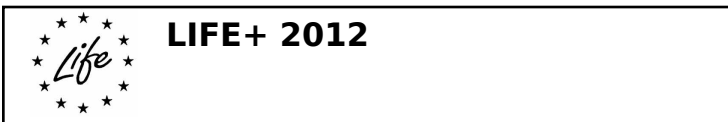




LIFE+ Nature

TECHNICAL APPLICATION FORMS

Part A – administrative information



FOR ADMINISTRATION USE ONLY

LIFE12 NAT/DK/000803**LIFE+ Nature project application****Language of the proposal:**

English (en)

Project title:

Restoration of Wet Habitats in the Jerup Beach Ridge Plain

Project acronym:

LIFE WETHAB

The project will be implemented in the following Member State(s):

Denmark Nordjylland

Expected start date: 01/07/2013**Expected end date:** 30/06/2018**LIST OF BENEFICIARIES**Name of the **coordinating** beneficiary: Ministry of the Environment, Nature Agency Vendsyssel

Name of the associated beneficiary: Frederikshavn Kommune (The Municipality of Frederikshavn)

Name of the associated beneficiary: State Prison of Kragsskovhede

LIST OF CO-FINANCIERS**PROJECT BUDGET AND REQUESTED EU FUNDING**

Total project budget:	2,657,560 Euro	
Total eligible project budget:	2,657,560 Euro	
EU financial contribution requested:	1,328,780 Euro	(= 50.00% of total eligible budget)

Coordinating Beneficiary Profile Information

Legal Name	Ministry of the Environment, Nature Agency Vendsyssel		
Short Name	NST VSY	Legal Status	
VAT No	33157274	Public body	<input checked="" type="checkbox"/>
Legal Registration No	33157274	Private commercial	<input type="checkbox"/>
Registration Date	11/04/1949	Private non-commercial	<input type="checkbox"/>

Legal address of the Coordinating Beneficiary

Street Name and No	Haraldsgade 53		
Post Code	2100	PO Box	
Town / City	Copenhagen Ø		
Member State	Denmark		

Coordinating Beneficiary contact person information

Title	Mr	Function	Administrator
Surname	FRIIS		
First Name	Jacob		
E-mail address	vsy@nst.dk		
Department / Service	Nature Agency Vendsyssel		
Street Name and No	Sct. Laurentiivej 148		
Post Code	9990	PO Box	
Town / City	Skagen		
Member State	Denmark		
Telephone No	4572543000	Fax No	

Website of the Coordinating Beneficiary

Website	http://www.nst.dk
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Brief description of the Coordinating Beneficiary's activities and experience in the area of the proposal

The Nature Agency (NST) is an institution within the Danish Ministry of the Environment. The main focus of the NST is the citizens and their use of nature as well as developing, establishing and restoring nature and to undertake practical management measures for wild flora and fauna. In addition to the efforts for nature on state land, the NST engage in green partnership arrangements with i.e. local authorities, aiming at nature management and awareness rising.

Administration and maintenance of forests and nature areas belonging to the state and development of nature quality in the landscape is the primary goal of the agency. The agency is responsible for the administration of national policies and legislation concerning nature conservation, restoration and management, open-air recreational activities, hunting and forestry. The agency is managing the State forest areas and other publicly owned nature and agricultural areas, in total around 190,000 hectares. The Nature Agency are organised on the principle of decentralisation. There is a central administration office in Copenhagen and 19 decentralized units covering the whole country. The central administration office is mainly responsible for the general management administration regarding policy, economics and planning plus the preparation of law and action programmes. The primary task for the decentralized units is to carry out various projects and initiatives and to maintain contact to the local stakeholders in their region. The agency's Management Division has the overall responsibility for the project.



COORDINATING BENEFICIARY DECLARATION

The undersigned hereby certifies that:

1. The specific actions listed in this proposal do not and will not receive aid from the Structural Funds or other European Union financial instruments. In the event that any such funding will be made available after the submission of the proposal or during the implementation of the project, my organisation will immediately inform the European Commission.
2. My organisation Ministry of the Environment, Nature Agency Vendsyssel has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 93.1 and 94 of Council Regulation 1605/2002 of 25/06/2002 (OJ L248 of 16/09/2002).
3. My organisation (which is legally registered in the European Union) will contribute 681.997.00€ to the project. My organisation will participate in the implementation of the following actions: A1, A2, A3, B1, B2, C1, C2, C3, C4, C5, C6, C7, C8, C9, D1, D2, E1, E2, E3, E4, E5, E6, E7, F1, F2, F3, F4, F5. The estimated total cost of my organisation's part in the implementation of the project is 1,363,994.00 €.
4. Should one or more associated beneficiary or co-financier reduce or withdraw its financial contribution, my organisation will ensure that a corresponding additional contribution is made available.
5. My organisation will conclude with the associated beneficiaries and co-financiers any agreements necessary for the completion of the work, provided these do not infringe on their obligations, as stated in the grant agreement with the European Commission. Such agreements will be based on the model proposed by the European Commission. They will describe clearly the tasks to be performed by each associated beneficiary and define the financial arrangements.
6. I am aware that my organisation is solely legally and financially responsible to the Commission for the implementation of the project (Article 4 of the Common Provisions).

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the Common Provisions (attached to the Model Grant Agreement provided with the LIFE+ application files).

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Skagen on 9th April 2013

Signature of the Coordinating Beneficiary:

Name(s) and status of signatory:

HEAD FORESTER

* When the form is completed, please print, sign, scan and upload it in eProposal

ASSOCIATED BENEFICIARY PROFILE

Associated Beneficiary profile information				
Legal Name	Frederikshavn Kommune (The Municipality of Frederikshavn)			
Short Name	FK	Legal Status		
VAT No	29189498	Public body		<input checked="" type="checkbox"/>
Legal Registration No	29189498	Private commercial		<input type="checkbox"/>
Registration Date	01/01/2007	Private non- commercial		<input type="checkbox"/>
Legal address of the Coordinating Beneficiary				
Street Name and No	Rådhus Alle 100		PO Box	null
Post Code	9900	Town / City	Frederikshavn	
Member State	Denmark			
Legal address of the Associated Beneficiary				
Website	http://www.frederikshavn.dk/			
Brief description of the Associated Beneficiary's activities and experience in the area of the proposal				
<p>With its 64276 km² and 62391 inhabitants Frederikshavn Municipality, situated in the northernmost part of Denmark, is one of the smallest municipalities in the region.</p> <p>Frederikshavn Municipality is constituted of the north eastern part of Denmark's coast, and the harbours therefore used to be very important due to fishing industry and shipbuilding yards. Recently though tourism has become an even more important industry.</p> <p>The nature, especially the coast near areas, is what makes the municipality attractive with regard to tourism. The nature is very diverse containing moors, sand hills, and bogs in the northern part whereas in the southern part, the landscape is dominated by a mixture of agriculture, moraine hills, and lower marine meadows.</p> <p>Beside the 8 Natura2000 areas the municipality contains more than 25 different kinds of landscapes found worth preserving.</p> <p>According to Nature Protection Act, the municipality is within its area of jurisdiction responsible for the following:</p> <ul style="list-style-type: none"> •Implementing the Council Directive 92/43/EEC of 21. May 1992 on the conservation of natural habitats and wild fauna and flora on areas not owned by the Danish State. •Enforcing the Danish Act no 933 of 24/09/2009 about Nature protection •Implementation of Danish Act no 408 of 01/05/2007 about Appointment and Administration of Internationally Protected Areas and Protection of Certain Species. •Implementation of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for community action in the field of waterpolicy. <p>Frederikshavn municipality is carrying out nature management in all protected areas, public as well as private, by keeping open nature areas clear of woody species and by control of invasive species.</p>				

ASSOCIATED BENEFICIARY PROFILE

Associated Beneficiary profile information				
Legal Name	State Prison of Kragsskovhede			
Short Name	KSH	Legal Status		
VAT No	53383211	Public body		<input checked="" type="checkbox"/>
Legal Registration No	53383211	Private commercial		<input type="checkbox"/>
Registration Date	01/04/1969	Private non- commercial		<input type="checkbox"/>
Legal address of the Coordinating Beneficiary				
Street Name and No	Sindalvej 81		PO Box	null
Post Code	9981	Town / City	Jerup	
Member State	Denmark			
Legal address of the Associated Beneficiary				
Website	http://			
Brief description of the Associated Beneficiary's activities and experience in the area of the proposal				
<p>The state prison of Kragsskovhede is a prison facility under the Department of Prison and Probation Service under the Ministry of Justice.</p> <p>The prison manages a large land area (635 hectares) in the Natura 2000 site DK00FX342/DK00FX006. The prison holds its own separate economy and must make use of its land for both inmate employment and educational purposes.</p> <p>The prison has a capacity of 211 beds for male inmates serving a prison sentence. The inmates are, while serving, obliged to participate in activities of education, production and maintenance. The primary perspective of this activity obligation is to add to the individual inmates' ability to live a life free of crime by giving him skills to help him support himself upon release. The various activities are operated under the instruction of employees with a professional background in the specific fields of activity.</p> <p>As it is, a number of inmates are engaged with agriculture and forestry in the land area. The prison administration is however keen on developing ways of engaging more inmates in outdoor activities and sees the project as a fine opportunity to obtain goals of rehabilitation of both nature and men in its custody.</p>				



ASSOCIATED BENEFICIARY DECLARATION

The undersigned hereby certifies that:

1. My organisation Frederikshavn Kommune (The Municipality of Frederikshavn) has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 93.1 and 94 of Council Regulation 1605/2002 of 25/06/2002 (OJ L248 of 16/09/2002).
2. My organisation (which is legally registered in the European Union) will contribute 613,033.00€ to the project. My organisation will participate in the implementation of the following actions: A1, A2, A3, B2, C1, C2, C3, C4, C5, C6, C7, C8, D1, D2, E2, E4, E6, E7, F1, F2, F3, F4. The estimated total cost of my organisation's part in the implementation of the project is 1,226,066.00 €.
3. My organisation will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the European Commission. This agreement will be based on the model proposed by the European Commission. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. For the purposes of the implementation of the agreement regarding this project between the European Commission and the coordinating beneficiary:
 - a) My organisation grants power of attorney to the coordinating beneficiary, to act in our name and for our account in signing the above-mentioned agreement and its possible subsequent riders with the European Commission. Accordingly, my organisation hereby mandates the coordinating beneficiary to take full legal responsibility for the implementation of such an agreement.
 - b) My organisation hereby confirms that we have taken careful note of and accept all the provisions of the above agreement with the European Commission, in particular all provisions affecting my organisation and the coordinating beneficiary. In particular, my organisation acknowledges that, by virtue of this mandate, the coordinator alone is entitled to receive funds from the Commission and distribute to my organisation the amount corresponding to our participation in the action.
 - c) My organisation hereby agrees to do everything in our power to help the coordinating beneficiary fulfil his obligations under the above agreement. In particular, my organisation hereby agrees to provide him whatever documents or information may be required, as soon as possible after receiving his request.
 - d) The provisions of the above agreement, including this mandate, shall take precedence over any other agreement between my organisation and the coordinating beneficiary which may have an effect on the implementation of the above agreement between the coordinating beneficiary and the Commission

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the Common Provisions (attached to the Model Grant Agreement provided with the LIFE+ application files).

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Frederikshavn on 5/4 - 2013

Signature of the Associated Beneficiary:

Name(s) and status of signatory:

* When the form is completed, please print, sign, scan and upload it in eProposal



ASSOCIATED BENEFICIARY DECLARATION

The undersigned hereby certifies that:

1. My organisation Stateprison of Kragsskovhede has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 93.1 and 94 of Council Regulation 1605/2002 of 25/06/2002 (OJ L248 of 16/09/2002).
2. My organisation (which is legally registered in the European Union) will contribute 33,750.00€ to the project. My organisation will participate in the implementation of the following actions: C1, C2, C3. The estimated total cost of my organisation's part in the implementation of the project is 67,500.00 €.
3. My organisation will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the European Commission. This agreement will be based on the model proposed by the European Commission. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. For the purposes of the implementation of the agreement regarding this project between the European Commission and the coordinating beneficiary:
 - a) My organisation grants power of attorney to the coordinating beneficiary, to act in our name and for our account in signing the above-mentioned agreement and its possible subsequent riders with the European Commission. Accordingly, my organisation hereby mandates the coordinating beneficiary to take full legal responsibility for the implementation of such an agreement.
 - b) My organisation hereby confirms that we have taken careful note of and accept all the provisions of the above agreement with the European Commission, in particular all provisions affecting my organisation and the coordinating beneficiary. In particular, my organisation acknowledges that, by virtue of this mandate, the coordinator alone is entitled to receive funds from the Commission and distribute to my organisation the amount corresponding to our participation in the action.
 - c) My organisation hereby agrees to do everything in our power to help the coordinating beneficiary fulfil his obligations under the above agreement. In particular, my organisation hereby agrees to provide him whatever documents or information may be required, as soon as possible after receiving his request.
 - d) The provisions of the above agreement, including this mandate, shall take precedence over any other agreement between my organisation and the coordinating beneficiary which may have an effect on the implementation of the above agreement between the coordinating beneficiary and the Commission

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the Common Provisions (attached to the Model Grant Agreement provided with the LIFE+ application files).

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Kragsskovhede on 25-09-12

Signature of the Associated Beneficiary:

Name(s) and status of signatory:

* When the form is completed, please print, sign, scan and upload it in eProposal

OTHER PROPOSALS SUBMITTED FOR EUROPEAN UNION FUNDING

Please answer each of the following questions:

- Have you or any of your associated beneficiaries already benefited from previous LIFE cofinancing? (please cite LIFE project reference number, title, year, amount of the co-financing, duration, name(s) of coordinating beneficiary and/or partners involved):

Danish Forest and Nature Agency projects which previously have received support from ACE/ACNAT/LIFE:

- Management of wetland habitats on Vestamager. 1986-89. EC contribution 109,500 €
- Heathland Management at Viborg. 1986-88. EC contribution (ACE) 51,185 €
- Protection of Marine Areas at Læsø and Stavns Fjord. 1986-90. EC contribution (ACE) 28,450 €
- Nature management in Tøndermarsken. 1986-89. EC contribution (ACE) 50,000 €
- Restoration of three Danish SPA's (Fiil Sø, Geddal Enge and Vænge Sø). 1991-93 EC contribution (ACE) 50,000 €
- Management of North European Heathland Areas in relation to the Directive 79/409/EEC (LIFE92NAT/DK/013600); 1993-95; EC contribution 400,000 €
- Restoration of large areas of national forests for the benefit of endangered birds, plants and biotopes. 1995-98. EC contribution 1,215,400 €
- Restoration of the area of Vest Stadil Fjord (LIFE97 NAT/DK/004199); 1997-2001; EC contribution 885,156 €
- Wadden Sea estuary nature and environment improvement (LIFE99 NAT/DK/006456); 1999-2002; EC contribution 713,036 €
- Restoration of habitats and wildlife of the Skjern Å River (LIFE00 NAT/DK/007116); 2001-04; EC contribution 2,207,163 €
- Restoration of Dune Habitats along the Danish West Coast (LIFE02 NAT/DK/008584); 2001-06; EC contribution 2,805,478 €
- Restoration of Dry Grasslands in Denmark (LIFE04 NAT/DK/000020); 2004-08; EC contribution 2,151,316 €
- Urgent Actions for the endangered Houting **Coregonus oxyrhynchus*; (LIFE05NAT/DK/000153); 2005-10; EC contribution 8,031,548 €
- Restoration of raised bogs in Denmark with new methods (LIFE05NAT/DK/000150); 2005-09; EC contribution 1,407,578 €
- LIFE05 NAT/DK/000151 ASPEA - Action for sustaining the population of *Euphydryas aurinia* EC contribution 283,284 €
- Restoration of Meadow Bird Habitats (LIFE06 NAT/DK/000158); 2006-09; EC contribution 714,466 €
- Rebuilding of Marine Cavernous Boulder Reefs in Kattegat (LIFE06 NAT/DK/000159); 2006-12; EC contribution 2,364,199 €
- Re-establishing a natural water flow level in the river system 'Mølleåen' (LIFE+07NAT/DK000100) 2009-11 EC contribution 2.334.821 €
- LIFE08 NAT/DK/000464: "Dry Grassland in Denmark - Restoration and Conservation"; EC Contribution 1,081,047 €
- LIFE08 NAT/DK/000465: "Genopretning af lysåbne naturtyper til at dække hele Helnæs området (Restoring semi-natural habitat types to a total cover of site Helnæs)" EC Contribution 1,264,967 €
- LIFE08 NAT/DK/000466: "Restoration of raised bog Holmegaards Mose" EC Contribution 445,853 €
- LIFE09 NAT/DK/000370: "Restoration of Atlantic heaths and inland dunes in Denmark" EC Contribution 2,037,844 €
- LIFE10 NAT/DK/000102: "Restoration of active raised bog" EC Contribution 4,194,396 €
- LIFE11 NAT/DK/000893: "Restoration of birdlife and natural habitats at Laesoe" EC Contribution 1,051,001.00 €

- Have you or any of the associated beneficiaries submitted any actions related directly or indirectly to this project to other European Union financial instruments? To whom? When and with what results?

