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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Standing Committee

43rd meeting
Strasbourg, 27 November - 1 December 2023

**REPORT
OF THE VISIT OF THE INDEPENDENT EXPERT
TO THE HAUTES-FAGNES NATURE RESERVE
(Belgium)**

12-13 October 2022

*Document prepared by
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1. Introduction

The European Diploma for Protected Areas was awarded to the Hautes-Fagnes Nature Reserve in 1966 and renewed in 1981, 1986, 1991, 1996, 2001, 2006, 2011. The last renewal should expire on 28th March 2021, but the validity of the Diploma was extended¹, on an exceptional basis (Covid-19), till 28th March 2024. To assess the opportunity to renew the Diploma an on-the-spot appraisal visit was undertaken in 2022.

The appraisal was organised through an on-line preparatory meeting and field visits.

23rd August 2022: online preparatory meeting: René Dahmen (Head of the Forest Office at Elsenborn in charge of the German speaking part of the Hautes-Fagnes Nature Reserve), Philippe Frankard (SPW DEMNA - Service public de Wallonie, Département de l'Étude du milieu naturel et Agricole), Johann Delcourt (University Liège, Station Scientifique des Hautes-Fagnes), Marc Hory (Council of Europe), Peter Skoberne (expert).

12th October 2022:

Meetings:

University Liège, Station Scientifique des Hautes-Fagnes (Mont Rigi): René Dahmen, Philippe Frankard (Research Centre at DEMNA, presentation on restoration projects), Johann Delcourt (Research Assistant of University of Liège and Director of the Research Centre in Mont-Rigi, presentation on the black grouse project), Emmanuelle Bousson (Official responsible for management plans in state and community forests and for Protected areas), Stephan Benker (Engineer in charge of NATURA 2000 in the Malmedy Directorate) and Julie Lebeau (Official of the central administration, Department of Nature Conservation, responsible for the Bern Convention). It was very positive that the Bern Convention focal point was present during part of the mission.

Field visit:

Imgenbraicher Venn, Brackvenn, Königliches Torfmoor; accompanied by: René Dahmen, Philippe Frankard, Friedrich von Frühbuss, Samuel Ernst, Frank Dandrifosse.

¹ Resolution CM/ResDip(2021)3 on the extension of the European Diploma for Protected Areas awarded to the Hautes Fagnes Nature Reserve (Belgium), Ekenäs Archipelago National Park (Tammisaari) (Finland), Seitsemien National Park (Finland), Camargue National Reserve (France), Vanoise National Park (France), Bayerischer Wald National Park (Germany), Siebengebirge Nature Reserve (Germany), Gran Paradiso National Park (Italy), Piatra Craiului National Park (Romania), Kuşçenneti National Park (Turkey) and Peak District National Park (United Kingdom) - https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=090001680a3156d

13th October 2022**Field visit:**

Rurhof, Fagne Wallone, Baraque Michel, Drosart, north edge of the Noir Flohay; accompanied by: René Dahmen, Oliver Schott (Scientific Officer from the research department of the ministry DEMNA, responsible for NATURA 2000 mapping, Odonata specialist), Pascal Ghiette (Scientific Officer from the research department of the ministry DEMNA, specialist for Birds and Mammals), Yves Pieper (Head of the Forest Office at Verviers, responsible for Nature Reserve Rond-buisson) and Philippe Frankard.

The President of the Advisory Management Commission, Jean FAGOT, apologised for absence because of being Covid positive.

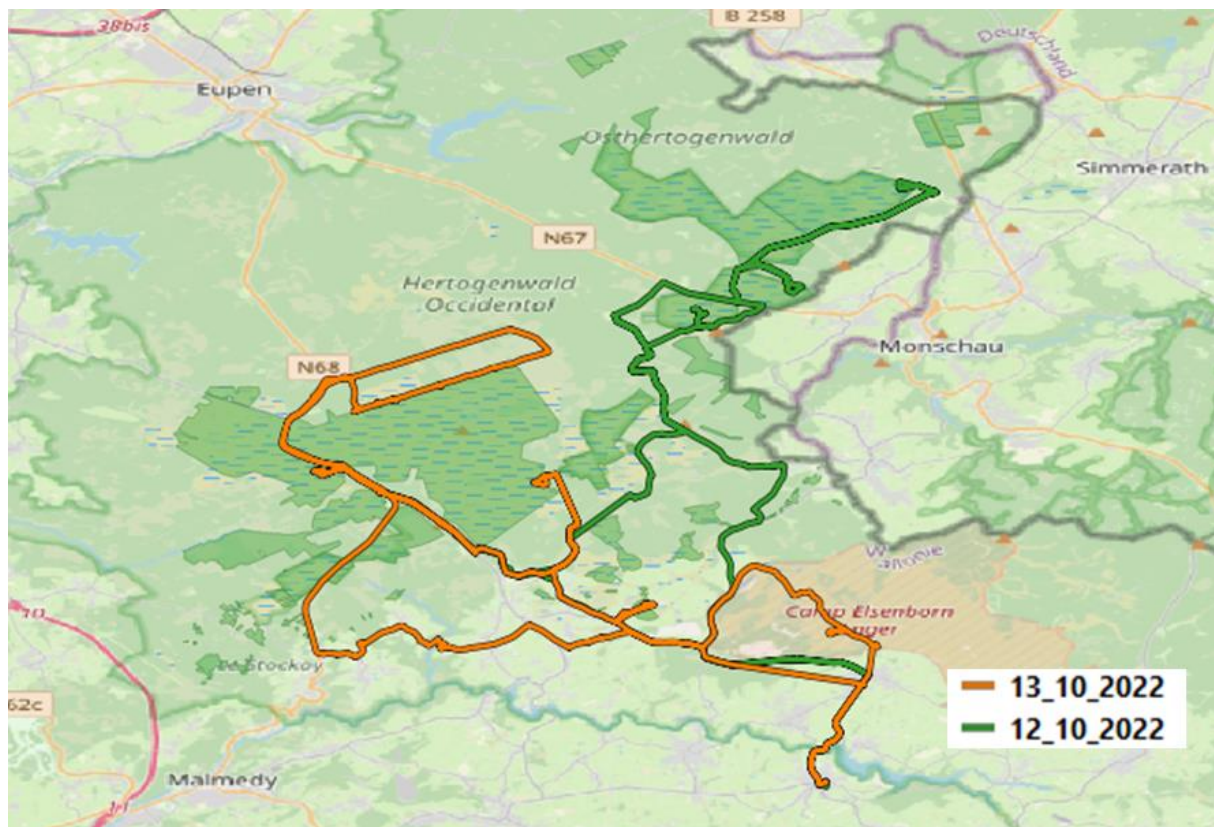


Figure 1: Track of the field visits.

The 2021 annual report² and following documents were considered:

- *Application file*, Council of Europe, 1965, document EXP/Nat/WP2/P(65)²³
- *European Diploma* (Hautes-Fagnes Nature Reserve (Belgium), the Camargue Nature Reserve (France) and the Peak District National Park (United Kingdom)), Council of Europe, 1966, document Res(66)22⁴
- Molenaar, J. G. de, 2001: *Expert report on renewal of the European Diploma of Protected Areas awarded to the Hautes-Fagnes Nature Reserve (Belgium)*, Council of Europe, document PE-S-DE (2001) 03⁵.

