

# LIFE Project Number LIFE11 NAT/DK/893

# MIDTERM Report Covering the project activities from 01/10/2012 to 30/11/2014

Reporting Date **31/12/2014** (financial 30/11-2014)

### LIFE+ PROJECT NAME

# Restoration of birdlife and natural habitats at Laesoe "LIFE LAESOE"

Project Data				
Project location	Project location			
Project start date: 01/10/2012				
Project end date:	30/09/2017 Extension date: n/a			
Total Project duration (in months)	60 months			
Total budget	€ 2,102,002			
Total eligible budget	€ 2,102,002			
<b>EU contribution:</b> € 1,051,001				
(%) of total costs 50				
(%) of eligible costs 50				
	Beneficiary Data			
Name Beneficiary Danish Nature Agency, Vendsyssel				
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Project Website	Project Website <a href="http://naturstyrelsen.dk/naturbeskyttelse/naturprojekter/life-laesoe/">http://naturstyrelsen.dk/naturbeskyttelse/naturprojekter/life-laesoe/</a>			

# List of contents

1	Executi	ve Summary	6
	1.1 Del	liverables and outputs	6
2	Introdu	ction	7
3	Admini	strative part	9
	3.1 Des	scription of the management system	9
	3.1.1	Organigram of the project team and the project management structure	
	3.1.2	Local community group	
	3.1.3	Advisory Board	11
	3.2 Eva	aluation of the management system	12
4	Technic	cal part	13
	4.1 Tec	chnical progress, per task	13
	4.1.1	Action A1 – Formation of Landowners Association	13
	4.1.2	A2 Permission to carry out conservation actions	15
	4.1.3	A3 Hydrological investigation	17
	4.1.4	C1 Clearing of trees and scrub	18
	4.1.5	C2 Clearing of reeds and emerging trees and scrub	21
	4.1.6	C3 Clearing of non native woody species	23
	4.1.7	C4 Clearing of Japanese rose	
	4.1.8	C5 Clearing of Cord grass	27
	4.1.9	C6 Establishment of cattle and sheep herds	30
	4.1.10	C7 Creating enclosures by fencing	34
	4.1.11	C8 Controlled burning.	36
	4.1.12	C9 Infra-structure	38
	4.1.13	C10 Control of foxes, mink and hooded crow	40
	4.1.14	C11 Restore natural hydrology	43
	4.1.15	C12 Landowners Association	45
	4.1.16	D1 Monitoring of impacts on targeted habitats and species	48
	4.1.17	D2 Assessment of the socioeconomic impact	53
	4.2 Dis	semination actions	55
	4.2.1	Objectives	
	4.2.2	E1 Establish Website	55
	4.2.3	E2 Newsletter	56
	4.2.4	E3 Provision of information tables.	56
	4.2.5	E4 A leaflet explaining the project	57
	4.2.6	E5 Visitor facilities	57
	4.2.7	E6 Public tours	57
	4.2.8	E7 Layman's report	58
	4.2.9	E8 Local community Group	58
	4.2.10	E9 Report on control of invasive species	58
	4.2.11	E10 Final seminar	
	4.2.12	List of dissemination deliverables:	59
	4.3 Eva	aluation of Project Implemention	59
	4.3.1	A1 Formation of a landowners association	59
	4.3.2	A2 Permission to carry out conservation actions	60
	4.3.3	A3 Hydrological investigation	
	4.3.4	C1 Clearing of trees and shrub and C2 clearing of reeds and emerging trees a	and
	scrub	61	
	4.3.5	C3 Clearing of non native woody species	62

	4.3.6	C4 Clearing of Japanese rose	62
	4.3.7	C5 Clearing of Cord grass	63
	4.3.8	C6 Establishment of cattle and sheep herds	64
	4.3.9	C7 Creating enclosures by fencing.	65
	4.3.10	C8 Controlled burning.	66
	4.3.11	C9 Infra-structure	67
	4.3.12	C11 Restore natural hydrology	68
	4.3.13	C12 Landowners association	68
	4.3.14	D1 Monitoring of impact on targeted habitats and species	69
	4.3.15	D2 Assessment of the socio-economic impact	69
	4.3.16	Effectiveness of the dissemination and comment on any major drawbacks	70
	4.4 Ana	alysis of long-term benefits	71
	4.4.1	Environmental benefits	71
	4.4.2	Long-term benefits and sustainability	71
	4.4.3	Long-term / qualitative economic benefits	71
	4.4.4	Long-term / qualitative social benefits	
	4.4.5	Continuation of the project actions by the beneficiary or by other stakeholder	ers.
		72	
	4.4.6	Replicability, demonstration, transferability, cooperation:	
	4.4.7	Best Practice lessons, innovation and demonstration value:	
	4.4.8	Long term indicators of the project success:	73
5		ents on the financial report	
		nmary of Costs Incurred	
	5.2 Ger	neral	
	5.2.1	Personnel	
	5.2.2	Travel	
	5.2.3	External assistance	
	5.2.4	Infrastructure	
	5.2.5	Equipment	
	5.2.6	Consumables	
	5.2.7	Other costs	
	5.2.8	Overheads	
		counting system	75
	5.3.1	Brief presentation of the accounting system	
	5.3.2	Brief presentation of the procedure of approving costs	76
	5.3.3	Brief presentation of the registration, submission and approval	
	-	re/routines of the time registration system	
	5.3.4	Brief explanation how it is ensured that invoices	
		tnership arrangements	
		ditor's report/declaration	
	5.6 Sur	mmary of costs per action	/9
		Formation of Landowners Association	
	5.7.1	A2 Permission to carry out conservation actions	
	5.7.2	A3 Hydrological investigation	
	5.7.3	C1 and C2 Clearing of trees and scrub	
	5.7.4	C3 Clearing of non native woody species	
	5.7.5 5.7.6	C4 Clearing of Japanese rose	
	5.7.6	C5 Clearing of Cord grass	
	5.7.7 5.7.9	C6 Establishment of cattle and sheep herds	
	5.7.8	C7 Creating enclosures by fencing	ð2

	5.7.9	C8 Controlled burning	82
	5.7.10	C9 Infra-structure	83
	5.7.11	C10 Control of foxes, mink and hooded crow	83
	5.7.12	C11 Restore natural hydrology	
	5.7.13	C12 Landowners association	
	5.7.14	D1 Monitoring of impact of targeted habitats and species	83
	5.7.15	D2 Assessment of the socio-economic impact	83
	5.7.16	E1 Establishment of website on the internet	83
	5.7.17	E2 Newsletter	83
	5.7.18	E3 Provision of information tables	83
	5.7.19	E4 A leaflet explaining the project	84
	5.7.20	E5 Visitor facilities	84
	5.7.21	E6 Public tours	84
	5.7.22	E7 Layman's Report	84
	5.7.23	E8 Local Community Group	
	5.7.24	E9 Report on control of invasive species	84
	5.7.25	E10 Final seminar	84
	5.7.26	F1 Project management	84
	5.7.27	F2 Overall project monitoring and monitoring of project progress	85
	5.7.28	F3 Networking with other projects	85
	5.7.29	F4 After LIFE conservation plan	85
6	Annexe	es	86
	6.1 Ad	ministrative	
	6.1.1	Articles of Association – Landowners Association	
	6.1.2	Agreement regarding C4 and C5 – University of Copenhagen	
	6.1.3	List of volunteers – moorburn	
		chnical	87
	6.2.1	Map C1	
	6.2.2	Map related to C1 – orthophoto map of challenge	
	6.2.3	Map related to C1 – detailed map challenge C1	
	6.2.4	Map C2	
	6.2.5	Map showing number of historic sites and C1 / C2	
	6.2.6	Map C7	
	6.2.7	Map C7 – enclosure outside N-2000 area	
	6.2.8	Map C8	
	6.2.9	Map C9	
	6.2.10	Map C10	
	6.2.11	Short Danish report re combating Japanese rose using seedling lifter	
	6.2.12	Experiment Report – Spartina spp.	
	6.2.13	Monitoring Report – Spartina spp.	
	6.2.14	Table – Spartina spp. Cover	
	6.2.15	Map showing re-monitoring of Spartina spp. 2014	
	6.2.16	Scientific Program – Spartina conference, Rennes 2014	
	6.2.17	A0 info sign	
	6.2.18	A0 info sign stand – design	
	6.2.19	A2 info sign	
	6.2.20	Example – sign for enclosure with livestock	
	6.2.21	Folder opened via smartphone	
	6.2.22	Folders – DK, EN, DE	
	6.2.23	15 pages related to visits to website – 2013/14	8 /

6	.2.24	Short introduction for platform meeting	. 88
6	.2.25	Short DK introduction	
6	.2.26	Introduction / presentation of LIFE Laesoe the HRH Prince Henrik – the Prin	ce
c	onsort		
6	.2.27	Brief presentation to ministers and committee	. 88
6	.2.28	Brief presentation used at educational day – DNA, VSY	. 88
6	.2.29	Example Newsletter – Landowners Association	. 88
6	.2.30	Mailing list – newsletter	
6	.2.31	Press cutting from July 2013 to September 2014	. 88
6	.2.32	Hydrological study – only submitted on memory stick	. 88
6	.2.33	List of keywords and abbreviations used;	
6	.2.34	Figures & tables relating to D1	. 88
6.3	Dis	semination annexes.	. 91
6	.3.1	Other dissemination annexes	
6	.3.2	Photographs per action on memory stick	. 91
_	.3.3	Videos	
_	.3.4	Power point on memory stick	
		al table of indicators	
7 F		al report and annexes	
7.1		lard Payment Request and Beneficiary's Certificate, original enclosed and duly	
		d – and in copy	
7.2		signed original of the Beneficiary's Certificate for Nature Projects is enclosed itted – and in copy.	
7.3		olidated Cost Statement for the Project – original signed is enclosed / submitte	
		,	
7.4	Fina	ancial Statement of the Individual Beneficiary on memory stick, including;	. 96
7.5		soe Municipality – letter from auditor regarding status of 3 employees – regard	
	as n	ot being permanent.	. 96
7.6	Inve	entory – equipment purchased	. 96
7.7		d of Accounts – LIFE Laesoe	
7.8	Lett	ters from Galloway Association regarding pricing and agreements with supplie	ers.

## 1 Executive Summary

The objectives are to establish a coherent and sustainable land management system on the island parallel to enlarging and enhancing habitats, establish favourable status / conditions for the designated breeding bird species, improve feeding conditions for migratory bird species, all mentioned below, as well as establish control over invasive alien species.

The project covers 4.469 hectare or the total terrestrial part of two N-2000 sites, both SACs and one also SPA.

The targeted habitats are 1330 salt meadow, 2130 grey dune, 2140 dune heath, 3110 + 3130 oligotroph lake types, 4010 wet heath, 4030 dry heath, 6410 molinia meadow, and 7230 alkaline fen.

The targeted species are breeding Dunlin Calidris alpina schzinii (B), Wood Sandpiper Tringa glareola (B), Avocet Recurvirostra avosetta (B), Artic Tern Sterna paradisaea (B) and Little Tern Sternula albifrons (B), and the migration visitors Brant Goose Branta bernicla bernicla (M), Bar-tailed Godwit Limosa lapponica (M) and Dunlin Calidris alpina alpine (M).

The invasive alien species are Japanese Rose Rosa rugosa and Cord Grass Spartina anglica.

The main threat is lack of grazing, caused by fragmented ownership - 336 landowners and 1758 cadastral units – and no coherent management. Only a few farmers with grazing livestock exist as a consequence of present farming structure, change in farming and environmental subsidies and high cost related to haulage to and from the island by ferry. Other important threats are overgrowth, invasive alien species, predation and inappropriate hydrology.

The paramount action is the establishment of a landowners association to secure coherent management of the N2000 areas both within the project period and following – clearing of wooded areas / woody overgrowth, controlled burning of heath / moorland, establishment of enclosures, purchase of cattle and sheep, improving natural hydrology, predator control (crow, mink and fox) and controlling IAS (Rosa rugosa and Spartina spp.) with new methods.

### 1.1 Deliverables and outputs

It is expected to deliver stable or increased populations of all targeted breeding birds apart from Wood Sandpiper – where creating suitable breeding sites is the main objective. For figures, we refer to page 73.

Regarding habitats it is expected to increase the acreage of 4010, 4030, 6230+, 6410 and 7230 plus in general enhance the quality of 1330, 2130+, 2140+, 3110 and 3130 by introducing grazing and – partly – moorburn.

Furthermore, the aim is to clear Japanese rose of approx. 24 hectare and Cord grass of approx. 15 hectare.

In all – the actions are expected to improve the status of targeted habitats to favourable condition.

#### 2 Introduction

The light demanding habitats and related species at Laesoe are very vulnerable and to some extend threatened. The latest assessment of the conservation status of Annex I habitat types at Laesoe found 8 of the designated habitat types in less favourable conservation status and all the designated species under threat.

The main problem is lack of grazing, caused by fragmented ownership - 336 landowners and 1758 cadastral units – and no coherent land management.

The objectives are to establish a coherent and sustainable land management system on the island parallel to enlarging and enhancing the light demanding habitats as well as the population of targeted birds.

The project sites involve 4.469 hectare, or the total terrestrial part of two N-2000 sites, both SACs and one also SPA.

The targeted habitats are 1330 salt meadow, 2130 grey dune, 2140 dune heath, 3110 + 3130 oligotroph lake types, 4010 wet heath, 4030 dry heath, 6410 molinia meadow, and 7230 alkaline fen. Regarding species Dunlin *Calidris alpina schzinii* (B), Wood Sandpiper *Tringa glareola* (B), Avocet *Recurvirostra avosetta* (B), Artic Tern *Sterna paradisaea* (B) and Little Tern *Sternula albifrons* (B), and the migration visitors Brant Goose *Branta bernicla bernicla* (M), Bar-tailed Godwit *Limosa lapponica* (M) and Dunlin *Calidris alpina alpine* (M).

Main conservation issues – and threats – being;

- Lack of coherent nature conservation management caused by fragmented structure of ownership.
- Loss of light demanding habitat due to overgrowth with woody species.
- Displacement of natural vegetation within targeted habitats and detrimental effect on targeted species due to invasion by Japanese rose and Cord grass.
- Loss of light demanding habitats due to overgrowth with woody species caused by drainage (inappropriate hydrology).
- Loss of species and small habitat areas due to inappropriate land management causing fragmentation and poor interaction and structure between habitat types.
- Disturbance to especially Little Tern, Arctic Tern and Avocet by humans and dogs of lead.
- Directs loss of targeted species and dispersal of colonies to less productive areas due to predation by fox, mink and hooded crow.

Establishment of the landowners association, a coherent managerial system covering all N-2000 areas and substantial livestock herds will directly create jobs in the farming industry and hopefully also lead to re-establishing the island slaughterhouse. Also nature tourism could be exploited and the island existing horseback riding industry might expand.

It is expected to deliver stable or increased populations of all targeted breeding birds, apart from Wood Sandpiper – where creating suitable breeding sites is the main objective. Regarding habitats it is expected to increase the acreage of 4010 by 15 hectare, 4030 by 35 hectare, 6230+ by 7-10 hectare, 6410 by 3-5 hectare and 7230 by 0,50-1 hectare plus in general enhance the quality of 1330, 2130+, 2140+, 3110 and 3130 by re-introducing grazing and – partly – moorburn.

Furthermore, the aim is to clear Japanese rose of approx. 24 hectare and Cord grass of approx. 15 hectare. The latter area has been re-monitored to approx. 23 hectare – further comments under C5.

In all – the actions are expected to improve the status of targeted habitats to favourable condition.

# 3 Administrative part

#### 3.1 Description of the management system

#### F1 Project management

The Danish Nature Agency (DNA) has the overall responsibility for the project. This includes the overall project administration, co-ordination and implementation of activities in all phases of the project. Activity reports will be made as part of the project management.

The project comprises actions at the island of Laesoe, involving DNA-VSY and Laesoe Municipality (LM) as coordinating beneficiary)).

Management structure see organigram page below.

As project manager is Hans – Henrik Jørgensen employed and specifically seconded to the project by the Nature Agency and located at the DNA, Vendsyssel unit. The project manager is in charge of the overall project administration, co-ordination and implementation of activities in all phases of the project. The project manager is also responsible of the project reporting.

The project manager furthermore being responsible for all financial issues, including all financial accounting, financial analysis of the actions, financial reporting and annual budgets, including budgetary control.

A working group has been established and includes a biologist located at DNA-VSY, machine operators, nature conservation and forest workers, from both Laesoe Municipality and the local unit of the Nature Agency are all part of the daily operation throughout the project area. Initially also a biologist located at Laesoe Municipality was intended joining the project, but left employment without replacement.

Both DNA and LM have made clerks available to the working group regarding accounting, payroll and assisting the project manager.

In general, professionals employed by DNA and Laesoe Municipality are available to the working group if specific requirements arise.

A Project Steering Committee consisting of the Head Forester, DNA-VSY, the Municipality Director and the project manager has been formed in order to secure coordination and project progress.

The Steering Committee secures the coordination and the project progress by frequent and close contact to the project manager. The Steering Committee meets 1 to 2 times a year.

Steering Committee meetings.

SCM 3/12/2012	28/5/2013	22/11-2013	10/9/2014
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A Project Advisory Board, consisting of experts on different aspects of nature restoration has been appointed to give their advice to the Project Steering Committee on project implementation. The board consists of professionals as mentioned on page 10 below and is covering all LIFE project owned by DNA, VSY (LIFE LAESO, LIFE WETHAB, LIFE

REWETDUNE). The Advisory Board will have the founding starting meeting 4. February 2015.

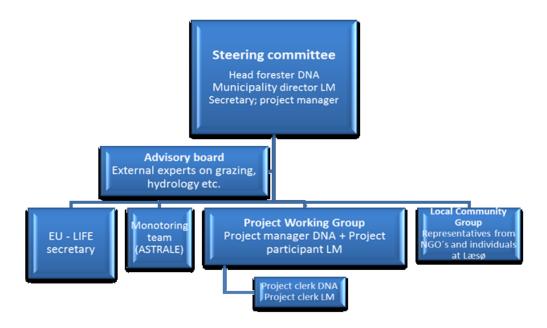
Initially also a representative from The Danish AgroFish Agency (Ministry of Food, Agriculture and Fisheries) was intended to join the board. This was during the establishment phase decided against due to other opportunities.

Furthermore the Local Community Group (action E.8) also functions as an advisory board to the project. For details see action E.8.

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

#### 3.1.1 Organigram of the project team and the project management structure

LIFE11 NAT/DK/000893 LIFE LAESOE organization.



The persons involved at present are;

- Head forester DNA Jesper Blom-Hansen
- Municipality director LM Johan Norden
- Project manager DNA Hans Henrik Jørgensen
- Project participant LM Jan Kjær
- Project clerk DNA Bjarne Jørgensen
- Project clerk LM Gitte Daugaard
- Biologist DNA Bjarke Huus Jensen
- Dissemination DNA Thomas Retsloff
- Project manager DNA (LIFE WETHAB) Helle Kold Jespersen
  - Special tasks as needed

#### 3.1.2 Local community group

- Carl Johan Junge
- o Sven Thyø
- o Klaus Munch
- o Freddy Worm Christiansen
- Poul Zinck Jensen

#### 3.1.3 Advisory Board

- Danish Ornithological Society
  - Knud Pedersen (birds and local knowledge)
- The Danish Society for Nature Conservation
  - Eigil Torp Olesen (botanical and local knowledge)
- University of Copenhagen
  - o Rita Merete Buttenschøn (grazing, invasive alien spp.)
  - Henning Adsersen (invasive alien spp.)
- Geological Survey of Denmark and Greenland
  - o Jens Morten Hansen (geology, hydrology)
- University of Aarhus
  - o Hans Brix (Spartina spp.)
  - o Rasmus Eirnæs (habitat types, biodiversity, ecology)
  - o Thomas Bregnballe (birds, especially coastal colony breeders)
  - o Toke Høye (insects, especially)
- Nature Agency
  - o Søren Ferdinand (administration etc.)

#### F2 Overall project monitoring.

Day to day overall monitoring is an integrated part of project management and is executed as registration of miscellaneous date in several ways, e.g. excel, GIS, photos etc. and as specific monitoring of species and habitats, see D1 page 88.

The project has and are still working with the use of drones both as monitoring instruments related to combating IAS and also to register the "before and after" situation following the implementation of individual actions, in a very visual manner. This is also a very effective manner in which to show how different methods have been applied.

The project will continue the use of drones and hopefully develop it into a reasonable cheap and effective tool to assist monitoring as well as other managerial elements.

For examples of videos taken from a drone, see appendix 6.3.3, page 91.

#### F3 Networking

The project manager work closely with all other Danish LIFE projects and especially with LIFE WetHab and LIFE ReWetDune being situated at the same DNA office.

Otherwise the DNA biologist and project manager did participate in LIFE BaltCoast final seminar in august 2012 and visited LIFE Aurinia (prior to LIFE Laesoe starting) as well as participating in Kich-off meeting in London 19<sup>th</sup> November 2012.

Also the yearly platform meeting, 2013 in Östersund, Sweden and 2014 in Rovaniemi, Finland were participated in, the latter also with a representative from LM.

Otherwise the project stays updated via the LIFE website or directly via contact to other projects.

#### 3.2 Evaluation of the management system

The partnership agreement is followed and the managerial process between the partners is working well.