No

- For those actions which fall within the eligibility criteria for financing through other European Union financial instruments, **please explain in full detail** why you consider that those actions nevertheless do not fall within the main scope of the instrument(s) in question and are therefore included in the current project.

The applicant intends to apply for co-funding from the Commission only where no other funding is available.

All alternative options have been screened as to secure whether other funding would be a possibility, including measures under the Danish Rural Development Programme (from now on referred to as DRDP). The DRDP funds can be applied for regarding clearing of woodlands / woody species, establishment of grazing plus restoration of hydrology, but limiting the work area within the project area, as demarcation rules excludes certain habitat types.

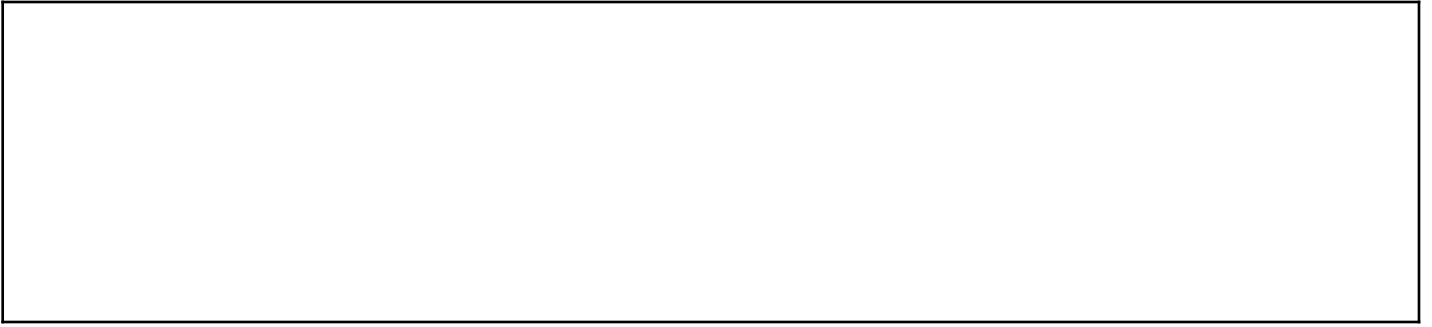
The fact that the beach ridge system in its structure is a true mixture of habitat types - wet and dry - of which some are excluded (habitat type 2140*, 4010, 4030, 7110* and 7140) and some included (habitat types 2130*, 2190, 6230*, 6410 and 7230) for funding under the DRDP schemes, together with the fragmented cadastral structure makes efficient use of DRDP challenging. The latter remark regarding interaction is further complicated by the fact that the whole application procedure under the DRDP schemes works with individual owners only, which in conjunction with a lengthy approval period, complicate matters.

However, the project has identified areas where DRDP can be applied and will cooperate with landowners to ensure that the two funding systems work together to reach overall objectives of conservation of the entire area thus avoiding fragmented non-coherent management. Estimations on the distribution is shown in Appendix 2.

Under LIFE+ a certain element of "force" is furthermore present, safeguarding commitment regarding the sustainable management following the project phase. Also the fact that project management is included under LIFE is essential. None of these elements would be present under DRDP alone. It should also be stressed that the project with LIFE+ funding would prepare more areas for later funding under the DRDP Programme which again would safeguard the sustainability of the project.

Apart from DRDP-funding none of the specific actions constituting this project are eligible for co-financing from Structural Funds or other Community financial instruments.

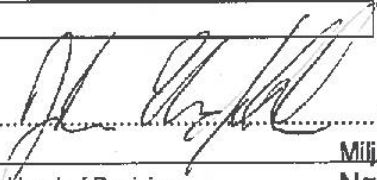
The issue regarding funding will be addressed ongoing and the applicants will, in the event that any other source of funding should become available - or scheme rules change - following the submission or during the implementation inform the commission regarding this new situation.



LIFE12 NAT/ - A8

DECLARATION OF SUPPORT FROM THE COMPETENT AUTHORITY

Optional: in addition to the support of the necessary competent authorities as described in the guidelines for applicants, this form may also be used to indicate any other support to the project by important stakeholder bodies, administrative bodies or individuals that may be concerned by the project.

Name and legal status:	
Nature Agency, Ministry of the Environment	
Full address:	
Haraldsgade 53 DK-2100 København Ø Denmark	
Tel:	+4572543000
Fax:	
Email:	kg@nst.dk
Contact person (name and function):	
Karsten Gasseholm, National LIFE+ Coordinator	
Please specify whether, why and how you will support this project:	
<p>The Natura Agency in the Ministry of Environments is the responsible Danish administrative unit for planning in relation to International Protected Areas in accordance with the Danish law.</p> <p>The present LIFE+ Natura project "Restoration of Wet Habitats in the Jerup Beach Ridge Plain" (DK00FX006 and DK00FX342) will significantly contribute to obtain favourable conservation status of a number of species such as Corncrake (<i>Crex crex</i>), Short-eared Owl (<i>Asio flammeus</i>) and Marsh fritillary (<i>Euphydryas aurinia</i>) and habitat types such as 4010 "Wet heaths", 7110* "Active raised bogs" and 91D0* "Bog woodlands". From a national point of view special attention is paid towards protection and rehabilitation of these species, habitat and nature types.</p> <p>Completion of the proposed LIFE+ project will be of importance towards fulfilling the obligations of the N-2000 plans for a number of specific areas. The central office of the Agency for Nature has coordinated the overall planning scheme for N-2000 but will not, however, be directly involved in project implementation.</p> <p>Finally, the Agency notice, that the project is well prepared both technically and towards the landowners. The central office of the Agency for Nature in Denmark in Copenhagen support the LIFE+ proposal and recommends the local Unit of the Agency in Vendsyssel as the coordinating beneficiary.</p>	
At	Copenhagen
	on 21/9 2012
Signature of the Competent Authority:	
Name and status of signatory:	Johan Husfeldt, Head of Devison
	Miljøministeriet Naturstyrelsen Haraldsgade 53 2100 København Ø



LIFE12 NAT/DK/000803

TECHNICAL APPLICATION FORMS

**Part B - technical summary and overall
context of the project**

SUMMARY DESCRIPTION OF THE PROJECT (Max. 3 pages; to be completed in English)**Project title:**

Restoration of Wet Habitats in the Jerup Beach Ridge Plain

Project objectives:

The overall objective of the project is to develop favourable conservation status in the entire habitat area. Habitat types with unfavourable conservation status are targeted by the project and will be restored and enlarged. The project will deal with all identified threats and the emphasis is on the "after LIFE situation", hence the focus on the development of a sustainable management set-up within the project period.

NST is the coordinating beneficiary. However, the project has been developed in close corporation with the associated beneficiary, FK. The project manager will work closely together with FK throughout the project to ensure that FK has full insight in project activities as FK is the authority regarding the Natura2000 site. FK activities in the project will focus on communication with landowners, to build up a mutual understanding between the involved parties and secure continuity when the project terminates.

The project will establish (or ensure) favourable condition in the designated habitat types (targeted habitat types with full name)

1330

2130* Fixed coastal dunes with herbaceous vegetation (grey dunes)

2140* Decalcified fixed dunes with *Empetrum nigrum*

2170

2180

2190 Humid dune slacks

2250

3130

3150

3160

3260

4010 Northern Atlantic wet heaths with *Erica tetralix*

4030 European dry heaths

5130

6230* Species-rich *Nardus* grasslands, on siliceous substrates in mountain

6410 *Molinia* meadows on calcareous, peaty or clayey-siltladen soils (*Molinion caeruleae*)

6430

7110* Active raised bogs

7120

7140 Transition mires and quaking bogs.

7150

7230 Alkaline fens

9190

91D0* Bog woodland

91E0

The project will enhance conditions for the designated butterfly species:

1065 Marsh Fritillary *Euphydryas aurinia*

The project will establish a sufficiently large habitat to maintain a population of the designated bird species:

A127

A166 Wood Sandpiper *Tringa glareolus*

A222 Short-eared Owl *Asio flammeus*

A338

and for

A112 Corncrake *Crex crex* (will be designated to the habitat area in the autumn 2012)

Actions and means involved:

The light demanding habitats and related species in the habitat area are very vulnerable to tree encroachment and draining. The latest assessment of the conservation status (The Natura 2000 plan of the area, Naturstyrelsen 2011) found 11 of the designated habitat types and 2 of the bird species in unfavourable conservation status. Together with Corncrake *Crex crex* and Marsh Fritillary *Euphydryas aurinia* this constitutes the targeted habitats and species.

Direct actions involved will be:

Clearing of trees (C1, C2, C3, C8)

Clearing of invasive alien species (C3)

Controlled burning (C4)

Grazing and mowing (A2, C5, C6)

Establishing a Cattle herd (C6)

Restoration of hydrology (A1, A2, B1, B2, C7)

Culling of mink (C9)

Improve local awareness (A2, F2 and E actions)

Several elements influence the conservation status of the habitat types and related species in a less favourable way; the most important being;

- overgrowth with woody species (native and alien)
- inappropriate hydrology
- lack of coherent management or even lack of management at all
- lack of grazing and mowing

The project aims to restore, enhance and extend where possible the habitat area's light demanding habitat types, and at the same time achieve improved conditions for the targeted species.

The project also aims to demonstrate new methods regarding;

- clearing of woody overgrowth in inaccessible areas,
- combining EU LIFE support with Danish Rural Development Programme in order to enhance conservation status of areas entailing land applicable to agro-environment schemes and land that can only obtain support from the LIFE programme.
- combating invasive alien species
- working with a very high number (554) private landowners
- Corncrake *Crex crex* management

Expected results (outputs and quantified achievements):

The targeted habitat types will all obtain favourable conservation status, except 7120* where it is only feasible to obtain a positive prognosis, by the end of the project.

Expected output will be:

Clearing of 1116 ha with woody species

Mulching of 157 ha as preparation for grazing and mowing

Control of invasive alien species at 40 ha

Increased or improved grazing and mowing at 787 ha

Purchase of 20 ha

One-off compensations payments on 24,8 ha

Improved hydrology at 2047 ha

Culling of mink in at least 20 weeks

Achievements:

HABITATS

Reestablishment of an area of at least 50 ha for natural re-generation of 7110* active raised bog in connection with the present remnant.

Enlargement of 2130*, 2140* and 6230* by 1 ha each.

and of 4010, 6410 and 7230 by 5 ha each.

and of 4030 and 91D0* by 10 ha each.

Habitat type 2190 and 7140 will not necessarily be enlarged, but especially due to raised water table obtain improved condition, and both serve as habitat for *Tringa glareola* and *Asio flammeus*.

Reducing the presence of invasive species to an absolute minimum by controlling stands and lowering the risk of further spreading.

Water table in the summer period secured allowing less and shorter periods of draught to appear; in the most vital area summer draught is not accepted.

SPECIES

Euphydryas aurinia

5 large sub-populations, 10 small subpopulations and evidence of dispersal by occurrence of new establishments (few larval webs) in corridors or feeding imago butterflies outside known breeding sites. Additional there must be 10 areas suitable for the butterfly, but not necessarily inhabited every year.

Development of an even more sustainable method of management of areas with *Euphydryas aurinia* - best practice.

Tringa glareola and *Asio flammeus*

1 breeding area suitable for *Tringa glareola*. 1 breeding area suitable for *Asio flammeus* and one additional feeding area suitable.

Crex crex:

3 singing males in at least 2 subareas. Increased breeding success by more appropriate mowing.

Can the project be considered to be a climate change adaptation project?

Yes No

No

GENERAL DESCRIPTION OF THE AREA / SITE(S) TARGETED BY THE PROJECT

Name of the project area:

Raabjerg Mose, Tolshave Mose and Jerup Hede.

Surface area (ha): 4,024.000

Surface description: The project area consists of the SAC at 4024 hectares as a whole including a SPA at 2326 ha.

EU protection status:

SPA NATURA 2000 Code : DK00FX006pSCI NATURA 2000 Code : DK00FX342**Other protection status according to national or regional legislation:**

There are 3 areas with conservation orders: Videslet Engen, 13 hectares (1982), Råbjerg Mose, 100 hectares (1951) and Tolshave, 154 hectares (2004).

2292 hectares of the SAC is advisory mapped as general protected by the Danish Act of Nature Protection (§ 3), 1386 hectares of this is mapped as bog and fen. The issue of the general protection is that landowners can not carry out projects that changes the condition of the habitat however "natural" changes in condition is not handled by the rule.

Main land uses and ownership status of the project area:

The project area consists of many small cadastral units, in all there are 557 landowners in the project area, 553 are private landowners. Each landowner may hold several cadastral units.

There are four state land owners. The Ministry of the Environment, The Danish Nature Agency administrates 110 hectares(all nature). The Danish Ministry of Justice, the state prison "Kragsskovhede" owns 635 hectares(including nature, arable land and buildings). The Ministry of Defence owns a small cadastral unit at 15 hectares with buildings. The municipality (Frederikshavns Kommune) is the owner of 34 hectares including 25 hectares forest.

Two foundations with a nature protection objective own 61 ha.

In all, private landowners hold 78 % of the land, the state 19 % and others (foundations and the municipality) 3 %.

Roughly nature covers 70 % of the area, arable land 20 % and roads, buildings etc 10 %.

Scientific description of project area:

Geological the area is based on an old beach ridge system, the largest in Europe and one of the largest in the world, known among geologists as *The Jerup beach ridge plain*. The ridges (rimmer) are typical 5 - 20 meters wide and up to 5 km long and the often humid slacks (dopper) in between are 10 - 200 m wide.

The central part of the area was formerly covered by active raised bog, the northern most in Denmark. We do not know the exact extension of this bog. However, we do know that in larger areas the bog overgrew the ridges. Peat cutting as late as in the 1950th changed the area significantly, creating the landscape we see today.

The area is one of the largest nutrition low bog areas in Denmark, even though it is situated in the continental biogeographic region visitors get the feeling of being in the boreal biogeographic region. Also many floral and faunistic elements are boreal related. Here we find the only Danish population of Labrador Tea *Rhododendron tomentosum* (Danish redlist: CR). It was here Crane *Grus grus* started re-colonization in Denmark in 1952 (or even as early as 1930'ties) and now holds a strong population of 5-10 pairs. The area is believed to play a key role in the Danish distribution history of Crane. Golden Eagle *Aquila chrysaetos* is often seen during migration and sometimes even present during summer.

The unique beach ridge structure gives an extremely high length of transition zones between wet and dry. Habitats needing this physical condition hold high biodiversity and form large parts of the project site. This applies e.g. to Molina meadows.

Wet heath mapped at the project site, constitutes 10 % of the mapped area in Natura 2000 sites in Denmark. Since the area is situated at a peninsula in the very North of the country, the amount of air born nitrogen deposition is lower than found in Denmark in general. Subsequently we do not see the recently reported collapse in *Erica tetralix* stands due to N-coursed acidification. This fact highlights the importance of enhancing project site condition, thus creating the possibility of long term preservation.

The low nitrification level and the transition zones provide good conditions for many insects. The area is known for its large population of red list butterflies, both at a national level as well as at a European level. The area holds the largest Danish population of the annex II species Marsh Fritillary *Euphydryas aurinia*. The nearest other large populations is in the Tranum-area 100 km to the south west, on Øland and Gotland in Sweden and in Southern England. At the European level Large heath *Coenonympha tullia* is redlisted as VU (EU27: NT) and it is quit common within the project area. Also present in the area: Purple-edged Copper *Lycaena hippothoe*, Alcon Blue *Phengaris alcon* and Niobe Fritillary *Argynnis niobe* all NT (EU27).

Due to former land use, large part of the project area has been drained. In many places open ditches have been established in order to drain the humid slacks between the ridges. This has had a great impact on not only the areas that was directly meant to become arable, but also on adjacent bog areas. An additional negative effect is that conditions for natural afforestation have been improved. Before the establishment of a draining system, the slacks were often flooded, thus drowning new seedlings. The result is that today large parts of the area are covered by dense forest and other parts by semi dense forest. This process is ongoing and the forest is still expanding.

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Wind, P, 1992. Oversigt over botaniske lokaliteter 9. Nordjyllands Amt. Miljøministeriet, Skov- og Naturstyrelsen .