Acknowledgement:

I would like to thank the organisers of the visit, in particular Mr René Dahmen and his team, as well as to all I met for the helpful, competent, enthusiastic and very open assistance during my assessment mission.

² <https://rm.coe.int/01-belgique-hautes-fagnes/1680a54894>

³ <https://rm.coe.int/sous-groupe-sur-l-octroi-d-un-diplome-europeen-objets-proposes-pour-/16806bb95d>

⁴ https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=09000016804f3ebe

⁵ <https://rm.coe.int/de03-2001-hautesfagnes-renewalreport-2001/1680a7b6c6>

2. General description

The Hautes-Fagnes are situated on the East part of the Ardennes at the Belgium German border. The plateau reaches the highest point in Belgium and Benelux (Signal de Botrange, 694 m). The main part of the crystalline plateau is covered by fens, bogs and heaths, surrounded mostly by spruce monocultures, planted on drained wetlands. Here is the largest peatland complex in Belgium which includes around 125 hectares of active raised sphagnum bogs of great ecological interest. The diverse peat habitats host particularly rare species of flora and fauna.

The qualifying habitat types from Annex I of the Habitats Directive:

- Active raised bogs (7110*)
- Degraded raised bogs still capable of natural regeneration (7120)
- Transition mires and quaking bogs (7140)
- Acidic fens
- Wet heaths (4010)
- Dry heaths (4030)
- Juniperus communis formations on heaths (5130)
- Bog woodland (91D0*)
- Old acidophilous oak woods with *Quercus robur* (9190)
- Natural dystrophic lakes and ponds (3160)
- Species-rich *Nardus* grassland (6230*)
- Mountain hay meadows (6520)

The site is the last refuge for the black grouse (*Tetrao tetrix*) in Belgium and plays an important role in the conservation of protected species of insects (dragon-flies, butterflies) and birds; a significant number of threatened birds use the site for nesting (including the northern shrike - *Lanius excubitor* and the ring ouzel - *Turdus torquatus*) or as a wintering ground during migration (including the common crane *Grus grus* and the Western marsh harrier *Circus aeruginosus*). The surface area of the reserve is 5.371 ha. The Reserve is on state owned land, a patchwork, splitted in several areas.

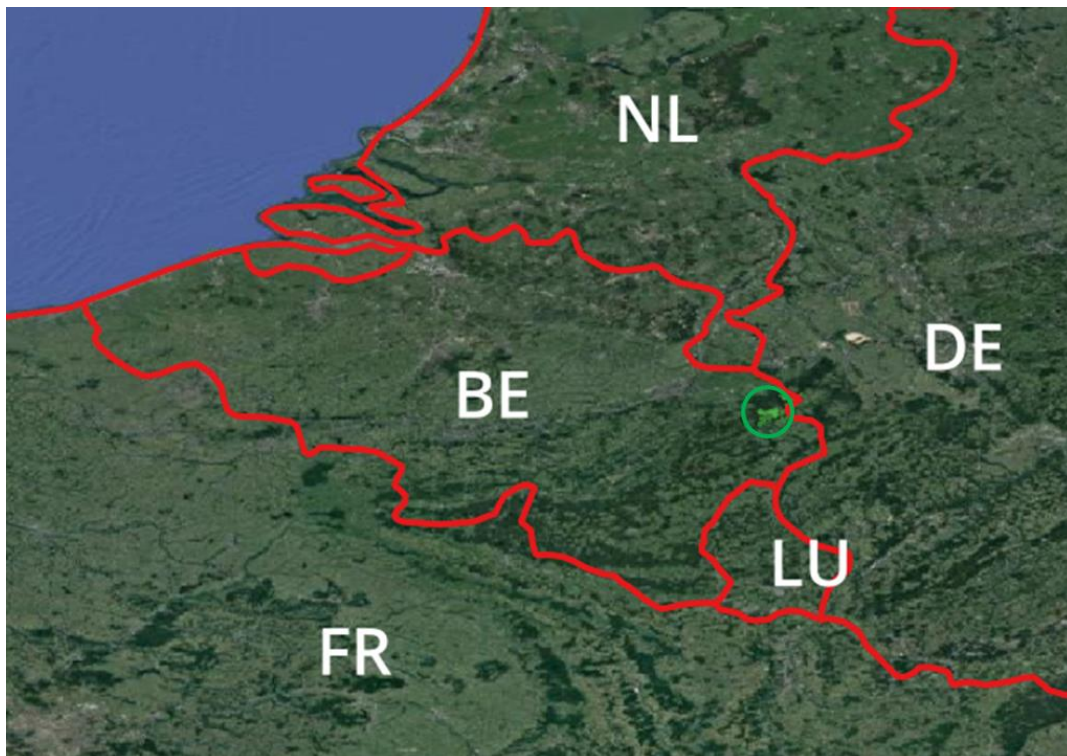


Figure 2: General situation of the Hautes-Fagnes National Reserve.

