LIFE Project Number

LIFE12 NAT/DK/000893

FINAL Report

Covering the project activities from 01/10/2012 to 31/03/2018

Reporting Date

27/08/2016

LIFE+ PROJECT NAME or Acronym

LIFE LAESOE Restoration of birdlife and natural habitats at Laesoe

Project Data

Project location	The island of Læsø, Denmark
Project start date:	01/10/2012
Project end date:	30/09/2017 **Extension date:** 30/03/2018
Total Project duration (in months)	66 months
Total budget	€ 2,102,002
Total eligible budget	€ 1,051,001
EU contribution:	€ 1,051,001
(%) of total costs	50%
(%) of eligible costs	50%

Beneficiary Data

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2. Executive Summary

LIFE LAESOE has taken actions to improve conservation status for light demanding habitats and related birds on the island of Læsø in Kattegat, Northern Denmark.
The project has been carried out in partnership between the Danish Nature Agency (coordinating beneficiary) and the Municipality of Læsø (associated beneficiary). As the project developed also the newly established Landowners Association became a valued project partner (associated beneficiary).

The project started October 2012 and finished March 2018 and had a budget of 2.1 mi. Euro with 50% contribution from the EU LIFE fond.

The project covers two Natura 2000 sites (DK00FX010 and DK00FX118) with consist of 6.500 hectare - 2.000 hectare is tidal zone and 4.400 is mainland.

At the beginning of the LIFE project lack of grazing was a threat to the light demanding nature areas on Læsø. One of the central reasons for the lack of grazing was the complex structure in ownership with many small and narrow cadastral units with many different land owners. The historic development in farming made it difficult for the individual farmer to run the small units efficiently with grazing. This meant dropping numbers of livestock on Læsø resulting in trees and shrub encroaching on the open nature areas. Therefore the living conditions for many of the birds and plants belonging to the open areas degraded.

Actions taken in the LIFE project to improve conservation status have mainly been:
- Clearing of trees, reeds and shrub
- Clearing of non native woody species
- Clearing of the invasive Japanese Rose and Cord grass
- Establishing grazing through providing livestock and fenced pastures
- Controlled burning
- Predator control
- Restoration of natural hydrology.

It has been very important for the project to secure long term coherent nature management by reintroducing grazing on a large scale. To obtain this an action of establishing a Landowners Association to gather management of small cadastral units to make grazing financially sustainable was central.

It was also a goal of the project to contribute socio economically by creating income for both landowners and livestock owners, creating a job as daily manager of the Landowners Association and create the basis for future associated jobs (veterinarian, slaughterhouse) and income (meat sales). As nature is one of the main reasons for tourists to visit Læsø the project conservation actions also contribute to the tourism industry.

During the project different methods to combat the invasive species Japanese Rose and Cord grass have been tested and best practice lessons learned. The project experiences and findings have been shared through publishing reports on control of both species in both Danish and English.

The many results of the project have as a whole contributed to maintaining and improving the light demanding nature of Læsø as habitat for rare birds and plants.

The main project results are:

- Establishment of a Landowners Association today managing 2,500 ha of nature on Læsø with grazing. Including creating a job as daily manager.
- Establishment of a livestock herd consisting of 380 cattle and 261 sheep.
- Clearing of nearly 799 ha of trees and shrub
- Clearing of 21 ha non native conifers in woodland
- Clearing of *Rosa rugosa* on 76 ha
- Clearing of *Spartina ssp*. on 29 ha
- Establishing new fences on 1,014 ha and improving existing fences on 1,674 ha.
- Controlled burning of nearly 600 ha of heathland with the help of volunteers.
- Culling of fox, mink and crow in cooperation with volunteer hunters.
- Closing of 4.4 km of ditches to establish more natural hydrology.
- Expanded area of several nature types
- Establishment and maintenance of a project webpage.
- Publishing of newsletters on the project.
- Establishment of 13 information boards in the project area.
- Publishing of leaflets on the project in Danish, German and English
- Guided tours in the project area.
- Establishment of a local community group
- Reporting and final seminar.

A well-functioning Landowners Association is the key to long term success of coherent nature management on Læsø.
Today the Landowners Association is an independent association with their own daily manager taking care of 2.500 ha of nature areas on Læsø through grazing. The members are landowners who lease their land to the association. The association provides grazing, fencing and applies for RDP funding. The large Galloway herd belonging to the association grazes the areas but many local livestock owners also function as grazing contractors for the association. Today the Landowners Association work towards developing and improving the nature management and also to promote sales of local nature meat. Through the management conducted by the Landowners Association nature and the individual members as well as Læsø as society are accommodated.

In the future the Danish Nature Agency, the Municipality of Læsø and the Landowners Association will continue to work together to maintain a coherent nature management.

3. Introduction

The island Læsø contains large areas with light demanding habitats with a rich biodiversity. At project start the light demanding habitats and related species were threatened by a lack of grazing caused by a fragmented ownership and no coherent nature conservation. The lacks of coherent nature conservation lead to overgrowth with woody species, invasive species, and fragmentation and to a less favorable conservation status for habitats. Populations of bird species were threatened by degraded habitats, disturbance and predation.

The project objectives were to ensure the targeted light demanding habitats a favorable conservation status and to increase targeted bird species, *see figure 1*. To ensure the grazing and nature conservation, a coherent and sustainable land management system was to be established – a Landowners association. To improve and to prepare all habitats for the management of the Landowners association they had to be cleared for woody species and invasive species, fenced and some controlled burned.

The project covers two Natura 2000 sites (DK00FX010 and DK00FX118) with consist of 6.500 hectare - 2.000 hectare is tidal zone and 4.400 is mainland.

Establishment of the landowners association covering all Natura 2000 sites will directly create jobs in the farming industry and meat production. Also landowners and livestock owners will benefit from the landowners association. The nature is a great part of the tourism on the island and nature conservation can only be seen as beneficially for the tourism.

Habitats			
Numbers	**Short name**	**Baseline**	**Project objectives**
1330	Salt marsh	1509 ha	improvement
2130	Grey dune	293 ha	improvement
2140	Dune heath	536 ha	improvement
3110	Lake shores	3 ha	improvement
3130	Oligotrophic lake	2 ha	improvement
4010	Wet heath	299 ha	Expansion 15 ha
4030	Dry heath	382 ha	Expansion 35 ha
6230	Species rich grassland	64 ha	Expansion > 8 ha
6410	Molinia meadow	21 ha	Expansion > 4 ha
7230	Alkaline fen	6 ha	Expansion > 1,5 ha

Bird species			
English name	**Scientific name**	**Baseline**	**Project objectives**
Dunlin (Southern subspecies)	*Calidris alpina schnizii*	9 – 14 pairs	25 pairs
Wood Sandpiper	*Tringa glareola*	0 pairs	2 suitable nesting areas
Avocet	*Recurvirostra avosetta*	120 pairs	250 pairs
Artic Tern	*Sterna paradisaea*	A few hundred pairs	800 pairs
Little Tern	*Sterna albifrons*	20 – 25 pairs	30 pairs
Dunlin (Northern subspecies)	*Calidris alpina alpina*	10,000 indiv.	45,000 indv.
Bar-tailed Godwit	*Limosa lapponica*	4,000 indv	4,000 indv.
Dark-bellied Brant Goose	*Branta bernicla bernicla*	700 – 1,200 indv.	1,500 indv.

Figure 1: *Project objectives. Indiv. = individuals*

4. Administrative part

4.1 Description of the management system

The Danish Nature Agency (DNA) has been the coordinating beneficiary of the project and has had the overall responsibility. This includes the overall project administration, coordination and implementation of activities in all phases of the project. Activity reports have been made as part of the project management.
The project activities have been carried out in partnership with the Læsø Municipality (LM) and Landowners Association (LA) as associated beneficiaries. The Partnership agreement with LM was submitted to the Commission with the Inception Report dated June 30th 2013. The Partnership agreement with LA was sent to the Commission November 13th 2017. *See figure 2 for management structure, annex 1 for persons involved during project period, annex 2 for gantt chart, and annex 3 for partnership agreements (USB only).*

Project working group

A working group was established and included the project manager and the key participants from the associated partners. Professionals employed by the project partners were available to the working group if specific requirements arose.

The project manager at DNA has been in charge of the overall project administration, coordination and implementation of activities in all phases of the project. The project manager has been responsible for the project reporting. The project manager has also been responsible for all financial issues such as ongoing analysis of status on costs per action and category, annual budgets, and responsible for overseeing compliance with common provisions on financial issues for the partners.

The project manager and the participant at LM have had close contact through mail and phone in daily management and also met frequently to update project status and coordinate work tasks in relation to actions. When LA was included as projects partner their participant was also included in the communication to ensure coordination of tasks and progress.
A project clerk at both DNA and LM were assisting the project manager and LM participant with accounting, timesheets, payroll and financial reporting.

Within the DNA local LIFE project managers, LIFE clerk, dissemination expert and biologist met once a month to benefit from each other's experiences, discuss common issues and help each other in project progress.

Audits were carried out by an independent auditor regarding LM and by National Audit Office / internal auditors regarding DNA.

The Steering Committee

The Steering Committee was established to secure the coordination and the project progress by frequent and close contact to the project manager. The Steering Committee consisted of the Head Forester at DNA and the Municipality Director at LM. The Steering Committee met 1 to 2 times a year.
To ensure progress in project management the project manager also held status-meetings with the head forester every six weeks.

Advisory Board

The Advisory Board consisted of experts on different aspects of nature and was established to function as consultants in tasks that required special guidance from specialists. The board was common for all LIFE projects with DNA, Vendsyssel (LIFE LAESO, LIFE WETHAB and LIFE REWETDUNE)

Local Community Group

The local community group was set up to inform the community about project actions but also to meet local interests. The group consisted of local NGO's and individuals, which could provide the project with input on how the project could meet local interests.

Amendments

Two amendments to the Grand Agreement have been made during the project period.
Amendment no. 1 signed by the commission March 15th 2016. The amendment included a prolongation of the project period with 6 month.
Amendment no 2 was signed by the commission September 6th 2017. The amendment included a budget modification and a partnership addition of LA.

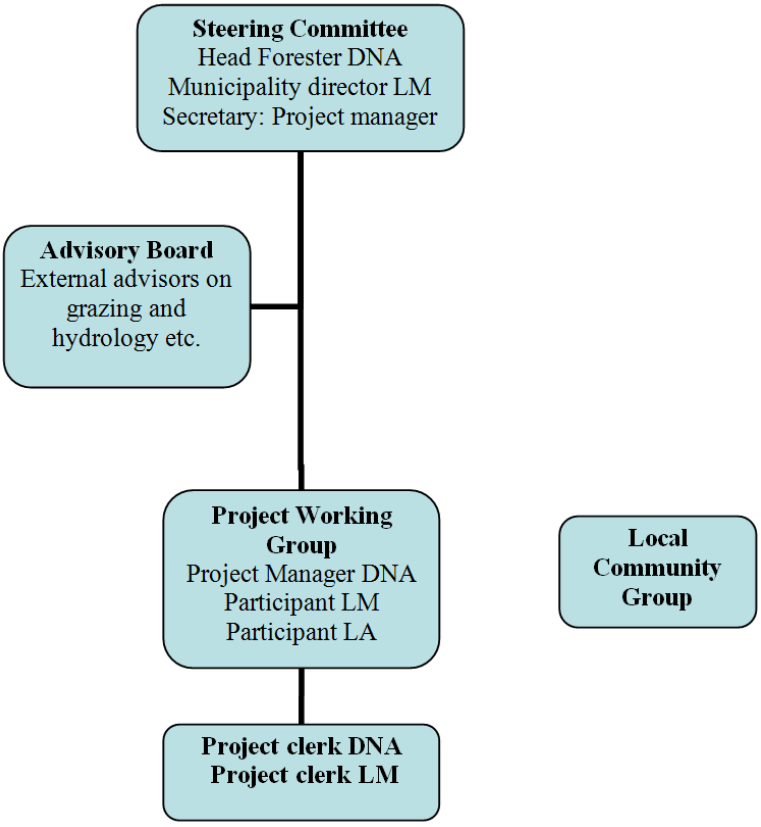

Figure 2: *Management structure*

4.2 Evaluation of the management system

Generally the partnerships have been working well. The project manager and the participant at LM have had close contact through mail and phone in daily management to coordinate work tasks in relation to actions. Meetings in person at office or at project site have been of great value in sharing practical experiences and to encourage joint commitment in the project.
DNA's office is placed at the mainland remote from the project site and therefore it has been an advantage in daily management to have LM placed near the project site and with a good local knowledge.
A rather large challenge in the project has been changes among staff at both LM and DNA. These changes in staff had an effect on project management, because new employees needed to learn about the project actions and LIFE-program. Changes at LM happened at both strategic level and among employees several times during the project period. Because LM is a small municipality with only few employees this led to a lack of focus and resources in all levels of the organization for implementation of actions agreed on in the Partnership agreement. Therefore DNA took over management in several actions to secure their implementation. Changes among staff at DNA were due to project manager's (Hans-Henrik Jørgensen) sick leave and later retirement in July 2017. A new project manager was employed per 1. November 2017 (Ellen Marie Tranekjær Leed). This meant that the project was without project manager in three months, during which an employee from DNA was able to take over management of the project part time (Søren Møller Pedersen).
Even through taken over management of actions from LM and the project manager's sick leave and retirement the project was still progressing. This was mainly because of a strong managerial setup at DNA and employees from DNA taking over the management of the project. The employees at DNA have also been important in introducing the new project manager to the project and LIFE-system.

Communication with the Commission and the Monitoring team

The project management received a number of letters / instructions from the Commission following visits by the project monitor as well as following reports to the Commission. Comments to these letters are attached as *annex 7.1.9 (USB only)* Furthermore the management participated in Nordic LIFE Platform meetings offering an opportunity to meet and discuss issues with representatives from both the Commission and the Monitoring team. All contact with the Commission can only be described as positive, helpful and solution-oriented.

The project monitor has been extremely important and helpful to the project regarding reporting, solutions in project challenges and guidance in general. The monitor has been easy to reach, the advice and support has been timely, useful, positive and easy to understand. The project management has been very happy with the cooperation.

5. Technical part

5.1. Technical progress, per task

5.1.1 A1 Formation of Landowners association

N2000 designation:
DK00FX118 and DK00FX010

Because of a fragmented structure in ownership on Læsø the support from the local community was essential for establishment of the Landowners Association. Therefore the process of this action was already started before the project period. In 2009 and 2010 several meetings were held with local organizations and individuals. Also a public meeting was held telling about nature conservation and the LIFE+-application.

The first meeting within the project period was already in 2012 and all farmers in the project area were invited. At the meeting the LIFE-project and purpose of a Landowner Association was presented and a working group was elected.
The working group was working on the establishment of the Landowners association for almost a year. To ensure the legal setup of the association a lawyer and an accountant was consulted.

In august 2013 the associations founding general meeting was held. At the meeting the articles of the association, budget and tenancies was presented and the first board was elected. The Board consists of 7 members – 5 landowners elected amongst the participants of the meeting, 1 appointed by Læsø Municipality and 1 appointed by the Nature Agency.

Indicators used to test the performance of this action have been measured in per cent of memberships amongst the project areas cadastral units, *see figure 3 and annex 7.2.10.*

A1	**Project area**	**Memberships**	**Membership in %**
Cadastral units	530	451	85,09
Landowners	190	115	60,53

Figure 3*: Memberships Landowners association*

This action was tree month delayed, *se annex 7.1.2*. One reason was the need to ensure support from the local community. The process was important and could not be stressed. The other reason was that the first organisation set-up was not accepted by Inland Revenue. This meant that the discussion regarding legal setup had to be resumed and the Articles of Association had to be re-written. The new articles and legal setup was accepted at an extraordinary general meeting in February 2014, *see annex 7.1.4*.

