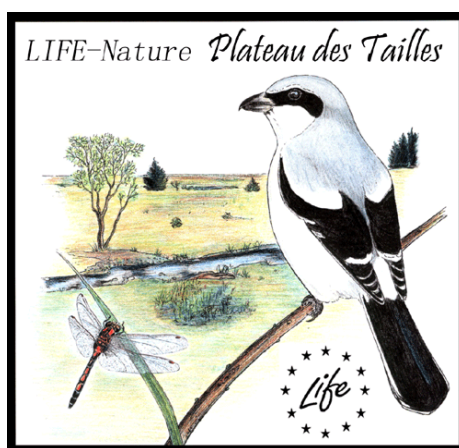




LIFE05 NAT/B/000089

**Plan After LIFE
(annex 46 to the technical final report)**



31/12/10

“Restoration of the natural habitats at the plateau des Tailles”

Data project

Project location : “Plateau des Tailles”, BELGIUM

Project start date : 01/01/2006

Project end date : 31/12/2010

Total project duration : 60 months

Total budget : 3.753.300 €

EC Contribution : 1.876.650 €

(%) of total cost : 50 %

(%) of eligible costs : 50 %

Data beneficiary

Name beneficiary : Executive Directorate-General « Agriculture, Natural Resources and Environment » - DGO3

Contact person : M. Pierre GERARD

Postal address : Avenue Maréchal Juin, 23 – 5030 GEMBLoux

Visit address : Rue de La Roche, 8 – 6660 HOUFFALIZE

Telephone : 32 – 81 – 626 438

Fax : 32 – 81 – 615 727

E-Mail : P.Gerard@spw.wallonie.be

Project website : www.lifeplateaudestailles.be

1. State of protection of the restored sites

The restored parcels of land (hereinafter referred to simply as parcels) are distinguished according to the owner type and the terms of the convention entered into with the latter. All parcels are resumed in a mapping layer edited by the LIFE team, filed and managed by the Coordination Cell LIFE of the Walloon Region (DEMNA). All information regarding land ownership status of these parcels is resumed in this layer.

1.1. Parcels acquired for the project

1.1.1. Approved private nature reserves RNOB-Natagora

A number of parcels acquired within the scope of the LIFE project remain the property of the non-profit organisation RNOB and obtain the status of **approved nature reserves**. These parcels are situated in the valley of the brooks Bellemeuse, Mincée, Martin-Moulin and Planchette. The involved parcels as well as their individual surfaces are listed in the table 1 of annex. The bills of sale are kept at the Department of Conservation of the non-profit organisation RNOB.

Two main sites can be distinguished :

- A. Valley of the Bellemeuse and the Mincée : 39,55 ha (see map 3.6, 3.7, 3.8 in annex)
- B. Valley of the Martinmoulin and the Planchette : 11,45 ha (see map 3.3, 3.4 in annex)

The **approval procedure** for these nature reserves is in progress. The file « Bellemeuse-Mincée » was introduced in 2009, the file « Martinmoulin – Planchette » in 2010. The sites should obtain their official status of approved nature reserve within two years following the application for approval. The editing of the files was made by the Department of Conservation of the non-profit organisation RNOB. The follow-up of the file at the administration of the Walloon Region is guaranteed by the DNF (Direction for Nature).

1.1.2. State nature reserves

The other parcels acquired within the scope of the project will obtain the status of **state nature reserve**. The involved parcels as well as their individual surfaces are listed in the table 1 of annex. See also the maps 3.5, 3.12, 3.13, 3.14 in annex. The notarial bills of the initial sale are kept at the Department of Conservation of the non-profit organisation RNOB.

- A. « *Massotais* » – **0,82 ha**. These parcels are adjacent to the actual RND of the fen 'Fagne du Grand Passage'
- B. « *Valire* » (brook of Pré Lefèvre) – **4,50 ha**. These parcels are adjacent to the parcels of the municipality of Houffalize under convention of LIFE.
- C. « *Baraques de Samrée* » (brook of the Lue) – **4,16 ha**
- D. « *Pont de la Bounire* » (brook of Noircini) – **2,43 ha**
- E. « *Prairies à Fenouil de Dochamps* » (brook of the Lue) – **2,97 ha**. These parcels are adjacent to the parcels of the property « Prignot » under convention of LIFE
- F. « *Fond de Dochamps* » (brook of the Lue) – **0,17 ha**. These parcels are adjacent to the parcels of the property « Church Council of Dochamps » under convention of LIFE.
- G. *The fen « Fagne Jean-Philippe »* (brook of the fen 'Fagne de la Goutte') – **2,09 ha**

- H. « *Bena-Bwès* » (river Aisne and brook of the fen 'Fagne de la Goutte') – **12,27 ha** and several separate blocs
- I. « *Fays de la Folie* » (brook of 'Fays de la Folie') – **4,33 ha** and several separate blocks
- J. « *Moulin de la Fosse* » (river Aisne and brook Laboru) – **0,77 ha** and several separate blocks.

This status will be preceded by the **retrocession** of the lands acquired by the non-profit organisation RNOB to the Walloon Region. The initiative and follow-up of this retrocession will be guaranteed by the DNF (Direction of Nature). This retrocession should be executed within two years after the end of the LIFE project, to know before the end of 2012.

Once the lands are reassigned, they will be integrated into the larger **state nature reserve of the 'Plateau des Tailles'**, and managed according to the procedures of the management plans edited by the LIFE team. The initiative of the introduction and the follow-up of the files for application of approval of these parcels will be guaranteed by the DNF (Direction of Nature). The final grant of the status of state nature reserve should be made within two years following the introduction of the file for application of approval.

1.2. ***Public parcels under status of state nature reserve***

Several restored sites were already within the perimeter of the nature reserve of the 'plateau des Tailles' **before the start of the project**. The following sites are involved, with a total surface of **278,40 ha**. The parcels involved are listed in the table 1 of annex.

- A. The fen 'Fagne du Grand Passage' (including Chanfa and Massotais) – **136,15 ha**
- B. The mud flats 'Fange aux Mochettes' – **76,12 ha**
- C. The fen 'Fagne de Robièfa' – **29,16 ha**
- D. The fen 'Fagne de Nazieufa' – **36,96 ha**

These parcels are **owned by the Walloon Region** and benefit already from the status of state nature reserve. Moreover, two sites are classified sites of exceptional heritage: the fen called 'Fagne du Grand Passage' and the mud flats 'Fange aux Mochettes'. Their admittance under the protection status (RND) has no time limit.

1.3. ***Public parcels under convention***

These parcels, belonging to **three municipalities** (Manhay, La-Roche-en-Ardenne and Houffalize) and to a Church Council (Dochamps), are subject to a convention with Région Wallonne. This convention is for a period of thirty years, in order to make these lands available to be integrated into the larger RND of the 'Plateau des Tailles'. These parcels, with a total surface of **284,27 ha**, are listed in the table 1 of annex. These conventions determine the conditions of the availability of the lands as well as the activities potentially allowed at the municipal sites LIFE (hunting, foraging, public access, forestry undertaking, drinking-water collection). A copy of these conventions is added in annex 1. Copies of these conventions were forwarded to the engineers of the Cantonment as well as to the responsible DNF officers.

- A. *Municipal property of La Roche* – **85,89 ha** – ratified on 16/12/2008 by the Municipal Board. Sites involved are: « Sources of Bellemeuse », the fen « Fagne de Samrée », « Municipal valley of Bellemeuse » (Partim). Custodian DNF: Ir. of the Cantonment of La Roche (François Baar).
- B. *Municipal property of Houffalize* – **15,83 ha** – ratified on 23/12/2008 by the Municipal Board. Sites involved are: « Valley of Pré Lefèvre », the fen « Fagne du Grand Passage » (Partim), « Municipal valley of Bellemeuse » (Partim). Custodian DNF : Ir. of the Cantonment of La Roche (François Baar). For the fen « Fagne du Grand Passage » : Ir. of the Cantonment of Vielsalm (Jean-Claude Adam).
- C. *Municipal property of Manhay* – **181,58 ha** – ratified on 22/11/2010 by the Municipal Board. Site involved are: « Connection between Nazieufa and Robièfa », the fen « Fagne du Pouhon », the fen « Fagne de la Goutte ». Custodian DNF : Ir. of the Cantonment of La Roche (François Baar).
- D. *Property of the Church Council of Dochamps* – **0,97 ha** – ratified on 23/07/09 by the Church Council. The site involved is: « Fond de Dochamps ».

Signing these conventions will be followed by the application for integration of the involved parcels into the big **RND of the 'Plateau des Tailles'**. This integration will be made according to a competent Government Order and according to the administration plan drawn up by the DNF, according to recommendations of the LIFE Team. The initiative and follow-up of this administrative procedure for integration of the public parcels in the RND of the 'plateau des Tailles' will be guaranteed by the DNF (Direction of Nature).

The conventions with the municipalities include a **nullity clause** in case of management failure of the restored sites by the Walloon Region or in case of delay of the admittance under the status of state nature reserve, which should take place within three years following the date of the signing of the conventions.

1.4. ***Public parcels outside of convention***

LIFE restoration works of the broadleaved forest were completed on the **municipal parcels of specific woods** (management guaranteed by the DNF). These parcels are not subject to a particular protection status, except for the system resulting from their classification within Natura 2000. It concerns beech crops.

1.5. ***Private parcels within convention***

1.5.1. *Property « Philippot » - 'Moulin de la Fosse' (= ditch mill)*

These parcels, with a total surface of **8,06 ha**, are subject to a **convention for availability** for a period of 30 years regarding their integration into the RND of the 'Plateau des Tailles'. The owner of the parcels, Marc Philippot, guarantees the management of the site by extensive grazing. The file for the application of integration of the parcels within the RND will be started and followed up by the DNF (Direction of Nature), according to the management plan set up by the LIFE team. The admittance under the status should be effective within two years after the end of the LIFE project, i.e. before the end of 2012. The parcels are listed in the table 1 of annex. The parcels are shown on the map 3.14 of annex. The custodian of this site is the Ir. of the

Cantonment of La Roche. A copy of this convention was forwarded to the Engineer of the Cantonment as well as to the DNF officer concerned.

