LIFE Project Number

LIFE 14NAT/DK/000606

Final Report
Covering the project activities from 01/08/2015 to 31/12/2022

Reporting Date

31/03/2023

LIFE PROJECT NAME or Acronym

Restoration and conservation of petrifying springs (*7220), calcareous fens (*7210) and alkaline fens (7230) in Denmark - RigKilde-LIFE -

Data Project

Project location	Northern Denmark (Jutland), Southern Denmark (Fyn), Sjælland
Project start date:	01.08.2015
Project end date:	31.12.2022
Total budget	6.220.049 €
EC contribution:	3.732.029 €
(%) of eligible costs	60

Data Beneficiary

Name Beneficiary	Thisted Municipality
Contact person	Mrs Tanja B. Binderup
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Project Website	www.Rigkildelife.dk

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This table comprises an essential part of the report and should be filled in before submission

Please note that the evaluation of your report may only commence if the package complies with all the elements in this receivability check. The evaluation will be stopped if any obligatory elements are missing.

Package completeness and correctness check	
Obligatory elements	**✓ or N/A**
Technical report	
The correct latest template for the type of project (e.g. traditional) has been followed and all sections have been filled in, in English *In electronic version only*	✓
Index of deliverables with short description annexed, in English *In electronic version only*	✓
Mid-term report: Deliverables due in the reporting period (from project start) annexed Final report: Deliverables not already submitted with the MTR annexed including the Layman's report and after-LIFE plan Deliverables in language(s) other than English include a summary in English *In electronic version only*	✓
Financial report	
The reporting period in the financial report (consolidated financial statement **and** financial statement of each Individual Beneficiary) is the same as in the technical report with the exception of any terminated beneficiary for which the end period should be the date of the termination.	✓
Consolidated Financial Statement with all 5 forms duly filled in and signed and dated *Electronically Q-signed or if paper submission signed and dated originals* and in electronic version (pdfs of signed sheets + full Excel file)*	✓
Financial Statement(s) of the Coordinating Beneficiary, of each Associated Beneficiary and of each affiliate (if involved), with all forms duly filled in (signed and dated). The Financial Statement(s) of Beneficiaries with affiliate(s) include the total cost of each affiliate in 1 line per cost category. *In electronic version (pdfs of signed sheets + full Excel files) + in the case of the Final report the overall summary forms of each beneficiary electronically Q-signed or if paper submission, signed and dated originals**	✓
Amounts, names and other data (e.g. bank account) are correct and consistent with the Grant Agreement / across the different forms (e.g. figures from the individual statements are the same as those reported in the consolidated statement)	✓
Mid-term report (for all projects except IPs): the threshold for the second pre-financing payment has been reached	✓

Beneficiary's certificate for Durable Goods included (if required, i.e. beneficiaries claiming 100% cost for durable goods) *Electronically Q-signed or if paper submission signed and dated originals* and in electronic version (pdfs of signed sheets)*	✓
Certificate on financial statements (if required, i.e. for beneficiaries with EU contribution ≥750,000 € in the budget) *Electronically Q-signed or if paper submission signed original and in electronic version (pdf)*	✓
Other checks	
Additional information / clarifications and supporting documents requested in previous letters from the Agency (unless already submitted or not yet due) *In electronic version only*	✓
This table, page 2 of the Mid-term / Final report, is completed - each tick box is filled in *In electronic version only*	✓

**signature by a legal or statutory representative of the beneficiary / affiliate concerned*

2 List of abbreviations

Thi Kom = Thisted Municipality
NST = Danish Nature Agency Fyn
Fax Kom = Faxe Municipality
Fur Kom = Furesø Municipality
Høj Kom = Høje Taastrup Municipality
Jam Kom = Jammerbugt Municipality
Str Kom = Struer Municipality
MST = Danish Environmental Agency

CB = Coordinating beneficiary
AB = Associated beneficiary
PM= Project manager
GA = Grant Agreement
RDP = Rural Development Program
Habitat types = Annex I habitat types of the habitats directive

3 Executive summary

3.1 Assessment as to whether the project objectives and work plan are still viable

The RigKilde-LIFE project (agreement no. LIFE14 NAT/DK/000606) was carried out in the period 1st August 2015 to 31st December 2022.

The project concerns a number of Annex I habitat types and Annex II and IV species within seven Danish Natura 2000 areas located in Northwest Jutland, on Langeland and on Zealand respectively according to the EC's Habitats Directive. The project comprises a total of eight sub-projects and involves eight partners.

The main focus of the project is the restoration and expansion of the area with the habitat types alkaline fens (7230), calcareous fens (7210*) and petrifying springs (7220*). The project also focuses on improving the conditions for the Annex II species great crestred newt (*Triturus cristatus*), large white-faced darter (*Leucorrhinia pectoralis*) and the water beetle (*Graphoerus bilinieatus*) as well as the Annex IV species moor frog (*Rana arvalis*). In addition, the project also focuses on improving the conservation status of other habitat types such as Atlantic salt meadows (1330) and Molinia meadows (6410) associated with the above habitat types.

The total project area is approx. 2,994 ha. To this can be added approx. 64 ha which during the project period has been approved as a project extension by the EU Commission. It is important to emphasize that the total area covered by the project is a gross area, and that the management measures carried out cover a significantly smaller area.

According to the GA with the EU, the project includes 33 individual actions with a focus on contributing to ensuring good conservation status of the project's habitat types and species and to be able to support the objectives of the respective Natura 2000 plans. According to the GA, the project includes the following activities and goals:

- Hydrological improvements (action C1 and C4) of approx. 305 ha habitat types
- Clearing of unwanted vegetation (action C2) on 163 ha of habitat types
- Grazing facilities (action C3) of approx. 203 ha habitat types
- Lot owner agreements on availability restrictions (action B1)
- Information (action E3)

By launching these activities, according to the GA, the following results are expected for the designation bases in the SAC sites:

- Hydrological improvements of existing 7230, 7210* and 7220* on approx. 120 ha
- Improved light-open conditions of existing 7230, 7210* and 7220* on approx. 170 ha as the sum of clearing and grazing
- Potential for development of new 7230, 7210* and 7220* on approx. 87 ha
- Management (hydrology, clearing and grazing) of other habitat types (e.g. 1330 and 6410) on a total of 381 ha
- 22 improved or new ponds and 250 m of bank improvements to improve breeding and living conditions of the targeted species
- Visitor facilities (information signs, handout, hiking trails)

It is important to note that the clearing and grazing efforts must be seen under one as the goal is to create light-open conditions. The efforts for new potential habitat nature must be seen as the combined efforts for hydrology, clearing and grazing.

Results

By implementation of the management actions the conservation status of the key natural habitat types has been improved as foreseen in the LIFE application by improving the hydrology and by establishing (clearings) and maintaining (grazing and supplementary clearings) more light-open conditions. Thus, the following area covers of the various management activities have been obtained:

- Hydrological improvements of existing 7230, 7210* and 7220* on 55,6 ha
- Light open conditions established on 164,4 ha consisting of clearance of 44,4 ha and 120,0 ha managed by grazing.
- Potential for development of new 7230, 7210* and 7220* on 84,7 ha
- Management of other habitat types such as 1330 and 6410 on 195,7 ha
- 27 new or restored ponds for amphibians and other species and 350 of improved banks
- Visitor facilities including 37 information signs, a handout and 3 hiking trails.

A comprehensive monitoring program has been implemented to obtain documentation of the biological, socio-economic and ecosystem service effects of the project.

The botanical trends are clear in all but two of the subprojects showing an overall positive effect on both the plant species' composition and the vegetation structure. The project has thereby promoted the likeliness of obtaining a favorable conservation status for the majority of selected areas.

The project's effort for improved habitats for amphibians and insects was not directly reflected in increased populations by the end of the project period. The main reason is most probably that the populations are very sensitive to dry weather conditions and that the effect monitoring in fact coincided with unusually dry springs and summers in 2021 and 2022.

Regarding the socio-economic effects several indicators have been analysed and the economic assets were calculated. The socio-economic indicators were evaluated in a model area in Thisted Municipality where sufficient data expectably could be collected in relation to availability grazing animals, nature management as a way of living and impact on local economy.

Regarding the calculated effect on ecosystem services the hydrological initiatives had a positive influence on the groundwater resources by increasing the formation of groundwater. Likewise, the hydrological initiatives were shown to have a positive influence on decreasing the release of greenhouse gases.

Project economy

The project budget was 6.220.049 €.

Chapters in the Final Report

Chapter 4: Introduction. This chapter describes the project's aim regarding improvements of the conservation status of a number of natural habitat types and species.

Chapter 5: Administrative part. This chapter describes project phases and the organization of the project. This chapter also describes changes to the Grant Agreement with an amendment and addresses questions from the Commission during the project period.

Chapter 6: Technical part: In this chapter the project actions and associated results are described. Under each action deliverable products are listed. In this chapter also the long-term benefits are described together with the monitoring results and outcome indicators.

Chapter 7: Key project indicators

Chapter 8: Comments on financial report. In this chapter the financial status and outcomes are described.

Chapter 9: Annexes. In this chapter annexes to the final report are listed together with an overview of deliverables and other material. All annexes are delivered to the Commission electronically.

Chapter 10: Financial report. In this chapter the account documents are reported.

3.2 Problems encountered

Covid-19 crises

During the period from early 2020 to late 2021 the Covid-19 crises caused a major drawback in our ability to cooperate with the project stakeholders. In particular the contact and cooperation with landowners was challenged as the contact most often occurs on a personal level. We are not able to quantify the effects of this drawback but we are certain that the Covid-19 crises have had a negative impact on obtaining the project goals in the specific management activities (C-actions). Also, our ability to carry out networking with other similar projects was hampered because of the Covid-19 crises. Likewise, as the Covid-19 restrictions were released during 2022 the project has been very busy since then with catching up the delays.

RDP grants

The management activities such as hydrology, clearings and grazing facilities have partly been based on funding from the Danish RDP. However, project implementation has suffered from the RDP funds' availability being very unstable and in particular the hydrology program became inaccessible early in the project period. In addition, the processing of RDP applications at the authorities has been very time consuming and often longer than one year. This was a major drawback for project implementation in the field.

Reluctant landowners

Most the project activities are dependent on the willingness of the private landowners to enter project agreements with the authorities. This is described as a risk in the LIFE application. In some cases, the project has met a reluctant attitude among the landowners which has resulted in fewer landowner agreements than foreseen in the LIFE application. The primary reasons for the reluctant attitude can be summarized as follows:

- The agricultural practices do not fit with the future management requirements of nature areas.
- Poor co-operation between the farmers and the beneficiaries.
- Unrealistic high demands for economic compensation.
- Landowners fear that proposes management will negatively influence hunting opportunities.

The conclusions of the feasibility studies differ from what we expected

The hydrological and botanical feasibility studies were performed to be able to design the specific management activities. In some cases, the conclusions differ from what we expected and this has had an impact on the management activities. This is described as a risk in the LIFE application. Especially, the hydrological feasibility studies have shown less need for hydrological improvements than foreseen in the application because:

- Hydrological issues are not the main reason for the present conservation status.
- Existing natural values may be harmed by hydrological changes.
- Hydrological improvements are not needed because a higher water level will be reached due to climate changes.

The resulting area with hydrological improvements is therefore smaller than foreseen in the LIFE application. In addition, the individual hydrological projects turned out to be more complicated than foreseen in the LIFE application and therefore the overall hydrological effort (cutting of subsoil drains etc.) has roughly been implemented as expected (please see section 6.1.8).

3.3 Changed SAC borders in Denmark

In 2017 and 2018 the Danish Ministry for Food and Environment initiated a process for altering the N-2000 borders. The alteration became valid in the autumn 2018 and the borders can be seen here: http://miljoegis.mim.dk/spatialmap?profile=natura2000-afgraensning-nov2018gaeldende. The changed borders affect some of the subprojects in this LIFE project to a minor degree, but in all circumstances positively because the SAC's have been enlarged. The changed SAC borders have therefore had no influence on our ability to carry out the project activities.

3.4 Technical changes and adjustments

In the table below we have summarized approved technical changes according to previous communication with the Commission.

Communication	**Action and issues – technical changes**
05062020	Some project areas outside N-2000 have been included in the project. The details are described in amendment #3.
23022021	In the LIFE application the effort for 7210 was focused in subproject 5 (Sydlangeland) and subproject 6 (Suså). Due to landowner reluctance in subproject 6 the main effort for 7210 has thereafter been in subproject 5.
PR#2	In the LIFE application a number of baseline, midterm and effect reports were foreseen. During the course of the project, we proposed to change this approach and in a number of actions we have produced compiled reports instead.

4 Introduction

The project primarily targets restoration and expansion of Annex I habitat types alkaline fens (7230), calcareous fens (7210*) and petrifying springs (7220*). The project also targets management of the Annex II species *Leuchorrhinia pectoralis, Triturus cristatus* and *Grahphoerus bilinieatus* and management of the Annex IV species *Rana arvalis*. In addition, the project also focuses on other relevant natural habitat types in the project sites such as Atlantic salt meadows (1330) and Molinia meadows (6410).

According to the original application the total project area is 2.994 ha mainly situated within 7 Danish SAC's and distributed in 8 subproject areas. The total project area defines where project activities can take place and management activities be implemented. To this should be added 64 ha which were added during the course of the project. A few hectares are situated outside the SAC's mainly to be able to restore natural hydrology in the SAC's and to be able to manage the SAC's in a way to be able to achieve favourable conservation status of the habitat types. It is important to notice, that the overall project area is a gross area while the actual performed management covers a somewhat smaller area.

According to a Danish national assessment the conservation status of alkaline fens (7230), calcareous fens (7210*) and petrifying springs (7220*) was in the danger of further deterioration at the time for the preparation of the LIFE application. The RigKilde-LIFE Nature project is therefore of outmost importance to be able to fulfil the N-2000 plans. In the national N-2000 baseline studies since 2009 until 2022 there is a trend for improved conservation status of the primary habitat types (7230, 7210*, and 7220*) considered in this LIFE project.

The project's main activities according to the GA are as follows divided into 33 individual actions:

- Restore hydrology on 1.026 ha of which 305 ha cover habitat types
- Clear vegetation on 328 ha of which 163 ha cover habitat types
- Improve the grazing opportunities on 744 ha of which 203 ha cover habitat types
- Restore ponds for target species
- Obtain the necessary landowner agreements
- Run public awareness campaigns
- Monitor biological and socio-economic indicators

According to GA these activities will end up in the following expected main results:

- Hydrological management of existing natural habitat types 7230, 7210*, 7220* on 120 ha
- Management by clearings and grazing of habitat types 7230, 7210*, 7220* on 170 ha
- Potential for developing additional habitat types 7230, 7210*, 7220* on 87 ha by hydrology, clearing and grazing management
- Management by hydrology, clearings and grazing of other habitat types such as 1330 and 6410 on 381 ha
- Purchase cattle to secure grazing
- 22 ponds and 250 m of improved lakeshores for target species
- Visitor facilities
- Networking

Below we have summarized the basic information for the 8 subprojects in the RigKilde-LIFE project. Please note, that subproject 3 is situated in two municipalities.

Subproject number	Local project name	SAC	Primary target: Habitat types of the habitat directive	Project area hectare	Project owner
	Overall project management				CB: Thi Kom
1	Vejlerne	DK00EY124	7230, 7220*	1.576	Thi Kom
2	Hvidbjerg Å	DK00EX132	7230, 7220*	229	Thi Kom
3	Agger	DK00EY133	7230, 7220*	263	Thi Kom
3	Agger	DK00EY133	7230	91	Str Kom
4	Underlien	DK00FX317	7230, 7220*	205	Jam Kom
5	Sydlangeland	DK008X201	7230, 7210*	128	NST
6	Suså	DK006Y275	7230, 7210*	163	Fax Kom
7	Vasby og Sengeløse Moser	DK002X213	7230	109	Høj Kom
8	Øvre Mølleådal	DK002X212	7230, 7220*	230	Fur Kom and NST

According to adjustments of the project area as described in the amendment (June 2020), the project area of subproject 2, 3 (Str Kom), 4, 6 and 7 was increased with app. 25, 10, 5, 4, 1 and 9 hectares, respectively.

Regarding the target species the focus of the subprojects is as follows:

Subproject number	Local project name	SAC	Target species of the habitat directive	Project owner
1	Vejlerne	DK00EY124	Annex II: *Triturus cristatus* Annex IV: *Rana arvalis*	Thi Kom
2	Hvidbjerg Å	DK00EX132	Annex II: *Triturus cristatus* Annex IV: *Rana arvalis*	Thi Kom
3	Agger	DK00EY133	Annex IV: *Rana arvalis*	Thi Kom
3	Agger	DK00EY133	Annex IV: *Rana arvalis*	Str Kom
4	Underlien	DK00FX317	Annex IV: *Rana arvalis*	Jam Kom
5	Sydlangeland	DK008X201	Annex IV: *Rana arvalis*	NST
6	Suså	DK006Y275	Annex IV: *Rana arvalis*	Fax Kom
7	Vasby og Sengeløse Moser	DK002X213	Annex IV: *Rana arvalis*	Høj Kom
8	Øvre Mølleådal	DK002X212	Annex II: *Triturus cristatus* Annex II: *Leucorrhinia pectoralis* Annex II:*Graphoerus bilinieatus* Annex IV: *Rana arvalis*	Fur Kom and NST

The species effort in most subprojects is based on specific habitat improvements such as creation of new ponds. However, in subproject 4 and 6 we did not implement any species-specific management and the species impact in these subprojects will occur from the overall improvements of the habitat types.

