements are made (temperature, pH, dissolved oxygen concentration, electrical conductivity) and biological indicators are sampled (diatoms and macro-invertebrates), in collaboration with the Regional Environmental agency.
3. direct management of several stretches of river with natural conservation techniques, to favour a return to stable environmental conditions (climax).

f) **Nature protection and safeguard of the scenery** – to protect, conserve and if necessary rehabilitate the natural environment and scenery.

According to the job description rangers' *"prevalent activity is guarding, taking care that the National and regional laws and regulations...with particular reference to environmental legislation"*.

This constant environmental policing takes up about 50% of the work hours over the year. Conservation of scenery, ecosystems, fauna and flora is primarily achieved by a scrupulous respect for environmental legislation.

Fauna censuses and the consequent fauna management (capture and culls) are amongst the most typical seasonal activities of rangers.

1. In Alpi Marittime Nature Park the chamois (*Rupicapra rupicapra*) and ibex (*Capra ibex*) populations have been counted regularly for over 25 years, whilst management operations on these species have meant that around 800 chamois and 300 ibex have been captured, mostly for other protected areas in the Alps to create or bolster new colonies. At present Alpi Marittime rangers are involved in

research on territory and pasture use by chamois (*Rupicapra rupicapra*). 138 chamois were caught and fitted with radio-collars.

All these activities carried out by the rangers, have allowed us to collect a significant quantity of data, regarding behaviour and biometrics, a precious source of information on the state of health of the chamois and ibex populations.

2. In the past rangers have carried out studies on the presence and distribution of smaller rodents and squirrels (*Sciurus vulgaris*) in the park, also a study was made of the distribution and behavioural patterns of marmots (*Marmota marmota*). Some of these studies were done individually some in collaboration with scientific staff.
3. For 20 years the park has been working on monitoring birdlife in the area. This has involved the rangers, volunteers and scientific staff, working in particular on:
 - a. Autumnal migration of raptors over the Maritime Alps, by direct observation;
 - b. The presence and distribution of birdlife both resident and non, by birdsong transects;
 - c. The variation in populations of black grouse (*Tetrao tetrix*), by watching the leks in spring and transects in summer using trained dogs.
 - d. Reproduction and distribution of golden eagle (*Aquila chrysaetos*)
4. The Park has been involved in an international reintroduction project in favour of bearded vultures (*Gypaetus barbatus*) in the Alps. We became involved in 1994 and both rangers and volunteers are employed in all the stages of the activity.
5. The first wolves (*Canis lupus*) arrived on the Italian side of the Maritime Alps in 1995 the rangers are on the front line for data collection on the presence and the activities in the Park and the surrounding valleys.
Now, rangers continue to play a fundamental role in wolf monitoring all over Piedmont by:
 - a. Collecting excrement for genetic analysis and to study their diet;
 - b. Identifying routes used by the packs (snow tracking) and the remains of their prey for studies on territory use and the impact of predation on wild ungulates.

The Flora and vegetation of the Maritime Alps are monitored constantly and species are collected by some rangers to create

- ✓ A scientific herbarium with over 1200 indigenous species included.
- ✓ An alpine botanic garden with over 450 autochthonous plants growing in 14 environments representing the main ecosystems found in the Park.

h) **Mountain forests**- to conserve, reinforce and recover the functions of our forests, in particular the protection they offer

Over recent years Alpi Marittime Nature Park has taken a guiding role in forest management in its territory:

- ✓ By managing some areas of woodland using modern forestry techniques as 'showcases'.
- ✓ By offering the local councils and the public technical advice on forestry matters to promote more sustainable silviculture methods that are more advantageous for everyone

The rangers' specific tasks are

- ✓ Surveillance and active intervention in case of forest fire
- ✓ Civil protection activities, participating directly on the territory.

Alpi Marittime rangers have taken part in a number of fire-fighting operations both in the Park and around it. All the rangers and technical staff have had specific training in fire-fighting follow up work. They are all trained for helicopter transport in fire areas.

At the time of maximum alert for forest fires, patrols also carry out continual preventative surveillance.

Tourism and leisure activities - to harmonize tourist and leisure activities with ecological and social needs, limiting activities that could be harmful to the environment.

Alpi Marittime is a walkers paradise, it has an extensive network of footpaths, mule tracks, military roads and ancient trade routes "the salt roads" which are architectural gems.

The Park has been working for years to promote a more respectful form of tourism, the aim is to regulate the flow of visitors and walkers in the summer and to safeguard the more sensitive natural wilderness areas. The rangers have always helped in this by:

1. collaborating in the production of tour and hiking guide books;
2. offering advice and information on routes to take and how to behave;
3. taking part in excursions, thematic visits and schools activities on environmental interpretation.

Collection and use of information

All the information that is gathered in the course of these activities would be of little use if it were not archived and organized in such a way as to be usable later.

From the '80's Piedmont Region has encouraged the setting up of a **Natural History Data Bank** for the collection, archiving, standardization and ordering of the flora and fauna data gathered.

Since 2002 this enormous quantity of data has been available for consultation and uploaded via internet, this means that there is an improved level of information sharing among those working on conservation.

Alpi Marittime Nature Park and Mercantour National Park have been twinned since 1987 and work together to manage and conserve an area of over 100,000 hectares that can boast one of the highest levels of biodiversity in Europe.

The two Park authorities have developed and managed common work and research projects for over 20 years. The research protocols are harmonized the data banks and cartography are shared.

The two twinned Parks have been working on the *European Distributed Institute of Taxonomy (EDIT)* project since 2007 to produce a general inventory (ATBI: *All Taxa Biodiversity Inventory*): intense field work over a wide scale to catalogue the whole biodiversity of the two protected areas.

The rangers collaborate daily in data collection field work, with specific work on flora and fauna, all documented on paper or with GPS technology.

Lastly, from December to April the rangers register precipitation, temperature, wind, the amount and condition of the snow on the ground, this information allows Piedmont Region to produce up to the minute weather and avalanche risk reports.

Conclusions

Few professions have this degree of total involvement in so many aspects of environmental conservation.

Few men and women work constantly on a daily basis to further the objectives of the Alpine Convention as rangers do.

Gianni Oppi
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