1.5.2. *Property « Prignot » - Grasslands at Fenouil de Dochamps*

These parcels, with a total surface of **2,82 ha**, are the object of a **convention for availability** for a period of 30 years regarding their integration in the RND of the Plateau des Tailles, ratified on 17/12/08. The file for the application of integration of the parcels within the RND will be initiated and followed up by the DNF (Direction of Nature), according to the management plan set up by the LIFE team. The admittance under the status should be effective within two years after the end of the LIFE project, i.e. before the end of 2012. The parcels are listed in the table 1 of annex. The parcels are shown on the map 3.12 of annex. The custodian of this site is the Ir. of the Cantonment of La Roche. A copy of this convention was forwarded to the responsible Engineer of the Cantonment as well as to the DNF officer.

1.5.3. *Property « Indivision Mardulyn » - Bellemeuse, Mincée, Martinmoulin*

These parcels, with a total surface of **4,07 ha** are the object of an **emphyteutic lease** for a period of 99 years in order to integrate them into the approved private nature reserves with which they are concurrent (RNOB reserve of the valley of Bellemeuse and of Mincée and reserve of the valley of 'Martin moulin'). The approval of these parcels for RNA will be made at the same time as the corresponding RNOB reserves and according to the same procedure (see 1.1.1). The involved parcels are listed in the table 1 of annex. Their location figures on the maps 3.6, 3.7, 3.8.

1.5.4. *Property « Limburg Stirum » - Valley of Pré Lefèvre*

These parcels are the object of a **convention for a period of thirty years** ensuring the development of the restoration works realised within the scope of the LIFE project and defining the exploitation constraints applicable to these parcels. These parcels, located in the valley of the brook of Pré Lefèvre, have a total surface of **25,76 ha**. They are close to the LIFE parcels owned by the municipality of Houffalize and located in the same valley. A copy of this convention is added in annex 1, it was ratified on 23/01/2008. No official protection status is given for these parcels. The DNF (Cantonment of La Roche – screening of Wibrin) guarantees the correct execution of the terms of the convention. A copy of this convention was forwarded to the Engineer of the Cantonment as well as to the DNF officer in question. These parcels will not obtain any official protection status outside their classification within Natura 2000. The parcels are listed in the table 1 of annex and their location on the map 3.5 of annex.

1.5.5. *Private parcels of medium-size*

Several parcels of medium size, situated in various valleys involved in the LIFE project, are the object of a convention guaranteeing the development of the restoration works realised within the scope of the LIFE project. These conventions guarantee the **non-replanting of softwood** on the parcels as well as the application of the **exploitation constraints**. These parcels have a total cadastral surface of **9,88 ha**, they are listed in the table 1 of annex. Their location figures on the maps 3.X of annex. These parcels will not obtain any official protection status outside their classification within Natura 2000. A copy of the convention type is added in annex 1.

2. Management of the restored sites

2.1. *General objectives of the management*

With regard to the development of the management plans, all restored sites (except for the municipal beech forests) were **mapped** by the LIFE team in order to define the following : the initial vegetation, the actual vegetation (at the end of the LIFE project) and the objective natural habitat. The vegetation has been described according to the typology Waleunis. This information is resumed in a mapping layer edited by the LIFE team, filed and managed by the Coordination Cell LIFE of the Walloon Region (DEMNA – performing agent : Grégory Motte).

The initial habitats, the habitats after restoring and the objective habitats directed the whole of the **restoration actions and management** defined for the several sites. Several constraints were taken into account in order to define the management operations : costs, human resources for following up, accessibility and practicability of the sites,... This process resulted in the creation of the management plan.

In general, the management of the sites **aims at the preservation or amelioration of the state of conservation of the natural habitats** of importance for the heritage, present or restored at the LIFE sites. Upon restoration and following management, it aims at an increase in the areas covered by these habitats. Besides, the management aims at a sustainable conservation of animal species and plant species of importance for the heritage as well as increasing their population numbers. The management of the sites aims also to improve or to restore the well functioning of the involved ecosystems (paedogenesis, storage of carbon, hydrology) as well as a functional and dynamic local ecological network (exchange between sites, colonisation dynamics). Finally, the management aims at optimising all services offered by the mediums for the human community : storage and purification of water, storage of carbon, products of sylviculture, of foraging and of hunting, natural, education, touristic, landscape, aesthetic and heritage value.

The **natural habitats** focused on with priority (annex I of the Directive « Fauna – Flora – Habitats ») are : wet peatland (4010), dry heathland (4030), nardus grassland (6230), wet grassland of Molinion (6410), streamside wetlands (6430), sub mountain hay meadows (6520), highly active turf moors (7110, 7120), transit turf moors (7140), beech forests with woodrush (9110), ravine maple bushes (9180), peat birch woods (91D0).

The **species** focused on with priority (annex I of the Directive « Fauna – Flora – Habitats ») are : Woodlark (*Lullula arborea*), Snipe (*Gallinago gallinago*), Jack snipe (*Lymnocyptes minimus*), Honey buzzard (*Pernis apivorus*), Hen harrier (*Circus cyaneus*), Wood sandpiper (*Tringa glareola*), Black stork (*Ciconia nigra*), European nightjar (*Caprimulgus europaeus*), Hazel grouse (*Bonasa bonasia*), Crane (*Grus grus*), Kingfisher (*Alcedo atthis*), Red kite (*Milvus milvus*), Grey-headed woodpecker (*Picus canus*), Black woodpecker (*Dryocopus martius*), Red-backed shrike (*Lanius collurio*), Great grey shrike (*Lanius excubitor*), Wryneck (*Jynx torquilla*), European beaver (*Castor fiber*), Miller's thumb (*Cottus gobio*), Large copper butterfly (*Lycaena helle*), Brook lamprey (*Lampetra planeri*).

2.2. ***Actors involved***

2.2.1. *LIFE team*

The LIFE team (DEMNA, RNOB, and Bemelmans) has applied the actions of the LIFE project and has realised the management plan for the restored sites, in consultation with the DEMNA and the DNF.

This team will be dissolved at the end of the LIFE project, on 31/12/2010.

2.2.2. *DEMNA – DNE – Coordination Cell LIFE*

This cell has worked out the cartographic layers registering the LIFE information, and is in charge of filing, managing and updating this data. It is responsible for the coordination of the scientific monitoring of the restored sites. It follows the application of the actions of the management plan by the workers on the field on site. It acts as the interlocutor of the European Commission regarding the follow-up of the afterLIFE.

2.2.3. *DNF – Direction of Nature*

This service ensures the setting up and follow-up of administrative files for admittance under the status of (state or approved) nature reserve of the restored sites within the scope of the LIFE project. This service is also responsible for the follow-up of the different conventions for availability of the LIFE sites (municipal and private sites).

2.2.4. *DNF – External services*

Table 2 mentions the different jurisdictions of the DNF to which the different LIFE sites are subject (direction – cantonments – screening).

The **cantonment engineers** are the custodians of the state nature reserves under their jurisdiction. In this regard, they are responsible for the application and the follow-up of the management plan at the involved RND's. They are in charge of the follow-up of the conventions with the farmers for grazing and mowing. They guarantee the correct execution of the thirty-years conventions agreed with the private owners within the scope of the LIFE project.

The **screening officers** are responsible for the general surveillance of the sites. They take care that the different users of the sites comply with the regulatory constraints: hunters, wood fellers, walkers,... They guarantee the surveillance of the infrastructures set up within the scope of the LIFE project at the properties subject to the forest regulation: hydraulic works, grazing fences, fencing for regeneration of broadleaved forest, individual protections. They guarantee the surveillance of the development of invasive plants at the restored sites. They guarantee the maintenance of the LIFE information panels installed at the sites subject to the forest regulation. They guarantee the correct execution of extensive grazing and mowing by the farmers under the convention. They guarantee the follow-up of the management works executed by the state workers or by subcontracting companies.

The **state workers** of the DNF are (depends on their availability) in charge of the execution of the light management works: cutting natural regeneration of spruces and hardwood, management of invasive plants.

2.2.5. Walloon high council for preservation of nature

The CSWCN gives its recommendation on the files for application of approval of the state nature reserves and private nature reserves involved at the LIFE project.

2.2.6. Advisory commission for management of state nature reserves at Marche-en-Famenne

The CCGRNDM is called in by the cantonment engineer when executing works for management of the sites.

2.2.7. Non-profit organisation RNOB – Preservation Department

The non-profit organisation RNOB is responsible for the follow-up and the execution of the management of the sites within RNA. It installs an advisory commission for management, in order to guarantee the follow-up of the latter and the adaptation of the management plan according to the evolution of the sites. One or several custodians are appointed for each of the involved reserves. These custodians are in charge of the surveillance of the sites, the follow-up in the field of the managing actions and for editing the annual management report. They are assisted in these tasks by the permanent staff of the association.

2.2.8. Commission for the preservation of the RNOB reserves of the northern Ardennes

This commission guarantees the coordination, the follow-up and the evaluation of the management of the RNA RNOB created by the LIFE project (valleys of Bellemeuse and of Martinmoulin).

2.2.9. Non-profit organisation Natagora – Regional Natagora « Eastern Ardennes »

The Regional Natagora is responsible for the coordination and the animation of all non-profit activities at the LIFE sites: guided walks, volunteer management yards. It coordinates with the advisory commission for management of the RNA's and with the custodians of the involved sites. It keeps up relations and partnerships with the other associations and local groups, involved in the preservation of nature: national parks, undertaking unions called 'syndicats d'initiatives', other non-profit organisations.