The work group establish at the DNA office have been exposed to severe workload caused by administrative changes and one secretary retiring in 2013 combined with one secretary on sick leave for half a year during 2013/14. Per 1<sup>st</sup> October 2014 DNA, Vendsyssel appointed a new project clerk for all their LIFE projects, being LIFE LAESOE, LIFE WETHAB and LIFE REWETDUNE. It is estimated that the person will use approx. 300 hours p.a. between 15<sup>th</sup> October 2014 and project end. The related cost will be covered within the current budget, including overheads.

Læsø Municipality also experienced dramatic changes amongst staff, some already reported in the Inception report, followed by the employment of a supervisor during 2013 and the dismissal of the same person autumn 2014. Also the Municipality Director was replaced during the early start of 2014. All of the above partly resulting in an "inappropriate" need to spend time on administrative elements and systems, rather than deliveries in the field. On the political scene a new Municipal Board – replacing 7 out of 9 members – was elected at Læsø in the autumn of 2013. As the Board members are very important intermediaries in the society, this also resulted in a need to fully inform this new Board – and individual members – regarding the LIFE project.

The project management process leading to deliveries of the individual action has as a principle followed the following model; public meetings — meetings with and establishment of agreements with individual landowners — initial site planning and coordination — execution and supervision — review and delivery of final action / task to landowner. As the project is working in a very small community and the structure of ownership — many cadastral units and owners — is complicated, the project quite naturally must be based on a foundation of understanding and mutual trust. Now — 2 years into the project — this is in general very much the case, but it must be stressed that it has been a challenging process getting this far.

Managerial challenges / problems encountered directly under the individual actions will be discussed following.

#### Communication with the Commission and Monitoring team.

The project management have received a number of letters / instructions from the Commission following visits by the Monitoring team as well as following delivering misc. papers to the Commission. Furthermore the management have participated in platform meetings etc., there having the 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.

Likewise regarding contact to the Monitoring team, where the project partners are in close and more frequent contact. The advice and support has been very helpful and the team always contactable, why the project management is very happy with the cooperation.

# 4 Technical part

#### 4.1 Technical progress, per task

#### 4.1.1 Action A1 – Formation of Landowners Association

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Preparatory actions / management plan

Activities regarding this action started with an initial meeting 17<sup>th</sup> October 2012 between the project partners and Læsø Farming Society (Læsø Landbrug) followed by a meeting presenting the LIFE project - with specific attention towards the establishment of the Landowners Association - at an invited meeting 5<sup>th</sup> November 2012. At this meeting an initial working group was elected amongst the participant, their task being to setup an association a.s.a.p. All landowners within the N2000 area where invited – of which 82 participated (24 %). The evening was characterized by a positive and inquisitive atmosphere.

The working group had its first meeting 21<sup>st</sup> November, followed by a substantial number (38) of meetings, a number of these also with representation of Solicitor and Chartered Accountant as to secure the legal part of setting up the organization.

At 7<sup>th</sup> June 2013 a final meeting with Solicitor and Chartered Accountant was held following which the final Articles of Association, budgets, draft leases / tenancies etc. was to be finalized for the founding General Meeting, which took take place 6<sup>th</sup> August 2013.

In all 79 landowners participated and the Associations first Board was elected. The Board consist of 7 members; 5 landowners elected amongst the participants, 1 appointed by Læsø Municipality and 1 appointed by the Nature Agency.

#### Methodology

Invited meeting for landowners, election of initial working group followed by meetings / discussion also including external advice and leading to proposed Articles of Association, which could be presented at a General Meeting.

#### Planned output and schedule

Action A1 is delivered as agreed in the Grant Agreement, but approx. 3 month later than expected.

The initial target was a functioning association (the managerial part) based upon a broad acceptance amongst the majority of inhabitants at Laesoe and established not later than 31. January 2013 and Articles of Association for the Landowners Association being in place – this is indeed the fact, although later than originally stipulated.

The partners are extremely satisfied with the establishment of the association, especially as this action in reality can be regarded as a test of the entire project amongst the inhabitants of Laesoe and will secure the after Life situation.

It must although be stressed, that some uncertainty still exist regarding the rules under the new CAP, which – in the meantime – will hold some landowners from joining the Association

The budgeted cost was 28.407 € and the actual accrued cost came to 64.955,78 €. This will be further explained under the financial paragraphs.

#### **Indicators** used

Articles of Association as a Co-operative with Limited Liability (A.M.B.A. under Danish law) were passed by a founding General Meeting, which took take place 6<sup>th</sup> August 2013 followed by an Extraordinary General Meeting 27<sup>th</sup> February 2014 passing changing the association from a Co-operative to a Limited Liability Association.

#### **Modifications**

N/A

#### Problem / drawbacks

As mentioned the association start its legal life as a Co-operative with Limited Liability and was set to start per 1<sup>st</sup> January 2014. An outstanding issue at the time of the FGM was the final acceptance from Inland Revenue regarding the set-up as a co-operative with limited liability, and taxation of the association. Surprisingly, and in spite of initial verbal information provided, this was not granted by Inland Revenue, which meant that we had to restart the discussion regarding legal setup and re-writing of the Articles of Association

The new Articles and new legal setup as a Limited Liability Association was passed by an Extraordinary General Meeting 27th February 2014, following substantial work by the working group as well as legal and accounting advisors. This of course also meant a dramatic increase in cost.

Partly running alongside the above discussions / consideration 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 above mentioned legal questions plus uncertainty re the new Common Agriculture Policy, unfortunately created a difficult working environment. Especially the CAP and rules / subsidies applied to support island communities created a challenge during negotiations and the actual work transferring the Agriculture Schemes from individuals to the Association, the latter task also including agricultural advisors (LandboNord).

It is therefore clear that the action has shown quite challenging and extremely time consuming to deliver and not within the initial timetable and budget.

#### Complementary action outside LIFE

N/A

#### **Continuation following LIFE Laesoe**

The establishment of the association under this action is the sustainable foundation for the after LIFE situation and the partner are convinced regarding its future success.

#### Tables, photographs etc.

Articles of Association, see appendix 6.1.1, page 86.

#### 4.1.2 A2 Permission to carry out conservation actions

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Preparatory actions / management plan

This action is performing according to plan and needed permissions relevant to activated actions are in place.

According to the Nature Conservation Act the conservations actions will in some cases require a notification or permission from the Municipality as the competent authority, in this case being Frederikshavn Municipality - of behalf of Læsø Municipality. This is also the situation regarding expanding the livestock number at the island. In all relevant actions these notifications / permissions has been executed and/or delivered.

Regarding permission from the Danish Agency for Culture, being responsible for listed building, sites and monument, a number of meetings have been executed, both at the Agency in Copenhagen and at Laesoe. The project was in need of permissions regarding implementing action C1, C2, C8, C9 and C10 in specific areas at the southern part of Laesoe. As a consequence of the size of the project and the number of listed building and sites a Framework Agreement was discussed and finally established 21<sup>st</sup> June 2013. The Agreement contains specific conditions regarding the precise implementation of the actions in question and is the first ever framework Agreement entered into by the Danish Agency for Culture.

As a substantial part of the project area is Special Protection Sites also the Protection Committee has been and is involved. Presently this is relevant in relation with action C1, C4, C5, C9, C10, C11 and E3.

#### Methodology

The majority of applications has been applied for – and granted – as "frame-applications / permissions", meaning that all action are applied exactly as shown on the action associated maps in the GA. Only condition has been to negotiate the acceptance from any landowners involved prior to executing any action.

As mentioned the discussions with the Danish Agency for Culture lead to a Framework Agreement enabling the project to work quite freely under the terms agreed.

In special situations the project have had to seek permission from the Protection Committee regarding special implementations on SP sites and DNA regarding executing actions in close vicinity to the coastline.

#### Planned output and schedule

All application dealt with by Frederikshavn Municipality has been granted as quick as possible respecting the consultation period while all applications to other authorities has been delayed beyond the statutory period. The latter not causing any serious problems regarding the execution of individual actions.

#### Indicators used

Permissions granted and Framework Agreement established.

#### **Modifications**

The conditions under the Framework Agreement with the Danish Agency for Culture has led to restrictions regarding moorburn and the methods applied under C1 and C2 as to

secure not causing damage to historic sites has led to increased cost, for comments related the this, see C1, C2 and C8 below.

In spite of this the established agreement can only be described as a win-win situation.

#### Problem / drawbacks

Minor and related to not receiving permissions as quick as hoped for.

The restriction regarding only executing moorburn "with the wind" over historic sites, see under C8 following, is not ideal from a nature conservation point of view, but in no way a substantial problem.

#### Complementary action outside LIFE

N/A

#### **Continuation following LIFE Laesoe**

Will be secured by LM and DNA as needed.

#### Tables, photographs etc.

See appendix 6.3.2

#### 4.1.3 A3 Hydrological investigation

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Preparatory actions / management plan

The action was initially planned to be executed during the latter part of 2012 and first half year of 2013 by subcontracting the survey work to Frederikshavn Municipality. The contract was although delayed until the summer of 2013 with the final report presented to the project by October 2013.

A part of the survey work still remains – and budgeted in the GA – as a task for the project management. This work will run alongside implementing C11.

#### Methodology

Initial desk study then followed by a detailed survey in the field. The work was subcontracted to Frederikshavn Municipality.

#### Planned output and schedule

Survey report delivered October 2013 slightly delayed, which was accepted by the Commission following the Inception Report as part of a revised C3 timetable. The subcontracted part of A3 can be considered as delivered.

#### Indicators used

N/A.

#### **Modifications**

None.

#### Problem / drawbacks

N/A

#### Complementary action outside LIFE

N/A.

#### **Continuation following LIFE Laesoe**

Not relevant.

#### Tables, photographs etc.

The report is enclosed in appendix 6.2.32, page 88 – memory stick only.

#### 4.1.4 C1 Clearing of trees and scrub

Action C1 and C2 has been argued by the project to be executed and reported as one due to difficulties in distinguishing between the two in some project areas. This has been granted by the Commission in letter dated 28th June 2013 – ENV.E3/CO/TS/bp ARES (2013) 2535472.

The technical part of the actions will be commented on separately because of the methods applied, but will be merged and evaluated as one action under that heading.

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Preparatory actions / management plan

As mentioned in the Inception Report this action is seen by the majority of landowners as the most problematic because of the substantial sporting interest normally linked to wooded areas, but also because Laesoe was a treeless island for centuries and therefore quite infertile from a farming perspective – which naturally is undesirable. From former LIFE projects (e.g. LIFE ASPEA LIFE05 NAT/DK/000151) with similar actions this attitude is well known, as is the fact, that as soon clearing of wooded areas gain pace a positive reaction can be expected.

Because of this the partners started clearing wooded areas within the ownership of the DNA and areas neighbouring DNA.

The main focus has been to work area by area in a coherent manner including all landowners and where the environmental benefits were greatest and as mentioned above initially on DNA land or where a protection orders / management plan already demanded areas to be cleared from trees. Happily these clearing showed that there was no reason for nervousness and the majority of inhabitants commented in a very positive manner followed by quite a few starting to clear areas within the N2000 area, but separated from the project.

#### Activities undertaken and outputs achieved

The area cleared the winter of 2012/13 totals approx. 57 hectare and it is estimated that approx. 10 hectare is cleared separated from the project. This can be regarded as added value to the project both from a financial perspective, but – perhaps – more important because it shows that a number of landowners are very positive regarding the project and are willing to pursue the values of individual actions at their own pace – but in line with the project.

During the harvesting season 2013/14 further 64,71hectare has been cleared taking the total acreage cleared up to approx. 36 % of the expected final result. Further 95.69 hectare mapped under C2 is also cleared and chip harvested under C1. The total volume harvested is approx. 4,000 M3. This is seen as very satisfactory and furthermore corresponds to the available livestock needed to graze the former wooded areas.

The action was initially planned to be carried out by contractors only, but due to shortage of contractors at the island, primarily employee of LM and DNA has been involved in the actual felling while only contractors has been used for extraction, chip-harvesting and haulage of the actual timber material.

All chip wood produced has been sold to the local heating plant thus reducing cost of this action. During negotiations with all landowners it was agreed that any net income produced would be paid to the landowner in question. This was accepted by the

Commission dated 28th June 2013 – letter ENV.E3/CO/TS/bp ARES (2013) 2535472. This is also the manner the action is calculated and budgeted initially in the GA.

#### Methodology

In the description of C1 in the Grant Agreement a number of working categories to be applied throughout the project area are outlined;

- 1. Felled to waste and left on the ground to decompose specific habitat and/or species issue, difficult ground conditions, no or limited access, less dense and /or young stands, historic/archaeological remains.
- 2. Felled to waste and burned on site specific habitat and/or species issue, difficult ground conditions, no or limited access, dense and /or young dense stands, historic/archaeological remains.
- 3. Chip harvesting (favourable, if access) older stands, high volume, public and access issues.

The categories are self-explanatory with no. 1 only used very limited, no. 2 primarily used on historic sites where felled material has been manually removed from and burned adjacent to the actual sites. Regarding no. 3, this has been divided into a number of different methods, namely;

- a. Manually felling, chip wood processing at source (stump), extraction of chip to public road, haulage by lorry to plant.
- b. Manually felling, forwarding of harvested material to central location, chip wood processing, forwarding of chip to public road using hook lift trailers, haulage by lorry to plant.
- c. Felling and extraction by feller / forwarder to central location, chip wood processing, haulage of chip to public road using hook lift trailer, haulage by lorry to plant.

The different methods are partly used / tested because of the substantial number of archaeological sites throughout the project area, partly because of highly varied climatic conditions – frosty and dry / rainy and wet – and partly to secure the overall best method from an economical point of view.

Presently the project prefers manually felling as it secures low stumps thus preventing the need for very expensive stump grinding / mulching operations. Low stumps are extremely important as is will secure future management of the area with cheap rotary or flair mulchers if livestock is unable to graze regrowth fully. The latter is quite often the situation following felling of Silver birch - *Betula pendula*, but not Downy birch - *Betula pubescens*.

Felling by feller / forwarder is the preferred method directly on archaeological sites as the timber cut can be lifted from the site without disturbing any remains due to the reach of the crane.

Other considerations regarding choice of method is in reality a question about availability and climatic conditions although the use of feller / forwarder often is seen as the preferred option as it clears the area completely in one working cycle leaving the area available for any future management task.

Regarding technique and equipment – this will be discussed under evaluation.

#### Planned output and schedule

As mentioned above a total of 64.71 hectares are now cleared, equivalent to 36 % of the expected total area and the action therefore progress in line with initial expectations.

It is although important to stress that a substantial number of negotiation remains regarding clearing wooded areas and in spite of a – in general – very positive attitude from landowners hard negotiations are to be expected. Especially one large landowner is at present absolutely against any clearing and as the structure is characterized by many cadastral units, clearing on his land, and in his vicinity, might pose a problem. This will influence how the project are able to clear woodland on neighbouring land, which of course must be executed in an – visually – organic manner. This problem is shown on map – see appendix 6.2.2 and 6.2.3, page 87.

Furthermore the initial area in the GA did not take N-2000 woodland types into consideration, but focused on clearing the majority of former light open habitats. Discussions on the island has left it more or less up to the individual owners to decide whether they would like N-2000 designated woodlands cleared or not. The project will still argue the clearing of woodlands in areas of high importance from targeted habitats and / or species.

Another issue is the sheer volume of timber. Any harvesting must be in reasonable line with the annual intake to the heating plant at the island, as haulage from the island presently would make the operation that expensive, that the agreed budget in the GA cannot be adhered to.

#### Indicators used

Regarding methods primarily environmental and financial considerations, but also weather and interest of the actual landowner, are taken into account initially. Assessing the action following execution is, apart from the financial result, very much down to a visual observation – tidy job, no track, no negative effect on species / habitats / historic remains, easy to manage in the future and a satisfied landowner.

#### **Modifications**

Apart from modifying methods ongoing and the need to use LM and DNA staff for the actual felling, no changes to what was described / agreed in the Grant Agreement have been introduced.

#### Problem / drawbacks

Not experienced.

#### **Complementary action outside LIFE**

As mentioned above a few landowners very positively have clearfelled woodlands independently of the project.

#### **Continuation following LIFE Laesoe**

Hopefully the project will succeed and achieve the targeted area. If not, future clearfellings will very much depend on the landowners in question and LM as being responsible for nature conservation on private land.

#### Tables, photographs etc.

Map showing the extent of work carried out, see appendix 6.2.1, page 87.

#### 4.1.5 C2 Clearing of reeds and emerging trees and scrub

As the seedling / young trees throughout a substantial part of the areas originally mapped under C2 during the application phase in 2011presently has grown into a size where harvesting to chip is making sense, the project asked the commission to accept C1 and C2 to be executed and reported as one action. For further comments – see under C1 above.

#### N-2000 designation

Until now only DK00FX010

#### Preparatory actions / management plan

As many of the area under this action had formerly been used for grazing and therefore was acknowledged as such, and with the potential to attract agricultural subsidies, the projects request for clearing these areas was immediately granted. This also supported by the fact that some of the areas had a projection order – also describing the wish to maintain the area as open with light demanding habitats.

Planning the action was therefore a question of starting where the most substantial environmental benefits would be best achieved – also taking consideration of specie related issues, climate and ground conditions.

#### Activities undertaken and outputs achieved

Due to the frosty conditions during the early part of 2013 substantial areas not normally accessible did shown manageable and was covered by the action – also including areas not initially included in the action – but now in need of treatment. In total approx. 157 hectare was executed in the first half of 2013, followed by some work during the summer and autumn of 2013 and then substantial work in the spring and summer of 2014.

To date approx. 472 hectare has been cleared under C2. This is substantial more than planned, budgeted and applied for in the GA, but is due to the fact that large area has been infected with emerging trees since the application was written. A substantial part of the initial area supposed to be cleared under C2 has been needed clearing as described under C1. A total of approx. 95.69 hectare mapped in the GA under C2 has been felled and chip harvested along with C1.

#### Methodology

Work related to this action was during the first winter (2012-13) carried out from mid-February to end April taking advantage of extremely frosty weather conditions. The action divides clearing of scrubs and emerging trees into 3 categories, namely;

- 1. Felled to waste and left on the ground to decompose specific habitat and/or species issue, difficult ground conditions, no or limited access, less dense and /or young stands, historic/archaeological remains.
- 2. Mowing (tractor mounted) in combination with manual felling with strimmers as to secure an organic structure and the protection of sub-habitats, species, historic/archaeological remains etc.
- 3. Mowing (tractor mounted) only in young and open stands/crops (less than 7 cm diameter).

Work in category 1 has until now been very limited, while category 2 initially was held back because of the then ongoing discussions with the Danish Agency for Culture regarding obtaining permission to work in the areas with high number of historic remains. As a consequence of the size of the project and the number of listed building and sites a Framework Agreement was discussed and finally established 21<sup>st</sup> June 2013 - this

Agreement resulting in also category 2 coming into action. Category 3 has been widely implemented, following the above mentioned Agreement, also in close vicinity to historic / archaeological remains, thus creating an overview of the task at hand.

Map showing number of archaeological sites within the area covered by action C1 and C2, see appendix 6.2.5, page 87.

Regarding technique and equipment – this will be discussed under evaluation.

#### Planned output and schedule

Work related to this action is ahead of schedule even with the need of taking a greater area than originally expected into treatment. One challenge is although becoming more and more obvious, namely the fact that sub-areas where predominately Silver birch are felled, the specie must be cut again as to stress the re-growth, as livestock are unable to secure 100 % grazing. Therefore a setup with grazing – supported by flair mulching – must be maintained for a period.

The action has been / and are very important as to prepare areas for fencing and grazing with livestock – see action C6 and C7.

All objectives and expected result will be achieved.

#### Indicators used

The success of this action is in reality a question of covering as large an area as possible at the lowest possible cost – at the same time securing a complete removal of unwanted wooded vegetation with the vegetation not re-sprouting "out of control". This depends on specie, technique, equipment, season and temperature.

As mention under C1 is very much a visual exercise and comparable to what's mentioned there.

#### **Modifications**

Apart from modifying methods ongoing no changes to what was described / agreed in the Grant Agreement have been introduced.

#### Problem / drawbacks

Not experienced.

#### Complementary action outside LIFE

None.

#### **Continuation following LIFE Laesoe**

Is – if needed – secured via the Landowners Association. Landowners not being members of the LA must maintain their area without trees / scrub if applying for agricultural subsidies. Where landowners are not applying for subsidies and are unwilling to maintain their land without trees, if this is required under a protection order or Natura-2000 action plan, Læsø Municipality must secure the nature conservancy interest.

#### Tables, photographs etc.

Map showing the extent of work carried out enclosed in appendix 6.2.4, page 87

#### 4.1.6 C3 Clearing of non native woody species

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Preparatory actions / management plan

As C3 is a very small task and limited to a geographically small area at the island of Hornfiskrøn, the action is awaiting execution in 2015.

#### Activities undertaken and outputs achieved

At present only managerial time spent on surveying the area when preparing for C1 / C2.

#### Methodology

N/A

#### Planned output and schedule

The action to be executed as described in the GA.

#### **Indicators** used

N/A

#### **Modifications**

The action will be executed as described in the GA.

#### Problem / drawbacks

None.

#### Complementary action outside LIFE

Felling of non-native tree species within the N-2000 area at Læsø is quite common and is undertaken by individual working out with the LIFE project, which is seen as very positive by the project.