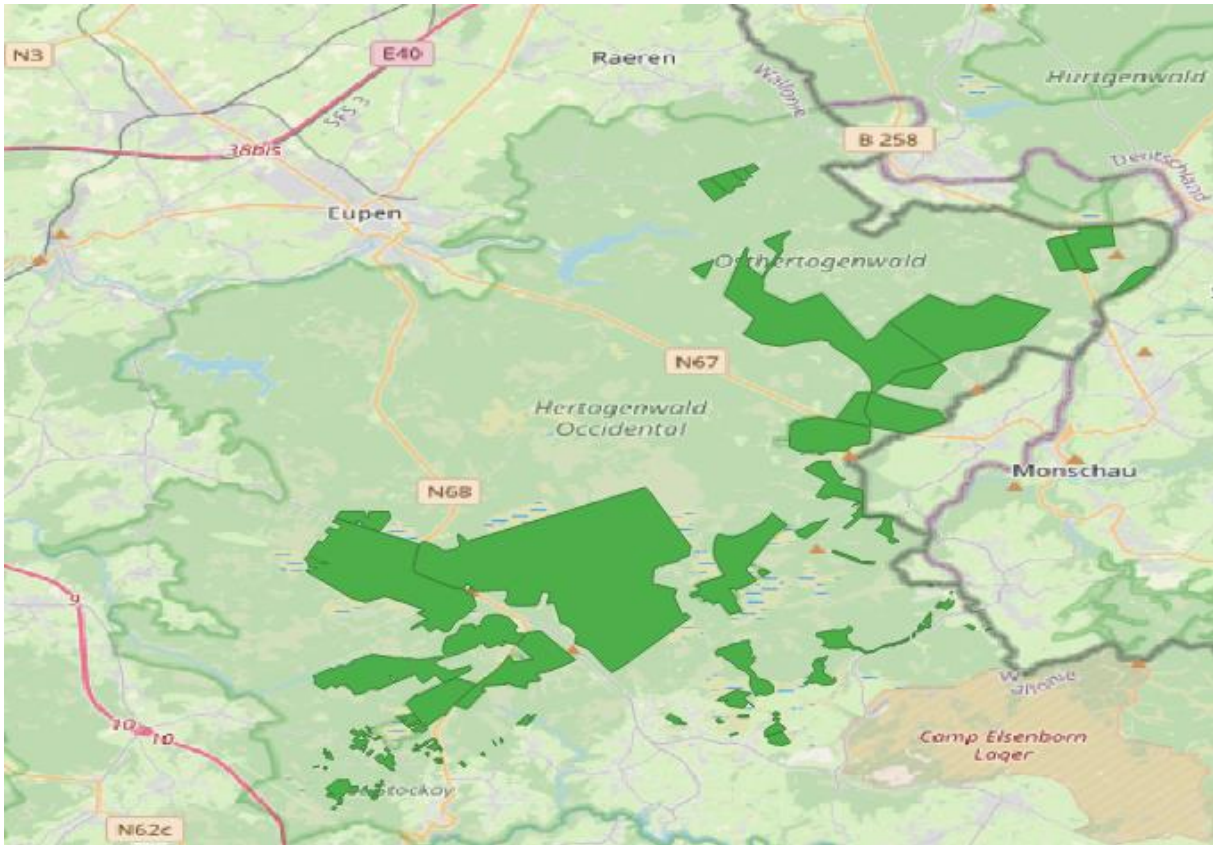


Figure 3: Situation of the Hautes-Fagnes Nature Reserve at the Hertogenwald (Eastern high plateau of the Ardennes) – Source: HFNR.



Figure 4: Arctic starflower (*Trientalis europaea*) is the symbol of the National Reserve.

3. European interest

The outstanding European value of the Hautes-Fagnes area are fens, bogs and heaths on the top of the eastern part of the Ardennes. In the past peat bogs were gradually irrigated, peat extracted and spruce planted. Only central areas of the 3 largest peat complexes remained relatively natural. Since the area has been protected in 1957 the process has been completely reversed. Spruce forests have gradually been eliminated and wetland conditions restored to allow natural processes towards different heath and wetland habitat types.

There are six Natura 2000 sites overlapping with the Nature Reserve (the largest: SPA and SAC Plateau des Hautes-Fagnes - BE33035C0), managed by the Ministry for Nature Conservation and Forests.

International importance is additionally proved by:

- UNESCO – listed on World Heritage Tentative list since 2003⁶;
- Ramsar Convention: the Hautes-Fagnes Nature Reserve are listed on the Ramsar list of wetlands of international importance since 2003⁷.

Conclusion:

The Hautes-Fagnes Nature Reserve is of exceptional European significance and importance for the conservation of biological diversity because of a well-managed wetland complex (maintaining and restoring fens and active peat bogs) in this part of Europe. Additional important highlight is that it is a relatively wild natural area embraced by very densely populated areas in Netherlands, Luxemburg, Germany and Belgium – an island of nature surrounded by highly urbanised areas.

4. Legal protection status

The Haute-Fagnes area was protected in 1957 and is one of the earliest protected areas in Belgium. The nature reserve statute is the highest protection status in Belgium. The area was several times enlarged, according to enlargement of the state property (2009, 2013, 2018). In 2000 the area of the reserve was about 4500 ha and in 2021 5371 ha. The next enlargement is planned in 2023 (about 843 ha). The result of this approach is a patchy structure of the reserve with a long-term strategy of gradual enlargement.

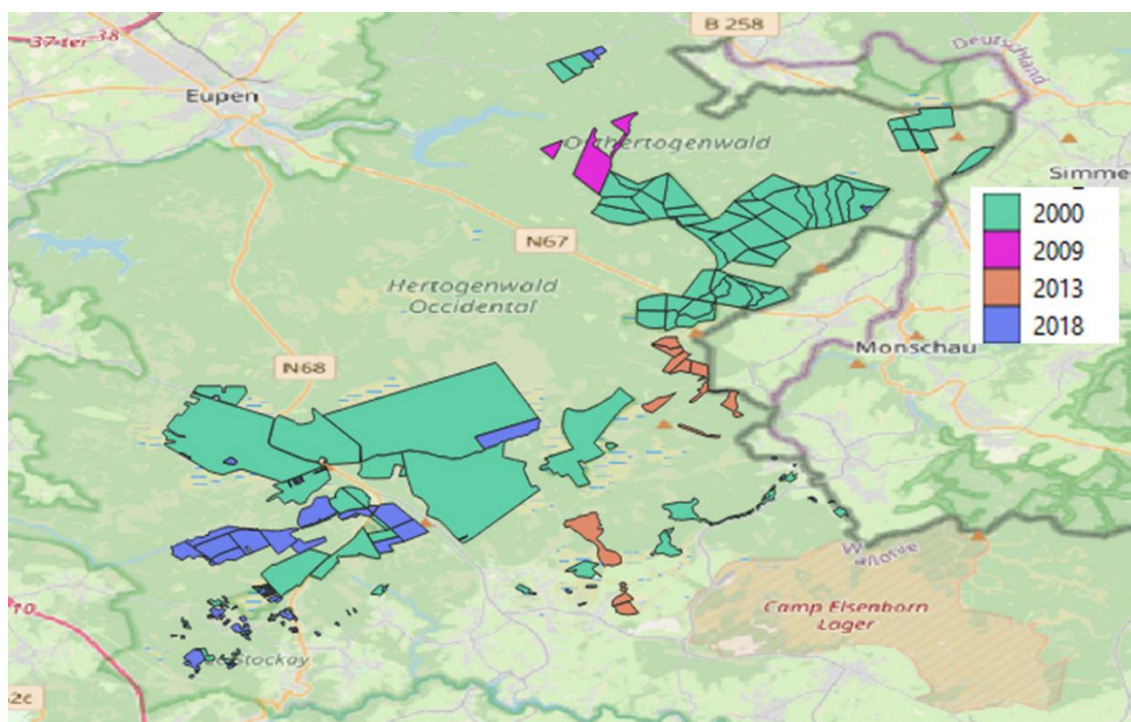


Figure 5: Gradual enlargement of Hautes- Fagnes Reserve (Source: HFNR).

