



LIFE Project Number
LIFE05 NAT/DK/000150

PROGRESS REPORT No. 1
Covering the project activities from 10.01.2005 to 31.12.2005

Reporting Date
28 April 2006

LIFE PROJECT NAME

**Restoration of raised bogs in Denmark with new
methods** Data Project

Project location	7 different NATURA 2000 areas in Denmark
Project start date:	10/01/2005
Project end date:	31/12/2009
Total Project duration (in months)	60 months
Total budget	€ 2.947.471
EC contribution:	€ 1.407.578
(%) of total costs	
(%) of eligible costs	

Data Beneficiary

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2. Lists of (i) key-words and (ii) abbreviations (when appropriate)

It has been judged that such a list isn't necessary at the moment

3. Executive Summary.

Project objective:

The main objective of the project is to contribute significantly to upholding of the coherence of the network of Danish Natura 2000 sites with 7110 *Active raised bogs.

Main results to be achieved:

Restoration of the hydrology of 361 ha of bog habitats

Clearing of 270,7 ha of overgrowth with trees and scrubs

Establishment of conditions for 398 ha of active raised bog to develop from degraded raised bog.

Reduction of the negative impact from nutrient enrichment by elimination of dry deposition of atmospheric N at trees and scrubs through clearing of 270,7 ha

Development of cost efficient and adequate methodology for restoration of raised bogs in Denmark.

Dissemination of methodology and results of the project.

List of key deliverables and outputs during the report period:

<i>Product/milestone</i>	<i>Action n^o</i>	<i>Deadline</i>	<i>Date of completion</i>
Kick-off Workshop	A.1.	30/11/2005	08/12/2005
Kick-off Workshop Report	A.1.	31/12/2005	25/01/2006
Launch of project web-site	E.7.	31/12/2005	07/04/2006

Summary of section 4 – 7.

Section 4: Technical development.

The project progresses as expected, the first year being marked by investigations, preparations and negotiations with private owners. Still there have been some specific results on a pair of the State owned sites.

Section 5: Problems encountered.

Two problems, which not can be taken lightly, have arisen. On site 34 a technical/legal problem concerning a high volt power line, and on site 88 the rise in land prices.

The project manager will prioritise a solution of those problems highly in the coming period.

Besides those, there is the expected change of partners due to the decommissioning of the Danish Counties:

Section 6: Financial issues.

There is nothing special to comment on the financial situation.

Section 7: Planned project progress.

Except for the problems mentioned above, the project are expected to progress as planned.

4. Technical development.

A. Preparatory actions/management plan preparation.

Action A.1. Kick off workshop.

The stipulated Kick – off workshop was held December 8. 2005.

The main target group for the workshop was local site managers and workers involved in the project. 33 persons participated in the workshop. Please refer to Annex A, for the agenda of the workshop, a list of the participants and a detailed report on the workshop.

Evaluation of the workshop.

Participation.

The participation from the project beneficiaries and partners was high, with the expected amount of different professions represented.

Local landowners and interest groups from the different sites targeted in the project had also been invited, but none of these had the interest or time to participate in this special workshop.

There are probably three reasons for that:

1. The workshop took place far away from 6 of the 7 project areas.
2. It was on a weekday.
3. The topics were of a more general character, and not directed towards the specific type of problems that tends to be of interest to landowners.

It is expected that the smaller local meetings arranged under action E2 (Co-operation with local communities, landowners and interest groups) would have much more interest for the local stakeholders.

Benefits from the seminar.

It is the general impression that the seminar has fulfilled its purpose. The participants now have a better understanding and motivation for the project.

The importance of peat-producing vegetation in restoring raised bogs as functional ecosystems is now clear.

Several practical management advises has been demonstrated and discussed.

For instance closing of drain systems, to remove or not remove encroachment from raised bog, the possibility of leaving branches in deep peat pits to advance the growth of Sphagnum, and the necessity of facilities for the public in some areas. All in all the main topics in the premises for the seminar has been the object of some very rewarding discussions.

The most important result of the seminar has been for the different participants to meet and start forming a network.

Action A.2: Hydrological investigations.

Investigations are planned on site 20, 34, 88, 103 and 104.

Site 20:

No activities in the report period.

Site 34:

The Danish consulting group COWI has carried out a series of investigations during the early spring of 2005, resulting in the report you can find in Annex B.