Parallel to the discussions mentioned above the project manager had to negotiate with a long list of landowners regarding membership of the association. In spite of a very positive attitude regarding membership, the uncertainty regarding the legal questions and new Common Agriculture Policy (CAP) created a difficult working environment. With all challenges combined this action has shown quite challenging and extremely time consuming.

The extra time consumption for the project manager in this action has resulted in a significant overspending in personal costs. Also the budget in the cost category external assistance has been exceeded because of the unforeseen costs for legal advice. The extra costs for personnel and external assistance have been necessary to ensure formation of the Landowners Association, which is an extremely important action in the LIFE-project and After-LIFE management setup.

The entire process starting with the election of a working group and the following work leading to the establishment of the association can only be perceived as extremely productive and creating an ownership to the Landowners Association and to the LIFE project. The partners cannot see any other solution which could have delivered the result better or more efficiently. It must also be stressed that forcing the process of forming the Landowners Association could only have been seen as inappropriate by the local community.

The establishment of the Landowners association is the sustainable foundation for the long term after LIFE management. The Landowners Association is today fully functioning, independent and without support from the LIFE-project. The association is managing approximately 2,500 hectare belonging to approximately 115 landowners. Based on the high number of memberships, which shows local support to the association, the project assesses the future of the association as very viable.

5.1.2 A2 Permission to carry out conservation actions

N2000 designation
DK00FX118 and DK00FX010

Several actions were depending on a number of permissions from different authorities, and sometimes a long processing time must be expected for obtaining permits. Therefore this action required an efficient planning from the project management to ensure that all actions could be carried out within the project period. Early in the project period DNA made a screening of which permits the project should apply for.

Where possible the permits have been applied for and given as framework permits to carry out conservation actions as described in the Grant Agreement. This meant that individual permits to the different actions on each specific area were not necessary.

Where framework permits has not been possible the project had to seek a single permit for a special task such as digging waterholes, putting up signs and restoring of natural hydrology. Agreements with landowners are always necessary regardless of permits obtained according to legislation.
Most permits have been obtained according to the time schedule with only minor delays. Unfortunately two permits regarding combating alien species (action C4 and C5) were not foreseen. The techniques used in action C4 and C5 turned out to be considered tillage by the authorities on Local Conservation Orders and the Nature Protection Acts articles on coastal protection thereby needing permits. The permits were given in spring/summer 2016. In the following 4 week appeal period four appeals were submitted to the permit regarding Local Conservation Orders - all about combating cord grass. All appeals were from landowners who argue that the technique "Dutch ditching" would make irreversible damage to the environment and create soft spots. The landowners feared that the softs spots would make horseback-riding and similar activities dangerous. In December 2016 The Environmental Board of Appeal confirmed the permit. The long process obtaining the permit caused delay of the actions C4 and C5.

Another action delayed because of a required permit was C11 Restoration of natural hydrology. The application was sent to LM in the beginning of April 2017, and the action was planned to be conducted in late summer. Due to Læsø Water Supply being uncertain how the restoration would affect the groundwater, the permit was much delayed. This left the project with only a little time to restore the natural hydrology at the very end of the project period. Despite some delays all permits to carry out conservation actions have been obtained.

After LIFE it is important to continually be aware of the need for permits when conducting nature conservation. Both DNA and LM are competent and experienced in applying for permits, and will support the Landowners Association in securing necessary permits.

5.1.3 A3 Hydrological investigation

N2000 designation
DK00FX010

When the proposal to LIFE was submitted, the first national mapping of the habitats and species within the SAC DK00FX010 showed that the hydrological condition of the habitat 1330 salt marsh was bad.
Therefore a survey of 87 ditches at the salt meadow was carried out in 2013 by Frederikshavn Municipality who is the formal partner for Læsø Municipality on water courses. The survey was carried out as initial desk study followed by a detailed survey in the field. All ditches where visited in the field and their possible effect on the salt meadow vegetation was observed. The survey showed that:

- The water level in the surrounding sea has a yearly normal variation of 1.5 meters and the salt meadow has a natural draining system where the water can flow both in and out the meadow. This means that large parts of the meadow can, especially in winter, be flooded.
- Man-made draining ditches to drain areas "behind" the meadow are crossing the meadow, but due to small "dikes" along the ditches, the ditches are therefore in general not affecting the natural hydrology of the meadows. The "dikes" are made of the excavated material from establishing and maintaining the ditches.

Because of the natural flooding and draining system and "dikes" along the manmade ditches, no ditch was found to have a significantly negative effect on the salt meadows. Minor improvement could be obtained by closing 6 ditches. The natural fluctuation due to sea level is on the other hand of great importance, *see figure 4. For the full survey see annex 7.2.12. (USB only)*

The second national mapping of habitats and the following analysis of the condition did not state negative hydrological conditions on the salt meadows.
The project therefor concluded, that and action on hydrology within the SAC DK00FX010 was not needed.

The hydrological action within the SAC DK00FX118 did not need a pre-investigation and proceeded as planned.

Result of survey in SAC DK00FX010	**Number of ditches (n = 87)**
Recently excavated, maintaining without risk	2
Small negative effect, bunging to the side possible	6
Natural overgrowing can proceed	3
More supply of water than draining	5
No negative effect or possible improvement	71

Figure 4*: Result of survey 2013.*

A minor delay of the hydrological investigation due to a heavy workload among staff at Frederikshavn Municipality did not have any effect on the conduction of action C11 – Restoration of natural hydrology, *se annex 7.1.2 for Gantt chart*.

5.1.4 C1 and C2 Clearing of trees, shrub, reeds and emerging trees and shrub

N2000 designation
DK00FX118 and DK00FX010

Clearing of trees, shrub and reeds was carried out in the most cost efficient way as possible without damaging habitats, species and historic remains.

Action C1 and C2 has been planned and conducted in close contact with action C6 – Establishment of cattle and sheep herds and C7 – Creating enclosures by fencing, to ensure grazing after clearings.

The clearings on private land required agreements with individual landowners. Therefore the project began clearings of trees in areas owned by DNA as an example to private landowners and the public. The clearings got a positive response and the project manager started to make individual agreements with private landowners regarding clearings and grazing.
It has been a priority to work in a coherent manner in sites where all landowners were willing to participate, where existing nature was threatened by encroachment and where most biodiversity improvement could be gained.

Located in the project area is a large site of 637 historic remains, *see figure 5*. Before clearings could begin on this site the project needed to obtain permission from The Agency for Culture and Palaces. The permit was given as a framework permit which contains terms for clearings, controlled burning and restoration of damage to historic remains related to grazing, *see annex 7.1.5 (USB only).*

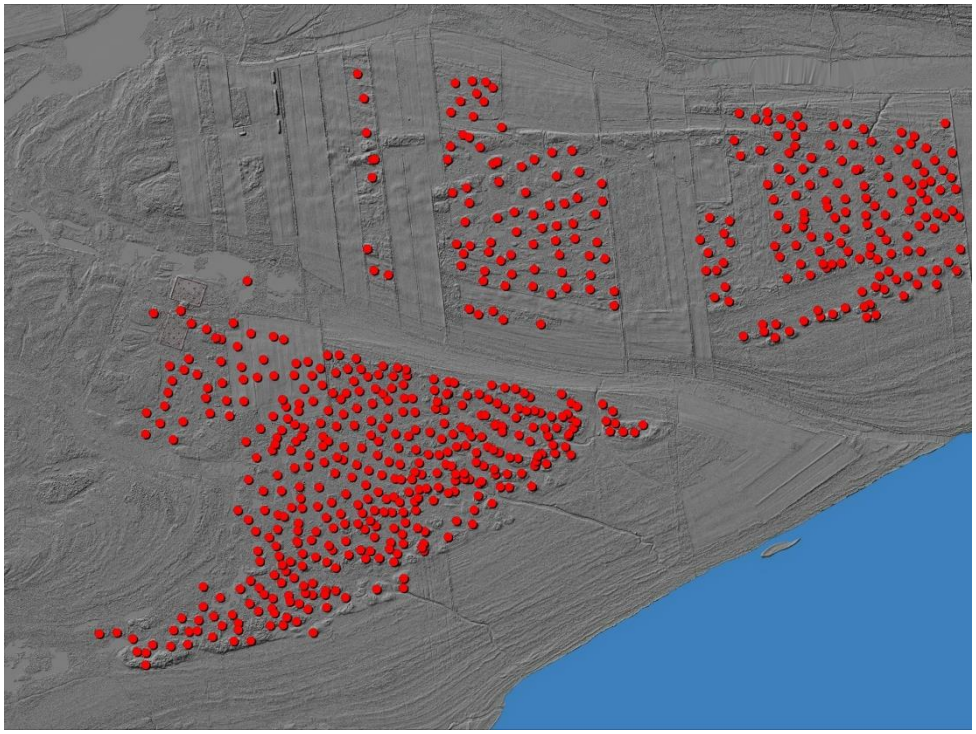

***Figure 5**: Overview of historic remains*

The clearings were conducted by external assistance, but also by nature workers from LM and forest workers from DNA.

The methods applied in action C1 are listed in categories beneath.

1. Felled and left on the ground to decompose.
   This method was only used very limited where specific issues demanded it: habitat and/or species issues, difficult ground conditions, no or limited access, less dense and/or young stands, historic remains.
2. Felled and burned on site.
   Used where specific issues demanded it: habitat and/or species issue, difficult ground conditions, no or limited access, dense and /or young dense stands, and especially on historic remains.
3. Chip harvesting
   The preferred method if there has been access with machines. The method has been used on older stands, stands with high volume and areas with public interests and access issues. Further this method has been divided into a number of different methods;
   a. Manually felling, chip wood processing at source (stump), extraction of chips to public road, haulage by lorry to heating plant.
   b. Manually felling, forwarding of harvested material to central location, chip wood processing, forwarding of chips to public road using hook lift trailers, haulage by lorry to heating plant.
   c. Felling and extraction by feller / forwarder to central location, chip wood processing, haulage of chips to public road using hook lift trailer, haulage by lorry to heating plant.

   All chip wood produced has been sold to the local heating plant to reduce costs in this action. Any surplus produced from clearings on private land was transferred to the landowner. This was accepted by the Commission in letter dated June 28th 2013.

Clearing of trees with special machines for wet conditions

The methods applied in action C2 are listed in categories beneath.

1. Felled and left on the ground to decompose.

This method was only used very limited were specific issues demanded it: habitat and/or species issues, difficult ground conditions, no or limited access, less dense and/or young stands, historic remains.

2. Mowing (tractor mounted) in combination with manual felling with strimmers.
   This method was used to secure an organic structure while protecting sub-habitats, species, historic/archaeological remains etc.
3. Mowing (tractor mounted)
   This method was only used in young and open stands/crops with a diameter less than 7 cm.


Clearing of reeds and emerging trees and shrub

Sometimes quick changes in weather between dry, wet and frozen conditions were a challenge. This was solved by the project by using special gear for machines or by stopping work until more favorable weather conditions returned.

Actions C1 and C2 has taken longer to implement than foreseen in the Grant Agreement. The delays and challenges of these actions were mainly due to the project manager's role in negotiations with many private landowners. This has been much more time consuming than anticipated in the original budget. Further problems getting qualified contractors at the rather remote island lead to implementation of these actions using own staff instead of contractors as originally planned.
As the project progressed a need for more clearing of emerging trees in action C2 than foreseen in Grant Agreement became evident.
The unforeseen cost in personal and the enlargement of action C2 using external assistance has resulted in exceeding the budgets of these actions. These changes were a part of the budget modification signed by the commission on September 6th 2017.

The target of C1 has not been reached. This is due to not all private landowners being willing to participate in these actions. Also the initial area in the Grant Agreement included registrations of Natura 2000 woodland habitats, which have not been cleared based on concrete assessments of nature value and on agreements with the individual landowners. Only minor clearings of tress in action C1 remain and the unforeseen need for clearing of more trees under action C2 contribute to the overall achieved result of action C1 and C2 combined,

see figure 6, annex 7.2.1 and 7.2.2. The project is very satisfied with the overall achieved result.

C1	2013	2014	2015/16	2017	2018	Total	Target
C1 Cleared	57	65	107	0		229	366
C2 Cleared	157	315	98	58	14	570	376
C1+C2 Cleared	**214**	**380**	**205**	**58**	**14**	**799**	**742**

Figure 6: *Results of action C1 and C2*

Following LIFE LM is responsible for C1 - Clearing of trees and shrub on private land. DNA is responsible on own land. Clearing of emerging trees and shrub as in C2 is continued following LIFE by the LA and only when needed in areas where the livestock cannot keep up with the regrowth of emerging trees.

5.1.5 C3 Clearing of non-native woody species

N2000 designation
DK00FX010

Action C3 was limited to a small area at the island of Hornfiskrøn.

First the project manager has surveyed the forest to get an overview of the non-native tree species and their density.
Following the trees were felled manually by contractor to reduce seed spread with non-native woody species. Because of only scattered trees and on an inaccessible island they were left on the ground to decompose to benefit biodiversity and species associated to dead wood.
To conduct this action the project was depending on good weather conditions and flexibility from the contractor, so he was able to get through the tidal zone to the island.

Unfortunately the only private landowner within this action, owning approximate 58 hectare of the site, did not want to participate in this action. This made the success rate of this action significantly smaller than hoped for, *see figure 7.*

C3	2013	2014	2015/16	2017	2018	Total	Target
Cleared	**0**	**0**	**0**	**0**	**21**	**21**	**78**

Figure 7: *Results of action C3*

Due to staff changes and the project managers unforeseen time use on action C1, C6, C7 and C12 the action was delayed.

DNA will continue monitoring and felling non-native tree species on own land after the LIFE-project. LM can if possible try to make an agreement with the private landowner.

In general it is positive that felling of non-native tree species within the N2000 areas at Læsø is quite common and is undertaken by private individuals supporting the goals of the LIFE project.

5.1.6 C4 Clearing of Japanese rose (Rosa rugosa)

N2000 designation
DK00FX118 and DK00FX010

This action was planned in cooperation with experts from the advisory board and by using the results gathered from the LIFE project LIFE08/NAT/DK/000464 and other research projects. The strategy was to combat *Rosa rugosa* by continually stressing the plant by using a combination of different treatments adjusted to the local conditions.

The focus in treatment was to:

- Prevent new plants establishing
- Stop the spreading of established clones
- Combat in as many habitats as possible

All mechanical treatment was partly conducted by contractors and partly by project workers.

Grazing
It was important to ensure a long continuation of grazing that could prevent the establishment and spreading of *Rosa rugosa* and other unwanted plants. Additionally, it was important to reduce the need for manual and mechanical re-treatment of the invasive rose. Therefore the fences and herds of cattle and sheep established in action C6 and C7 were significant to the long term control of the *Rosa rugosa*.

Thermal treatment
The original objective was to mechanically treat the *Rosa rugosa* with mowing and thermal methods. Unfortunately the thermal manufacturer did not succeed in getting the equipment functioning properly, and the project had to give up on this method. Instead of thermal treatment the project experimented with the two pulling-up methods described beneath.

Mowing
Mowing was used as a method of combating *Rosa rugosa*, where it was not possible to use grazing or as a supplement to grazing. In addition to grazing mowing has been used where the animals do not eat *Rosa rugosa* or where the stand has grown too large and dense for the animals to access and control it.
The mowing was done with mulcher and tractor mounted or manual brush-cutter. In areas with subsequent grazing, mowing is often done as a one-time only intervention, whereas repeated mowing is necessary in areas without grazing

Pulling-up with a plant lifter
As an experiment pulling-up the roses with a plant lifter was tried. The plant lifter is a tool, which is normally used in plant nurseries. It cuts the rose free beneath the surface, lifts it and shakes sandy soil off the roots. The roots are left to dry out at the soil surface and thereby die.

The experiment with the plant lifter showed, that the method was most suitable for control of *Rosa rugosa* with a superficial root net in soils consisting of sand and/or gravel.