5 Administrative part

5.1 Description of project management

The project management is taken care of in action F1 as follows:

Thi Kom is the coordinating beneficiary and has established a secretariat to support the project. Until early 2020 Lars Christian Adrados was the PM and currently Tanja B. Binderup handle this role. Financially the project is supported by the economic controller Inge Husted Larsen. The current chairman of the steering group is Tanja B. Binderup.

The current composition of the steering group is as follows:

Tanja B. Binderup, Head, Thi Kom
John Patuel Hansen, Str Kom
Gitte Clausen, Head, Jam Kom
Jakob Harrekilde, Forest supervisor, NST
Thorkild Lauridsen, Head, Fax Kom
Arne Schøller Larsen, Head, Høj Kom
Susanne Kjær Nielsen, Head, Fur Kom

The steering group is supported by the economic controller and by an external assisting project manager (in the period from March 2020 to December 2023). During the project period Mrs. Susanne Kjær Nielsen changed her position in Fur Kom and the authority to represent the municipality was taken over by Mrs. Helle Bank. MST is seated in the steering group. Originally MST was represented by Mr. Jess Jørgensen but his has been substituted by Mr. Jacob Høeg.

The project group take care of the day-to-day activities in the project. In most cases each of the seven beneficiaries has one or two representatives in the project group which at present is composed of:

Mathilde Boesen, Thi Kom
Elsemarie Kragh Nielsen, Thi Kom and Str Kom
Anja Sørensen, Thi Kom
Allan Esken, Jam Kom
Annita Svendsen, NST
Charlotte Rosenblad Ralund, Fax Kom
Anne Planeta Etzerodt, Fax Kom
Henriette Voigt, Høj Kom
Vibeke Heskjær Christensen, Høj Kom
Mette Larsen, Fur Kom
Henriette Bjerregaard, MST

During most of the project period the steering group meet regularly with two – three months intervals. Minutes are available from the meetings. The project group meetings took place more frequently and mostly on a monthly basis. The meetings were hosted on-line by the external assisting project manager and minutes from each meeting are available.

During the project period the project management at Thi Kom was challenged because the PM left the project by April 2020. Thereafter Thi Kom reorganized the project management with a new PM (Mrs. Tanja Binderup) supported by an external assistant project manager (from Bangsgaard & Paludan ApS). The effort to reorganise the project management has caused higher costs for action F1 than foreseen in the GA. We also notice, that several TDO's have been attached to the project during the project period as well as two monitoring experts.

The PM has shown high attention to give instructions about the administrative procedures to the involved parties. In addition, the PM has shown high attention to follow-up on the project's targets. The PM activities include attention to:
- Timesheets. A timesheet has been developed based on the LIFE model timesheet.
- Principles for time registration based on the circular note (8 December 2010) from the Commission
- Account system. Based on the Thi Kom account system for this LIFE project each AB has made a similar system. Each AB is responsible for their own account, but the CB keeps copies of all supporting account documents and makes an overall account for the entire project.
- Clear project identification on all invoices.
- Common Provisions.

These procedures have been discussed on-going through-out the project period on meetings with the steering and project group.

Meetings with the monitor team and the Commission (EASME)

- Neemo monitoring meeting 18022016
- Neemo monitoring meeting 22112017-23112017
- Neemo monitoring meeting 11122018-1212218
- Meeting with the Commission (Sylvia Barova) 09092019-10092019
- On-line meeting with the Commission (María-José Aramburu and Sylvia Barova) 13102021
- Neemo monitoring meeting 18052022
- Neemo monitoring meeting 31012023

5.2 Previous reports and amendments

Within this project the following technical reports have been submitted to the Commission:

- Progress Report #1: 03092017 (including partner agreements)
- Midterm Report: 31122018
- Progress Report #2: 31102020
- Progress Report #3: 15032022

During the project period the Commission has issued two amendments (letter amendments 1 and 2). On 05062020 we submitted a request for an amendment for an extension of the project period until 31122022, for including an additional partner (MST) in the project and for a budget modification due to a financial contribution from MST. The amendment (#3) was approved by the Commission (letter dated 16072020).

5.3 Answers to questions from the Commission

The Commission has evaluated the technical reports (PR#1, MtR, PR#2, PR#3) and visits (TDO and monitor) in a number of letters during the project period. Below we address issues (shown by italics) raised by the Commission in this communication.

Overall, we acknowledge, that the technical deliverables can be supplied electronically (cf. https://cinea.ec.europa.eu/programmes/life/life-reporting_en).

Commission letter dated 13032016 (letter following monitor visit 18022016)

Technical issues

1. *The project is asked to submit copies of signed partner agreements.* The agreements were submitted as part of PR#1.
2. *Attention is drawn to the output indicators.* Input to the Key Project Indicators will take place on-line as part of the FR.
3. *Attention is drawn to the project's website.* The website was up and running during 2016 and relevant subpages are also available in English.

Financial issues

4. *We appreciate that the timesheets comply with the requirements of the LIFE programme.*
5. *We appreciate that documentation of invoices and proof of payments are accepted by the Commission.*
6. We notice that certain requirements must be fulfilled to be able to reimburse travel costs.
7. *The project is asked to submit a description of the procurement procedures used by the beneficiaries.* All beneficiaries are public bodies and follow the national rules on public procurement combined with local rules at some of the beneficiaries. During the monitoring visits the monitor has checked several tendering procedures and no discrepancies have been identified. Furthermore, the monitor verified that the selection procedure of Amphi Consult was carried out correctly and in line with the national legislation (cf. the MtR). Please see Annex 1a for the principals of selecting service providers.

Commission letter dated 19032018 (reply to PR#1 and comments to monitor visit 22112017)

Technical issues

1. *The project is asked to use the correct templates for future reporting.* We have done that in future reports according to the templates provided by EASME / CINEA
2. *The project is asked to pay attention to the impact of the project.* This issue is addressed in section 6.2 and 6.3 by the action-by-action description (section 6.1) and in the communication (in writing) during 2021 and 2022.
3. *Some deliverables are missing the required LIFE and N-2000 logos.* The appropriate logos are now in the reports.
4. *In relation to Action A1 an overview of the outcome must be provided per project area and the use of funds must be described.* The impact and the used funds have been evaluated in a compiled report (please see Annex 1b and section 6.1.1).
5. *The project is asked for including hydrological applications under the RDP in relation to Action A3.* However, this was never relevant due to the composition of the Danish RDP.

6. *The project is asked to include some NST owned areas (subproject 5) in Action A4.* However, as NST already is the owner of the areas in subproject 5 this did not become relevant and the request was withdrawn in MtR.
7. *Action A4 eventually will become more resource demanding than foreseen in the GA. The project is asked to justify this.* As argued in the MtR, action A4 is time consuming both with respect to the specific consultations and negotiations and in relation to follow-up dialogue with the landowners. However, the final outcome is that enough resources for action A4 was allocated in the original budget of the GA.
8. *A detailed status of the compensation demands (Action B1) from private landowners is requested.* The issue has been addressed in PR#2 (including follow-up communication between EASME and Thi Kom) and is addressed in section 6.1.7.
9. *EASME comments on a proposal for purchasing additional land not being part of the GA.* However, the final outcome is that it never became relevant to include the proposed land in the project. In our amendment (June 2020) however, other areas were included in the project with a compensation payment.
10. *In relation to a revision of the N-2000 borders in Denmark EASME recommends the project to be careful during project implementation.* The issue is addressed above in section 3.3.
11. *EASME encourage the project to establish an English version of the website.* This issue has been addressed and the website is available in English.
12. *EASME gives advice for preparing an amendment for including MST as an associated beneficiary.* A request for an amendment was submitted in June 2020 and approved by EASME in July 2020.
13. *EASME reminds the project to do the time registration in a correct manner.* The project manager has worked with the project group with instruction for correct registration in timesheets and to ensure correct signature.
14. *EASME asks for alle relevant documents related to the selection of Amphi Consult for Action D2.* The documents were provided with the MtR (financial part).

The issues above were also addressed in annex 5 in the MtR.

<u>Commission letter dated 14032019 (reply to MtR)</u>

Technical issues

1. *Action A1. LIFE and Natura 2000 logos missing on reports.* The appropriate logos are now in the reports.
2. Na.
3. *Economic compensation for areas outside N-2000 requires detailed information.* The required information was provided for relevant areas in the amendment request of June 2020.
4. *For compensated areas documentation must be provided relating to conservation clauses, contracts etc.* The required documentation is provided in the reporting of Action B1 (please see section 6.1.7) for all relevant parcels and subprojects where compensation has been paid. Regarding confirmation of the price level at statement from the Danish Tax authorities is available in the LIFE application (p. 170).
5. *Purchased land must be registered in the EU land-purchase database.* This is relevant for subproject 1, 4, 5 and 6 (please see section 6.1.7).
6. *Problems with obtaining the project goals in action C1, C2 and C3.* In the period from 2020 to 2022 we have argued (in letters dated 17112021, 14012022 and 24022021) for the discrepancy between the targets and the obtained results. The obtained results will

be explained in detail below in the reporting of action C1 (section 6.1.8), C2 (section6.1.9) and C3 (section 6.1.10).

7. *eDNA analysis of Graphoderus bilineatus is accepted if based on market prices.* The analyses have been performed by Niras who took over Amphi Consult employees in a company fusion. Originally, Amphi Consult was performing the general species monitoring based on a tender performed on 15032016. Therefore, there are no specific tender for the eDNA analysis.
8. *Some delays were incurred in action D3 and D4 concerning socio-economic monitoring and monitoring of ecosystem services.* Regarding action D3 the delay was caught up during 2021 and 2022 when external experts collected data related to the three pre-defined indicators although it seemed relevant only for some of the subprojects. The outcome is described in the reporting of action D3 below (section 6.1.15).
   In PR#2 we proposed to make a compiled report for estimating the projects influence on the groundwater resources and a compiled report for the projects effect on carbon capture. The outcome is described in the reporting of action D4 (please see section 6.1.16).
9. *The website must be available also in English.* The problem has been solved.
10. No comments.

Financial issues

11. *Descriptions of project costs are not sufficiently detailed.* This has been corrected.
12. *Descriptions of project costs must be more detailed in order to be able to link costs to the budget.* This has been corrected.
13. *Some costs were classified incorrectly.* This has been corrected.
14. *Detailed information on the calculation of annual personnel costs must be provided.* This was provided to the external monitor on meeting 10092019 for Thi Kom, NST and FUR Kom. A complete calculation is Annex 1c for all beneficiaries.
15. *The timesheets are flawed because the name of the supervisor is missing.* The has been corrected.
16. *The cost for producing the website is high.* We find the cost reasonable due to the fact that the project is complicated by involving 8 subprojects and many disseminations.
17. *The cost for purchasing a grass chopper in subproject 3 (Str Kom) must be justified.* The machine will be used by the volunteer group ("Kærets Venner") at the project site to manage the hiking trail in the project area. If the machine was not in place the hiking trail would become more or less inaccessible during the summer and the value of the subproject to the general public accordingly reduced. Purchase of the machine and use of the machine by the volunteer group ("Kærets Venner") also gains important local ownership to the project. Later on, this was accepted by the Commission (letter dated 13122109).

<u>Commission letter dated 13122019 (letter following project visit by Commission 09092019-10092019)</u>

Technical issues

1. *In subproject 6 focus is on management of 7210*.* However, due to landowner reluctance the proposed area for grazing cannot be fulfilled and there are no alternative locations with 7210* in the subprojects where grazing can be introduced. As explained in our follow-up letter (24022021) to PR#2 NST will supply additional areas (app. 2 ha) for development of potential 7210*. During 2022 Fax Kom also supplied

additional (0,3 ha) potential 7210* by planting turfs of *Cladium mariscus.* This effort to some extent compensates for the missing grazing management of 7210*.

2. *There are special requirements for the purchase (or compensation in general) of areas outside N-2000.* The required information was provided for relevant areas in the amendment request of June 2020.
3. *The project's targets have been reduced concerning the habitat types. This reduction must be justified.*
   In our follow-up letters (17112021, 14012022 and 24022021) to PR#2 and in PR #3 we explain the background for the revised targets, and we described realistic revised targets (more or less equal to the obtained reported results). This especially concerns the outcome of action C1 (hydrology - please see section 6.1.8) where the implementation of the hydrological issues is beyond what was foreseen in the application and on a smaller area than foreseen for the habitat types 7230, 7210* and 7220*. The outcome of action C2 (clearings – please see section 6.1.9) and action C3 (grazing – please see section 0) must be seen under one as the goal is to obtain light open conditions of the habitat types. Thus, a larger total area of especially 7230 and 1330 have been managed in action C2 and C3 than foreseen in the application.
4. *The cost for eDNA must be based on marked prices.* As explained above, the analyses were provided by the service provider already performing the species monitoring of the project. The service provider had previously been selected based on a tender.
5. *The delay of action D3 (Socio-economy) and action D4 (Ecosystem-services) are worrying.* As explained above the project has taken care of these issues and the reporting has been performed during 2022 (please see section 0 and 6.1.16)
6. *The KPI needs to be revised.* This is addressed as part of the final report.

Financial issues

7. *Some timesheets are still missing the name of the supervisor*. This has been corrected.
8. *The 15. Juni Foundation supports the project to strengthen the projects website.* The support will not be included in the financial report.
9. Na.

<u>Commission letter dated December 2020 (Undated – letter following PR #2 and online monitoring meeting 06102020)</u>

1. *In action A1 we propose to include the total surveyed area as the target area. We appreciate, that CINEA accepts this.* The total area of the surveys is reported in section 6.1.1. Further, potential sites for *Cladium mariscus* were presented in the follow-up letter from Thi Kom to CINEA on 28022021.
2. In Action A2 we propose that the target must be the number of permits rather than the covered area. In Action A4 we propose that the target must be the number of necessary agreements rather than the area covered by the agreements. *We appreciate that CINEA accepts this*, and the outcome is reported in section 6.1.2 and 6.1.5.
3. *CINEA notes, that the budget uptake is low in action B1.* In follow-up letter dated 28022021we argue for the low budget uptake which is due to primarily landowner resistance towards the project.
4. The project proposes a flexible approach where action C1, C2 and C3 to some extent replace each other with respect to fulfilling the set goals. *We appreciate that CINEA in principle accepts this approach*. In particular it is relevant to report the obtained results for action C2 (clearings) and C3 (grazing) in common because the purpose of these actions is to secure light-open conditions.

5. *For action C1 CINEA pays attention to the extent of the project's implementation of the hydrological improvements and that it seems impossible to fully implement the action as foreseen in the GA.* Arguments for reducing the target area of action C1 have been communicated to CINEA on email 20112020, and letters dated 28022021 and 17112021. Furthermore, the final hydrological achievements are elucidated in section 6.1.8.
6. It is proposed to see the results of action C2 and C3 under one. *We appreciate that CINEA accepts the proposal.* The approach has been explained in follow-up communication dated 14012022 and the achieved results are explained in section 6.1.9 and 0.
7. The breeding program for *G. bilineatus* in action C5 cannot be implemented as foreseen in the GA. *CINEA asks for a description of alternative activities for the species.* This was discussed on the monitor meeting on 18052022 and the activities are explained in more detail in section 6.1.12.
8. We propose to conduct only baseline and effect monitoring in D actions and abandon the midterm monitoring. *We appreciate that CINEA accepts this* and in section 0 we explain the financial consequences of the change.
9. *We appreciate that CINEA accepts that no baseline monitoring in action D2 is conducted* in subproject 5 (Sydlangeland).
10. *We appreciate that CINEA accepts our revised time plan for reporting in action D3.* The final report for this action is available in annex 12.
11. *We appreciate that CINEA accepts compiled reports in action D4* for the projects influence on groundwater storage and for reducing carbon release instead of separate baseline and effect reports. The reports are available in annex 13.
12. *CINEA draws attention to the KPI database and the necessary updates.* We address this issue as part of the final report.
13. *CINEA mentions that the obligatory disclaimer is missing on the project's website.* The disclaimer is now available on the website (the main page).
14. *We appreciate that management plans (action F4) also can be elaborated for subproject 1 (Vejlerne), 2 (Hvidbjerg Å) and 3 (Agger, Thi Kom).*
15. *CINEA mentions, that some timesheets are still missing the name of the supervisor.* The error has been corrected in future timesheets.