Wind, P. & Pihl, S. (eds.): The Danish Red List. - The National Environmental Research Institute, Aarhus

Importance of the project area for biodiversity and/or for the conservation of the species /habitat types targeted at regional, national and EU level (give quantitative information if possible):

The project area is of great importance to the Natura 2000 network, both nationally and at a European level. Covering more than 4000 hectares, it constitutes one of the larger Danish land based Natura 2000 sites.

At the national level due to the fact that 10 % of all mapped 4010 wet heath is found here. And there is a very special geological influence on the distribution of habitats since the large beach ridge system provides more crossover zones between wet and dry habitats than seen in other areas.

The list of designated habitats and species, including bird species to the SPA is quite long. It consists of 25 habitats, one "habitat species" and 4 bird species.

Since a large amount of habitats and also species have an unfavourable status and a poor prognosis, we find this project most appropriate.

Species and habitats designated by the SAC DK00FX342. Targeted by this project is marked with bold letters.

List of habitats and species designated in the SAC

1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

2130* Fixed coastal dunes with herbaceous vegetation (grey dunes)

2140 * Decalcified fixed dunes with *Empetrum nigrum*

2170 Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*)

2180 Wooded dunes of the Atlantic, Continental and Boreal region

2190 Humid dune slacks

2250* Coastal dunes with *Juniperus* spp.

3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-*

Nanojuncetea

3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation

3160 Natural dystrophic lakes and ponds

3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion*

vegetation

4010 Northern Atlantic wet heaths with *Erica tetralix*

4030 European dry heaths

5130 *Juniperus communis* formations on heaths or calcareous grasslands

6230 * Species-rich *Nardus* grasslands, on siliceous substrates in mountain

6410 *Molinia* meadows on calcareous, peaty or clayey-siltladen soils (*Molinion caeruleae*)

6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

7110 * Active raised bogs

7120 Degraded raised bogs still capable of natural regeneration

7140 Transition mires and quaking bogs.

7150 Depressions on peat substrates of the *Rhynchosporion*

7230 Alkaline fens

9190 Old acidophilous oak woods with *Quercus robur* on sandy plains

91D0 * Bog woodland

91E0 * Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

1065 Marsh Fritillary *Euphydryas aurinia*Species designated in the SPA

Species designated by the SPA DK00FX006. Targeted by this project is marked with bold letters.

A112 Corncrake *Crex crex*. The species is included in the new SDF, that The Danish Nature Agency sent to the commission in December 2012. At the Danish Natura 2000 website the new designation content is published in the file: <http://www.naturstyrelsen.dk/NR/rdonlyres/C22FFDAC-1703-40FD-9F15-280DDD3A394E/0/FuglUdpgr201231Dec.pdf> (Please note that SPA 6 is DK00FX006 and that Corncrake *Crex crex* is "Engsnarre" in Danish.)

A127 Crane *Grus grus*

A166 Wood Sandpiper *Tringa glareolus***A222 Short-eared Owl *Asio flammeus***

A338 Red-backed Shrike *Lanius collurio*

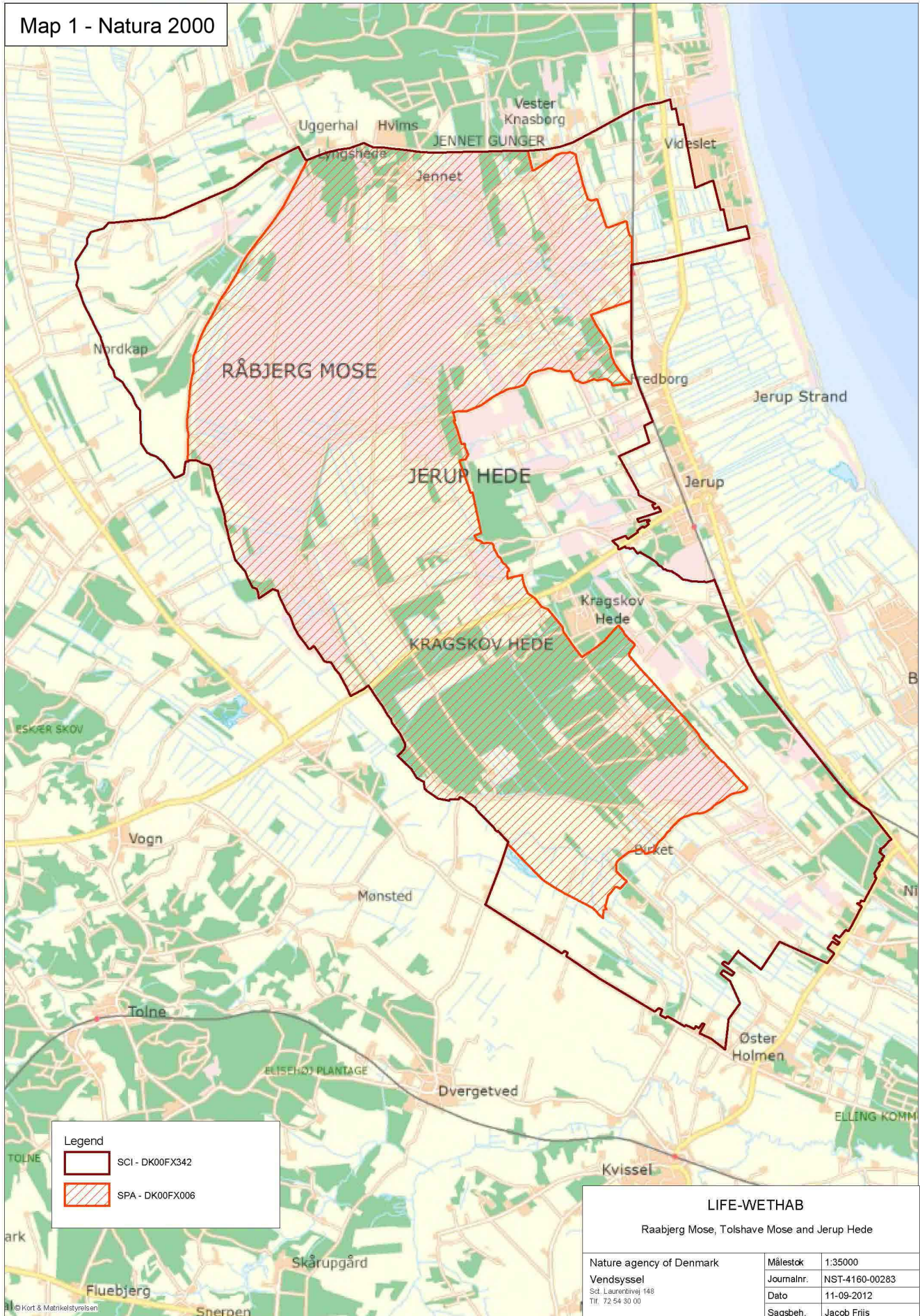
Annex IV. Among annex IV species of the habitats directive there is a very large population of Moorfrog *Rana arvalis* in the area and a small population of Sand Lizard *Lazerta agilis*. Also Otter *Lutra lutra* and a few species of bats (Daubenton's Bat *Myotis daubentonii* and Common Pipistrelle *Pipistrellus pipistrellus*) are found.

The maps show the distribution of each targeted habitat, but please note that the mapping is based on polygons that include as many as 5 habitats, and the maps therefore display larger area than the individual habitat covers.

Other maps show where each action will take place in accordance to the distribution of the targeted habitats. Actions with the aim of restoring population of bird species will only take place within the SPA.

The main actions are clearing of woody overgrowth, including invasive alien species and hydrological restoration.

Name of the picture: Map 1: Nature 2000, code DK00FX006 and DK00FX342



Name of the picture: MAP 27 - Project area on arial photo.





DESCRIPTION OF SPECIES / HABITATS ISSUES TARGETED BY THE PROJECT

Habitats targeted by the project

The targeted habitats all together cover 1472 hectares or 36.6 % of the 4024 hectares project area. Most of the habitats occur in long and narrow structures in a multi mosaic landscape. During the mapping of the area each habitat's share of the mapped areas is estimated in percentage, hence the areas are not exactly precise.

2130 *Fixed coastal dunes with herbaceous vegetation (grey dunes)

Covers 99 hectares or 2.5 % of the project area. See map MAP 7.

The conservation status: Unfavourable.

The recorded condition is that 36 % of the area has unfavourable status, and the prognosis is poor for the whole area mainly due to overgrowth by woody species.

Sand has been added upon the beach ridge plain system by natural drifting. This has happened in three periods of time: year 300 BCE, year 300 -500 and 1550-1850 AC. The thickness of the sand layer varies and only where dune morphology is visible, areas have been mapped as coastal dunes. The dunes that we see today are all formed in the latest period of sand deposition and situated in the eastern part of the project area.

2140 *Decalcified fixed dunes with *Empetrum nigrum*

Covers 76 hectares or 1.9 % of the project area. See MAP 8.

The conservation status: Unfavourable.

The recorded condition is that 63 % of the area has unfavourable status, and the prognosis is poor for the whole area mainly due to overgrowth by woody species and fragmentation.

See note about mapping of dunes under the 2130* description. The 2140* dune heath is often dominated by Heather *Calluna vulgaris* or Crowberry *Empetrum nigrum*.

2190 Humid dune slacks

Covers 14 hectares or 0.4 % of the project area. Only found in the northern part of the project area. See MAP 9.

The conservation status: Unfavourable.

The recorded status is favourable, however the prognosis is poor for the whole area, mainly due to overgrowth by woody species, occurrence of invasive alien species and inappropriate hydrology.

4010 Northern Atlantic wet heaths with *Erica tetralix*

Cover 191 hectares or 4.7 % of the project area. See MAP 10.

The conservation status: Unfavourable.

The recorded condition is that 60 % of the area has unfavourable status, and the prognosis is poor for the whole area, mainly due to overgrowth and inappropriate hydrology.

*The 4010 wet heath is dominated by Heath *Erica tetralix* but also *Andromeda polifolia* is quite abundant. The population might be a sign of larger distribution of 7110 historically, but due to low peatlayer (< 30 cm) areas are mapped as 4010.*

4030 European dry heaths

Covers 489 hectares or 12.1 % of the project area. See MAP 11.

The conservation status: Unfavourable.

The recorded condition is that 94 % of the area has unfavourable status, and the prognosis is poor for the whole area, mainly due to overgrowth by woody species.

*4030 Dry heath is dominated by *Calluna vulgaris* and *Empetrum nigrum* but also *Vaccinium vitis-idaea* can dominate parts of the heath. Small stands of *Populus tremula* can be seen as normal variation.*

6230 * *Species-rich Nardus grasslands, on siliceous substrates in mountain areas*

Covers 28 hectares or 0.7 % of the project area. See MAP 12.

The conservation status: Unfavourable.

The recorded condition is that 45 % of the area has unfavourable status, and the prognosis is poor for the whole area, mainly due to overgrowth and inappropriate grazing.

*The habitat can be very rich in flowering plants and therefore important for butterflies like *Euphydryas aurinia*. In the better subareas *Arnica montana* is part of the flora.*

6410 *Molinia meadows on calcareous, peaty or clayey-siltladen soils (Molinion caeruleae)*

Covers 328 hectares or 8.2 % of the project area. See MAP 13.

The conservation status: Unfavourable.

It has been recorded that 95 % of the area has unfavourable status, and the prognosis is poor for the whole area, mainly due to overgrowth with woody species, inappropriate hydrology and lack of grazing.

Most parts are highly dominated by *Molinia caerulea*, but also *Juncus conglomeratus*, *Viola paulustris*, *Potentilla erecta* and *Luzula multiflora* can be found in abundant numbers.

7110 * Active raised bogs

Covers 2.3 hectares or 0.06 % of the project area. See MAP 14.

The conservation status: Unfavourable.

It has been recorded that 100 % of the area has unfavourable status due to overgrowth and inappropriate hydrology.

This small remnant still entails hummocks with "red" *Sphagnum*-species and a few hollows with "green" *Sphagnum* species.

7140 Transition mires and quaking bogs.

Covers 131 hectares or 3.3 % of the project area. Found in 3 areas: Råbjerg Mose, Napstjert Mose and Tolshave Mose. See MAP 15.

The conservation status: Unfavourable.

The recorded condition is that only 1 % of the area has unfavourable status. However, the prognosis is poor for the whole area due to overgrowth and inappropriate hydrology.

The 7140 bogs in the area are mainly based on *Sphagnum* spp. However, a few bogs are based on *Menyanthes trifoliata*. Another species is *Rhynchospora alba* (found in both 7140 and 7150 in the SAC).

7230 Alkaline fens

Covers 14 hectares or 0.3 % of the project area. See MAP 16.

The conservation status: Unfavourable.

It has been recorded that 42 % of the area has unfavourable status, and the prognosis is poor for the whole area due to inappropriate grazing and possibly inappropriate hydrology.

91D0 * Bog woodland

Covers at least 30 hectares or 0.7 % of the area, but a larger area is in succession to develop into 91D0*. See MAP 17: Habitat no. NT91D0.

The conservation status: Unfavourable.

It has been recorded that the habitat has favourable status, but inappropriate hydrology and invasive and exotic tree species makes prognosis unfavourable.

The habitat consist mainly of older *Betula pubescens* and few *Betula pendula*. We also see some natural grown *Pinus sylvatica*.

During the project implementation, areas of succession might be evaluated in respect to other conservation issues, and some probably left for further succession. Others will be felled to allow restoration of heath and bog and targeted bird species habitat demands.

Species targeted by the project

1065 Marsh Fritillary *Euphydryas aurinia* (annex II of habitats directive)

Conservation status: Favourable

Conservation status, national level: Unfavourable

Conservation status, European level: Although being least concerned (LC) in the European Red List, the species is red listed in all countries around Denmark, Great Britain (VU), Sweden (VU), Germany (EN) and even extinct in Northern Germany, Schleswig-Holstein.

The area hosts the largest meta-population in Denmark. It consists of 3 large subpopulations of more than 50 larval webs and around 10 smaller subpopulations. DNA analysis confirms that it is one genetic coherent and genetic healthy population. The population is about or above 50 % of the Danish population

The monitoring means is account of larval webs. The numbers of webs are apporx. 600 corresponding to 2400 adult butterflies. In 2012 both spring and summer were cold and wet and preliminary data indicate a poor season, with a few % of normal amount of larval webs in the area.

The Nature Agency has an agreement about delivery of specimens to the reintroduction programme in LIFE-Aurinia - Reestablishment of the Marsh Fritillary (*Euphydryas aurinia*) in Northern Germany. LIFE09 NAT/DE/000010 (Project Manager: Antje WALTER).

A122 Corncrake *Crex crex* (annex I of bird directive)

Conservation status: Unknown (as the species is not yet on the list of designation)

Conservation status, national level: unfavourable but increasing. Danish national red list: NT.

Although no longer at the international red list as threatened, Corncrake is still a challenge to management in the areas, and also Corncrake is one of the bird species listed at the "List of Annex I bird species of Directive 2009/147/EC considered as "Priority for funding under LIFE" as agreed by Ornis Committee".

1-3 breeding pairs have been recorded in the SPA being part of the project area. Three areas within the SPA is used by Corncrake. Additional it is also found outside the SPA, but inside the SAC. There will not be C-actions targeted the species in this subarea. However, corncrake will undoubtedly benefit from the planned actions as the habitat conditions in general will be improved

61-64 pairs have been recorded breeding in Denmark (<http://www.dofbasen.dk/ART/art.php>)

A166 Wood Sandpiper Tringa glareolus (annex I of bird directive)

Conservation status: Unfavourable

Conservation status, national level: Unfavourable but stable. Danish national red list: VU

In 1950s it was common as breeding bird in the project area. In 1972 there were 2-5 pairs, however the last breeding record is from the early 1980s.

The national population comprises 94 breeding pairs in 2011 (<http://www.dofbasen.dk/ART/art.php>). The population declined dramatically 50-100 years ago, but also during the latest 30-40 years the species disappeared from many sites, especially inland due to overgrowth. The main population is found in large dune areas south of Hanstholm in north-western Jutland (distance 115 km). Nearest breeding area is a SPA area 8 km north of the project area, here the species was recorded re-established in 2007 after a LIFE project (LIFE02 NAT/DK/008584) with 1-3 pairs breeding.