Pulling-up with tractor mounted crane

Pulling-up *Rosa rugosa* has been used in several places along the coast where it was possible to drive a tractor. A tractor mounted with a crane and a scissor-grip was used for pulling up the rose bushes. To get the best grip on the roots of the rose, the grip went deep into the ground.

The rose bushes with their root system are pulled up and shaken free of soil. The plants are subsequently collected and brought away by crane and carriage. After pulling-up the plants, the zone around the treated area was examined and cleared for root pieces in order to avoid new roses establishing.

The method has proved suitable in the coastal area where the soil consists of sand or gravel. The reach of the crane is approximately 5 meter, which means that the method also can be used in hilly terrain and on steep slopes with rose bushes other ways difficult to reach.

Grazing prevents the invasive rose to spread into the grazed area. (Photo Rita Merete Buttenschøn)

A large stand of Rosa rugosa outside an enclosure has been mowed (Photo Naturstyrelsen).

Plant lifter (Photo Naturstyrelsen)

Follow-up control of area where the roses have been pulled up (Photo Naturstyrelsen).

In the Grant Agreement the estimated area were *Rosa rugosa* should be treated was 23.91 hectare. But during the project period all the sites where *Rosa rugosa* has been controlled, were mapped more precisely by GPS to facilitate monitoring and follow-up treatment. The method used to measure the cover of *Rosa rugosa* in the Gant Agreement cannot be compared to the method used during the project period. As an example *see figure 8 and annex 7.2.4*. The mapping during the project period showed that a total of 76 hectares with scattered and large stands of *Rosa rugosa* has been combatted during the LIFE project, *see figure 9*.

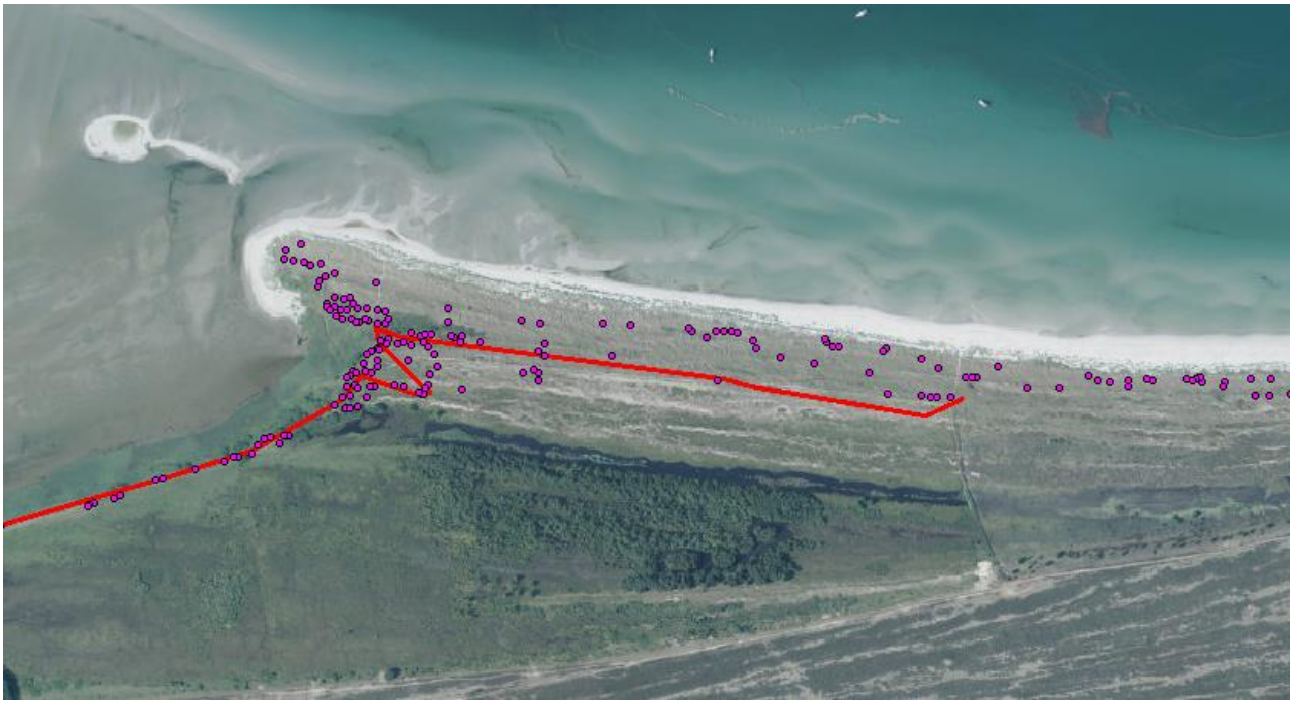

Figure 8: *Mapping of Rosa rugusa. Red line = Grant Agreement estimate. Purple dots=actual GPS mapping*

This action was delayed, *see annex 7.1.2 for gantt-chart*. This was partly because of time spent developing the thermal methods and with the method using plant lifter. Also this action experienced public and political resistance against using mechanical treatment and the project needed to obtain two not foreseen permits as described in action A2. The permits stated that agreements with all individual landowners were required before combating the specie in private areas. The time necessary to obtain individual agreements with landowners was not foreseen in the Grant Agreement.
In late summer 2017 the project began the action at areas owned by DNA while negotiating a few agreements with private landowners. The project used the work carried out at DNA owned land, to raise awareness, demonstrate method and gain public understanding.

As a result of delays not all targeted areas were mechanically treated, *see annex 7.2.4*. Nevertheless the project gained good practical experiences using mechanical methods as described in section 5.2.9.
While the mechanical methods were delayed existing activities helped to prevent the specie to spread and overshadow light demanding habitats. Many areas with presence of *Rosa Rugusa*

were already fenced and grazed. Some areas outside fences have been grazed sheep herded by a shepherd.

C4	2013	2014	2015/16	2017	2018	Target
Combatted	0	0	0	70*	6*	23.91

Figure 9: *Results of action C4*

**** Because of different methods to measure the combatted cover of Rosa rugusa this number cannot be compared to the targeted objective.***

Where the project has established grazing the need to continue treatment following LIFE will be reduced.
DNA will continue treatment in areas on own land with best practice learned from the project.
LM will continue to inform and work on agreements with private landowners.

5.1.7 C5 Clearing of cord grass (Spartina spp.)

N2000 designation
DK00FX010

Because of no experience in Denmark regarding combatting Cord grass *Spartina anglica* the project needed to gain knowledge on how to combat Cord grass. The project collected information about Cord grass, made some small scale practical experiments and participated in an international Spartina conference at the University of Rennes, France.
In early February 2014 different methods to combat Cord grass was discussed at a meeting in the advisory board. Following the meeting the project made an agreement with a German student from Lüneburg University and expert from the advisory board Rita M. Buttenschøn, University of Copenhagen. The agreement included a test of different methods to help the project find the most efficient way to combat Cord grass.

The survey was conducted in 2014 with block experiments:

1. Uprooting/inversion + dark seaweed cover
2. Uprooting/inversion + black plastic cover
3. Digging/tilling + removing
4. Cutting + black plastic cover
5. Cutting + dark seaweed cover
6. No treatment (control)

Beside from testing methods to combat Cord grass the agreement also included mapping of Cord grass. The mapping showed that the specie did not only cover 14.97 ha as estimated in the Grant Agreement, but approximately 24 hectare.

Based on results and recommendations from the block experiments the project chose digging as the main method to combat Cord grass, *se annex 7.2.13 (USB only)*. The digging started in spring 2015 as soon as weather conditions allowed the work to begin. The Cord grass plants

were dug up by an excavator and they were buried in ditches excavated nearby (described as “Dutch ditching”). The digging seemed very successful and monitoring in the spring of 2016 showed no regrowth of Cord grass.

Combatting cord grass with "Dutch ditching"

Unfortunately this action experienced public and political resistance and brought the work to a standstill. This was due to concern about the "Dutch ditching" method could turn the seabed soft causing problems for horse riders. This led the project to obtain two not foreseen permits as described in action A2. The permits stated that agreements with all individual landowners were required before combating the specie in private areas. The time necessary to obtain individual agreements with landowners was not foreseen in the Grant Agreement. The permits require the project to clearly mark where the Cord grass is buried and put up signs in the area informing about the work.

After the project had secured political support at Læsø the partners wanted to accommodate the public skepticism about the ”Dutch ditching”. A demonstration and test area at DNA land was agreed upon with the Local Community Group and work was done in March 2017. During the “Dutch ditching” public meeting was held at the site to give the locals an opportunity to see the work being done and ask questions. 35 people participated. The goal was to contribute to information about removal of Cord grass and also to follow development in possible soft spots. Even though there was a lot of skepticism at the meeting the project overall experienced the information about Cord grass as positive.
The test area was monitored together with the Local Community Group in June 2017 and showed no signs of the seabed turning soft.

After the birds breeding season in July 2017 the project continued the combatting of Cord grass in areas owned by DNA. The project tried to make agreements with private landowners, but still there was a lot of skepticism, and it was not possible to make agreements covering enough neighboring areas to constitute further sites for the action. For future effort the project will use the work carried out at DNA owned land, to raise awareness, demonstrate method and gain public understanding.

The original target was to combat all areas with Cord grass, but this target has not been reached, *see annex 7.2.5*. This is due to the above described setbacks and because the area covered with cord grass was much bigger than anticipated. Other factors which have had an effect on the success rate were the relatively short period between birds breeding season ending and conditions turning too wet in the fall, and in general working around high tides. In total the project has combatted Cord grass in an area of 29 hectares with scattered and large stands, *see annex 7.2.5 and figure 11*. Because the GPS mapping used to measure the cover of Cord grass in the project period is different from the method used to estimate the cover in the Gant Agreement these methods cannot be compared, *see figure 10 and annex 7.2.5*.

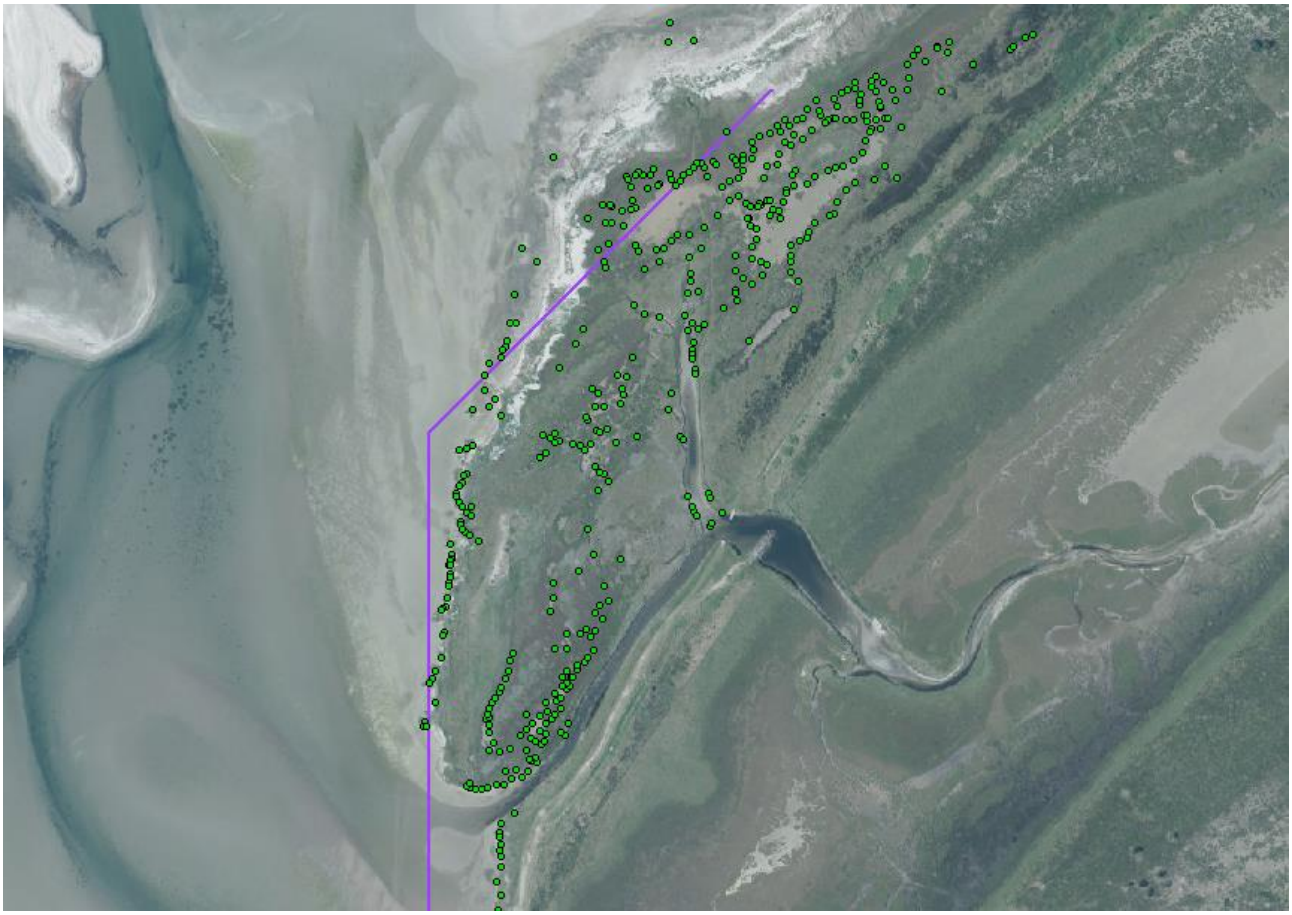

***Figure 10**: Mapping of Spartina. Purple line=estimate from GA. Green dots=actual GPS mapping.*

Even though not all targeted areas have been worked on with the described method Cord grass has been combatted in more areas by grazing. Some of the areas fenced and grazed or grazed with herded sheep contain Cord grass as mentioned under action C7. Grazing reduces foliage and help to prevent *Spartina* spreading by seeds.

Following LIFE DNA will continue the treatment in areas on own land and by using best practice learned from the project. LM will continue to inform and work on agreements with private landowners.

C5	2013	2014	2015/16	2017	2018	Total	Target **
Cleared	Trials	Trials	4*	22.6 *	2.4*	29*	14.97

***Figure 11**: Results of action C5*

*****Because of different methods to measure the combatted cover of cord grass this number cannot be compared to the targeted objective.*

****** *Monitoring in 2014 shows specie cover on approx. 24 hectare.*

5.1.8 C6 Establishment of cattle and sheep herds

N2000 designation
DK00FX118 and DK00FX010

This action was carried out coordinated with action A1, C1, C2, C7 and C12.

The estimated number of livestock needed at the end of project period was 1,000 cattle and 1,200 sheep. Galloway cattle and sheep were bought from different breeders. Purchasing was limited to healthy animals from herds of a known suitable character. Because the livestock would be grazing in areas with public access it was important that the character of the animals was suitable.

The project asked the Galloway Association in Denmark to source livestock of sufficient quality and to suggest a pricing structure based on the demanded quality and size of the total trade, *see annex 7.2.14 (USB only).* As a consequence the project bought 158 cattle from four individual breeders. This method to source Galloway cattle was discussed with the Commission in letter dated April 29th 2015. The requested declaration on purchase of cattle is attached as appendix 7.2.15.
The prices on Galloway cattle went up quite considerably between the budget being made and the purchases taking place. As a result the project had to replace some of the cows foreseen by heifers to be able to reach the goal.
The extra 20 cattle bought by the project and discussed with the commission in letter dated April 29th 2015 has been withdrawn from the project.