The rapport draws these primary conclusions:

- It is possible to raise the water level to the vertical contour of 49.7 m (DVR90 Danish Vertical Reference 1990). But in the short run it is only recommended to raise the level to 49.5 m. For two main reasons: not to get too deep water, which would slow down regeneration of sphagnum, and not to reach a water level when nutritious (or perhaps even calcareous) ground water seeps into the bog.
- A rise to level 49.5 m (and even just a rise to level 49.0) will affect the surrounding agricultural areas, more than anticipated in the original project, which is based on a preliminary investigation. Therefore the report contains suggestion for solutions to prevent impact on the surrounding areas.
- Those solutions involve new initiatives in the form of construction of a low dam (135 m. long) towards west of the area, a diffuser for the outfall and a new drainage tube around the north west of the habitat area.

Site 88:

Investigations are still being carried out by Sønderjyllands County in co-operation with the Danish independent research and consultancy organisation DHI Water & Environment.

The resulting integrated groundwater model is expected to be ready not later than May 2006.

Site 103 and 104:

A laser scanning of site 103 has been made without co-financing from the Commission.

A similar scanning will be made of site 104 during the spring of 2006.

Action A.3: Development of improved restoration methodology.

The activity has not been started within the time of this report.

A contract will be made with Forest & Landscape Denmark (an independent centre at the Royal Veterinary and Agricultural University of Denmark) to carry out this action.

It is planned that the action will result in a report not later than 31. December 2007.

Action A.4: Introduction and testing of active re-vegetation methods.

The activity has not been started within the time of this report.

A contract will be made with RisagerConsult to carry out this action.

The action is expected to start in May 2006.

The end of the action is stipulated to be at March 31. 2007, but there is strong indications of that this is much too early to expect any usable results.

When we know more we will approach the Commission with a suggestion for a revised timetable for this action.

B Purchase/lease of land and/or rights.

The Land Consolidation Division of the Directorate for Food, Fisheries and Agri Business (within The Ministry of Food, Agriculture and Fisheries) has completed a preliminary investigation of property, ownership and attitude to the project among the owners who could be involved in a land consolidation.

Here there has been an individual contact to all the owners of property in the potential area for a land consolidation. The investigation can be seen in Annex C. The investigation has by a misunderstanding nor been included in the application for the LIFE project and is for that reason fully financed by the Danish Forest and Nature Agency.

There are two main conclusions as a result of the investigation:

- A land consolidation supporting the LIFE project will have good possibilities for success, as the owners are positive.
- The price of land in the area has been raised dramatically during the last 1½ year, in October 2004 the price was 90.000 DKr (12.000 €) per hectare, at the present the price is 140.000 DKr (18.700 €) per hectare.

The cost of the planned action has therefore also been raised substantially, from 2.9 mill DKr (395.000 €) to 4.7 mill DKr (630.000 €).

The Danish Forest and Nature Agency and Sønderjyllands County together will make an effort to find an acceptable solution to this problem; either by getting additional financing of the project, or by adjusting the project to the new conditions.

We will inform the Commission as soon as we know more.

C Non-recurring biotope management.

Action C.1: Restoration of hydrology.

There has been activity in the field within this action on one of the sites:

Site 20:

Here the hydrology of 19.6 hectares out of the target area of 31.2 hectares has been restored.

That has been done by blocking 7.000 m of ditches using 350 small dams of plywood (the target for the site is 12.325 m) and by digging a new outlet from the Lake Økssø to the bog area north of the lake. In reality this has raised the level of water on 28 hectares of bog and 30 hectares of lake. It is to be noticed that the water in Lake Økssø is very clean and low on nutrients.

* See the maps and photos in Annex D.

Site 34:

As a result of the investigations made under action A.2 the means to restore the hydrology on this site has to be changed considerably: There has to be constructed a low dam (135 m. long) towards west of the area, a diffuser for the outfall and a new drainage tube around the north west of the habitat area.

This will raise the cost of this action from 78.535 Dkr (10.527 €) to 499.030 Dkr

(66.894 €). Fortunately it may be possible to obtain financing for those changes by using less money on Action C.2. at site 34. That may be done by drawing of some of the experiences exchanged during the kick-off seminar. It is quite possible that the expected cost for action A2. in that way can be reduced by using some of the gained experienced used on other sites – for instance site 20.

We will inform the Commission as soon as this is clarified.

All sites:

Generally the activities under this action in the coming year will primary are investigations and preparations.

Action C.2: Clearing of trees and shrubs.

There has been activity in the field within this action on one of the sites:

Site 49:

Here tree and scrub encroachment has been removed on 14.7 hectares out of the target area of 24.9 hectares.

See the map in Annex E

For 2006 there is planned activity under this action on several sites – 34, 49, 250, 88 and 104.

Special comments:

On site 20 – St. Økssø 18 hectare of plantation and encroachment was cleared before the restoration of the hydrology, but that was done without financing from the Commission.

