

ANNUAL REPORT 2021

Siebengebirge/ Germany Nature Reserve

Name of the area: Siebengebirge Nature Reserve

Year and number of years since the award or renewal of the European Diploma of Protected Areas

Award 2021 **1 year** (until 2024)

Certifications/ **Nature Reserve Area**

Designations **FHH-Area**

European Diploma of Protected Areas

National Geotope

Date of delivery **DEC 6, 2021**

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1. To draw up a management plan within three years in order to guarantee the preservation of the reserve and its cohesion within the larger area of the nature park.

As mentioned before, this condition was fulfilled in 2015. Meanwhile a great number of projects have been realized in cooperation of the Large Scale Conservation Project Chance7, the Biological Stations Rhein-Sieg and Bonn, the Regional Forest Authority Rhein-Sieg-Erft NRW and the VVS. Since our 2020 report this has included

- establishment of sheep grazing with long term game permeable fences in the Weilberg; Wolkenburg and Stingenberg areas,
- removal of brushwood, especially blackberry bushes, in former vineyards, lying fallow for many years, this in connection with building dry stone walls as habitat for thermophile animals and plants. Fundamentally, a dry stone wall is a structure that can flex and move, and therefore needs minimal foundation. It also allows water to pass through it with ease, whereas a mortared wall will trap moisture, often leading to failure when the water freezes,
- Building of a Motorway A3- crossing in Logebach Valley and wild cat mapping (combination of attractant bars and photo traps/ hair samples for analysis) to find out to what extent this crossing is actually used,
- preservation, expansion and new planting of meadow orchards, especially near Löwenburg, Petersberg and Burghof,
- networking of habitats in connection with land acquisition Ob3erdollendorf and Schnitzenbusch,
- habitat optimization (2 dry stone walls = 67 meters)) for wall lizard and its resettlement on Korfer Berg/Rhöndorf. Stone walls here also with their function as step stone biotopes,
- visitor channelling measures at Stenzelberg,
- continuation of bracken control to avoid the development of a dominant monoculture- and the reduction of diversity of species in an area, as the fronds block light and rainfall and through bracken litter prevent other species from establishing,
- **intensive afforestation measures (Cf. point 5: Other information).**

2. Recommendations

2.1 In case of changes in the management of the area, the leading role of the VVS (Verschönerungsverein für das Siebengebirge), whose work to date has been fully satisfactory in the eyes of the Council of Europe, should be maintained;

Realized

No changes

2.2 develop a new financial plan together with local communities and the Rhein-Sieg-District.

A first successful step has been taken (cf. Annual Report 2020)

Yet, so far, this covers only personell expenditures.

No changes

2.3 continue the provision of financial support by the North Rhine Westphalia government

No changes

Financial support for the just unexpectedly stated Drachenfels steel anchors – now on the backside of the ruin - has been guaranteed by the District Government (Bezirksregierung) Cologne.

2.4 maintain great vigilance regarding the possible construction of new roads.

New roads have not been built. They are not planned either.

Yet the VVS has created an above-the-line item “financial reserves for road surfacing” for the two private VVS roads to Drachenfels and Löwenburg (fire and rescue service access).

2.5 minimise disturbance caused by traffic on all roads crossing the Siebengebirge area and consider the setting up of a system of public transport for visitors;

This year's corona pandemic has considerably more people driven into the reserve. Since 2020 we counted 50 % more cars on the Margarethenhöhe parking lots than before (2019 ca. 60.000).

In November 2021 the Königswinter city council has obliged itself committed to achieve climate neutrality in the city until 2035. To realize this aim, bicycle, foot traffic and public transportation shall be given priority.

This requires an enormous feat of cooperation between transportation companies and their communal and regional carriers. To push this enormous effort the VVS has introduced a motion in the nature park assembly to develop new plans for visitors arriving/departing via the Rhine link.