2.2.10. Farmers under convention

These farmers guarantee the execution of extensive grazing and mowing on the LIFE sites according to the terms and conditions of the conventions agreed upon with the managers of the sites (DNF or the non-profit organisation RNOB).

2.2.11. Subcontracting entrepreneurs

These entrepreneurs guarantee the execution of the specific works for management/restoration, ordered by the managers of the sites (DNF or the non-profit organisation RNOB).

2.2.12. Municipalities

The municipalities (Manhay, La Roche and Houffalize) guarantee the maintenance of the tourist infrastructures (inspection tours, information boards, picnic areas, cattle grids, barriers) and the didactic paths constructed within the scope of the LIFE project.

The municipalities are the beneficiaries of the revenues coming from the exploitation of the restored sites, according to the constraints linked to their protection status : granting hunting permits, sale of wood, and drinking-water collection.

2.2.13. Private owners of sites under convention

These owners are responsible for the compliance with the constraints for exploitation of the parcels for which they ratified a LIFE convention. They are in charge of the execution of the managing operations imposed by these conventions.

2.2.14. Undertaking union 'Syndicat d'initiative' of Samrée

The SI of Samrée is responsible for tourist animation of the didactic paths constructed within the scope of the LIFE project at the municipal property of La-Roche-en-Ardenne.

2.3. ***Managing operations***

Eight important management operations have been defined.

2.3.1. *Elimination of ligneous growth*

2.3.1.1. *Elimination of natural regeneration of spruces*

Description of the action

Numerous seeds of spruces will grow in the future in the restored open areas. The extent of this re-colonisation will vary according to the size of the seed bank present in the soil and the range of supplies from outside. This phenomenon of colonisation, that is very important during the first years of the restoration, will attenuate with the progressive depletion of the seeds on the spot. Given the import of seeds from outside, it will never vanish completely because of the presence all over of spruces around the restored sites. The observation of the re-colonisation of the sites since the re-opening of the locations allow for the classification of the various sites according to a priority degree for intervention. The intervention schedule that has been drawn up is based on this priority degree. The young spruces will be eliminated by scrub clearing (manual power brush cutter). The scrubs should have reached a certain development before clearing, so as to be well visible amongst the herbaceous vegetation, and cutting should be done underneath the first green sprout (to guarantee no re-sprouting). In general, we estimate that one elimination every five years is sufficient.

Surfaces involved and intervention schedule

This operation involves almost all of the restored areas. They figure on the maps G1 of annex. The global area to be treated is about **544,34 ha**. The interventions are spread out according to degree of priority over a period of five years. After five years, the cycle begins again. After two elimination cycles, a new evaluation of the intervention frequency will be necessary, in function of the evolution of the presence of growth. The ideal period for intervention is from August until April.

Elimination of spruce growth	Global	2011	2012	2013	2014	2015	2016
DNF Cant La Roche	403,91	0,00	133,64	90,74	61,21	69,23	49,09
DNF Cant Vielsalm	105,84	0,00	0,00	105,84	0,00	0,00	0,00
RNOB	34,59	2,01	0,69	0,00	0,30	29,58	2,01
Surface (ha)	544,34	2,01	134,33	196,58	61,51	98,81	51,10

Involved performers

At the state and municipal properties, the work will be planned, followed-up and performed by the DNF. The clearing of scrub growth will be carried out at the expense of the public service workers.

At the nature reserves RNOB, the elimination of growth will be planned, followed-up and performed by the non-profit organisation RNOB. The work for scrub clearing will be performed by the staff of the association, by sub-contractors or by volunteers.

Zones	Responsible performer	Execution	Involved surface
Municipal and state properties	DNF	Workers of public service	509,75 ha
RNA «RNOB »	Non-profit organisation RNOB	Staff Volunteers Sub-contractors	34,59 ha

2.3.1.2. *Elimination of natural regeneration of leafy growth*

Description of the action

In the areas where a natural open habitat is planned, the elimination of natural regeneration of leafy growth will coincide with the elimination of the growth of spruces. This elimination will be executed according to a unique method. Taking into account the actual density of big game, the major part of leafy growth will probably be eliminated directly by grazing game. Leafy growth may, however, be more present in future, in favour of a better regulation of the game combined with the development of the broad-leaf seed stands planted during the LIFE project. In future, the scale of this action will follow in this way an evolution reverse to the development of the elimination of young growth of spruces.

An important colonisation by leafy growth has been noticed in certain specific zones: extirpated zones, high turf moors. If this colonisation is not strictly controlled, it would very quickly have a strong negative impact on the already established or developing natural habitats. The control, therefore, of the broad-leaf growth in these areas is of priority importance.

Surfaces involved and intervention schedule

The surfaces involved by this operation figure on the maps G2 of annex.

The global surface to be treated measures **364,23 ha**. The interventions are distributed according to degree of priority for intervention over a period of five years. After 5 years, the cycle starts again. After 2 elimination cycles, a new evaluation of the intervention frequency in relation to the evolution of the presence of growth is made. The surfaces to be treated always overlap the surfaces referred to at point 2.3.1.1. The ideal period for intervention is from August until April, but the young leafy growth is more visible in August-September-October and is easier to eliminate.

Elimination of leafy growth	Global	2011	2012	2013	2014	2015	2016
DNF Cant La Roche	255,62	0,00	85,82	57,93	35,66	51,17	25,05
DNF Cant Vielsalm	105,84	0,00	0,00	105,84	0,00	0,00	0,00
RNOB	2,77	1,03	0,69	0,00	0,02	0,00	1,03
Surface (ha)	364,23	1,03	86,51	163,77	35,68	51,17	26,08

In the **priority** zones (see maps G3 in annex), covering a global surface of **26,25 ha**, the scrub clearing will be executed and followed-up as long as the colonisation by leafy growth has not become zero or very weak. All of these zones are situated in municipal or state property. The scrub clearing will be carried out **every 3 years**, as from 2011.

Priority cut of the leafy growth		
<i>DNF Cant. of La Roche</i>	<i>DNF Cant. of Vielsalm</i>	<i>RNOB</i>
14,87 HA	10,95 HA	0,43 HA

Involved performers

At the state and municipal properties, the work will be planned, followed-up and performed by the DNF. The scrub clearing of growth will be executed at their own expense the public service workers.

At the nature reserves RNOB, the elimination of growth will be planned, followed-up and performed by the non-profit organisation RNOB. The work for scrub clearing will be performed by the staff of the association, by sub-contractors or by volunteers.

Zones	Responsible performer	Execution	Involved surface
Municipal and state properties	DNF	Workers of public service	387,28 ha
RNA «RNOB »	Non-profit organisation RNOB	Staff Volunteers Sub-contractors	3,2 ha

2.3.1.3. Conversion of temporary softwood shelters

Description of the action

On the sites of the plateau, surfaces between 0,5 and 1 ha that were previously colonised by natural softwood regeneration have been preserved temporarily as shelter for the big game (deer, roe deer, wild boar). When the spruces in these areas grow, so as to start multiplying, the shelters will no longer be functional and will have to be removed. This operation consists of cutting down the spruces and removing them completely from the sites. If they have reached a certain commercial value, this can be done by the agent for wood selling. If possible, the branches will be valorised as wood energy.

Surfaces involved and intervention schedule

The softwood shelters are situated at the following sites : the fen 'Fagne de Samrée', the Sources of Bellemeuse, the fen 'Fagne de la Goutte', 'Colafa', the upstream fen 'Fagne of Pouhon', the downstream fen 'Fagne of Pouhon', the connecting area between Robièfa and Nazieufa. They cover a total surface of **12,51 ha**.

Taking into account the growth rate of the spruces, this elimination will be done around the year 2025. This elimination will be done outside the bird nesting period, from early August until the end of March. These shelters figure on the maps G3 in annex.

Involved performers

This operation takes place on municipal properties, hence it falls under the direction of the DNF (only Cantonment of La Roche). The operation will be executed through sub-contracting and if possible within the scope of a procedure of wood selling and/or energetic valorisation of the cut products.

2.3.1.4. Elimination of the natural regeneration of Scots pine

Description of the action

This operation concerns only the growth of pines actively colonising the high turf moor of the fen 'Fagne du Grand Passage' (RND). The elimination of these pines will be done by scrub clearing, at the same time as the elimination of the on the high turf moor, more specifically every 3 years on a global surface of **10,95 ha**. The DNF is responsible for the planning, follow-up and execution of this action. The intervention period will be between August and April. The surfaces involved are shown on the maps G3 in annex.

2.3.2. Control of the invasive plant species

2.3.2.1. Broom (*Cytisus scoparius*)

Description of the action

The colonisation of the broom has been observed in various areas of dry heathland in nascent stage. Elimination in these zones is necessary to avoid suffocation of the heath specimen and the development of heathland. Some surfaces are situated in areas grazed by cattle, these eat very little broom. The elimination of broom will be done by manual scrub clearing (power brush cutter). The results of scrub clearing will be left at the spot. The scrub clearing will be done every 3 years until the dynamism of the re-colonisation is exhausted, which should occur once the seed bank becomes depleted.

Surfaces involved and intervention schedule

The areas involved for this action have a total surface of **14,98 ha**. These surfaces shown on the maps G3 in annex will be treated annually. The intervention will be done between August and April.

Involved performers

This operation takes place on municipal or state properties, hence it falls under the direction of the DNF, who guarantees the planning and follow-up. The operation will be executed at their own expense by the state workers of the DNF.