Site 34:

The maps (B2/1 and B2/2) enclosed with the final application and in the grand agreement are not correct concerning the actions of Viborg County. Apparently the maps for the application from 2004, hasn't been changed during the revised application for 2005. All the descriptions, area sizes and financial issues are correct; it is just the map that does not show the correct disposition of the action.

As soon as the revised actions in action C.1 has been clarified, and thereby the impact from those actions on action C.2 we will provide the Commission with fully revised maps showing all the actions C.1 and C.2 by the Viborg County.

D Recurring biotope management.

Action D.1: Clearing of re-growth.

This action is a follow up on action C.2, and has in the report period been used solely at site 20, where 9,5 hectare has been cleared.

Clearing of re-growth are not planned beforehand, but depends on the actually situation on the areas which has been cleared of trees under action C.2.

E Public awareness and dissemination of information.

Action E.1: Mounting of map tables / information boards.

No actions planned in this report period.

Action E.2: Governance: Co-operation with local communities, landowners and interest groups.

Site 20:

The area with restored hydrology has been presented to groups of professionals and for groups of interested from the public and the Press.

Site 34:

There has been established a special board to follow the project, the board consist of members elected among individuals who owns land within the project area.

January 19th (2005) there has been a meeting with the board, where the project and the preliminary hydrological investigations was presented.

The board is regularly informed about the development of the project in letters.

Site 49:

There has been no activity during the report period.

Site 88:

The main activity on this side has been the preliminary investigation for a land consolidation, which is mentioned under action B.

Site 103:

There has been no activity during the report period.

Site 104:

There has been close contact between the sole owner of the site (Brahetrolleborg Estate) and the County of Fyn during the period.

Site 250:

There has been no activity during the report period.

All sites:

As mentioned under action A1 Local landowners and interest groups from the different sites targeted in the project were invited to the kick-off workshop but none of these participated. The probably reasons are mentioned under A1.

Action E.3: Facilities for visitors including boardwalks.

Site 20:

A path existing before the raise in the water level has been restored for a length of 1.700 meters including a 6 meter long bridge/boardwalk across the new outlet from the Lake Økssø. An Australian system to provide footings suitable for lightweight structures has

been used with success in the construction of the bridge. Read more about the system at www.mega-anchor.dk . Photos can be seen in annex D.

Action E.4: Best management guidelines for Danish bogs

No actions planned in this report period.

Action E.5: Seminar on improved methods for raised bog restoration.

No actions planned in this report period.

Action E.6: Production of a layman's report.

No actions planned in this report period.

Action E.7: Project web site.

Due to technical and capacity problems, the launch of the web-site has been delayed. The deadline was December 31, 2005, but the web-site was first launched April 7, 2006. The site is placed on the homepage of the Danish Forest and nature Agency (www.sns.dk) but can also be accessed directly at the address www.raisedbogs.dk , and the aliases (www.højmooseprojektet.dk www.hojmooseprojektet.dk www.højmooseprojektet.dk and www.höjmooseprojektet.dk)

F Overall project management.

Action F.1: Project management and co-ordination.

Organigram

Danish Forest and Nature Agency	Project Management	
	Danish Forest and Nature Agency	
	Project manager: Jesper Stenild (Fussingø State forest district) M.Sc. in Forestry.	
	Project working group	
	Organisation	Name
	Lindet State Forest District (Site 88, Kongens Mose)	Christian Brix Søndergård Forest Engineer. Local Project leader.
Haderslev State Forest District (Site 250, Svanemosen)	Claus Simonsen Forest Engineer. Local Project leader.	
Feldborg State Forest District (Site 49, Ndr. og Sdr. Boestmose)	Otto Buus. Forest Engineer. Local Project leader.	
Buderupholm State Forest District (Site 20, St. Økssø)	Søren Kjær. M.Sc. in Forestry. Local Project leader.	
Counties	Viborg County (Site 34, Brandstrup Mose)	Merete Nielsen. Forest Engineer. Local Project leader.
	Sønderjylland County (Site 88, Kongens Mose)	Lene Kristensen. M. Sc. in Engineering. Local Project leader.
	Vejle County (Site 250, Svanemosen)	Peder Nygård Nielsen. M.Sc. in Biology. Local Project leader.
	Fyn County (Site 103 Storelung and Site 104 Nybo Mose)	Erik Vinther. M.Sc. in Biology. Local Project leader.
Operational level forest districts and counties		

The project working group had the first meeting at September 2. 2005.

The following topics were discussed at the meeting:

Briefing of the contents in the final grant agreement, presentation of the project manager, principles for keeping of accounts and reporting to the project manager, status for each project site, agreement between beneficiary and partners according to article 4.7 in the grant agreement, the task of the working group, Kick off workshop and public awareness.