2.6 continue investigating the possibility of extending the wilderness area so as to guarantee the preservation of the natural beauty, features, resources and biodiversity of the Siebengebirge as a protected area;

In 2010, when the VVS established its private “wildernis area”, it had a size of 523 ha. Meanwhile the NRW Forest Authorities have added another 208 ha, the NRW Foundation 93 ha, so that now it covers 824 ha.

With the exception of necessary traffic safety measures there are no forestry activities on these areas. Dead spruce trees as a consequence of the bark beetle misery are not removed and are left to the biological degradation process.

Within one decade only, in some parts we recognize the development of a landscape with a mosaic of ecosystems that function with as little influence from human beings as any around. In spite of – in general – people's growing disconnection from nature, we have realized a strong desire of Siebengebirge visitors to enjoy and experience wildernis. That is why we consider it our task to develop public awareness of the qualities of these areas.

A result of these considerations is a walking guidebook “Hiking trails to wildernis” that the VVS published on Oct.29, 2021, (170 p) Five different hiking trails and –paths – 35 km altogether – guide visitors through the wildernis area in the heart of the Natura2000 Siebengebirge area. In 65 “wildernis windows” on wooden posts along the five routes natural phenomena and developments are vividly explained. An extensive glossary with typical wildlife species complete the richly illustrated guide.

Via QR-code (on the signposts) visitors have access to the website of the VVS and can download the “Hiking trails to wildernis”

2.7 encourage the continuation and extension of scientific research => vgl. 8

Situated close to the universities of Bonn, Cologne and Aachen, the Siebengebirge has been and is the object of quite a lot of dissertations, bachelor's – master's theses and scientific journal articles, this even in international journals. At the moment the focus seems to be on geological topics. Examples are e.g.

- a master's thesis to the volcanic pillars of the Oelberg basalt quarry as an architectural principle (RWTH Aachen)
- an article from the International Journal of Earth Sciences 107, p.1465-1484
High-resolution 40AR/39AR geochronology of volcanic rocks from the Siebengebirge (Central Germany)-Implications for eruption timescales and petrogenic evolution of intraplate volcanic fields.
- Montanhistorische und Geotechnische Untersuchungen/ Geophysikalische Erfassung im Gebiet des Ofenkaulbergs/ Siebengebirge: In: Der Ofenkaulberg Petersberg, 2020, S. 259 – 277. Mit Ausstellung im Siebengebirgsmuseum Königswinter.
- Sven von Loga: Wie alt ist das Siebengebirge eigentlich? Das Siebengebirge 1/2021, p. 25-28
- There is an interdisciplinary research team (led by the Biological station Rhein-Sieg) that works on "landscape change in the Siebengebirge". Up to 1850 every vineyard had its own small grove. Here beeches were chipped at a height of ca. 90 cm. At this height 8-10 offshoots developed that after 3-4 years could be "harvested" and used as vine poles. These poles were not yet impregnated, rotted and had to be replaced after 3 years. The team meticulously researches on this phenomenon and – in connection with a vineyard - has started to rear such a "ram-bush" beech, of which we still have some ca. 150 year old specimens.

3. Site Management:

No changes

4. Boundaries:

No changes

5. Other information

• Spruce death and reforestation

As mentioned in our 2020 Annual Report, parts of the Siebengebirge forest, especially in the south of the reserve (Bad Honnef), after two unusually hot summers, global warming and broad bark beetle attacks were heavily damaged, as trees in water-starved habitats had lost their natural defences. Above all it was the spruce tree that fell victim to the beetle, so that –with the exception of the wildernis area - spruce stocks had to be felled.

But also beech trees have suffered from drought stress. Quite a lot of beech trees show crown defoliation/thinning that is easy to spot during drone flights. Research suggests it is the beech rather than the oak we should fear for in the future. Beech trees have shallower roots, while oaks reach moisture deeper in the soil and continue to grow.