The project bought 51 sheep, but had problems finding suitable shepherding and general management of the sheep. As a consequence the project stopped expanding the herd early on. Meanwhile DNA forest workers managed the sheep. Despite challenges with sheep management LA succeeded in making a contract with a private landowner managing the sheep. The private landowner grazes habitats in the project area and is responsible for caretaking of the sheep. The contract is attached as *annex 7.1.6 (USB only).*
In the summer 2016 and 2017 LA, LM and DNA started cooperation with a shepherd. Together the shepherd and sheep were able to graze light demanding habitats that cannot be fenced because of public interests. Also the shepherd was functioning as a nature interpreter and the sheep were able to graze Japanese rose and Cord grass outside fences. With LA and the shepherd able to manage the sheep the project decided to continue expanding the herd with further 220 sheep for future nature management.

To handle the livestock an ATV with trailer, a livestock trailer, sheep facilities, and one sheepdog was bought. A cattle hotel for wintering has been established at a private landowner working as an entrepreneur for the LA. Also private landowners have been producing winter feed for the livestock.

When LA was a legal entity at the beginning of 2014 the livestock and equipment was handed over to the association by an agreement, *see annex 7.1.7 (USB only).*
Since the formation of the LA there have been discussions between the project and the Commission on the status of the association. By recommendation of the European Commission in letter of February 9th 2017 the project applied in May 2017 for a partnership addition to include Landowners Association as associated beneficiary. This was accepted by the Commission in Amendment no 2 signed on September 6th 2017.

This action has been on schedule except from the delay in expanding the sheep herd. After the Landowners Association has been established local cattle farmers have increased the number of animals in their own herds. The need for the amount of cattle purchased in the project was therefore less than anticipated and some of the LA's cattle were slaughtered before than anticipated in the Grant Agreement. The income from slaughtering was discussed with the commission, *see annex 7.1.8 (USB only).* Today the Landowners Associations own herd is 380 cattle and 261 sheep. 16 livestock owners contribute to the association with 1,164 cattle, 226 horses and 169 sheep grazing on contract. The total number of 2,200 livestock is appropriate for grazing the area of approximately 2,500 hectare. The increase in local livestock shows that the LA has a local anchoring and support. The project is very satisfied with this development since the Landowners Association is considered by the project as an important key to secure Læsø's habitats and bird-life in the future.

The action will, following the project, be carried on by the Landowners Association. The need for livestock will be adjusted depending on the number of livestock from local livestock owners.

5.1.9 C7 Creating enclosures by fencing

N2000 designation
DK00FX118 and DK00FX010

The project wanted to achieve a coherent management of nature habitats by gathering many small cadastral units in large enclosures. Therefore this action was carried out in close coordination with action A1, C1, C2 and C6.

1,014 ha new fences have been established by contractors and to a lesser extent by LM and DNA staff. All new fencing for cattle and horses has been established using mostly 2 plain wires and 5 plain wires for sheep. All new fences were connected to electricity either by using mains (3 pcs.) or batteries/solar cells (12 pcs.). Also a secure sheep fence for wintering was established outside Natura 2000-site. This was accepted by the Commission in letter dated April 29th 2015.

At the beginning of the project period 1,674 ha with existing fences were maintained by contractors and to a lesser extent by LM and DNA staff. In particular this continuous maintenance was necessary to keep fencing along the coast line free of seaweeds getting caught on the barbed wires during high tides in winter. As the project progressed it became clear that this ongoing maintenance could not be maintained long term. To secure future grazing within the existing fences the project replaced barbed wire with plain wire, which along the coast can be taken down in wintertime. This solution is much more cost-efficient in future maintenance.

Fence lines have been discussed and agreed on with livestock owners and the Local Community Group. Public access within fences has been secured by establishment of stiles and gates. Also signs are placed on fences with information about the LIFE-project, animals and public access.

Instead of building 10 cattle pens the project bought 5 mobile pens, which can be used as pens or combined pens, runs and/or corrals. This was accepted by the Commission in letter dated April 29th 2015. LA's management of cattle later required 7 more mobile pens to be bought.

7 small ponds functioning as drinking water for livestock has been established. The project experienced a problem with a lack of drinking water for the livestock in some fences. Therefore four reliable water supplies were established in these fences to secure the gazing and animal welfare. No mobile water tanks for sheep were bought as no mobile fences were established as foreseen in the GA.

This action has been delayed compared to the original time schedule, *see annex 7.1.2*. The delays and challenges is mainly due to the project managers role in negotiations with many private landowners being much more time consuming than anticipated in the original budget. Further problems getting qualified contractors at the rather remote island lead to using own staff instead of contractors as originally planned.
The original budget for personnel was therefore not sufficient and changes were a part of the budget modification signed by the commission on September 6th 2017.

The targeted area of this action has not been reached completely through the LIFE project, *see annex 7.2.6 and figure 12*. This is partly due to not all landowners wishing to be a part of the project and partly due to the budget not being sufficient.
As project progressed it showed that not all areas were suitable for fencing as first anticipated. One reason was the Natura 2000 woodland habitats which had not been taken into consideration in the Grant Agreement as also described in action C1 and C2. Another reason was public interests in using the areas for recreation and tourism. Instead some of the light demanding habitats outside fences was grazed by the shepherded flock of sheep as descried in action C6.

The overall goal of 1,712 ha being grazed is supported by activities outside the LIFE project:

- Private landowners are on their own incentive applying for fences through RDP funds, all together at 323.67 hectares.
- LA has fencing activities concerning new fences
- DNA has established a large fence of approximately 370 hectare within the northern Natura 2000-site at Læsø.

The project considers these activities as a positive development, to secure fencing and grazing of nature areas after LIFE. None of the activities outside the LIFE-project are shown in *annex 7.2.6 or in figure 12.*

C7	2013	2014	2015/16	2017	2018	Total	Target
New fences	194.81	234.49	567.07	12.40	17,63	1,014	1,712.15
Enhancing existing	1,532.56	1,532.56			141,44	1,674	1,559.55

Figure 12*: Results of action C7*

The Landowners Association will secure future establishment and maintenance of enclosures following the LIFE project.

5.1.10 C8 Controlled burning

N2000 designation
DK00FX118 and DK00FX010

Controlled burning is an old and traditional element of heather management and requires good skills among staff. DNA staff has good experience using controlled burning and therefore has been responsible for planning this action with participation of LM workers.

Every year the controlled burning was planned by DNA staff and permitted by the local fire department. The local fire department was also informed on the actual day of controlled burning.

In consideration to wildlife and safety controlled burning only takes place between October and April. Within this period February / March often has the most ideal weather for controlled burning. The actual work have been carried out by establishing firebreaks using mowers, water or burning to control the area to be burned. The firebreaks could be established in advance (days / weeks) of the actual burning or at the same day as burning. The preparation of firebreaks was followed by burning the actual site either with or against the wind.
The actual fires could normally be started after dew evaporated around 11.00 o'clock in the morning and then continue until evening.
Controlled burning implies using proper protective clothing, secure fire fighting equipment on site, secure communication and informing neighbouring landowners as well as authorities.

The establishment of a voluntary group primarily amongst the island beekeepers took place in 2014. Working together DNA staff, LM staff and volunteers could carry out controlled burning on larger sites and be more efficient.

This action was delayed with one season, but the project has burned more areas than targeted, *see annex 7.2.7 and figure 13*. Controlled burning has been very dependent on the right weather conditions. The right weather conditions did not occur in the beginning of the project and only minor areas were burned. In 2015 and 2016 the weather conditions were favourable and because of the volunteer group the project was able to burn large sites. This made the action more cost-efficient than foreseen in the Grant Agreement.

C8	2013	2014	2015/16	2017	2018	Total	Target
Executed	15.66	41.33	509.95	1,5	-	568.44	433.98

***Figure 13**: Results of action C8*

As a management tool DNA regularly use controlled burning on dwarf bush habitat types. This will continue on DNA owned land in the area following LIFE.

Controlled burning

5.1.11 C9 Infra-structure

N2000 designation
DK00FX118 and DK00FX010

This action was carried out to improve existing tracks and to get access to remote locations. The infrastructure should secure implementation of all C-actions trough gaining access for tractors and equipment, haulage of timber/chip wood, livestock and personnel. As an example all harvested timber needed to be transported from the project area to public roads outside the project area.
A well-functioning infrastructure was also important in gathering traffic from many different landowners to avoid many individually used tracks outside roads in habitats.

All areas where accesses have been necessary the infrastructure has been provided and damaged roads have been repaired following the actions. The work was carried out without damaging habitats, species and historic remains.

- To create a surface suitable for tractors, trucks and 4-wheel driven sturdy vehicles the work on tracks has been conducted by using either sand or hand-sized stone as materials.
- Following harvesting and extraction of wood in action C1 repair of roads and tracks has been carried out. This has been done by purchase and placement of extra sand or done with existing materials on site.
- In action C1 also wood chip has been used to temporary create access in remote areas. In these areas the materiel has been left on site to decompose.
- One important access road to the southern Natura 2000 area has been repaired by establishing a road with logs. This is an old method used in wet areas where logs are placed under terrain and covered with sand. The logs help to improve the carrying capacity of the road.

In this action the original target was also to expand an existing footpath with a simple footpath. The purpose of the footpath was to disseminate the area and to avid disturbance from visitors near a small lake, which could be a possible re-colonization area for Wood sandpiper. Unfortunately the local landowners would not accept an expansion of this footpath and this part of the action could not be completed.

This action was planned to be carried out as needed throughout the whole project period, but was delayed due to delays in action C1 and C2, *see annex 7.1.2*. The target of this action was to establish or maintain 15,920 meters of track and the project has established and maintained a total of 19,462 meters of track, *see annex 7.2.8.* This has been done within the budget. Only smaller modifications, such as length and placement, of tracks have been made in this action.

The infrastructure is also important in future management, because of the need to transport equipment and livestock into the areas. The maintenance of tracks following LIFE will be done by DNA, LM and LA depending on national law.

5.1.12 C10 Control of foxes, mink and hooded crow

N2000 designation
DK00FX118 and DK00FX010

Control of foxes, mink and hooded crow was carried out to reduce predation pressure on the targeted bird species.
On Læsø predation by fox is possibly higher at ground nesting birds than on the main land. Field Vole *Microtus agrestis* is on the main land known to be a large part of fox diet, but does not exist on Læsø. A larger part of the fox diet therefor might consist of birds' eggs and nestlings.
The control was carried out using both trapping and shooting as methods. 6 local volunteers helped by trapping mink and shooting crow and fox. Trapping of crow was not possible and control of crow was instead carried out by shooting. Control of foxes were done with a permit to shoot the species under conditions not permitted by the general hunting legislation, *e.g.* at night. Artificial fox dens were established to improve the success of the action by making it easier to find the foxes.

Results in terms of numbers of culled foxes, mink and hooded crow on the whole island of Læsø are shown in *figure 14*. As the island is only 118 km^2 predators can reach the SPA from almost any location making numbers for the entire island relevant.

Species		**2014 - 2015**	**2015-2015**	**2016-2017**	**2017-2018**
Hooded Crow	*Corvus cornix*	726	466	348	471
Fox	*Vulpes vulpes*	51	50	62	84
American mInk	*Mustela vison*	15	5	15*	9

***Figure 14**. Numbers of predators shot at the island of Læsø. (Official hunting statistics).*
At reporting time Season 2017-2018 is still open for hunters to report culling. Numbers can therefore be higher.
(*) include 7 specimens reported as European polecat Mustela putorius, a species not recorded on the island of Læsø and therefore probably mink.

Only within the latest year a decline in controlled predators was visible. Some of the artificial fox dens were without foxes and less foxes were seen in the nesting areas during the last breeding bird survey.

The action will continue by using the artificial fox dens and by cooperating with volunteer hunters. DNA will continue to be in close contact with local hunters and their local association.

5.1.13 C11 Restore natural hydrology

N2000 designation
DK00FX118 and DK00FX010

This action was implemented based on the survey in action A3.

In winter and early spring 2017 the project got an overview of the work to be done to complete this action. The ditches in the northern Natura 2000-site SAC DK00FX118 was visited in the field to prepare for the practical implementation and to be aware of other considerations such as infrastructure, silviculture and visitor facilities. Five draining systems at this site were found to be possible to close without being in conflict with infrastructure and silviculture outside the Natura 2000-site.

The restoration of the natural hydrology was expected to be carried out in August and September 2017 under dry weather conditions, to minimize damage to the habitats. Unfortunately the permit required was delayed as described in action A2. This left the project with only a little time to restore the natural hydrology at the very end of the project period. All ditches were closed according to plan except from one ditch in the southern Natura 2000-site DK00FX118. This was due to a combination of time-pressure and bad weather conditions.

The techniques used to close ditches were:

- Ditches filled in, where the soil from the excavation was still at the location.
- Ditches blocked off where there was no soil left or a need to keep some drainage function because of considerations to infrastructure.

The work was carried out by one contractor who filled the ditches with soil by machines. In very wet areas the machines drove on belts to prevent leaving deep tracks in the terrain. Because of time-pressure DNA workers meanwhile placed bungs to block ditches.

This action improves hydrology on a loosely estimated app. 55 ha in the habitat area containing targeted habitats *2140 Dune Heath, 3110 Oligotrophic lake habitats, 3130 Oligotrophic waters with vegetation, but will also improve the hydrology in the habitats 2180 Wooded dunes, 2190 Dune slacks, 4010 Wet heath and *91D0 Bog woodland.

The original target was to close off 10,497 meters of ditches. During the project period the targeted objective reduced due to the conclusion in action A3 describing that restoration of hydrology within the southern Natura 2000-site DK00FX010 was not needed. Also some ditches in the northern Natura 2000-site DK00FX118 could not be closed because of infrastructure needed to be maintained. A total of five ditches and 4,400 meters of draining systems has been closed, *see annex 7.2.9.*

5.1.14 C12 Landowners Association

N2000 designation
DK00FX118 and DK00FX010

After the establishment of the Landowners Association in 2013 the association has been fully functioning, independent and without support from the LIFE-project. The purpose is to work for sustainable nature and agricultural management of Natura 2000-areas, belonging to the members.

The basic and fundamental financial setup of the association is to unite privately owned Natura 2000-areas and apply for RDP funds. The association offers to pay a reasonable rent to private landowners and take over the administrative and practical burden of land management. Also private livestock owners are paid for their grazing-services.

The association is responsible for approx. 2,500 hectare, *see annex 7.2.10*, which includes:

- Administration of land lease with approximate 115 landowners
- Administration of agreements with 16 livestock owners, who contribute to the association with 1,164 cattle, 226 horses and 169 sheep.
- Coordination of grazing.
- Management of the Landowner Associations own herd of 380 cattle and 261 sheep.
- Applications for RDP funds as a common application covering all members.
- Maintenance and establishment of fences.
- Making joint purchasing of services and goods.
- Ensuring that members are in compliance with regulations regarding nature, environmental, agricultural and more.
- Marketing and sales of meat.

Soon after the establishment of the association it was planned to hire a daily manager, but because of the need for a more stable financial situation this was postponed till late 2016. Meantime the project manager from DNA was appointed to be daily manager. Unfortunately there has been a lack of stability in daily manager and the third manager is moving to Læsø in summer 2018. In the periods in-between daily managers the LA made an agreement with a consultant and DNA to take over the management. This solution means that the management of the association has been stable and running.

Overall it has been very positive having a daily manager representing LA. The daily manager made it easier for the local community to distinguish between the LA and the LIFE-project. The role of the project manager has been much more time consuming in this action than foreseen in the original budget. The project manager's extra time use has been spent on negotiating with a long list of landowners regarding membership, clearing of tress and fencing. Also DNA forest workers at Læsø have been directly involved in winter housing and

herding the herds until the establishment of the association. The extra costs for personnel and travel have been necessary to ensure the Landowners Association, which is an extremely important action in the LIFE-project and After-LIFE management setup.

The target of managing 3,271.70 hectares of the project area with grazing has not been achieved completely within the project period. This is due to not all landowners willing to participate in the project and not all areas suitable for fencing as also described under action A1 and action C7. Today LA manages 2,500 hectares with grazing and the project is very satisfied with the result. Also LA continues to work on increasing membership.