⁶ <https://whc.unesco.org/en/tentativelists/5358/>

⁷ https://rsis.ramsar.org/RISapp/files/RISrep/BE1405RIS_1508_en.pdf

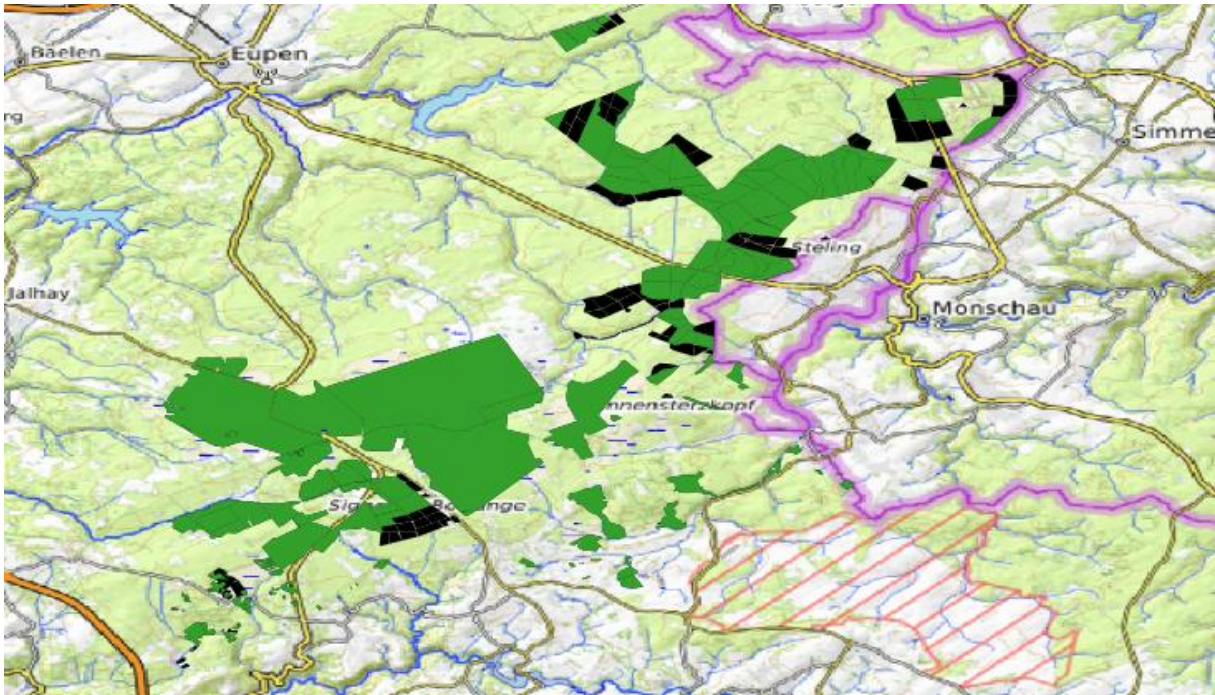


Figure 6: Enlargement of Hautes- Fagnes Reserve forseen in 2023 (Source: HFNR).

In 1971 a transboundary agreement between the Parc Naturel Hautes-Fagnes (Belgium) and the Nord-Eifel Nature Park (Germany) was concluded to establish the current Hautes-Fagnes-Eifel Nature Park. The main objective of this area is tourism management and has practically no measures and role regarding nature conservation.

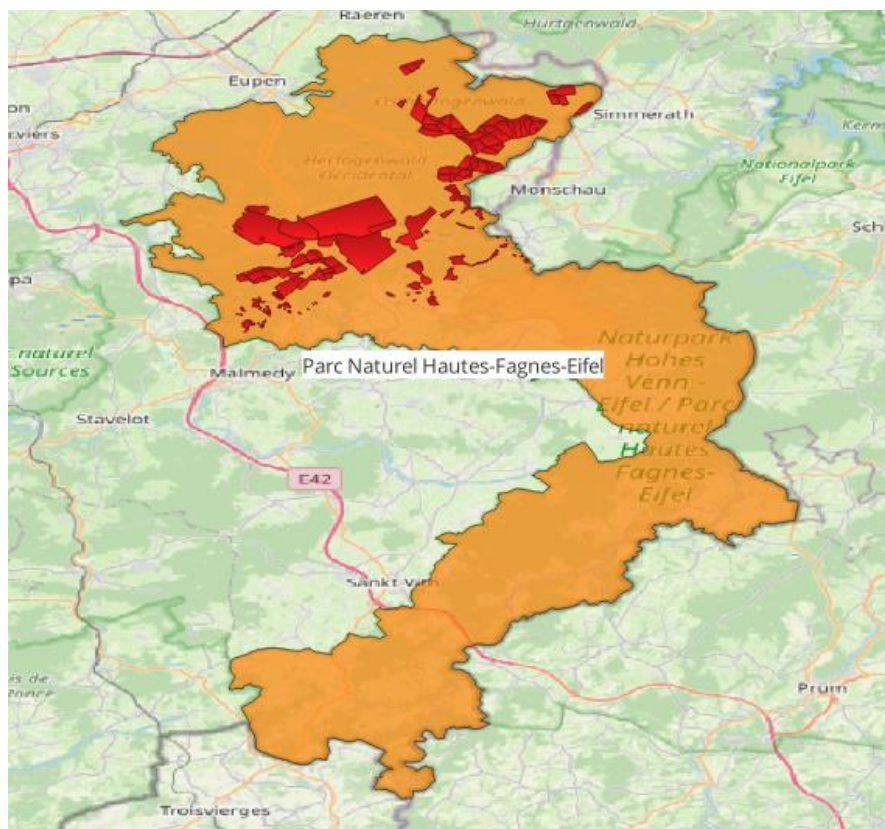


Figure 7: Parc Naturel Hautes-Fagnes-Eifel (only Belgian part) and HFNR (Source: HFNR and CDDA).

Regarding international designations (apart of the European Diploma) the Hautes-Fagnes are on the UNESCO World Heritage tentative list and on the Ramsar List of wetlands of international importance (2003). The area includes most of the areas with nature reserve status to a logical unit. It seems that there is no management foreseen for the Ramsar site as the competences of the state are not linked to the regional and local level. There is no active cooperation between federal authorities and the reserve management administration.