A222 Short-eared Owl Asio flammeus (annex I of bird directive)

Conservation status: Unfavourable

Conservation status, national level: Unfavourable and declining. Danish national red list: EN

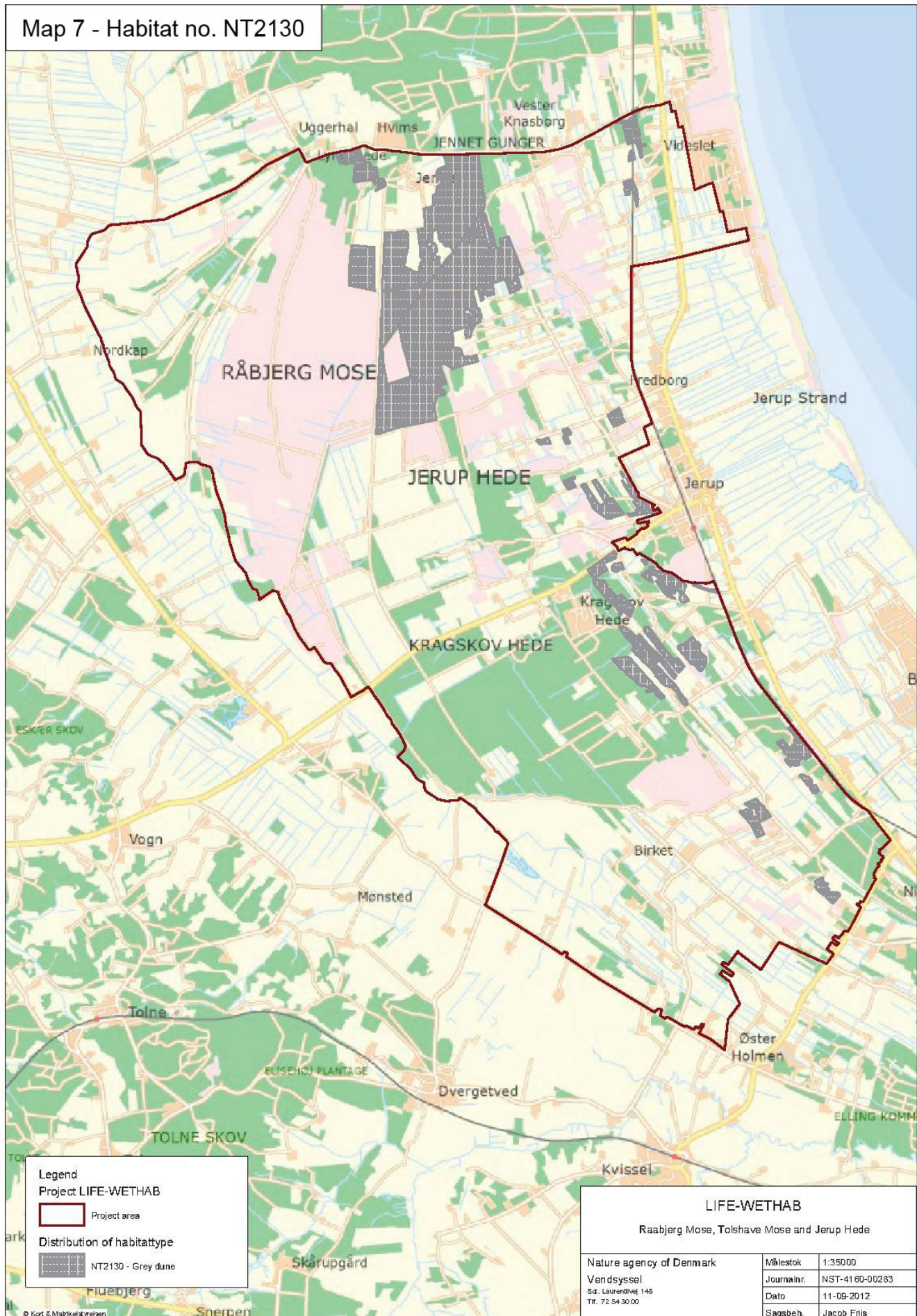
There are breeding records from the 1970s and 1980s. Presently extinct in the project area.

Danish national population 2011: 5 pairs (<http://www.dofbasen.dk/ART/art.php>)

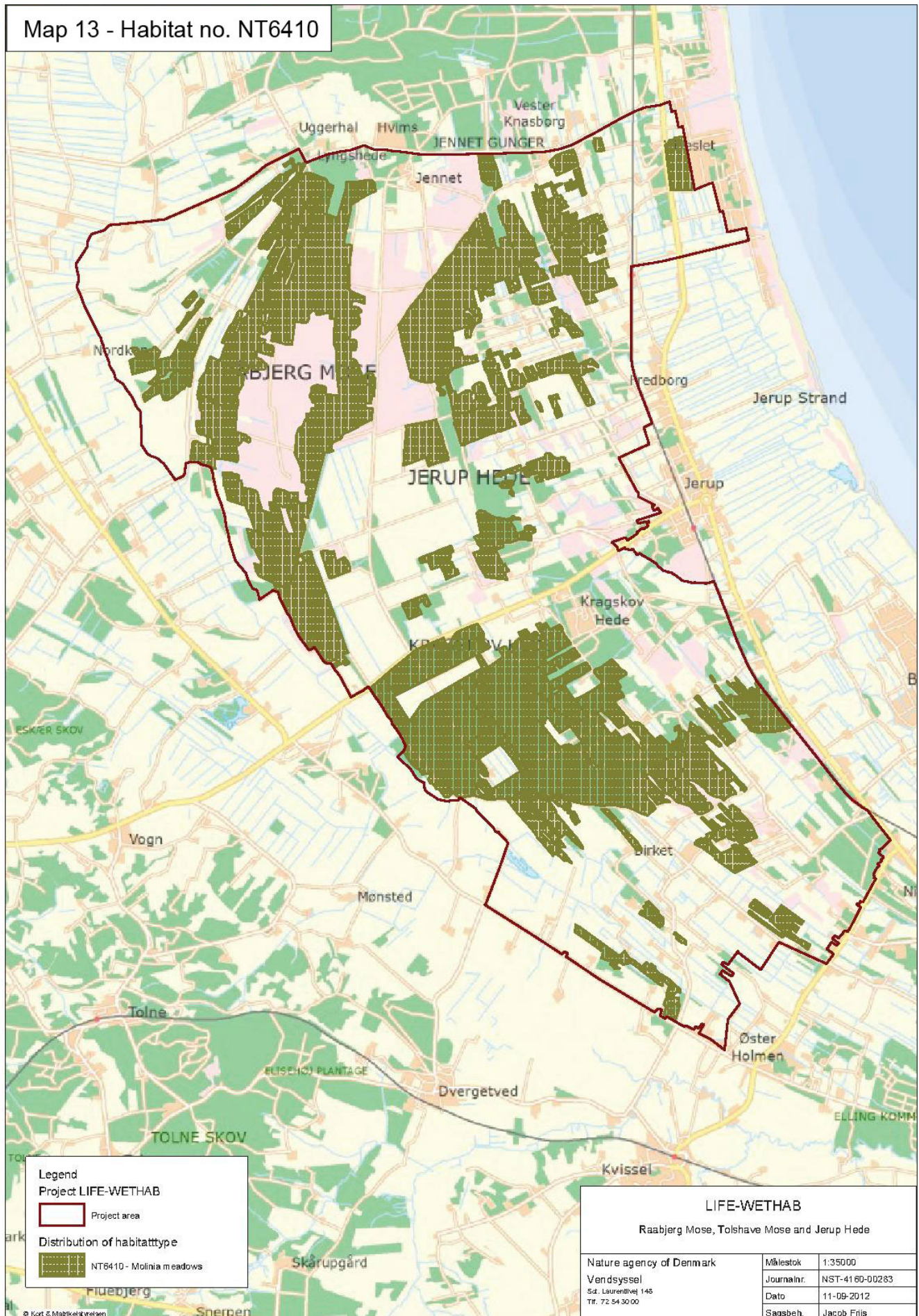
Interesting records in June 2th, 2007 and July, 14th 1993, more records in migrating season February-

May.

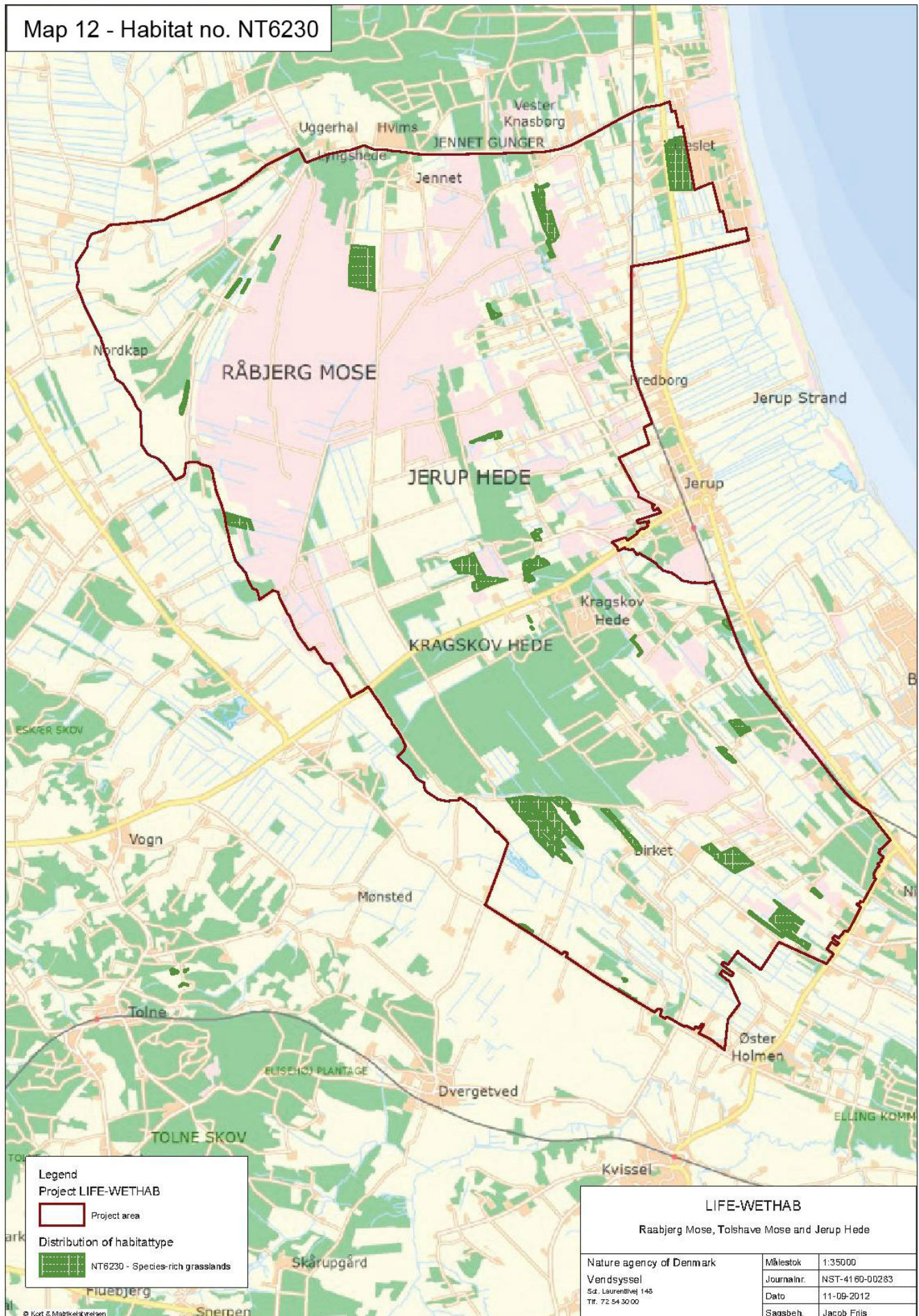
Name of the picture: MAP 7: Habitat no. NT2130



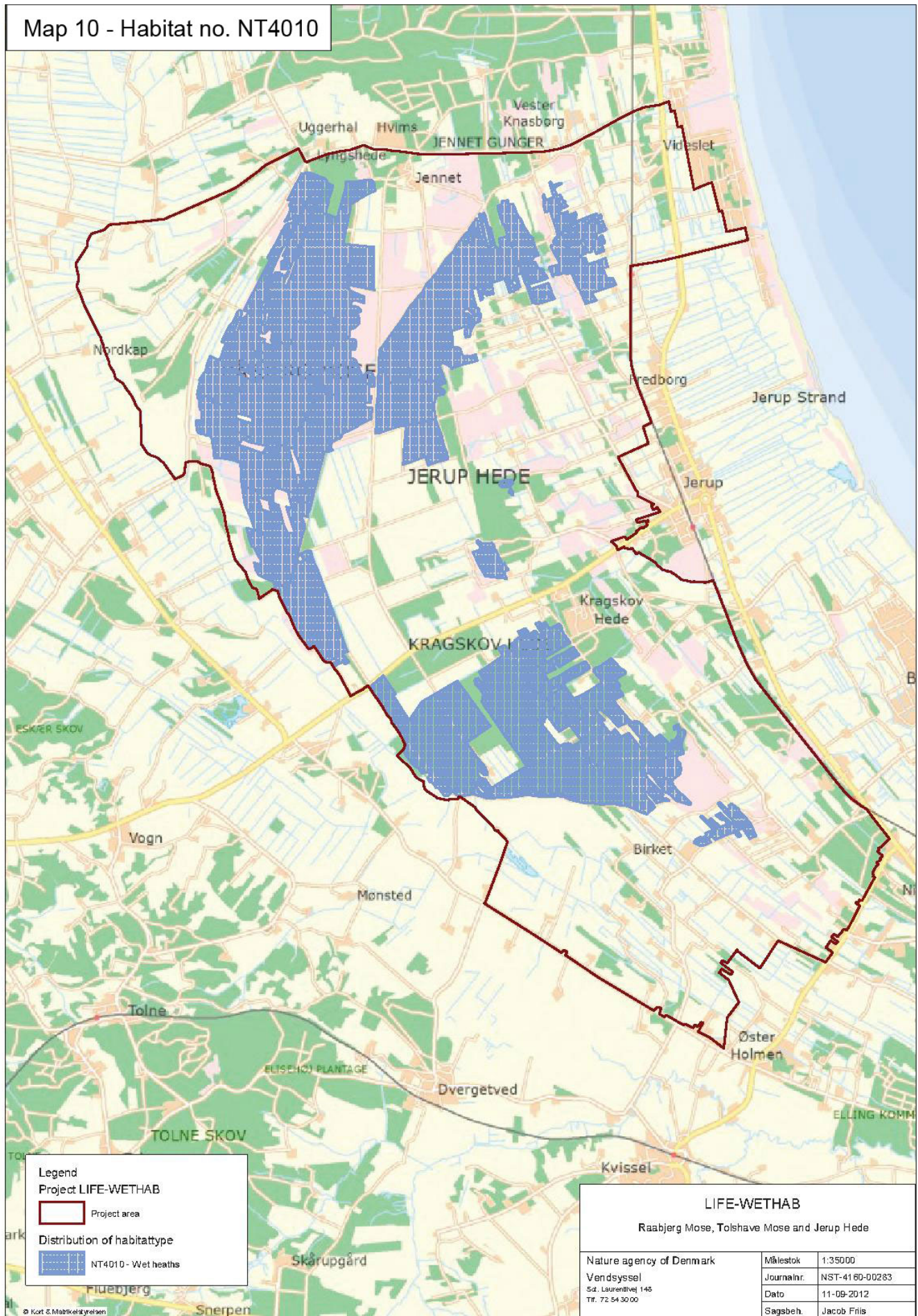
Name of the picture: MAP 13: Habitat no. NT6410