Broom cutting		
<i>DNF Cant. of La Roche</i>	<i>DNF Cant. of Vielsalm</i>	<i>RNOB</i>
3,13 HA	11,85 HA	0 HA

2.3.2.2. Bracken (*Pteridium aquilinum*)

Description of the action

The development of bracken has been observed in some zones. This development is fortunately restricted in the open areas, but this fern is more present in the fenced properties installed in the beech forests. The control of its development is mandatory, to avoid finding large massifs covered with fern expanding and suffocating the intended open natural habitats (often dry heathland) or the young planting of broadleaved forests. Some of the grazing zones are involved as well (cattle does not eat the bracken). Taking into account the problem of eliminating this plant completely, the objective of the action will be to avoid the spread of the areas already involved. Elimination will be done by manual mowing (power brush cutter), every year between 15th July and the end of August. If possible, this mowing will be preceded by threshing the fiddleheads, carried out in June. In the broadleaved forest planting, the control of the bracken can be omitted once the young trees that have been planted are high enough (normally about 3 years after planting). In the open areas, an evaluation after five years will allow modification according to the areas being treated.

Areas involved and intervention schedule

In the open zones, the areas to be treated every year cover **2,10 ha** of continuous massifs (Grand Passage : 1 ha – Pouhon : 0,80 ha – Goutte : 0,30 ha).

On the maps G3 in annex the areas involved by this intervention are shown. For the areas outside the fenced properties, the indicated areas do not correspond with the actual zones that are effectively occupied by fern, but with potential expansion surfaces where the presence of fern should be checked regularly.

Inside the planting under fencing, the global surface covered by fern is **8,6 ha**. The table below indicates the involved fenced properties as well as the proportion of the area invaded by fern.

Property ID	Municipality	Execution	Cleaning	Surface of the property (ares)	Surface to be cleared (ares)
97	Houffalize	Houffalize	Berismenil	180	45
98	Houffalize	Houffalize	Berismenil	186	47
125	Houffalize	Houffalize	Wibrin	242	48
124	Houffalize	Houffalize	Wibrin	115	29
121	Houffalize	Houffalize	Wibrin	136	41
107	La Roche	La Roche	Berismenil	193	39
73	La Roche	La Roche	Berismenil	145	36
91	La Roche	La Roche	Berismenil	94	23
72	La Roche	La Roche	Berismenil	144	72
108	La Roche	La Roche	Berismenil	137	68
84	La Roche	La Roche	Berismenil	31	19
90	La Roche	La Roche	Berismenil	42	25
93	La Roche	La Roche	Berismenil	18	13
99	La Roche	Walloon Region	Berismenil	123	25
47	Manhay	Manhay	Lamormenil	133	33
61	Manhay	Manhay	Lamormenil	142	42
62	Manhay	Manhay	Lamormenil	243	73
53	Manhay	Manhay	Lamormenil	198	79
40	Manhay	Manhay	Lamormenil	175	88
26	Manhay	Manhay	Odeigne	56	14
				TOTAL	859

Involved performers

As the areas to be treated are situated inside municipal and state properties, the planning, follow-up and execution of this action will be done by the DNF. More precisely, the work will be executed in the open zones (including the fenced property 99) by the state workers of DNF. Inside the fenced properties situated in the municipal beech forests, clearing works will be planned and followed-up by the DNF but executed by municipal workers, according to the pro rata of the spreading of the fenced properties (Houffalize – 5 fenced properties – 209 ares to be cleared ; La Roche – 7 fenced properties – 270 ares ; Manhay – 6 fenced properties – 330 ares).

Control of the bracken				
DNF Cant La Roche	DNF Cant Vielsalm	Municipality of La Roche	Municipality of Manhay	Municipality of Houffalize
1,35 HA	1,00 HA	2,70 HA	3,30 HA	2,09 HA

2.3.2.3. *Himalayan balsam (Impatiens glandulifera)*

Description of the action

The recent appearance of the Himalayan balsam has been noted in various restored sites, at present being : the upstream fen 'Fagne du Pouhon' (0,30 ha), high valley of the Aisne (0,75 ha), at 'Moulin de la Fosse' (2,5 ha) and Nofoy (valley of Bellemeuse – 1 ha). Taking into account the highly invasive characteristic of this plant, and however restricted its extension is at these sites (except at 'Moulin de la Fosse' and at Nofoy), a regular grubbing of the plants is absolutely urgent. Moreover, these places have already been treated annually in the course of the LIFE project.

Scientific studies have proved the efficiency of the control campaigns, which lead, if carried out regularly, to a strong regression and even to the eradication of the plant in these places.

The control consists of a grubbing out of the plants every two years, before they flower. The weeded plants are stored on piles close to the grubbing site. Attention must be paid to keep the piles away from watercourses, to avoid the propagation of fragments of the plants by flooding.

Areas involved and intervention schedule

At the involved sites, the land parcels to be treated have a total surface area of **4,55 ha**. They figure on the maps G3 in annex.

Grubbing will be done twice a year on every site (except for 'Moulin de la Fosse' : one grubbing only at the end of July, before grazing starts), once at the end of July and a second time at the end of August.

Involved performers

On the public sites or sites put under RND, the planning and follow-up of the grubbing falls under the responsibility of the DNF (involved clearing agent). More precisely, grubbing will be done by the state workers of the DNF.

In the RNA of the non-profit organisation RNOB, this association will be in charge for organising the grubbing campaigns. These can be executed either by the staff of the association, or occasionally by voluntary management working groups.

A coordination of these operations with the group of the Contract of the river l'Ourthe, executing similar operations in this hydrographic basin, will be very useful.

Grubbing of the Himalayan balsam		
<i>DNF Cant. of La Roche</i>	<i>DNF Cant. of Vielsalm</i>	<i>RNOB</i>
3,55 HA	0 HA	1 HA

2.3.3. Surveillance and repair of the hydraulic structures

2.3.3.1. Surveillance

Description of the action

The stability and water-tightness of the various hydraulic structures, realised within the scope of the LIFE project, should be checked regularly: pools, clay pools, peat dykes, mineral dykes, sheet piling dykes, culverts. The potential problems to be detected concern mainly leakage at the dykes and at the overflow pipes (PVC pipes), silting up of the overflow pipes and the culverts, and problems of erosion of the dykes caused by overflow. The clay pools and the clay stoppers on the drains will not need any particular follow-up. In order to assist this control, all structures have been inventoried and mapped. Each structure is identified by a specific code. The presence of special layouts (overflows or weirs) is indicated in the database. A control sheet of the various types is available (see annex 2), listing the different points to be inspected. The works to be done at the various sites are shown on the maps G4 in annex.

All the structures have to be inspected twice a year, the first time in April, at the end of the winter, and the second time in October, at the beginning of autumn. The problems discovered at these inspections will initiate the programming and execution of the necessary repair works.

Areas involved and intervention schedule

Over the whole of the restored sites, the following structures are installed: **595 water plans (dykes and pools), 2 sheet piling dykes, 213 clay pools, 4907 stoppers on the drains, and 29 culverts**. The major part of these structures is concentrated in the sites of the plateau (municipal and state properties). Some pools and dykes have also been created at the sites of the following valley floors : Valire (Pré Lefèvre – state RND), Grands Prés (Martinmoulin – RNA RNOB), Moulin de la Fosse (Aisne – private RND), Baraques de Samrée (Lue – state RND), the fen 'Fagne Jean-Philippe' (Ru Fagne de la Goutte – state RND), Nofoy (Bellemeuse – RNA RNOB), Baraques de Bérismenil (Bellemeuse – RNA RNOB), 'Au Moulinay' (Bellemeuse – RNA RNOB).

All these structures (except for the clay pools and the stoppers) have to be inspected twice a year, the first time in April, at the end of winter, and the second time in October, at the beginning of autumn. The problems discovered at these inspections will initiate the programming and execution of the necessary repair works.

Involved performers

At the municipal and state properties the monitoring will be guaranteed by the agent of the DNF in the area where the structures are situated.

At the sites under RNA managed by the non-profit organisation RNOB, the surveillance will be guaranteed by the custodian of the involved reserve.

Surveillance and repair of the hydraulic structures		
<i>DNF Cant. of La Roche</i>	<i>DNF Cant. of Vielsalm</i>	<i>RNOB</i>
1 sheet piling dyke 536 dykes and pools 213 clay pools 29 culverts	1 sheet piling dyke 2 mineral dykes 31 pools	4 dykes 21 pools

2.3.3.2. Repair

Description of the action

The problems discovered during the monitoring of the hydraulic structures will be dealt with within the scope of this action. Minor problems (unblocking pipes, small leakages) do not necessitate a mechanised intervention and can be dealt with at the same time as the monitoring. More important problems (breaches or erosion of the dykes, severe leakage) will necessitate the intervention of a mechanical shovel. All problems discovered in one year will be dealt with at the same time. The intervention will be planned so as to limit moving the machine and to reduce the intervention costs. For these repairs, help will be called upon initially from companies having the experience in this domain and who have at their disposal the necessary special machinery: mechanical shovel of 15 to 21 T, equipped with caterpillar track of a minimal width of 80 cm). In certain zones, driving the machine on floating platforms may be necessary. In order to guarantee an optimal execution of the works, the person in charge of the follow-up of the works will assist the driver during the complete works to be done.

Surfaces involved and intervention schedule

The majority of the main problems with the hydraulic structures have been solved during the project, as most of them manifested themselves within two or three years after the realization of the structures. As a consequence, the number of problems will diminish largely with the stabilisation and the revegetation of the dykes.

We estimate that 40 hours of repair per year will be necessary from 2011 until 2015. From 2016 until 2025, we foresee 20 hours of intervention each year. The works for repair will be executed from early June until the end of September, preferably in periods of dry weather. The satisfactory completion of the works will be checked at the time of the inspection in October following the implementation.

Involved performers

At the municipal and state properties, the outlining, planning and follow-up of the works will be performed by the DNF.

At the nature reserves managed by the non-profit organisation RNOB, the outlining, planning and follow-up of the works will be performed by the staff of the association.

Works necessitating the intervention of a mechanical shovel will be sub-contracted to a specialised company.