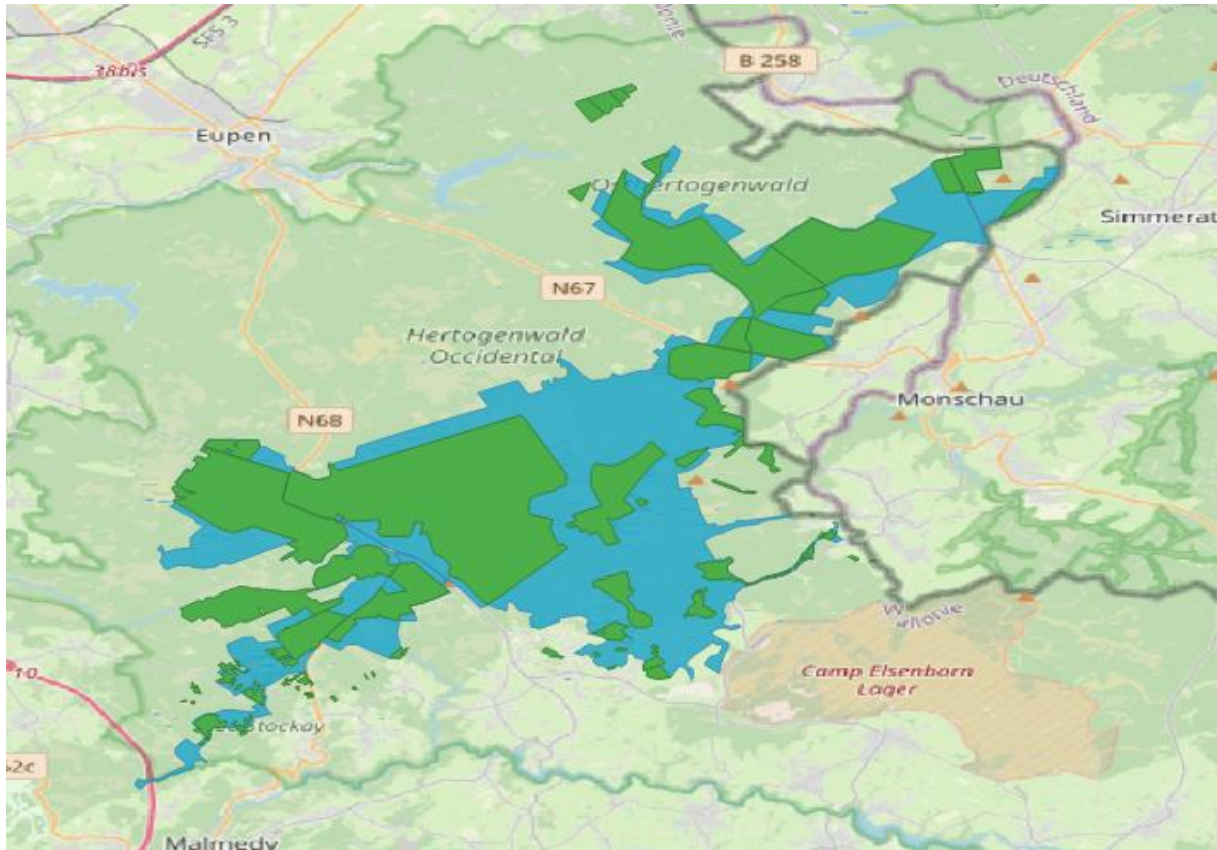


Figure 8: Situation of the Hautes-Fagnes Nature Reserve and Ramsar site (Source: HFNR and WDPA).

Conclusion:

The existing protection status is considered as a solid basis for the future conservation of the Diploma holding area and should remain as such even if the general protection frame would change (e. g. establishment of a National Park).

5. Management

Institutional arrangements

At national level, the Ministry of the Wallonia Region is the competent authority for the administration and management of the reserve. Since a reorganisation in 1998 on regional level there is only one body: Direction de Malmédy de la Division de la Nature et des Forêts. Operational offices are on local level in three cantons: Malmédy (fagnes of the Baraque Michel complex in the French speaking part), Elsenborn (covering fagnes of the northeast and smaller fagnes in the south in the German speaking part), and Eupen (small fagne near Eupen).

There is good cooperation within all three cantonal offices, they are adequately equipped and finances are stable for regular work. Specific tasks are outsourced, whereas scientific support is covered by a team of biologists at the Centre Scientifique de la Région Wallonne, based at the Station Scientifique des Hautes-Fagnes of the Liège University.

The expansion of the restoration process means more involvement in project management and consequently in the maintenance of restored areas. Therefore, a demand for more human and financial capacities can be reasonably expected in the future.

It should also be noted that two official languages are used in the area, so all documents have to be bilingual. This requires additional financial and human resources as well as delays procedures.

Strategic documents and the Management Plan

The first management plans were operational in 1987-88. The main goal was to stop degradation of wetland areas and start the restoration activities. Despite there were no elaborated annual working plans, the management in practice worked very well and the results in enlarging the reserve area and restoration were evident.

As national obligations regarding Natura 2000 management were high in the agenda and considering that the Hautes-Fagnes Nature Reserve is completely covered by this network, good scientific data were crucial for planning management decisions. Targeted habitat type mapping in the field was completed by the end of 2021 and digitalised in spring 2022. Waiting for these essential results caused delay in the preparation of management plans, but did not influence the already planned restoration works.

There are 24 management plans foreseen to cover the whole area of the reserve, including areas proposed for the enlargement of the HFNR in 2023. In early 2023 it is foreseen that a detailed working plan will be agreed on.

Two management plans have already been finalised and approved (Cléfaye: 226 ha; Fagne Wallonne: 627 ha), while other plans are still in the elaboration process. As the structure of the management plans and the adoption procedure are well established, it is likely that management plans for other areas will be successively adopted in following years.

Management plans are mostly dealing with restoration and maintaining restored areas, thus highly dependent on results of monitoring results, outcomes of different projects and own experience.

Each plan has a detailed geographical, ecological and legal description, followed by a strategic plan at general level, as well as for the particular unit of the reserve. It includes budgetary provisions and an operational plan.

For the next period it might be useful to consider whether it makes sense to cluster some areas with similar ecological conditions and reduce the number of management plans and consequently procedures.

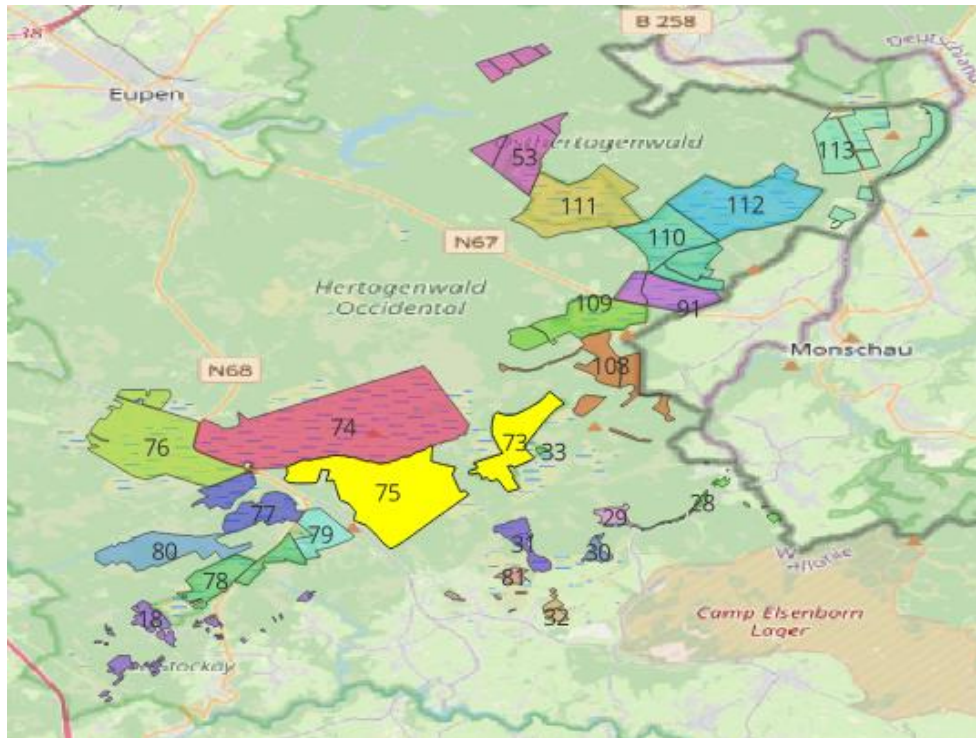


Figure 9: Management units (Source: HFNR).