The establishment of the Landowners association is the sustainable foundation for the long term after LIFE management. Based on the high number of memberships, which shows local support to the association, the project assesses the future of the association as very viable. Since employing a daily manager LA, LM and DNA has been functioning as partners in planning grazing, fencing and clearing activities. The partners will continue this cooperation on nature conservation after the LIFE-project.

5.1.15 D1 Monitoring of the impact of targeted habitats and bird species

N2000 designation
DK00FX118 and DK00FX010

Monitoring of targeted habitats and species have been coordinated with the National Program for Monitoring of Water and Nature, NOVANA. NOVANA monitoring is carried out by the Danish Environmental Protection Agency. The LIFE project has only collected data not part of NOVANA. Monitoring of targeted species, only took place in the SPA DK00FX345, whilst habitat monitoring occurs in both DK00FX010 (for short N9) and DK00FX118 (for short N10). The SPA is covering the same area as DK00FX010.

Targeted habitats
The targeted habitats are all part of NOVANA and therefore mapped every 6 years. The latest mapping was completed in 2016.

	2006 mapping		**2011 mapping**		**2016 mapping**	
Targeted habitat	**N 9**	**N10**	**N 9**	**N 10**	**N 9**	**N 10**
1330	1507	2.2	1511	2.2	1526	1.5
2130	190	115	178	170	162	140
2140	273	263	215	221	234	249
3110	2	1.3	*	*	*	*
3130	0.2	1.7	*	*	*	*
4010	275	24	250	18,4	192	19
4030	378	4.2	373	7.4	385	13.4

6230	61	3.8	34	2.5	42.8	4.2
6410	21	0.2	134	21	166	0
7230	4.5	1.2	2.8	1.7	2.8	1.7
Total	2711.7	416.6	> 2697.8	> 444.2	> 2710.6	> 428.8

***Figure 15**. Hectares of habitat mapped. (Data: Environmental Protection Agency)*
**) = mapped as 2190 humid dune slacks, therefore total numbers are minimum numbers.*

To determine the enlargement of targeted habitats an additional mapping of areas cleared of dens overgrowth by the project but not mapped by NOVANA was carried out by external assistant. A total of 32 areas were mapped using the same method as NOVANA to determine actual habitat type and to estimate the habitat likely to develop in near future. The enlargement of habitats in these areas is shown in *figure 16.*

Habitat number	**Habitat**	**N 9 (ha)**	**N 10 (ha)**
4010	Wet heath	1.6	
4030	Dry heath	21.5	
6230	Species rich acid grassland	5.4	
6410	Molinia meadow	29.1	0.1
7230	Alkaline fen	0	
Non targeted habitats	Other annex I types	8.2	2.7
Total		**65.2**	**2.8**

***Figure 16**. Enlargement of habitats in areas cleared by the project but not included in NOVANA mapping. Habitats already developed or estimated likely to develop in near future.*

Some of the areas cleared by the project were already included as designated habitats in the 2016 NOVANA mapping. The total result of mapping by NOVANA and external assistant is shown for DK00FX010 in *figure 17* and for DK00FX118 in *figure 18*.

Habitat	NOVANA 2011 – 2017	Area mapped by project	Total change	Objective
1330	15.1			
2130	-15.9			
2140	19.2			
3110	0			
3130	0			
4010	-57.8	1.6	-56.2	15
4030	12.3	21.5	33.3	35
6230	-18.2	5.4	-12.8	≥ 1
6410	31.6	29.1	60.7	≥ 1
7230	0	0	0.0	≥ 1
Total	**2.2**	**57.6**	**25.0**	➢ **53**

Figure 17*. Change in area (ha) of targeted habitats and cumulated change in area of habitats with expansion objective in SCI DK00FX010.*

Habitat	NOVANA 2011 – 2017	Area mapped by project	Total change	Objective
1330	-0.7		-0.7	
2130	-29.9		-29.9	
2140	28.1		28.1	
3110				
3130				
4010	0.9		0.9	
4030	6.0		6.0	
6230	1.7		1.7	7 - 10
6410	0.0	0.1	0.1	3 - 5
7230	0.0		0.0	0.5 - 1
Total	**6.1**	**0.1**	**6.2**	**10.5 - 16**

Figure 18*. Change in area (ha) of targeted habitats and cumulated change in area of habitats with expansion objective in SCI DK00FX118.*

A total enlargement of designated habitats of 68 ha has been obtained. Of these 57.7 ha were targeted habitats. The distribution of enlargements between different habitats differ from the objectives in the GA. 4010 wet heath, dominated by *Erica tetralix*, is the most vulnerable habitat. The increase by the project of 1.6 ha did not change the picture of a habitat in problems. The general climate changes might be a factor, since *Erica tetralix* needs constant humidity around the roots, and the effect of the change in Denmark is that we get both more draught and more flooding. This condition however is essential to 6410 molinia meadow, which shows the highest increase in area during the project period.

Targeted species

Five breeding bird species and 3 staging migration bird species were targeted by the project, *see figure 19*. Avocet was part of the LIFE application but as it was removed from the list of designated birds of the SPA, we no longer consider the staging birds as targeted.

English name	Scientific name	Targeted as breeding	Targeted as staging
Avocet	*Recurvirostra avosetta*	x	(removed)
Dunlin	*Calidria alpina*	x (ssp *schinzii*)	x (ssp *alpina*)
Wood Sandpiper	*Tringa glareola*	x	
Artic Tern	*Sterna paradisaea*	x	
Little Tern	*Sterna albifrons*	x	
Bar-tailed Godwit	*Limosa lapponica*		x
Dark-bellied Brant Goose	*Branta bernicla bernicla*		x

***Figure 19**. Targeted species.*

Surveys of numbers of breeding pairs have been carried out each year during the project period. Data has been collected through NOVANA and by the project using an external assistant. DNA also has additional data collected before project start. Results of the surveys are shown in *figure 20.* Results of surveys of staging migrating birds are shown in *figure 21*.

	2013	**2014**	**2015**	**2016**	**2017**	**Objective**
Avocet	57 - 59	46	9	36 - 44	17	250
Dunlin	16 - 17	15 - 19	No survey	15 - 17	8 - 9	25
Artic Tern	454	321	155	217	84	800
Little Tern	24	21	19	14	6	30

***Figure 20**. Numbers of pairs of breeding targeted bird species recorded during surveys.*

Species	**Start**	**Highest number**	**Objective**
Bar-tailed Godwit	4000	2505 (May 2017)	4000
Dark-Bellied Brant Goose	700 - 1200	1573 (May 2014)	1500
Dunlin	10000	19000 (Sept. 2017)	45000

***Figure 21**. Maximum of targeted staging migrating birds.*
Highest number for dunlin is published at www.dofbasen.dk, highest number counted by the project is 15000.

In addition to objectives of breeding pairs of birds it was an objective to establish two areas suitable for breeding Wood Sandpiper. Suitable breeding must have low vegetation around the small lakes, shallow water along banks and more than 300 m to trees. After clearing of stands and sparse overgrowth at Kringelrøn and improved grazing at Syrsig the two areas were visited in 2017 and 2018 and both found suitable.

Syrsig. May 23th, 2017

Kringelrøn. February 7th, 2018

Possible breeding sites for Wood Sandpiper at Syrsig and Kringelrøn

In 2017 a survey of a selection of non-targeted breeding birds was carried out, in order to get at better picture of the causes to the decline in the targeted breeding bird species.
The survey shows a decline in all waders and small gull species, increase only in large gull species and Common Crane. Common Tern also show increase but is not breeding regularly at the island. The main increase in large gulls is at islands in the game reserve where decline in the targeted species, Avocet and Artic Tern is less severe than at in the rest of the project area. Results of the survey are show in *figure 22.*

English name	**Scientific name**	**2007**	**2017**	**Change (%)**
Oystercatcher	*Haematopus ostralegus*	544	369	- 32
Lapwing	*Venellus vanellus*	302	203	- 33
Ringed Plover	*Chalidrius hiaticula*	115	76	- 34
Curlew	*Numenius arquata*	134	98	- 27
Redshank	*Tringa totanus*	919	536	- 42
Turnstone	*Arenaria interpres*		9 - 10	-
Black-headed Gull	*Larus ridubundus*	66	0	- 100
Common Gull	*Larus canus*	342	144	- 58
Lesser Black-backed Gull	*Larus fuscus*	16	10	- 38
Herring Gull	*Larus argentatus*	199	288	+ 45
Great Black-backed Gull	*Larus marinus*	239	276	+ 15
Common Tern	*Sterna hirundo*	8 (2006)	30	Not yearly
Crane	*Grus grus*	*c.* 2 – 4	7 - 11	+ 150 - 175

Figure 22*. Selected non-targeted breeding bird species. Change in breeding pairs 2007 – 2017.*

Breeding areas.
The quality and number of the breeding areas is important to breeding success therefore factors regarding quality were included in the survey. Hooded crows are potential predators and numbers therefore important. Lapwings are known to be good at sounding the alarm when predators approach. More breeding areas make the population less vulnerable if something happens to one site. Results of surveys on these factors are shown in *figure 23.*

Factor	**status**
Nest risk of flooding	No improvement
Number of Hooded crows in the breeding areas of the SPA	289 individuals in May - June.
Numbers of breeding Lapwings in dunlin area	2017: 77 2007: 98
Areas (re-) colonized by breeding dunlin	1 area (Als Dyb Revler)

Figure 23*. Factors registered to evaluate the quality of breeding site.*

The number of the potential predator Hooded Crowe *Corvus cornix* was counted in 2017 during breeding bird survey. It is a high number and no significant decline is seen. The number of breeding Lapwings at the main breeding area of schinzii-dunlin is probably still enough to ensure alarming of predators.

The targeted breeding birds all showed decline likely to be caused by a variety of factors such as insufficient grazing, predators, invasive plant species covering both nesting areas and feeding areas, and possible disturbance to some of the species. Factors that the project has helped overcome.
All targeted species are waders or terns that produce relatively few offspring and often first breed at 2 or 3 years old, but can get 25-30 years old. If there is a period of low or even no breeding success and minimum recruitment of adult birds a drastic decline will occur and it is the experience of DNA, from the nearby island of Hirsholm, that there will be a delayed effect of actions taken to change the situation.
Most of the breeding bird species targeted are declining in Denmark and are extinct or with very low and unstable population at the Swedish West coast (except Wood Sandpiper) some 40 km away. There is therefore a very low possibility of immigration by birds from other areas. For the Arctic Tern the very high decline (82%) can partly be explained by a change in breeding area. Hundreds of Arctic Terns have colonized a sandy island that emerged at Voerså on the East coast of Jutland some 20 km WSW of Læsø. It is likely that some of these migrated from Læsø.
The first signs of lowering the predation by fox, less predation of crow alone due to fewer trees in the nesting areas, better grazing and an increased awareness during the LIFE project combined with an expected delayed response give hope for the breeding birds of Læsø's coastal areas long term.

Monitoring will continue after LIFE as part of the NOVANA program.

5.1.16 D2 Assessment of the socioeconomic impact and ecosystem restoration

The socioeconomic impact of the project is assessed through development in jobs, landowners, livestock, food products and tourism:

Jobs

The Landowners association which has been established through the LIFE project has created a new job on Læsø as daily manager of the association.

The Landowners Association has also created more work for locals acting as contractors on maintaining fences, growing winter food for the cattle and taking them in for the winter and other work.

As a result of not being able to fence in some areas close to the sea shore a shepherd with sheepdog and a pack of sheep has worked with grazing these areas in the summer. Not only has this created a new job - it has also been used for tourist purposes, when the shepherd hosted tours.

A new butcher's shop has recently opened at Læsø to process and sell the islands locally produced meet products. This has enabled two newly trained butchers originally from Læsø to return to a job on Læsø instead of having to find a job elsewhere.

Landowners and livestock

Landowners who are members of the Landowners Association receive income in the form of rent for their land. A lot of the areas did not prior to the Landowners Association provide a direct income. Cost for administration and application for RDP funding is greatly reduced for the individual landowner by the Landowners Association handling al management aspects as a whole.

Each privately owned animal is paid to graze by the Landowners Association, which means that the livestock is functioning as contractors. The owners are paid for the nature conservation that their livestock do and this has made Læsø's private livestock owners expand their number of livestock.

Food products

There is an increasing awareness of using locally grown foods and for years the production of Læsø salt, honey and scampi has grown successfully and branding the island as a place of high quality foods.

The local livestock owners and Landowners Association have an economic benefit in being able to brand and sell meat from the livestock as a product of both Læsø and as a help to local nature conservation.

The conservation of light demanding habitats also helps to create better conditions for the production of honey.

The products are produced and processed locally, and they are also sold in different local shops and used in local restaurants.

A poster and leaflet marketing the beef from cattle doing nature conservation has been released in the spring of 2018. *See annex 7.3.7.*

Tourism

The nature on Læsø is the foundation of a great part of the tourism on the island. Along with the socio economic benefits described in this section an improved and on-going care of the nature areas can only be seen as beneficially for the tourism industry at Læsø.

5.2 Dissemination actions

5.2.1 E1 Establishment of website on the Internet

The website was originally planned that to be established by LM, but due to changes among staff DNA took over the establishment and maintenance of the website.

The site was established as sub site to the DNA main site - one version in Danish and one version in English. The content was adapted to be used at both tablets and smart-phones.
The website informs about the project purpose, actions, progress, news, and makes project dissemination materials available. On the website it has also been possible to sign up for the newsletter in action E2. Since the LA employed a daily manager at the beginning of 2017 the website has also been containing information about the association until they establish their own platform.

After website establishment the work on DNA websites was moved from the local DNA units to the central DNA press unit, were layout and software was updated. Unfortunately this meant that the project website was not functioning and updated correctly for a few months. A new website was launched in the summer 2014. Also periods with illness, heavy workload and changes at DNA staff left the project with little resources to update the website regularly with news and materials. In spite of these challenges the website has still been well functioning as general information about the project. The project has only had positive feedback on the website and especially the interactive map has been very useful.

Generally the website has been well visited compared to other DNA project websites. During the project period the website had 5.579 visitors with 3,780 of these being unique, *see annex 7.3.2 (USB only)*. The statistic from the new website since summer 2014 shows naturally a large interest in the beginning of the project. During the project the activity level has been increasing in periods with many activities or when dissemination materials have been sent out with references to the website - for example in news articles, newsletters and with final seminar material.

http://naturstyrelsen.dk/naturbeskyttelse/naturprojekter/life-laesoe/

5.2.2 E2 Newsletter

The newsletters have been written and sent out by both DNA and LM.

Two types of newsletters have been sent out. One was sent out by LA to their members informing about activities in the association. The other one was sent out by LM and DNA informing about status and activities in the LIFE project. This newsletter was sent out to all 36 people who signed up for the newsletter at the project website.

Periods with illness, maternity-leave, heavy workload and changes at LM and DNA staff left the project with little resources to send out newsletters regularly every quarter. LA has since

the beginning of 2017 published their own newsletters to members of the association. Both the project newsletters and the LA have also been published at the project website. This was considered as a positive development by the project. All though not quarterly as foreseen in the Grant Agreement a total of 18 newsletters have been sent out, *see figure 14 and annex 7.3.3 (USB only)*

Never the less the project has through the whole project period experienced a great interest from the local newspaper and other media. This interest has helped to inform about project activities as a supplement to newsletters. For all articles *see annex 7.3.4 (USB only)*.

E2	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**Total**
Newsletters sent out by LA	-	3	2	1	2	5	1	**14**
Newsletters sent out by LM and DNA	-	-	-	2	1	1	-	**4**
Sum of newsletters	-	3	2	3	3	6	1	**18**

Figure 24: *Results of action E2*

5.2.3 E3 Provision of information tables

The information tables were originally planned to be established by LM, but due to changes among staff DNA has produced all information tables.