2.3.4. Surveillance and repair of the protecting fences at the broadleaved forest

Description of the action

In order to guarantee their protecting role, the fences installed at the beech forests will have to be inspected for their perfect state on a regular basis. Several problems can damage the tightness of the fences for the game: windfall, game collision, open barriers. The inspection consists of walking all round the perimeter of the fence to look out for possible problems. If a problem occurs, traces of the presence of game (grazing) inside the fences will be spotted and the game will need to be expelled. The repairs will be performed within one month after they are found. The mini-fences (diversification island zones) will also be checked and repaired if needed.

The individual protective plant sheathings will also be inspected. This check-up consists of an inspection whether the sheathing is well placed and if the plant is growing correctly. Dead plants have to be replaced within 3 months following a negative finding.

Surfaces involved and intervention schedule

The fences and planting zones with individual protections are situated on the maps G5 in annex. a specific code has been assigned to each fence.

61 fences, 67 mini-fences and 2339 sheathings for protection have been realised during the LIFE project. These installations are situated mainly in the municipal properties (Manhay, La Roche and Houffalize), either in the beech forests, or in the restored zones (future RND). Some fences are located in state properties (the mud land 'Fange aux Mochettes', the fen 'Fagne de Robièfa') and private land (property Limburg-Stirum).

The inspection will be carried out twice a year for all fences, a first time at the end of the winter (March) and a second time in autumn (October). The necessary repairs will be done within one month following the damage found. An extra inspection of all fences will be undertaken within two weeks after each significant storm period.

Involved performers

The installations situated in the municipal beech forests will be followed-up by the DNF in consultation with the involved municipalities (Manhay, Houffalize and La Roche).

The installations situated in the RND of municipal property and in the state properties will be followed-up by the DNF.

In these public properties, the surveillance of the installations, the planning and follow-up of the repairs will be executed by the DNF.

Smaller repairs will be done by the municipal or state workers, whereas more important repairs will be sub-contracted to a specialised company.

The surveillance and repair of the fence installed at the property E. de Limburg Stirum is at the expense of the owner.

Surveillance and repair of fences, mini-fences and sheathings				
DNF Cant La Roche	Municipality of La Roche	Municipality of Manhay	Municipality of Houffalize	Private property Limburg Stirum
22 fences 1 mini-fence 1408 sheathings	11 fences 32 mini-fences 301 sheathings	13 fences 28 mini-fences 323 sheathings	14 fences 6 mini-fences 307 sheathings	1 fence

2.3.5. Extensive grazing of the restored sites

Description of the action

Several enclosures for extensive grazing have been installed in the course of the project. The management by grazing aims at preservation and maintenance of the open habitats restored during the project. On the plateau, mainly wet and dry heathlands are concerned, whereas in the valley floors grazing aims at preservation of the wet alluvial meadows. For the time being, grazing in these enclosures is guaranteed by local farmers, benefiting from agri-environmental bonuses for this (measure « natural meadow » or « meadow of important biological value »). The conventions binding the farmers to the management (DNF or RNOB) has a duration of 5 years, linked to the duration of the MAE contract. A copy of these conventions is available in annex 3. In expectation of the retrocession to the Walloon region of the parcels acquired by the RNOB during the project, temporary conventions for grazing have been drawn up between RNOB and the involved farmers. Grazing is mainly done by bovine cattle and for some sites by horse cattle and sheep. No feeding is allowed on these sites. The number of livestock is very low (maximum 0,25 livestock unit/ha/year). The table 3 represents the main characteristics of the various grazing zones.

Areas involved and intervention schedule

There are totally **105,10 ha** managed by extensive grazing, in **15 enclosures** (see table 3).

On the sites of the plateau, the grazing is a seasonable grazing of a long duration, starting from mid April and ending about mid October or mid November, according to the cases (and the constraints linked to hunting).

On the valley floors, grazing is more intensive, but within a shorter period (animal mowing).

The zones managed by extensive grazing are situated on the maps G6 in annex.

Involved performers

As for the municipal and state sites, the DNF does the management. It takes care of the follow-up of the conventions and checks whether the terms and conditions for grazing are being respected (date of entry and departure of the animals, constraints). The DNF will also be in charge of replacing fences when these become obsolete.

As for the private sites under the RNA, the non-profit organisation RNOB does the management. The association takes care of the follow-up of the conventions and checks whether the terms and conditions for grazing are being respected (date of entry and departure of the animals, constraints). The association will also be in charge of replacing fences when these become obsolete.

The farmers are responsible for the execution of grazing, according to the terms and conditions and the constraints of the convention they signed. They are, in particular, responsible for preserving the (fixed and movable) fences and the keeping the enclosures in good condition.

As for the enclosures situated at the municipal property of Manhay (Goutte, Pouhon), the municipality is co-signatory of the convention and participates in the selection of the partner-farmers.

Extensive grazing		
<i>DNF Cant. of La Roche</i>	<i>DNF Cant. of Vielsalm</i>	<i>RNOB</i>
12 enclosures 67,04 ha	2 enclosures 35,05 ha	1 enclosure 3,01 ha

2.3.6. *Recurrent mowing of the restored sites*

Description of the action

Several areas will be managed by late mowing. This mowing aims at maintaining two types of open habitats of important biological value: sub mountain hay meadows on the plateau and wet alluvial meadows on the valley floors. On the plateau, several meadows were already managed by mowing before the start of the project (the mud land 'Fange aux Mochettes', the fen 'Fagne du Grand passage'). Mowing in these zones will continue. The other zones need an intensive preparation in order to make the initial wood bottoms fit to be mowed: windrowing of cutting brush, deep milling and levelling of the soil, spreading of hay. The involved zones are mowed every year and this includes removal of the mowing products. In most cases, the mowing is a **classical mechanised mowing**, executed with the help of conventional agriculture equipment: mowing with the scythe, spreading and pressing of hay to be sold afterwards. In this case, the farmer is bound to the management (DNF or RNOB) by a convention of five years and benefits from the agri-environmental bonuses (measure « natural meadow » or « meadow of important biological value »). Inside the mowed areas, refuge areas (at least 20 % of the surface) are kept unmowed in order to limit the impact of the management on the entomofauna.

At some sites on the valley floors (RNA of the valley of Bellemeuse, RND of the basin of the river Aisne), some limited surfaces that are hardly accessible or reachable with agricultural machinery will be **mowed by hand** (brush cutter or mowing machine). The hay will be gathered manually and stored on piles at the edges of the mowed sites. Except if indicated otherwise in the management plan, this mowing will be executed every year.

Inside certain grazing enclosures (Grand Passage and Nazieufa), a mowing to prepare grazing has been done during the LIFE project. This mowing concerned areas of heath lands with perennial heath plants. This mowing was intended to **regenerate the heath land** and to provoke the appearance of new growth, only eaten by the bovine cattle. According to the evolution of the vegetation inside the enclosures, it will probably be recommendable to repeat this mowing after about ten years. Due to the weak bearing capacity of the heath soils, this mowing will be done during periods of dry weather with machines with large caterpillar track (tractors with double wheels or soft track). The mowing products will be removed as much as possible.

In wetter areas, mowing is probably not possible with the classic agricultural engines. In this case, engines with large caterpillar tracks could be necessary to realise mowing. These « **difficult** » **parcels** of land are in very limited areas only (Valire – Sources of Bellemeuse). In this case, mowing will be done every five years. The mowing products will be removed as much as possible.

Surfaces involved and intervention schedule

The table 4 represents the various areas that will be managed by mowing.

The **classical mechanical mowing** concerns 5 zones with a total surface of **26,99 ha**, of which 20,74 ha on sites managed by the DNF and 6,25 ha on RNOB sites. The intended mowing is an annual mowing to be done after 15th August.

The **manual mowing** on the valley floors concerns a large number of small areas with a total surface of **10,75 ha**, of which 1,62 ha on sites managed by the DNF and 9,13 ha on RNOB sites. The intended mowing is an annual mowing to be done after 15th August.

Mowing for regeneration of peatlands that are grazed concerns 3 zones with a total surface of 17,31 ha (management : DNF). It comprises a single mowing, to be carried out in August-September beginning in 2020, according to the evolution of the vegetation within the enclosures.

Mowing in « difficult » wetland areas concerns 2 zones with a total surface of 3,51 ha (management : DNF La Roche). This mowing will be carried out once every five years (starting from 2012), between 15th August and 30th September.

About **22,78 ha meadows of high biological importance** that are mowed every year at the LIFE sites (RND Mochettes and RND Grand Passage) have been added to these surfaces, this was before the project started and their management will obviously be continued in future.

This makes a **total of 81,34 ha** that are managed by mowing on the whole of the perimeter of the restored sites.

The maps G7 in annex indicate the areas that are involved for management by mowing.

Involved performers

On public properties (municipal and state properties), the DNF, who manages the sites, is responsible for following-up the mowing conventions with the farmers and to watch over the proper carrying out of the operations. On these sites, the DNF is also in charge of planning and follow-up of mowing operations that necessitate the intervention of a sub-contractor (mowing for regeneration of the heath lands, mowing in difficult areas, mowing of small areas on the valley floors).

At the RNA managed by the non-profit organisation RNOB, the association, which manages the sites, is responsible for following-up the mowing conventions with the farmers and to watch over the proper carrying out of the operations. On these sites, the non-profit organisation RNOB is also in charge of planning and follow-up of mowing operations that necessitate the intervention of a sub-contractor (mowing of small areas on the valley floors).

The partner-farmers are responsible for the carrying out of the mowing, according to the terms and conditions of the convention binding them to the management, the DNF or RNOB. The manual mowing of isolated small areas will be done by the staff of the association. For these areas, the hay will be collected by volunteers of the association at the specific works organised and assisted by the staff of the association.

Specialised companies will perform mowing (mowing for regeneration of the heath lands, mowing of difficult parcels, mowing of small areas on the valley floors) as a sub-contractor of the manager and according to the terms and conditions of the work specifications.