The project manager was engaged from November 1st 2005, and used the first period to get acquainted with the different project sites, and to organise the kick-off workshop. The workshop was organised in co-operation with the local managers for site 88.

Reports delivered since the start of the project.

January 2006:

Report from the Kick- off workshop (Annex A)

Action F.2: Effect Monitoring.

Six of the eleven automatic water level loggers to be installed on the sites managed by the counties, has been acquired, but not mounted within the report period.

Action F.3: Participation in international workshops and international networking.

No actions planned in this report period.

Action F.4: After-LIFE Conservation Plan.

No actions planned in this report period.

5. Problems encountered

- **Site 34.**

At site 34 a serious problem has emerged. A high voltage cable on wooden masts crosses the site. Normally this should not have caused any problems, as the site is protected by a conservation order from 1984, which should have secured all parts with economical interests in the area a proper compensation. But the power company claims that they never has been informed about the conservation order, and never had got any compensation. This disagreement could lead to the project falling behind schedule, to increased costs and in the uttermost worst case that the project on site 34 cannot be completed.

There has just been an intern clarification about the legal issues of this disagreement. On that background the county of Viborg and the project manager together will begin negotiations with the power company as soon as possible. The intention is to find a reasonable agreement with the company, which can forward the project as most as possible.

We will inform the Commission as soon as we know more of this situation.

- **Action B.**

As stated under the action on side 6 the price of land has gone up in the area, the expected cost of the planned action has therefore also been raised from 2.9 mill DKr (395.000 €) to 4.7 mill DKr (630.000 €).

The Danish Forest and Nature Agency and Sønderjyllands County together will make an effort to find an acceptable solution to this problem; either by getting additional financing of the project, or by adjusting the project to the new conditions.

We will inform the Commission as soon as we know more.

- **The decommissioning of the Danish counties.**

The administrative reform in Denmark will result in the decommissioning of the Counties as from 31 December 2006. This project involves the counties of Viborg, Vejle, Sønderjylland and Fyn as partners.

This situation was envisaged before the contract on the project was concluded. The Danish Forest and Nature Agency (DFNA) on behalf of the Ministry of Environment has guaranteed for the fulfilment of the Counties responsibilities in the A12 form of the project document.

The challenges ahead involve a process to adopt the present contractual, administrative and organizational set-up for the project to the new situation.

This will involve:

- Transfer of partner responsibilities to DFNA.
- Amendments to the project documents and budgets
- Specification of the necessary documentation including the technical and especially the financial reporting of the counties to ensure a proper closure of them as partners

- Reorganization of the management structure

These challenges are common to all LIFE Nature projects involving Danish Counties. So in order to facilitate a smooth transition in an organized process involving the main stakeholders (the LIFE-unit, the external team and the projects managers) the DFNA will propose to the LIFE-Unit that a meeting should be organized before summer 2006 – involving all LIFE-Nature projects - with Danish Counties as partners or beneficiaries – to discuss the requirements, responsibilities and timing in this process.

After such a meeting we will continue – in cooperation with our partners – to prepare the necessary requests for additional clauses according to article 13 of the common provisions, with a view to present them to the Commission early autumn.

6. Financial issues

Project Costs Incurred

Cost category	Total cost according to the Commission's decision*	Total costs incurred from the start date to 31. December 2005	% **
1. Personnel	1.090.054,67 €	49.531,93 €	4,54%
2. Travel	36.913,46 €	124,66 €	0,34%
3. Outside assistance	801.510,90 €	43.639,10 €	5,44%
4.1 Durable goods Infra-structure	26.917,90 €	0,00 €	0,00%
4.2 Durable goods Equipment	36.473,76 €	10.811,80 €	29,64%
5. Land purchase	398.708,21 €	0,00 €	0,00%
6. Consumables	370.099,06 €	9.475,38 €	2,56%
7. Other costs	22.745,63 €	606,97 €	2,67%
8. Overheads	164.047,17 €	7.993,29 €	4,87%
SUM TOTAL	2.947.470,75 €	122.183,14 €	4,15%

There is nothing special to comment on the budget posts, the use of 30 % of Durable goods Equipment is natural, as it concerns acquirement of water loggers to monitor the project.

7. Planned project progress

The activities planned until the next reporting date of the project are for this report mentioned under each action.

8. Annexes

Annex A: Kick-Off Seminar, Report, Agenda and list of participants.

Annex B: Report on hydrological investigations at site 34.

Annex C: Report on preliminary investigation of land consolidation.

Annex D: Map, photos and a newspaper article from activities on site 20.

Annex E: Map from activities on site 49.