The information tables were produced to give on-site general information on the project. The 13 information tables were individually adapted to each site of placement and consist of maps and information about project activities. The tables feature both LIFE and Natura 2000 logo. To direct readers to more information a QR code is featured. By scanning this with smartphone a direct connection to the website is established and to the leaflet in English and German. Also leaflet cassettes are placed together with the information tables containing leaflets produced in action E4. The information tables have been well received. Furthermore the project produced one sign specifically to avoid disturbance of the Little tern, this is only put up during breeding season.

This action was postponed to fit in with the replacement of other information tables at DNA sites on Læsø and because of high workloads at the DNA office, *see annex 7.1.2*.

Originally 17 signs were planned, but only 14 have been produced and placed at the island, *see annexes 7.2.11 and 7.3.5*. The project assessed that two planned signs would be located too close to others signs and one planned would be located at a site not attracting visitors.

5.2.4 E4 A leaflet explaining the project

DNA has been responsible for producing the leaflets.

The leaflet produced provides general information regarding the project, the targeted habitat types and species, and features both LIFE and Natura 2000 logos, *see annex 7.3.6*. The leaflet was in the Grant Agreement foreseen to be in Danish with a short summary in English and German. This has been modified so the leaflet is instead released in both a Danish, English

and German version. This is a better solution allowing for more space for information and was possible within the budget.
To direct readers to more information a QR code is featured. By scanning this with smartphone a direct connection to the project website is established. Also the leaflet can be downloaded from the project website.
The leaflets have been available at LM office, DNA office, the local tourist office and in leaflet cassettes placed with information boards.

This action was postponed to fit in with action E3 and because of high workloads at the DNA office, *see annex 7.1.2*. The original target was printing yearly 4,500 copies. Printing copies has only been done as needed. During the project period a total of 10,000 leaflets have been printed within budget. Also the project assumes that a substantial number of visitors instead downloaded the leaflet from the website.

Later in the project a need for more specific dissemination materials about the Landowners Association occurred, because locals and tourists searched for information about the association. Therefore the project produced a leaflet and a poster informing about the association, cattle, nature conservation and meat products. The leaflet and poster features both LIFE and Natura 2000 logos, *see annex 7.3.7.* The extra leaflet and poster was not foreseen in the budget in action A4's cost category external assistance, but the project assessed that these dissemination materials were important in continuously informing and raising awareness about the LA – also following the LIFE project.

5.2.5 E5 Visitor facilities

This action has only been included to show that the applicants considered visitor facilities as an important part of a project this size. No budget and no expected results were included for this action.

Many visitor facilities existed at project start such as parking areas and public toilets. These areas have been supplemented with information tables and leaflets (action A3 and A4).

5.2.6 E6 Public tours

Both DNA and LM were responsible for arranging public tours, but due to changes among LM staff DNA tock over this whole action from 2013 to 2016. From 2017 LM has been responsible for arranging public tours.

All public tours have been scheduled in public holiday seasons, so as many people as possible had the opportunity to attend. DNA or LM hosted the tours telling about the LIFE-project and the actions to preserve nature, habitats and species. The guided tours have been announced in

the local tourist guide, the local newspaper, at the project website and in DNA's own guided tour-leaflet, *see annex 7.3.8 (USB only).*
The original target was to host 5 tours a year. A total of 28 public tours have been held during the project period, with an attendance of between 4 and 33 people, *see figure 25*. As a supplement LA hosted two guided tours in 2013.

In the summer 2016 and 2017 the shepherd was functioning as a nature interpreter hosting five tours a week, *see annex 7.3.9 (USB only)*. The shepherd told about the LIFE-project, combating invasive alien species with sheep and herding in general. These tours were very popular.

Apart from public tours LM has also hosted three other tours telling about the LIFE-project. The participants were NGO's, Hjørring Municipality and a group of business women.
Together DNA and LM hosted a tour for a group of students from the University of Copenhagen.
September 3rd 2013 the project manager also gave information about the LIFE project to His Royal Highness Prince Henri of Denmark during an official royal visit to Læsø. Prins Henri visited a project site.
In May 2017 the LM also participated in a public presentation at Læsø telling about why it looks so drastic in the landscape, when nature conservation is carried out. About 20-30 people attended, *see annex 7.3.10 (USB only).*

E6	2012	2013/2014	2015	2016	2017	2018	Total
Public tours	-	9	6	- Shepherd hosting tours	13 Shepherd hosting tours	-	**28**

Figure 25: *Results of action E6*

5.2.7 E7 Layman's report

The layman's report was originally planned to be produced by both LM and DNA, but only DNA staff has worked on this action.

The Layman's report was produced at the end of the project period to present project results and experiences to landowners, to project participants, to local community and to the public in general, *see annex 7.3.1*. The report has been produced with both text in Danish and English and feature both LIFE and Natura 2000 logo. The report has been made available at the project website.

5.2.8 E8 Local Community Group

Both DNA and LM have been responsible for establishment and management of the Local Community Group. The Local Community Group was set up to inform the community about the project actions but also to meet local interests.

To establish the Local Community Group the first meeting was held in November 2012, but only the Beekeepers Association was announcing an interest. Following that meeting the project manager made direct contact to a number of stakeholder's, NGO's and private individuals which lead to the group being established in late 2013.
As the project progressed also locals heard about the meetings and attended. The project accepted this expansion of the group and saw it as a positive development, because the information reaches a broader circle in the public. On the other hand new locals attending the meetings requires that every meeting starts out explaining the project and giving information about activities and their purpose.

Meetings in the Local Community Group have been arranged when the project needed to inform about the project or when the groups perspective on project actions needed to be discussed. The Local Community Group has been helpful in discussions regarding establishment of enclosures and clearing of invasive species.

The Local Community Group has also been discussing activities outside the LIFE project, and LM will following the LIFE-project continue the group to discuss nature conservation.

5.2.9 E9 Report on control of invasive species

The reports on control of invasive species were originally planned to be produced by both LM and DNA, but only DNA has worked on this action.

The reports were produced at the end of the project period in a partnership between DNA and University of Copenhagen. University of Copenhagen was responsible for writing the scientific part and DNA was responsible for writing about the projects practical experiences. The reports presents the problems related to the species Japanese rose and Cord Grass and the projects practical experiences with methods used to combat the species, *see annex 7.3.11*.
The reports have been produced with both text in Danish and English and feature both LIFE and Natura 2000 logo. The reports have been made available at the project website and will be distributed within DNAs network of project managers and when possible presented in international context on conferences etc.

5.2.10 E10 Final seminar

DNA, LM and LA were responsible for contributing to this action.

Invitations to Final seminar were sent out in June 2017 and the seminar took place on September 20th to 21st 2017 at Læsø. All together 51 people participated from Danish municipalities, NGO's, scientific specialists, agricultural organizations and from local and central units of the DNA, *see annex 7.3.12*. The Final seminar was held in Danish.
The first day consisted of presentations about the project and the project results. In the evening there was a volunteer geological walk carried out by a member of the project expert group and a networking dinner. The second day was a field trip showing and discussing the

project actions. The content of the final seminar particularly focused on project results, formation and management of LA and control of invasive species.
Following the seminar the project got a very positive response on content, presentations and time-schedule.

5.2.11 List of dissemination deliverables

- 7.3.1 Layman's report
- 7.3.2 Website statistic
- 7.3.3. Newsletters
- 7.3.4 News articles
- 7.3.5 Information tables
- 7.3.6 Leaflets in Danish, English and German
- 7.3.7 Leaflet and poster about Landowners association
- 7.3.8 Advertisement for public tours
- 7.3.9 Guided tours with shepherd
- 7.3.10 Material for public presentation about nature conservation
- 7.3.11 Report on control of invasive species
- 7.3.12 Final Seminar material
- 7.3.13 After LIFE conservation plan

5.2.12 F1 Project management

See description under administrative part in chapter 4.1.

5.2.13 F2 Overall project monitoring and monitoring project progress

Reports delivered to the Commission during the project period have been used to report on project progress, *see figure 26*. The same data used in reports has also been used to ensure project progress in daily management of all actions. The data includes spreadsheets, the project Gantt-chart and GIS-data to closely monitor project indicators. Every six weeks the head forester and the project manager met to evaluate and discuss project progress.
These management-tools helped the project to plan actions and to respond timely on delays and changes in project development.

REPORTS DELIVERD	
Report	**Date**
Inception report	30-06-2013
Mid-term	31-12-2014
Request for prolongation	Sent to the commission in December 2015 Commission approval 15th March 2016
Progress report no. 1	30-06-2016
Request for budget modification and partnership addition	Sent to the commission in June 2017 Commission approval???

Progress report no. 2	30-06-2017
Final report	27-08-2018

Figure 26*: Reports delivered during project*

5.2.14 F3 Networking with other projects

Networking activities during project period has been:

- August 2012, *LIFE BaltCoast final seminar*, Germany (before project start).
  Participants: Hans-Henrik Jørgensen (DNA), Bjarke Huus Jensen (DNA)

- Visit of *LIFE Aurinia,* Germany (before project start).
  Participants: Hans-Henrik Jørgensen (DNA), Bjarke Huus Jensen (DNA)

- 19th November 2012, *Kich-off meeting in London*, England
  Hans-Henrik Jørgensen (DNA), Bjarke Huus Jensen (DNA)

- September 24th – 26th 2013: *LIFE Platform meeting in Östersund* Sweden.
  Participants: Hans-Henrik Jørgensen (DNA).

- June 10th-12th 2014: *LIFE Platform meeting in Rovaniemi*, Finland.
  Participants: Hans-Henrik Jørgensen (DNA), representative from LM

- September 15th - 17th 2015, *LIFE Platform meeting in Aalborg*, Denmark
  Participants: Stine Pagel Hansen (LM)

- 18th January 2017, *Plant Congress* in Herning, Denmark.
  Participants: Jesper Blom Hansen (DNA)

- 1th- 2th February 2017, *Biodiversity Symposium* in Copenhagen, Denmark
  Participants: Ellen Marie Tranekjær Leed (DNA), Bjarke Huus Jensen (DNA)

- February 10th 2017, *DNA Nature project-network meeting* in Juelsminde, Denmark.
  Participants: Ellen Marie Tranekjær Leed (DNA)

- April 19th-20th 2017, *LIFE Platform meeting in Örebro*, Sweden
  Participants: Ellen Marie Tranekjær Leed (DNA)

- May 2th-3th 2017, *DNA Nature project-network meeting* in Thy, Denmark.
  Participants: Ellen Marie Tranekjær Leed (DNA)

- Juni 30th 2017, *DNA LIFE Economy workshop* in Fussingø, Denmark
  Participants: Ellen Marie Tranekjær Leed (DNA)

- November 16th 2017, *DNA Nature project-network meeting* in Randbøl, Denmark.
  Participants: Ellen Marie Tranekjær Leed (DNA)

- June 11th-13th 2018, *LIFE Platform meeting in Punkaharju,* Finland
  Participants: Søren Møller Pedersen (DNA)

- In addition to network meetings, the project daily shared experiences with the LIFE projects REWETDUNE and WETHAB, who are also located at DNA office in Skagen. The project group at DNA was meeting once a month to discuss project progress, economy and challenges.

5.2.15 F4 After LIFE conservation plan

See annex 7.3.13

5.3 Evaluation of Project Implementation

LIFE Læsø has been a restoration project using traditional methods such as clearings of tress, combatting invasive alien species, establishment of fences and grazing to restore light demanding habitats.
To ensure the nature conservation following the LIFE-project the Landowners Association was established. The establishment of LA has made the local community involved in nature conservation at Læsø, which have been important to the project's success.
The LIFE project has also made it possible to try new methods especially in combating the invasive alien species Japanese Rose and Cord grass. The experiences will be important in future management of the species.
In general the project has created awareness in the local community about nature and nature conservation. To accommodate this interest the project experienced the dissemination as very important.
The amendment no. 1 included a prolongation of the project period with 6 months. Because of long term illness, heavy work load and changes among staff the amendment was important to the project implementation in general and especially to the actions regarding combating non-native woody species, invasive species and restoring natural hydrology (C3, C4, C5 and C11). If the amendment had not been granted the results and experiences in these actions had perhaps not been gained.

Task	Foreseen in the revised proposal	Achieved	Evaluation
A1	100 % membership	85,09 % membership	The process starting with the election of a working group and the following work leading to the establishment of the association can only be perceived as extremely productive and creating a ownership to the Landowners Association and to the LIFE project. Legal and financial advice ended up extremely costly. A more precise description of services prior to hiring legal and financial advice could have made this

			action more cost-efficient.
A2	All permits obtained	All permits obtained	A thorough screening of needed permits and planning is very important to ensure project progress and to minimize delays. It is important to contact authorities in this screening process. Framework permits are administrative timesaving.
A3	Investigation-survey delivered	Investigation-survey delivered	Because of a lack of skills within hydrology at project partners it has been very positive and timesaving to outsource this survey. For similar task in the future it would be an advantage to have more of the reporting in writing. It will provide an easier understand of the material and conclusions for new project participants.
C1	366 ha	229 ha	It is extremely important to allocate adequate time to negotiate with landowners, because of their importance to the project success. Using special machines and manual clearings to protect vulnerable and wet habitats can be necessary even if they are less cost-efficient.
C2	376 ha	570 ha	After clearing of trees there will often be a need for subsequent treatments because of regrowth especially with Silver birch (*Betula pendula)*. In consideration of future treatment with machines and grazing low tree stumps are important. This is best achieved by manual felling of trees.
C3	78 ha	21 ha	An action that is very dependent on only one landowner can have a significant setback if the landowner does not want to participate. When access is a problem it can be cost-efficient to leave trees on the ground where they can benefit biodiversity and there is no damage to habitats.
C4	23.91 ha	76 ha	The LIFE-project was an opportunity to try new methods by using the plant-lifter and pulling up by tractor mounted crane. An unexpected public and political resistance against this action occurred, because the public was used to Japanese rose growing along shores with nice looking flowers and with rosehips used in food products. The project experienced an importance in telling the public about the purpose of this action and the negative effects of invasive alien species. Also it is extremely important to allocate adequate time to negotiate with landowners, because of their importance to the project's success.
C5	14.97 ha	29 ha	The LIFE-project was an opportunity to make a survey and find best practise to combat Cord grass. A misunderstanding about the method used was, that it would prevent accesses to the shore line. This lead to an unexpected public and political resistance against this action. The project experienced an importance in telling the public about the purpose of this action and negative effects of invasive alien species. Also it is extremely important to allocate adequate time to negotiate with landowners, because of their importance to the project's success.
C6	Cattle: 1,500 Sheep: 1,200	Cattle: 380 Sheep: 261	It is important that the need for livestock can be adjusted depending on the number of livestock from local livestock owners. Arrival of the livestock is difficult to plan because it depends on when the project is able to source livestock. Also the transportation of cows with calves needs to be planned in

			consideration to animal welfare. An agreement about management of the livestock is to prefer before purchasing livestock. Otherwise the project has to spend resources on the management of the livestock.
C7	New fences: 1,712.15 ha Existing fences: 1,559.55 ha	New fences: 1,014 ha Existing fences: 1,674 ha	It is extremely important to allocate adequate time to negotiate with landowners, because of their importance to the project's success. The ideal and most cost-efficient fencing and nature conservation can be difficult to achieve with many landowners owning small areas in one project site. Especially when not all landowners are willing to participate.
C8	433.98 ha	568.44 ha	This is very much a weather depending action. Trained workers with good skills are necessary to secure safety. Controlled burning in small areas is very time-consuming and therefore expensive. A volunteer group has made controlled burning more cost-efficient, because the project was able to burn larger areas. Establishment of a volunteer group also creates local commitment to the project and continuation after LIFE.
C9	15,920 m	19,462 m	A functioning infrastructure has been important in implementation of actions during the project period and in future management. A well-functioning infrastructure was important in avoiding traffic from many different landowners creating individual tracks in habitats outside roads.
C10	-	2,011 crows, 247 foxes and 44 mink culled	The results in culled numbers of predators are very good and in particular foxes are now observed less on the island. Cooperation with volunteer hunters has been beneficial in both carrying out the action, in engaging local community and in securing a continuation after LIFE.
C11	10,497 meters	4,400 meters	The work is preferred conducted in late summer under dry weather conditions, to minimize damage to the habitats. When using the right machinery and shaping the soil after the surrounding environment, traces from the work quickly disappears. Using limited tender the project ensured cost-efficiency.
C12	3,271.70 ha	2,500 ha	It is extremely important to allocate adequate time to negotiate with landowners, because of their importance to the project success. Involving local volunteers as board members was important to gain local support. Employing a daily manager made it easier for the local community to distinguish between the LA and the LIFE-project and made the association more independent. After the association has been legally established it was still important that the partners supported the association in management.
D1	Monitoring habitats and species	Monitoring completed	Monitoring has been important to follow the development in habitats and species, but some results will first be visible after a period of time (new habitats, birds).
D2	Assessment of socioeconomic impact	Assessment completed	Direct and visible socio-economic impact such as creating a new job as daily manager of the LA, opening a butcher shop with new jobs and attracting tourist to sheep herding have been important in showing community benefits to those not necessarily interested in nature conservation.
E1	Establish website	Website established	The website has been functioning well as general information platform and to make project materials available.