Mowing			
	<i>DNF Cant La Roche</i>	<i>DNF Cant Vielsalm</i>	<i>RNOB</i>
<i>Annual mowing MAE</i>	24,29 HA	19,23 HA	6,25 HA
<i>Annual mowing</i>	1,62 HA	0 HA	9,13 HA
<i>Regeneration mowing</i>	10,39 HA	6,92 HA	0 HA
<i>Mowing on difficult parcels</i>	3,51 HA	0 HA	0 HA

2.3.7. Maintenance of hosting infrastructures for the visitors

Description of the action

This action concerns the maintenance of the various infrastructures set up for receiving visitors at the restored sites : information boards, didactical modules, handrails and barriers, signposts and signposting stakes, picnic areas, observation towers, cattle grids. The structures can be grouped according to the itineraries to which they are related.

Educational path « The High Marshes of Bellemeuse » (Samrée, municipality of La Roche)

Observation tower : 1
Handrail for access to the tower : 1 (double handrail – length 170 m)
Single signposts and stakes : 26
Barriers : 3
Modules and educational boards : 6
Picnic area : 2 tables, 1 waste bin
Cattle grids : length 240 m, width 150 cm

Educational path « The Mill of Bellemeuse » (Berismenil, municipality of La Roche)

Single signposts and stakes : 25
Barriers : 3
Modules and educational boards : 7
Picnic area : 2 tables, 1 waste bin

Signposted path « The Sources of the River Aisne » (Odeigne, municipality of Manhay)

Starting panel and waste bin : 1
Observation tower : 1
Single signposts : 17
Toponymic signposts : 2
Barriers : 6
Protective handrail : length 25 m
Bridge over the river Aisne : 1

Signposted path « Tour of the Fens of Odeigne » (Odeigne, municipality of Manhay)

Single signposts : 40
Toponymic signposts : 3

Specific information panels LIFE

Fifteen extra information panels were installed on the signposted paths and at the edge of the public roads. The recurrent interventions concern the general surveillance of the structures, cleaning of the information boards and educational modules, and emptying the waste bins. The annual inspection of the structures aims at determining the heaviest maintenance works to be executed. Possible instructions about circulation restrictions will be displayed at the starting points of the various circuits. From May until October, the waste bins will be emptied every two weeks. From November until April, they will be emptied monthly.

Surfaces involved and intervention schedule

The various structures as well as the tracks of the circuits are indicated on the maps G8 in annex.

The annual inspection of the paths will be executed at the opening of the tourist season during May. All of the boards and modules will be cleaned every two years at the same time with the annual inspection of the paths in the month of May.

Involved performers

The municipality of Roche, through the undertaking union 'Syndicat d'initiative' of Samrée, is responsible for the inspection, the maintenance and the preservation of the infrastructures of the circuits « High Marshes of Bellemeuse » and « Mill of Bellemeuse », situated on its territory, including the regular emptying of the waste bins.

The municipality of Manhay is responsible for the inspection, the maintenance and the preservation of the infrastructures of the circuits « Sources of the River Aisne » and « Tour of the Fens of Odeigne », situated on its territory, including the regular emptying of the waste bins.

The DNF will be in charge of the annual cleaning of the specific information boards LIFE. The DNF is also responsible for displaying the circulation restrictions linked to hunting and the tranquillity for the game. It assures the monitoring of the use of the paths.

2.3.8. General monitoring of the sites

Description of the action

The protection statuses (RND and RNA) assigned to the restored sites imply a series of restrictions of the possible activities on the sites: hunting, sylviculture, foraging, visitors' circulation, water collection. These restrictions respect and override the applicable legislation of the Walloon Region, in particular the legislation regarding the nature reserves (Law for the preservation of nature and related decrees) and to the new Forestry Act.

Hunting

Hunting big game is allowed in the RND (municipal and state properties) under certain restrictions, stipulated in the derogation decree (AGW of 14/03/2008) or in the conventions for putting the municipal sites at disposal (see copies of the conventions in annex 1). An integrated derogation decree is planned.

Sylviculture

A marginal forestry undertaking is still possible at the restored sites, provided these are compatible with the management objectives and explicitly mentioned in the management plan. These interventions concern basically the elimination of the temporary softwood shelters and clearing areas of broadleaf coppice wood.

Water collection

The drinking-water collection, including the creation of new collecting points, will remain possible at the restored sites. There are actually 3 water extraction points operational at the restored sites.

Foraging

At the LIFE property sites of the municipalities of Manhay, La Roche and Houffalize, foraging of bilberries, cranberries and mushrooms will still be allowed at certain periods (from 15th June to 30th November) under certain conditions (holders of written authorization granted by the municipality). For this foraging and during these periods, foraging outside the clearly indicated roads and paths will be allowed.

Movement of the public

In general, the movement of the public is only allowed on the signposted paths that are constructed for this purpose. The foraging by bilberry and mushroom foragers as well as the people in charge of the scientific follow-up of the sites will remain permissible outside the roads and paths.

Outside the public roads, the movement of bicycles and motor vehicles is strictly forbidden on the LIFE sites, except to ensure the surveillance of the sites or the hunting territory or for vehicles directly related to management works at the sites.

Involved performers

Through the intermediation of cleaning agencies, the DNF is responsible for the general surveillance of the sites and has to monitor the compliance with the various activity restrictions mentioned above.

2.4. Executing schedule

The tables 5 represent the intervention schedule for each of the management operations, detailing the recurrence and the areas to be treated. Distinction is made between the different responsible operators (DNF La Roche, DNF Vielsalm, RNOB).

2.5. Evaluation of the costs and of the duration of the interventions

2.5.1. Sources of finance

The management operations in the state nature reserves (state lands or municipal parcels under convention) will be financed by the Walloon Region, on the regional budget allocated to the management of state nature reserves.

The management operations in the approved nature reserves (management : RNOB) will be financed by the managing association, which benefits from an annual subsidy of the Walloon Region which guarantees the management of its nature reserves. For specific expensive interventions, executed by sub-contractors, the association also had the possibility being granted a specific subsidy of the Walloon Region (subsidy for extraordinary works).

The various municipalities involved (La Roche, Houffalize and Manhay) will finance the works for maintenance and repair of the infrastructures installed on their lands, outside the state nature reserves: fences, plantings and protections in the state beech forests, infrastructures related to tourism.

The farmers in charge of mowing and/or extensive grazing at the restored sites benefit from agri-environmental bonuses for the management of these parcels. These bonuses allow making this exploitation economically attractive for the farmers.

2.5.2. Costs per action

The various costs are estimated according to the costs experienced during the course of the LIFE project. Taking into account the rise in living costs and the duration of the management plan, these costs should be updated if necessary.

The cost has been evaluated for all of the actions (except mowing and grazing under MAE), whoever the operator might be. It concerns the **operating cost when sub-contracted to a specialised company**, based on an hourly work rate (and not on a flat rate basis). These costs can obviously be cut down if the managers are capable of meeting certain management operations at their own expense. The tables 6 in annex provide the costs specified according to the actions, the operators and the intervention schedule.

Manual scrub clearing

This operation concerns pruning the leafy natural regeneration and softwood (spruce, Scots pine), and of broom without removal. Taking into account the variable density of the seeding according to the sites, we estimate that one man is able to treat an area of **4 ha per day**. Based on a cost of 30 €/hour VAT included, the **final cost is 60 €/ha**.

Costs per rotation

Elimination of growth of spruces and of hardwood

Note: as cutting of spruces and hardwood is planned on the same areas, they are recorded only once.

Responsible		2011	2012	2013	2014	2015	2016
DNF La Roche	Surface (ha)	0	133	90	67	69	49
	Time (h)	0	266	180	134	138	98
	Cost (€)	0	7980	5400	4020	4140	2940
DNF Vielsalm	Surface (ha)	0	0	106	0	0	0
	Time (h)	0	0	212	0	0	0
	Cost (€)	0	0	6360	0	0	0
RNOB	Surface (ha)	2	1	0	1	30	2
	Time (h)	4	2	0	2	60	4
	Cost (€)	120	60	0	60	1800	120

Priority elimination of coppice shoots of hardwood and of Scots pine

Responsible		2011	2012	2013	2014	2015	2016
DNF La Roche	Surface (ha)	0	15	0	0	15	0
	Time (h)	0	30	0	0	30	0
	Cost (€)	0	900	0	0	900	0
DNF Vielsalm	Surface (ha)	0	11	0	0	11	0
	Time (h)	0	22	0	0	22	0
	Cost (€)	0	660	0	0	660	0
RNOB	Surface (ha)	0	1	0	0	1	0
	Time (h)	0	2	0	0	2	0
	Cost (€)	0	60	0	0	60	0

Elimination of broom

Responsible		2011	2012	2013	2014	2015	2016
DNF La Roche	Surface (ha)	3	0	0	3	0	0
	Time (h)	6	0	0	6	0	0
	Cost (€)	180	0	0	180	0	0
DNF Vielsalm	Surface (ha)	12	0	0	12	0	0
	Time (h)	24	0	0	24	0	0
	Cost (€)	720	0	0	720	0	0

Mowing bracken

We estimate that one man is able to treat an area of **50 ares per day**. Based on a cost of 30 €/hour VAT included, the final cost is **480 €/ha**.

For the areas under RND, the costs and intervention times are as follows :

Site	Responsible	Surface to be treated (ha)	Time (hours)	Annual cost
Grand Passage	DNF Vielsalm	1,00	16	480 €
Pouhon	DNF La Roche	0,80	13	390 €
Goutte	DNF La Roche	0,30	5	150 €
	TOTAL	2,10	34	1020 €

Within certain fenced properties (state beech forests), the recent plantings some of which are invaded by fern should also be cleared. This clearing will be necessary in 2011, 2012 and 2013. As from 2014, the development of the plants will be sufficient not to be hindered any longer by the bracken.

The areas to be treated, the times and the annual costs, per municipality, are divided as follows.