#### **Continuation following LIFE Laesoe**

Future existence of non-native tree species at Hornfiskrøn will be monitored, and if found, felled by the project partners.

#### Tables, photographs etc.

#### 4.1.7 C4 Clearing of Japanese rose

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Activities undertaken and outputs achieved

This action was set to be started in 2<sup>nd</sup> quarter 2013 as it was estimated that resources would be available to combat a number of mature stand of Japanese rose prior to the wildlife breeding season. This showed out not to be the case, why the work was postponed to the back end of June, beginning July and in accordance with the original described methodology – being partly mowing and partly using thermal methods.

Where enclosures have been established or realigned -C7 – this has been done also including stands of Japanese rose, if any.

However the project experienced a setback as the senior advisor from University of Copenhagen, Forest & Landscape, left the University and took up employment elsewhere. This is very unfortunate as the person in question is the very key person regarding the use of thermal methods in Denmark. The new employer will although allow the advisor take part in the project, but only to a limited extend.

The other senior advisor – Rita M. Buttenschøn, University of Copenhagen – is still a part of the project and participate in both this action and action C5.

For agreement regarding co-operation with UOC, see appendix 6.1.2, page 86.

During 2013 it become clear to the project that the initial idea of using burning (gas) as the preferred thermal method should be replaced with steam as this seems to show better effect on the vegetation.

In consequence it was therefore agreed with the Danish manufacturer that a thermal (steam) experimental unit would be available for testing by the project in July/August 2013.

Again the project had to accept drawbacks as the manufacturer did not succeed in getting the experimental unit to function properly during 2013.

While all these consideration / discussions / challenges took place another method and tool (old nursery equipment used for lifting seedlings out of the soil) became apparent to the project why this option was pursued. Meantime the project combated Japanese rose using mulchers / brush cutters as to secure some momentum and stress the plants.

#### Methodology

The method applied to maintain momentum during the autumn of 2013 was mowing using a flair or rotary mulcher and where dictated by the ground conditions also brush cutters. This work was done prior to the rose developing rose hips and the material left on the ground to decompose.

Along with the work the above mentioned nursery equipment (seedling lifter) was tested and showed very successful.

It was therefore decided to invest in and use this equipment as the main initial method, perhaps followed by the use of steam, if needed and if fully develop by the manufacture as a practical piece of equipment.

As the equipment no longer is produced, two second hand units were bought, stripped down and then assembled as one working unit plus spare parts.

#### Planned output and schedule

As a consequence of the above challenges, but also a decision to pursue action C1 and C2 as much as possible because of the ideal working conditions coursed by the dry summer,

working with action C4 in a larger scale was postponed to the autumn of 2014, but then prevented by a complete change in weather, as it turned very rainy and wet. This meant that working with the seedling lifter would not create the desired result as it requires dry soil to work properly.

Implementing the new method using the seedling lifter is therefore planned to start in the beginning of 2015 a.s.a.p. weather permitting. Depending of the success the use of the lifter will be repeated or thermal methods will come into use.

#### Indicators used

Monitoring system is being set up in partnership with University of Copenhagen and will be ready for the spring of 2015.

From the project start in 2012 till now a visual assessment has been used.

Alongside the actual treatment, focus is towards;

- Preventing new plant establishment
- Stop the spread of established clones
- Combat it in as many habitats as possible

#### **Modifications**

The initial assumption using primarily burning (gas) has been reconsidered partly due to the risk for igniting other plant societies as the action works with repeated treatment and therefore must be implemented throughout the growing season and as steam seems / is assumed to function better. The thermal methods were intended used following initial mowing. This method has been and is still used to stress the plants, but will be changed, primarily using the seedling lifter as it will lift and therefore expose also the roots of the plant. This material – foliage plus root system – will then be exposed to the sun, dry out and die or could be burned on site / removed from the area.

Methods using the seedling lifter has been discussed with University of Copenhagen and it is regarded a very promising method.

For short report regarding the use of this equipment, see appendix 6.2.11, page 11.

#### Problem / drawbacks

As mentioned the project experienced a setback as the senior advisor from University of Copenhagen, Forest & Landscape, left the University and took up employment elsewhere. This is very unfortunate as the person in question is the very key person regarding the use of thermal methods in Denmark. The new employer will although allow the advisor take part in the project, but only to a limited extend.

Hopefully this will maintain a situation, where the advisor is able to help out specifically regarding thermal methods.

The other senior advisor; Rita M. Buttenschøn, University of Copenhagen, is still a part of the project and participate in both this action and action C5.

Rita M. Buttenschøn is the leading advisor regarding combating Japanese rose and maintain an absolute overview of the current national as well as international situation.

#### Complementary action outside LIFE

As Japanese rose is very well liked and not considered problematic by the general public, no private individuals are normally trying to combat the specie. At Læsø only one private landowner is presently working alongside the project and effectively trying to eradicate the specie.

#### **Continuation following LIFE Laesoe**

LM and DNA will maintain a monitoring and eradication program following as new seed will be carried to the island via the sea, even if the project is successful combating and eradicating the specie at the island.

**Tables, photographs etc.** See appendix 6.3.2 for photos.

#### 4.1.8 C5 Clearing of Cord grass

#### N-2000 designation

So far only DK00FX010

#### Activities undertaken and outputs achieved

As no Danish experiences regarding combating cord grass exist the project initially looked for literature on the subject from all known existing sources. This already started alongside applying for LIFE + funding initially.

I became clear from studying the miscellaneous literature that cord grass were quite sensitive to mowing / removal of all foliage followed by flooding as the rhizomes would then be unable to carry oxygen, thereby leading to plant dead.

Therefore a number of methods were tested during the summer of 2013. All testing took place on individual clones directly in the so-called blue ribbon as the dynamic nature of the area would soon "wash away" any trace of the fairly radical treatment. Three methods were tested:

- 1. Manually uprooting and removal of the plant material from site
- 2. Uprooting using the seedling lifter and removal of plant material from site
- 3. Uprooting and burial of the plant material alongside the treated area (Dutch ditching)

It soon became clear that method 1 and 3 were workable and seemed very promising. The methods will be further discussed under evaluation, but it became clear that quite a number of challenges did exist, the majority linked to the harsh and salty working environment.

In January 2014 the project were contacted by a young Master Thesis student, who wanted to join the project, working specifically with Cord grass. As University of Copenhagen – together with Lüneburg University – accepted to supervise the student a formal agreement regarding involvement was established in March 2014.

The agreement involved;

- Why is Cord grass such a big problem (ecologically, economically and socially)
- What management techniques exists (where have they been used so far, what are the strengths and weaknesses)
- The uniqueness of the areas where Cord grass grows
- Create a monitoring plan perhaps re-monitor the island (which techniques would be best suitable to apply in which areas of the island)
- Recommend management techniques

The actual work carried out by the student started in June and is at the time of writing the Midterm report still ongoing.

Also in January 2014 the project learned about an International Spartina Conference, going to take place at University of Rennes, France in July 2014. Both the student and project manager participated.

All the above led to deciding to await the Conference, before setting up a more detailed program for the action.

Following the Conference it became the project manager clear that a number of issues had to be addressed as all recommendation from the conference clearly stated that if a management program trying to combat Cord grass was to be implemented it had to be radical, consistent and monitored extremely detailed, therefore;

- 1. A meeting in the Steering Committee followed by a political decision at LM therefore agreed to;
  - a. Full commitment towards a if possible total eradication of Cord grass at the island during the LIFE project (as also forming part of the GA).
  - b. Inform the public and secure a wide acceptance of the action amongst the inhabitants at the island.
- 2. Establish and maintain the needed monitoring system following LIFE.
- 3. Allocate resources to combat Cord grass if, as and when needed following LIFE.

The focus during the late summer and autumn of 2014 has been to monitor the result following the initial testing of methods and a complete re-monitoring of the presence of Cord grass at the island.

Regarding monitoring drones have been tested and the project are planning to investigate the further use of this tools when combating the specie as well as Japanese rose.

This will enable the project to start combating the specie in a knowledge-based manner as from the spring of 2015.

#### Methodology

As mentioned above 3 methods were tested in 2013, namely;

- 1. Manually uprooting and removal of the plant material from site
- 2. Uprooting using the seedling lifter and removal of plant material from site
- 3. Uprooting and burial of the plant material alongside the treated area (Dutch ditching).

Followed by a detailed set of experimental plots in 2014, namely;

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

#### Planned output and schedule

Although monitoring have shown a by far greater area presence than the monitoring from 2010, forming part of the Grant application and thus being the foundation for the budget, the project management is still convinced that a resolute managerial effort will lead to control and eradication plus – perhaps more important – develop new methods in the continued battle against this specie.

#### **Indicators** used

Straight forward – no re-growth.

#### **Modifications**

The initial assumption regarding the use of thermal method either alone or in combination with other – mechanical – methods is presently not considered viable. This is primarily due to the environment where cord grass is growing, being very dynamic with tidal movements, salty conditions and the presence of stone / boulders all making the blue ribbon partly inaccessible for thermal equipment (as this is developed at present). The purchase of an ATV partly to carry thermal equipment and partly as a mean of transportation is therefore presently restricted to the latter (where it is extremely useful).

At present the project assume that manual removal of regrowth is a more likely method than thermal.

#### Problem / drawbacks

As mentioned the project experienced a setback as the senior advisor (Thermal methods) from University of Copenhagen, Forest & Landscape, left the University and took up employment elsewhere. This is very unfortunate as the person in question is the very key person regarding the use of thermal methods in Denmark. The new employer will although allow the advisor take part in the project, but only to a limited extend.

The other senior advisor; Rita M. Buttenschøn, University of Copenhagen, is a part of the project and participate in both this action and action C4.

Rita M. Buttenschøn is furthermore supervising the German Master Thesis student working with C5.

The spread of the specie since the 2010 mapping is a challenge as might be the public perception regarding combating the specie in what is normally regarded a fragile environment.

#### Complementary action outside LIFE

No action will take place regarding combating Cord grass at Læsø out with the project. The project management will insure that any new knowledge globally announced will be considered viable / beneficial for the project.

#### **Continuation following LIFE Laesoe**

As mentioned both LM and DNA are committed to the task of combating the specie following LIFE Laesoe.

#### Tables, photographs etc.

For monitoring and experimental reports, see appendix 6.2.2 & 6.2.3, page 87.

Conference, Rennes, see appendix 6.2.16, page 87.

Maps showing result of re-monitoring, see appendix 6.2.15, page 87.

Drone flights, see appendix, see appendix 6.3.3., page 91.

#### 4.1.9 C6 Establishment of cattle and sheep herds

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Activities undertaken and outputs achieved

This action was – more or less in tandem with A1 – the main time consumer during the projects initial phase during 2012/13.

As stated in the Grant Agreement, the project wanted to purchase hardy cattle of the Galloway breed because of their known qualities regarding grazing the habitats in question.

A substantial problem existed as the projects initial budgets for the purchase of livestock showed no comparison to the 2012/13 market, why there was lack of funds to secure the wanted number of mature cows and a number of cows had to be replaced by heifers.

Another issue was that the calving cows purchased had to be transported to Læsø well in advance of the expected calving date due to animal welfare issues. This again meant that the cows had to be feed and looked after during the calving period, a cost initially not budgeted. This very issue were mentioned in the IR and commented in the Commissions letter dated 26. July 2014 – stating that this was acceptable if compliant with article 15. The related cost came to  $16,738.99 \in$ .

At the very end of 2012 Læsø Municipality funded the purchase of 50 cows using own funds outside the LIFE project.

This was discussed with ASTRALE at the time and agreed to be left upon for inclusion in the accounts later on during the project life / budget amendment.

In the very beginning of 2013 the total flock therefore came to;

- 85 cows
- 68 heifers
- 14 heifer calves
- 4 bulls

As 10 heifers and 5 heifer calves did not stand up to the contractual conditions at delivery, it was agreed with the supplier that the flock would graze within the project during the season of 2013 and returned / slaughtered during the autumn 2013 - the supplier to reimburse the project any loss.

During the autumn of 2013 the project was offered a flock of 51 cows plus 2 bulls at a very competitive price. Although having spent the majority of the budgeted funds allocated to C6, it was decided also to purchase this flock.

This purchase plus the 2013 calving took the flock up to the following number at year-end;

- 135 cows
- 54 heifers
- 47 heifer calves
- 39 bull calves
- 5 bulls
- 280 head in total.

At end November 2014 the total number of cattle amounts to 356.

Regarding sheep the project purchased 51 ewes in December 2012 followed by a ram in October 2013. As is showed very difficult to find a shepherd no ram was put to the ewes during 2013.

At the time of writing the sheep flock consist of;

- 41 ewes
- 1 ram
- 30 lamb ♀
- 27 lamb ♂

As set out in the GA all livestock was transferred to the Landowners Association, when the association started as a legal entity per. 1<sup>st</sup> January 2014.

The association is therefore fully responsible for the entire husbandry and the associated economy.

The herding of cattle and sheep during 2013 (from approx. 1st June to late October / beginning November) was initially agreed with a number of retired farmers, herding from horseback.

Regarding taking the island numerous horses into the project all initial negotiations has gone very well and during the earlier mentioned meetings between owners of cattle and horses the individual enclosures has been distributed in an orderly and cooperative manner. This has also been the case regarding the actual date for setting the individual horses / cattle onto the summer pasture — which must reflects the arrival and start of breeding season for the targeted birds, simply to avoid trampling of nests / eggs.

All objectives and expected result are foreseen to be achieved.

#### Methodology

When the project became known in "the cattle society" quite a number of dealers contacted the project and it became clear to the partners that going out to a wider audience in an open tendering process would probably turn out contra-productive, as it would be more or less impossible to control the quality of livestock offered and indeed provided.

It was therefore decided that the project would ask the Galloway Association in Denmark to source livestock of sufficient quality and suggest a pricing structure taking into account the demanded quality as well the size of the total trade.

As a consequence the project bought cattle from 4 individual breeders - plus from the existing DNA flock at Læsø – following the recommended prices.

As pointed out in the commission letter dated 26. July 2013 this procedure most be argued as it might be in conflict with CP article 8.4. The project will argue as follows;

- The project would never have been able to source the needed livestock form one supplier/bidder, as that supplier/bidder would have had to source the needed flock from a number of sub-suppliers.
  - This would have been un-acceptable to the project as absolutely no guaranty for authenticity and "social behaviour" of the livestock could be given.
- None of the individual contracts exceeded the threshold.
- As we took advice from the Galloway Association in Denmark, we felt and still feel – fully assured both regarding price-structure as well a general availability of stock in current the marked.
  - Letters from the Association and individual contracts, see appendix 7.8, page 96.

#### Planned output and schedule

The livestock numbers quoted and aimed for in the GA was 200 cows plus bulls and 150 ewes plus rams.

The project management is although very satisfied regarding the achieved number of cattle and the numbers has shown sufficient during the initial phase of the project. One obstacle was that a major landowner – entering the project during 2013 – decided to stay outside the project from the summer of 2014. This meant that approx. 50 cows plus followers had to be used grazing nature conservation sites at the mainland, instead of Læsø during 2014.

The future regarding expanding the cattle flock to the needed number looks bright, the flock is "settling in" and under good management. The final number will depend on the total acreage under grazing also taking private livestock owners wishes and needs into consideration.

During 2014 problems regarding finding suitable shepherding and general management of the sheep flock continued and this is still very much the case, why the project are holding back expanding the flock. In the meantime DNA staff secures the shepherding.

Recently a new farmer at Læsø has flagged an interest in building up a substantial sheep flock. This is very interesting and will be pursued.

Under this action also a cattle-trailer and an ATV (MULE) has been purchased. The latter unfortunately proved insufficient and completely unable to operate in wet environments, why it will be traded in with a standard ATV a.s.a.p.

#### Indicators used

The partners decided from the very start that only Galloway cattle would be purchased into the project and these had to be purebreds as a mean to secure the investment and possible future sale of livestock. This was made a condition to all suppliers.

Likewise with the sheep where it was decided that it had to be Spelsau and if at all possible, also purebred.

The reason behind choosing these breeds are their well-known capability grazing poorly producing habitats and without posing a threat to the public. This would also enable farmers with heavier breeds to expand their business by grazing the better and less fragile habitats.

#### **Modifications**

The action is partly modified caused by the financial challenge regarding cattle and partly because it has proven very difficult to find experienced shepherds at the island regarding sheep.

#### Problem / drawbacks

Presently building up the expected sheep flock is posing a problem. It is although a fact that the needed managerial and shepherding experience must be present before this should be pursued.

Presently staff from DNA is in charge of shepherding.

#### Complementary action outside LIFE

As the project, and perhaps more importantly the Landowners Association, gain pace and substance, it is likely that present and new farmers might see an opportunity in grazing and therefore invest in cattle or sheep. This will be seen as very positive by the partners as well as the Landowners Association as a mean to create local ownership and

understanding. The coming grazing season (2015) will probably give indication in that direction.

#### **Continuation following LIFE Laesoe**

The action will be carried on following the project depending on the actual need for livestock and will be secured by the existence of the Landowners Association – where both project partners are board members.

#### Tables, photographs etc.

See under action C7 for new grazed area, appendix 6.2.6, page 87. See appendix 6.3.2 for photos.

#### 4.1.10 C7 Creating enclosures by fencing

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Activities undertaken and outputs achieved

As mentioned in the Inception Report quite a few enclosures has shown more expensive than expected as has maintenance – or realignment – work to existing enclosures. This is considered a minor problem compared to the positive elements – amongst others a broad cooperation – executing the initial phase of the action and bodes well for the coming work.

The Local Community Group have been helpful gathering local opinion / views regarding the position of fence-lines, stiles and also taking a wide variety of users specific requirement into consideration.

As and when livestock have been placed in the individual enclosures signs with information about the LIFE project, the livestock, access and other relevant information is erected

The action initially assumed that all work would be subcontracted, but due to the very short available period following the frosty and wintery conditions "all" available skilled manpower at the island was seconded to the work in 2013, which means that subcontractors as well as staff from both LM and DNA have been involved.

In 2014 the situation showed out very alike 2013 with no contractors from the mainland being available for fencing at Læsø, again creating the need to use one local contractor and – to a limited extend - staff from DNA. The work carried out by the contractor was partly tendered and partly done at an hourly rate following negotiations regarding price and conditions.

5 ponds have been established in new enclosures.

Furthermore the following has been purchased under this action

- 4 Livestock bale feed-rings
- 20 Cattle panels for pens

Map showing the extent of work carried out enclosed in appendix 6.2.6, page 87.

#### Methodology

All new fencing for cattle and horses has been erected using 2 plain wires, apart from one area where dairy cattle are grazing, where only one wires is normal.

When fencing for sheep 5 plain wires are erected.

All fencing is electric, either using mains (preferred) or batteries / solar cells.

In some instances repairs are carried out to existing fences in remote locations where barbed wire has been used. This is carried on, if electrical fencing is impossible to maintain.

#### Planned output and schedule

The pace of fencing is in line with clearing under action C1 and C2 plus the livestock partly supplied for grazing via action C6 and private individuals.

As mentioned under C1 the initial area in the GA did not take N-2000 woodland types into consideration, but focused on clearing the majority of former light open habitats. Discussions on the island has left it more or less up to the individual owners to decide whether they would like N-2000 designated woodlands cleared or not. The project will still argue the clearing of woodlands in areas of high importance from targeted habitats

and / or species. The targeted area to be fenced and grazed in the GA might therefore be reduced as a result of the above.

Fencing erected and or maintain is shown in the following table.

	Executed 2013	Executed 2014	Target 2017
New fences	194.81	234.49	1,712.15 hectare
Enhancing existing	1532.56	1532.56	1,559.55 hectare

New fences executed equals 25 % of target.

#### **Indicators used**

N/A

#### **Modifications**

The original plan regarding building 10 cattle pens as fixtures has been changes to buying a number of cattle panels, which can be used as pens or combined pens, runs and / or corrals.

Caused by the ongoing challenges related to managing the sheep flock the project had to erect a secure sheep fence to be used as wintering site out with the Natura-2000 area and not originally budgeted for in the GA. The site was chosen as it is owned by LM and is ideally placed for daily management. The enclosure is not included in the above figures, but totals 3.93 hectare.

The cost of this came to  $7,387.51 \in$  and it is hoped that the commission will accept this cost as eligible.

#### Problem / drawbacks

In some instances have new or temporary fences been erected in a non ideal position, because not all landowners have joined the Landowners Association or have been reluctant to permit the project full managerial access to their land. This of course means increased cost for the project compared to a situation with full access and the possibility of holistic management.

The partners have to accept this as a natural part of implementing a project this size.

#### Complementary action outside LIFE

A limited number of areas within the N-2000 designation are fenced – and therefore grazed – by individuals not being part of the Landowners Association or actions under the project. This is not causing a problem related to the project objective regarding species or habitats.

#### **Continuation following LIFE Laesoe**

The establishment of the Landowners Association should safeguard future establishment and maintenance of enclosures in the designated areas following the LIFE project.

#### Tables, photographs etc.

See appendix 6.2.7, page 87 for map showing position of wintering area. And 6.2.6, page 87 for general map re C7.

#### 4.1.11 C8 Controlled burning

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Activities undertaken and outputs achieved

The winter of 2012/13 was extremely well suited for controlled burning and the project started the action in late February by burning only DNA owned land. The main reason for not covering more acreage initially was due to the discussion with the Danish Agency for Culture regarding burning in areas with high number of historic remains on the southern part of the island.