			News on the website and dissemination materials with reference to the website increase activity.
E2	20	18	The newsletters have given information about the project status and news to members of the LA and other stakeholders. A great interest from the local newspaper and other media has helped to inform about project activities as a supplement to the newsletters.
E3	17	14	Information tables provided good on-site information on the project. Producing many different information tables adapted to each site required more work than just producing one with general project information.
E4	Producing leaflet	Leaflets Produced	Leaflets have provided good general information on the project and has been easy to print as needed and distribute
E5	25	28	Public tours have been a great way to meet the public and inform about the project purpose and answer questions.
E6	-	-	
E7	Producing Layman's report	Layman's report produced	A nice way of summing up and explain the project results to the public in a non-scientific report. Will be very useful in the coming years.
E8	Establishment of Local Community Group	Local Community Group established	The Local Community Group has engaged the local community in the LIFE-project. The groups' perspective on actions can be a tool to avoid conflict of interests.
E9	Producing reports	Reports produced	The reports gather the projects experiences with combatting invasive alien species. This can be useful information to other organisations working with nature conservation, Cord grass and Japanese Rose.
E10	Organize final seminar	Final seminar organized	Final seminar is an opportunity to share and discus project experiences with other professionals. A well planned and organized time-schedule was necessary because of the island logistic.

5.4 Analysis of long-term benefits

5.4.1. Environmental benefits

Direct / quantitative environmental benefits:

- A total enlargement of designated habitats of 68 ha has been obtained. Of these 57.7 ha were targeted habitats. The distribution of enlargements between different habitats differ from the objectives in the GA. Clearings of trees and grazing in both Natura 2000-sites has made improvements in existing light demanding nature habitats and created an opportunity for new light demanding habitats to establish.
- The improved habitats are assessed also to have improved conditions for birds in SAC DK00FX010.
- Feeding areas for staging migrating birds are negatively influenced by *Spartina ssp* and removing the plant from 29 ha therefore has a direct positive impact. The Dark-bellied Brant Goose increased to a number above the objective, the dunlin increased by app. 42% of the objective. The Bar-tailed Godwit inexplicably declined.
- 2 areas have been made suitable as breeding areas for Woody Sandpiper, *Tringa glareola* and a large number of predators have been culled directly impacting the targeted breeding birds. The targeted breeding bird species have a long response time to improvements of

habitats and only during the breeding season 2018 (after the end of the project) an increase in Little Tern, *Sterne albifrons* to 11 pairs was observed.

- The establishment of LA has ensured nature conservation after LIFE by managing the overall grazing in both Natura 2000-sites. The establishment of LA has created an association which brings together landowners and livestock owners with the purpose of nature conservation which will benefit both parties.
- Experiences with combating Japanese rose and Cord grass have created a basis for decisions regarding management and choice of technical methods in control of alien species in both Natura 2000-sites.
- The predation was diminished by control of fox, mink and hooded crow and many trees that serves as lookouts for hooded crow has been removed. This is assessed to have improved conditions for breeding birds in SAC DK00FX010.
- Closing ditches has contributed to a more natural hydrology in habitats and in areas with important resources of ground water. By closing ditches in wet areas also higher degree of CO2 retention is obtained.
- Wood chip production from clearing of trees has been used in local CO2 neutral heating and is reducing the need for using heavy fuel oil or coal for heating.

The project has impacted directly or indirectly:

- EU's policy for agriculture, food and rural areas, EU's sustainable development strategy and "Rural development 2014-2020".
- EU's Biodiversity Strategy to 2020.
- EU Climate Change and Energy Policy.
- EU Water framework directive.
- EU Environment Action Program.

5.4.2 Long-term benefits and sustainability

The expectation is that the light demanding habitat types will continue to improve conservation status long-term as the actions carried out by the project will take time to show their full effect.

The purpose of LA is to work for sustainable nature and agricultural management of Natura 2000-areas, belonging to the members. Therefore the light demanding habitats and bird species will continue to benefit from the grazing of livestock and clearing of regrowth from trees when needed. As LA continues to work on increasing membership it is expected that the association will expand in managed hectares. Also managing nature outside the Natura 2000 areas can be a future opportunity for the association.
Based on the high number of memberships, which shows local support to the association, the project assesses the future of the association as very viable. Future threats for the organisation can be lack of a stable daily management, not having local support from members and changes in RDP funds which will all have a negative effect on the association.

Through daily management LM and DNA will still be legally responsible for obtaining favourable conservation status from all targeted habitats and species. LM will be responsible on private owned land and DNA will be responsible on own land. Through experiences gained from methods used in the project LM and DNA will continue to work on clearing of trees, combatting invasive species and control foxes, mink and hooded crow. Public resistance

against nature conservation activities can be a treat for both DNA and LM. For LM especially landowners not willing to participate in nature conservation can be a threat. To avoid local resistance DNA and LM will continue to improve information to the public.

Finances needed to secure future management will partly come from the LA applying for RDP funds and income from meat sale and from LM and DNA budgets related to nature conservation.

5.4.3 Long-term / qualitative economic benefits

Through the financial setup of LA both private landowners and livestock owners benefit financially. The association offers to pay a reasonable rent to private landowners and take over the administrative and practical burden of land management. Also private livestock owners are paid for their grazing-services.
The LA has gathered expenses and made nature management more cost-effective to livestock owners, which lead to an increase in livestock at Læsø. The increase in livestock has already created a marked for meat sale and a butcher shop has opened bringing 2 young butchers back to the island. With the increased livestock there is also a future possibility for opening a slaughterhouse and a veterinary employment at the island.
The LA making nature conservation sustainable will also be cost-efficient for both LM and DNA, as they will not use as many resources on clearings on tress, fences and grazing.
The project has already created direct economic benefits through income from grazing and meat sales, and through creating a job as daily manager of the LA, a seasonal job as shepherd and indirectly by creating the basis for opening a butcher shop selling local meat from nature conservation livestock.

5.4.4 Long-term / qualitative social benefits

The Landowners Association which has been established through the LIFE project has created a new job on Læsø as daily manager of the association.
The Landowners Association has also created more work for locals acting as contractors on maintaining fences, growing winter food for the cattle and taking them in for the winter and other work.
As a result of not being able to fence in some areas close to the sea shore a shepherd with sheepdog and a pack of sheep has worked with grazing these areas in the summer. Not only has this created a new job - it has also been used for tourist purposes, when the shepherd hosted tours.
A new butcher's shop has recently been opened at Læsø. This has enabled two newly trained butchers from Læsø to return to a job on Læsø to process and sell the islands locally produced meet products.

The nature on Læsø is the foundation of a great part of the tourism on the island. Along with the socio economic benefits described in this section an improved and on-going care of the nature areas can only be seen as beneficially for the tourism industry at Læsø. Also tourists and locals using nature to be active or to recuperate contribute to public health.

In general the project has created awareness about nature values, resources and different interest in nature management in the local community. LM is now working on a plan for a future holistic landscape management, where also the local community will be involved.

The projects advisory board has also contributed to sharing knowledge between scientists and the project partners, which was very beneficially to the project actions. Also the project contributed to educational purposes when including a student from University of Copenhagen in action C5.

5.4.5 Continuation of the project actions by the beneficiary / other stakeholders

Through daily management LA and DNA will still legally be responsible for obtaining favourable conservation status from all targeted habitats and species. LM will be responsible on private owned land and DNA will be responsible on own land.

The LA, LM and DNA will continue functioning as partners in planning grazing, fencing- and clearing activities to ensure nature conservation.
The LA will be responsible for activities involving grazing, livestock and fences. LM and DNA will continue to combat invasive species, use controlled burning, control predators and preform special tasks not covered by the LA's nature management.
More information can be found in the After LIFE conservation plan included as *annex7.3.13*

5.4.6 Replicability, demonstration, transferability, cooperation

Is it very much hoped that the establishment of the Landowners Association will demonstrate a sound community based way to cooperate on nature conservation management creating social and economic benefits. This can hopefully be shown to be effective in particular in small communities with a lot of very small individually owned cadastral units.

The framework agreement with The Agency for Culture and Palaces was the first framework agreement established regarding historic remains. The permit concerned 637 historic remains and contained terms for clearings, controlled burning and restoration of damage to historic remains related to grazing. The framework agreement made work cost-efficient and created mutual understanding between the project and The Agency for Culture and Palaces. This framework agreement will hopefully inspire other similar collaborations between authorities and projects.

5.4.7 Best practise lessons, innovation and demonstration values

- A1, C12: Best practise is to establish the association based on support and involvement from the local community and thereby creating ownership. Also involving specialists in legal and financial advice is important in the establishment of the association. Employing a daily manager makes it easier for the local community to distinguish between the LA and the LIFE-project and made the association more independent.

- A2: Screening of needed permits and planning is very important to ensure project progress and to minimize delays. It is important to contact authorities in this screening process. This will also be important in the work following the LIFE-project. Framework permits are administrative timesaving and thereby more cost-efficient.

- C1, C2, C3, C4, C5, C7, C8: Dealing with many and small cadastral units owned by many individual owners is challenging. Therefore it is extremely important to allocate adequate time to negotiate with landowners, because of their importance to the project success.

- C4: Best practice used was to get a god overview of the stands before combatting Japanese rose and to use different methods in combination depending on the size of the stands, terrain, soil and vegetation.

- C5: Because of no experience in Denmark combatting Cord grass, best practice was found by testing different methods in a survey conducted by University of Copenhagen. Also all stands of Cord grass was mapped to get a good overview. The survey showed best practice was digging up the cord grass and the project continued working with this method on a larger scale.

- C6: Livestock owners increased their own herds when the project demonstrated cost-efficiency in nature management. It is therefore important that the number of livestock belonging to the project can be adjusted depending on the number of livestock from local livestock owners.

- C8, C10: Using volunteers, where possible, makes actions more cost efficient and creates local understanding and involvement in the nature conservation.

5.4.8 Innovative and demonstrative value

As an experiment pulling-up Japanese roses with a plant lifter was tried. The plant lifter is a tool, which is normally used in plant nurseries. It cuts the rose free beneath the surface, lifts it and shakes sandy soil off the roots. The roots are left to dry out at the soil surface and thereby die. The experiment with the plant lifter showed, that the method was most suitable for control of *Rosa rugosa* with a superficial root net in soils consisting of sand and/or gravel.

Formation of the Landowners Association has high innovative and demonstrative value. Other types of smaller grazing cooperation are known in Denmark, but not on this scale and as a business setup. Also the project has developed the business setup for the LA that is legally and fiscally approved and can be used by others

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5.4.9 Long-term indicators of the project success

Specie	Long-term indicators
Dunlin *Calidris alpine schinzii*	25 pairs breeding
Wood Sandpiper *Tringa glareola*	Re-colonisation
Artic Tern *Sterna paradisaea*	800 pairs breeding
Little Tern *Sterna albifrons*	30 pairs breeding
Avocat *Recurvirostra avosetta*	250 pairs breeding
Dunlin *Calidris alpine alpine*	45,000 individuals resting

Bar-tailed godwit *Limosa lapponica*	4,000 individuals resting
Dark-bellied brant goose *Branta bernicla bernicla*	1,500 individuals resting

Habitat	**Long-term indicators**
4010 Northern atlantic wet heath	Further improvement of conservation status
4030 European dry heath	Further improvement of conservation status
6230* Species-rich nardus grassland	Further improvement of conservation status
6410 Molinia meadows	Further improvement of conservation status
7230 Alkaline fens	Further improvement of conservation status
1330 Atlantic salt meadows	Further improvement of conservation status
2130* Fixed coastel dunes	Further improvement of conservation status
2140* Decalcified fixed dunes	Further improvement of conservation status
3110 Oligotrophic waters	Further improvement of conservation status
3130 Oligotrophic / mesotrophic standing waters	Further improvement of conservation status

The project partners will continue working for sustainable populations of the targeted bird species and keep the objectives of the project regarding numbers of breeding pairs and staging birds.

The project partners will continue a management of the area that improves the habitats, especially by improving the structure and function with less overgrowth and reduced cover of invasive alien species.

The dominating factor for the long-term success is and will be the Landowners association as this is in reality the only instrument capable of delivering the environmental result leading to safeguarding the conservation status of the habitats / species.
The important indicator is therefore the success or failure of the association

6. Comments on the financial report

Amendment no 2 was signed by the commission September 6th 2017. The amendment included a budget modification.

All comparisons of actual costs to budget in this section will be made according to approved, modified budget.

6.1. Summary of Costs Incurred

PROJECT COSTS INCURRED				
	Cost category	Budget according to the grant agreement*	Costs incurred within the project duration	%**
1.	Personnel	824.088	844.141,62	102,4
2.	Travel	29.060	45.296,73	155,9
3.	External assistance	730.091	719.821,52	98,6
4.	Durables: total non-depreciated cost			
	- *Infrastructure sub-tot.*	43.755	43.700,46	99,9
	- *Equipment sub-tot.*	257.910	242.268,91	93,9
	- *Prototypes sub-tot.*			
5.	Land			
6.	Consumables	68.175	52.110,49	76,4
7.	Other costs	11.409	7.922,86	69,4
8.	Overheads	137.514	136.868,38	99,5
	TOTAL	2.102.002	2.092.130,98	99,5

*) If the Commission has officially approved a budget modification indicate the breakdown of the revised budget. Otherwise this should be the budget in the original grant agreement.
**) Calculate the percentages by budget lines: e.g. the % of the budgeted personnel costs that were actually incurred

6.1.1 General

The overall costs incurred are on budget and in accordance with project results.
No major discrepancies between the budget and costs incurred on the distribution to cost categories are seen. Costs are in accordance with Article 15.2 of the Common Provisions.

The project budget has benefitted from any income created. Income has been included as negative costs in the financial report in the corresponding cost category and action. If for instance income has been created from sales of chip wood produced by contractors under action C1 it has been included as negative cost under external assistance for C1. If a surplus is generated (costs of clearing, transport etc. deducted from income) on privately owned land this is transferred to the owner.

This procedure has been discussed with the Commission and complies with the Commissions letter dated November 25th 2015, annex points 2, 3 and 4.

One of the objectives of the project has been to use RDP-funding to make grazing financially viable to the landowners. To avoid double funding with LIFE there is a process of mutual checking both from the LIFE project and from the Danish Agrifish Agency who is responsible for RDP-program in Denmark.
The Agrifish Agency sends maps showing applications for RDP-funding within the project area to the project management. If funding through LIFE is already agreed to or actions implemented applications for RDP funding are turned down. The Agrifish Agency publishes GIS maps of approved applications every year. These maps are consulted by the LIFE project management before making agreements with landowners to avoid paying for actions already funded by RDP.
This way of both the Agryfish Agency checking for LIFE-funding and the LIFE management consulting the Agrifish Agency maps of RDP-funding is a very effective way of avoiding risk of double financing.