Meanwhile a large-scale reforestation has started all over the Siebengebirge – and, that is worth mentioning: - with broadest public support – of hundreds of private volunteers, small and big business (DHL), NGOs, public authorities and clubs. Its aim is to achieve a mixed, drought-resistant and species-rich deciduous forest. In Bad Honnef

we count 90.000, in Königswinter (VVS) 10.000, in Bonn-Ennert 10.000 newly planted trees. (cf. Annual Report 2020 No 5.1).

We think this extraordinary volunteer commitment of so many people is a sign of people's final realization that our forests fulfil a whole range of socially beneficial functions vital to human life

- **Number of rangers**

In the analysis of the 2020 annual reports from February 24, 2021 the Group of Specialists urgently recommended the increase in the number of rangers in the near future. In this respect we are able to report a success.

On the background of "masses" of corona-caused visitors the Rhein-Sieg-Kreis as member of the Nature Park Assembly has fulfilled the VVS-request to increase the number of rangers. Thus now we have got 4 instead of only 2 rangers with sovereign rights who can effectively support our 9 honorary wardens.

- **Public relations work**

In spite of the extensive corona restrictions – lasting for several months - of excursions, presentations, lectures, exhibitions, concerts, festivities etc., especially referring to the 150 year jubilee of the VVS, the reserve was able to present an attractive and many-sided program by the different players of the reserve, as e.g.

- a Sunday market of regional products
- Siebengebirge Presentation day round the forester's house
- a several day-wildernis camp for juveniles
- a several day youth camp on Flora and fauna of the SG
- an exhibition to the volcanic Ofenkaul-Mountain
- exhibitions "Windows to the SG" and "Wildernis area SG"
- a Federal Army Forces Music Corps concert on Petersberg
- opening of 35 km wildernis trails
- establishment of 2 nature discovery trails off the beaten tracks (decentralization)
- a Meadow orchard project for schools
- publication of 2 "Siebengebirge" magazines
- a bulk of botanical, geological and historical excursions

- **No end to Drachenfels rockfalls**

There is no end to the renewal of the 80 Drachenfels steel able anchors that hold the mountain top with its ruin together. After in 2019 several anchors had to be repaired (costs 3.5 million €), now close inspections of the Geological Service NRW have shown that in spring 2021 new anchors must be installed on the back side of the mountain. Costs and duration of these repair works are not yet predictable, but will probably also go into millions.

- **Wolves on the rise**

Wolves were hunted to extinction in Germany some 140 years ago. So livestock had not required special protection. But that has changed as wolves have been returning to Germany from neighbouring Poland for the past 30 years to search for new territory. Most live in Eastern Germany (Brandenburg, Saxony, Saxony-Anhalt and Lower Saxony), but meanwhile they have also returned to North Rhine-Westphalia, Hesse and Palatinate, that means in the immediate vicinity of the reserve, where animals are kept on open pastures (e.g. 3 flocks of sheep of the Biological Station Rhein-Sieg)

Although the exact number of wolves in Germany is not known, authorities estimate that there are 1.300 – 1.800 individual animals roaming free. According to Agriculture Minister, Mrs. Klöckner, the number of sheep, goats and cattle killed or injured by wolves in Germany has grown to 2.900 in 2019. Most attacks occurred where wolves were looking for new territory and farmers had not yet installed appropriate protective measures.

Given their status as an endangered species, wolves are protected under EU conservation laws. The momentary practice in NRW is that the state government establishes a so-called “wolf area” of nearly 1000 square kilometers after authorities found evidence of a wolf within the area. If an area is formally recognized as “wolf area”, shepherds and farmers can apply for assistance to protect livestock. Thus the trend is to “protect sheep, goats and cattle in areas where wolves live.” The problem for farmers is that technically an area can only be designated as “wolf area”, when a wolf has been in residence for at least six months to be considered settled.

We think in the near future the grey wolf will generate more controversy, confusion or emotional extremes than any other animal.

Verschönerungsverein für das Siebengebirge VVS

Königswinter, December 6, 2021