

Swiss National Park (SNP) Zernez Annual Report 2013

State	Switzerland
Name of the area	Swiss National Park (SNP)
Central authority concerned	Federal Commission of the Swiss National Park Robert Giacometti, President Clüs 150 J CH–7530 Zernez
Authority responsible for its management	Prof. Dr. Heinrich Haller Director of the Swiss National Park Chastè Planta-Wildenberg CH–7530 Zernez Tel. 0041 81 851 41 11 Fax 0041 81 851 41 12 E-Mail: heinrich.haller@nationalpark.ch Internet: www.nationalpark.ch

I. General information

The Swiss National Park (SNP) is a high-altitude mountainous nature reserve, extending over 170 km² at an altitude between 1400 and 3200 m. It is the oldest Central European and Alpine national park and harbours a rich variety of alpine fauna and flora within an intact natural landscape. According to the IUCN the SNP belongs to the exclusive group of strict nature reserves (category Ia). The object of our national park is to permit nature to run its natural course, and to be able to observe its evolution.

1. Natural heritage — State of conservation

1.1. Environment

In the SNP changes are observed over a long period of time and are an inherent part of its existence. They are well documented, but do not give rise to undue concern.

The new "Atlas of the Swiss National Park", which was published in October 2013, provides extensive information about the development of our institution during the first 100 years of its existence. The atlas is available in German and in French. Furthermore it exists in digital

form: <u>www.atlasnationalpark.ch</u>. When consulting this work it can clearly be seen that the continuous strict protection of processes has proved to be successful and offers a unique field for scientific research in both nature and environmental education.

There was only one event that caused concern during the year under review, namely an operational incident at the Engadine Power Company (EKW), just outside the SNP, at the end of March. Following the unforeseen interruption of the provision of compensation water in the river Spöl sludge was discharged downstream, thereby killing thousands of fish as well as microscopic water organisms. The cantonal department of public prosecution is investigating the incident but their conclusions are not yet available. The up till now successful process of revitalisation of the river Spöl (internationally observed) has suffered a setback; however, as the incident only affected the upper reach of the river, we remain optimistic that the aquatic ecosystem will in time regenerate itself.

1.2. Flora and vegetation

Abundant rainfall at the beginning of summer followed by a period of good weather permitted optimum development of the flora, thus providing plenty of food for herbivores as well as delighting numerous visitors to the Park.

1.3. Fauna

As in previous years our employees conducted a census of the three main species of ungulates found in the SNP: red deer *Cervus elaphus*, ibex *Capra ibex*, and chamois *Rupicapra rupicapra*. Based on the figures obtained, it was confirmed that the number of chamois has decreased in the last ten years, whereas the deer population has remained constant. The latter is subjected to a population control, outside the SNP of course, as the animals migrate from the Park in the autumn during the hunting season. The decrease in the number of chamois corresponds to a trend throughout the Alps, although the cause is not known. Ibex numbers have steadily increased in the last three years, so that the population is gradually recovering from its extreme low in 2009. There are also some roe deer *Capreolus capreolus* in the wooded parts of the SNP, but their population is much smaller than those of the other three species of ungulates and it is difficult to ascertain their numbers.

During the year under review there was no evidence of the presence of large predators in the SNP or the surrounding area. Once again two pairs of bearded vultures *Gypaetus barbatus* bred inside the SNP, with one young bird fledging from one of the nests. Meanwhile the reintroduction of the bearded vulture can be considered to be a success. It would seem that nothing stands in the way of further positive development – at least in our region.

As in previous years, there are still 6 pairs of golden eagles *Aquila chrysaetos* in the SNP. In 2013 three broods were successfully raised in the SNP, with four young birds fledging the nest.

2. Cultural heritage and socio-economic context

2.1. Cultural heritage

No changes.

2.2. Socio-economic context

Once more the weak Euro (or strength of the Swiss Franc) had a negative influence on the tourist season in the Engadine. This was noticeable in the decline in visitor numbers to the information centre (see below) and purchases made by visitors.

3. Education and scientific interest

3.1. Visitors – Information policy

We do not yet have the definite results from our census points in the SNP for 2013. Due to the overall decline in tourist frequentation we anticipate visitor numbers falling further to somewhat less than 150,000 people per year (from June to October).

For the reasons stated above, the National Park Centre in Zernez also saw a reduction in visitor numbers. Nevertheless, about 20,000 people visited the exhibition during the current year. The public greatly appreciated the seasonal temporary exhibition, featuring the crow family (Corvidae).

The "Naturama" lecture series and the National Park Open-Air Cinema were the most important public events during the current year. Considerable efforts enabled us to once again hold the National Park Open-Air Cinema without the aid of a main sponsor. Regrettably the weather was not very helpful, resulting in a far less than average number of visitors. Special emphasis was also laid on nature study activities, which gave an opportunity to address the local population in particular.