Municipality	Responsible	Surface to be treated (ha)	Time (hours)	Annual cost
HOUFFALIZE	DNF La Roche	2,10	34	1020 €
LA ROCHE	DNF La Roche	3,00	48	1440 €
MANHAY	DNF La Roche	3,50	56	1680 €
	TOTAL	8,60	138	4140 €

Grubbing of the balsam

We estimate that one man is able to treat an area of **33 ares per day** (one sweep). Based on a cost of 30 €/hour VAT included, the **final cost is 1440 €/ha for two sweeps**.

For the areas to be treated, the costs and annual intervention times needed are divided as follows :

Site	Responsible	Surface to be treated (ha)	Passages	Time (hours)	Annual cost
Pouhon	DNF La Roche	0,30	2	14	432 €
Moulin Fosse	DNF La Roche	2,50	1	61	1830 €
Fayi de la Folie	DNF La Roche	0,75	2	36	1080 €
Bellemeuse	RNOB	1,00	2	48	1440 €
	TOTAL	4,55		159	4782 €

Conversion of the temporary softwood shelters

If no economical valorisation is possible, the only solution will be to pay for eliminating the softwood game shelters. Based on a complete removal of the cut waste, we estimate that the overall cost for this elimination to be **5000 €/ha. The elimination of the whole of the shelter areas (surface of 12,51 ha) will cost about 62500 €**. In practice this cost can be spread over five years, from 2023 until 2027 (12 500 €/year). These costs are borne by the DNF Cantonment of La Roche.

Surveillance (hydro, exclosures, general)

On the parcels subject to the forest regulation, this surveillance will be guaranteed by the responsible DNF officer in charge of the clearing area, within the scope of his usual work. In this way, this action doesn't carry any specific cost as such. The time dedicated to this surveillance depends on the clearing areas involved (see table below).

Area	Responsible officer	Hydro	Exclosures plantings -	General surveillance
Berismenil	E. JACQUES	3 J	5 J	5 J
Odeigne	M. GROGNARD	4 J	2 J	5 J
Freyneux	E. JACQUES	2 J	3 J	5 J
Wibrin	J. PECHEUR	< 1 J	3 J	5 J
Dochamps	L. LEJEUNE	< 1 J	-	3 J
Les Bourgeois	Y. FONTEYN	< 1 J	< 1 J	3 J
Lierneux	J. MATHIEU	< 1 J	< 1 J	3 J

At the RNA managed by the non-profit organisation RNOB, the various surveillance operations will be guaranteed by the custodian(s) of the reserve, acting here as volunteers.

Repair of the hydraulic structures

Based on the repairs executed at the recent structures in the course of the project, we estimate that in the course of the first five years about **40 machine hours** (power shovel and driver) need to be spent for repairing damage and deficiencies at the hydraulic structures. After five years, the repairs will become minimal and annual flat rate of **20 machine hours** will be largely sufficient.

Based on a unit cost of 85 €/machine hour, **the annual cost is 3400 € VAT included from 2011 until 2016, and 1700 € VAT included as from 2017.** The larger part of the repairs will be done on public lands (responsibility: DNF).

The cost for these works do not include the cost for following-up the yard (40 h per year), which will be performed by the responsible DNF officer within the scope of his usual work.

Cost for the repair of hydraulic structures – flat rate to be reserved			
	<i>DNF Cant La Roche</i>	<i>DNF Cant Vielsalm</i>	<i>RNOB</i>
<i>2011 – 2016</i>	35 h machine 2975 €	3 h machine 255 €	2 h machine 170 €
<i>> 2017</i>	15 h machine 1275 €	3 h machine 255 €	2 h machine 170 €

Repair of the enclosures and the mini-fences

Based on the repairs that have been executed already in the course of the project, we estimate **the annual cost for repairs at 5000 € TVAC** (based on being carried out by a sub-contractor), except for exceptional damage caused by windfall after a storm.

This cost is covered by the owners, taking into account the actual exposure of the fences to damage by windfall (the fences in open areas are less exposed to this risk):

City of Houffalize (municipal beech forests) : 1350 €/year

City of La Roche (municipal beech forests) : 1250 €/ year

Municipality of Manhay (municipal beech forests) : 1400 €/ year

Walloon Region (RND and RND at municipal property) : 1000 €/ year

These amounts establish an average, taking into account the number and the location of the fences, as the damage that occurs to the fences is random and unpredictable.

Replacement of protective sheathings at broadleaf plants

We estimate the mortality rate of broadleaf plants after planting to be 10% in beech forest and at 7% in open areas, i.e. **200 plants of the 2339** planted within the scope of the LIFE project. Based on a cost of **10€ VAT included per plant** (including the labour input), the replacements will cost **2000 € VAT included.** This important replacement should take place only once, in 2011.

The costs are spread per owner as follows :

City of Houffalize (307 sheathings – 33 plants to replace) : 330 €

City of La Roche (301 sheathings – 33 plants to replace) : 330 €

Municipality of Manhay (323 sheathings – 35 plants to replace) : 350 €

Walloon Region (1408 sheathings – 99 plants to replace) : 990 €

Grazing and mowing by the farmers

The carrying out of grazing and mowing by external farmers (under MAE convention) does not imply specific costs for the manager. Moreover, the maintenance of the fences and enclosures are to be borne by the farmer. Taking into account the material installed, the complete replacement of the fences for grazing, for the account of the manager, will not be necessary before the end of the period covered by this management plan. The financial charge for the account of the manager (DNF or RNOB) for larger repairs will probably be necessary, but cannot be evaluated. A subsidy for extraordinary works can be applied for, to cover these works. The **metalling of the enclosure of Nazieufa** has to be carried out in 2011. The cost for this work, that will be executed by the DNF, is estimated at **1200 € VAT included**.

Manual mowing

We estimate that the cost for this mowing (and the windrowing of the hay) will be about **1500 €/ha** VAT included if the complete work is sub-contracted to a specialized company. This cost will be lower if all or part of the work is done at their own expense by the staff of the management (DNF or RNOB) or by volunteers (RNOB yards).

Based on the surfaces to be treated, the annual costs are divided as follows:

Manager	Surface to be treated (ha)	Annual cost
DNF La Roche	1,62	2430 €
RNOB	9,13	13695 €
TOTAL	10,75	16125 €

Regeneration mowing of the heath lands

Based on the works realised in the course of the LIFE project, we estimate the cost for this intervention at **1500 €/ha VAT included**. We must stress that this mowing will not be executed before 2020 and then once every ten years if the vegetation of the grazed sites makes it necessary.

Site	Responsible	Surface to be treated (ha)	Cost
Grand Passage	DNF Vielsalm	6,92	10380 €
Nazieufa	DNF La Roche	9,22	13830 €
Goutte	DNF La Roche	1,17	1755 €
	TOTAL	17,31	25 965 €

Considering the areas to be treated (17,31 ha), the **overall cost for a mowing is about 25965 €**. The realisation of this mowing depends exclusively of the DNF.

Mowing on difficult areas

Based on the experience gained in the course of the project, we estimate the cost of this intervention at **2000 €/ha** VAT included, if the work is completely sub-contracted to a

specialised company. We stress that this mowing will only be executed once every 5 years as (delete as) from 2012 on.

Based on the areas to be treated (**3,51 ha**), the **overall cost of a treatment is about 7020 €**. These areas depend from the DNF Cantonment of La Roche.

Maintenance of tourist infrastructures

Taking into account the nature of the equipment, an **annual flat rate of 1000 €** will be sufficient to cover the **repairs** of the four signposted paths : **500 €** for the paths of **Samrée** (to be provided for in the municipal budget of La Roche or of the SI of Samrée) and **500 €** for both paths of **Odeigne** (to be provided for in the municipal budget of Manhay).

The **annual maintenance of the paths**, at the cost of the municipal workers or the SI, will take 5 working days (for one person) : 2 days for Samrée and 3 days for Odeigne. This maintenance implies the inspection of the equipment, cleaning of the boards and clearance of vegetation.

Emptying the waste bins will be integrated into the municipal route for litter collecting from the public waste bins.

Scientific follow-up

The **botanical follow-up** (reading, encoding, treatment and disseminating of the data) will take **250 working hours** once every 3 years, meaning, based on an hourly rate of 30€/h, a cost of **7500 €**.

The **entomological follow-up** (coordination of the group of volunteers, reading, encoding, treatment and dissemination of the data) will take **100 working hours** every year, at a cost of **3000 €**.

The **ornithological follow-up** (coordination of the group of volunteers, reading, encoding, treatment and dissemination of the data – system with observation points for listening) will take **50 working hours** every year, at a cost of **1500 €**.

The costs for this following-up will be undertaken by the Demna, or if necessary by the convention bias with external operators, to be defined.

The table below indicates the annual distribution of the costs for scientific follow-up.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Botanical follow-up		7500			7500			7500		
Entomological follow-up	3000	3000	3000	3000	3000	3000			3000	
Ornithological follow-up	1500	1500	1500	1500	1500	1500			1500	
TOTAL	4500	12000	4500	4500	12000	4500	0	7500	4500	0

3. Scientific monitoring of the sites

The scientific monitoring set up in the course of the project will be continued, adapting itself to the recurrence of the readings.

3.1. Botanical follow-up

The readings will be done at the **44 groups of three boxes** installed during the course of the project. These boxes, pegged out on two stakes (+ a metal bar underground), are situated in a cartographic bank of datas (DEMNA). The readings will be done one year in every three years (redone in 2012). The detailed protocol of the follow-up figures in annex 4, as well as the detailed characteristics of the various series of permanent boxes will be taken. This follow-up will be executed by a biologist designated by the DEMNA. This person will be in charge of encoding, treating and dissemination of the collected data. This follow-up is necessary in order to identify the evolution of the floristic structure of the restored natural habitats, of their state of preservation and to verify whether the objectives of restoration and management have been reached.