As mentioned above an agreement with the Danish Agency for Culture was entered into during 2013 also containing permission to burn over historic sites.

Therefore substantial areas were accessible for burning as the project entered the winter of 2013/14, which unfortunately turned out very wet and not suited for burning.

At the very back end of the open season for burning, the weather turned dry and a window of opportunity arose, resulting in a fair acreage being covered. Only problem then was the substantial stacks of wood material awaiting chip harvesting, which had to be avoided.

The establishment of a voluntary group primarily amongst the island beekeepers took place at the very back end of 2014 and this group will be a very valuable element of the project during forthcoming seasons, being able to join forces with staff from LM and DNA - or work separately.

All objectives and expected result will be achieved.

#### Methodology

Controlled burning is an old and traditional element of specifically heather management, but unfortunately also partly lost as a skill amongst managers and workers alike.

Therefore its common reacting in an uncertain manner working with open fires, which is very understandable, but very contra-productive, as the workforce must act in a decisive and consistent manner.

The actual work is carried out by establishing firebreaks using mowers, water or burning to create the border between what's going to be burned and not. The firebreaks can be established in advance (days / weeks) of the actual burning or in the very morning where high moisture contents in the vegetation prevent a successful fire. This is the time consuming part and is followed by burning the actual site either with or against the wind. Normally the most suitable weather for moorburn in Denmark is fund in February / March and in period with prevailing winds from east.

The actual fires can normally be started around 11.00 in the morning and then continue into the evening.

Executing moorburn implies using proper protective clothing, secure firefighting equipment on site, secure communication and informing neighbouring landowners as well as authorities.

#### Planned output and schedule

Although the project have achieved only a limited amount of acreage burned during the initial 2 years the partners are confident regarding achieving the set target, simply because action C1 and C2 are now in reality finished on sites planned for excessive moorburn. This fact enables the partners to cover substantial acreages especially on the southern part of the island, as there are hardly any obstacles and the area being surrounded by sea on three sites, why the only important factor is direction of wind.

	Executed 2013	Executed 2014	Target 2017
Moorburn	15.66	41.33	433.98 hectare

Moorburn executed equals 13 % of minimum target.

#### **Indicators** used

As almost all areas designated for moorburn has not been burned for decades a lot of the vegetation can be characterised as over mature / senile. Therefore the partners as a general rule would prefer burning carried out against the wind as to secure an effective fire both devouring the vegetation and the litter layer.

This is although not an option where historic remains are present due to the agreement with the Danish Agency for Culture, who will only permit fires, directly running over historic remains, if performed with the wind. This is primarily due to the existence of peat dikes surrounding the individual sites.

The effect of a given fires in normally indicated by a complete removal of both senile vegetation and the litter layer why this is the optimal situation targeted.

It is although also important to secure a varied environment following a moorburn which is achieved if the fire is performed with varying intensity.

# **Modifications**

The project have no intensions regarding modifications other than such applied by weather conditions.

# Problem / drawbacks

This action very much depends on having suitable weather and an experienced and reliable workforce in place. The latter is in place between LM and DNA and furthermore now supported by a group of volunteers.

The weather is out of our control, but might impose drawbacks.

#### Complementary action outside LIFE

No moorburn will take place outside the LIFE project and within the LIFE area.

# **Continuation following LIFE Laesoe**

Again this will be secured by the Landowners Association who will introduce fires as a management tool running alongside grazing.

Continued moorburn will also be encouraged by the island bee-keepers as to secure young and heavily flowering heather.

# Tables, photographs etc.

Map showing the extent of work carried out enclosed in appendix 6.2.8, page 87.

For members of voluntary group, see appendix 6.1.3, page 86.

## 4.1.12 C9 Infra-structure

### N-2000 designation

Both DK00FX118 and DK00FX010

## Activities undertaken and outputs achieved

This action is planned carried out throughout the whole project period and will be started as and when needed to secure haulage of timber and chip wood related to action C1 and access in general for other project purposes.

The action furthermore contain negotiating and securing future access within the N2000 area as to avoid negative effects on habitats, targeted bird species and historic remains. This is partly an issue regarding management related traffic carried out by the numerous owners, but must also be addressed regarding leisure-orientated use of some of the areas. This issue is already addressed by the project in general terms and especially during discussion regarding action C7 – creating enclosures. As mentioned under C7 these discussions have been held in a positive atmosphere and striking a sound balance between public use and protection of the areas in question.

# Methodology

The work should be done to a minimum requirement both from a financial point of view, but also to avoid creating tracks in a quality encouraging a build-up in unrestricted traffic. Therefore the work to date have been executed by using materials either sand or hand-sized stone as metal thereby creating a surface suitable for tractors, lorries and 4-wheel driven sturdy vehicles, but not ordinary cars.

Following harvesting and extraction task under C1 also repairs to dirt tracks has been carried out. This is done without introducing materials from outside the area to the site, but only to reinstate to what was prior to executing the action.

During executing C1 also chip wood / brash has been used to temporarily create access in remote areas. In these instances the materiel has been left on site to decompose.

# Planned output and schedule

Work related to this action is only carried out if needed why the figures in the GA is very much an estimated, but qualified. Until now parts of 14.389 meter of track has been maintained and / or upgraded out of a total estimated figure of 15,920 metre.

The planned new public footpath is presently at planning stage and need permission from the Protection Committee as it runs over a Special Protection Site. This is planned for 2015.

#### **Indicators** used

As mentioned above only as little as possible is carried out. The indicator in reality being; - will the formation carry the needed traffic during implementation without attracting unwanted traffic in the future.

Regarding reinstating areas this must be done to as high a standard as possible without causing further damage – striking a balance.

#### **Modifications**

No modifications to methods outlined in the GA are planned, but as mentioned perhaps a modification regarding the estimated lengths of track to be improved.

Modifications might be imposed by the Protection Committee as part of the consultation period leading up to granting permission establishing the public footpath.

#### Problem / drawbacks

None expected regarding improving tracks, but perhaps related to the public footpath – see under modifications.

# Complementary action outside LIFE

Unlikely to happen and not foreseen. The project is required to make good any damage done to existing track during the implementation of individual actions.

# **Continuation following LIFE Laesoe**

Not an issue. If certain track / routes must be maintained because of grazing / nature conservation actions this will either be secured via the Landowners Association or by LM on private land and DNA on state owned land.

# Tables, photographs etc.

Map showing present status, see appendix 6.2.9, page 87. See appendix 6.3.2 for photos of work carried out.

# 4.1.13 C10 Control of foxes, mink and hooded crow

# N-2000 designation

Both DK00FX118 and DK00FX010

# Activities undertaken and outputs achieved

At the very early stage of the project contact was taken to the island sporting associations – "Dansk Jagtforening" and "Læsø Strandjagtforening" – asking them to suggest areas for establishment of artificial fox dens as well as a group of members, who would be willing to take responsibility for carrying out the predator control, both related to fox, hooded crow and mink.

The present situation is that 15 fox dens have been established primarily on the islands southern part and in vicinity of breeding sites for waders and waterfowl.

These 15 artificial fox dens are therefore ready for the coming winter season and as quite a few are already in us, the project have great expectations regarding this winter cull.

The remaining 5 dens are in cooperation with the Danish Agency for Culture planned to be installed in close vicinity to historic sites where natural fox dens already are present, but destroying the historic remains. The hope being is to relocate – and control – the fox from the artificial dens thereby avoiding both damages to the historic remains and predation on targeted species.

One fox has been culled from a den in November 2014. The cull will normally be at its peak December – February.

As for the control of mink three named persons are allocated to this task also forming part of a national mink control scheme.

They have been fully trained and equipped from the national program why LIFE Laesoe have had no expense setting this up – apart from managerial time consumed.

This part of the action has so far managed to catch / cull 5 mink.

Regarding hooded crow the team allocated to work with the fox dens will be partly responsible here. During the implementation of action C1 and C2 all solitary trees has been felled in the area covered, which have made a significant reduction an predation pressure from hooded crow.

It has although shown quite difficult – and in spite of a very positive attitude in favour of the action as a whole – to establish cooperation regarding controlling crow so far.

Therefore the action will change slightly here – compared to the original outset.

During monitoring work in the summer of 2013 and 2014 related to targeted breeding birds is has become clear that fox probably is the main predator of the 3 predators targeted by the project, but also crane play a very important role – perhaps even in line with fox

## Methodology

The fox dens are established on dry ground using concrete piping forming a draft proof environment and in close vicinity of targeted birds breeding sites and fox traffic "junctions". The standard den established is 18 metre in length also holding a lair for the fox the rest in.

The actual control is carried out by using a terrier to flush the fox from the den and cull it by shooting when outside.

Regarding controlling mink traps are used. The traps are placed along watercourses, island and artificial island and are of the "instant killing types. These being used as mink and fox are they only predators at the island and fox being too big to enter the traps.

Regarding the control of hooded crow it was initially expected to use traps only, but as a consequence of problems regarding finding both persons and landowners in acceptance future control will now be a combination of trapping and shooting.

## Planned output and schedule

The success of the fox dens – and thereby controlling fox number – will start showing this coming winter season and continue during the project phase and following.

Regarding mink this is well under way and will as mentioned above carry on. The project partner do not consider mink being a very serious problem at the island, but as a number of the island mink producers are expanding their businesses, an increase in escapees is likely.

The problems related to the control of crow should be solved within a short period why a reasonable cull is hoped for during the winter and early spring of 2015.

#### **Indicators** used

All hunters must report their cull of species to DNA on a yearly basis when applying for a hunting license.

It is therefore a possibility to assess the yearly cull of the species in question during the project period.

#### **Modifications**

Regarding controlling hooded crown the original intention to work with traps only will be changed to working with both traps and culling by shooting during the pre-breeding season of the crow. The project will apply for a permission to cull accordingly.

Due to problems regarding trapping on private land this part of the action will now take place on DNA and LM land only and carried out by own staff.

These changes together with the action re mink will probably mean a decrease in costs compared to the initially budgeted figures in GA.

#### Problem / drawbacks

Action progressing according to plan in general, but regarding controlling crow on private land and with the help from members from the sporting associations (Læsø Strandjagtforening and Dansk Jagtforening) quite unexpected problems arose. The attitude were and are that any private landowners applying for agricultural subsidies would be at risk being fined, if the traps placed on his land was not looked after according to legislation. This is in fact a realistic threat as cross compliance involving numerous legislations must be adhered to, when applying for subsidies.

Because of this the action are planned changed slightly as mentioned above.

# Complementary action outside LIFE

Is should be stressed that a substantial number of crows a culled on a yearly basis at the island. The majority of these being migrating birds, thus having only limited impact on targeted species, during the breeding season.

Cull of species related to action C10 by hunters at Læsø

	2011	2012	2013
Fox	354	554	502
Mink	55	61	29
Hooded crow	9	8	12

# **Continuation following LIFE Laesoe**

It is expected that the control of all 3 species will be carried out following the project. This partly directed by LM and DNA because of the continued need to help the targeted species and partly because of the strong sporting community at the island, as controlling fox, mink and hooded crown would help also game species at the island.

# Tables, photographs etc.

Map showing dens, see appendix 6.2.10, page 87.

See appendix 6.3.2 for photos.

See appendix 6.2.22, page 87 for folder re capture of mink.

#### 4.1.14 C11 Restore natural hydrology

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Activities undertaken and outputs achieved

As mentioned under A3 the hydrological survey was delivered in a final report to the project during October 2013.

The survey reviled that only a few hydrological issues exist not already know and described in the GA and that former (desk) surveys – commented upon below – only partly can be taken into account.

Mentioned in the GA, one of the issues regarding the hydrological status, as highlighted in the N2000 action plan, is that a number of former surveys of the area – especially at the southern part of the island – have concluded that hydrological problems exist. It was and is although the applicants believe that these conclusions were based upon models, not capable of taking the nature, structure and dynamic variations of the salt meadows (salt marsh creeks and mudflat channels - 1330) often flooded by the sea, into account.

It should also be added that because these meadows are only marginally higher than the adjacent sea, the influence from just that (flooding / wind stowing) is by far greater than any influence caused by a few artificial drainage channels.

The report describes status and suggests specific managerial actions to rectify present situation thereby delivering a practical working tool.

At the time of delivering the Inception Report the partners therefore expected to start the action during the last quarter of 2013, but due to the workload referred to under management and action A1 above, action C11 still awaits to be started. This is very unfortunate, but is not posing a problem regarding achieving the action within the project period.

# Methodology

The methods described in the GA still to be followed, they are;

- Drains to be filled in
- Drains blocked off
- Drain maintenance stopped

# Planned output and schedule

The initial output stated in the GA plus further needed work described in the survey report will be initiated following reconsidering the total task, environmental gains and funds available.

Physical work will – weather depending – commence in 1<sup>st</sup> quarter 2015.

Specific areas must await the execution of action C1 / C2 as to secure the carrying capacity of the terrain during harvesting and extraction.

#### **Indicators** used

Throughout the majority of the project area only a visual control of implementing the actual action will be used. In the area around Foldgårdssøen water loggers are in place as the area is the island water supply catchment. These loggers will be used to document changes alongside a visual assessment of the development, partly caused by abandonment of drains and partly because of woodland clearings, the latter reducing the overall consumption.

Action C11 and especially C1/C2 should combined dramatically reduce the regrowth with woodland species.

#### **Modifications**

No modification planned at present. As mentioned above the Dansih Agency for Culture might impose restriction upon the project regarding working in close vicinity to historic remains

#### Problem / drawbacks

As Danish legislation imposes an obligation on all landowners to secure the free flow of drainage water from upstream landowners in any catchment, the partners wish to pursue e.g. filling in a drain might impose a potential conflict between financial and ecological considerations. Such a situation will be addressed as and when occurring.

# Complementary action outside LIFE

Because of the dramatic change in farming structure at the island, the majority of drains formerly maintained within the Natura-2000 areas, are now left without maintenance. This managerial fact is very beneficial to the project and habitats / species involved.

# **Continuation following LIFE Laesoe**

Without doubt the change in managerial input related to cultivation marginal area like the ones in question will work against drainage and drain maintenance. This is furthermore supported by the Water Frame Directive.

Without doubt, the only drains with continued maintained within the Natura-2000 areas at Læsø, will be drains securing the free flow of water from upstream landowners.

#### Tables, photographs etc.

See appendix 6.3.2 for photos.

#### 4.1.15 C12 Landowners Association

# N-2000 designation

Both DK00FX118 and DK00FX010

# Activities undertaken and outputs achieved

Following the establishment per 1<sup>st</sup> January 2014 the association started working and acting as a legal entity.

Board of Director was elected and a managerial setup agreed upon. Board meetings take place on a monthly basic.

The LIFE project manager from DNA was appointed operational manager and the secretarial function was subcontracted to an independent accountant.

All livestock acquired under C6 was transferred to the Association and a contract regarding herding the livestock, including being fully responsible for feeding and accommodating the livestock, was granted a local farmer.

The basic and fundamental financial setup of the association is amalgamating all privately owned N-2000 areas at the island, apply for agricultural subsidies and manage all enrolled areas in a holistic and environmentally correct manner. This will result in paying the owners a reasonable rent for the tenanted areas and removing the practical and managerial burdens of land management from their shoulders. Also livestock owners will be paid for grazing the areas in question.

# Methodology

The Association is established as too;

- Manage (as tenant) all N-2000 areas pooled by the members, thereby securing the sustainable nature conservation operation of the areas both during and particularly following the project.
- Being responsible for the overall management of or play a co-ordinating role regarding all livestock needed for grazing of the project area (as the livestock needed (see action C.6) might consist of livestock owned by individuals, smaller grazing societies and livestock purchased by the project partners and handed over to the association).
- Being responsible for the establishment of agreements regarding grazing, production of winter fodder, wintering livestock etc.
- Being responsible for applying for subsidies being farming as well as environmental and any other funding available plus the sale of any association owned surplus livestock on behalf of all members. This will also include maintaining records and the reporting to public bodies as required by law.
- Being responsible for the associations own expenditure and the related bookkeeping and accounting.
- Being responsible for maintaining an open approach regarding dissemination and debate in general as to secure the association will be regarded as perceived anchored at the island.

#### Planned output and schedule

As the areas hopefully leased to the association are owned by 336 individuals coherent management is considered impossible unless all individual landowners pool their ownership into one management unit, which will be able to secure future grazing

management including financial sustainability and thereby nature conservation of the N2000 sites at Laesoe.

Furthermore only a capable, strong and widely accepted managerial structure is seen as the tool to deliver.

The targets described in the GA under A1 were that landowners equivalent to 75 % of the project area have enrolled as members by 30<sup>th</sup> June 2013, 85 % as members by 30<sup>th</sup> June 2014, 95 % as members by 30<sup>th</sup> June 2015 and an overall hope that all landowners (100 %) within the project area had enrolled as members by 30<sup>th</sup> June 2016.

This is not the situation at present where only approx. 45 % of the targeted area receiving subsidies is tenanted by the association. This figure equals approx. 1.470 hectare out of the targeted 3,271.70 hectare for grazing.

It is important to mention that the acreage enrolled reflects the pace of C1, C2, C6 and C7 and very importantly also the time horizon involved when preparing and applying for agricultural subsidies on a specific area of land. Also important is the fact the many more are ready to become members as soon as association are able to accommodate them.

The action has proven extremely time-consuming so far and therefore by far more costly up front than initially budgeted for in the GA.

Furthermore the under A1 mentioned challenges regarding the uncertainty regarding the CAP is a factor related to enrolment in the association.

The partners are extremely satisfied with the current situation and have high expectations for the success of the association.

#### **Indicators** used

Apart from direct deliveries – statutes, well-functioning Board of Directors, a proper managerial setup etc. – the important indicators is in reality the general perception amongst the inhabitants at Læsø, and this can only be described as very positive.

#### **Modifications**

The managerial setup was initially planned and budgeted for reflecting a situation with more members and a healthier financial situation. This meant that the original plan of employing a daily manager soon after the establishment had to be postponed.

It was therefore agreed that the LIFE project manager from DNA was appointed operational manager. This is far from ideal, as it creates uncertainty at the island distinguishing between the LIFE project itself and the Landowners Association. Furthermore because the managerial role is very time consuming and not at all budgeted in the GA.

# Problem / drawbacks

Issues related to the new CAP and uncertainty related to the situation as described under A1 have all led to some potential members holding back their enrolment, which is not seen as a major problem by the partners due to the pace of the related actions, as mentioned above.

Another problem is that a number of landowners so far have decided not be join the association, because of financial or other reason. This is very unfortunate if their ownership forms part of the enclosures erected by the LIFE project and the same enclosures forms part of common grazing. This is only a problem regarding the holistic management of the area and the financial position of the Association – not the objectives targeted by the LIFE project.

The different roles of the DNA project manager are unfortunate as the public maintain a less positive attitude towards the LIFE project than to the Association. This might

influence the enrolment of members. This situation might seem surprising, but is a fact of the island community being quite autonomous.

# Complementary action outside LIFE

A few landowners are working against the Association and have entered into grazing agreements with a number of livestock owners.

As mentioned above, this is unfortunately for the Association, but not for the LIFE project as such.

The partners have no doubt about the landowners in question will become members within a foreseeable future.

# **Continuation following LIFE Laesoe**

The Association is now a fact at the island and the vast majority in the community are in favour of its establishment and the whole idea, based upon.

The association will without doubt expand during the project period and continue following.

Tables, photographs etc.

# 4.1.16 D1 Monitoring of impacts on targeted habitats and species

#### N-2000 designation

Both DK00FX118 and DK00FX010

#### Activities undertaken and outputs achieved.

Targeted breeding bird species.

The survey of breeding targeted birds within the SPA part of the project area took place in May and June 2013 and 2014 as planned and the weather allowed a reliable and total count.

Data of numbers of breeding pairs, numbers of colonies, and the risk of flooding, predation risk and breeding success in selected species have also been collected; results are presented specie by specie below and in the table figure D1a in appendix 6.2.34, page 88. Data of suitable habitat is collected by the NOVANA program but is not yet available.

The Danish Centre for Environment and Energy, Aarhus University (DCE) have published a report on how to classify the habitats of 16 bird species, including all the 5 targeted breeding species (Fredshavn et. al 2014).

All breeding bird data are digitalized into a GIS system. We have also digitalizes and collected data from former surveys (1987, 1990, 2007, 2010 and 2012), though most do not cover the total project area or all targeted species.

# Dunlin Calidris alpina schinzii.

Small variation between the two years counted, population around 17 pairs.

One pair with nest was found in 2014 at the small islands Als Dyb Revler, this is a new sub-area, and thereby also a step towards a dispersal of the population.

In the main breeding area there is a population of at least 25 pairs of breeding Lapwing *Vanellus vanellus* and several pairs of Oystercatcher *Haematopus ostralegus* and Redshank *Tringa totanus*. All these species, but especially *Vanellus vanellus* gives good warning and protection against predators. Hooded Crow *Corvus cornix* is frequently in the breeding area with 5-10 individuals and flying between possible crow nesting areas outside the Dunlin breeding and the dunlin breeding area have been observed. Also Fox *Vulpes vulpes* is present in the areas during some of the counts and footprints are found all over the area.

Suitable area of breeding *Calidris alpina schzinii* will be measured at the end of the project, using the classification in Fredshavn et al (2014).

# Wood Sandpiper Tringa glareola.

The Wood Sandpiper has been sought for both within the project an in NOVANA with negative results.