<u>Commission letter dated 31032022 (letter following PR #3)</u>

CINEA's evaluation of the PR#3 contains the following remarks:

- *Concern is addressed to the fact that permits are still missing for the implementation of some measures.* During 2022 we have done a large effort to implement action C1 measures and all the planned measures have actually been implemented. This is described further in section 6.1.8.
- Agreements with landowners are reached (action A4) continuously. The agreements obtained during 2021 were presented to the external monitor on 18052022 and copies of alle agreements are included in Annex 3.
- *Some activities are implemented outside N-2000.* On the monitoring meeting at 18052022 the external monitor was provided with documents concerning
  - technical and financial justification for inclusion of the areas
  - maps showing the planned activities
  - a breakdown of the costs.
- On the 18052022-monitor meeting the monitor was provided with detailed data on the action C1 implemented activities such as the extent of closing of subsoil drains (please also see section 6.1.8).

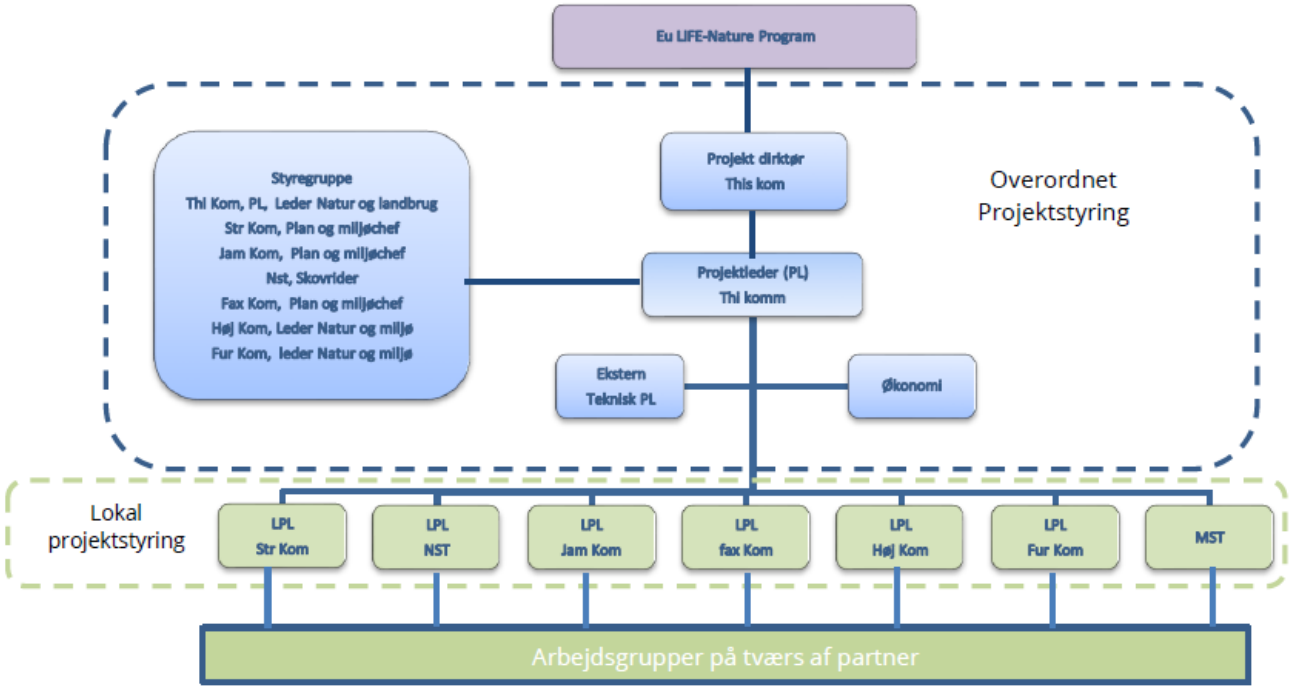
- The focus of the socio-economic report in action D3 was discussed with the monitor on the 18052022-monitor meeting. The report has been finalized with an English abstract and is attached in annex 12.

Commission letter dated 15072022 (letter following monitoring visit 18052022)

1. *CINEA reminds us to submit the report about the RDP results in action A3.* The report is available in annex 2 and action A3 is reported in section 6.1.3.
2. *CINEA acknowledge the receipt of samples of landowners' agreements.* This is part of action A4 which is reported in section 6.1.5. Landowners' agreements for the entire project are available in annex 3.
3. *We are pleased that CINEA accepts a 5-year lease of a parcel for winter grazing in subproject 3 (Str Kom).* The final outcome is leasing of 7,08 ha.
4. *CINEA accepts the technical and financial justification for project implementation on parcels outside N-2000.* In the reporting of action B1 (section 6.1.7) the restrictions are described in more detail and the registration of a clause is in place in the land book for those parcels where an agreement was obtained. Proof of registration is in annex 5.
5. *CINEA acknowledge the receipt of detailed information about our hydrological implementation.* The outcome of the hydrological activities in action C1 is described in section 6.1.8.
6. *We are pleased that CINEA accepts that associated beneficiary NST will restore 2 ha of 7210*.* During the autumn 2022 associated beneficiary Fax Kom has made a turf transplantation of *Cladium mariscus* on 0,23 ha to potential restore 7210*. Based on the experiences with this transplantation and with the transplantation (1,3 ha) NST has performed at subproject 5 (Sydlangeland) NST will restore the additional 2 ha of potential 7210* near Gulstav Mose (please see our letter 24022021) during 2023 in an After-LIFE perspective.
7. *CINEA mentions that we have conducted additional measures to improve habitats for Graphoderus bilieatus*. This is explained in more detail in section 0.
8. *CINEA acknowledge the receipt of the socio-economic report in action D3.* The final report with an English summary is available in annex 12.
9. *CINEA mentions that the obligatory disclaimer must be included in both the Danish and the English version of the website.* We have made the necessary adjustments.
10. *We are pleased that CINEA accepts cancellation of the third study trip.* Thus, as part of action E6 (please see section 6.1.22) two study trips (out of three planned trips) have been completed.
11. *We are pleased that CINEA accepts our revised proposal for the educational path in subproject 3 (Str Kom).* The path was established in the autumn 2022 and the path is described in more detail in our reporting of action E9 (section 6.1.25).
12. *We are pleased that CINEA accepts that the final seminar in action E12 is organized as a virtual event.* The seminar took place on 01122022 and the presentations are available on the projects' website. The activity is reported in section 6.1.28.

5.4 Organigram

Below we have attached a revised organogram (in Danish) which is explained in more detail above.



- Thi Kom: Thisted kommune
- Str Kom: Struer kommune
- Jam Kom: Jammerbugt kommune
- Fur Kom: Furesø kommune
- PL: Projektleder

NST: Naturstyrelsen
Fax Kom: Faxe kommune
Høj Kom: Høje Taastrup kommune
MST: Miljøstyrelsen
LPL: Lokale projektleder

5.5 Audit information

Our auditor is the BDO auditor (BDO Statsautoriseret Revisionsaktieselskab, Kystvejen 29, 8000 Aarhus C, CVR. Nr. 20222670). The NST account was audited by Rigsrevisionen and the audit declaration is part of the overall audit performed by BDO.

6 Technical part

6.1 Technical progress action by action

In this section we address the project progress action by action. It is important to notice, that the major management and restoration means in this project are

- Improved hydrology
- Clearings
- Grazing facilities
- Improvement of habitats

to be able to contribute to achieve a favourable conservation status of the habitat types and species targeted in this project.

For each action we have made an overall description of the achieved results. This is followed by a detailed description of achieved results per site in a tabular manner.

It is important to notice that planned start and end dates of activities refer to the revised time schedule (Form C3) of amendment #3.

6.1.1 Action A1: Botanical and hydrological feasibility studies

The aim of this action is to perform botanical and hydrological feasibility studies to provide data for entering landowner agreements and to plan the management works. The studies were conducted by the staff of the beneficiaries or by consultants. To the extent that the studies have been carried out by external consultants the task has been tendered according to the procurement rules of the individual beneficiary. At a minimum the procurement was based on the standard national rules.

Foreseen start date: 09/2015	Actual start date: 01/2016
Foreseen end date: 05/2021	Actual end date: 06/2022

In general, the studies were carried out in the beginning of the project period. However, some of the hydrological surveys were conducted in the second half of the project period in connection to our work with obtaining landowner agreements.

On privately owned areas detailed hydrological studies were typically prepared after obtaining agreements with the landowners in order to minimize the risk of revising the documents at a later stage. On areas owned by NST this consideration was unnecessary. The technical surveys have varying complexity and consist of simple notes or extensive reports.

Some of the studies have been financed by use of RDP funds as a complementary measure to the LIFE project. The RDP financed studies are reported as part of the achieved results of the LIFE project. Please notice however, that reports funded by RDP do not carry the LIFE and N-2000 logos.

Planned outputs

The botanical and hydrological feasibility studies are planned to cover 1014 ha distributed on 268 ha of habitat types and on 746 ha of other land area.

Deliverables

We have prepared a compiled report for the area of habitat types and of other land areas covered by the botanical and hydrological feasibility studies. The report is in annex 1 and the report covers both the 2016 and 2017 reporting mentioned as deliverables in GA.

Achieved outputs

The botanical studies cover 1012 ha of which 293 ha are habitat types and 719 ha are other land areas. The hydrological studies cover 1270 ha of which 509 ha are habitat types and 761 ha are other land areas. Please note, that areas covered by the hydrological studies in most cases are the same as the areas covered by the botanical studies.

The botanical and hydrological studies were partly financed by RDP funds covering 402 ha and 710 ha, respectively.

The hydrological studies have revealed the demand for hydrological improvements in order to achieve improved conservation status of the targeted habitat types. In some cases (c.f. our communication dated 17112021), the studies show, that the hydrology of the targeted habitat types not need any changes and that improvement of the conservation status is dependent on other initiatives such as clearings and grazing. In other cases, the studies reveal that the hydrology of some of the local project areas (especially in subproject 3 Agger, Thi Kom) are influenced by e.g., increasing runoff due to climate change. In addition, the studies also

revealed that the hydrology in some cases should remain untouched in order not to harm existing natural assets. In conclusion, the overall demand for hydrological management of the targeted habitat types is less than foreseen in GA and this decreases the demand for activities in action C1 (hydrological improvements).

Overall, the expected results of this action have been achieved. Details on achieved results are shown in table A1-1. The individual reports are not deliverables and not attached to this report, but they are available on the projects' website (https://www.rigkildelife.dk/dokument-arkiv/).

Table A1-1: Overview of the activity performed in Action A1.

Sub-project number	**Subproject name**	**Activity performed Action A1**
1	Vejlerne, Thi Kom	7 biological studies 5 hydrological feasibility studies
2	Hvidbjerg Å, Thi Kom	2 biological studies 6 hydrological feasibility studies
3	Agger, Thi Kom	7 biological studies 3 hydrological feasibility studies
3	Agger, Str Kom	1 biological study 1 hydrological feasibility study
4	Underlien, Jam Kom	No biological studies 1 hydrological feasibility study
5	Sydlangeland, NST	No biological studies 2 hydrological feasibility studies (including a detailed project description)
6	Suså, Fax Kom	No biological studies 1 hydrological feasibility studies (including a landowner survey)
7	Vasby Sengeløse, Høj Kom	1 biological study No hydrological feasibility study
8	Øvre Mølleådal, Fur Kom + NST	1 biological study

6.1.2 Action A2: Authorization procedures

This action focuses on authorization procedures to secure that the activities in each subproject obtain the necessary permits according to the present legislation. In most cases, this means that each subproject must be approved according to the nature protection act, the watercourse act, the planning act, and in some cases local conservation rules and the agricultural law.

Foreseen start date: 09/2015	Actual start date: 03/2016
Foreseen end date: 09/2021	Actual end date: 06/2022

Planned outputs

Perform applications to obtain the necessary permits to be able to implement the project activities.

Deliverables

No deliverables.

Achieved outputs

Legislative questions are typically clarified when successful negotiations have been concluded with the landowners. All subprojects have obtained the required permits as listed below to be able to implement the projects. The entire authorization procedure was carried out without any complaints. Details of the achieved results are shown in table A2-1.

Table A2-1: Overview of the activity performed in Action A2.

Sub-project number	**Subproject name**	**Activity performed Action A2**
1	Vejlerne, Thi Kom	Planning Act: 12 permits Watercourse Act: 12 permits Nature protection Act - §3: 22 permits Nature protection Act - §16: 1 permit Conservation Act (c.f. Nature protection Act §50): 4 permits
2	Hvidbjerg Å, Thi Kom	Planning Act: 1 permit Watercourse Act: 3 permits Nature protection Act - §3: 6 permits
3	Agger, Thi Kom	Watercourse Act: 1 permit Nature protection Act - §3: 6 permits Conservation Act (c.f. Nature protection Act §50): 1 permit The species conservation Act: 1 permit
3	Agger, Str Kom	Watercourse Act: 1 permit Nature protection Act - §3: 2 permits Nature protection Act - §15: 1 permit
4	Underlien, Jam Kom	Watercourse Act: 1 permit Nature protection Act - §3: 2 permits Conservation Act (c.f. Nature protection Act §50): 1 permit EIA screening: 1 permit Land consolidation Act: 1 permit
5	Sydlangeland, NST	Watercourse Act: 1 permit Nature protection Act - §3: 1 permit EIA screening: 1 permit
6	Suså, Fax Kom	Nature protection Act - §3: 2 permits
7	Vasby Sengeløse, Høj Kom	Watercourse Act: 5 permits Nature protection Act - §3: 9 permits EIA screening: 1 permit

		Water supply Act: 1 permit
8	Øvre Mølleådal, Fur Kom + NST	Nature protection Act - §3: 2 permits Conservation Act (c.f. Nature protection Act §50): 2 permits

6.1.4 Action A3: Preparing applications for RDP

The action focuses on applications for RDP grants in the support of clearings and grazing facilities where possible in the subprojects. Thus, RDP grants have been used as a complementary tool to the LIFE grant with respect to the specific management activities in action C2 (clearings) and action C3 (grazing facilities).

Foreseen start date: 09/2015	Actual start date: 08/2015
Foreseen end date: 09/2021	Actual end date: 05/2022

Planned outputs

Perform applications for RDP grants to be able to implement complementary project activities in action C2 and action C3. The applications and RDP grants are planned to cover 538 ha distributed on 218 ha of habitat types and on 320 ha of other land area.

Deliverables

We have prepared a compiled report for the area of habitat types and of other land areas covered by the RDP applications. The report is in annex 2.

Achieved outputs

In total the project has achieved RDP grants to management activities on 413 ha where 116 ha covers various habitat types and 297 ha covers other land use. Most of the grants support establishment of grazing facilities while a few grants support clearing activities. The opportunity for achieving RDP grants for hydrological improvements was closed by the national authorities early in the project period.

The Danish RDP scheme is managed by the Danish Agricultural Agency and the designation of areas qualifying for RDP support is one of the Agency's tasks. During the project period eligible areas for RDP grants has been reduced in some subprojects and increased in other subprojects. Another problem is that the Agency's handling time of the applications has been extremely long and that the RDP was suspended for one year. In some cases, this has resulted in that implementation of management activities by RDP grants were skipped in favour of using LIFE funds. Details of the achieved results are shown in table A3-1.

Table A3-1: Overview of the activity performed in Action A3.

Sub-project number	**Subproject name**	**Activity performed Action A3**
1	Vejlerne, Thi Kom	RDP funds on 191 ha distributed on 17 grants
2	Hvidbjerg Å, Thi Kom	RDP funds on 35 ha distributed on 4 grants
3	Agger, Thi Kom	RDP funds on 80 ha distributed on 6 grants
3	Agger, Str Kom	No RDP funds
4	Underlien, Jam Kom	RDP funds on 54 ha distributed on 9 grants
5	Sydlangeland, NST	No RDP funds
6	Suså, Fax Kom	RDP funds on 21 ha distributed on 1 grant
7	Vasby Sengeløse, Høj Kom	RDP funds on 32 ha distributed on 8 grants
8	Øvre Mølleådal, Fur Kom + NST	No RDP funds

6.1.5 Action A4: Contact and cooperation with landowners and hunters

The action focuses on cooperation with private landowners and hunters in the subprojects in order to achieve support to perform the feasibility studies in Action A1 and ultimately to achieve agreements for project implementation (cf. C actions).

Foreseen start date: 12/2015	Actual start date: 12/2015
Foreseen end date: 12/2021	Actual end date: 06/2022

Planned outputs

Agreements to perform feasibility studies (cf. action A1) is planned to cover 1368 ha. The areal cover of agreements for project implementation is not defined in GA. Instead, the focus is to obtain the necessary number of agreements to be able to implement the foreseen C-actions.

Deliverables

No deliverables. However, the achieved agreements are available in annex 3 including maps showing the areal cover of the agreements. This is a follow-up on the comments in the CINEA letter dated 15072022.

Achieved outputs

Agreements to perform the feasibility studies (cf. action A1) were reported in MtR with an area cover of 1887 ha. In this respect the planned output has been achieved.
Overall, we have obtained app. 100 agreements for project implementation (cf. C actions) covering 677 ha. A large part of these agreements has been obtained without using economic compensation. The remaining agreements are based on economic compensation (details are explained in section 6.1.7).