Elsewhere in the domain of information, the usual yearly programme of activities was carried out. Worth mentioning are two new editions of the SNP magazine "Cratschla". The SNP management received special visits from various European countries and the rest of the world.

3.2. Scientific research

Scientific research has played a central role in the SNP from the outset, and numerous national scientific institutions take part in this work. The scientific questions posed are mainly aimed at understanding the development of an ecosystem in the presence of dense ungulate populations.

The most important projects, most of which are long-term programmes, are listed below:

- Mechanisms and processes in the dynamics between forest and open land in the presence of large numbers of herbivores
- Qualification and quantification of browsing effects by ungulates on part of the SNP and the surroundings
- Regular census of number and distribution of red deer, ibex and chamois
- Population ecology of ungulates
- Invertebrates: inventories of several taxa
- Monitoring the ecology in the Spöl river, which is influenced by hydroelectric utilization
- Monitoring the water ecology in the Macun lakes
- Spatial evaluation of the landscape change in the last 100 years
- Change detection on landscape level with aerial photographs
- Visitor census and interviews

In the domains of research and communication the SNP is actively involved in various internationally orientated projects.

Scientific publications: Please see the SNP 2012 annual report. Recent publications are listed on pages 89–91.

4. *Site description*

4.1. Changes in legislation or regulations

No changes.

4.2. Changes in ownership title

No changes.

4.3. Extension or transfer, new uses

The recognition of the Val Müstair National Park Biosphere Reserve by UNESCO in 2010 was, as is well known, linked to the condition that by 2013 the core zone (i.e. SNP) must be completely surrounded by a buffer zone. Negotiations with the municipalities concerned have been difficult insomuch as restrictions imposed by higher authority are generally regarded with criticism. Nevertheless the regional organisation Pro Engiadina Bassa has assumed responsibility for the buffer zone, and a solution could be found on the basis of the "Nature-Landscape-Tourism structural plan". Elaboration of this plan is time consuming, as it has to run alongside the political negotiations, which has meant that the deadline given by UNESCO for the fulfilment of its conditions has had to be extended. On completion of this process the population of each municipality will vote whether or not they want to be a part of the Biosphere Reserve. For this reason the eventual outcome cannot be forecast at present.

5.1. Improvements made

In the SNP nature is left entirely to itself. This strict protection of natural development forbids any form of human intervention. Maintenance work was carried out, where necessary, on the existing installations provided for visitors and researchers.

One of the main problems of the SNP is the Pass dal Fuorn (Ofenpass) road, which cuts through the park. At weekends in summer and autumn traffic is intense, which does not fit in with the overall picture of the national park at all, and which also raises questions regarding security. Additional road signs have been installed, and more stringent traffic controls have been carried out. This has led to a slight reduction in traffic speed but does not resolve the basic problem, which cannot reasonably be eliminated for geographical, social and political reasons. Nevertheless, with regard to the problem of traffic congestion in the vicinity of the Munt la Schera tunnel (access to Livigno), measures introduced by the municipality of Livigno to regulate the winter-flow of tourists will hopefully bring about a long-term solution.

5.2. Management

Introduced in 2012, the SNP's new administrative structure, which comprises three departments and central services, was finalized during the year under review. This has proved to be a successful move, with a noticeable improvement in internal communication and collaboration within the team.

As in previous years, the number of infringements of National Park regulations was minimal. Our close collaboration with the neighbouring Stelvio National Park continues. In addition those responsible in the SNP are involved in the Swiss Parks Network and the Alpine Network of Protected Areas.

II. Influence of the award of the European Diploma of Protected Areas

It is an honour for the SNP to be awarded the European Diploma. This diploma symbolises our reputation and we are proud of it. Concerning quantitative effects, the influence of the award is unknown.

III. Conditions and/or Recommendations for Award or Renewal

We are delighted that the European Diploma has been awarded to the SNP until 2022. We shall do all that is within our means to ensure that the quality of our institution is maintained and guaranteed in the years ahead.

By 2014, when the SNP will be celebrating its 100-year jubilee, it should be in excellent shape in all respects. With the inauguration of the new National Park Centre and the expansion and revision of the Biosphere Reserve designation, two main projects have already been implemented. The publication of the "Atlas of the Swiss National Park" (see above, page 1) is a significant event. Furthermore the jubilee year will give us the opportunity to intensify public relations and further develop the work of our institution. Besides the main celebrations taking place in Zernez on 1st August, plans include an open-air spectacle with performances throughout the summer, a touring exhibition throughout Switzerland, a jubilee exhibition, TV coverage and various publications. An organisation committee is responsible for overseeing and implementing all jubilee year projects. Their most important task has been to raise the necessary funds to cover the budget of 3 Mio. CHF; in the meantime this goal has been attained.

CH-7530 Zernez, November 12th, 2013; Prof. Dr. Heinrich Haller, Director