Actions planned in the two areas reported by the project as suitable for *Tringa glareola* are nearly executed why the expected result – re-establishing two suitable breeding areas for the species – is awaited. The areas will be evaluated using the resent publish classification system (Fredshavn et al. 2014).

#### Avocet Recurvirostra avosetta.

The monitoring revealed a large decline in the population of *Recurvirostra avosetta*. At the first survey in May 2014 only 12 pairs were present, but in June 43 pairs was located. Possible explanations is either that the last 31 pairs have given op the first attempt and

therefore not was at nesting site at the May survey or that the species simply was late breeding in 2014.

If we look at a 1987 survey covering only the central part of the project, there was 9 colonies around the island Hornfiskrøn just south of the mail island, in 2013 only one is remaining, see map (fig D1e, appendix 6.2.34, page 88). Predation is likely to be high in this sub-area, maybe foxes is now permanent on Hornfiskrøn. But we also suspect Crane *Grus grus* to be a predator. Footprints of Crane have been recorded in some of the colonies, and cranes have also been sees flying between colony areas and crane nesting areas. *Grus grus* is a designated species of the SPA, but not targeted by the project since it is increasing. There is a pairs of Cranes nesting at Hornfiskrøn and one pair just north off at Kringelrøn. Further pairs are found in a bog area in central part of the main island. Finally human disturbance by tourists and vehicle traffic can have negative impact. Also other species decline in this area.

# Arctic Tern Sterna paradisaea.

An average of 388 pairs were counted, based upon figures from 2013 (454) and 2014 (321).

In the southern/central part of the project area; Als Dyb, Kringelrøn and Hornfiskrøn 105 pairs where found in 13 colonies in 2013, in the same area in the year 1990 there was 409 pairs in 31 colonies. The largest colony in 1990 was 160 pairs and in 2013 it was 44 pairs.

The risk of flooding has been estimated to be high at colonies holding 56 % of the pairs, medium at 24 % of the pairs and low at only 20 % of the pairs. No incidents of flooding during the project have been recorded so far.

Arctic Tern is probably quite affected by climate change as they eat fish species feeding on copepods, also being highly affected by global warming. This is the case further north in artic (reference) but the effect is likely to play a role around Læsø. Our expected result in reaching 800 pairs might med to optimistic, but still maintained.

# Little Tern Sternula albifrons.

The species is stable in its attempt to breed. An average of 23 pairs was located in the western part of the project area. Small just hatched chicks have been observed. A record in early July 2013 of nesting that could be re-nesting due to disturbance at first attempt and only few young in the area indicates low breeding success.

The main breeding area is very sought by the public, people are walking, swimming, just staying at the beach, fishing, spear-fishing, kitesurfing, canoeing, walking the dog etc. but we have no research of the importance of these activities. Action is taken to protect the terns, see action E3.

#### Targeted staging migratory bird species.

As mentioned in the application a spring survey of 2011 (at no cost to the project) is being used as baseline for the two relevant migrating targeted species (*Branta bernicla* and *Limosa lapponica*). At the same date of the spring survey 622 individuals of *Limosa lapponica* were recorded at the island but outside the SPA, making the potential numbers for feeding inside the SPA 3442 individuals.

During survey for breeding terns and avocet in May 2014 it was discovered that the targeted staging species were still in the area and an additional spring count took place. Results of this spring surveys is collected in a table (see figure D1b in appendix 6.2.34, page 88).

The autumn survey is planned to take place in August, October and November. As the project started in October 2012 the first autumn survey was to take place in 2013, but due to logistic and weather condition we failed in doing this autumn survey. For the most important sub area, the game reserve in eastern part we have counts every month during the seasons 1994 to 2001 and 2008 to 2010 (se figure D1c in appendix 6.2.34, page 88) why these data can help setting the baseline.

As Acocet *Recurvirostra avosetta* since 31<sup>st</sup> December 2012 is no longer part of the designation of the SPA as staging (but still as breeding), it is not necessary to count this species in August (http://nst.dk/media/nst/68126/Fugl-Udpgr-2012-31Dec.pdf).

The Danish Centre for Environment and Energy, Aarhus University (DCE) have published a report of staging birds in the Danish Game Reserves 1994- 2000 (Clausen et. Al 2013). The report concludes that the Game Reserve "Bovet–Knotten" at Læsø is the 2<sup>nd</sup> most important game reserve in Denmark due to staging Dark-bellied Brant Goose *Branta bernicla* and the 4<sup>th</sup> most important to both staging Curlew *Numenius arquata* and Dunlin *Calidris alpina*. Bovet-Knotten game reserve is situated in the eastern part of the project area.

# Targeted habitats

The application was based on mapping data from 2005 collected by NOVANA, but now mapping data from 2011 is quality assured and available. Some of the targeted habitats have changed significantly in area, this is assumable more likely caused be a better understanding or determination of the habitats rather than changes at the sites.

To measure the results of the enlarged habitats at the end of the project all managed areas will be valued why there will be both a total areas of habitats (the national mapping of 2017, and the increased areas of each habitat enlarged by the project.

Regarding the monitoring results of action C1, C2, C3, C4, C5, C7, C8 and C11 the 2012 aerial photos will be used as base line.

# Methodology.

Targeted breeding bird species is monitored by mapping of pairs and colonies. The initial mapping from 2013 and 2014 will be used as a baseline and the final mapping in 2016 and 2017 as the result of the project.

The monitoring is coordinated with the Danish National Monitoring Program of Water and Nature "NOVANA", the bird part is limited and some species like *Sterna paradisaea* is only monitored every 6 year, others every 2<sup>nd</sup> year. Data from NOVANA is included. Staging bird numbers are monitored in 8 subareas.

The habitats will at all times be monitored using methods describes by the national monitoring program NOVANA.

#### Planned output and schedule.

Species

Monitoring of targeted breeding bird species is planned to be repeated in May/June 2016 and 2017.

Targeted staging migrating bird species will be mapped in autumn 2015 and 2016 and spring 2017 as a minimum.

#### Habitats

The project will visit all areas with action that could possible change the individual habitats. Likely from a habitat not at the Annex 1 list to one of the targeted habitats.

Furthermore the project will monitor Japanese rose and Cord grass ongoing throughout the project period. For 2014 monitoring figures re Cord grass, see appendix 6.2.15, page 87.

The project will additionally use mapping data of the national monitoring program NOVANA. The next 6<sup>th</sup> yearly mapping will take place in the final year of the project, 2017

#### Indicators used.

The monitoring use mainly direct counts numbers of pairs, either by counting numbers of birds in a colony, counting nests or monitoring adult birds alert screams depending of the species.

Indicators of parameters that have impact of the population, colony size and numbers, risk of flooding (% of both total population and of numbers of colonies), predation risk (numbers of crows at time of counts, distance to trees. Suitable area of *Calidris alpina schnizii* will use indicators of Fredshavn *et al* (2014). Likewise with *Tringa glareola* in the two areas restored.

#### Modifications.

Only minor modification as we have stopped monitoring Acocet *Recurvirostra avosetta* in August due to the specie (since 31<sup>st</sup> December 2012 is) no longer being part of the designation of the SPA as staging.

#### Problem / drawbacks.

The monitoring program will be delivered as targeted.

#### Weather

Weather data is not logged as part of the project.

Early April 2013 was extraordinary cold with hard and dry frost in connection with strong northeastern wind. This had a severe impact on the evergreen plants especially dwarf shrubs species of the family *Ericacea* and a loss of leaves and also plant mortality /dieback was seen. Heather *Calluna vulgaris*, which is a characteristic species in some of the targeted habitats, still suffers from this.

The winter off 2013-2014 was fairly warm and with very little frost and the spring came early followed by a dry and long summer.

There was a lack of sever summer storms with high water level and over flooding of nests is believed not to have had significant importance of breeding pairs or breeding success. Monitoring the breeding birds was conducted in suitable weather condition. The planned autumn counts of staging birds had to be canceled partly due to bad weather condition.

# Complementary action outside LIFE.

A project involving voluntary monitoring of staging birds in the Game Reserve part of the project area is in progress. It is a type of citizen science project. Through the winter 2014/15, training of NGO stakeholders like hunters and fishermen will take place. Cost of the project will be covered by the DNA game reserve budget. The project will give more data on the targeted staging migratory bird species; Dark-bellied Brant Goose *Branta bernicla bernicla* and Dunlin *Calidris alpina* since the game reserve is important to both species. The 3<sup>th</sup> targeted staging bird species; Bar-tailed Godwit *Limosa lapponica* only use the game reserve is small numbers.

Further action to reduce possible human disturbance apart from the signs erected by action E3 will be taken in the general work in connection with the Danish Natura-2000

plans. At a meeting with the advisory group of the game reserve January 2015 we will discuss possible action. This work is a follow up on a report regarding disturbance in Natura-2000 areas (Therkildsen et al 2013). The report mentions possible disturbance to two of the targeted species; *Recurvirostra avosetta* and *Sternula albifrons*.

# **Continuation following LIFE Laesoe.**

The Danish National Monitoring Program of Water and Nature "NOVANA" will continue to monitor the breeding designated bird species of SPA DKOOFX345. The general concept in NOVANA is that species in favorable condition will be monitored extensively (distribution in  $10 \times 10$  km squares) and birds in less favorable condition will be monitored also be population size every  $2^{nd}$  or  $3^{rd}$  year. The program can be unfolded if a bird species in favorable condition changes status to unfavorable.

At present there is no know program to monitor staging birds in the area following LIFE. Habitats are mapped and classified in the NOVANA-program every 6<sup>th</sup> year. Additional monitoring with data from more parameters is carried out every 3<sup>rd</sup> year at 2 stations in SAC N9 and 2 stations in SAC N10.

#### 4.1.17 D2 Assessment of the socioeconomic impact

(by Læsø Municipality)

The project is now 2 years old, and in good progress. The effect mentioned in the Grant Agreement, is now identified, and will be enhanced in the years to come. Some comments could be:

## Municipality of Læsø.

The population is currently 1,803 people on Læsø. Læsø Municipality and other rural areas continue to suffer from a declining population. Læsø is working on business development and planning in order to create the best conditions for businesses on the island. LM struggles to retain, develop and create the basis and facilities for new businesses. Læsø Municipality successfully cooperates with the Trade and Industry Council Nord in Frederikshavn, which ensures a professional business advisory and consulting service for the companies on Læsø.

#### Direct jobs.

Three Employees from LM have since the end of February 2013 been assigned to work on the Life project. This implies that that the three employees being engaged in the nature conservation works were assigned/employed approx. 1 month before LM usually rehire employees. LM hopes that the project can contribute to the creation of more permanent (full-year employment) jobs in the future.

Furthermore 5 employees from DNA – all local taxpayers – have been partly seconded to the project as from the beginning of 2013.

The farmer herding the livestock purchased by the project has employed 1 person, also settling at the island during 2014.

In addition approx. 250 cattle plus 50 sheep has been added to the island livestock numbers from the very start of the project, which has meant extra work for local farmers as well as DNA employees involved in caring for animals pending establishment of a Landowners Association. The livestock is in good condition and the total numbers of cattle and sheep is now numbering 358 and 50. The lambs are not included in this number.

Also, local contractors have been taken into the project, primarily regarding the establishment of enclosures/fencing and clearing of wooded areas. This has partly meant that people who formerly were unemployed came into work, although only on temporary basis.

# **Indirect jobs**

There is a great interest in the project which can be seen from the many guests visiting the island. LM has evidence which shows that the project has a positive effect on the tourism industry. Nature conservation and the large number of livestock on Læsø are attractive fields of interest to many of the island's guests, and generate a further possibility to get an even better experience on the island - experiences which directly support and underpin growth within local tourism. Presently we work on the possibility of establishing a model that can provide nature related dissemination on the island.

The increasing number of animals opens up for a possibility for production of quality food on Læsø. The potential is recognized and the Trade and Industry Council North is

aware of the opportunities and includes the subject in their dialogue with companies and individuals on Læsø. Also, the production of honey is an important industry on Læsø and the project will directly have a positive impact on this industry in years to come.

The haulage of animals to Læsø has meant an increase in tonnage and freight on the Læsø ferry and furthermore the project has implied an increasing number of visitors to Læsø, visitors who in one way or another are working for / taking part in the project.

The animals have also led to greater cooperation between the LM / DNA and the local farmers. Miscellaneous agreements have been made for wintering, production of fodder etc

#### Other issues

The work for establishing a landowners association was completed the 6<sup>th</sup> August 2013. It is obvious that the landowners' association has contributed considerably to the ongoing of the project, as well as the association has contributed notably to establishing a general consensus on the project through a solid ownership towards the project and through a mediator's role.

Presently Læsø has no veterinarian. But there is an ongoing dialogue with interested veterinarians from the mainland, regarding the possibility of setting up a business on Læsø. The project's many animals support this aim and many citizens on the island are hoping that the project can promote the goal that once again a veterinarian is to be settled on Læsø.

The Local Council of Læsø and the Trade and Industry Council North have since the beginning of the project regularly discussed the possibilities of providing the necessary slaughterhouse facilities with sufficient capacity for the local livestock on the island. This subject is also present amongst the interest of companies on Læsø and therefore strongly supported by LM.

Tables, photographs etc.

# 4.2 Dissemination actions

# 4.2.1 Objectives

The project shall establish a website, publish a newsletter, provide information tables, publish a leaflet, establish a Local Community Group and offer public tours during the initial phase of its lifetime. At project end also a Layman's report, a report on control of IAS and a final seminar must be delivered.

The overall objectives being too promote the project including the background and create understanding and acceptance for the project. Furthermore the above sources of information must convey the findings / experiences of the project.

Beside the above mentioned sources of information a number of meetings of informative nature has been held, the local press at Læsø has been used as frequent as possible as has other specialized publications.

Presently a public meeting is in the planning – the agenda being partly to inform regarding the LIFE project and partly to explain and underline the nature of the Landowners Association, simply enabling the community to clearly distinguish between the two. The meeting will also inform regarding the new CAP and how this will influence individual and the association.

#### 4.2.2 E1 Establish Website

Due to changes amongst LM personnel the responsibility of establishing the website was decided to be moved from LM to DNA and the site works of the DNA main site as well as LM main site. It is also DNA who is responsible for the maintenance of the site.

Site in Danish:

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

Site in English (temporary):

http://eng.naturstyrelsen.dk/topics/nature/life-laesoe/

From the very start the site maintained high quality, worked extremely well, was constantly updated and was very well visited and perceived. Especially the interactive map did show very useful.

An outstanding issue has been to create a site in English.

The initial success unfortunately did not persist as DNA, VSY from the start of 2014 no longer where allowed to maintain the layout of the site, as this was now to be executed centrally by DNA head office also introducing new software and concept.

In spite of ongoing protests from the project partners this in reality meant that LIFE Læsø has been without an updated and functional website since the spring of 2014 and still are at time of writing.

We are now promised that a new website will be up running as from 11<sup>th</sup> December 2014 at which time the project also will be allowed to propose amendment / changes to the at head office decided layout plus forward new etc. to the site. Following this an English version will be completed a.s.a.p.

The project partners – and LM expressly not being at fault – can only excuse the present situation, but have had to accept being without any influence at all.

In spite of the above the project must maintain the view that the site will be completely up running again as from late December 2014 and will be maintained / updated from then on.

Apart from the obvious problems encountered lately the partners have received only very positive feedback regarding the website and trust this again will be the case. The objective should therefore be fully meet.

See appendix 6.2.23, page 87 for analyses related to visits to the website.

#### 4.2.3 E2 Newsletter

As stated in the Inception report the newsletter was set to be started late 2012 and published quarterly it was at that time decided to delay its launch and of two reasons.

Firstly the press coverage had been quite substantial locally and secondly because it was felt that action A1, establishment of the landowners association – considered as the very key component of the project – should be in place prior. Until then the website and press releases had to function as sources of information.

When the Inception report was delivered the newsletter was expected to start following the 6th August 2013 – the date of the founding General Meeting of the LA.

Since then newsletters has been published to members of the association and on the website – the latter although being under influence of the problems mentioned above.

The present situation is that the Landowners Association in close cooperation with the project will publish newsletter at least quarterly and more frequent if required.

The initial objective will be met.

Example newsletter and mailing list enclosed in appendix 6.2.29, page 88.

#### 4.2.4 E3 Provision of information tables

As stated in the Inception report this action was delayed to fit in with the replacement of other information tables at DNA sites on Læsø planned with effect from spring 2014.

Unfortunately and due to high workloads at the DNA office this again had to be postponed.

Again it must be stated that this is the full responsibility of the coordinating beneficiary – LM expressly not being at fault.

A minor deviation from what was agreed in the GA is introduced and hopefully accepted by the commission. Originally 17 signs were planned, but now only 14 are to be erected as is was felt that 2 sign were located to close to others and 1 being located at a site not attracting visitors.

The overall layout is that 3 signs are produced in 700 X 990 mm, while 11 are in A2 and 1 in A3. The thinking is that the 3 large signs are placed at the most important sites of visit and contains a general introduction to the project, while the 11 other signs have a text related to the specific area both in terms of area description and planned actions in the vicinity. The A3 sign is directly linked to the protection of Little tern at Stokken and will be used on the island during the breeding season.

All signs are fitted with QR code linking to the website and QR codes linking to an English and German edition of the leaflet – see below.

All signs are now produced and will be erected during the latter part of December 2014 or in January 2015, why all objectives are met.

The individual sign stands decided upon by the partners are the standard DNA stand. These have been purchased from DNA as representing good value for money also taking design and surrounding signposting into consideration.

It is the partners hope that the commission will accept this.

Example all signs and stand design, see appendix 6.2.17 to 6.2.20, page 87.

# 4.2.5 E4 A leaflet explaining the project

Also this action was initially delayed partly due to the necessity to fit in with action E3, but primarily due to high workloads at the DNA office.

Again it must be stated that this is the full responsibility of the coordinating beneficiary – LM expressly not being at fault.

The leaflet provides information regarding the project, the target habitat types and species. Unfortunately the leaflet could not accommodate the – in the GA – mentioned "code best of practise", why the project will promote this in the annual tourist publication handed out at the ferry and tourist office. Furthermore the theme will be mentioned at parking areas throughout the project area and in the local newspaper.

The leaflet is now produced in a Danish, English and German edition. Initially printed in 1000, 500 and 500 copies and will be available via LM, DNA and the tourist office at Læsø.

As mentioned above QR codes will link from the individual signs to the leaflet.

Compared to the assumption mentioned in the GA it is the partners strong believe that a substantial number of visitors will access the leaflet from the website, why the originally estimated yearly consumption of 4.500 might not be needed. The leaflet will of course be produced in accordance with needs.

The project objectives are met.

Leaflets are attached in appendix 6.2.22, page 87.

#### 4.2.6 E5 Visitor facilities

This action is not calculated in the project as all facilities are in place, as well as maintained and serviced in existing budgets of the project partners. Information tables – E3 – will be erected at these points of access.

## 4.2.7 E6 Public tours

In total 9 public tours has be conducted, and announced in the local newspaper and at the tourist office, and coinciding with public holidays, being winter (February), Easter, summer (July/August) and autumn (October).

Related to this action changes amongst LM personnel have led to primarily DNA staff having conducting these tours so far, but this is planned to change as from 2015, where both partners will arrange tours.

Running alongside the partners tours the Landowners association did announce two tours in august 2014. Quite surprisingly only 2 attended the first tour and none showed up at the second.

The project – represented by both partners – also participated in "Madens dag" 13<sup>th</sup> September 2014 (food's day) being an early event drawing a substantial number of visitors. Both the LIFE project and the Landowners Association were promoted during the day – which saw a substantial interest.

Furthermore DNA, VSY used the project as the annually educational day for all staff the 4<sup>th</sup> September 2014. The project, the actions and the preliminary results were presented and indeed discussed.

LM, DNA and the Landowners Association will coordinate and offer public tours from 2015 onwards.

So far the projects objectives have not been fully meet also because of a low turnout to the tours offered. This has been surprising and not considered the normal experience at Læsø. The partners believe the action is very much needed, of interest to the locals as well as tourist and will attract participants in the future, why objectives are assumed being met.

# 4.2.8 E7 Layman's report

N/A

# 4.2.9 E8 Local community Group

At the first invited meeting 5th November 2012 a call for participant / members to the Local Community Group was made, only leading to one group (the Beekeepers Association) announcing an interest.

Following that meeting, several and continued direct contacts and appeals have been made to a number of NGO's, organisations and private individuals leading to the group being established late 2013.

It has been a surprise to experience the local attitude towards this action - as well as other actions – and the obvious contradiction in the demand for information and involvement amongst the islanders, but when invited, none are coming forward.

Anyway – the group are now in place and consist of 5 persons as mentioned above under management.

The setup is that he Community Group will contact the project partners as and when need occurs, more than the project informing the group. Therefore it is also the group deciding on meetings, agenda and so forth. The project is quite happy regarding this construction, as it is the islanders own decision, but would clearly have preferred a tighter setup as to secure the flow of information – which is very much needed both ways.

In spite of this the Local Community Group has been very helpful especially regarding discussing establishment of enclosures and the views of different user groups. Also combating IAS is very much a theme amongst the group.

It is very much the projects hope that the group can be further expanded, thereby reflecting a wider part of the community.

Regarding obtaining the objectives the action has indeed delivered a group, but not quite what the project manager had hoped for so far. It can therefore be stated that the Community Group is in place as an instrument and hopefully will develop into a beneficial platform for exchanging views and experiences within the timespan of the project.