A large effort has been done in the negotiations with private landowners to obtain the necessary agreements for project participation. However, in some cases agreements could not be obtained (cf. our letter dated 17112021):

- Because the agricultural practices do not fit with the future management requirements of nature areas.
- Due to a poor co-operation between the farmers and the beneficiaries. Thus, some farmers have a general negative attitude towards the public authorities.
- Because of unrealistic high expectations for economic compensation among the landowners.
- Because of hunting interests which the landowners claim are incompatible with the planned management activities to improve the conservation status of habitat types.

Details of the achieved results regarding agreements for project implementation are shown in table A4-1.

Table A4-1: Overview of the activity performed in Action A4.

Sub-project number	Subproject name	Activity performed Action A4
1	Vejlerne, Thi Kom	37 agreements on 205 ha. 29 agreements (188 ha) without compensation and 8 agreements (17 ha) with compensation.
2	Hvidbjerg Å, Thi Kom	21 agreements on 77 ha. 16 agreements (46 ha) without compensation and 5 agreements (31 ha) with compensation.

3	Agger, Thi Kom	8 agreements on 101 ha all without compensation.
3	Agger, Str Kom	2 agreements covering 53 ha. 1 agreement (46 ha) without compensation entered with the management group "Kærets Venner" and 1 agreement (7 ha – winter quarter) with compensation.
4	Underlien, Jam Kom	13 agreements on 80 ha. 11 agreements (52 ha) without compensation and 3 agreements (28 ha) with compensation.
5	Sydlangeland, NST	1 agreement on 8,7 ha for purchase.
6	Suså, Fax Kom	24 agreements on 48 ha. 22 agreements (40 ha) without compensation and 2 agreements (8 ha) with compensation.
7	Vasby Sengeløse, Høj Kom	14 agreements on 31 ha. 13 agreements (30 ha) without compensation and 1 agreement (1 ha) with compensation.
8	Øvre Mølleådal, Fur Kom + NST	11 agreements on 89 ha without compensation.

6.1.6 Action A5: Surveys for *Graphoderus bilineatus*

The action focuses on a biological survey of *G. bilineatus* at subproject 8 (Øvre Mølleådal) as a planning tool for implementing action C4 (improved habitats for the species) and action C5 (restocking and release of the species).

Foreseen start date: 04/2016	Actual start date: 04/2016
Foreseen end date: 12/2016	Actual end date: 11/2016

Planned outputs

A biological survey report for the management of *G. bilineatus* at subproject 8.

Deliverables

A biological survey report for *G. bilineatus* at subproject 8. The report is available in annex 4.

Achieved outputs

The survey was conducted by the company "Natur360". Out of 51 potential habitats 17 spots were concluded to be possible habitats for *G. bilineatus*. Larvae of the species were mapped on 4 locations while adult individuals were mapped only at 1 location. The report recommends habitat improvements (cf. action C4) of 11 spots and concludes that restocking and release (cf. action C5) of *G. bilineatus* may be problematic if based on the very small present population at subproject 8.

6.1.7 Action B1: Economic compensation to landowners

The aim of this action is to obtain agreements with private landowners where economic compensation is demanded by the landowners. The compensation payments have been necessary to be able for the project to obtain the necessary availability to the project areas and to be able to implement the management activities.

Foreseen start date: 12/2015	Actual start date: 06/2016
Foreseen end date: 12/2021	Actual end date: 06/2022

Planned outputs

In the GA economic compensation was foreseen in all subprojects. Thus, once and for all compensation was expected on 55 ha and 64 ha were expected to be purchased. It is important to notice, that most of the agreements necessary for project implementation were expected to be achieved without using economic compensation as explained in section 6.1.5.

Deliverables

A declaration stipulating future land use is part of every single landowner agreement, where compensation has been paid. Printouts from the land book showing the limitations in land use for nature purposes on parcels having received economic compensation are included in annex 5. In the annex you will also find maps showing the areal cover of agreements based on economic compensation.

Achieved outputs

Overall, the project has entered 21 agreements involving economic compensation. 74,2 ha are covered by permanent (one-off), or leasing contracts (5 to 20 years) and 19,47 ha were purchased by the beneficiaries. A time-limited agreement (leasing) was only entered if a permanent agreement couldn't be obtained. In some of the subprojects it was necessary to purchase some parcels to be able to obtain the land rights. This is the case in subproject 1, 4, 5 and 6. The relevant purchased parcels have been registered in the EU land purchase database.

The overall results of the action compared to the targets of the GA are shown in table B1-1.

Table B1-1: Overview of the target and achieved results of economic compensation activities in action B1.

Subproject number	**Local project name**	**Target habitat types**	**Action B1 Agreements achieved**	**Action B1 in GA**
1	Vejlerne, Thi Kom	7230, 7220*	Once-and-for all compensation on 14,8 ha. Purchase of 1,57 ha by changing parcels (cf. amendment #3)	Purchase up to 15 ha of intensive agricultural parcels, purchase up to 5 ha of nature parcels. Once-and-for all compensation on 20 ha
2	Hvidbjerg Å, Thi Kom	7230, 7220*	Once-and-for all compensation on 31,0 ha	
3	Agger, Thi Kom	7230, 7220*	No compensation	
3	Agger, Str Kom	7230	Lease of 7,1 ha	Purchase up to 10 ha
4	Underlien, Jam Kom	7230, 7220*	Purchase of 7,5 ha and once-and-for all compensation on 20,5 ha	Purchase up to 5 ha. Once-and-for all compensation on up to 30 ha
5	Sydlangeland, NST	7230, 7210*	Purchase of 8,7 ha	Purchase up to 10 ha
6	Suså, Fax Kom	7230, 7210*	Purchase of 1,7 ha	Purchase up to 5 ha
7	Vasby Sengeløse, Høj Kom	7230	Lease of 0,8 ha	Purchase up to 5 ha and lease up to 5 ha

8	Øvre Mølleådal, Fur Kom + NST	7230, 7220*	No compensation	Purchase up to 9 ha

In table B1-2 the results of action B1 in each of the subprojects is explained in more detail. If areas outside N-2000 have been compensated it is highlighted in the table.

Table B1-2: Details of the economic compensation activities at each subproject.

Sub-project number	**Subproject name**	**Activity performed Action B1**
1	Vejlerne, Thi Kom	Once-and-for all compensation used to enter 6 agreements with private landowners. The changes in land use as stated in the registered clause are permanent. Two parcels purchased (one of them outside N-2000. This is explained in our reply to PR#3) by Thi Kom to be able to obtain the necessary land rights. This was accepted in CINEA letter dated 15072022.
2	Hvidbjerg Å, Thi Kom	Once-and-for all compensation used to enter 5 agreements with private landowners. The agreements are permanent. 2 agreements including areas outside N-2000 (this is explained in our reply to PR#3).
3	Agger, Thi Kom	Although a compensation demand was foreseen in the GA the management activities were possible to implement without using economic compensation.
3	Agger, Str Kom	Use of compensation was foreseen to be necessary to obtain access to surrounding parcels to be used as winter quarter for cattle. The outcome is leasing (1 agreement) of parcels for a period of 5 years with a possibility for prolongation. The leased parcels are situated outside N-2000. This was accepted in CINEA letter dated 15072022. In addition, a small land consolidation process was carried out to obtain a better property structure with less properties within the project area.
4	Underlien, Jam Kom	A land consolidation process was a central tool to be able to obtain permanent land rights on 28 ha. Of this 7,5 ha (distributed on 3 parcels) was purchased by Jam Kom and 20,5 ha are covered by 3 agreements with once-and-for all compensation.
5	Sydlangeland, NST	Most of the subproject area was state owned by the start of the project (by NST). A property (incl. buildings) of 23,8 ha was purchased by NST and out of this the purchase of 8,7 ha will be funded by LIFE. The remaining area of 15,1 ha and the buildings are financed by other sources than LIFE. The area-value and building-values is assessed in the closing document (købsaftale) (please see annex 4).
6	Suså, Fax Kom	One parcel purchased by Fax Kom to be able to obtain the necessary land rights. Additionally, 6,6 ha is leased for 8 years. The compensation however is paid by Fax Kom outside the LIFE budget and the areas are partly situated outside N-2000.
7	Vasby Sengeløse, Høj Kom	Most of the subproject area is conserved with an existing strict nature clause. Therefore, economic compensation was only used to lease (20 years) a small plot of 0,8 ha outside the conserved area involving 1 agreement. It was not possible to obtain agreement for a winter quarter on surrounding areas as planned in the GA.
8	Øvre Mølleådal, Fur Kom + NST	Although a compensation demand was foreseen in the GA the management activities were possible to implement without using economic compensation.

The project has compensated approximately 24 ha less than foreseen in the GA. There are multiple reasons for this which have been elucidated in section 6.1.5 in relation to the private landowners. As explained in section 6.1.1 there are also technical and hydrological reasons for managing a smaller area than foreseen in the GA.

The registered clause generally contains the following limitations in future land use for parcels with improved hydrology:

- No rotation of soils, no use of manure or fertilizers, no use of chemical spraying
- No change in water level. Hydrological improvements must be sustained.
- No intensive agriculture and no crops

- No feeding of wildlife
- No supplementary feeding of domestic animals
- No afforestation or energy crops

6.1.8 Action C1: Hydrological improvements

The purpose of this action is to improve the hydrological conditions with the aim to improve the conservation status of the targeted habitat types. The hydrological improvements are in most cases followed by other management initiatives such as establishment of grazing facilities.

Foreseen start date: 07/2016	Actual start date: 03/2016
Foreseen end date: 06/2022	Actual end date: 06/2022

Planned outputs

In the GA hydrological improvements were planned in all subprojects but subproject 8 (Øvre Mølleådal). The overall target for the action is shown for the habitat types 7230, 7220* and 7210* in Table C2-1. Thus, hydrological management was foreseen to take place on 118,8 ha 7230, 2,5 ha 7220* and 1,2 ha 7210*. In addition, hydrological management was also foreseen on other habitat types occurring in connection to the primary target habitat types. The overall target for hydrological management of these other habitat types is shown in the (Table C1-3).

Output was also foreseen in GA for potential new 7230, new 7210* and new 7220* - cf. table C1-1. According to the GA the effect must be seen as the combined output of action C1, C2 and C3.

The total cover of hydrological management was foreseen on 1026 ha.

Deliverables

There are no deliverables in action C1. Maps showing the area cover of the hydrological improvements are shown in Annex 6 together with photos showing the hydrological activities in the field.

Achieved outputs

The total area covered by the hydrological management is 255 ha. The area cover of the implementation of the hydrological management of the primary habitat types is shown in table C1-1 for each subproject. Table C1-2 summarizes the overall output for the entire project regarding the primary habitat types and Table C1-3 shows the area cover of the hydrological management of the other habitat types targeted by the project.

Table C1-1: Overview of the target and achieved results of hydrological improvements in action C1. Potential areas are newly created habitat types.

Subproject number	Local project name	Target habitat types	Action C1 Hydrological management achieved (ha)	Action C1 in GA (ha)
1	Vejlerne, Thi Kom	7230, 7220*	7230: 14,0 7220*: 0 Potential 7230: 2,7 Potential 7220*: 0,3	7230: 17,4 7220*: 0,4 Potential 7230: 30,0 Potential 7220*: 0
2	Hvidbjerg Å, Thi Kom	7230, 7220*	7230: 3,4 7220*: 0,0 Potential 7230: 16,6 Potential 7220*: 0,5	7230: 43,5 7220*: 1,1 Potential 7230: 5,0 Potential 7220*: 0
3	Agger, Thi Kom	7230, 7220*	7230: 15,5 7220*: 0,4 Potential 7230: 1,6 Potential 7220*: 0,0	7230: 34,7 7220*: 0,7 Potential 7230: 9,0 Potential 7220*: 5,0

3	Agger, Str Kom	7230	7230: 9,3 Potential 7230: 13,4	7230: 9,0 Potential 7230: 9,0
4	Underlien, Jam Kom	7230, 7220*	7230: 3,7 7220*: 0,6 Potential 7230: 4,7 Potential 7220*: 0,0	7230: 11,8 7220*: 0,4 Potential 7230: 9,0 Potential 7220*: 2,0
5	Sydlangeland, NST	7230, 7210*	7230: 0 7210*: 0 Potential 7230: 5,0 Potential 7210*: 4,5	7230: 0 7210*: 0 Potential 7230: 5,0 Potential 7210*: 4,5
6	Suså, Fax Kom	7230, 7210*	7230: 1,2 7210*: 6,1	7230: 1,7 7210*: 1,2
7	Vasby Sengeløse, Høj Kom	7230	7230: 0,6 Potential 7230:1,4	7230: 6,6 Potential 7230: 2,0
8	Øvre Mølleådal, Fur Kom + NST	7230, 7220*	7230: 0,7 7220*: 0 Potential 7230: 0,8	7230: 0 7220*: 0 Potential 7230: 6,0

Table C1-2: Overview of the target and achieved results of hydrological management activities in action C1 on the primary habitat types (Pot.=potential newly created).

Habitat type	7230	7210*	7220*	Pot. 7230	Pot. 7210*	Pot. 7220*
Action C1 in GA (ha)	115,8	1,2	2,5	75,0	7,0	4,5
Hydrological management achieved (ha)	48,5	6,1	1,0	41,1	4,5	0,8

Table C1-3: Overview of the target and achieved results of hydrological management activities in action C1 on habitat types surrounding the primary target habitat types.

Habitat type	1330	6410	2130	2140	2190	7140
Action C1 in GA (ha)	97,1	40,0	25,9	12,2	8,4	1,8
Hydrological management achieved (ha)	45,3	4,2	5,0	0,0	3,8	0,0

The hydrological management cover 55,5 ha of 7230, 7210* and 7220* in combination and 58,2 ha of other habitat types. This is lower than foreseen in the GA and the primary reasons are:

- that the hydrological feasibility studies showed where hydrological management could take place in favour of the habitat types. The mapped areas are smaller than foreseen in the GA,
- that agreements on hydrological management could not be achieved with all relevant landowners.

The project operates with various means for hydrological improvements. Closing of subsoil drains are much more costly than closing of open ditches although both ditches and subsoil drains originally are established to lower the water table and drain the project areas. In the GA both types of drainage systems are proposed to be handled in the project but the precise extent of closing subsoil drains and open ditches had to be mapped in the feasibility studies (Action A1). Overall, the studies conclude, that many more subsoil drains than open ditches need to be closed.

Although the area cover of the hydrological management is smaller than foreseen in the GA the specific implementation of hydrological activities has been rather comprehensive:

- 7452 m of ditches have been closed (18000 m foreseen in GA)
- 21710 m of subsoil drains have been closed or redirected (4500 m foreseen in GA)
- 3 crossings in streams established (3 foreseen in GA)
- 2500 m of streams restored (3400 m foreseen in GA)

- 2 dikes established (in total 600 m) with fixed outlets to stream (1 dike foreseen in GA). This was implemented in subproject 5 (Sydlangeland) and designed on the basis of a hydrological model (cf. Action A1). Full scale implementation was only possible after the purchase of additional 8,9 ha.

Comparing the achieved area cover of the hydrological management with the specific activities indicates, that the hydrological restoration was more complicated, comprehensive, and costly per area unit than foreseen in the GA.

The potential for newly created habitat types is the combined result achieved in action C1, C2 and C3. In section 0 we have made a compiled conclusion of the potential output of newly created habitat types.

6.1.9 Action C2: Clearings

The aim of this action is to remove vegetation to secure light open conditions of the targeted habitat types. The clearing activities are followed-up by grazing initiatives to be able to maintain the light open conditions. The purpose of action C2 and action C3 can be seen under one and in section 6.1.10 we have made a conclusion of the combined result of the two actions. This approach was approved by EASME in letter dated 10122020.

Foreseen start date: 01/2016	Actual start date: 03/2016
Foreseen end date: 06/2022	Actual end date: 06/2022

Planned outputs

In the GA management by clearing was planned in all subprojects but subproject 3 (Agger Str Kom) and subproject 5 (Sydlangeland). The overall target for the action is shown for the habitat types 7230, 7220* and 7210* in Table C2-1. Thus, clearings were foreseen to take place on 71,9 ha 7230, 5,0 ha 7220* and 12,6 ha 7210*. In addition, clearings were also foreseen on other habitat types occurring in connection to the primary target habitat types. The overall target for clearing of these other habitat types is shown in the (Table C2-3).

Output was also foreseen in GA for potential new 7230, new 7210* and new 7220* - cf. table C2-1. According to the GA the effect must be seen as the combined output of action C1, C2 and C3.

The total cover of clearings was foreseen on 328 ha as a combined effort of LIFE activities and complementary RDP activities.

Deliverables

There are no deliverables in action C2. Maps showing the area cover of the clearings are shown in Annex 7 together with photos showing the clearing activities in the field.

Achieved outputs

The total area covered by the clearings is 121 ha. The overall area cover of the clearings of the primary habitat types is shown in table C2-1 for each subproject. Table C2-2 summarizes the overall output for the project regarding the primary habitat types and Table C2-3 shows the area cover of the clearings of the other habitat types targeted by the project.