6.1.2 Personnel

The project experienced problems regarding availability of contractors on the island and therefore had to use LM and DNA staff to substitute. This was taken in to account in the budget modification.

6.1.3 Travel

Since the project is located on an island, and the road to get there includes a ferry, travel costs are naturally higher than if the project was located on the main land. It has been very important for the DNA project manager to have close contact with partners, stakeholders and locals to ensure project success. Therefore presence on the island has been important. Budget for travel has clearly been underestimated, partly due to extra presence necessary during periods with change in staff in LM, in daily manager of LA and in DNA project manager.
Also travel cost for participation in International Spartina Conference in France July 2014 was not foreseen in the GA.

6.1.4 External assistance

Due to problems finding contractors on the island the budget was slightly reduced with the budget modification to allow for substitution with DNA and LM staff.

6.1.4 Durables – infrastructure

Costs for infrastructure have been as budgeted.

6.1.5 Durables – equipment

To allow for higher costs in mainly personnel the original budget was reduced in the budget modification.
The method used in purchasing cattle has been subject to separate evaluation, see *annex 7.2.15 (USB only).*

6.1.6 Land purchase/purchase of property rights

N/A

6.1.7 Consumables

To allow for higher costs in mainly personnel the original budget was reduced in the budget modification.

6.1.8 Other costs

As budgeted other costs have been very low.

6.1.9 Overheads

No comments

6.2. Accounting system

6.2.1 Brief presentation of accounting systems

The Nature Agency has a coherent accounting system. All internal appropriations, budgets and accounts are kept in one system. This system also holds information about each employee's time registration. This means that all financial reporting materials are stored in one system, with easy access to extract the information again.
The Municipality of Læsø also has a coherent accountancy where all internal appropriations, budgets and accounts are kept in one system. The municipality's system does not hold detailed information on employee's time registration, please *refer to section 6.2.3*.

At both the Nature Agency and the Municipality the LIFE Læsø project has its own specific set of account numbers to hold the financial information - internal appropriations, budgets and accounts, relevant for the actions each partner is involved in. Each partner secured an internal appropriation in their respective accounting systems in the beginning of the project, based on a budget regarding the actions the partners must complete. These project accounts are balanced each year.
As agreed in the Partnership Agreement Læsø Municipality only contributes with their workforce, why no other project related costs are produced via LM. Cards of accounts are found in *annex 8.5.*

The Landowners Association only contributed financially with a total of 13 euro and has had no invoices or personnel costs to account for. Therefore LA has been exempt from making a financial report of their own. Their contribution is accounted for in the financial report of the DNA. LA has cosigned the Consolidated Cost Statement for the Project, *see annex 8.3.*

6.2.2 Brief presentation of the procedure of approving costs

All project relevant invoices are in the accounting system provided with appropriate accounting information: project account, action number and cost category. All project invoices are processed and approved in the accounting system by the project manager.
Paper copies of all invoices and proof of payment are collected and kept by the financial secretary at DNA.
As laid down in the Partners Agreement no invoices are paid by the Municipality of Læsø.
All costs entered into the LIFE+ financial reporting tool are without VAT.

6.2.3 Brief presentation of the registration, submission and approval procedure/routines of the time registration system

All DNA salaried employees make time registration into an electronic system on a daily basis. The system is called **mTID**. All project-relevant activities are marked with project- and

action-specific numbers. Each month the employee accepts and locks the time registration, after which the registration is approved by the head of the Unit. This information is then accessible in the accounting system. All DNA hourly-paid employees make time registration on "excel time-sheet" also on a daily basis. As was the case for salaried employees project-relevant activities are marked with project- and action-specific numbers. Each month the employee email (electronically) the excel time-sheet to the manager, who approves and transfer the information into the time-sheet database mTID. The information is then accessible in the accounting system.

Regarding LM both salaried and hourly paid employees use the EU excel based template. The hourly employees although using a printed form on a daily basis. These are then signed and handed over to a clerk by the end of each month and then entered into the electronic format. All LM timesheets are forwarded to the DNA project manager for control and signature on a monthly basis.
Statistical information based on the employee's information in the timesheet database is composed every year. The "yearly-statistic" is the foundation when calculating the annual working time. The annual working time is calculated on an individual basis for every employee.
The total time registered is then reduced with the non-productive time, which includes time registered as:

- Vacation
- Lunch time
- Sickness/other absence.
- Absence because of bad weather (may be relevant for some workmen).

If an employee is long-term ill, more than 21 days in succession, the employer is entitled to a partial refund of the salary. If this is the case, time registered as sickness will NOT be deducted from the total registered. Time registered as parental leave will NOT be deducted from the total registered, because of partial refund of the salary. We have chosen this conservative approach regarding calculation of the annual working time because it is associated with a rather large effort to find and document the compensation receive per employee. So if we don't deduct compensation received (which always will be less that the amount paid in salary to the employee) it wouldn't be righteous to regard the absence as non-productive time

6.2.4 Brief explanation how it is ensured that invoices contain a clear reference to the LIFE+ project

All project relevant invoices are in the accounting system provided with appropriate accounting information: project account, action number and cost category. All project invoices are processed and approved in the accounting system by the project manager. Paper copies of all invoices and proof of payment are collected and kept by the financial secretary at DNA. No invoices are paid by the Municipality of Læsø as outlined in the PA. All costs entered into the LIFE+ financial reporting tool are without VAT.

6.3. Partnership arrangements

The partnership agreement with LM states that the associated beneficiary forwards timesheets and updated financial reporting to the project manager at DNA once a month. The municipality uses the timesheet template and the Financial Report template provided by the EU Commission.

DNA checks that the timesheets and financial reports given by LM are filled in correctly and timesheets dated and signed correctly. The municipality keeps original paper copies of invoices and timesheets and provides DNA with second copies.
All invoices are paid by DNA and therefore the Municipality only mentions costs in the categories personnel and travel to account for and report.

The LA was added to the project as partner with Amendment no 2. The partnership agreement states that the LA contributes to the Final Seminar and with a total cost of 13 Euro.

6.4. Auditor's report/declaration

Audit Report is attached as *annex 8.12 (USB only).* The report is completed by

RIGSREVISIONEN

Rigsrevisionen
Landgreven 4
DK-3101 Copenhagen K.
Denmark
Tel: +45 33 92 84 00
e-mail:info@rigsrevisionen.dk

The Audit Report includes the personnel cost from LM as audited by

BDO

BDO Statsautoriseret revisionsaktieselskab
Visionsvej 51
DK-9000 Aalborg
Tlf.: +45 96 34 73 00
www.bdo.dk

The Audit Report from LM is attached as *annex 8.13 (USB only).*

6.5 Summary of costs per action

Table also included in Excel format with Financial Report for DNA (Omkostninger pr action)

Action no.	Short name of action	1. Personnel	2. Travel and subsistence	3. External assistance	4.a Infra-structure	4.b Equip-ment	6. Consumables	7. Other costs	TOTAL
A1	Formation of Landowners Association	18.495,97	841,65	45.299,41	0,00	0,00	31,37	0,00	64.668,40
A2	Permission to carry out conservation actions	12.126,35	311,60	0,00	0,00	0,00	198,83	0,00	12.636,78
A3	Hydrological investigation	1.176,24	0,00	2.381,98	0,00	0,00	0,00	0,00	3.558,22
C1	Clearing of trees and shrub	170.892,32	251,47	105.380,23	559,52	0,00	3.764,87	0,00	280.848,41
C2	Clearing of reeds and emerging trees and shrub	165.674,54	82,77	29.568,46	0,00	3.825,01	17.357,18	0,00	216.507,96
C3	Clearing of non native woody species	2.880,28	0,00	1.080,11	0,00	0,00	0,00	0,00	3.960,39
C4	Clearing of Japanese rose	24.667,98	0,00	18.302,72	0,00	1.845,57	2.041,29	0,00	46.857,56
C5	Clearing of cord grass	37.153,49	4.213,75	73.606,45	0,00	9.582,09	4.667,29	500,00	129.723,06
C6	Establishment of cattle and sheep herds	37.402,47	592,82	23.068,15	0,00	215.119,52	8.484,75	489,52	285.157,22
C7	Creating enclosures by fencing	54.293,72	0,00	355.763,45	0,00	4.026,23	4.794,32	1.608,15	420.485,86
C8	Controlled burning	21.839,68	0,00	0,00	0,00	0,00	4.415,82	1.608,15	27.863,64
C9	Infra-structure	2.734,35	0,00	1.933,47	43.140,94	0,00	0,00	0,00	47.808,76
C10	Control of foxes, mink and hooded crow	4.502,16	62,60	7.343,98	0,00	6.835,94	107,45	0,00	18.852,13
C11	Restore natural hydrology	3.539,15	0,00	2.958,87	0,00	328,23	0,00	0,00	6.826,25
C12	Landowners Association	50.913,29	59,49	6.626,01	0,00	0,00	30,67	0,00	57.629,46
D1	Monitoring of impact on targeted habitats and species	3.073,51	0,00	21.286,39	0,00	403,36	49,00	0,00	24.812,26
D2	Assessment of the socieecomomic impact	38,56	0,00	0,00	0,00	0,00	0,00	0,00	38,56
E1	Establish website	9.905,62	0,00	0,00	0,00	0,00	0,00	0,00	9.905,62
E2	Newsletter	2.205,11	0,00	0,00	0,00	0,00	347,37	0,00	2.552,48
E3	Provision of information tables	9.583,36	0,00	118,20	0,00	0,00	2.137,31	0,00	11.838,88
E4	A leaflet explaining the project	1.759,06	0,00	9.207,38	0,00	0,00	0,00	0,00	10.966,44
E5	Visitor facilities	61,99	0,00	0,00	0,00	0,00	0,00	0,00	61,99
E6	Public tours	1.624,92	0,00	0,00	0,00	0,00	2.217,51	0,00	3.842,43
E7	Layman´s report	886,23	0,00	0,00	0,00	0,00	0,00	0,00	886,23
E8	Local Community group	6.477,00	0,00	0,00	0,00	0,00	78,97	0,00	6.555,97
E9	Report on control of invasive species	898,63	0,00	6.717,09	0,00	0,00	0,00	0,00	7.615,72
E10	Final seminar	8.194,23	946,26	1.112,15	0,00	0,00	0,00	3.513,95	13.766,59
F1	Project management	170.410,69	33.445,99	8.067,04	0,00	302,95	1.386,50	203,10	213.816,27
F2	Overall project monitoring	11.212,94	439,29	0,00	0,00	0,00	0,00	0,00	11.652,23
F3	Networking	8.480,62	3.989,90	0,00	0,00	0,00	0,00	0,00	12.470,53
F4	After LIFE conservation plan	1.037,17	59,13	0,00	0,00	0,00	0,00	0,00	1.096,30
Over-heads		59.089,91	3.170,77	50.387,51	3.059,03	16.958,82	3.647,73	554,60	136.868,38
	TOTAL	**903.231,54**	**48.467,50**	**770.209,03**	**46.759,50**	**259.227,73**	**55.758,23**	**8.477,46**	**2.092.130,98**

In general there are discrepancies for all actions between budget and actual costs. Minor discrepancies naturally occur since budgets can never be more than qualified estimates. Some of the actions however warrant separate comments.

A1 Formation of Landowners Association

As described under section 5.1.1 the action had to revise the legal setup to be accepted by Inland Revenue. This meant that the discussion regarding legal setup had to be resumed and the Articles of Association had to be re-written and approved by calling an extraordinary Founders Meeting. Costs for legal advice and personnel therefore ended up higher than estimated.

C4 Clearing of Japanese rose and C5 Clearing of Cord grass

These actions were delayed as described in sections 5.1.6 and 5.1.7 mainly due to two not foreseen permits being necessary and necessity of individual agreement with landowners also not foreseen to be necessary. Because of the delay not all foreseen areas could be cleared during the project period and therefore not all budget spent.

C8 Controlled burning

In 2015 and 2016 the weather conditions were favourable and because of the volunteer group the project was able to burn large sites. This made the action more cost-efficient than foreseen.

C11 Restore natural hydrology

During the project period the targeted objective reduced due to the conclusion of the hydrological survey that restoration of hydrology within the southern Natura 2000-site DK00FX010 was not needed.
Unfortunately the permit required to carry out the action was delayed and left the project with only a little time to restore the natural hydrology at the very end of the project period.
These two factors have resulted in in less actual cost than expected.

C12 Landowners Association

As described in section 5.1.14 this action unfortunately ended up in need of DNA staff functioning as daily manager for the LA for longer periods of time than originally planned resulting in actual costs exceeding the budget.

7. Annexes

7.1 Administrative annexes

7.1.1 Persons involved during project period
7.1.2 Gantt chart
7.1.3 Partnership agreements (USB only)
7.1.4 Articles of the association (USB only)
7.1.5 Framework permit from The Agency for Culture and Palaces (USB only)
7.1.6 Agreement regarding sheep (USB only)
7.1.7 Agreement handing over equipment to the association (USB only)
7.1.8 E-mail correspondence with the commission regarding income from slaughtering of cattle (USB only)
7.1.9 Comments to letters from the Commission *(USB only)*

7.2 Technical annexes

7.2.1 Map – C1
7.2.2 Map – C2
7.2.3 Map – C3
7.2.4 Map – C4
7.2.5 Map – C5
7.2.6 Map – C7
7.2.7 Map – C8
7.2.8 Map – C9
7.2.9 Map – C11
7.2.10 Map – C12
7.2.11 Map – E3
7.2.12 Hydrological investigation (USB only)
7.2.13 Managing and controlling Invasive Species (USB only)
7.2.14 Letters from the Galloway Association (USB only)
7.2.15 Declaration on purchase of cattle *(USB only)*

7.3 Dissemination annexes

7.3.1 Layman's report (deliverable)
7.3.2 Website statistic
7.3.3 Newsletters (USB only)
7.3.4 Newspaper articles (USB only)
7.3.5 Information tables
7.3.6 Leaflets in Danish, English and German (deliverables)
7.3.7 Leaflet and poster about Landowners association (deliverables)
7.3.8. Advertisement for public tours (USB only)
7.3.9 Guided tours with shepherd (USB only)
7.3.10 Material for public presentation about nature conservation (USB only)
7.3.11 Reports on control of invasive species (deliverables)
7.3.12 Final Seminar – program, list of participants and materials (deliverables)
7.3.13 After LIFE conservation plan (deliverable)

7.4 Final table of indicators

Attached as *annex 7.4 (USB only)*

8. Financial report and annexes

8.1 "Standard Payment Request and Beneficiary's Certificate" - signed original
8.2 "Beneficiary's Certificate for Nature Projects" – signed originals
8.3 "Consolidated Cost Statement for the Project" - signed original
8.4 "Financial Statement of the Individual Beneficiary" – signed originals - including

- Personnel costs
- Travel costs
- External assistance
- Infrastructure
- Equipment
- Land purchase
- Lease of land
- Consumable material
- Other direct costs
- Overheads
- Funding from other sources, divided in "Contribution of the associated beneficiary", "Other sources of funding" and "Direct income".

8.5 Cards of accounts for individual beneficiaries (USB only)
8.6 Ministry of Finance regulation of travel compensation January 1st 2016. (USB only)
8.7 Example of logbook for use of private car for work related travel (USB only)
8.8 Guide on correct invoicing for suppliers and contractors (USB only)
8.9 Summary of costs incurred and Summary of costs per action (USB only)
8.10 Financial Report DNA (USB only)
8.11 Financial Report LM (USB only)
8.12 Audit Report DNA (USB only)
8.13 Audit Report LM (USB only)
8.14 Supporting documentation for personnel costs (USB only)
8.15 Views from legal department on selection of entrepreneurs (USB only)