In total 2 meetings has been held plus 5 site meetings discussing specific issues related to fencing, public access etc.

Member – see above under management – page 11.

#### 4.2.10 E9 Report on control of invasive species

To be delivered by end of project.

#### 4.2.11 E10 Final seminar

N/A

#### 4.2.12 List of dissemination deliverables:

Mentioned directly under above headings, apart from;

- The LIFE and Natura 2000 logo are used on documents and durable goods.
- For audio-visual products by action, see appendix 6.3.4, page 91 only memory stick
- Photographs, by actions, see appendix 6.3.2 only on memory stick
- Press cuttings overview as per date published, see appendix 6.2.31, page 88.
- Social Media not used. None of the project partners have the personnel resources' to use social media.

# 4.3 Evaluation of Project Implemention

#### 4.3.1 A1 Formation of a landowners association

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 a ownership to the action and also the LIFE projects as such. Evaluating the process the partners cannot see any other way which would have delivered better or more efficiently. It must also be stressed that forcing the delivery of the action could only have been seen as inappropriate by the community.

# **Cost-efficiency**

Costs related to time invested by the project partners are seen as needed and therefore more than justified. Cost related to legal and financial advice ended up extremely costly – and seen following – the services required should have been by far more precisely described.

The situation was, however, quite straight forward from the start, but somehow escalated "out of control" when Inland Revenue entered the scene. As described above, this happened that late during the process that the partners and the work group simply had to finish the job, no matter the cost. Otherwise the entire action as well as project was at risk due to a very likely negative reaction in the community.

The costs related to agricultural advisors regarding the transfer of subsidies from individual to the association and the initial establishment of the association as applicant under the CAP was effective and expenditure considered great value for money.

	A1 Formation of a Landowners association
Targeted in the GA	Association established by 31 <sup>st</sup> January 2013.
Achieved of targeted	Association established by 6 <sup>th</sup> August 2013 – starting 1 <sup>st</sup> January
	2014
Evaluation	Extremely long process, but safeguarding the views of the local
	community.
Achieved instantly	Legal establishment / statutes of association.
Achieved after time	All owners to become members as targeted in the GA – thereby
	securing after LIFE.

Amendment leading to	"Enforced" by Inland Revenue and leading to lengthy discussions
	and extreme build up in expenditure.
Objectives meet	Delivered as outlined in GA.

# 4.3.2 A2 Permission to carry out conservation actions

This action is ongoing and co-ordinated between LM, DNA and the individual authorities in question.

The system agreed regarding forwarding applications as "frame-application" is working extremely well and are also received very well by all consultation parties. Furthermore the Framework Agreement established with Danish Agency for Culture is – as the first ever established – very helpful.

# **Cost-efficiency**

Apart from managerial time and travelling no direct costs are involved. The action has initially quite costly, which is natural.

	A2 Permission to carry out conservation actions
Targeted in the GA	Permission as and when needed.
Achieved of targeted	Delivered ongoing.
Evaluation	Working very well in general – only a very few applications has
	been delayed.
Achieved instantly	N/A.
Achieved after time	N/A.
Amendment leading to	N/A.
Objectives meet	Yes, the action progressing well and still ongoing.

# 4.3.3 A3 Hydrological investigation

Apart from the delay imposed due to heavy workload amongst staff at Frederikshavn Municipality the survey work has been carried out to the projects full satisfaction. The survey included preliminary desk studies following by thorough field trips of the entire area all ending up in a detailed report.

# **Cost-efficiency**

The survey has not been invoiced as yet, but is agreed carried out within a maximum of 20,000.00 Dkr. – which is below the budgeted figure.

	A3 Hydrological investigation
Targeted in the GA	A report providing basis for needs and conservation measures.
Achieved of targeted	Provided and achieved.
Evaluation	Executed as described and tendered.
Achieved instantly	The basis for carrying out action C11.
Achieved after time	N/A.
Amendment leading to	No amendment.
Objectives meet	Yes – as per GA.

# 4.3.4 C1 Clearing of trees and shrub and C2 clearing of reeds and emerging trees and scrub

# Methodology

We refer to method 1, 2 or 3 mentioned above. Presently the project prefers manually felling as it secures low stumps thus preventing the need for very expensive stump grinding / mulching operations. Low stumps are extremely important as is will secure future management of the area with cheap rotary or flair mulchers if livestock is unable to graze regrowth fully. The latter is quite often the situation following felling of Silver birch - Betula pendula, but not Downy birch - Betula pubescens.

Felling by feller / forwarder is the preferred method directly on archaeological sites as the timber cut can be lifted from the site without disturbing any remains due to the reach of the crane.

Other considerations regarding choice of method is in reality a question about availability and climatic conditions although the use of feller / forwarder often is seen as the preferred option as it clears the area completely in one working cycle leaving the area available for any future management task.

Regarding clearing younger stands / emerging trees and scrub on sites without historic remains the absolute preferred method is using a tractor and rear mounted rotary mulcher. The tractor must obviously be fitted with wide tyres and the work ideally carried out in frosty weather or during dry summers. It is an advantage to maintain a high cut – approx. 30-40 cm – as this will result in the stems of woody species being seriously split, causing maximum stressing and thereby less regrowth.

The tractor and rear mounted mulcher is by far the most economical and providing the best result if used during ideal weather conditions.

To maintain momentum during the extremely wet winter of 2013/2014 a piste grooming machine fitted with a flair mulchers was used. The machine is able to work in extremely wet environment but as it is very expensive to operate only acceptable if momentum must be maintained or the task in question requires extremely low ground pressure.

#### **Cost-efficiency**

The cost are very tree-size depending. In general clear-felling using feller / forwarder is the most cost-efficiency, but as DBH increase manually felling become more and more competitive. If the area must be managed using mulcher following, manual felling must e applied.

When clearing reeds and emerging trees up to approx. 8 cm the most cost-efficiency method is using a tractor fitted with a rotary mulcher. This although depending of terrain conditions, carrying capacity and habitat requirements as these might enforce the use of other equipment.

#### Results

	C1 Clearing of trees and scrub
Targeted in the GA	365.91 hectare
Achieved of targeted	131.71 hectare
Evaluation	Preferred method is by feller / forwarder followed by chipping. Clear the area in one working cycle. If future regrowth must be managed mechanically, consider manual felling as to secure low stumps.
Achieved instantly	Area cleared and seed sources removed. Can be enclosed and grazed. Water consumption decreased. Light demanding habitats benefitting. Predation pressure decreased. Can be freely managed

	using livestock, mulchers, fire etc.
Achieved after time	Enhance and expand the targeted habitats as well as conditions for
	targeted species.
Amendment leading to	Extended use of manual felling thereby avoiding the need to stump
	grind following and heavy not budgeted expenditure.
	Own staff, LM and DNA, used for manual felling as contractors
	were not, or only partly, available at the island. This enabled the
	project to maintain pace and deliver the action according to overall
	schedule. If not amended, the project would not have been able to
	performed according to schedule.
Objectives meet	Clearly – the action progressing well

	C2 Clearing of reeds and emerging trees and scrub
Targeted in the GA	239.83 hectare
Achieved of targeted	471.77 hectare
Evaluation	If dry / frosty conditions use tractor with rotary mulcher. Cheap and effective.
	If wet conditions use piste grooming machine with flair mulcher.  Very expensive but capable of going anywhere.
	Rotary mulcher preferred over flair mulcher.
	Maintain high cut of approx. 30 – 40 cm.
	No mechanical methods to be introduced on historic remains.
	Must be felled using strimmers and left to decompose or removed,
	perhaps burned.
Achieved instantly	Area cleared and seed sources removed. Can be enclosed and
	grazed. Water consumption decreased. Light demanding habitats
	benefitting. Predation pressure decreased. Can be freely managed using livestock, mulchers, fire etc.
Achieved after time	Enhance and expand the targeted habitats as well as conditions for targeted species.
Amendment leading to	The use of piste grooming machine fitting with mulcher meant that
	momentum could be maintained in spite of weather conditions. If
	not amended the project would have been behind schedule.
Objectives meet	Clearly – the action progressing well

The targeted acreage under the 2 action are still maintained at 605.74 hectare and the budget figure at present remaining at the in the GA agreed figures, being  $424,899 \in$ . As mentioned the project will apply for an amendment during the second half of the project period and these action will be involved.

# 4.3.5 C3 Clearing of non native woody species

N/A.

# 4.3.6 C4 Clearing of Japanese rose

Mowing using flair or rotary mulchers supported by strimming has been used initially during the project but will change as from season 2015 to more or less exclusively using the seedling lifter. Mowing and preferred by a flair mulcher is effective and will combat the specie if used repeatedly throughout the growing season. The mowing must take place approx. once a fortnight.

Combating the specie by grazing with sheep – gute or spelsay – is successful and will combat the specie.

Whether thermal methods will be tested is a question regarding the success of the seedling lifter.

## **Cost-efficiency**

Mowing is a cheap method but ending up quite expensive as it must be repeated during the growing season and conducted over at least 3-4 years.

The same goes for strimming in less accessible areas. It's reasonable cheap, but becomes very expensive before the desired result is achieved.

Regarding the use of the seedling lifter the project have not had the chance to gather enough experiences. It is a very simple tool and only requires an ordinary agricultural tractor, furthermore it is expended that only one treatment is needed initially followed by either grazing, manually removal and / or thermal treatment of regrowth. It is therefore expected to be by far more cost-efficient than repeated mowing.

	C4 Clearing of Japanese rose
Targeted in the GA	23.91 hectare
Achieved of targeted	All areas are under treatment
Evaluation	Preferred method is by seedling lifter followed by grazing,
	manually removal and / or thermal treatment of regrowth.
Achieved instantly	Requires repeated treatment, but any treatment will dramatically
	reduce the establishment of rosehips and thereby seed.
Achieved after time	Following 3-4 years of repeated treatment the action will enhance
	and expand the targeted habitats as well as conditions for targeted
	species.
Amendment leading to	Overall shift from mowing / thermal towards the use of seedling
	lifter supported by digging out / thermal methods and grazing will
	lead to better and cheaper results.
Objectives meet	Objectives set to being met by end of project in 2017. Is - in spite
	of initial problems – now progressing well.

# 4.3.7 C5 Clearing of Cord grass

Initial treatment tests have been conducted during 2013 and multilateral trials established during 2014 enabling the project to progress the action as from 2015 on informed and structured basis.

The main method will be removal of all foliage plus top soil layer either by the use of excavators or manually digging out. This first treatment might be followed by repeated use or manually digging out or thermal methods.

#### **Cost-efficiency**

Presently the project is very doubtful regarding the cost, but if the use of an excavator as the main tool is showing successful, this will imply a reasonable low cost. Two problems then arise; to which degree must the initial treatment be followed by a manual action and how much has cord grass spread compared to the initial survey in 2010 – the survey in 2014 indicates a doubling – and will continue to spread while the action is in progress.

	C5 Clearing of Cord grass
Targeted in the GA	14.97 hectare (2014 re-surveyed to 22.95)
Achieved of targeted	The areas under treatment from 2015
Evaluation	Preferred method is by digging out with excavator, manually
	removal with shovel and / or thermal treatment and grazing of

	regrowth.
Achieved instantly	Might require repeated treatment, but any treatment will
	dramatically reduce the establishment of inflorescences and
	thereby seed plus rhizomes.
Achieved after time	Following 1-3 years of repeated treatment the action will enhance
	and expand the targeted habitats as well as conditions for targeted
	species.
Amendment leading to	Overall shift from mowing / thermal methods towards the use of
	excavator to dig out / manually digging out / thermal methods and
	grazing will lead to better and cheaper results.
Objectives meet	Objectives set to being met by end of project in 2017. Is - in spite
	of initial problems – now progressing well.

# 4.3.8 C6 Establishment of cattle and sheep herds

The project decided to focus on purchasing a hardy breed as this was needed to graze the vast majority of habitats in the project area. This due to the low fertility and productivity of these areas combined with the fact that private stockholder would normally prefer heavier breed, thereby require better grazing. This is also very much the situation at present.

Furthermore focus was upon buying primarily pregnant cows as to boost the herd establishment and only pure breeds to secure the asset of the flock.

A major problem related to establishing a flock this size from different sources is the fact that cows have been to bull at different times throughout the year, resulting in irregular calving.

This implies holding cows back as to secure future calving within the same period in the entire herd.

Due to early arrivals caused by animal welfare issues and initial challenges establishing the Landowners Association which both meant a need to purchase fodder and pay for shepherding the action progressed as originally planned.

Regarding sheep this quite surprisingly turned out extremely challenging as nobody rely had the skill nor the interest in looking after them, why the partners initially had to buy fodder and help regarding shepherding.

The action is delivered and the partners are happy with the end result.

#### Cost-efficiency

Consideration regarding other – and cheaper – breeds or the possibility of transporting, e.g. steers and heifers to the island for the summer grazings might have shown less expensive to the project.

This would although have been contra-productive from a socio-economic point of view and also against the preference in the community.

As for the purchase of sheep the project would have been better of delaying the purchase, but then, we wouldn't have had the benefits of the grazing delivered.

	C6 Establishment of cattle and sheep herds
Targeted in the GA	200 cows + 6 bull initially
	150 sheep + 5 rams initially
Achieved of targeted	167 cows and heifers + 4 bulls initially
	51 ewes + 1 ram initially
Evaluation	If at all possible the ideal situation would have been to purchase
	cows with calves at side and delivered to the island by June. This is

of course difficult to source and would have implied a dramatic
delay in building up the herd.
A substantial herd of mixed age from the offset. Presence of old
cows adding the advantage of experience concerning what and
how to utilize the grazing (they act as "aunts" for the calves).
Building us the herd as quick as possible boosts the effects on
targeted habitats as well as conditions for targeted species.
The objective relates to building up the herds will be achieved over
time as the herd becomes one amalgamated unit and not
individual herds.
The generated effect of the herds – cows and sheep – will show
more and more both in terms of acreage covered and direct effect
on targeted habitats as well as targeted species.
In reality no amendments has been introduced, but imposed on
the project as part of challenges arisen and decisions made as to
secure the implementation of the action.
Regarding cattle the objectives has been met and regarding sheep
hopefully will be met by end of the project in 2017, although
probably not as estimated.

# 4.3.9 C7 Creating enclosures by fencing

Fencing have progressed according to targets and as set out in the GA apart from being restricted by only a few contractors being available for the project, resulting in also having to employ staff from LM and DNA in this action.

With the project now being in a more stable phase, the execution of the individual, but naturally coherent, actions should now be possible to plan better. This hopefully also implying being able to attract contractors to the island.

There is still a challenge in working towards an ideal financial and technical solution erecting fences, when not all landowners in a specific area are in favour of joining the project. This will hopefully improve ongoing.

# **Cost-efficiency**

Staff from both LM and DNA joining the action are very skilled fencers, know the ground and therefore cost-effective.

The situation with only limited fencing contractors being available might influence the cost, both this has not been the impression of the partners. The local fencer has been contracted to work on an hourly rate as is indeed considered competitive and effective.

	C7 Creating enclosures by fencing
Targeted in the GA	1,712.15 hectare new enclosures
	1,559.55 hectare enclosure enhanced
Achieved of targeted	429.30 hectare new enclosures
	1,532.56 hectare enclosure partially enhanced
Evaluation	Quality of fencing and the needed pace maintain as LM and DNA staff has been partly seconded to the action. Partners convinced regarding the provision of value for money in spite of the shortage of contractors.
Achieved instantly	A substantial part of the old enclosures has been enhanced, some only temporarily and the needed new enclosures being erected. All accommodating livestock purchased by the project as well as privately owned, thus affecting targeted habitats as well as the

	conditions for targeted species.
Achieved after time	The objective will be achieved over time as livestock herds builds
	up therefore needing further enclosures.
	The generated effect of the action and C1, C2, C6 will show more
	and more both in terms of acreage covered and direct effect on
	targeted habitats as well as targeted species.
Amendment leading to	No amendments have been introduced, but the project has had to
	adapt to current situation regarding availability of contractors.
Objectives meet	Objectives have been and are met ongoing. This will continue until
	project end.

# 4.3.10 C8 Controlled burning

This is very much a weather depending action. Initially also influenced by the presence of woodlands and / or stack of wood awaiting chipping.

The hope regarding establishing a voluntary group to assist came into being in late 2014 thus creating a by far better chance of covering large areas as from 2015 onwards as and when a window of opportunity arise.

# **Cost-efficiency**

Moorburn only taking small areas in is very time-consuming and therefore extremely expensive. As large areas are now prepared and a voluntary group established the project hold high expectations regarding the effectiveness and therefore also cost in the future.

	C8 Controlled burning
Targeted in the GA	433,98 to 867.96 hectare
Achieved of targeted	56.99 hectare
Evaluation	Staff from LM and DNA is experienced and well equipped. Initial
	moorburn under the project have been limited partly due to
	weather condition and partly due external issues.
	Large areas are now ready as are a voluntary group.
Achieved instantly	The targeted objective is instantly visual although differs related to
	vegetation type. The initial effects on grass will show within the
	following growing season while dwarf bushes will react slower.
	There is an instant effect on biodiversity.
Achieved after time	The objective behind moorburn will be achieved over time also
	influenced by the success of the individual fire.
	The effect rejuvenating dwarf bushes will be apparent after 1-3
	years.
	Both an effect in terms of acreage covered and direct effect on
	targeted habitats as well as targeted species will be apparent over
	the life of the project.
Amendment leading to	No amendments have been introduced, but the project will
	experience a challenge as the action is extremely weather
	depending.
Objectives meet	Objectives have been and will be met ongoing.

#### 4.3.11 C9 Infra-structure

Work covered under this action is only carried out as and when needed.

# **Cost-efficiency**

Again this action is very much influenced by the fact that contractors are available in limited numbers at the island. Therefore work are contracted on an hourly rate and very much depends on mutual understanding and trust.

As mentioned above under C7 above, the work carried out in C9 is indeed considered competitive and effective by the partners.

	C9 Infra-structure
Targeted in the GA	15,960 meter of tracks improved
	3,281 meter of new public footpath
Achieved of targeted	14,389 meter of tracks (partially)
	0 meter of new public footpath
Evaluation	Straight forward contractual work carried out following tender or
	negotiation.
	Public footpath is awaiting discussion with The Protection Board.
Achieved instantly	The objective is achieved instantly re maintenance work.
Achieved after time	N/A
Amendment leading to	N/A
Objectives meet	Objectives have been and will be met ongoing. Issue related to the
	public footpath discussed elsewhere.

# 5.3.12 C10 Control of foxes, mink and hooded crow

The establishment of artificial dens is carried out as described ion GA. All activities related to controlling mink have been carried out in cooperation with another Danish project, thereby imposing no cost so far. Control of hooded crow in reality not started as explained above.

# **Cost-efficiency**

Artificial fox dens are bought as kits and are easily assembled in a excavated trench and the work has been done partly by volunteers.

Controlling mink so far the project has avoided purchasing traps for a budgeted cost of  $\in$  2,115 by joining the national project.

As hooded crow are now proposed controlled partly by own staff the project will experience cost related to wages.

	C10 Control of foxes, mink and hooded crow
Targeted in the GA	20 artificial fox dens
	15 mink traps
	30 traps for hooded crow
Achieved of targeted	20 artificial dens bought – 15 installed
	15 mink traps – delivered for free
	0 traps for hooded crow
Evaluation	Fox dens bought and installed according to plan. Control of mink
	set up effectively as part of national project. Control of hooded
	crow unsuccessful until now due to fear from being fined under
	the CAP.
Achieved instantly	Dens installed and working instantly as are traps for capture of
	mink (instant killing types) and hooded crow (live capture).
	Objectives related to targeted species will show instantly by

	reduced predation.
Achieved after time	A reduction in predators will have an instant as well as long term, if
	the populations are controlled persistently. Targeted species will
	benefit greatly.
Amendment leading to	By joining the national project regarding mink sawing will accour
	but at the same time further expenditure are expected related to
	control of crow due to change in action.
Objectives meet	Objectives have been and will be met ongoing regarding
	controlling predator numbers – hopefully targeted species will
	react accordingly.

# 4.3.12 C11 Restore natural hydrology

Not started at present.

	C11 Restore natural hydrology
Targeted in the GA	10,947 meter of drains filled in
	5 bungs purchased
Achieved of targeted	O meter of drains filled in
	0 bungs purchased
Evaluation	N/A
Achieved instantly	N/A
Achieved after time	N/A
Amendment leading to	N/A
Objectives meet	Not presently – but will be delivered as per GA.

#### 4.3.13 C12 Landowners association

In spite of being extremely time-consuming to establish under A1 and all the work related to managerial daily task the partners are very happy with current status. When evaluating the whole process and all the work during the initial phase of the associations' life, the process itself, as the deliveries, can only been regarded as what was hoped for.

# **Cost-efficiency**

All costs so far are related to time spent by the project manager supporting and thereby facilitate the birth and initial life of the association. This support will continue. It is very difficult to judge whether the work and all the meetings and discussions leading to the present situation could have been achieved for less costs. The focus of the project partners at this point in time is by far more the establishment and initiating success of the association, very much established by the community.

	C12 Landowners association
Targeted in the GA	Long term sustainable managerial regime securing after life
Achieved of targeted	Delivered
Evaluation	Positive process throughout the 1 <sup>st</sup> year of existence
Achieved instantly	Perceived as owned by the community – mutual understanding
Achieved after time	Hopefully all owners within the N-2000 areas becoming members
Amendment leading to	Not really. Progressing as outlined in the GA

Objectives meet	Yes. Regarding memberships although not presently – but the
	partners are convinced will be delivered as per GA before project
	end.