Table C2-1: Overview of the target and achieved results of clearing activities in action C1. Potential areas are newly created habitat types. Clearings have taken place by use of either LIFE of RDP funds.

Subproject number	Local project name	Target habitat types	Action C2 Clearings achieved (ha)	Action C2 in GA (ha)
1	Vejlerne, Thi Kom	7230, 7220*	7230: 6,7 (LIFE) + 5,5 (RDP) 7220*: 0 Potential 7230: 9,0 Potential 7220*: 0	7230: 18,9 7220*: 0 Potential 7230: 30,0 Potential 7220*: 0
2	Hvidbjerg Å, Thi Kom	7230, 7220*	7230: 0,7 (LIFE) 7220*: 0,0 Potential 7230: 7,3 Potential 7220*: 0	7230: 5,8 7220*: 0,5 Potential 7230: 5,0 Potential 7220*: 0
3	Agger, Thi Kom	7230, 7220*	7230: 17,8 (LIFE) + 0,1 (RDP) 7220*: 2,8 (LIFE) + 0,6 (RDP) Potential 7230: 2,0 Potential 7220*: 0	7230: 19,2 7220*: 0,9 Potential 7230: 9,0 Potential 7220*: 5,0
3	Agger, Str Kom	7230	7230: 1,5 (LIFE)	7230: 0

			Potential 7230: 12,8	Potential 7230: 9,0
4	Underlien, Jam Kom	7230, 7220*	7230: 0,3 (RDP) 7220*: 0,2 (RDP) Potential 7230: 0,3 Potential 7220*: 0,3	7230: 12,3 7220*: 1,7 Potential 7230: 9,0 Potential 7220*: 2,0
5	Sydlangeland, NST	7230, 7210*	7230: 0 7210*: 0 Potential 7230: 0 Potential 7210*: 0	7230: 0 7210*: 0 Potential 7230: 0 Potential 7210*: 0
6	Suså, Fax Kom	7230, 7210*	7230: 0,01 (LIFE) 7210*: 0,4 (LIFE) + 0,7 (RDP) Potential 7230: 1,6 Potential 7210*: 0,9	7230: 1,7 7210*: 14,0 Potential 7230: 0 Potential 7210*: 0
7	Vasby Sengeløse, Høj Kom	7230	7230: 4,4 (LIFE) +1,8 (RDP) Potential 7230: 3,6	7230: 6,6 Potential 7230: 2,0
8	Øvre Mølleådal, Fur Kom + NST	7230, 7220*	7230: 0,9 (LIFE) 7220*: 0 Potential 7230: 0,5	7230: 1,4 7220*: 0,5 Potential 7230: 6,0

Table C2-2: Overview of the target and achieved results of the clearing activities in action C2 on the primary habitat types (Pot.=potential newly created).

Habitat type	7230	7210*	7220*	Pot. 7230	Pot. 7210*	Pot. 7220*
Action C2 in GA (ha)	71,9	12,6	5,0	75,0	7,0	4,5
Clearings achieved (ha)	39,7	1,1	3,6	37,0	0,9	0,3

Table C2-3: Overview of the target and achieved results of the clearing activities in action C2 on habitat types surrounding the primary target habitat types.

Habitat type	1330	6410	2130	2140	2190	7140
Action C2 in GA (ha)	6,8	19,5	25,1	5,0	17,2	0,1
Clearings achieved (ha)	0,7	5,0	0	0	0	0

The area cover of the achieved clearings is below the target in the GA. However, this is to a large extent compensated by the grazing achievements which are above the target (section 6.1.10) and therefore the project's overall target for improving the light conditions of the targeted habitat types is fulfilled. The clearings cover 44,4 ha of 7230, 7210* and 7220* in combination and 5,8 ha of other habitat types.

As analysed in action A3 part of the clearings were implemented by use of RDP funds. 44,4 ha were cleared by use of these funds instead of using LIFE funds. Thus approximately 1/3 of the clearings were financed by RDP funds as foreseen in the GA.

The clearing of habitat type 7210* is low compared to the target. This is due to landowner reluctance in the core 7210* area at subproject 6 (Suså). As a compensation measure Fax Kom has restored 7210* by turf transplantation of *Cladium mariscus* on 0,23 ha and NST plan to establish additional 2 ha as an After-LIFE activity.

As mentioned, the potential for newly created habitat types is the combined result achieved in action C1, C2 and C3. In section 0 we have made a compiled conclusion of the potential output of newly created habitat types.

6.1.10 Action C3: Grazing facilities

The aim of this action is to establish grazing facilities to secure light open conditions of the targeted habitat types, to improve the structures of the grazed areas and to maintain habitats for the target species. In some areas grazing facilities are installed as a follow-up activity to clearings in Action C2. As mentioned, the purpose of action C2 and action C3 can be seen under one and below we have made a conclusion of the compiled result of the two actions.

Foreseen start date: 05/2017	Actual start date: 09/2016
Foreseen end date: 06/2022	Actual end date: 06/2022

Planned outputs

In the GA management by grazing was planned in all subprojects. The overall target for the action is shown for the habitat types 7230, 7220* and 7210* in Table C3-1. Thus, grazing was foreseen to take place on 65,9 ha 7230, 2,2 ha 7220* and 12,6 ha 7210*. In addition, clearings were also foreseen on other habitat types occurring in connection to the primary target habitat types. The overall target for clearing of these other habitat types is shown in the (Table C3-3).

Output was also foreseen in GA for potential new 7230, new 7210* and new 7220* - cf. table C3-1. According to the GA the effect must be seen as the combined output of action C1, C2 and C3.

The total cover of grazing was foreseen on 744 ha as a combined effort of LIFE activities and complementary RDP activities.

Deliverables

There are no deliverables in action C3. Maps showing the area cover of the grazing facilities are shown in Annex 8 together with photos showing the grazing activities in the field.

Achieved outputs

The total area covered by grazing is 651 ha. The overall area cover of the grazing effort of the primary habitat types is shown in table C3-1 for each subproject. Table C3-2 summarizes the overall output for the project regarding the primary habitat types and Table C3-3 shows the area cover of the grazing effort of the other habitat types targeted by the project.

Table C3-1: Overview of the target and achieved results of grazing activities in action C3. Potential areas are newly created habitat types. Clearings have taken place by use of either LIFE of RDP funds.

Subproject number	**Local project name**	**Target habitat types**	**Action C3 grazing achieved (ha)**	**Action C3 in GA (ha)**
1	Vejlerne, Thi Kom	7230, 7220*	7230: 6,0 (LIFE) + 24,9 (RDP) 7220*: 0,4 (RDP Potential 7230: 17,9 Potential 7220*: 0,6	7230: 10,8 7220*: 0 Potential 7230: 30,0 Potential 7220*: 0
2	Hvidbjerg Å, Thi Kom	7230, 7220*	7230: 2,3 (LIFE) + 20,1 (RDP) 7220*: 0,2 (RDP) Potential 7230: 23,7 Potential 7220*: 0,5	7230: 8,3 7220*: 0,0 Potential 7230: 5,0 Potential 7220*: 0,0
3	Agger, Thi Kom	7230, 7220*	7230: 9,5 (LIFE) + 20,0 (RDP) 7220*: 0,1 (LIFE) + 2,8 (RDP) Potential 7230: 4,7 Potential 7220*:0	7230: 19,0 7220*: 0,4 Potential 7230: 9,0 Potential 7220*: 5,0

3	Agger, Str Kom	7230	7230: 10,7 (LIFE) Potential 7230: 10,7	7230: 6,0 Potential 7230: 9,0
4	Underlien, Jam Kom	7230, 7220*	7230: 3,0 (RDP) 7220*: 0,1 (LIFE) +0,4 (RDP) Potential 7230: 2,0 Potential 7220*: 0,7	7230: 9,8 7220*: 0,4 Potential 7230: 9,0 Potential 7220*: 2,0
5	Sydlangeland, NST	7230, 7210*	7230: 0 7210*: 0 Potential 7230: 5,0 Potential 7210*: 4,5	7230: 0 7210*: 0 Potential 7230: 5,0 Potential 7210*: 4,5
6	Suså, Fax Kom	7230, 7210*	7230: 0,7 (RDP) 7210*: 0,6 (LIFE) + 1,0 (RDP) Potential 7230: 2,1 Potential 7210*: 0,9	7230: 1,7 7210*: 12,6 Potential 7230: 0 Potential 7210*: 0
7	Vasby Sengeløse, Høj Kom	7230	7230: 0,5 (LIFE) +5,7 (RDP) Potential 7230: 4,1	7230: 6,5 Potential 7230: 2,0
8	Øvre Mølleådal, Fur Kom + NST	7230, 7220*	7230: 11,0 (LIFE) 7220*: 0,1 Potential 7230: 14,6	7230: 9,4 7220*: 0,3 Potential 7230: 6,0

Table C3-2: Overview of the target and achieved results of the grazing activities in action C3 on the primary habitat types (Pot.=potential newly created).

Habitat type	7230	7210*	7220*	Pot. 7230	Pot. 7210*	Pot. 7220*
Action C3 in GA (ha)	65,9	12,6	2,2	75,0	7,0	4,5
Grazing achieved (ha)	114,4	1,6	4,0	84,7	5,4	1,8

Table C3-3: Overview of the target and achieved results of the grazing activities in action C3 on habitat types surrounding the primary target habitat types.

Habitat type	1330	6410	2130	2140	2190	7140
Action C3 in GA (ha)	22,8	30,7	42,4	9,8	16,1	0,1
Grazing achieved (ha)	133,4	13,8	18,0	17,3	13,2	0

The project has almost achieved the over-all target for the grazing activities (target 744 ha, achieved 651 ha). The grazing activities cover 120,0 ha of 7230, 7210* and 7220* in combination and 195,7 ha of other habitat types. This is well above the combined target for the habitat types 7230, 7210* and 7220* (90,7 ha) and the other habitat types (121,9). Besides the habitat types and the potential habitat types the grazing effort includes other areas (such as meadows without strict protection equivalent to 335 ha) in between to be able to create large management units. We find the achieved grazing effort an important result to be able to compensate for the under-achievements of clearings (action C2).

As analysed in action A3 part of the grazing effort were implemented by use of RDP funds. Thus, these funds have been used for establishing grazing facilities on 408 ha. Of this, RDP funds have been obtained for grazing facilities on 77,5 ha of 7230, 7210* and 7220* in combination while RDP funds for grazing facilities only were foreseen on 18,8 ha in GA. Thus, the project has been very efficient in obtaining RDP funds for project activities related to grazing. In addition, private landowners have used RDP funds to establish grazing facilities on additionally 472 ha as a complementary measure to the LIFE activities in the targeted N-2000 sites. This is based on the encouragement from the LIFE project to the landowners.

The project has only succeeded with the grazing of habitat type 7210* to a limited amount. This is due to landowner reluctance in the core 7210* area at subproject 6 (Suså). As a compensation measure Fax Kom has restored 7210* by turf transplantation on 0,23 ha and NST plan to establish additional 2 ha as an After-LIFE activity. On the other hand, the project

has succeeded with the implementation of grazing facilities on habitat type 7220* being well above the target.

Overall, establishment of the grazing facilities has been more comprehensive than foreseen in the GA and involves these items:

- 86655 m of fences (14700 m foreseen in GA)
- 11 corrals (4 foreseen in GA)
- 27 gates (67 foreseen in GA)
- 35 power supplies (5 foreseen in the GA)
- 44 water supplies (7 foreseen in GA)
- 21 cattle crossings (0 foreseen in GA)
- 10 heads of cattle (15 foreseen in GA). Agreement for the use of the cattle is in annex 8.
- 1 cattle shelter (9 foreseen in GA)

The actual implementation of the grazing facilities reflects that it is difficult to predict the exact demands among the landowners and that the demands are very dependent on the local situation. Part of the grazing facilities have been funded by RDP funds.

Compiled output of the combined effort of clearings and grazing

The purpose of grazing and clearings can be seen under one with the aim of achieving light open conditions and to prevent overgrowth. With this approach the project has been successful (cf. table C3-2 and table C3-3) as the area cover of the grazing activities on the habitat types 7230, 7220* and 1330 is well above the target. The effort for 7210* was difficult (please see above) while the grazing effort on the remaining habitat types is below the target or close to the target. Overall, we have put a large effort into establishing the grazing facilities because it is a more sustainable way of managing the light-open habitats compared to maintenance with clearings. Thus, the prevailing approach was to let the grazing animals do the job which is also the prevailing approach in the Danish LIFE IP Natureman.

Compiled output of newly created habitat types

According to the GA the output of newly created habitat types 7230, 7220* and 7210* is the combined result achieved in action C1, C2 and C3. The achieved results are presented in table C3-4.

Table C3-4: Overview of the target and achieved results of newly created primary habitat types distributed on action C1, C2 and C3.

Habitat type	Pot. 7230	Pot. 7210*	Pot. 7220*
Target ha	75,0	7,0	4,5
Action C1 achieved ha	46,1	4,5	0,8
Action C2 achieved ha	37,0	0,9	0,3
Action C3 achieved ha	84,7	4,8	1,8
Final output	84,7	4,9	1,8

The project has resulted in an area of newly created 7230 slightly above the target. The newly created area of 7210* is below the target, but in an after-LIFE perspective additional 2 ha is expected in subproject 5 (Sydlangeland). In addition, the area of newly created 7220 is also below the target.

6.1.11 Action C4: Management of open water surfaces

The aim of this action is to improve the habitats for the targeted Annex II species *Leuchorrhinia pectoralis, Triturus cristatus* and *Grahphoerus bilinieatus* and management of the Annex IV species *Rana arvalis*.

Foreseen start date: 10/2016	Actual start date: 05/2016
Foreseen end date: 03/2022	Actual end date: 06/2022

Planned outputs

According to the GA the output is to improve or establish 22 ponds and to create 250 m of improved pond banks to secure feeding and breeding habitats for the targeted species. The action was planned to take place in 5 subprojects. The overall target for the action is shown for the various species in Table C4-1.

Deliverables

There are no deliverables in action C4. Maps showing the location of the ponds and improved pond banks is shown in Annex 9 together with photos showing the activities in the field.

Achieved outputs

The project has restored 27 ponds which is 5 more ponds than foreseen in the GA. In addition, the project has improved 350 m of pond banks which is 100 m more than foreseen in the GA. The improved pond banks are targeting *G. bilinieatus* and the additional effort with the pond banks is a compensation measure to the skipped supplementary breeding and rearing program in Action C5.

Table C4-1: Overview of the target and achieved results of improving or establishing ponds and improving the ponds banks for the targeted species in action C4.

Subproject number	Local project name	Target species	Action C4 Achievements	Action C4 in GA
1	Vejlerne, Thi Kom	*T. cristatus and R. arvalis*	13 shallow ponds	10 shallow ponds within the 3 subprojects in Thi Kom
2	Hvidbjerg Å, Thi Kom	*T. cristatus and R. arvalis*	2 shallow ponds	
3	Agger, Thi Kom	*T. cristatus and R. arvalis*	No ponds	
3	Agger, Str Kom	No specific target	1 pond	No target
4	Underlien, Jam Kom	No target species	No ponds	No target
5	Sydlangeland, NST	*T. cristatus and R. arvalis*	4 shallow ponds and 2 deeper ponds	6 shallow ponds
6	Suså, Fax Kom	No target species	No ponds	No target
7	Vasby Sengeløse, Høj Kom	*R. arvalis*	2 shallow ponds	1 shallow pond
8	Øvre Mølleådal, Fur Kom + NST	*T. cristatus, L. pectoralis, G. bilinieatus and R. arvalis*	5 shallow ponds and 350 m of improved pond banks	5 shallow ponds and 250 m of improved pond banks

6.1.12 Action C5: Supplementary breeding and rearing program for *Graphoderus bilineatus*

This action focuses on restocking and release of *G. bilineatus* at subproject 8 (Øvre Mølleådal). The restocking program will be based on the recommendations obtained in the biological survey in action A5.

Foreseen start date: 04/2018	Actual start date: 08/2018
Foreseen end date: 06/2022	Actual end date: Action closed 2020

Planned outputs
A restocking and release program for *G. bilineatus* to support the present population at subproject 8. The outcome of the program is expected to result in a Danish core population of *G. bilineatus* at subproject 8.

Deliverables
No deliverables.

Achieved outputs
The restocking and release program for *G. bilineatus* was abandoned due to the very small present population at subproject 8. Thus, the breeding program presented in the GA would result in a high pressure on the present population of *G. bilineatus* and a risk of a negative impact of the species conservation status. Instead, species management took place by improved habitat management (cf. action C4) for *G. bilineatus* at subproject 8. This was accepted by CINEA in letter dated 10122020.

6.1.13 Action D1: Monitoring of habitat types

The aim of this action is to monitor the project's influence on the conservation status of the targeted habitat types 7230, 7210* and 7220*. This is based on information on the botanical composition.

Foreseen start date: 04/2016	Actual start date: 02/2016
Foreseen end date: 09/2022	Actual end date: 12/2022

Planned outputs

The program is composed of a baseline monitoring, a midterm monitoring and an effect monitoring in relation to the targeted habitat types. However, because the effect of the management initiatives must be seen in a long-time perspective it was decided to skip the midterm monitoring and focus on the baseline and effect monitoring. Nevertheless, a midterm monitoring was performed in a few subprojects.