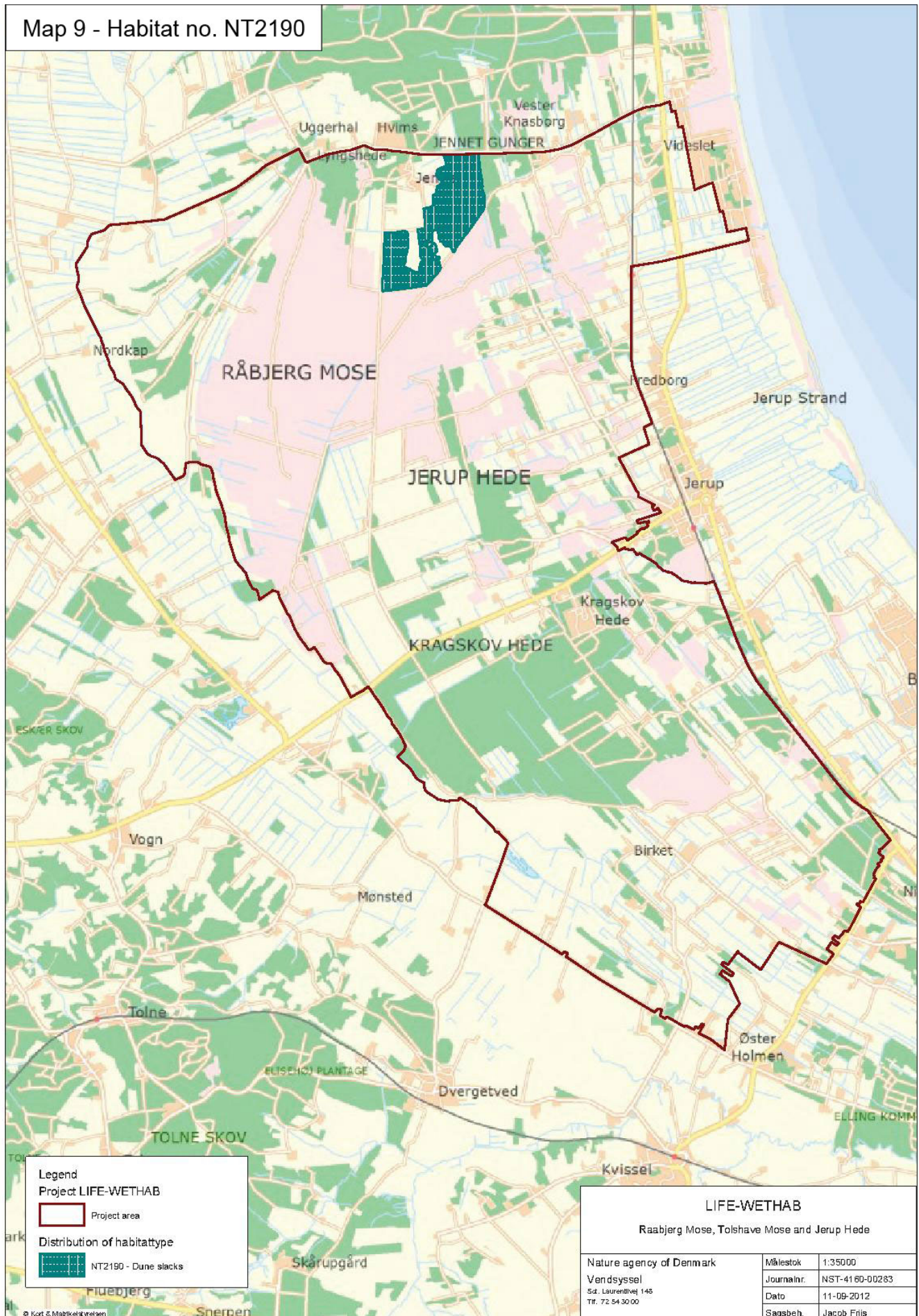
Name of the picture: MAP 12: Habitat no. NT6230



Name of the picture: MAP 10: Habitat no. NT4010



Name of the picture: MAP 9: Habitat no. NT2190



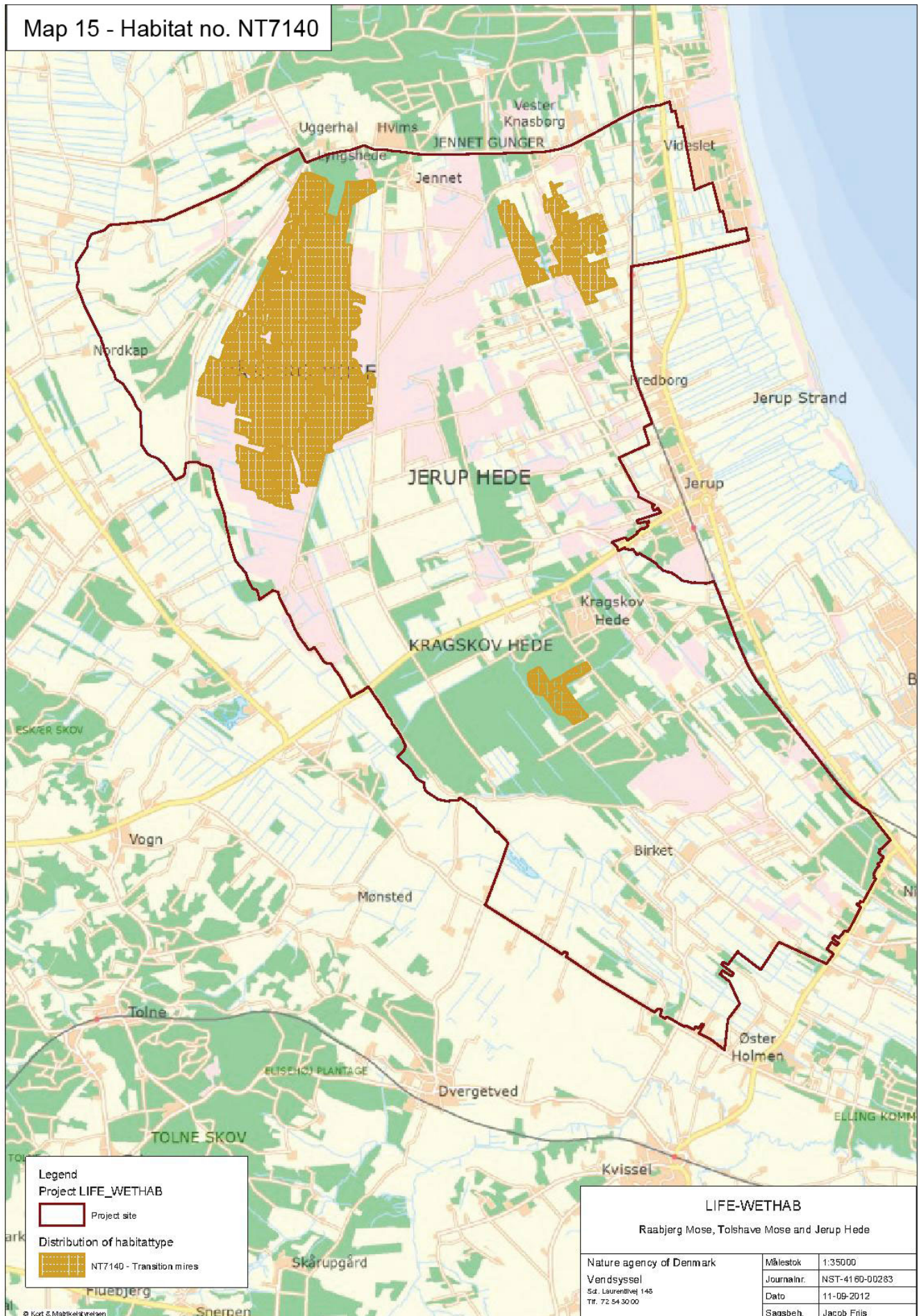
Name of the picture: MAP 14: Habitat no. NT7110



Name of the picture: MAP 16: Habitat no. NT7230



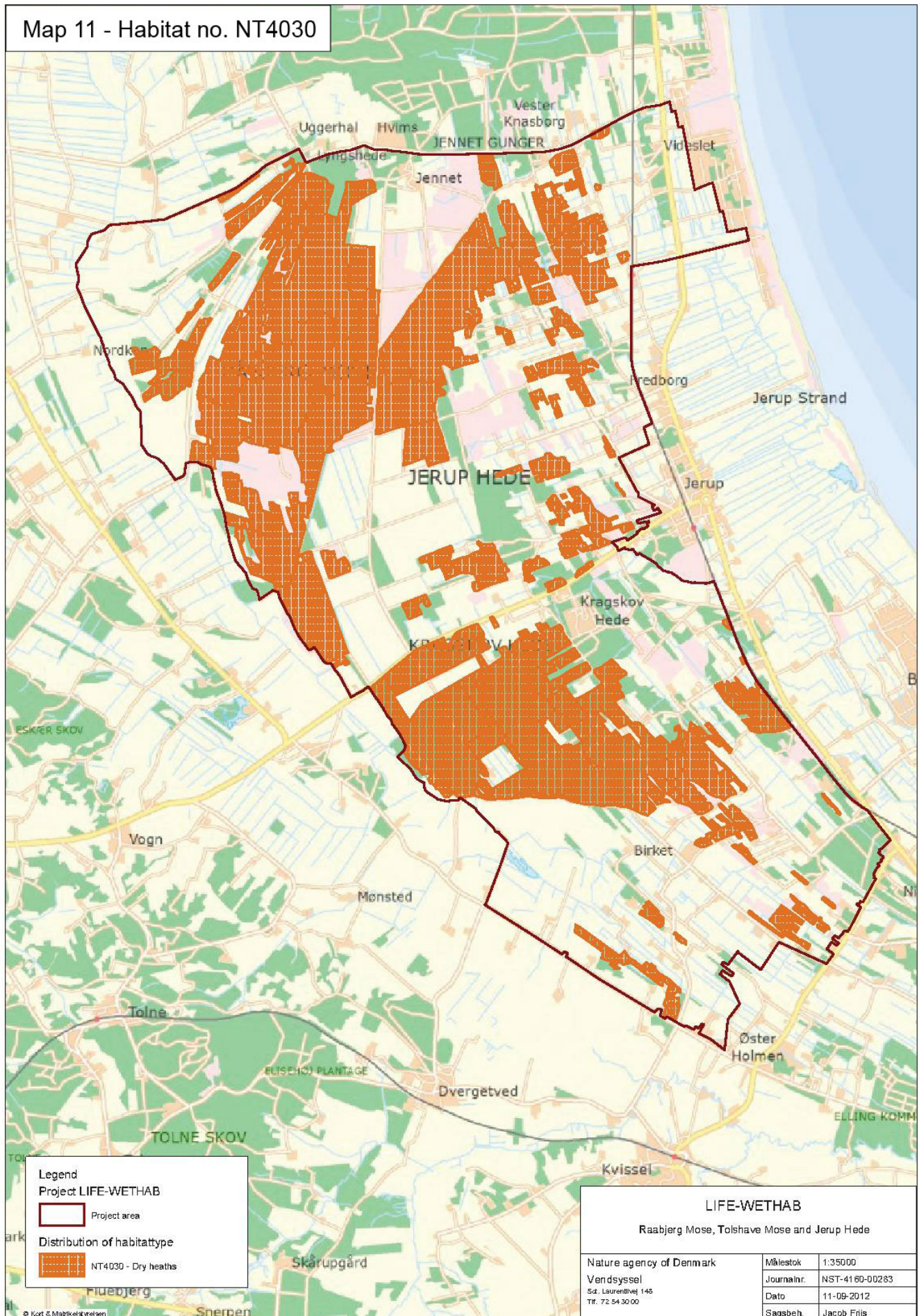
Name of the picture: MAP 15: Habitat no. NT7140



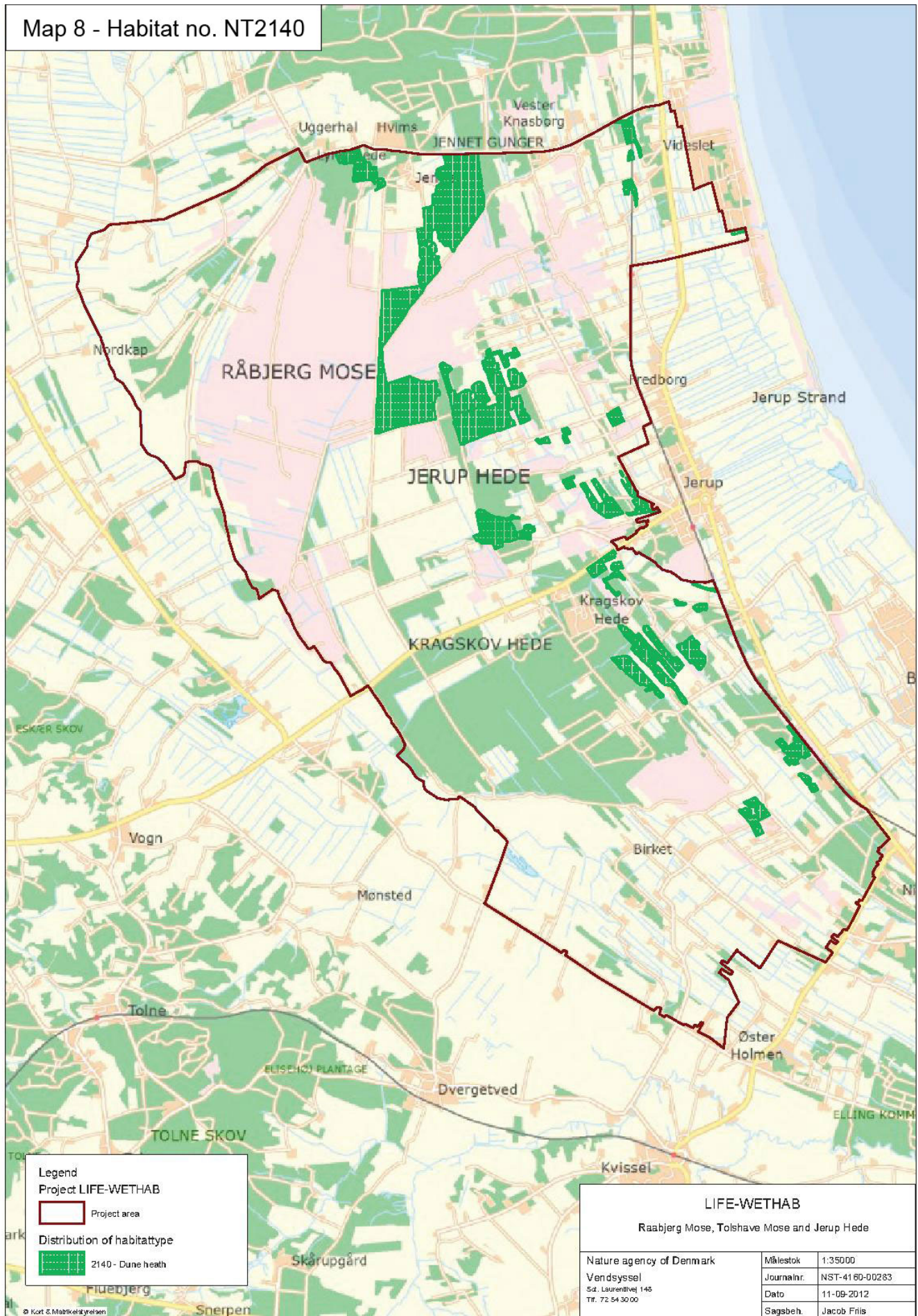
Name of the picture: MAP 17: Habitat no. NT91D0



Name of the picture: MAP 11: Habitat no. NT4030



Name of the picture: MAP 8: Habitat no. NT2140



CONSERVATION PROBLEMS AND THREATS

Provide this information for those species and habitat types directly targeted by the project

There are 8 threats to the Natura 2000 site. The Natura 2000 plan of the area (Naturstyrelsen 2011, see reference in "scientific description") has identified 7 threats, and this project has identified an additional threat (no. 3).

With regard to quantification of the threats, if not stated otherwise, the threat is to all hectares of the mentioned habitats. The habitats in concern will be listed under each threat using the Natura 2000 code.

Natura 2000 code and ha

2130*: 99 ha

2140*: 76 ha

2190: 14 ha

4010: 191 ha

4030: 489 ha

6230*: 28 ha

6410: 328 ha

7110*: 2,3 ha

7140: 131 ha

7230: 14 ha

91D0*: 30 ha

With regard to quantification of the threats to species, see text under the description of each threat.

1. Overgrowth by woody species.

A threat to all targeted habitats and species.

Tringa glareolus and *Asio flammeus* will not recolonize the area. *Crex crex* and *Euphydryas aurinia* will disappear from the area.

Overgrowth is a threat to all light demanding herbal species. Overgrowth also increases nitrogen disposition by enlarging the roughness, deposition can easily be doubled. The consequence is loss of the above mentioned habitats and eventually disappearance of the species depending on the habitats.

This threat includes both native and exotic species. Exotic species includes invasive alien species (see list at threat 5) and exotic species not at the Danish national IAS list, eg: *Picea sitchensis*, *Picea glauca*, and *Pinus mugo* ssp. *uncinata*.

Tringa glareola and *Asio flammeus* do not nest in areas overgrown with trees. And especially *Asio flammeus* primarily feeds in open areas.

The project will deal with this threat by creation of clearing actions, hydrological actions, mowing and grazing actions, all based on landowner agreements. A minimum of necessary infrastructure must be established, some of temporarily nature, some of permanent.

2. Inappropriate hydrology (draining).

A threat to 2190, 4010, 6410, 7110*, 7140, 7230, 91D0*, *Tringa glareola* and *Crex crex*.

Tringa glareolus will not recolonize the area, *Crex crex* will disappear from the area

In the 4010 drainage is a problem since the main plant *Erica tetralix* needs permanent humidity in their root zone.

In 4010, 6410 and partly 7140 drainage reduces the period of temporary flooding and thereby does not prevent growth of trees sufficiently.

In 7110* drainage is crucial since it reduces the growth of *Sphagnum* species and reduces the dynamics with fewer or no hollows (part of the typical raised bog surface).

In 7140 drainage reduces the growth of *Sphagnum*, in some years so much that the floating rafts "hit the bottom" and we also see that *Sphagnum* dries out completely and dies.

For the remaining habitats they are dependent on wet soil condition. Draining causes the extinction of the habitats.