#### 4.3.14 D1 Monitoring of impact on targeted habitats and species

A brief evaluation of the monitoring plan is that the overall set op is appropriate. Surveys of breeding birds in both May and June concentrated on *Calidris alpina schnizii* in June and the rest of the species in May, but it appeared also to be useful to visit areas with terns and avocet in June. Most indicators chosen are possible to measure but it is difficult to select the exact time to measure breeding success of *Sternula albifrons* since the young birds together with their parents can leave the area as soon they can fly.

Monitoring staging migratory birds as a single spring survey seems reliable. We do not yet have experience to evaluate autumn surveys.

# **Cost-efficiency**

The monitoring work is delivered for very limited costs to the project – partly directly by a subcontracted person and partly via national programs.

	D1 Monitoring of impact on targeted habitats and species
Targeted in the GA	Secure successful operation / implementation
Achieved of targeted	On target apart from autumn counts
Evaluation	Progressing well.
Achieved instantly	Yes.
Achieved after time	N/A
Amendment leading to	Objectives being met.
Objectives meet	Yes.

# 4.3.15 D2 Assessment of the socio-economic impact

Læsø Municipality is a small Municipality in a small local community, and has close contact and sense of the communities view and attitudes. Effects are therefore very quickly visible. Furthermore Læsø Municipality maintains quality-assured business monitoring and evaluation through cooperation with the Trade and Industry Council Nord in Frederikshavn Municipality. Læsø Municipality is therefore continuously updated on new developments.

To date Læsø Municipality has seen a positive development, already resulted in new jobs. More specifically, are LM aware of these effects;

- Employment of one additional full-time position to herding cattle, purchased by the Life project.
- An equestrian center on Læsø has expanded considerably, adding further activities and trips both inside and outside the tourist season. All additional activities related to visiting the re-established natura-2000 areas.

Læsø Municipality is very pleased with the synergy created by the Life project, and LM will observe the needs of stakeholders closely as well as ensuring that all advice needed to support the project and related interests will be provided.

# **Cost-efficiency**

Very difficult to address and evaluate at present. If the project develops as assumed and the hoped synergies unfold fully, the community will without doubt benefit greatly – and for a "limited financial investment".

	D2 Assessment of the socio-economic impact
Targeted in the GA	A direct influence
Achieved of targeted	The beginning of precisely that
Evaluation	Primarily carried out by Trade and Industry Council Nord
Achieved instantly	1 direct job and expanded employment amongst contractors and
	business.
Achieved after time	Expected further new jobs
Amendment leading to	N/A
Objectives meet	So far, absolutely.

# 4.3.16 Effectiveness of the dissemination and comment on any major drawbacks

The dissemination of the project started soon after project start with setting up the website and using local newspapers to inform about the project. This was very successful as also reported in the Inception Report.

The use of local newspapers and relevant journals has been and are ongoing and is considered very effective.

The website has experienced a major drawback during 2014, drawback imposed by DNA head office and being out of the project managers as well as the associated partners' control. This can only be regarded as extremely unfortunate, as the website initially worked very well and was constantly updated, only shortage being the English edition. For visits to the website – see 6.2.23, page 87. During 2013 we experienced an average of 601 unique visits per months with a peak at approx. 1,800 dropping down to a 2014 average of 131 per month. For 2013/14 the average has been 350 unique visits per month. The project has been promised by DNA head office, that a new and fully functioning website will be launched during December 2014.

Other drawback has been the delay of producing leaflets and information tables as described and discussed with the Commission as well as Astrale throughout the past year. Both the leaflets and the information tables are now produced and available / erected during December 2014 / early January 2015.

Regarding quarterly newsletters to members of the Landowners Association these has been produced from the outset and are now set to develop into an more readable print. Also the establishment of the Local community Group experienced birth trouble, but the group is now operational although not quite what the project manager had hoped for initially.

In general the project has been flagged very well and furthermore spawned nationwide coverage as a consequence of the visit by the Royal Family to Læsø. This followed later by Ministers and parliamentary committee also being informed during a visit and tour through the project area.

Apart from the obviously unfortunate recent development regarding the website the partners are satisfied with the dissemination seen overall and reflecting the projects actual development.

It should be stressed that the problems related to the website and the delay in delivering other dissemination action have indeed highlighted the project managers focus towards this element and future deliveries

# 4.4 Analysis of long-term benefits

#### 4.4.1 Environmental benefits

Without doubt will the targets set in the GA being met regarding habitats while targets related to targeted species might be by far more difficult to assess presently. This partly due to species needing time to react following changes to individual habitats at the island but more importantly multifarious influences out of the projects control.

It is although clear that the following will impact 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

# 4.4.2 Long-term benefits and sustainability

Outlook regarding all targeted habitat types is very promising, but species by far more difficult to assess as multifaceted relationship interacts.

The main player will be the Landowner's association which is expected to secure a holistic and correct grazing management of the majority of natura-2000 areas at the island. This is assured as the association is broadly accepted as emanating from the community and benefitting both environmental as well as financial interests. Furthermore LM – as responsible authority – and DNA are both represented at the LA board, which should secure striking the correct balance between environmental and financial considerations.

Threats could be lack of community backing to the association and change in the CAP mowing subsidies from nature conservation grazing towards hard core farming – the latter not supposed as a real risk.

The finances needed to secure future management will partly come from the LA – landowners' contribution, subsidies from the CAP, sale of livestock and services plus from both LM and DNA budgets related to nature conservation. The partners strongly believe LA is the very instrument to deliver sustainability after LIFE.

# 4.4.3 Long-term / qualitative economic benefits

As mentioned above the setup established with the LA will provide cost effective nature conservation management as well as business opportunities – within e.g. food production and nature tourism – if managed highly effective / business like.

# 4.4.4 Long-term / qualitative social benefits

The project will lead to further employment within the farming / nature conservation industry and related industries at the island.

The island is also important regarding public health for the community as well as tourist, as there is no pollution from heavy industry and e.g. background nitrogen figures are very

low. Furthermore the pace and lifestyle at the island and the whole appearance ensures health.

# 4.4.5 Continuation of the project actions by the beneficiary or by other stakeholders.

Actions not covered by LA, e.g. C4 and C5, will be continued by LM and DNA.

# 4.4.6 Replicability, demonstration, transferability, cooperation:

Is it very much hoped that the establishment of the LA will demonstrate a possible route regarding sound nature conservation management and not only in small communities – although it's considered more beneficial in such places. Denmark has a strong history regarding cooperatives – which could be "reinvented" and used more widely within EU.

#### 4.4.7 Best Practice lessons, innovation and demonstration value:

- A1. The formation of the association. Established by supporting the local community, thereby creating ownership, directly leading to environmental benefits and strongly linked and interacting with the CAP.
- A2. The framework agreement with the Danish Agency for Culture. The first ever established agreement creating mutual understanding and cost-effective solutions to multi-faceted issues.
- C2 will hopefully develop methods combating Silver birch. As a side-effect of the project it is hoped that methods regarding combating Silver birch seedlings following clearing mature stand will be develop as grazing with livestock in general is inadequate. The method could be stressing by continued mowing or using the seedling lifter.
- C4 in combating Japanese rose by using the seedling lifter migh be the environmental answer to a long existing problem, probably in combination with other simple methods.
- C5 in develop methods to eradicate the specie while creating an understanding for a Danish action plan re Cord grass at higher level in Denmark.
- C6 by purchasing and thereby secure livestock to be used actively from the very outset of a project and by an organisation having its roots in the local community definitely boost the management of natura-2000 sites and thereby biodiversity.
- C8 moorburn as a "reinvented" tool to manage a wide range of light demanding habitats by re-education personnel and voluntary groups. Moorburn if fully restrained is an extremely cost effective managerial tool.
- C12 landowners Association, see also A1. Will create common understanding and goals thereby making financial as well as ecological sense.
- Dealing with many and small cadastral units. Coherent nature conservation management of larger areas is more and more necessary as to obtain biodiversity and connection, but the structure of ownership with many cadastral units is challenging. The establishment of a cooperative is a natural and meaningful route to deliver.

## 4.4.8 Long term indicators of the project success:

**Species** 

Specie	Target	Comments
Dunlin Calidris alpine schinzii	25 pairs breeding	Presently maintained as target
Wood Sandpiper Tringa glareola	Re-colonisation – 2 sites	Presently maintained as target
Artic Tern Sterna paradisaea	800 pairs breeding	Presently maintained as target
Little Tern Sterna albifrons	30 pairs breeding	Presently maintained as target
Avocat Recurvirostra avosetta	250 pairs breeding	Presently maintained as target
Dunlin Calidris alpine alpine	45,000 individuals resting	Presently maintained as target
Bar-tailed godwit  Limosa lapponica	4,000 individuals resting	Presently maintained as target
Dark-bellied brant goose <i>Branta bernicla bernicla</i>	1,500 individuals resting	Presently maintained as target

#### **Habitats**

Habitat	Target	Comments
4010	Ermanded 15 heaters	Presently maintained
Northern atlantic wet heath	Expanded – 15 hectare	as target
4030	Expanded – 35 hectare	Presently maintained
European dry heath	Expanded – 33 nectare	as target
6230*	Expanded – 7-10 hectare	Presently maintained
Species-rich nardus grassland	Expanded – 7-10 neetare	as target
6410	Expanded – 3-5 hectare	Presently maintained
Molinia meadows	Expanded – 3-3 nectare	as target
7230	Expanded – approx. 1 hectare	Presently maintained
Alkaline fens	Expanded – approx. 1 nectare	as target
1330	1507 hectare enhanced	Presently maintained
Atlantic salt meadows	1307 nectare chinaneed	as target
2130*	73 hectare enhanced	Presently maintained
Fixed coastel dunes	73 nectare enhanced	as target
2140*	134 hectare enhanced	Presently maintained
Decalcified fixed dunes	134 nectare enhanced	as target
3110	3 hectare enhanced	Presently maintained
Oligotrophic waters	3 nectare cimaneca	as target
3130	2 hectare enhanced	Presently maintained
Oligotrophic / mesotrophic standing waters	2 nectare enhanced	as target

The partners very much feel that beside the technical implementation of the projects actions – which will deliver the objectives regarding habitats and hopefully also species – the domination factor 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.

## 5 Comments on the financial report

## 5.1 Summary of Costs Incurred

	PROJECT COSTS INCURRED									
	Cost category	Budget according to the grant agreement*	Costs incurred within the project duration	%**						
1.	Personnel	698,868	417,806	59,8						
2.	Travel	29,060	27,831	95,8						
3.	External assistance	740,413	219,761	29,7						
4.	Durables: total <u>non-depreciated</u> cost	378,153	235,401	62,3						
	- Infrastructure subtot.	43,755	18,361	42,0						
	- Equipment sub-tot.	334,398	219,922	66,8						
	- Prototypes sub-tot.	0	0	0						
5.	Consumables	106,585	9,481	8,9						
6.	Other costs	11,409	3,166	27,8						
7.	Overheads	137,514	64,143	46,6						
	TOTAL	2,102,002	980,470	46,6						

<sup>\*)</sup> 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.

#### 5.2 General

As discussed during the initial phase of the project a need to apply for a budget amendment is evident and the partners will request this during the second phase. This issue is mentioned in the Commissions letter dated 26. July 2013 and furthermore directly recommended in the Commission letter dated 30. July 2014 (ENV.E3 LB/TS/ak ARES (2014) 2728173.

This is in particular due to the problems regarding availability of contractor and the use of LM and NNA staff to substitute the "shortage".

Please see the following to illustrate the current status re the 2 % rule.

	102% regel							
Timer for pe	darbejdere	8068,8						
Forbrug for	permanente m	edarbejdere	281485,07					
Forbrug på	andet end pers	sonnel	498521,66					
	%		177,1					

<sup>\*\*)</sup> Calculate the percentages by budget lines: e.g. the % of the budgeted personnel costs that were actually incurred

#### 5.2.1 Personnel

Cost incurred so far due to contractors being replaced with LM / DNA staff primarily regarding action C1, but also action C6 and C7.

#### 5.2.2 Travel

The substantial cost incurred at this point in time is due to not fully appreciating the effect of the rules regarding daily allowances plus the substantial number of ferry trip between Læsø and the mainland. Without doubt this cost category is under budgeted.

#### 5.2.3 External assistance

Will also be influenced by the request for budget amendment – ok at present.

#### 5.2.4 Infrastructure

In accordance with the budget.

## 5.2.5 Equipment

This category will be a part of the budget amendment request. Primarily due to changes regarding methods implied combating Japanese rose and Cord grass and costs related to herding and wintering livestock, initially not budgeted for (the latter totalling 16,738.04 €.).

#### 5.2.6 Consumables

Also this category will be a part of the budget amendment request, partly due to the above mentioned change in methods – from thermal towards mechanical – regarding C4 and C5.

#### 5.2.7 Other costs

No comment at this time.

#### 5.2.8 Overheads

N/A

## 5.3 Accounting system

#### 5.3.1 Brief presentation of the accounting system

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, see below.

#### **5.3.1.1** Project accounts

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 projects related costs are produced via LM.

For code of account etc. see appendix 7.7, page 96.

## 5.3.2 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 PA no invoices are paid by the Municipality of Læsø.

All costs entered into the LIFE+ financial reporting tool are without VAT.

# 5.3.3 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 accountancy. 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 accountancy.

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 end month and then entered into the electronic format. All LM timesheet 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 time
- Lunch time
- Sickness/other absence.

• Absence because of bad weather (may be relevant for some workmen).

## 5.3.4 Brief explanation how it is ensured that invoices

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.

## 5.4 Partnership arrangements

The partnership agreement states that the associated beneficiary – The Municipality of Læsø – 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.

## 5.5 Auditor's report/declaration

No such report/declaration is needed for this midterm-report. Below you find the contact information to project auditors.

Auditor for the Coordinating Beneficiary:

## RIGSREVISIONEN



Audit of State Accounts

St. Kongensgade 45 DK-1264 Copenhagen K. Denmark

Tel: +45 33 92 84 00

e-mail:info@rigsrevisionen.dk

Contacts: Sultan Kayiran, Fuldmægtig: E-mail sk@rigsrevisionen.dk

Thomas Hällström, Fuldmægtig: E-mail th@rigsrevisionen.dk

Auditor for the Associated Beneficiary:

BDO Kommunernes Revision Visionsvej 51 9000 Aallborg.

## 5.6 Summary of costs per action

This table should present an allocation of the costs incurred per action. It should be presented in both paper and Excel format.

Action no.	Short name of action	1. Personnel	2. Travel and subsistence	3. External assistance	4.a Infra- structure	4.b Equip- ment	4.c Prototype	5. Purchase or lease of land	6. Consumables	7. Other costs	TOTAL
A1	Formation of Landowners Association	18711	842	44891	0	0	0	0	13	409	64883
A2	Permission to carry out conservation actions	6272	312	0	0	0	0	0	267	0	6851
А3	Hydrological investigation	674	0	0	0	0	0	0	0	0	674
C1	Clearing of trees and scrub	92602	251	29840	0	0	0	0	26	0	122720
C2	Clearing of reeds and emerging trees and scrub	121809	83	21216	0	2707	0	0	1251	0	147066
сз	Clearing of non native woody species	190	0	0	0	0	0	0	0	0	190
C4	Clearing of Japanese rose	2584	0	13652	0	1846	0	0	0	485	18567
C5	Clearing of cord grass	9634	1960	308	0	8926	0	0	12	2023	22862
C6	Establishment of cattle and sheep herds	37630	593	0	0	190385	0	0	1669	69	230346
С7	Creating enclosures by fencing	26454	0	101012	0	10366	0	0	0	0	137832
C8	Controlled burning	4569	0	0	0	0	0	0	1823	0	6392
С9	Infra-structure	1011	0	2882	15479	0	0	0	0	0	19372
C10	Control of foxes, mink and hooded crow	1697	0	6486	0	5289	0	0	0	0	13472
C11	Restore natural hydrology	42	0	0	0	0	0	0	0	0	42
C12	Landowners Association	15282	0	0	0	0	0	0	9	0	15291
D1	Monitoring of impact on targeted habitats and species	255	0	2356	0	0	0	0	0	0	2611
D2	Assessment of the socieecomomic impact	0	0	0	0	0	0	0	0	0	0
E1	Establish website	7057	0	0	0	0	0	0	0	0	7057
E2	Newsletter	547	0	0	0	0	0	0	0	0	547
E3	Provision of information tables	3795	0	0	0	0	0	0	4007	0	7802
E4	A leaflet explaining the project	958	0	0	0	0	0	0	0	0	958
E5	Visitor facilities	42	0	0	0	0	0	0	0	0	42
E6	Public tours	426	0	0	0	0	0	0	0	0	426
E7	Layman's report	0	0	0	0	0	0	0	0	0	0
E8	Local Community group	1601	0	0	0	0	0	0	1	0	1601
E9	Report on control of invasive species	0	0	0	0	0	0	0	0	0	0

E10	Final seminar	0	0	0	0	0	0	0	0	0	0
F1	Project management	58909	19273	0	0	0	0	0	384	131	78696
F2	Overall project monitoring	397	0	0	0	403	0	0	0	49	849
F3	Networking	4511	4518	0	0	0	0	0	0	0	9029
F4	After LIFE conservation plan	148	0	0	0	0	0	0	0	0	148
Over- heads		29246	1948	15585	1083	15395	0	0	664	222	
	TOTAL	447052	29779	238228	16562	235317	0	0	10144	3388	980470

As mentioned above and discussed during the initial phase of the project a need to apply for a budget amendment is evident and the partners will request this during the second phase.

This is in particular due to the problems regarding availability of contractor and the use of LM and NNA staff to substitute the "shortage".

This is also needed as to show the financial interaction between the partners as the present status is different from the initial presentation of the project budget and indeed the GA.

At the latest meeting with Astrale, the project was asked to deliver a revised FC as part of the Midterm report. The project hope the Commission will accept this to be delayed until an amendment to the budget is requested, as an attempt now will be based upon an incomplete and non-holistic review of the project.

## 5.7 A1 Formation of Landowners Association

As mentioned earlier the action has been extremely time-consuming and by far more costly regarding external advisors than anticipated and budgeted for in the GA.

The association started its legal life as a Co-operative with Limited Liability and was set to start per 1<sup>st</sup> January 2014. An outstanding issue at the time of the FGM was the final acceptance from Inland Revenue regarding the set-up as a co-operative with limited liability, and taxation of the association. Surprisingly, and in spite of initial verbal information provided, this was not granted by Inland Revenue, which meant that we had to restart the discussion regarding legal setup and re-writing of the Articles of Association

The new Articles and new legal setup as a Limited Liability Association was passed by an Extraordinary General Meeting 27th February 2014, following substantial work by the working group as well as legal and accounting advisors. This of course also meant a dramatic increase in cost.

Partly running alongside the above discussions / consideration 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 above mentioned legal questions plus uncertainty re the new Common Agriculture Policy, unfortunately created a difficult working environment. Especially the CAP and rules / subsidies applied to support island communities created a challenge during negotiations and the actual work transferring the Agriculture Schemes from individuals to the Association, the latter task also including agricultural advisors (LandboNord).

It is therefore clear that the action has shown quite challenging and extremely time consuming to deliver and not within the initial budget.

#### 5.7.1 A2 Permission to carry out conservation actions

Accrued cost coming close to budget, indicating that the project might end up slightly above budget at project end.

## 5.7.2 A3 Hydrological investigation

Well below at present.

## 5.7.3 C1 and C2 Clearing of trees and scrub

If these actions are seen as one the project has spent 61 % of the total allocation achieving approx. 56 % of target.

It is although important to mention that C2 had to cover a by far larger area due to woodland establishment following filling in the Grant application, but have in reality delivered all targets set. It is also a fact that clearing the substantial areas with historic remains has been extremely challenging and very costly. These areas are now all completed under C1 and C2. A visual presentation of this issue is presented in appendix 6.2.5, page 87.

It is the partners believe that the budget is sufficient and will enable us to reach target – perhaps in a slightly reduced form regarding covered acreage but not environmentally, as a pragmatic solution to the action must be achieved with landowners also being repellent in their attitude towards clearing woodlands. This issue have been discussed earlier in this report.

As discussed LM / DNA staff has substituted contractors re C1 and vice-versa partly re C2. The latter being a consequence of hiring a piste grooming machine during the wet winter of 2013/14. Also funds have been used buying strimmers and chainsaws, not initially planned.

#### 5.7.4 C3 Clearing of non native woody species

Not started and planned to be executed as from 2015.

#### 5.7.5 C4 Clearing of Japanese rose

Progressing in line with original plan and amendments already mentioned. The purchase of seedling lifters was not an originally budgeted item, but a natural part of project development. This cost is shown under equipment.

#### 5.7.6 C5 Clearing of Cord grass

The project have so far spend approx. 13 % of total budget and in reality delivered nothing regarding combating the specie in the field.

But the project is now – and due to relevant initial work and re-monitoring – ready to start actual work to control and eradicate the specie. The mention Conference was not originally budgeted for, nor were the cost related to cover expenses held by the German student.

In contrast the benefits of the student involvement so far (and ahead) plus the experiences and network obtained from the conference are of immeasurable worth.