Based on the data collection in the baseline and effect monitoring we have produced a compiled report with overall conclusions for the entire project. In addition, the initial baseline monitoring has been reported individually for most of the subprojects.

For subproject 1-3 (Thi Kom) it is important to notice, that monitoring of the areal cover of the habitat types (Action A1 and D1) has revealed that the national mapping (as used in the GA) is flawed at Thi Kom. During the autumn 2021 the MST (who is the national N-2000 authority) has conducted a quality assurance of the Action D1 data which has resulted in adjustments of the mapped areas. Thus, a minor part of the Action D1 mapped 7230 areas has been disqualified as a natural habitat type and instead qualify for potential 7230. The adjustments have been taken into consideration throughout this report.

Deliverables

The deliverables (Annex 10) are composed of individual baseline monitoring reports from the subprojects and a compiled effect monitoring report for the entire project. The midterm monitoring report was skipped as explained above and it is important to notice, that no baseline report is available for subproject 5 because no habitat types were present a project start. This was accepted by CINEA in letter dated 10122020.

Achieved outputs and main conclusions

Data have been collected by Thi Kom and by external service providers (based on tenders).

Based on the national monitoring data the conservation status of 7230, 7210* and 7220* were unfavorable for all selected subprojects at the beginning of the project. The status is also indicated by the baseline data collected in the beginning of the project period.

The compiled monitoring report is based on data collected in 2017 and 2022 and focuses on the habitat types 7230, 7220* and 7210*. It is evident, that the project has had an overall positive effect on both the plant species' composition and vegetation structure. In total, positive effects were detected in all but 2 subprojects and the project has thereby promoted the likeliness of obtaining a favorable conservation status for the majority of selected areas. In the remaining subprojects the conservation prognosis was unchanged. In subproject 5 (Sydlangeland) and subproject 6 (Suså) the management initiatives were conducted recently and the biological effect is difficult to demonstrate at this moment. At subproject 5 development towards 7230 requires hydrological improvements and these improvements were

implemented in 2022. At subproject 6 a positive influence is expected in the future as the grazing management come into effect.

6.1.14 Action D2: Monitoring of Annex II and Annex IV species

The aim of this action is to monitor the project's influence on the conservation status of the targeted Annex II species *Leuchorrhinia pectoralis*, *Triturus cristatus* and *Grahphoerus bilinieatus* and the Annex IV species *Rana arvalis*.

Foreseen start date: 04/2016	Actual start date: 02/2016
Foreseen end date: 09/2022	Actual end date: 09/2022

Planned outputs

The program is composed of a baseline monitoring, a midterm monitoring and an effect monitoring in relation to the targeted species. However, because the effect of the management initiatives must be seen in a long-time perspective it was decided to skip the midterm monitoring (except for *R. arvalis*) and focus on the baseline (except for *L. pectoralis*) and effect monitoring (all species).

Based on the data collection in the baseline and effect monitoring we have produced a compiled report with overall conclusions for the entire project.

Deliverables

The deliverables (Annex 11) are composed of the baseline monitoring report for *R. arvalis* and of the concluding compiled monitoring report including data for all target species. The reports were prepared during 2021 and 2022 following the completion of the specific management activities.

Achieved outputs and main conclusions

Data have been collected by external service providers (based on tenders).

In table D2-1 we have made an overview of the monitoring effort of the targeted species.

Table D2-1: Overview of the monitoring effort of the targeted species.

Target species	**Baseline monitoring**	**Effect monitoring**
Rana arvalis	All subproject but subproject 6. Based on field studies in 2016 on 58 locations. Also, e-DNA on 18 locations.	Midterm monitoring performed in 2018 and effect monitoring in 2021 on 58 locations and in the 15 newly created ponds.
Triturus cristatus	Monitored in subproject 1, 2 and 5 based on national NOVANA data.	Monitored in 2022 at 15 locations in subproject 2, 5 and 8 and in the 15 newly created ponds.
Leuchorrhinia pectoralis	No baseline data	Monitored in the field at subproject 8 including 5 new ponds.
Graphoderus bilinieatus	Baseline monitoring performed at subproject 8 (Action A1).	Monitored based on e-DNA.

R. arvalis

Overall, much fewer egg clumps were recorded at the effect monitoring than at the baseline monitoring. This is mainly because the species has disappeared or been severely decimated at individual core locations in subproject 1, 3, 7 and 8 and probably this is caused by extreme weather conditions. The number of locations with occurrences of the species has been approximately the same for all three monitoring events.

In June 2022, amphibian surveys targeting amphibian fry were carried out at 15 newly established ponds in subproject 1, 2 and 8. The species was recorded at 1 location.

T. cristatus
In 2021, a baseline analysis (desktop) was carried out based on NOVANA data for occurrence of the species in subproject 1, 2 and 5. The analysis showed that there are no registrations under NOVANA of the species in these subprojects.
In June 2022, field inspections were carried out targeting in particular the species at 15 locations in subproject 2, 5 and 8. The presence of the species was recorded in 1(at subproject 5) out of the total of 15 investigated locations. In addition, the monitoring of amphibian fry in 2022 in 15 newly established ponds in subproject 1, 2 and 8 showed occurrence of the species in 4 ponds.

G. bilinieatus
The monitoring effort for this species took place at Vaserne in subproject 8. The biological survey in Action A1 showed occurrence of a very small population and it was decided to perform the effect monitoring by using eDNA for qualification. In September 2021, water samples were collected for eDNA research at 6 locations in Vaserne. However, eDNA examination could not detect the presence of the species in some of these locations.

L. pectoralis
In June 2022, a field study was carried out for the presence of the species in 5 newly established ponds in subproject 8. The species was recorded in 1 of the new ponds.

6.1.15 Action D3: Socio-economic monitoring

The aim of this action is to monitor the project's influence on socio-economic indicators such as

- Laymen's responsibility for nature protection by grazing
- Nature management as a way of living among farmers
- The project's impact on local economy

Foreseen start date: 04/2016	Actual start date: 06/2020
Foreseen end date: 12/2022	Actual end date: 04/2022

Planned outputs

The program is composed of baseline and effect data. The original plan was to collect data from all subprojects. However, due to the nature of the indicators it was proposed to perform the data collection only in Thi Kom. Thus, we assessed that collection of sufficient data required a large geographical area with a high frequency of project activities which was unavailable at the other project partners.

Deliverables

The deliverables (Annex 12) are composed of a compiled report analysing baseline and effect data for the three indicators. The report was prepared during 2021.

Achieved outputs and main conclusions

Grazing initiatives

Private landowners and livestock owners are the primary custodians of most Danish nature areas such as springs and marshes. The project therefore focuses on dissemination of knowledge and learning, where grazing and key land management measures protect natural assets and suitable habitats for plants and animals. Suitable grazing animals are deemed to be available, as a census in Thisted and other municipalities has shown a significant rise in the number of grazing animals such as cattle, despite earlier forecasts of a decline.

Nature management as a way of living

A questionnaire was sent to landowners conducting nature care and grazing. The results of the survey clearly indicate the need for better facilitation of how caring for nature can be made a profitable branch of farming. Such facilitation could include consultancy and training. AMU (education targeting existing labour force) courses in nature management as a part of farming are available at Nordjyllands Landbrugsskole, Lundbæk and this can be promoted to the landowners and livestock owners involved in the project. The project has also taken part in a training course along with NaturERFA Fyn (a networking group for nature managers on Fyn, Denmark), organised by Landboforeningen Velas (The Farmers Society). The theme was year-round grazing with robust cattle and horses.

In addition to the professional nature management, voluntary citizens took part in nature management events at some local spots. The citizens have been asked for their motivation for taking part in various micro-care activities such as scything. The feeling of doing something meaningful in the company of others is deemed to be the most important triggering parameter. But also, being able to learn something new about nature and working with a scythe have been mentioned frequently. Considerable potential is deemed to exist in activation of the general public, as everyone should be able to take part in similar activities over a weekend or as part of their holidays. Awareness of the activity primarily comes from those who have tried it, and the sense of community is highly valued.

Impact on local economy
16 businesses or institutions in Thi Kom have been asked about how they use nature in relation to their product, communications and branding. The survey indicated that local natural assets, can help brand a business, contribute to its turnover, and thus generate profit. 63% of the businesses could relate it to their turnover and 25% do have related turnover, which is quantified as between DKK 0.1 and 0.5 million. 50% of those businesses have grown in terms of employees (1-10)

6.1.16 Action D4: Ecosystem service monitoring

The aim of this action is to monitor the project's influence on the ecosystem services for improving groundwater capacity and for counteracting greenhouse gas emissions.

Foreseen start date: 04/2016	Actual start date: 01/2022
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs

The program is composed of theoretical baseline and effect data.

The groundwater capacity calculation is based on the area where hydrological activities have been implemented and the topographic catchment area to each of the local project sites. Together with knowledge about precipitation and evapotranspiration the formation of groundwater (hl) is calculated by use of a water-equilibrium equation.

The effect of the project for reducing the emissions of greenhouse gasses is calculated by using the national greenhouse gas model for climate related wetland restoration projects. The basis for this model is a national mapping of peat lands and assumptions related to the restored groundwater level. The GA predicts a reduced released of CO_2-equivalents of 1.974 t/yr.

Deliverables

The deliverables (Annex 13) are composed of a compiled groundwater report and a compiled greenhouse gas report comparing the baseline and effect data. The reports were prepared during 2022 after completion of the hydrology projects in action C1.

Achieved outputs and main conclusions

Formation of groundwater

As part of the hydrological improvements, the project has estimated the water balance before and after the realization of the local projects, and thereby the amount of water available for building up the groundwater resource. The expected volume of water available for groundwater build-up for the total project area is calculated to be approx. 4.1 million hl at baseline. The resulting expected volume of water available for groundwater build-up after the project's realization, for the total project area, is calculated at approx. 10.6 million hl, corresponding to an increase of approx. 6.4 million hl or approx. 156%.

Reduction of greenhouse gas emissions

Some of the hydrological improvements have been implemented on peaty soils. The project has thus had a positive effect on a reduction in greenhouse gas emissions of a total of 1,828 tonnes of CO_2-equivalents per year. This supports the national and UN goals of zero carbon emissions in 2050. It should be noted however, that some of the sub-areas do not have peat-containing soils, which is why these areas do not contribute to the reduction in greenhouse gas emissions.

6.1.17 Action E1: The project's website

The aim of this action is to produce and maintain the project's website.

Foreseen start date: 09/2015	Actual start date: 10/2016
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs
This is an obligatory action. According to the GA the website was planned to communicate the background, targets and activities of the project and to e.g., present activity reports.

Deliverables
There are no deliverables.

Achieved outputs and main conclusions
The website is available here: https://www.rigkildelife.dk/

The website is available in Danish and English. It contains the obligatory LIFE and N-2000 logos as well as the disclaimer.

The website is organized with descriptions of project activities and outcomes per subproject. It contains a news section and a document archive.

Our statistics for the entire project period show that the website was visited by 7,910 unique users resulting in the showing of 55,419 individual subsites. The website has been visited by 6 different nationalities.

6.1.18 Action E2: Merchandise

The aim of this action is to produce traditional communication material such as a handout, a poster, roll-ups, beach-flags and ball pens.

Foreseen start date: 10/2015	Actual start date: 05/2016
Foreseen end date: 12/2022	Actual end date: 12/2021

Planned outputs
According to the GA the merchandise mentioned above will be produced early in the project period to be able to help in the promotion of the project towards various target groups.

Deliverables
The handout and the poster are deliverables and they are presented in Annex 14. We produced 35.000 handouts and 1500 copies of the poster.

Achieved outputs and main conclusions
The communication material was produced as planned and includes the deliverables, 14 Roll-ups, 7 beach-flags and 2000 ball pencils. Copies of the material is available in Annex 14 together with the deliverables. The merchandise has been of great value to be used at public meetings and networking activities for promoting the project. The interest in the handout was very high and we decided to produce additionally 10.000 copies during the project period.

6.1.19 Action E3: Information signs

The aim of this action is to produce and erect obligatory information signs at strategic spots in each of the subprojects. The information signs will present the project background, the habitat types and the management activities in a layman's perspective.

Foreseen start date: 08/2016	Actual start date: 02/2016
Foreseen end date: 12/2016	Actual end date: 12/2022

Planned outputs

According to the GA 17 information signs will be erected. The information signs will be of various size.

Deliverables

There are no deliverables. However, copies of the information signs and maps showing where they are located are in Annex 15 together with photos showing the information signs in the field.

Achieved outputs and main conclusions

Table E3-1 gives an overview of where the information signs have been erected. All in all, we have produced 37 information signs which is 20 more signs than expected in the GA. One of the information signs (at subproject 3, Str Kom) is composed of 6 smaller information signs placed on a visitor table. In some of the subprojects more information signs were erected than foreseen in the GA because the subprojects are composed of rather small project areas with some distance between. The info-signs are equipped with the LIFE and Natura-2000 logos and the disclaimer.

Table E3-1: Information signs erected in the various subprojects.

Subproject number	**Local project name**	**Action E3 Achievements**	**Action E3 in GA**
1	Vejlerne, Thi Kom	4 information signs	In the subprojects at Thi Kom 5 information signs
2	Hvidbjerg Å, Thi Kom	4 information signs	
3	Agger, Thi Kom	3 information signs	
3	Agger, Str Kom	1 "information table" containing 6 (A3) information signs. In addition, 3 info signs (A3)	1 information sign
4	Underlien, Jam Kom	5 information signs	3 information signs
5	Sydlangeland, NST	1 information sign	1 information sign
6	Suså, Fax Kom	2 information signs	1 information sign
7	Vasby Sengeløse, Høj Kom	1 information sign	1 information sign
8	Øvre Mølleådal, Fur Kom + NST	5 information signs (NST) and 3 information signs (Fur Kom)	1 information sign (NST) and 3 information signs (Fur Kom)

6.1.20 Action E4: Public involvement

The aim of this action is public awareness raising about the project and give the general public a better understanding of why nature management activities are urgent.

Foreseen start date: 04/2016	Actual start date: 06/2016
Foreseen end date: 09/2021	Actual end date: 08/2022

Planned outputs

According to the GA 41 public events were planned to take place across the subprojects.

Deliverables

There are no deliverables. However, in Annex 16 samples of notes and photos from the public awareness raising events are available.

Achieved outputs and main conclusions

Table E4-1 gives an overview of the number of awareness raising activities in the subprojects. All in all, we have arranged 45 events and the expected output of the action is fulfilled. The event types vary a lot and include traditional public meetings, public guided trips as well as more specialized events such as a bioblitz and events targeting e.g. the local botanical societies. Other event types targeted farmers at the local agricultural shows.

Table E4-1: Public awareness raising activities in the subprojects

Subproject number	**Local project name**	**Action E4 Achievements**	**Action E4 in GA**
1	Vejlerne, Thi Kom	6 public events at the agricultural show, at the national nature meeting and at local nature events	5 public events
2	Hvidbjerg Å, Thi Kom	2 public events at the agricultural show and at "The day of the forests"	2 public events
3	Agger, Thi Kom	5 public events at the agricultural show, as photo safaris and at "The day of the wildflowers"	3 public events
3	Agger, Str Kom	6 public events arranged together with the voluntary group "Kærets Venner"	5 public events
4	Underlien, Jam Kom	5 public events at the agricultural show, as guided nature trips, at the national nature meeting and as a school arrangement	6 public events
5	Sydlangeland, NST	2 public guided trips	3 public events
6	Suså, Fax Kom	2 public events at "The day of the wildflowers" and a dedication event	2 public events
7	Vasby Sengeløse, Høj Kom	5 public events including a bioblitz, guided trips and a trip for the local botanical society	3 public events
8	Øvre Mølleådal, Fur Kom + NST	12 public events open for citizens and e.g., the botanical society	12 public events

6.1.21 Action E5: Public and private micro management

The aim of this action is to engage citizens in local nature management.

Foreseen start date: 04/2016	Actual start date: 04/2016
Foreseen end date: 09/2022	Actual end date: 10/2022

Planned outputs

The action will take place by providing common nature management equipment and arrange specific micro-management events. According to the GA 36 micro-management events were planned to take place across the subprojects. In addition, a trailer containing the nature management equipment should become available on a free of charge basis among voluntary nature managers.

Deliverables

There are no deliverables. However, in Annex 17 samples of notes and photos from the public micro-arrangements are available.

Achieved outputs and main conclusions

Table E5-1 gives an overview of the number of micro-management activities in the subprojects. All in all, we have arranged 42 micro-manage events and thus the expected output of the action is fulfilled with respect to the number of micro-scale management arrangements. During the project period we revised where best to implement the action and at subproject 8 in particular the interest for micro-management has been overwhelming.

The management trailer was equipped early in the project period and been used at several arrangements. Since 2020 our statistics show that the trailer has been in use at 33 events. To increase the awareness of the trailer and the opportunity for micro-scale management we produced 6 you-tube videos about handling of the equipment.