Artificial drainage also has negative impact on *Tringa glareola* and *Crex crex* by changing the structure of their habitat by eradicating essential structural elements and microhabitats, like shallow hollows.

The project will deal with this threat by executing a hydrological survey, and subsequently the establishment of bungs, adjustable weirs and closing of open ditches.

3. Structure in ownership.

A threat to all targeted habitats and species

Euphydryas aurinia and *Crex crex* may disappear from the privately owned land, *Crex crex* may disappear from the project area, *Asio flammeus* and *Tringa glareolus* will not recolonize the area

Small and narrow cadastral units make appropriate management difficult. See MAP no. 19 Cadastral overview.

Even though the 4 public landowners share 794 ha, 553 private landowners share 3230 ha, an average of 5,8 ha that again can be composed by several cadastral units. There are some fairly big landholders in the area, leaving several hundred very small cadastral units, many as small as 0,5 ha.

From an economic point of view, there is no incentive for the small individual landowners to carry out any form of activity e.g. grazing or cutting of hay. There exists no, or only very insufficient infrastructure, in large parts of the area. Many of the cadastral units are either so small, or so inaccessible, that the owners do not care about overgrowth, trees are not cut etc.

Together with the fact that large parts of the area have been drained, the once open landscape, and even the wet habitat types are being transformed into forest.

The project will handle this threat by first of all awareness raising among the landowners. The project will also provide easy access to grazing animals and focus on pooling of small cadastral units to managerial sizes.

4. Inappropriate grazing or mowing.

A threat to 2130*, 2140*, 4030, 6230*, 6410, 7230, *Crex crex* and *Euphydryas aurinia*.

Crex crex and *Euphydryas aurinia* will disappear from the area as both species are dependent on a grazing and-or mowing regime.

In 2130*, 2140*, 6230*, 6140 and 7230 insufficient or no grazing leads to tall grass vegetation with loss

of biodiversity. Over time tree encroachment will occur, with the consequence of total habitat loss.

If 4030 is not managed regularly the *Calluna vulgaris* will grow tall, turn senile and die.

Euphydryas aurinia prefers areas extensively used for grazing or mowing. Grazing with too high density of animals is often a problem and leads to local extinction.

Crex crex is found in both 6410 Molina meadows and more semi-cultural meadows and even arable grass fields. Often the fields are cut too early in the season not allowing the chicks to grow up and/or cut in a way that does not allow the birds to escape the mower. Inappropriate grazing can also be a problem to *Crex crex* and therefore an overall planning can be valuable to the species.

The project will deal with this threat by the establishment of a proper grazing/mowing regime, the establishment of a cattle herd, gaining control of the hydrology, at the formation of a landowner association.

5. Invasive alien plant species.

A threat to all targeted habitats and species.

Tringa glareolus and *Asio flammeus* will not recolonize the area. *Crex crex* and *Euphydryas aurinia* will disappear from the area.

In the area *Pinus mugo* ssp *mugo* and *Pinus contorta* are found in abundant numbers. Though *Pinus mugo* is listed as characteristic to 91D0*, it is considered alien in Denmark and one of the most invasive species to heaths and bogs. *Prunus serotina* is spreading but still only found in relative few populations. *Rosa rugosa*, *Fallopia japonica* and *Amelanchier spicata* are also found in the project area.

The above species are part of the overall "overgrowth with woody species" problem as described under threat no. 1. However the invasive alien species presents an additional problem; they are not easily eradicated. The conifer species are fairly easy to deal with; once cut there is no regrowth. The problem with regrowth of e.g. *Rosa rugosa* is well known. The threat to habitats is evident, as they all potentially could be lost.

Note that other exotic trees-species will be handled as overgrowth thus are included in threat no. 1.

The project will deal with this threat by implementing actions dealing with overgrowth, hydrology (drowning of regrowth) and awareness raising among the landowners. On top of this, one designated and carefully designed action (C3) will deal with the problem of the "apparently" endless ability of especially *Prunus serotina* and *Rosa rugosa* to regrow.

6. Fragmentation and/or reduction of habitat area.

A threat to the habitats 2140*, 4010, 4030, 7110* and 91D0*

The above mentioned habitats have had a strong reduction in area within the last 60 years and are now either too small to maintain the needed structure and function e.g. spreading of species and/or is divided by barriers e.g. plantations. 7110 *Active raised bog that formerly covered several hundred ha now only covers 2,3 ha.

The project will overcome this threat by clearing actions and hydrological actions, thus creating the possibility for the habitats to enlarge.

7. Deposition of airborne nitrogen

A threat to 2130*, 2140*, 2190, 4010, 4030, 6230*, 7110* and *Euphydryas aurinia*.

Euphydryas aurinia will disappear from the area

The overgrowth with woody species, developing into mature forest increases the area's roughness

hence increases the deposition of airborne nitrogen. Further, the deposited nitrogen enriches soil conditions, which is a threat to many of the typical plant species of the targeted habitats. Succession will push towards tall grass encroachment. This will in turn have a detrimental impact on e.g. *Euphydryas aurinia*. In Denmark *Euphydryas aurinia* uses *Succisa pratensis* exclusively as foodplant for the larvae. This plant is vulnerable to tall grass encroachment.

The project will deal with this threat by carrying out clearing actions, as well as controlled burning.

8. Predation.

A threat to all targeted bird species: *Tringa glareolus*, *Asio flammeus* and *Crex crex*.

Tringa glareolus and *Asio flammeus* will not recolonize the area. *Crex crex* and *Euphydryas aurinia* will disappear from the area.

All 3 bird species are ground nesting birds, thus vulnerable to predators feeding on the ground as *Neovision vison* and Fox *Vulpes vulpes*. Population size of foxes is presumed to be at a natural level but mink is an invasive species and contributes to an unnatural high predation pressure.

The municipality of is among the 5 municipalities in Denmark (99 in all) with the highest number of *Neovision vison* culled yearly by hunters in Denmark. The number is between 28.1 - 45.0 individuals at 100 km², indicating a high density.

The project will deal with this threat by the introduction of a mink culling programme (action C9).

Nyctereutes procyonoides radio tagged by the LIFE project LIFE09/NATSE/344 has been observed in the area, but there is no evidence of a permanent population. If suddenly found, possible actions controlling Raccoon Dog will be addressed by the ongoing Raccoon Dog LIFE project.

PREVIOUS CONSERVATION EFFORTS IN THE PROJECT AREA AND/OR FOR THE HABITATS / SPECIES TARGETED BY THE PROJECT

In order to qualify the project application at hand, the Danish Nature Agency in cooperation with an other governmental landowner (local prison) conducted a pilot project in the autumn of 2011. Due to the beach ridge system many parts of the project area are quite inaccessible. The aim of the pilot project was to gain experience and knowledge on how to reach the remote ridges by the construction of temporarily roads and to what extent heavy and big machinery (thus cheap in term of cost per produced cubic meter) can be used. The roads are necessary in order to transport the produced chip out of the habitat area. The pilot project cleared dens forest as well as some parts with scattered overgrowth in 4010, 4030, 6410 and 7140. In total 15,2 ha was cleared. The proposed clearing actions and the related budgets in this project application are based on the findings of the pilot project.

The LIFE project ASPEA (Action for Sustaining the Population of *Euphydryas Aurinia*) LIFE05 NAT/DK/000151 took place in 2005 - 2008. Of the 694 ha of restoration actions in the ASPEA project 217 took place in the (now) SAC DK00FX342. The project resulted in clearing of overgrown habitats, fencing and establishing of low density grazing of 200 ha, raised water table at 80 ha and controlled burning 1 ha. None of these C-actions will be repeated at the same areas in the project of this application. The LIFE ASPEA project clearly was essentially as restoration of *Euphydryas aurinia* habitats and creation of new habitats. However the need of more knowledge on long-term habitat management to maintain the population is still needed.

The Danish Nature Agency has recently purchased 5 ha in the central part of Raabjerg Mose (2011).

The state prison in the area holds a cattle herd with the purpose of employing the inmates. However the herd has a positive side effect as to conservation friendly low density grazing of habitats. The area with working inmates is closed to the public. This again has a positive side effect leaving the area

almost undisturbed and thus favouring e.g. cranes and red deer.

EU ADDED VALUE OF THE PROJECT AND ITS ACTIONS

DK00FX342 – Jerup Hede, Råbjerg og Tolshave Mose (SAC status since Dec 22th 2011), constitutes one of the largest land based habitat areas in Denmark (4024 ha). It is an old heath an bog area (mose in Danish translates to bog). It entails 25 habitats types including 7 priority types. 5 of these, 2130*, 2140*, 6230*, 7110*, 91D0*, are targeted by this project. Further more the Corncrake *Crex crex*, an annex I bird species with special European conservation interest, is a target species of the project. The Danish Nature Agency sent a revised SDF to the commission in December 2012. At the Danish Natura 2000 website the new designation content is published in the file: <http://www.naturstyrelsen.dk/NR/rdonlyres/C22FFDAC-1703-40FD-9F15-280DDD3A394E/0/FuglUdpgr201231Dec.pdf>. Please note that SPA 6 is DK00FX006 and that Corncrake *Crex crex* is "Engsnarre" in Danish.

The project approach is based on a holistic point of view with the clear objective of long term conservation of the entire habitat area. The project has emphasis on the "after LIFE situation", hence the strong involvement in the project of the municipality, being the responsible authority for maintaining a favourable conservation status when the project terminates.

There will be a significant contribution to the conservation at the European level for priority habitat types (see above list). It should be highlighted that enlarging the area of 7110* active raised bog will contribute to conserve this special threatened habitat.

The overall aim of the project is to take care of all identified threats to the entire SAC. The actions of the project is designed and planned to restore and enhance the condition of the targeted habitat types and species. However, the actions are also designed and planned so that the remaining designated habitat types and species will not suffer any negative impact. On the contrary, there will at least be a neutral impact and in many instances the not targeted habitats and species will benefit from the project, e.g. through the control of IAS and restoration of hydrology.

If the project is not implemented the wet habitat types will remain to dry for long term conservation and all the habitat types will get more overgrown, larger areas will get unfavourable conservation status. Ultimately there will be a severe loss of habitat types. The two extinct bird species will not recolonize the area and the population of Corncrake *Crex crex* will decline.

The project outcome will include innovative techniques that will be replicable in the EU. This goes for;

- the development of the technique of construction of temporarily roads cable of carrying heavy machinery and forwarders loaded with harvested chip. As many projects across Europe deal with wet habitat types, they can benefit from this project.
- the development of techniques with regard to eradication invasive alien species.
- the development of a Corncrake management scheme.
- as more than 500 landowners will be involved in the project, the results of formation of a landowners association, and the daily management of the same would be of great interest to other habitat areas.
- the project will take an approach where the Rural Development Programme is utilized where possible, hence working hand in hand with the EU-LIFE support with the aim of a holistic nature conservation attitude towards the entire habitat area. The project management will develop a set-up, where it becomes easier for the small landowners to establish partnerships, make use of the agro-environment subsidy scheme thus securing the implementation of conservation actions, e.g. grazing.

SOCIO-ECONOMIC EFFECTS OF THE PROJECT

The local community Jerup with around 635 citizens has an association with the vision: “*We will live in a city of solidarity and responsibility for others and respect for nature*” (www.jerup.net). This indicates the keen interest in nature conservation, and that it is considered a benefit to live close to nature areas. The region in which the project area is located suffers from emigration. The population is declining. The creation of better nature would probably make it more attractive to settle in the area, hence add to stopping the decline in population.

The State Prison of Kragsskovhede, an associated beneficiary of the project, manages 735 hectares of land of which 635 hectare are situated in the habitat areas. This land is of both agricultural and nature character.

Inmates participate in the daily caretaking of live stock and other agricultural operations. These agricultural activities engage a certain number of inmates - depending among other things on the actual inmates working skills. The State Prison is, however, for strategic purposes, dedicated to developing the use of the land in order that an increasing number of inmates can be activated in the area in ways that - within the frame of nature conservation/restoration - will meet the need for enhancing individual inmates working skills and education while participating in the outdoor activities in the area. Likewise, the State Prison intends to make use of the area in addressing issues of inmate health challenges.

As the actions implemented on prison areas will be accompanied by an increased need for manual labour which can be carried out by inmates the applicants project will help the State Prison reach its strategic goals of enhancing inmates chances of successful rehabilitation. Engaging prison staff and inmates in the project will therefore, in a broad perspective, derive a positive socioeconomic effect.

BEST PRACTICE CHARACTER OF THE PROJECT

The project contains various actions that can result in best practice notes and guidelines.

Best practice results will obvious be generated by the demonstration project A1 formation of a landowners association on voluntary basic and containing semi professional sub-groups.

Crex crex management (as part of C5) in a wider context and in an area where coherent management is challenging due to the cadastral structure and modern farming practices is also considered very important.

The basic management by clearing trees and scrubs and non native woody species (C1, C2 and C3) also contains challenges due to the nature of the beach ridge system, the number of cadastral units and the specific methods to be implemented.

Controlled burning (C4) is, despite it being one of the oldest management tools, a method that many managers find difficult to use and perform quite different, why more knowledge and this projects findings and results will be of substantial practical interest.

Best practice result will be published via a number of channels; at the website, in Layman’s report, at the final seminar, in leaflets and especially regarding C.4 and C.5 also in scientific publications and as management guidelines.

The local weekly newspaper and various journals will furthermore be used as means to deliver information regarding the project and its findings.

DEMONSTRATION CHARACTER OF THE PROJECT

The establishment of a "Landowners Association" as a voluntarily association is considered a new approach towards solving the problem of insufficient coherent management of habitats and species. The present situation with many landowners owning small cadastral units and only a few with cattle or other suitable livestock is not sustainable. Through this project the applicants wish to demonstrate that if landowners, livestock owners and authorities' works together synergy effect appears, benefitting the nature - and indeed also the landowners / farmers and the community.

All too often - as argued below - has substantial nature conservation schemes resulted in great achievements regarding initial actions but failed following, simply because of lack of common understanding (ownership and pride) and the establishment of a coherent sustainable managerial setup.

Demonstrate new and strategic *Crex crex* management for grasslands and meadows using stepwise decision steered management based on monitoring to advice landowners and land managers.

Demonstrate new techniques and adapted knowledge regarding combating a number of invasive alien species. This project will take advice from, build on the experiences and amend techniques accordingly, from both the LIFE08/NAT/DK/000464 and the LIFE11 NAT/DK/000893 projects.

The project will furthermore demonstrate how conservation effort in a Natura2000 network can be financed by combining the LIFE+ programme with the new schemes under the Danish Rural Development Programme in a multi habitats mosaic landscape.

EFFORTS FOR REDUCING THE PROJECT'S "CARBON FOOTPRINT"

The major energy consuming - thus CO₂ producing - activities of the proposed project is those actions carried out by the use of large machinery, which is mainly clearings (C1, C2 and C3). These actions will be subcontracted in either a limited or a public tender procedure. Therefore, specific conditions will be included in the call for tenders to ensure that the 'carbon footprint' of the proposed project will remain as low as possible.

Harvested woodlands and individual trees (C1, C2 and C3) will be used in CO₂ neutral heating plants as chip wood. This adds up to approx. 16,000 tonnes of wood, being equivalent to approx. 4,500 tonnes of heavy fuel oil or 6,500 tonnes of coal.

Livestock will be fed using locally grown fodder avoiding CO₂ heavy haulage.

When creating enclosures by fencing, only Eco-label (FSC) posts will be used.

The hydrological actions will result in storing of CO₂ in the peat layer.

Also energy consuming activity of the proposed project constitutes those actions including travel to and from the project area and the management attending miscellaneous meeting, e.g. platform meeting. All travels / flight will be considered as to ensure that the 'carbon footprint' of the proposed project will remain as low as possible.

When feasible, videoconferences will be used for meetings, avoiding travelling.

EXPECTED CONSTRAINTS AND RISKS RELATED TO THE PROJECT IMPLEMENTATION AND HOW THEY WILL BE DEALT WITH (CONTINGENCY PLANNING)

1. Failure regarding the establishment of a Landowners Association (*Resistance from individuals and / or group of individuals regarding the project or individual action*)

The establishment of a common understanding and a voluntarily Landowners Association is considered one of the most important elements of the project and the sustainable nature conservation management of the targeted habitats and species. All too often has substantial nature conservation schemes resulted in great achievements regarding initial actions but failed following, simply because of lack of common understanding and the establishment of a coherent sustainable managerial setup.

It is therefore of vital importance that the partners are able to argue the needs to all landowners and furthermore support the establishment of the association actively.

This process was started during the summer of 2012, partly by conducting a public meeting inviting all landowners within the Natura2000 area and partly by a telephone survey amongst landowners. The initial public meeting (held on 28th June 2012) was very well attended (105 landowners).