One concern is the fact that the 2014 re-monitoring showed an increase in Cord grass infested areas with approx. 60 % since 2010 why doubt regarding the available funds are sufficient to deliver the objectives. Following 2015 this issue can be more accurately addressed.

Purchase of misc. equipment and cost under consumables originally budgeted for is presently not assumed spend, as the methods applied combating the specie will change. This will be part of the discussed budget amendment.

Initially no sums very budgeted under travel and other costs.

## 5.7.7 C6 Establishment of cattle and sheep herds

As already stated this action has shown by far more expensive than initially expected. This is partly due to price developments between the year of application and actual purchase of livestock, but also due to extra cost caused by having to winter and herd the flock until the establishment of the Landowners Association.

This is unfortunate, but in reality just a natural consequence of implementing practical actions, being difficult to assess years ahead of execution.

As stated earlier, LM did contribute by buying 50 cows in late 2012. This cost is not taken into account as yet and as agreed with Astrale.

The substantial consumption shown under personnel is partly due to the project manager spending more time than anticipated but also staff from DNA at Læsø being directly involved in herding.

A further expenditure of 24,133.86 € is awaiting bookkeeping. This is related to a purchase of 20 cows from DNA to the project. This flock has been purchased for a price as set by the Danish Galloway Association, see appendix 7.9, page 96. Similar to the price used for purchasing all other livestock to the project.

#### 5.7.8 C7 Creating enclosures by fencing

So far spend approx. 36 % of budget and delivered approx. 25 % of target regarding new enclosures and approx. 98 % regarding existing.

Again the considerable consumption under personnel is partly due to the project manager spending more time than anticipated, but more importantly the need to employ LM and DNA staff as contractors has been partly unavailable from time to time. The project sees this as a natural adaptation to the situation.

Is has been needed to establish an enclosure for wintering sheep outside the mapped area showed in the GA and out with the Nature2000 area. The cost came to  $\in$  7,387.51 and it is hoped that the commission will accept this as eligible.

### 5.7.9 C8 Controlled burning

Presently spend approx. 5 % of budget and delivered 13 of target.

The action have been slowed down due to weather condition, but primarily due to having to await the completion of C1 and C2 plus the agreement with the Danish Agency for Culture prior to being able to work in larger scale on the southern part of the island.

From 2015 and ahead in principle only weather can cause a problem regarding delivering and furthermore a voluntary group is now formed and ready to help.

#### 5.7.10 C9 Infra-structure

So far spend approx. 40 % of budget and delivered what was needed following implementing other actions.

The project has presently no concerns regarding maintaining budget.

#### 5.7.11 C10 Control of foxes, mink and hooded crow

The mink trapping has shown less expensive due to linking up with a national project, but the crow element might show more expensive that initially budgeted for.

The project has presently no concerns regarding maintaining budget.

## 5.7.12 C11 Restore natural hydrology

Not started as yet – the project has presently no concerns regarding maintaining budget.

#### 5.7.13 C12 Landowners association

This action has so far consumed approx. 47 % of budget and is expected to exceed budget. This is due to the by far more expanded role of the project manager, now also functioning as daily manager for the association.

At present the final expenditure re this action can only be classified as pure guesswork as the association is still very much in its initial phase.

The project hope the commission might consider figures budgeted under travel and consumables to be allocated under personnel.

#### 5.7.14 D1 Monitoring of impact of targeted habitats and species

The project has no concerns regarding maintaining budget.

#### 5.7.15 D2 Assessment of the socio-economic impact

The project has no concerns regarding maintaining budget.

## 5.7.16 E1 Establishment of website on the internet

The project has no concerns regarding maintaining budget within the financial limits agreed, but must obtain control regarding the daily management of the site to deliver overall objectives.

#### 5.7.17 E2 Newsletter

The project has no concerns regarding maintaining budget.

#### 5.7.18 E3 Provision of information tables

The project has no concerns regarding maintaining budget.

As mentioned the project purchased information table stands from a DNA unit producing according to the DNA design manual. This partly as the majority of information tables will be

placed on DNA land and therefore must fit in visually and partly because the stands are considered reasonable priced.

#### 5.7.19 E4 A leaflet explaining the project

There is at present a clear move away from printed hand-outs towards the use of QR codes and smartphones why the initial expectation regarding a fairly high number of printed leaflets is expected reduced.

The project has no concerns regarding maintaining budget.

#### 5.7.20 E5 Visitor facilities

No cost budgeted.

#### 5.7.21 E6 Public tours

The project has no concerns regarding achieving targets.

#### 5.7.22 E7 Layman's Report

N/A

## 5.7.23 E8 Local Community Group

The project has no concerns regarding maintaining budget.

If the projects ends up not spending the allocated budget it could be argued that surplus funds should be moved towards either A1 or C12 as the managerial time spend under these heading are very much in line with the objectives of E8 – taking community views into consideration.

#### 5.7.24 E9 Report on control of invasive species

N/A

#### 5.7.25 E10 Final seminar

N/A

#### 5.7.26 F1 Project management

The actual financial consumption is presently being approx. 39 % of total, which is probably in line with the life of a LIFE project, being "front heavy".

Only minor concern presently, is the build-up in the project managers travel expenses, which is partly due to the project being "front heavy" and partly due the fact that the full consequence of daily allowances', when staying away from office / home, was not fully budgeted for in the GA.

The project has no present concerns regarding maintaining budget.

## 5.7.27 F2 Overall project monitoring and monitoring of project progress

The status is primarily a consequence of the project manager maintaining a "bad habit" registering the majority of his managerial time directly under F1, thereby not fully register al monitoring, evaluation and control properly.

The project will argue that F1 and F2 to some extend should be evaluated in tandem, in special regarding the project managers time.

The project has no concerns regarding maintaining budget.

## 5.7.28 F3 Networking with other projects

The actual financial consumption is presently being approx. 61 % of total.

As the 2015 platform meeting will take place in Denmark, this means reduced cost re traveling and the project has no present concerns regarding maintaining budget.

## 5.7.29 F4 After LIFE conservation plan

N/A

## 6 Annexes

## 6.1 Administrative

- 6.1.1 Articles of Association Landowners Association
- 6.1.2 Agreement regarding C4 and C5 University of Copenhagen
- 6.1.3 List of volunteers moorburn

## 6.2 Technical

- 6.2.1 Map C1
- 6.2.2 Map related to C1 orthophoto map of challenge
- 6.2.3 Map related to C1 detailed map challenge C1
- 6.2.4 Map C2
- 6.2.5 Map showing number of historic sites and C1 / C2
- 6.2.6 Map C7
- 6.2.7 Map C7 enclosure outside N-2000 area
- 6.2.8 Map C8
- 6.2.9 Map C9
- 6.2.10 Map C10
- 6.2.11 Short Danish report re combating Japanese rose using seedling lifter
- 6.2.12 Experiment Report Spartina spp.
- 6.2.13 Monitoring Report Spartina spp.
- 6.2.14 Table Spartina spp. Cover
- 6.2.15 Map showing re-monitoring of Spartina spp. 2014
- 6.2.16 Scientific Program Spartina conference, Rennes 2014
- **6.2.17 A0** info sign
- 6.2.18 A0 info sign stand design
- **6.2.19 A2** info sign
- 6.2.20 Example sign for enclosure with livestock
- 6.2.21 Folder opened via smartphone
- 6.2.22 Folders DK, EN, DE
- 6.2.23 15 pages related to visits to website 2013/14

#### 6.2.24 Short introduction for platform meeting

#### 6.2.25 Short DK introduction

# 6.2.26 Introduction / presentation of LIFE Laesoe the HRH Prince Henrik – the Prince consort

#### 6.2.27 Brief presentation to ministers and committee

## 6.2.28 Brief presentation used at educational day – DNA, VSY

## 6.2.29 Example Newsletter – Landowners Association

## 6.2.30 Mailing list – newsletter

## 6.2.31 Press cutting from July 2013 to September 2014

## 6.2.32 Hydrological study – only submitted on memory stick

## 6.2.33 List of keywords and abbreviations used;

• LM: Læsø Municipality

• DNA: Danish Nature Agency

• VSY: Vendsyssel

• GA: Grant Agreement

• PA: Partnership Agreement

• AGM: Annual General Meeting

• FGM: Founding General Meeting

• LCG: Local Community Group

• SC: Steering Committee

• DAC: Danish Agency of Culture

• UoC: University of Copenhagen

• JR: Japanese rose

• IAS: Invasive alien Species

#### 6.2.34 Figures & tables relating to D1

Targeted breeding species	Population (in pairs), survey May- June 2013	Population (in pairs), survey May-June 2014	Avarage of 2013 and 2014. Beginning of project.	Expected result of project
Calidris alpina schinzii	16 - 18	15 - 19	17	25 pairs
Tringa glareola	0	0	0	Two suitable areas
Recurvirostra avosetta	59	43	51	250 pairs
Sterna paradisaea	454	321	388	800 pairs
Sternula albifrons	24	21	23	30 pairs

Figure D1a. Result of the first surveys of the breeding targeted bird species within the SPA DK00FX345.

Targeted species with spring survey	Total count (individuals) April, 2011	Count (individuals) May, 2014	Expected result of project (individuals)
Branta bernicla bernicla	970	1,573	1,500
Limosa lapponica	2,750	1,600	4,000

Calidris alpina alpina	12	2,500
Canaris aipina aipina	12.	2,500

Figure.D1b Result of the survey of staging targeted bird species with in the SPA DK00FX345.

	1994	1995	1996	1997	1998	1999	2000	2001	2008	2009	2010
Branta b. bernicla	936	807	648	496	628	278	311	238	473	514	179
Calidris a. alpina	6000	963	900	8850	593	3225	10241	7683	4944	5715	12165
Recurvirostra avosetta	602	350	600	700			173	136	50	60	95

Figure D1c. Maximum numbers of staging birds in the game reserve part of the SPA in the periods 1994-2001 and 2008-2010. Data provided by the Danish Centre for Environment and Energy, Aarhus University (DCE).

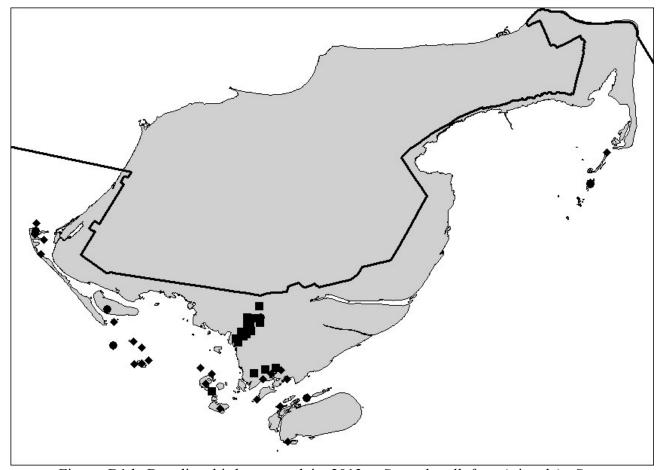


Figure D1d. Breeding birds mapped in 2013. *Sternula albifons* (triangle), *Sterna paradisaea* (rhombus), *Recurvirostra avosetta* (circle) and *Calidris alpina schinzii* (square).

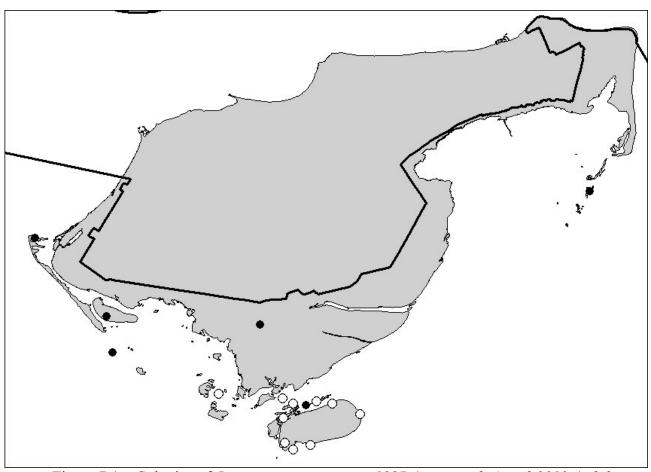


Figure D1e. Colonies of Recurvirostra avosetta, 1987 (open circles) and 2013 (solid circles).SPA is marked with a bold line. Survey in 1987 did only cover central/southern part.

SAC	DK0	0FX010	DK0	0FX118	Total h	ectares
Habitat	GA.	2011	GA.	2011	GA.	2011
1330	1507	1511	2.2	3.6	1509	1515
2130*	190	178	115	170	305	348
2140*	273	215	263	221	536	436
3110	2	?	1,3	?	3	?
3130	0.2	?	1,7	?	2	?
4010	275	250	24	18,4	299	268
4030	378	373	4.2	7.4	382	380
6230*	61	34	3,8	2.5	64	38
6410	21	134	0,2	0	21	134
7230	4.5	2.8	1.2	1.7	5.7	4.5

Figure D1f. Table of areas (in hectares) of the targeted habitats in the two SACs used for the application (GA) and of the latest mapping (2011).

#### References.

Clausen, P., Holm, T.E., Laursen, K., Nielsen, R.D. & Christensen, T.K. 2013. Rastende fugle i det danske reservatnetværk 1994-2010. Del 1: Nationale resultater\_[Staging birds in the Danish network of Game Reserves 1994-2010. Part 1. National level]. Aarhus Universitet,

DCE – Nationalt Center for Miljø og Energi, 118 s. - Videnskabelig rapport fra DCE - Nationalt Center for Miljø og Energi nr. 72 <a href="http://dce2.au.dk/pub/SR72.pdf">http://dce2.au.dk/pub/SR72.pdf</a>
Fredshavn, J.R., Pihl, S., Bregnballe, T. & Søgaard, B. 2014. Tilstandsvurdering af levesteder for ynglefugle. 16 Natura 2000 udpegningsarter. [System of classification of habitats of breeding bird species. 16 Natura 2000 designation species] Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi, 52 s. - Videnskabelig rapport fra DCE – Nationalt Center for Miljø og Energi nr. 114 <a href="http://dce2.au.dk/pub/SR114.pdf">http://dce2.au.dk/pub/SR114.pdf</a>

Therkildsen, O.R., Andersen, S.M., Clausen, P., Bregnballe, T., Laursen, K. & Teilmann, J. 2013. Vurdering af forstyrrelsestrusler i NATURA 2000-områderne.[Threat by disturbance in Natura 2000 sites in Denmark] Aarhus Universitet, DCE – Nationalt Center for Miljø og Energi, 174 s. - Videnskabelig rapport fra DCE - Nationalt Center for Miljø og Energi nr. 52 http://www.dmu.dk/Pub/SR52.pdf

#### **Previously submitted**

Partnership Agreement signed 28<sup>th</sup> May 2013 and submitted with Inception Report per 30<sup>th</sup> June 2013.

#### 6.3 Dissemination annexes.

- 6.3.1 Other dissemination annexes
- 6.3.2 Photographs per action on memory stick
- 6.3.3 Videos
  - Video taken from a drone C1 and C2 before and after
  - o <a href="http://vimeo.com/115230035">http://vimeo.com/115230035</a> (password life)
  - Video taken from a drone C5 testing as monitoring vehicle
  - o https://vimeo.com/107540407 (password fanne)
- 6.3.4 Power point on memory stick

## **6.4** Final table of indicators

## Part 1 – Preparatory actions

Table 1 - Types of preparatory actions implemented A, B actions)  $\,$ 

actions)								
Types of preparatory actions	No. of preparatory actions	Species involved (Latin name)	Type of habitats involved (*)	No. of species involved	No. of habitats involved	No. of N2000 sites involved	Surface involved (ha)	Incurred cost (€)
Plans of project measures								
Action plans	1	N/A	N/A			2	4406	64,883
Management plans								
Guidelines								
Inventories & Studies								
Ex ante monitoring								
Ex post monitoring								
Permit procedures	1	Calidris alpina schzinii, Tringa glareola, Recurvirostra avosetta, Sterna paradisaea, Sternula albifrons, Branta bernicla bernicla Limosa lapponica, Calidris alpina alpina	1330 salt meadow, 2130* grey dune, 2140* dune heath, 3110 + 3130 oligotroph lake types, 4010 wet heath, 6230* Species- rich Nardus grassland, 6410 Molinia meadow, 7230 alkaline fen	8	10	2	4406	6,851
New Natura 2000 area								
Land purchased								
Other (hydrological survey)	1	Calidris alpina schzinii, Tringa glareola, Recurvirostra avosetta, Sterna paradisaea, Sternula albifrons, Branta bernicla bernicla, Limosa lapponica, Calidris alpina alpina	1330 salt meadow, 3110 + 3130 oligotroph lake types, 4010 wet heath, 6410 Molinia meadow, 7230 alkaline fen	6	10	2	Approx. 3500	674
Total (Every item counted only once)	3	N/A	N/A	8	10	2		72,408

## Part 2 – Concrete actions

Table 2 - Best practices/concrete techniques//conservation actions/methods

implemented (C actions)

Deliverable	No. of concrete actions	Species involved (Latin name)	Type of habitats involved	No. of species involved	No. of habitats involved	No. of N2000 sites involved	Surface involved (ha)	Incurred cost (€)
Natura 2000 site creation								
Natura 2000 site restoration/improvement	9	Calidris alpina schzinii, Tringa glareola, Recurvirostra avosetta, Sternal paradisaea, Sternula albifrons, Branta bernicla bernicla, Limosa lapponica, Calidris alpina alpina	1330 salt meadow, 2130* grey dune, 2140* dune heath, 3110 + 3130 oligotroph lake types, 4010 wet heath, 4030 dry heath, 6230* Species-rich Nardus grassland, 6410 Molinia meadow, 7230 alkaline fen	8	10	2	4406	663,959
Conservation actions (predation)	1	Calidris alpina schzinii, Tringa glareola, Recurvirostra avosetta, Sterna paradisaea, Sternula albifrons		5		1	3693	13,472
Reintroduction	N/A							
Ex situ conservation	N/A							
Removal of alien species	2	Calidris alpina schzinii, Recurvirostra avosetta, Sterna paradisaea, Sternula albifrons, Branta bernicla bernicla, Limosa lapponica, Calidris alpina alpina	1330 salt meadow, 2130* grey dune, 2140* dune heath, 4010 wet heath, 4030 dry heath, 6230* Species-rich Nardus grassland, 6410 Molinia meadow, 7230 alkaline fen	7	8	2	Approx.6500	41,430
Others (please specify)								
Total (Every item counted only once)	12	N/A	N/A	8	10	2	N/A	718,861

# Table 3 OUTCOMES

Training

No. of training sessions	Total no. of persons trained	Incurred cost (€)
10	15	Directly under actions

Training conducted as part of individual action, C1, C2, C4, C5, C8

## Part 3 – Awareness raising and communication

Table 4 OUTCOMES

Workshops, seminars, public tours and conferences

Target audience:	General public		Specialised audience (e.g. decision- makers)			Very specialised audience (e.g. experts, academics)			
Number of participants:	Local/ Regional	National	EU/ International	Local/ Regional	National	EU/ International	Local/ Regional	National	EU/ International
0-25 participants	11			4		1	2		
25-75 participants	1				2	1			
75-100 participants	2								
More than 100 participants									
Total incurred cost (€)	Approx. 5,487.34								

## Table 5 OUTCOMES

## Media and other dissemination work

Type of media			
Project website: average number of visitors per month			
Press releases made by the project	25		
General public article in national press	7		
General public article in local press	40		
Specialised press article	4		
Internet article			
TV news/reportage			
Radio news/reportage			
Film produced			
Film played on TV			
Film presented in events/festivals			
Exhibitions attended	1		
Information centre/Information kiosk	4		
Project notice boards	20		
Newsletters	6		
Total incurred cost (€)	15.406		

## Table 6 **OUTCOMES**

## **Publications**

Type of publication	No. published	No. of copies	Languages(*)
Layman's report			
Manuals			
Leaflets	1	2000	DK, EN, DE
Brochures			
Posters	5	100	DK
Books			
Technical publications			
Other (please specify)			
Total incurred cost (€)	958		

1 leaflet produced in 3 versions, DK, EN and DE. 5 different poster / introductions produced for use during meetings / public tours / visit by The Royal Family and Ministers.

## Table 7 **OUTCOMES** Educational actions

Establishment involved	No. of students
Kindergartens/Primary schools	
Secondary schools	
Higher education establishments	25
Total incurred cost (€)	None

## 7 Financial report and annexes

- 7.1 **Standard Payment Request and Beneficiary's Certificate,** original enclosed and duly signed and in copy.
- 7.2 Duly signed original of the **Beneficiary's Certificate for Nature Projects** is enclosed / submitted and in copy.
- **7.3** Consolidated Cost Statement for the Project original signed is enclosed / submitted.
- **7.4 Financial Statement of the Individual Beneficiary** on memory stick, including;
  - Personnel costs
  - Travel costs
  - External assistance
  - Infrastructure
  - Equipment
  - Prototype (only applicable for ENV and BIO projects)
  - Land purchase (only applicable for NAT projects)
  - Lease of land (only applicable for NAT projects)
  - Consumable material
  - Other direct costs
  - Overheads
- 7.5 Laesoe Municipality letter from auditor regarding status of 3 employees regarded as not being permanent.
- 7.6 Inventory equipment purchased
- 7.7 Card of Accounts LIFE Laesoe
- 7.8 Letters from Galloway Association regarding pricing and agreements with suppliers.