Table E5-1: Overview of micro-management activities in the subprojects

Subproject number	**Local project name**	**Action E5 Achievements**	**Action E5 in GA**
1	Vejlerne, Thi Kom	4 events at local nature festivals and on the national nature meeting	7 events
2	Hvidbjerg Å, Thi Kom	3 events including a "Nature management family day". In addition, produced 6 you-tube videos (https://www.rigkildelife.dk/nyheder/2020/naturplejetraileren/) demonstrating use of the management equipment	3 events
3	Agger, Thi Kom	7 events at local nature festivals, at the "day of the nature", and for local botanists	5 events
3	Agger, Str Kom	3 events arranged together with the voluntary group "Kærets venner"	0 events
4	Underlien, Jam Kom	2 events arranged together with the local branch of the Danish society for Nature Conservation	10 events
5	Sydlangeland, NST	No events. Instead, events arranged in subproject 8	4 events
6	Suså, Fax Kom	1 event arranged as the transplantation of *Cladium mariscus* for potential new 7210*	2 events
7	Vasby Sengeløse, Høj Kom	4 events arranged as scythe management events	5 events
8	Øvre Mølleådal, Fur Kom + NST	10 events arranged as management by mowing and 8 events arranged as management by burning	0 events

In conclusion we have achieved the foreseen outputs.

6.1.22 Action E6: Networking with other projects

The aim of this action is networking with other LIFE Nature projects to gain knowledge about the management of the targeted habitat types among employees at the beneficiaries to improve the implementation of the project activities.

Foreseen start date: 04/2016	Actual start date: 05/2017
Foreseen end date: 09/2022	Actual end date: 06/2022

Planned outputs

The action will focus on participating in the following networking activities:

- LIFE Platform meetings
- Exchange of knowledge with the LIFE Rare Nature project (LIFE11 NAT/DK/000894)
- Exchange of knowledge with the LIFE Springday (LIFE12 NAT/EE/000860)
- Exchange of knowledge with the LIFE Wetlands (LIFE13 NAT/LV/000578)

Deliverables

There are no deliverables. However, in Annex 18 we have arranged short reports from the networking activities with other LIFE projects.

Achieved outputs and main conclusions

The project participated in LIFE platform meetings on a regular basis. However, due to the Covid-19 crises the project only participated in 3 Nordic LIFE Platform meetings. In addition, we also participated in a LIFE Invertebrate platform meeting (2018) in Scotland and in France (2018) with the focus of the management of dunes (LIFE Flandre – LIFE 12 NAT/BE/000631).

Exchange of knowledge with LIFE Rare Nature took place in October 2018 in combination with a visit to N-2000 sites in Southern Sweden known for their rich alkaline fens. The excursion focused on issues related to hydrological restoration, grazing issues and development of potential habitat types on agricultural soils.

Instead of visiting LIFE Springday the project arranged a visit to N-2000 sites in Estonia known for their rich alkaline fens. Most of the visited spots serve as reference sites for the management activities in the Danish sites.

The visit to the LIFE Wetlands project was replaced by planning a visit to an Irish alkaline fens project. However, due to the Covid-19 crises, we were unable to complete the visit.

In addition, the project has been networking with other present Danish LIFE Nature projects on the yearly national nature meeting (Naturmødet).

In conclusion, the project was unable to implement all foreseen activities, which was mainly caused by the Covid-19 crises.

6.1.23 Action E7: Workshops for animal keepers

The aim of this action is to obtain capacity building among landowners and animal keepers for managing habitat types. This will occur by arranging workshops.

Foreseen start date: 07/2016	Actual start date: 06/2017
Foreseen end date: 09/2022	Actual end date: 09/2022

Planned outputs

The action will take place be arranging 11 workshops targeting landowners and animal keepers.

Deliverables

There are no deliverables. However, in Annex 19 we have arranged short reports and photos from some of the workshops.

Achieved outputs and main conclusions

All in all, we arranged 14 workshops connected to the subprojects in Thi Kom, Str Kom, Høj Kom and Fur Kom as follows:

- Thi Kom arranged 5 workshops at the local School of Agricultural Business.
- Str Kom arranged 4 workshops together with the local voluntary management group "Kærets Venner"
- Høj Kom arranged 4 workshops targeting local farmers
- Fur Kom arranged 1 workshop targeting local animal keepers

We received positive feedback from the participants for arranging the workshops and we believe that the workshops gave important input in the supporting of the ownership among the landowners and animal keepers for nature management. This approach is also used in the LIFE IP Natureman project in the education of nature managers.

In conclusion we have achieved the foreseen outputs.

6.1.24 Action E8: App and school material

The aim of this action is to increase the information availability about the activities in the subprojects by updating an existing APP from the LIFE Redcoha project (LIFE 12 NAT/DK/001073). In addition, the aim is to raise the awareness among school children in the primary school for nature management.

Foreseen start date: 04/2017	Actual start date: 01/2017
Foreseen end date: 06/2020	Actual end date: 10/2020

Planned outputs

The action will update the APP and produce education material for the level of primary school.

Deliverables

There are no deliverables. However, the education material is available in Annex 20.

Achieved outputs and main conclusions

The APP is available in e.g., App store under the name "ThyLIFE". Because the APP is based on the LIFE Redcoha project only subprojects 1, 2 and 3 at Thi Kom is represented in the APP.

The education material is available on the project's website (https://www.rigkildelife.dk/dokument-arkiv/undervisningsmateriale/rigkilde-undervisningsmateriale/) and is composed of a you-tube animation video about the 7230, 7120* and 7220* habitat types as well as more traditional education material to be printed and used in the class. The material is composed of a specific task description and a teacher's guide (please see annex 20).

The education material has been used by a fifth-grade class in a public school near subproject 5 and the event was supported by an NST employee. The education material is now part of the educational materials database of the Danish primary schools.

In conclusion we have achieved the foreseen outputs.

6.1.25 Action E9: Hiking trails

The aim of this action is to increase the availability of information among the citizens about the project and increase the interest in value of the targeted habitat types and N-2000 values in general.

Foreseen start date: 07/2018	Actual start date: 09/2018
Foreseen end date: 06/2022	Actual end date: 11/2022

Planned outputs

The project planned establishment of 3 hiking trails situated in subproject 3 (Agger Str Kom), subproject 4 (Underlien, Jam Kom) and subproject 6 (Suså, Fax Kom). This includes 500 m of boardwalk and two simple hiking trails (length specified as several kilometres).

Deliverables

There are no deliverables. However, photos of the hiking trails are available in Annex 21 together with maps showing the location of the trails.

Achieved outputs and main conclusions

At the three subprojects the following results have been obtained:

Subproject 3 (Agger, Str Kom)

The project established 239 m of boardwalk and 286 m of trail. The shorter boardwalk compared to the GA is caused by problems obtaining the necessary permit according to the Nature Protection Act concerning coastal protection areas. Thus, a permit was only obtained for the part of the boardwalk situated outside the protection area. Special care was taken towards the N-2000 values during the planning and construction of the boardwalk to make sure that present habitat types not were affected negatively by the construction works. The combined boardwalk and trail were celebrated on an opening ceremony in late 2022. The changes were accepted by CINEA in letter dated 15072022.

Subproject 4 (Underlien, Jam Kom)

The project established 450 m of hiking trail which is part of a longer hiking trail established by NST in the N-2000 site.

Subproject 6 (Suså, Fax Kom)

The project established 540 m of hiking trail which guides the public into the project site on a farm track already in place.

In conclusion we have achieved the foreseen outputs for improving the public's access to the project sites.

6.1.26 Action E10: Best practice publication

The aim of this action is to increase the availability of information among professionals on issues related to successful management of 7230, 7210* and 7220*, micro-scale management and monitoring. The information will also be valuable for others interested in nature management.

Foreseen start date: 03/2022	Actual start date: 05/2022
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs

The project will prepare a best practice publication considering central issues of nature management in relation to 7230, 7210* and 7220* as well as micro-scale management and monitoring.

Deliverables

One best practice publication. The publication is available in Annex 22 in Danish with an English summary.

Achieved outputs and main conclusions

The best practice report has been prepared during the autumn 2022 and focuses on the following subjects:

- Hydrology in groundwater borne habitat types
- Hydrological mapping by use of thermal mapping
- Hydrological case studies (subproject 3 (Agger, Str Kom), subproject 4 (Underlien, Jam Kom) and subproject 6 (Vasby og Sengeløse Moser, Høj Kom)
- Management of *Cladium mariscus*
- Micro-scale management of habitat types
- Monitoring by use of eDNA

The best practice report was announced on the closing seminar (cf. section 6.1.28) and is available on the project's website (https://www.rigkildelife.dk/media/2031/bestpract_rigkildelife_web_30jan23.pdf). In conclusion we have achieved the foreseen output.

6.1.27 Action E11: Layman's report

The aim of this action is to prepare and present the obligatory layman's report.

Foreseen start date: 07/2022	Actual start date: 05/2022
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs
The project will prepare the obligatory layman's report in Danish and English.

Deliverables
One Layman's report. The publication is available in Annex 23 in Danish and English.

Achieved outputs and main conclusions
The layman's report has been prepared during the autumn 2022 and focuses on the following subjects:

- Introduction to nutrient poor wet habitat types
- Introduction to the subprojects of RigKilde-LIFE
- Clearing and grazing activities in the vulnerable habitat types
- Hydrology of the vulnerable habitat types
- Targeted species and how to manage them
- Effects on the habitat types of the project
- Dissemination activities for N-2000 capacity building among landowners, animal keepers, NGO's and the general public.

The layman's report was announced on the closing seminar (cf. section 6.1.28) and is available on the project's website (https://www.rigkildelife.dk/media/2067/laegmand_rigkilde_life_20marts_web_23.pdf). In conclusion we have achieved the foreseen output.

6.1.28 Action E12: Closing seminar

The aim of this action is to share knowledge gained in the project with other professionals and NGO's.

Foreseen start date: 03/2022	Actual start date: 07/2022
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs

Originally the closing seminar was planned as a 2-day physical event. However, due to the uncertainties regarding the Covid-19 situation and to ensure attending participants we decided to arrange the closing seminar as a virtual meeting. According to the GA 100 attendants are expected.

Deliverables

There are no deliverables. However, the seminar material is available as PDF files on the project's website (https://www.rigkildelife.dk/delprojekter/thisted-kommune/afslutningswebinar/afslutningswebinar/afslutningswebinar/) and as livestreamed you-tube material.

Achieved outputs and main conclusions

The seminar took place at December 1st 2022. The seminar was arranged in Thi Kom at Hanstholm Lighthouse with physical attendance of the project group, the steering group and the speakers. The seminar was life streamed.

The seminar program was composed of the following topics:

- Presentation and experiences from the project (by the project group)
- Best practice experiences with focus on micro-management (by the project group), eDNA (by Niras) and hydrological mapping (by Watson D)
- A biodiversity analyses based on botanical data (by HabitatVision)
- Research on alkaline fens and petrifying springs (by Aarhus University)
- Introduction to the best practice report and the layman's report.

Our statistics show registration of 141 attendants and thus we have reached more people than original planned. To this should be added 26 people attending the seminar physically.

6.1.29 Action F3: Workshops for employees at the project

The aim of this action is to obtain capacity building among the employees in the project group about the key management and monitoring issues.

Foreseen start date: 07/2016	Actual start date: 09/2016
Foreseen end date: 09/2021	Actual end date: 09/2022

Planned outputs

The action was planned as 3 workshops attended by project group employees. The workshops were planned so that all subprojects could be involved in the sessions.

Deliverables

There are no deliverables. However, workshop material is available in Annex 24 including programs, presentations and short minutes.

Achieved outputs and main conclusions

The workshops were arranged focusing on various topics and took place as follows:

- 6th – 7th May 2019. Focus on hydrological improvements. The workshop took place in subproject 4.
- 24th – 25th September 2019. Focus on various types of construction works and cooperation with the constructors. The workshop took place in subproject 6, 7 and 8
- 15th September 2022. Focus on botanical monitoring. The workshop was arranged in subproject 3 (Agger Str Kom) and was supported by HabitatVision (consultant).

In conclusion we have achieved the foreseen outputs for capacity building in the project group.

6.1.30 Action F4: Management plans

The aim of this action is to prepare management plans for each subproject to point out management issues in the years following the LIFE project.

Foreseen start date: 01/2022	Actual start date: 03/2022
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs

A management plan will be prepared for each subproject and will serve as an annex to the N-2000 action plans which are the main plans governing the municipalities management of the N-2000 sites inside their territory.

Deliverables

A management plan for each of the subprojects. The plans are available in Annex 25 and on the project's website (https://www.rigkildelife.dk/delprojekter/rigkilde-life-afslutning/afsluttende-materiale/rigkilde-life-afslutning/plejeplaner/).

Achieved outputs and main conclusions

The management plans have been prepared during the autumn 2022. The management plans have been organized with a description of achieved results and expected management needs in the years after the project ends. Part of this is also to describe who is practical and financial responsible for follow-up activities. This is also used as an input to the After-LIFE Plan.

In conclusion we have achieved the foreseen outputs regarding the management plans.

6.1.31 Action F5: After-LIFE plan

The aim of this action is to prepare the obligatory After-LIFE plan to point out management issues in the years following the LIFE project.

Foreseen start date: 03/2022	Actual start date: 10/2022
Foreseen end date: 12/2022	Actual end date: 12/2022

Planned outputs

The After-LIFE plan will be prepared at the end of the project period. It will be available in Danish and English.

Deliverables

The obligatory After-LIFE plan is available in Annex 26 in Danish and English. It is also available on the project's website (https://www.rigkildelife.dk/media/2030/after-life-conservation-plan-rigkilde-life_danish_final.pdf).

Achieved outputs and main conclusions

The After-LIFE plan is composed of the following sections:

- Introduction to the project
- Overview of the achieved results organized in various activities
- Future management activities organized in various activities
- Future management costs organized in various activities

In conclusion we have achieved the foreseen output regarding the After-LIFE plan.

6.2 Main deviations, problems and corrective actions implemented

During the project period some issues arose with influence on project implementation and calling for corrective actions.

Project management

During the project period the project management at Thi Kom was challenged because the PM (Mr. Adrados) left his position in April 2020. Thereafter, as a corrective manner, Thi Kom organized the project management with a new PM (Mrs. Tanja Binderup) supported by an external assistant project manager (from the company Bangsgaard & Paludan ApS). Implementing this change and re-establishing and effective project management required time and economic resources.

Related to project management topic we also notice, that several TDO's from EASME/CINEA have been attached to the project during the project period as well as two monitoring experts.

The Covid-19 crises

During the period from early 2020 to late 2021 the Covid-19 crises caused a major drawback in our ability to cooperate with the project stakeholders. In particular the contact and cooperation with landowners was challenged as the contact most often occurs on a personal level. This drawback had a negative impact on obtaining the project goals in the specific management activities (C-actions). Also, the project management was challenged by the Covid-19 crises because the physical ability of the project team to meet was prevented. We partly solved this by introducing frequent on-line meetings in the project and steering group. Likewise, as the Covid-19 restrictions were lifted during 2022 the project has been very busy with catching up the delays.

RDP grants

During the project period the national Danish administration of the RDP was very unstable and the various schemes for hydrology, clearings and grazing was partly unavailable for certain periods and the processing time for applications was very long. In particular the scheme for improved hydrology became unavailable for good early in the project period. The lack of eligibility for RDP funds was a major drawback for project implementation and as a corrective manner the LIFE funds was used for project implementation.

Deviations from original target

The areal extent of the hydrological improvements of the target habitat types 7230, 7120* and 7220* as well as of the secondary habitat types is less than foreseen. To obtain an area cover as large as possible we have performed extensive feasibility studies. Based on the conclusions from these studies the demand for hydrological improvements were less than foreseen in the GA. In addition, the reluctant attitude among the landowners towards the project has resulted in fewer agreements for project participation than foreseen in GA.

6.3 Evaluation of project implementation

Project implementation has taken place by beneficiaries composed of Danish municipalities, the Danish Nature Agency (NST) and the Danish Environmental Agency (MST. When implementing nature management activities the municipalities operate on private land and NST operates only on state areas. This results in more challenges to the municipalities as project implementation depends on the landowners' willingness to enter project agreements. When management is implemented the landowners in most cases keep their area and receives economic compensation (once-and-for all or leasing) for a nature clause. On the other hand, NST must purchase areas from private land owners if the areas are necessary for project implementation. In this way the cost efficiency of acquisitioning private land rights is better for the municipality projects than for the state projects when operating on third man's land.

The feasibility studies concluded a less demand for hydrological improvements with regard to the target habitat types as compared to the GA goals. However, it is important to notice that the results of the feasibility studies can be valuable for other project types focusing on other issues than management of habitat types. Thus, the feasibility studies can be valuable in other contexts such as the national program for wetland restoration and the national program for hydrological restoration of peatlands.

Another lesson learned is the importance of using the same monitoring guidelines among all beneficiaries to be able to draw conclusions across the different project sites. Thus, it is important to involve specialists early in the project period to define the monitoring methods and to secure correct use.