3.2. Entomological follow-up

The readings will be done at the **34 stations** that were already followed in the course of the project ; they are shown on the table below and are situated in a cartographic bank of datas (DEMNA). For each of these stations, a fixed itinerary has been defined, as well as a duration for sampling. The detailed protocol for follow-up is available in annex 4. From 2011 until 2016, this follow-up will be executed every year, and then every 3 years as from 2017. {Ce suivi intensif dans les premières années après le projet permettra de suivre de près la colonisation des sites restaurés par les espèces cibles.} The target groups of this follow-up are the Odonate and the Lepidoptera Rhopalocera. In particular, following species are targeted :

Peat habitats : *Leucorrhinia rubicunda*, *L. dubia*, *Coenagrion hastulatum*, *Aeshna subarctica*, *Aeshna juncea*, *Somatochlora arctica*, *Orthetrum coerulescens*, *Sympetrum danae* (dragonflies), *Boloria aquilonaris*, *Lycaena hippothoe* (butterflies)

Alluvial habitats : *Cordulegaster boltonii*, *Orthetrum coerulescens*, *Lestes dryas* (dragonflies), *Lycaena helle*, *L. hippothoe*, *Boloria eunomia*, *Satyrrium pruni*, *Erebia medusa* (butterflies).

This follow-up will be coordinated by the DEMNA, with the support of a small group of volunteers for the collection of the biological data.

This follow-up aims in general to evaluate the biological evolution of the restored sites (and to check whether the objectives of restoration and management have been reached) through the evolution of the populations of species, being the key and indication of the biological quality of the sites.

Nr	Station
1	The fen 'Fagne du Grand Passage'
2	Massotais (RND)
3	Chanfa (RND)
4	Robièfa (RND)
5	Nazieufa (RND)
6	Connection between Robièfa and Nazieufa (RND)
7	The upstream fen 'Fagne du Pouhon' (RND)
8	The downsteam fen 'Fagne du Pouhon' (RND)
9	The fen 'Fagne de la Goutte' (RND)
10	The mud land 'Fange aux Mochettes' (RND)
11	Sources of Bellemeuse (RND)
12	The fen 'Fagne de Samrée' (RND)
13	Municipal valley of Bellemeuse (RND)
14	Nofoy (RNA Bellemeuse)
15	Baraques de Bérismenil (RNA Bellemeuse)
16	Fond des Is (RNA Bellemeuse)
17	Au Moulinay (RNA Bellemeuse)
18	Pré de Va (RNA Bellemeuse)
19	Mincée (RNA Bellemeuse)
20	Valley of Pré Lefèvre (RND)
21	Valire (RND)
22	Grands prés (RNA Martinmoulin)
23	Planchette (RNA Martinmoulin)
24	Baraques de Samrée (RND)
25	Meadows of Dochamps (RND)
26	Fond de Dochamps (RND)
27	The mill 'Moulin de la Fosse' (RND)
28	The bridge 'Pont de la Bounire' (RND)
29	The fen 'Fagne Jean-Philippe' (RND)
30	The brook 'Fagne Goutte' (RND)
31	Ressenal (RND)
32	Hari prés (RND)
33	Bena bwès (RND)
34	The mill 'Moulin de la Fosse' (RND)

Table 7. List of the stations for entomological follow-up

3.3. ***Ornithological monitoring***

The ornithological follow-up includes the follow-up of the **30 observation points for listening** installed in the course of the LIFE project, indicated by a numbered stake.

The sites of the various observation points for listening are located in a cartographic bank of datas (DEMNA), the list figures in the following table. Readings will be done according to the protocol available in annex 4. They will be executed every year from 2011 until 2016, and after that once every 3 years.

The readings will be coordinated by the DEMNA, with the support of a small group of volunteers for the collection of data.

This follow-up aims in general to evaluate the biological evolution of the restored sites (and to check whether the objectives for restoration and management have been reached) through the evolution of the specific composition of the communities of breeding birds.

Nr	Station
1	Fond des Is (RNA Bellemeuse)
2	Baraques de Bérismenil (RNA Bellemeuse)
3	Nofoy (RNA Bellemeuse)
4	Downstream municipal Bellemeuse (RND)
5	Upstream municipal Bellemeuse (RND)
6	Sources of Bellemeuse downstream (RND)
7	Fagne de Samrée (RND)
8	Sources of Bellemeuse upstream (RND)
9	Mud land 'Fange aux Mochettes' (RND)
10	The fen 'Fagne de la Goutte I' (RND)
11	The fen 'Fagne de la Goutte II' (RND)
12	The fen 'Fagne de la Goutte III' (RND)
13	The downstream fen 'Fagne du Pouhon' (RND)
14	Colafa (RND)
15	The upstream fen 'Fagne du Pouhon I' (RND)
16	The upstream fen 'Fagne du Pouhon II' (RND)
17	Nazieufa I (RND)
18	Nazieufa II (RND)
19	Robièfa I (RND)
20	Robièfa II (RND)
21	Massotais I (RND)
22	Massotais II (RND)
23	Chanfa (RND)
24	The fen 'Fagne du Grand Passage' (RND)
25	Grands Prés (RNA Martinmoulin)
26	Pré Leroy I (privé Martinmoulin)
27	Pré Leroy II (privé Martinmoulin)
28	Upstream Pré Lefèvre (RND)
29	Downstream Pré Lefèvre (RND)
30	Valire (RND)

Table 8. List of the stations for ornithological follow-up

{Associé aux suivis par points d'écoute, des **s suivis d'espèces rares** (liste rouge wallonne) seront coordonnés par l'asbl AVES (même convention avec le DEMNA que pour les points d'écoute). Ces suivis visent à détecter et à documenter l'apparition dans les sites d'espèces nicheuses de grand intérêt patrimonial, comme la Bécassine des marais ou le Torcol fomialier. Ils viseront aussi à suivre les populations d'espèces nicheuses déjà en place, comme par exemple la Pie-grièche grise.}

4. **Activity for information, sensitisation and education – volunteers**

The following activities, organised in the course of the project and directly connected to the restored sites, may be continued with the help of various external actors. Unfortunately, in the absence of a local coordinator of the actions after the project, the success will completely depend on the goodwill and the motivation of these volunteers for the realisation of these activities.

4.1. Guided walks

The people, who might propose guided tours for the exploration of the sites, are : **DNF** (external services), **SI of Samrée** (bird watching tour, excursions « deer bellowing »), **CNB – Trientale** (trientalis, meaning: Starflower) (nature walks) – **Regional Natagora Eastern Ardennes** (nature walks) – **Natural park of the two Ourthes** (cultural and nature walks).

4.2. Educational activities

The **non-profit organisation Vert Pomme** (=apple green), based at Odeigne, has suggested animated activities for schools focussing on nature, taking place at the restored sites of the municipality of Manhay.

The training of the Nature and Environment Interpreters, coordinated by the **non-profit organisation Environmental Education**, has included an annual visit to the sites of the plateau des Tailles in their training programme.

4.3. Volunteer groups

At the RNA of the valley of Bellemeuse and of Martinmoulin, the **Regional Natagora Eastern Ardennes** organises every year several volunteer groups to participate in the management of the sites : scrub clearing, mowing and collecting hay. These groups have to be monitored carefully.

At the RND, only the **non-profit organisation Vert Pomme** has shown interest in organising management groups, preferably within the territory of Manhay.

The organisation **Trientale (= trientalis : starflower) of the Naturalistic Unions of Belgium** participates eagerly with the management groups at the sites of the 'plateau des Tailles', but does not guarantee the initiative and the organization of the groups.

5. Follow-up, inspection and evaluation of the management

5.1. *Follow-up of the creation of the management team*

The recommended operations for management are defined and planned in various **working documents** : After LIFE plan, management plan of the sites, MIS for management. These documents will have been worked out at the end of the LIFE project by the workgroup of the project, together with the various people involved.

The **plan after LIFE** is an executive summary of the future management of the restored sites. It was communicated to the EC with the final reports of the LIFE project and is used to check whether the grants that were applied during the LIFE project have been applied sustainably.

The **management plans** form the official technical base document for the status admittance under protection (RND or RNA) of the restored sites. It includes detailed scientific information about the biological importance of the sites involved and about the management objectives. The management plan describes in detail the specifications for future management of the sites involved.

All management operations are situated and characterised in an **MIS**, worked out and managed by the DEMNA. These cartographic layers include a detailed description of the protected parcels within the scope of the LIFE project, a cartography of the natural habitats (before restoration – after restoration – objectives) of the various restoration works that took place at these sites in the course of the project, as well as the management works recommended in the management plan. The management works that will actually be realised on the sites will also be encoded every year in this unit of cartographic layers.

5.2. *Evaluation of the management*

The **scientific monitoring** of the sites will be used to check whether the objectives for restoration have been reached and to describe the biological evolution of the restored sites (see above). The conclusions of this follow-up will serve to validate or to adjust the management plans.

The **encoding of the management works** and their comparison with the management plan will also be used to check whether the plan After LIFE is correctly executed.

The DEMNA will be in charge of the **inspection of the execution of the management plans** and to check, bearing in mind the results of the scientific monitoring, whether the management objectives have been reached. It presents its scientific conclusions to the manager of the sites (DNF or RNOB) in order to adapt the management specifications. This information will also be distributed to the various advisory bodies concerned in the preservation of the sites (CCGRND, Preservation Commission Natura 2000, Management Commission RNOB)

For the RND, the **CCGRNDM** will also be actively involved in the evaluation and update of the management plans of the sites. As for the RNA managed by the non-profit organisation RNOB, the Management Commission of the Northern Ardennes will fulfil the same role. The **Preservation Commission Natura 2000** of Marche will also be able to intervene.

5.3. ***Update of the management plans***

The management plans are scheduled for a period of **thirty years**, which corresponds to the duration of the convention concluded with the public owners. However, these plans need to be **evaluated every five years and updated every ten years**. The DNF is responsible for the update of the management plans for the RND's.