MU	Name of the managem. unit	Area (ha)
29	Schwarzes venn	36,29
30	Herzogenvenn	26,29
31	Nesselo	71,82
32	Rurhof	28,25
33	Haard	3,43
91	Brackvenn nord	180,00
108	Stellerholz	216,04
109	Brackvenn sud	252,61
110	Allgemeines Venn	341,38
111	Kutenhart	396,56
112	Steinley	436,58
113	Hoscheit	331,42
18	Petites Fagnes de Malmedy	126,23
73	Clefaye – adopted 2015	226,84
74	Fagne des deux séries	1117,53
75	Fagne Wallonne – adopted 2014	631,22
76	Grande Fange	565,85
77	Herbofaye-Polleur	208,13
78	Neur Lowe-Setay	195,39
79	Botrange	114,70
80	Lonlou	219,71
81	Petite Rur	32,03
53	Stuhl-Neuwald	310,78
28	Rur, Littebruch, Breitebach	29,42

Financial matters

Financing is stable, core financing is secured by the regional government based on the law. Additional incomes are provided substantially by different projects. Most restoration work is done by project financing (e. g. LIFE+). A substantial part of the budget is needed for maintaining visitor's infrastructure (13,2 km of wooden trails).

Nature conservation and natural resources management

As the Hautes-Fagnes are a strict reserve there are no economic activities in the area. However, some limited activities are connected with the regular maintaining of the park infrastructure, like trails, bridges, and of course restoration works.

Systematic restoration started through the implementation of management plans (1987-88). The first pilot restoration projects started in 1993 on very small areas, as it was necessary to develop methods and measures of restoration for different habitat types. Mostly scraping of grassland and later flooding areas through damming. For dry heath, experimental sod-cutting was introduced in 1997 and for wet heaths in 2000. As experimental works gave good results, they started restoration on larger scales (series of 6 LIFE projects 2003 – 2018 in Ardennes region, in Hautes-Fagnes 2007 – 2012), using unique methods. They were developed in experimental phase based on the use of mechanisation and skilled operators. The project aimed to restore open habitats on peat soils, to restart the activity of peat-accumulating vegetation, and to improve the connectivity of similar habitats between six Natura 2000 sites on the plateau to enhance species mobility.

Since 1993 they restored 308 ha of peatbogs, 131 ha heaths, 10 ha hay meadows and *Nardus* grasslands and 37 ha of acidic fens. They restored 632 ha of broad-leaves forest with fences, whereas large areas evolved naturally when the spruce forest was removed.

In 2020-2021 more than 20 ha of degraded peatbogs have been restored by flooding using dams (Grande Fange). Restoration of degraded peatbogs by flooding are planned for future (Fagne Devant-Troupas, Fagne des Deux-Séries, Fagne Wallonne).

The PLT Hautes-Fagnes project received the best of the best award for LIFE projects in 2013. The project restored also water regimes to increase water availability, including sod-cutting and the creation of small ponds in several locations. The filling of 178 km of drains ensured wetter conditions on peat bog and wet heath, while 8 km of dams were built to flood 23 ha of degraded peat bogs in order to restart peat-accumulating vegetation⁸.

Results of monitoring are proving visual impression about relatively quick changes towards fen and peat habitat types. Species are following those changes. For instance, number of dragon fly species and their populations are showing increasing trends. Some birds (like cranes) are using areas as resting and feeding areas during migration. European viper (*Vipera berus*) was detected since 2009 in the north-eastern part. The origin is unclear, most probably it was due to a release. Obviously, the habitat is optimal as the viper is spreading in terms of area and numbers.

However, constant surveillance followed by maintenance works where needed, is essential. Most focus is needed on monitoring water regime, natural reforestation and control of invasive species, in particular *Alnus incana* in the eastern part.

Restoration work of the Hautes-Fagnes Nature Reserve is already now contributing to the national efforts in implementing EU nature restoration policy. This will be even more evident when the EU restoration regulation will be adopted (overarching target to restore 20% of EU's land and sea area by 2030 and all ecosystems in need of restoration by 2050!). There is a special focus on peatlands. This opportunity should be taken into consideration for further planning, restoring and fund raising.

⁸https://webgate.ec.europa.eu/life/publicWebsite/index.cfm?fuseaction=search.dspPage&n_proj_id=3114

There is a basic dilemma regarding the approach to the restoration. One possibility is to leave completely to natural processes and only monitor changes. The other option is active restoration towards desired result. This is the case of the Hautes-Fagnes. With the removal of existing secondary vegetation and changes in water regime they create conditions for different types of wetland habitat types that were present before the degradation. Natural processes are in this way accelerated and they can develop in different directions. It is a very good example of a managed nature reserve where practices are closely following monitoring results. In the next steps, monitoring results are shaping further decisions and measures.

Research and monitoring

Research activities are very well covered by the Station Scientifique des Hautes-Fagnes of Liège University, supported by a team of biologists of the Centre Scientifique de la Région Wallonne. It is based at the station and attached to the administration and management of the reserve. They have a great experience and publish articles with scientific impact about wetland restoration research.

A monitoring programme was set-up during the LIFE project and continues as a part of the After-LIFE Conservation Plan: botanical monitoring in 405 permanent quadrants, bird monitoring along nine pathways, dragonfly monitoring on 44 water bodies, and butterfly monitoring. Target bird species, for which the project aimed to raise population numbers, including the black grouse (*Tetrao tetrix*), hazel grouse (*Bonasa bonasia*), European nightjar (*Caprimulgus europaeus*) Northern shrike (*Lanius excubitor*), grey-headed woodpecker (*Picus canus*) and black stork (*Ciconia nigra*)⁹.

Special research is linked to the re-population of the black grouse including systematic monitoring, studies on influences of climate change and predation.

Visitor management and public relations

Visitors of the Hautes-Fagnes Nature Reserve are numerous but very limited on pathways and remain controlled. Hiking in the nature reserve is only allowed on the prepared and marked paths. Some larger footbridges that lead through the high moor are also suitable for wheelchairs. There are many roads and forest tracks in wooded areas of the High Fens suitable for cycling.

There are 3 zones regarding public access:

- zone B: Entering is only allowed on marked paths and if certain rules are obeyed;
- zone C: Entry is only permitted to people accompanied by an accredited nature guide from the Nature and Forest Administration;
- zone D: Public access is strictly forbidden.

In zone B there are well marked trails equipped with park infrastructures (information boards, information points, parking places, footbridges, etc.). Access may also be restricted by the current weather conditions (fire hazard) or other circumstances. In these cases, a red flag is raised at the starting point of the trails.

The administration of the Nature Reserve is responsible for maintaining 13,2 km of wooden trails. Regular maintenance requires a substantial part of the budget which is not sufficient due to the age of the infrastructure. Trails are a very effective way of channelling visitors and preventing them to enter vulnerable areas. There are no serious problems with visitors within the Reserve, as most of the visitors are using trails that are in the vicinity of parking places along the main roads. However, there is a problem of crowds near visitor's centres and along the main roads during weekends and in the high season. After all, Haut-Fagnes Plateau is surrounded by very densely populated areas in Germany, Luxemburg, Netherlands and Belgium.