6.4 Analysis of benefits

Environmental benefits

A) Direct / quantitative environmental benefits

By implementation of the management actions the conservation status of the key natural habitat types has been improved as foreseen in the LIFE application by improving the hydrology and by establishing (clearings) and maintaining (grazing and supplementary clearings) more light-open conditions. This has affected 124,5 ha of the habitat types as follows:

- 7230 - alkaline fens: 114,4 ha (3,6 % of the Danish occurrence)
- 7210* - Calcareous fens: 6,1 ha (6,0 % of the Danish occurrence)
- 7220* - Petrifying springs: 4,0 ha (1,3 % of the Danish occurrence)

In addition, the management activities will improve the potential for developing additional 91,3 ha of the key habitat types in the future as foreseen in the application as follows:

- 7230 - alkaline fens: 84,7 ha
- 7210* - Calcareous fens: 4,8 ha
- 7220* - Petrifying springs: 1,8 ha

Amphibian species and insect species will benefit from new ponds or renovation of ponds and the project thereby supports the species' conservation status.

Another important result of the project is the dissemination of the results and the N-2000 network by a large number of public arrangements, info-signs, leaflets etc.

together with a website, the layman's report and the best practice report. A large audience was reached on the closing seminar which also contributed to the dissemination of the project results.

B) Qualitative environmental benefits

Substantial areas have been improved by clearings and grazing facilities and the hydrology has been optimized where appropriate. We have chosen sustainable and long-lasting solutions to make sure that the management will have an effect also in the years after completion of the project. The need for future management is described in individual management plans for each subproject and in a more over-all manner in the After-LIFE Conservation Plan.

Economic benefits

Due to the improved management by grazing the future management costs to clearings will be reduced. The farmers will be able to have an income from meat production on areas previously overgrown by woody plants (please see our socio-economic report in annex 12). This approach has also been used in other LIFE Nature projects such as the Danish LIFE IP "Nature-man" where focus is on the farmer for making a sustainable business for nature management by grazing. The same approach was accommodated in the Danish LIFE Rare Nature with "near nature" meat production.

Social benefits

The management of project areas by grazing supports local farmers. The project supported this approach by providing capacity building among local farmers and animal keepers within the field of nature management. In addition, several initiatives (tracks, APP, leaflet, information signs) have been taken to improve recreational opportunities and at the same time promote the N-2000 network.

Replicability, transferability, cooperation

Our focus on management of alkaline fens builds on the experiences from other Danish municipalities also working with this nature management approach (e.g., LIFE Rare Nature). This is also relevant in relation to the Danish LIFE IP "Nature-man".

Our experiences have in particular encouraged private landowners to seek RDP funding for grazing facilities on additionally 472 ha in the three N-2000 sites included in the LIFE project within Thi Kom. This private activity for nature conservation potentially supports our effort for managing the target habitat types of the LIFE project.

Best practice lessons

In our project, hydrological management is a key management tool at some of the subprojects. In the alkaline fens, hydrological management must be studied in more detail and in some sites; a decreased water table may be the right solution in order to be able to manage the site by grazing. Another important lesson is, that it is crucial for the restoration of 7230, 7210* and 7220* to take the origin of the water (e.g. ground water versus surface water) into account and learn about the hydrological flow regime in the sediments. These issues are described in the best practice publication (cf. section 6.1.26).

Another important lesson is the benefit of modernizing the property structure to support large grazing units by using land consolidation. When the grazing units become larger, it becomes easier for the farmer to plan and carry out the appropriate management. This is also a key

element in the Danish program for multifunctional land consolidation which for example have been used to implement the Danish LIFE Wadden sea Birds project (LIFE19 NAT/DK/000922), LIFE Ip Natureman (LIFE16 IPE/DK/000006) and LIFE Bioscape (LIFE20 NAT/DK/000048). Thus, land consolidation is an important tool to obtain the necessary landowner agreements in projects involving many private landowners.

Innovation and demonstration value

Our LIFE project is a best practice project but to some level the project has also been innovative. By the capacity building in the field of nature management among the landowners and animal keepers we consider new ways to obtain a sustainable management of 7230 by making nature management an ordinary farming practice and by contributing nature management as a sustainable business case for farmers. In addition, we have used new methods for hydrological mapping by use of thermal sensitive equipment and for species identification by using e-DNA. The new methods were presented on the final seminar and are included in the best practice manual.

Policy implications

The project supports the following EU policies and ads to EU values:

A) The Biodiversity Strategy 2020 in relation to protection of species and biotopes, protection and restoration of vulnerable ecosystems, and to stop the loss of biodiversity. This is also relevant with respect to the Biodiversity Strategy 2030. This occurs by preserving and managing existing habitat types by various types of management (hydrological, clearings and grazing) and by developing potential additional habitat types such as 7230, 7210* and 7220*. This markedly increases the possibilities for achieving a favourable conservation status of the habitat types in the SAC's of this project. In some of the SCA's (e.g., subproject 7) our effort will affect almost the entire SAC and make a substantial contribution to honour the biological measures of the specific N-2000 plan. The management effort is an important step towards the fulfilling of the N-2000 action plans which are the local planning document responsible for the implementation of the measures described in each N-2000 plan.

In addition, the project favours a number of amphibians and insects (Annex II and IV of the habitats directive) by improving their habitats and by making additional habitats.

The experience obtained with implementation of a larger nature restoration project will benefit the beneficiaries in future similar work. For example, the capacity building will be valuable in the implementation of the Danish peatland restoration initiative with a goal of 100.000 ha before 2030.

B) The Waterframework Directive in relation to counteract decomposition of peat and reduced releases of nutrients to the aquatic environment. This occurs by extensification of agricultural areas, by hydrological improvements thereby converting these areas to nature. Another outcome is an improved protection of the groundwater resources as demonstrated in action D4 (please see section 6.1.16).

C) The Bio Economic Strategy 2020 by supporting sustainable use of natural resources. In this project this occurs through a multi-functional use of natural areas, e.g., by improving the natural values and at the same time improving a sustainable production of meat by nature-near farming

D) The climate and energy policy by decreasing releases of greenhouse gases. At all project sites (except subproject 7 and 8) an increased groundwater table will protect decomposition of existing peat layers and add to the accumulation of additional peat over time. This will add to carbon storage and counteract greenhouse warming as demonstrated in action D4 (please see section 6.1.16).

7 Key Project-level Indicators

To be updated in the online KPI. The indicators table is a deliverable according to the GA but will be accessible in the online database.
Data for the KPI is based on the achieved results of the A-, C- and D-actions. The project has ensured that the data input is verified and corresponds to the actually achieved and documented results. Adjustments have been made in comparison to the first snapshot that was based on the foreseen results in the GA.
Species is generally not considered in the KPI except for one IAS species.

8 Comments on the financial report

The account information presented in this report is based on the final financial report. The Financial reports are in section 9.

8.1 Summary of costs incurred

The costs incurred are compared to the original GA budget in the table below. Compared to the budget the total cost of the project shows a smaller consumption of app. 80.000 € equivalent to 1 %.

Budget breakdown categories	Total cost in €	Costs incurred from the start to end in €	Total costs compared to budget (%)
1. Personnel	1.310.824	2.282.759	174%
2. Travel and subsistence	78.637	65.561	83%
3. External assistance	2.876.626	2.770.838	96%
4. Durable goods			
Infrastructure			
Equipment		18.826	
Prototype			
5. Land purchase / long-term lease	1.152.186	487.978	42%
6. Consumables	334.952	119.890	36%
7. Other Costs	151.420	63.640	38%
8. Overheads	315.404	372.502	118%
TOTAL	**6.220.049**	**6.181.994**	**99%**

We have the following comments to the breakdown of the costs on the various costs categories compared to the budget:

Personnel: the overspend of app. 939.000 € is caused by the prolongation of the project period calling for additional personnel resources for project management. Additional personnel resources have also been used in action A3 for the application work to secure RDP funds to the project activities. In addition, many of the E actions as well as the botanical surveys (action A1) and botanical monitoring (action D1) have been more resource demanding than foreseen in the GA. Some of this can be explained by using inhouse capacities among the beneficiaries instead of external assistance.

It is important to notice, that the overspend is below 20% of the entire budget and the overspend therefore does not require a budget modification to be eligible. Please also see the table in section 8.5.

Travel: the smaller consumption of app. 13.000 € is primarily caused by reduced travel activity due to the Covid-19 crises.

External assistance: the smaller consumption of app. 106.000 € is primarily caused by our reduced effort for clearings balanced with a larger consumption in other activities.

Land purchase / long-term lease: the smaller consumption of app. 671.000 € is due to our somewhat limited success with obtaining the landowner agreements. However, we have been able to achieve agreements based on a lower average unit price than foreseen in the GA which also adds to the savings.
Durable goods: we have learned that the purchase of heads of cattle and a grass chopper must be categorized as durable goods. This is followed by a N-2000 Nature certificate
Consumables: the smaller consumption of app. 214.000 € derives from issues which have been handled as external assistance or durable goods. This is for example the case regarding fencing material and heads of cattle.
Other costs: the smaller consumption of app. 93.000 € derives from issues which have been handled as external assistance. This is for example the case regarding expenses related to the grazing facilities.
Overheads: The overheads become app. 56.000 € higher than foreseen in the budget. This is caused by the low use for landowner compensation (which not contributes to the overhead) and the increased use for personnel.

8.2 Accounting system

The CB and the AB's have made individual account systems. In the systems, expenses can be tracked on the main cost categories and on subprojects. It is also possible to track expenses per action per subproject.

8.3 Partnership arrangements

The partnership agreements were attached to the PR#1.

8.4 Certificate on the financial statement

The certificate on the financial statement from the individual beneficiaries are in annex 29.

8.5 Estimation of person-days used per action

Action type	Budgeted person-days	Estimated % of person-days spent
All projects when applicable Action A: Preparatory actions	1.190	154%
NAT and CLIMA projects Action B: Purchase/lease of land and/or compensation payment for payment rights	182	59%
NAT projects Action C – Concrete conservation actions	730	155%
NAT and CLIMA projects Action D: Monitoring and impact assessment	76	374%
NAT and CLIMA projects Action E: Communication and Dissemination of results	799	119%
NAT and CLIMA projects Action F: Project management (and progress)	1.172	181%
TOTAL	4.149	155%

8.6 Costs per action

In the table below, we have made a chart of the total costs per action and compared these costs to the budget. Our most important comments to some of the actions are as follows:

- Action A1 became more costly than foreseen. This reflects that more areas were surveyed than originally planned as the basis for the specific management activities.
- The work with authorisation applications in action A2 was more time consuming than foreseen in the budget.
- Also, the work with RDP applications in action A3 was more time consuming than foreseen which was due to inappropriate workflows at the national authorities. Thus, additional personnel resources have been used in relation to handling of the RDP applications.
- In action A4 the consumption was close to the budget although the area cover of this action is larger than foreseen.
- The consumption for landowner compensation in action B1 is quite low and is caused by our limited success with obtaining the specific landowner agreements.
- The consumption in action C1 is close to the budget. The area cover, however, was less than foreseen and the consumption reflects that implementation of the hydrological improvements are expensive and complicated.
- The combined consumption in action C2 and C3 is a little bit lower than expected but the combined target has been reached for most of the habitat types. The effort in these actions was also supported by RDP funds.
- The monitoring of habitat types in action D1 was more time consuming than foreseen, especially in Thi Kom where the national mapping of habitat types was flawed. Thus, much larger areas than foreseen were monitored.
- The monitoring in action D3 and D4 was performed in a more flexible way than foreseen which allowed us to perform a more compressed reporting in a more cost effective manner.
- Action E3 becomes more costly than foreseen and resulted in substantially more info-signs than predicted in the GA. Thus, the demand for info-signs seemed to be underestimated in the GA.
- The networking activities in action E6 became more costly than foreseen. We found it valuable for the project to extent the networking effort which for example was expressed in participating in the yearly national nature meetings.
- The cost for the hiking trails in action E9 is over the budget which primarily is caused by high costs for the boardwalk in subproject 3 Str Kom.
- Savings in action E12 was obtained by hosting the closing seminar as a virtual arrangement instead of a physical meeting for all participants. Only the members of the project and steering groups as well as the speakers attended the seminar physically.
- In action F1 there is a substantial overspend. There are multiple reasons for this. The most important is that the project management at Thi Kom was challenged for a period following the exit of Mr. Adrados calling for a remodelling of the project secretariat and involving an external assisting project manager. The assisting project manager has also been involved in the Final Reporting during 2023. The prolongation of the project period called for additional personnel resources as well as the Covid-19 crises for handling the project towards the landowners.

Action	Budget €	Total costs €	Total costs compared to budget (%)
Action A1: Botanical and hydrological feasibility studies	698.538	793.268	114%
Action A2: Authorization procedures	34.728	49.325	142%
Action A3: Preparing applications for RDP	39.491	105.704	268%
Action A4: Contact and cooperation with landowners and hunters	287.017	284.900	99%
Action A5: Surveys for Graphoderus bilineatus	9.333	9.525	102%
Action B1: Economic compensation to landowners	1.523.550	656.297	43%
Action C1: Hydrological improvements	915.001	980.579	107%
Action C2: Clearings	565.984	399.918	71%
Action C3: Grazing facilities	502.339	578.097	115%
Action C4: Management of open water surfaces	122.345	158.418	129%
Action C5 – Supplementary breeding and rearing program for Graphoderus bilineatus	6.189	6.704	108%
Action D1: Monitoring of habitat types	45.490	128.167	282%
Action D2: Monitoring of Annex II and Annex IV species	37.122	45.005	121%
Action D3: Socio-economic monitoring	30.683	8.556	28%
Action D4: Ecosystem service monitoring	30.149	9.591	32%
Action E1: The project's website	50.471	76.282	151%
Action E2: Merchandise	28.162	30.395	108%
Action E3: Information signs	38.188	59.645	156%
Action E4: Public involvement	43.953	58.198	132%
Action E5: Public and private micro management	61.154	80.417	131%
Action E6: Networking with other projects	69.555	116.545	168%
Action E7: Workshops for animal keepers	52.172	37.408	72%
Action E8: App and school material	23.732	24.496	103%
Action E9: Hiking trails	115.547	152.677	132%
Action E10: Best practice publication	16.255	8.594	53%
Action E11: Layman's report	9.924	9.309	94%
Action E12: Closing seminar	53.564	33.150	62%
Action F1: Project Management	299.805	816.352	272%
Action F2: KPI	9.200	5.769	63%
Action F3: Workshops	45.907	54.204	118%
Action F4: Management plans	38.283	22.534	59%
Action F5: After LIFE-plan	15.492	3.143	20%
Action F6: Audit	85.322	6.324	7%
	5.904.645	**5.809.492**	**98%**

*excluding OH

Co-financer

The project does not include co-financers.

9 Annexes

9.1 Administrative annexes

Partnership agreements delivered in the PR#1.

9.2 Technical annexes

Annexes marked with red are deliverables.

Annex #	Annex description
1a	Description of procedures for selection of service providers
1b	Action A1 – compiled report about activities
1c	Calculation of salary costs
2	Action A3 - compiled report about activities
3	Action A4 – land owner agreements
4	Action A5 – report about *G. bilineatus*
5	Action B1 – printouts from the land book
6	Action C1 – maps and photos
7	Action C2 – maps and photos
8	Action C3 – maps and photos
9	Action C4 – maps and photos
10	Action D1 – monitoring reports habitat types 7230, 7210* and 7220*
11	Action D2 – monitoring of targeted species
12	Action D3 – monitoring of socio-economy
13	Action D4 – monitoring of ecosystem-services
14	Action E2 – merchandise products
15	Action E3 – information signs
16	Action E4 – notes and photos from public events
17	Action E5 – notes and photos from micro-management arrangements
18	Action E6 – short reports from networking activities
19	Action E7 – short notes and pictures from workshops
20	Action E8 – education material for primary school
21	Action E9 – hiking trails
22	Action E10 – best practice report
23	Action E11 – layman's report
24	Action F3 – workshop material
25	Action F4 – management plans
26	Action F5 – After LIFE plan

10 Financial report and annexes

Consolidated Cost Statement for the project signed by coordinating beneficiary
Annex 27: Consolidated Cost Statement for the project signed by Thisted Municipality.

Financial Statement of the Individual Beneficiaries
Annex 28: Financial statements from
- Thisted Municipality
- Danish Nature Agency Fyn
- Faxe Municipality
- Furesø Municipality
- Høje Taastrup Municipality
- Jammerbugt Municipality
- Struer Municipality

Individual cost statement signed by all beneficiaries
Annex 29: Financial cost statements from
- Thisted Municipality
- Danish Nature Agency Fyn
- Faxe Municipality
- Furesø Municipality
- Høje Taastrup Municipality
- Jammerbugt Municipality
- Struer Municipality

Payment Request signed by coordinating beneficiary
Annex 30: Payment Request signed by Thisted Municipality

Beneficiary's N-2000 Certificate signed by beneficiaries
Annex 31

Auditors report
Annex 32