During August and September 2012 the Municipality has called landowners regarding their attitude towards the projects main actions – clearing, fencing and hydrology. The actions affect 318 ownerships and approx. 90% of these have been attempted contacted. More than half has given either a positive, neutral or negative response to the suggested actions. Please see MAP 4 – MAP 6 regarding the outcome of the telephone survey.

On the basis of the two initiatives above the applicants concludes, that there is a substantial support from landowners for the actions and the project as a whole.

Following this, further meetings have been held with smaller groups and NGOs as well as individual landowners as to assure a common understanding.

To alleviate conflicts dialog and communication with the local community, landowners and NGOs will be initialized through ongoing dialog, the mounting of information tables, publication of leaflets, establish facilities for visitor and miscellaneous meetings.

The partners therefore foresee no major problems regarding this vital element and will secure that all needed help and support will be given throughout the establishment and following.

2. Failure obtaining the necessary permits from competent authorities to carry out conservation actions.

According to the Nature Conservation Act the conservation actions will in most cases require a notification or permission from the local Municipality. In addition, in areas Designated as Conservation Areas an exemption from the Nature Conservancy Board will in some areas be needed before carrying out the conservation activities of this project.

Preliminary contracts to the authorities have already been made indicating that these permissions will be obtained since the actions is in line with the national conservation plans for the project sub-areas.

The notification or application procedure takes a maximum of 4 to 12 weeks, depending on the Municipality / The Nature Conservancy Board. The local authority - The Municipality - will receive an application presenting the total conservation actions in the beginning of the project period. The project manager will mitigate the risk of not obtaining a permission by initiating a further dialogue with the respectively, primarily The Nature Conservancy Board before an application is sent. As Frederikshavn Municipality is an associated beneficiary all proposed actions has been discussed in details also in view of obtaining permissions.

It is general practise in administrating these regulations to allow initiatives which have character of nature improving. The actions are very well qualified to improve the conservation status of the targeted habitat types in this project. Therefore the actions are indeed nature improvement and no impediment is expected.

If the authorities decline one or more of the conservation actions, the project management will contact the authority in order to find an alternative solution - e.g. an alternative conservation action / location - and hereby mitigate the impact of this risk.

However, the decisions of the authorities might be appealed, and this might imply that the implementation of some actions will have to be postponed or - worst case scenario - not executed. The problem will be dealt with through dialog with the local landowners, communities and NGOs before the start of the project and through continuous co-operation throughout the project period.

3. EIA screening

In some cases conservation actions might require a notification according to the Departmental Order on EIA (Environmental Impact Assessment) in order to examine the need for a screening of the impact of the conservation actions at the environment.

This might e.g. be the case related to the establishment of wintering facilities for cattle, but legislation regarding this very issue is at present under review.

The need for screening is not expected, but if so, the total timeframe for the procedure is normally 2 - 4 months, but in some instances up to 7 months.

If screening should be required, it is likely to conclude there being no need for further investigation since the actions all have character of nature improving. At the very beginning of the project, the authority will receive a notification according to the Departmental Order on EIA. This should be in time to start-up the conservation actions as planned in 2013/14.

Should any screening result in a further need for investigation the implementation of the proposed conservation actions may be delayed with up to ½ -1 year. There is also the risk that the review entails a demand for changes in the planned actions. If so, the project management will contact the authority in order to find an alternative solution - e.g. an alternative conservation action / location - and hereby mitigate the impact of this risk.

No development projects are planned within the project area.

4. Problems regarding certain species and / or habitats imposing restrictions on the managerial freedom to act.

The applicants strongly feel that the application is thorough and holistic and take individual species and habitats needs into account.

It is although a fact that in a substantial part of the project areas there are target habitats and species as well as other vulnerable habitats and species to take in account when carrying out the c-actions, e.g. breeding cranes *Grus grus*.

This will leave management with a challenging and limited "window of opportunity" to carry out a number of individual actions.

5. Weather conditions not suitable for clearing trees, scrubs

As the vast majority of the area in need of these action is wet due to the very structure of the beach ridge system, these areas can be difficult to manage without causing damage. As with constrain 4 & 6 the management is left with a very limited "window of opportunity", the ideal being either very dry - or frosty - conditions.

6. Weather conditions not suitable for controlled burning

With the purpose of rejuvenating heather, manage rough vegetation and to remove nutrients, areas with such vegetation will be burned. Controlled burning is very suitable in areas where an effort with machines is not possible and in several of the targeted habitats and will be carried out in March throughout the project.

Nevertheless this action is very dependent on suitable weather conditions, being dry and relatively calm weather. There is a risk that these conditions will only be present in a very short spell each year.

Burning in a beach ridge system is furthermore complicated by the fact that the management aims to burn the dryer habitats only, avoiding the risk of setting the peaty sub-areas at fire as a fire here would be more or less impossible to control.

7. Land purchase

Purchase of a number of cadastral units is budgeted for in the project.

During the initial meeting and the above mentioned telephone survey this issue has been discussed and it is the applicant understanding that where purchase is vital to the project implementation a willingness is present amongst landowners, primarily because the units in question quite often are located remotely from the main holdings.

8. The socio-economic environment

A minor risk might be present regarding individual landowners revenue when renting out sporting rights. Although the project aims to secure and enhance the habitat for large herbivores it is a common experience that landowners quite often react strongly against any action which is believed to have a negative impact on population size or distribution, e.g. the clearing of woodlands.

Also action C2 regarding inappropriate hydrology carry a risk of imposing problems related to revenue, at least initially with a few landowners / farmers.

The management will act as mentioned under threat no. 3 by establishing a common understanding for the project, why no major impacts are expected

9. RDP

There is a risk (small risk according to the Danish Ministry of Food, Agriculture and Fisheries) that RDP 2014-2020 has altered conditions and become less favourable. Alternative approaches must be undertaken with acceptance from the Commission, including finding alternative funding.

There is a risk of a gap in the programme in 2014/2015. If so the actions being implemented on these areas will be moved forward in time.

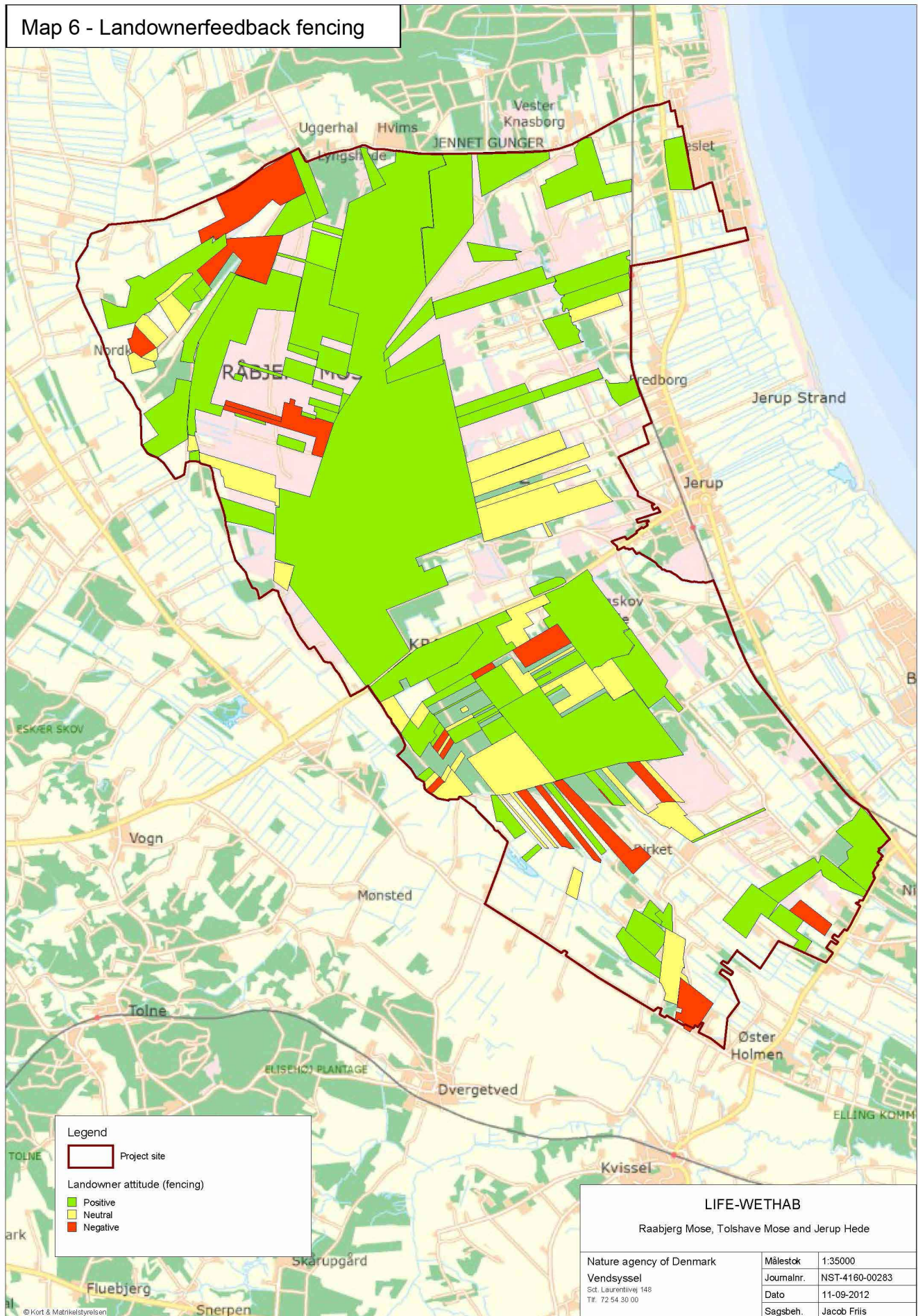
10. Hunting

The potential conflict between fencing and hunting interest will be dealt with through open dialog about the issue. Both the placement and design of enclosures will take place in close companionship with both landowners and local hunting associations.

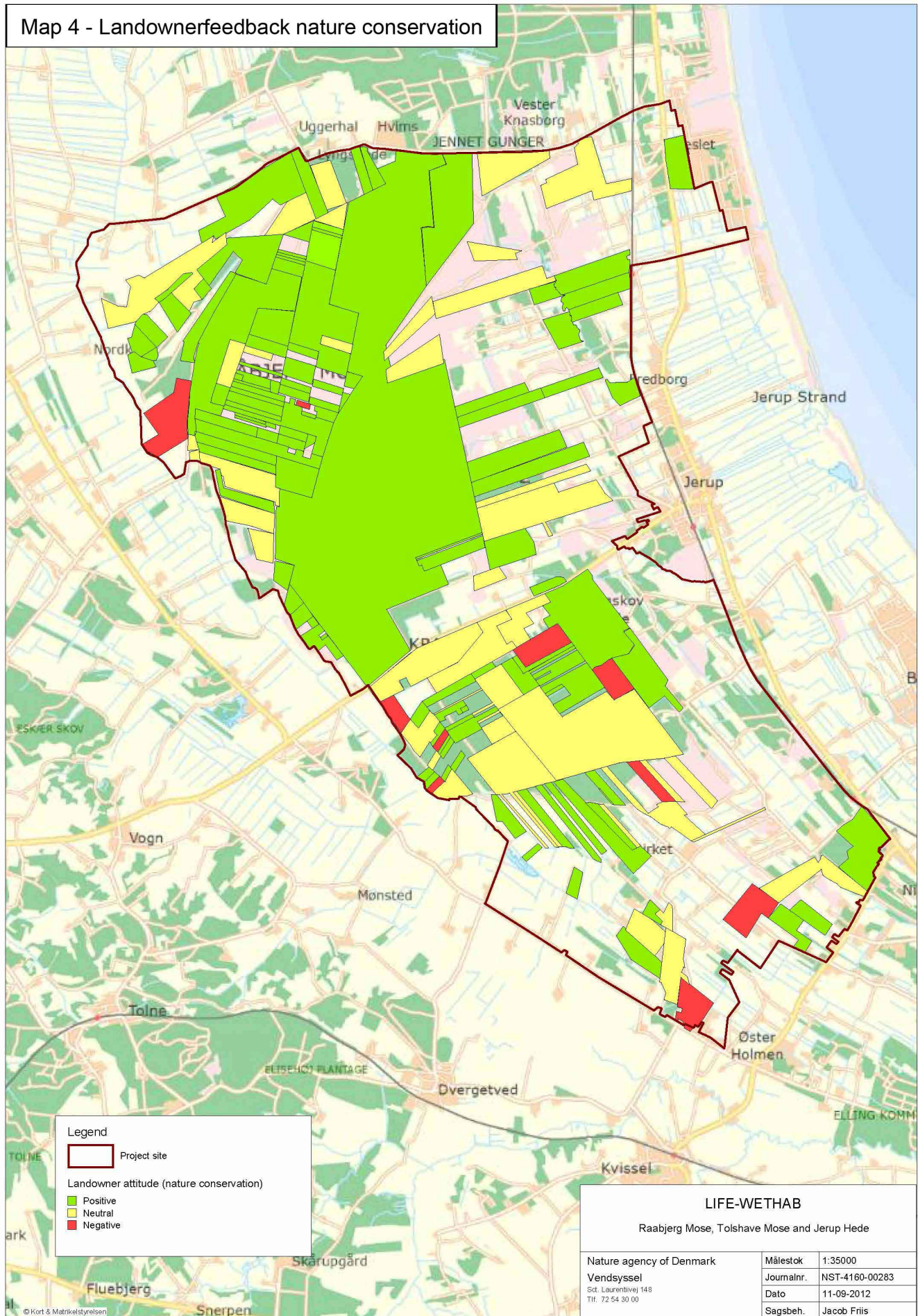
To summarize

Regarding all above mentioned constrains the applicants strongly expect that ongoing dialog, the lengths, the budget and the very methods and technique proposed are designed to accommodate any constrains and risks arising why no significant impact on the projects implementation is expected.

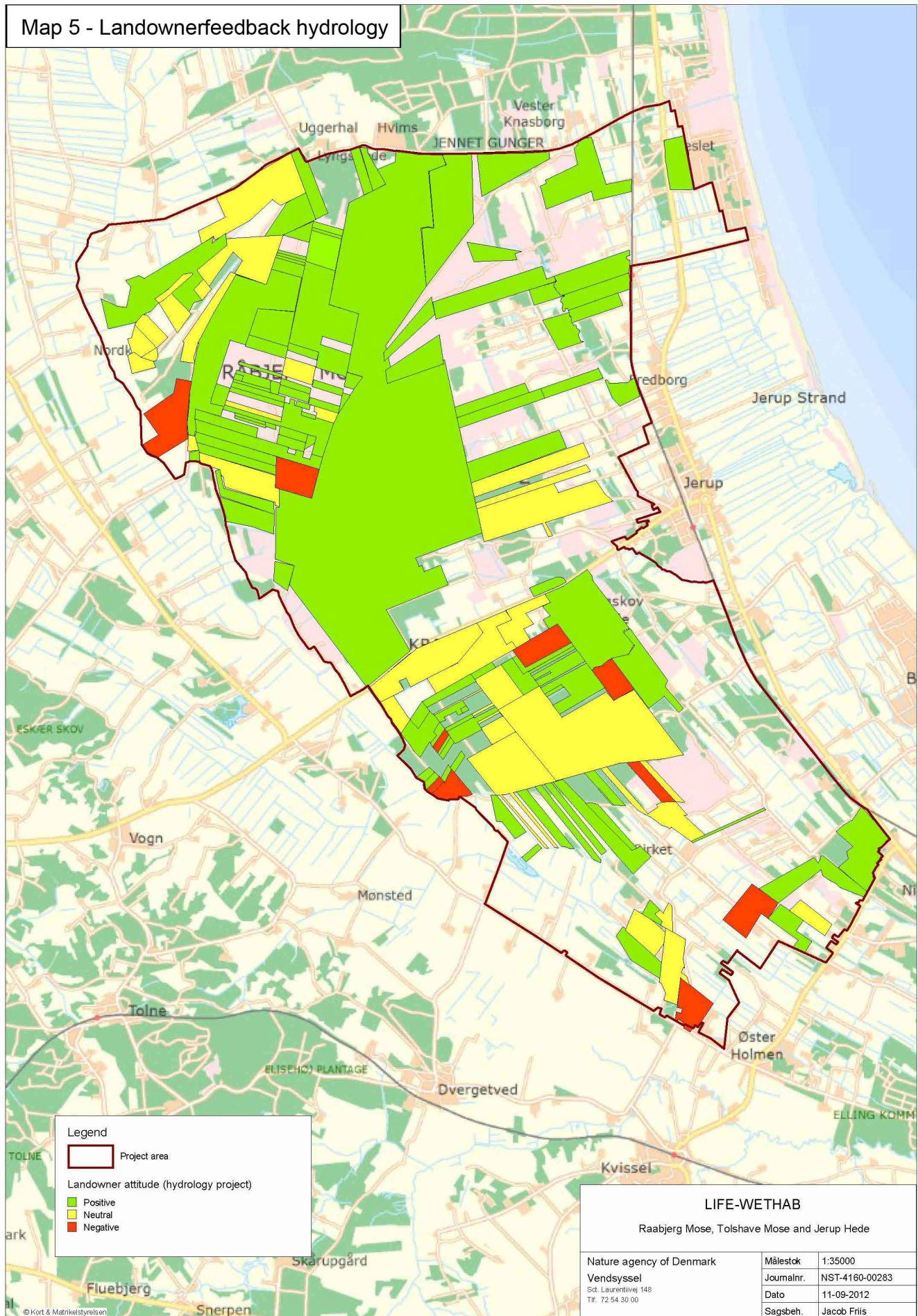
Name of the picture: MAP 6: Landowner feedback - Establishment of livestock grazing



Name of the picture: MAP 4: Landowner feedback - Nature restoration



Name of the picture: MAP 5: Landowner feedback - Raising subsoil water level



CONTINUATION / VALORISATION OF THE PROJECT RESULTS AFTER THE END OF THE PROJECT

Which actions will have to be carried out or continued after the end of the project?