From 2018 – 2021 there was an INTERREG-Project focused on tourist visit of the Hautes-Fagnes area. The data were collected with different methods, mostly cameras and collecting of GSM signals. For the core zone in 250 days 360.000 visitors were detected by GSM data that spent 1-3 hours (52%) or more than 3 hours (48%). By

⁹https://webgate.ec.europa.eu/life/publicWebsite/index.cfm?fuseaction=search.dspPage&n_proj_id=3114

modelling these data to an annual period, the number of visitors in the core area is as follows: 580.000 visitors (220.000 local, 85.000 Belgian, almost 200.000 German, 8.000 Dutch and 72.000 of other nationalities). There are about 1,1 million visitors to the broader area of Hautes-Fagnes per year!¹⁰

Information centres (e. g. the Natural Park Centre in Botrange, Ternell Centre) and parking facilities are managed by local tourist organisations. They are marketing HFNR assets and highlights for visiting and experiencing the area.

Information on internet is maintained by tourist organisations including information on visitor's regime, possibility to hire guides, etc. Nature Reserve authorities have no web home page.

It is an example of interesting work sharing. The National Park Office is dealing exclusively with nature conservation issues and informing the tourist organisations about natural assets, conditions in the field that is important for visitors (e. g. fire risk, fog, irrelevant times, vulnerable places to visit), whereas tourist organisations are managing tourist flows. They are informing visitors of the National Park rules and limitations, providing guided tours with licensed guides, preparing and selling publications for visitors (books, brochures, maps, applications).

Relations of the Nature Reserve administration at international scale

There are not much international relations, as their work and targets are specific and oriented to the active management of the reserve and international issues are in competence of the state authorities. They cooperate with the neighbouring National Park Eiffel¹¹ in Germany on actual operational level when needed. The management objectives of both protected areas are very different so institutional efforts for twinning are not reasonable.

The Hautes-Fagnes Nature Reserve gained a substantial know-how in restoration of wetlands. Many groups of scientists and practitioners from different countries are visiting this area and restoration teams in order to learn from their experience and get ideas for similar work.

Any living links to the applications to the World Heritage or the Ramsar Convention were not detected during the mission. They could have an impact regarding publicity but hardly no added value to the current management.

Conclusion:

Management is in place and is operational.

6. Review of the condition and recommendations of the Resolution CM/ResDip(2011)9 on the renewal of the European Diploma of Protected Areas awarded to the Hautes Fagnes Nature Reserve (Belgium):

Condition:

finalise, by 2015, the updated management plan for the reserve as a whole and provide the human resources necessary to this end.

The finalisation of the management plans was delayed mostly because of the dependance on the results of habitat types mapping. Another reason was the rather long consultation process with stakeholders. After the adoption of first two management plans it is likely that consultation and adoption processes will be shorter, but still there are 22 plans to adopt and the capacities of the staff are limited. The management plans contain

¹⁰https://www.researchgate.net/publication/351689279_L%27ecoTourisme_en_Ardenne_les_chiffres_cles

¹¹ <https://www.nationalpark-eifel.de/de/>

many measures to maintain the restored areas (in particular open waters and heaths). Thus, adequate human and financial means should be planned.

Because the condition was not fully implemented, I suggest that it remains.

Recommendation 1:

pursue the restoration of the peatland areas using the new techniques developed under the European Union's LIFE programme;

This recommendation was fully implemented and methods even further developed (see chapter on restoration). These methods are the essence of the regular work. However, the restoration process is a permanent management goal of the Hautes-Fagnes Nature Reserve and should be taken into account in the new set of recommendations.

Recommendation 2:

continue to acquire privately owned plots of land inside the reserve and classify those of significant ecological value as publicly owned nature reserves;

During the LIFE project, 137 ha of private properties were purchased and restored. Additionally, 315 ha of state forest was deforested. Both areas were included in the Nature Reserve (extension of 452 ha).

This process continued and currently (2022) it is proposed that the Nature Reserve will be enlarged with additional 841 ha. It is planned to continue this trend with additional areas that have potential for nature conservation. The achievements from the last evaluation are evident. It is a permanent task that should continue.

Recommendation 3:

continue to raise awareness of the nature reserve's European significance among local inhabitants, peripheral municipalities and decision makers;

Hautes-Fagnes Nature Reserve staff is actively involved in the co-operation with local communities. They have regular meetings (forest owners, farmers, school activities). One of the very successful activities are field visits organised for the surrounding municipalities. Many awareness raising events and activities were realised within LIFE projects.

A recent issue where HFNR staff was proactive was communication regarding the occurrence of the wolf since 2018. Wolves are mostly staying within the reserve, but they were noticed by some visitors and surrounding farmers. Such proper communication is essential to create conditions for co-habitation.

There is a very important task of the NR staff regarding visitors in the reserve beyond the surveillance duties. They inform and educate visitors on the spot about natural assets, restoration, visiting rules and behaviour.

The visibility and importance of the area on more general level is communicated mostly through Natural Park network and tourist organisations (e. g. East Belgium Tourist Agency), marketing natural assets but explaining visiting rules and limitations, as well.

It is an interesting sharing of work. HFNR staff is focused on the reserve management, whereas broader public relation work and tourist management outside the reserve is dealt by tourist organisations.

Recommendation 4:

continue and intensify the efforts to safeguard the black grouse population in co-operation with the relevant European partners;

This issue was intensively addressed in this period. The last population of the country was nearly extinct in 2016 despite all conservation efforts. In 2017 a project for the reinforcement of the population by translocation and breeding started. The project was led by the University of Liège, funded by the Public Service of Wallonia and some private organisations (WWF, Pairi Daiza foundation, Spa Monopole). In spring 2017 and 2018, they translocated black grouse from Sweden to reinforce the existing population. The success is carefully monitored. In parallel a lot of restoration work on creating suitable habitats for grouse were done, as habitat fragmentation was one of the key drivers for negative trends. Another one is predation, linked to fox control. And the third important factor is climate change. Heavy rain in spring time (like in 2021) is not favourable for the survival of young birds. Despite all this, relatively good nesting results (2/3 of chickens left nest) were achieved.

Additionally, the Scientifique des Hautes-Fagnes of Liège University started a breeding project adapting a new mother-assisted rearing and release technique ('born to be free') developed in Poland. In this way they increase the survival of young chicks.

Recommendation 5:

ensure the sustainability of the measures taken under the LIFE Programme, which have had a very positive effect by providing the reserve with a guarantee of sufficient financial and human resources.

For the time being, this recommendation is realised in spirit of the LIFE Programme after-LIFE rules. Finances are secured mostly by the European Agricultural Fund for Rural Development (EAFRD) for large-scale works and the Direction de Malmédy DNF budget for some regular work. So, after LIFE projects following restoration works were realised:

- peatbog restoration by flooding (36 ha), scraping (63 ha) or re-modelling the peat surface (3 ha);
- wet heath restoration by sod-cutting (15 ha);
- elimination of non-native broad-leaved forests (Grey alder *Alnus incana*) - 15 ha;
- spruce cutting and restoration of broad-leaved forests (290 ha).

It is very likely that these budget lines will remain, especially if the allocation of EU funds will be justified by the EU nature restoration process. For the planning of future works, it must be emphasised that beyond restoration works maintenance of restored areas finances and human capacities have to be addressed, as well. Another important issue regarding sustainability of the process is the transfer of knowledge and skills to the younger generation. It is happening already at scientific level, but it should be taken into account in the administration and technical staff (mostly restoration work), as well.

7. Issues not covered by previous recommendations

Invasive species

Within the frame of regular monitoring, the presence of invasive alien species is observed. The main issue in this field is the Grey alder (*Alnus incana*) in the eastern part. Staff are removing trees or group of trees systematically as part of the restoration works. They studied and developed efficient removing methods which can be done by machinery and are effective on larger swampy areas.

It is obvious that this is a permanent activity that demands regular financial means.

Other invasive alien species were not mentioned as a problem.

Climate change

Recommendation No. 206 (2019) of the Standing Committee of the Bern Convention, adopted on 6 December 2019, on nature-based solutions and management of protected areas in the face of climate change, is addressing EDPA, as well:

- Ensure adaptive management in the context of climate change is included, as appropriate, in Resolutions for the award or renewal of the European Diploma for Protected Areas (EDPA);
- Support the involvement of Emerald Network and EDPA sites in testing ways of scaling up and transferring nature-based solutions, as a response to climate change and for the prevention of natural disasters.

Results of monitoring can be used for following changes in species compositions due to climate change. Number of thermophilus species is increasing.

Not only changes in temperature are observed, but weather pattern is changing, as well. There are more weather extreme events, more rainy days in spring, hot and dry summers, etc. All these changes have an influence on wildlife (e. g. negative influence on grouse population and positive on thermophile species).

Spruce plantations are influenced by climate change and this is an additional reason to remove them gradually and replace them by wetlands.

Through water management measures in the frame of restoration there is a certain influence on the general water regime situation in the area, mitigating draught effects in wetland ecosystems.

Enlargement of the EDPA area

Fagne De La Haie Henquinet Et Du Sart Lurô and Rond-Buisson Duret State Nature Reserve are bordering the Hautes-Fagnes State Nature Reserve. They have the same legal status, the same natural assets and the same established management. So, there are no reasons not to regard them as an integral part of the Hautes-Fagnes SNR in respect of the European Diploma. When the enlargement of the Reserve, foreseen in 2023 happens, both adjacent reserved could be notified to the Secretariat of the Bern Convention as European Diploma site.

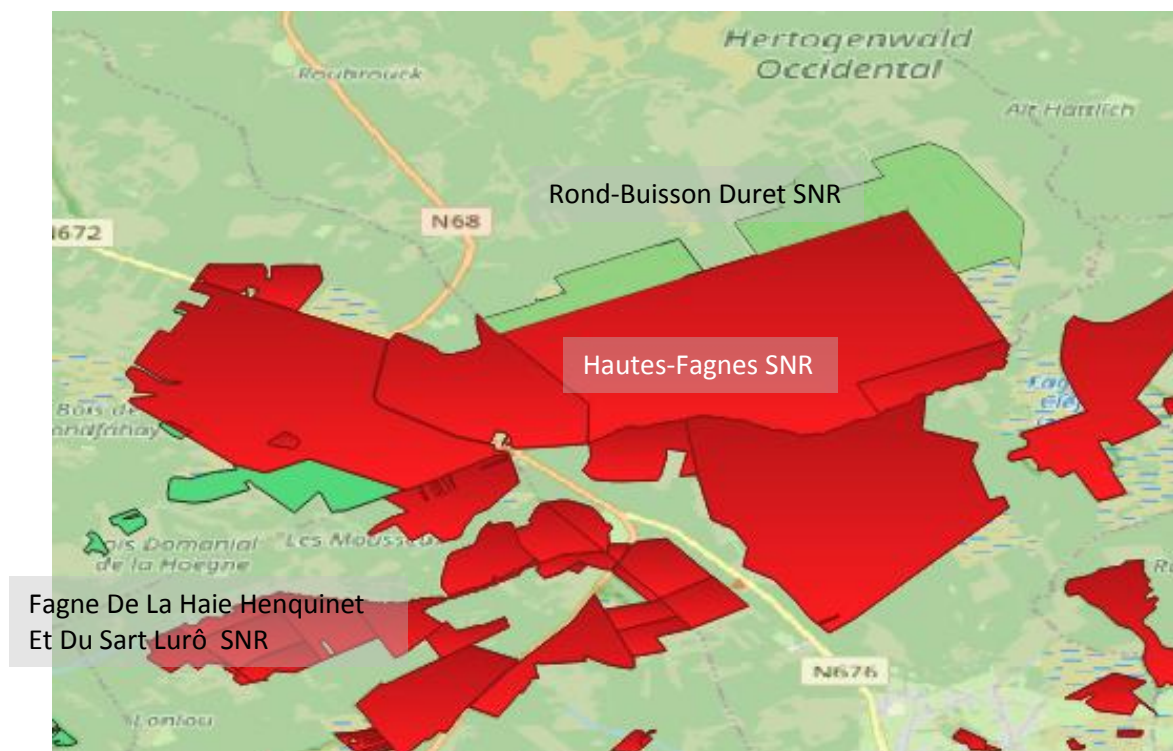


Figure 10: Hautes-Fagnes Nature Reserve and neighbouring nature reserves (Source: HFNR).

European Diploma visibility

I regularly pay attention to the visibility of the European Diploma on the spot. The European Diploma logo is not used. The EDPA logo should be placed and explained on publications, on suitable places in the information centres and starting points of the trails. However, plates with information about European Diploma are prepared but not yet installed on the ground.

8. Conclusions and Recommendations

General conclusion:

The Hautes-Fagnes Nature Reserve is of European importance and is well managed with a view to restore and maintain the exceptional natural character of the area.

I therefore recommend to the Group of Specialists on the European Diploma for Protected Areas and to the Standing Committee to the Bern Convention to renew the European Diploma of the Hautes-Fagnes Nature Reserve for the next 10 years.

In addition, a **condition** and the following **recommendations** should be attached to the renewal:

Condition: Adopt by 2028 the management plans for all areas of the Nature Reserve and secure finances for their implementation. Explore the opportunity and feasibility to cluster management plans related to several areas in the future.

Recommendations:

1. Continue the restoration of the wetland areas and secure human and financial resources to maintain them;
2. Continue to acquire land of significant ecological value and enlarge the area of the Nature Reserve;
3. Continue to raise awareness on the nature reserve's European significance among local communities, peripheral municipalities and decision makers;
4. Enhance cooperation with the tourist sector raise awareness of visitors on the code of conduct within the protected area. Manage parking spaces and adapt the areas open to visitors to the actual situation (e. g. snow, fire risk);
5. Consider extending the European Diploma of the Hautes-Fagnes Nature Reserve to the Fagne De La Haie Henquinet Et Du Sart Lurô and Rond-Buisson Duret State Nature Reserves;
6. Make more use of the European Diploma logo in all information material and brochures, and explain the relevance of the Diploma wherever appropriate, in particular in the visitors' centres and on the website.