- maintain and support the Landowners Association in any possible way - A1
- maintain agreements with landowners and individual livestock owners - A1
- grazing and mowing as well as maintaining enclosures, water systems and infra-structure related to grazing and mowing - C5
- clearing of emerging woody seedling and saplings in targeted habitats should grazing by livestock and large herbivores and / or raised water levels be unable to control this in certain sub-areas - C1, C2 and C3
- clearing of emerging and / or new *Prunus serotina* stands - C3
- clearing of emerging and / or new *Amelanchier spicata* stands - C3
- clearing of emerging and / or new *Rosa rugos* stands - C3
- clearing of emerging and / or new *Fallopia japonica* stands - C3
- controlled burning of primarily dry heath as to secure optimal conservation status - C4
- predator control - C9
- monitoring of habitats and species - D1
- maintain the website - E1
- publication of newsletters to members of the Landowners Association - E2
- maintain visitor facilities, information tables and availability of a leaflet - E3 and E4

How will this be achieved, what resources will be necessary to carry out these actions?

Primarily Frederikshavn Municipality, but also Kragsskovhede State Prison and the Nature Agency - in cooperation with the Landowners Association - will continue the management and conservation activities necessary to maintain and further enhance the conservation status of all habitats and species targeted by this project. Experience, results and best practice developed during the project will be retained and implemented by the ongoing management - Frederikshavn Municipality being the local authority - over the project site following.

The needed management activities will be financed through the annual budgets of Frederikshavn Municipality, Kragsskovhede State Prison and NST (NST owned land) plus agriculture / environmental schemes available, the latter concerning a large proportion of privately owned land.

Protection status under national/local law of sites/species/habitats targeted (if relevant)

According to the Act on Environmental Objectives for Water and International Nature Protection Areas, no. 1150 of 2003/12/17 legally binding Natura2000 management plans covering the period of 2010 - 2015, must be developed and adopted. According to the Act on Environmental Objectives public authorities are committed to the Natura2000 plans. The objectives in the plans will subsequently be established and implemented through Action plans developed by the Municipalities and the Nature Agency during 2012. The Action plans must include an order of priority of the expected conservation effort, goals and expected effect of the conservation activities, expected methods and conservation management to improve and maintain a favourable conservation status. The Danish Act on Environmental Objectives constitutes the general guarantee that project areas will be appropriately managed after the project is completed.

The experience on management of the involved light demanding habitats gathered in this project will be of great importance meeting the fundamental ecological needs of the areas involved, and will influence the development of management plans not only within the project area but also in other sites.

How, where and by whom will the equipment acquired be used after the end of the project?

All equipment purchased will be used carrying out nature conservation activities in the project area by Frederikshavn Municipality and will be marked with stickers displaying the EU LIFE+ logo as well as the partners.

To what extent will the results and lessons of the project be actively disseminated after the end of the project to those persons and/or organisations that could best make use of them (please identify these persons/organisations)?

Dissemination after the end of the project will mainly be ensured by the established website, newsletters and dialog to members of the Landowners Association and the association sub-groups, the ongoing availability of a leaflet describing the conservation management and articles in relevant newsletters, scientific publications and by participating in conferences and seminars.

Participating landowners, miscellaneous NGOs, the general public, land and conservation managers, Nature Agencies, other EU project managers as well as researchers - both nationally and at EU level - will be the target group for the dissemination activities.

C1, C2 and C3 or even just trespassing is therefore not possible close to cranes in the period from

medio March to primo August. This is leaving the - often - wettest part of the year to carry out actions. Early autumn can be dry and good as can winter with frozen wetlands. With a project period of 5 years it should be possible to full fill the actions.

Some actions require permissions from authorities (action A3); we have reasons to believe they are achievable but there is a potentially risk that applications are denied or that NGO or others entitled to complaint will complain and there by delay a final decision.



LIFE12 NAT/DK/000803

TECHNICAL APPLICATION FORMS

**Part C – detailed technical description of the
proposed actions**

LIST OF ALL PROPOSED ACTIONS

A. Preparatory actions, elaboration of management plans and/or of action plans

- A1 Hydrological Survey
- A2 Establishment of a Landowner Association
- A3 Application for permits to carry out conservation actions

B. Purchase/lease of land and/or compensation payments for use rights

- B1 Land purchase
- B2 Purchase of property rights

C. Concrete conservation actions

- C1 Clearing of woodlands
- C2 Partial clearing of woodlands
- C3 Clearing of invasive and non native species
- C4 Controlled burning
- C5 Grazing and mowing
- C6 Establishment of a cattle herd
- C7 Restoration of hydrology
- C8 Establishment of necessary infrastructure
- C9 Culling of mink by trap

D. Monitoring of the impact of the project actions (obligatory only if there are concrete conservation actions)

- D1 Monitoring of impact of targeted habitats and species
- D2 Assessment of the Socio-economic Impact and Ecosystem Restoration

E. Public awareness and dissemination of results (obligatory)

- E1 Establishment of website on the Internet
- E2 Newsletter
- E3 Provision of information tables
- E4 Leaflets explaining the project and best practice
- E5 Layman´s report
- E6 Report on control of invasive species

E7 Final seminar

F. Overall project operation and monitoring of the project progress

F1 Project Management

F2 Management of the Landowner association

F3 Overall project monitoring and monitoring of project progress

F4 Networking with other projects

F5 After-LIFE Conservation Plan

DETAILS OF PROPOSED ACTIONS

A. Preparatory actions, elaboration of management plans and/or of action plans

ACTION A.1: Hydrological Survey

Description (what, how, where and when):

There is a need to perform a detailed screening / survey of the hydrology as one of the main objectives of the project is to restore hydrological conditions. A survey based upon geographical surface models, supplemented by inspections on the ground in the relevant areas, will be conducted by consultants to identify problems as well as actions needed to rectify present status. The outcome of this screening will form basis for the actions implemented in C7. See MAP 18: Action A1.

Former surveys of the area have concluded that hydrological problems do exist in relation of the status of habitat types. It is although the applicants believe that these conclusions are based upon models, not capable of taking the fragmented beach ridge system and the dynamic variations of nature and seasonal variations into account. A screening / survey of the areas needed to provide a detailed basis for the planning of the necessary restoration measures and the character and extend of these measures.

It must be underlined that the challenges regarding subsoil water levels are very diverse across the habitat area. The main focus of the initial hydrological survey will be the central part of the bog areas (Raabjerg Mose, Tolshave Mose and Jerup Hede).

The survey will determine existing subsoil water levels and furthermore the ditches and drains having a negative effect on the areas hydrology. By computer modeling it can be estimated what impact stopping these ditched will have reaching desired subsoil water levels.

Preliminary initiatives to gain knowledge about the water fluctuations will be implemented in the autumn 2012. A device to measure the water level will be installed in the central part of the bog areas giving a preliminary insight in the yearly water fluctuation - and further on during the project period information on how the water levels will respond to the implemented actions. The yearly water fluctuation is of particular interest as to avoid desiccation in the hollows during the summer period thereby maintaining or enhancing the conservation status of the habitats.

Note that a hydrological survey has already been undertaken in the LIFE Aspea on approx. 80 ha. This project will not implement further hydrological survey or restoration in that area. However, in order to plan c-actions for the improvement and restoration of a number of the targeted habitats e.g. 4010, 7110 and 7140 in the remaining 3944 hectares of the project area, it is necessary to carry out a hydrological survey.

Reasons why this action is necessary:

In order to clarify which actions should be implemented in Action C7 it is necessary to implement a detailed survey of ground table water levels as well as collecting information from a surface computer models. The actions implemented as the outcome of the survey will deal with threat no. 2.

The survey is necessary both to determine the optimal water table in order to restore the wet habitat types of the project, and to define the specific location to block ditches.

Further, the survey will provide essential knowledge in terms of making agreements with landowners. When taking to landowners it is a necessity, that the project management can display insight into the consequences of e.g. blocking of ditches

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

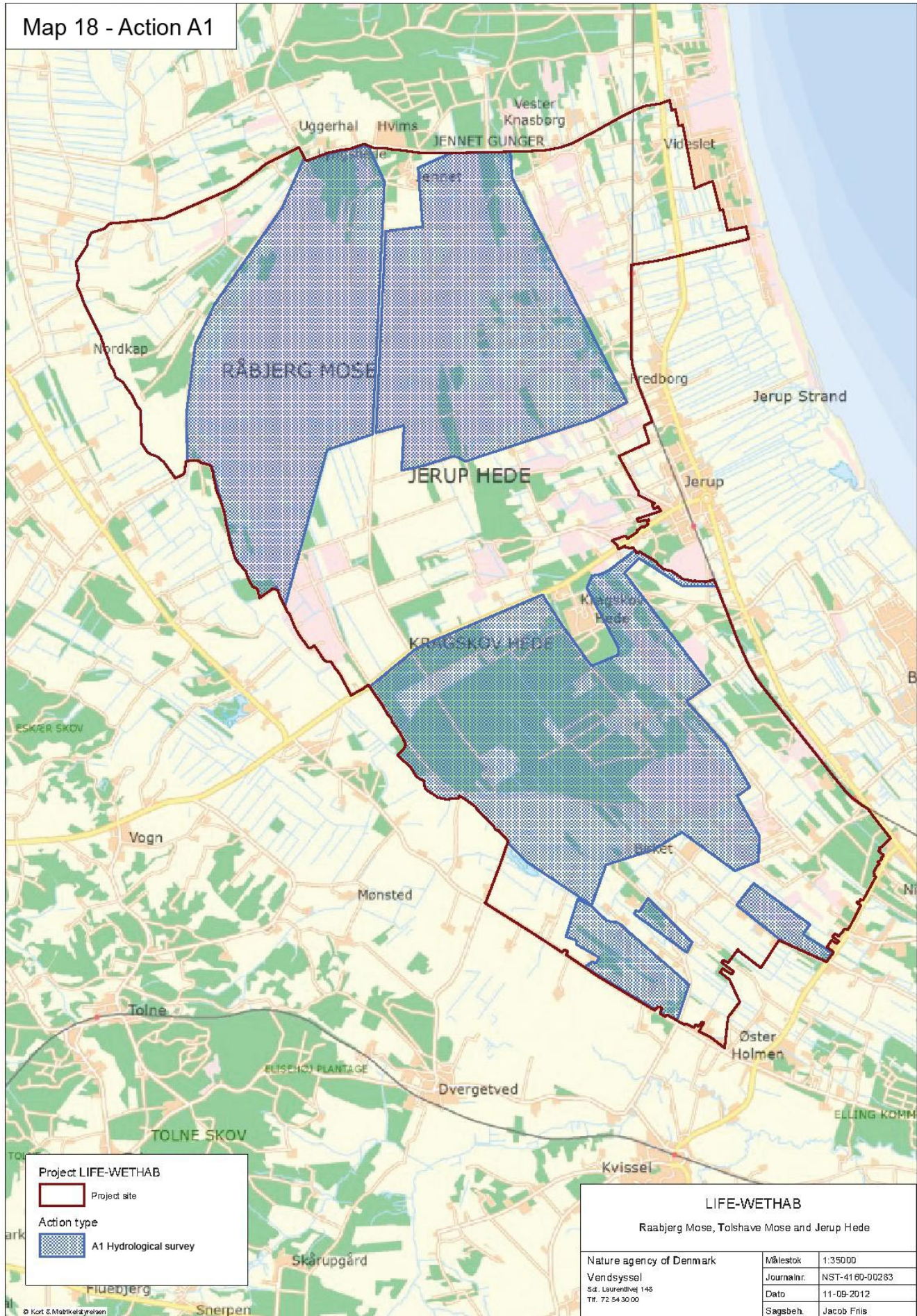
Expected results (quantitative information when possible):

The results of the survey will give an overview of the hydrological status and clarify the methods and extent of actions to be implemented in Action C7.

How was the cost of the action estimated?:

The survey will be sub-contracted. A large European consultancy within hydrology screenings has been asked to give a rough estimate of the costs related to the described survey. The total cost of the survey is estimated to 46,980 Euro. Beside there are personal cost of administrating of totally 5,109 Euro.

Name of the picture: MAP 18: Action A1



A. Preparatory actions, elaboration of management plans and/or of action plans

ACTION A.2: Establishment of a Landowner Association

Description (what, how, where and when):

The establishment of a voluntary landowner association is considered very important to the success of the project objectives. The fact that there are 557 individual landowners with one or several cadastral units within the boundaries of the Natura2000 area is challenging from a managerial point of view. See Map 19: Cadastral Overview.

In broad terms the description below is how the applicant sees the role of the association and how the managerial structure should be established as to secure functionality and sustainability. Adjustment might occur when the process of establishing the association take off.

The objectives of the association are:

- To ensure awareness of nature values of the project area
- To bound the local community and create ownership to the project
- To ensure the long term coherent management (after LIFE)
- The establishment of a platform for exchange of experiences
- To coordinate and consult interest sub-groups

All landowners within the habitat area are invited to join the association and a board of directors will be elected at the annual general meeting. The applicants should hold seats in the board during the project period and Frederikshavn Municipality (responsible authority) following. All managerial and administrative expenses during the project period will be covered by the project.

Within the association four working groups will be formed. The subjects of these groups will cover the main concerns of the landowners and the management following a LIFE project within the project area; grazing, hunting, commercial and nature. These groups will also be responsible for maintaining an open approach regarding dissemination and debate in general regarding the four issues. A organizational chart of the association is shown in Appendix 1.

The project work group - and Frederikshavn Municipality (as responsible authority regarding nature conservation) following a project - will facilitate and coordinate the interest groups and put together a working group for every category consisting of 5-8 members. Not only landowners can be appointed to participate in the work of the interest working groups, but also persons with a legitimate interest and knowledge regarding a certain issue e.g. representatives from miscellaneous NGOs. The establishment and management of both the Landowner Association and interest groups will be facilitated by the project work group.

Landowners can address the interest groups to get advice regarding issues within the individual groups field of work. Furthermore meetings will be held in every interest group at least 4 times a year, where issues can be discussed and new knowledge dispersed. A specific description for each group is composed below:

- **Grazing / mowing.** This group will initially be responsible for the assembling of landowners in grazing and mowing units (together with the project work group) and continuously play a coordinating role regarding all livestock needed for grazing of the project area. The livestock needed will be owned by individuals, smaller grazing societies and livestock purchased by the project partners and borrowed to the grazing units.

Secondly the group shall advise the units about life stock management (in the context of nature conservation), life stock wintering and knowledge regarding support schemes, being farming as well as environmental and any other subsidy available. The interest group shall at all time during the project period keep a close dialog with the project work group and vice versa.

- **Hunting.** Hunting is of great interest to many owners, both from a sporting and a financial point of view. Especially the management of the large population of the red deer within the habitat area is an important issue. The project work group will assist counseling with the local wildlife consultant from NST and work on a coherent wildlife management in a broader perspective.
- **Commercial interests.** There is a number of commercial interest within the project area; agricultural and cattle farms, mink production, small scale industries and a number of other business activities. These interests are important to take into account in the conservation strategies and the group should ensure commercial interest will be incorporated in the management of the project area. Local commitment and support from all members of the community will be crucial to sustainable project success.
- **Nature conservation.** The key subject of this project and of substantial interest to many landowners. Knowledge about the issue is the key to the conservation beyond the project period and the group holds an essential role. The group shall advice landowners regarding conservation issues and shall throughout the project period maintain close dialog with the project work group.

The Nature Agency and Frederikshavn Municipality (the two beneficiaries of the application) held a public meeting on the 28. June 2012 in Jerup (town in the middle of the project area). The agenda was to describe the project background, objectives and actions to the landowners and to assess landowner attitude towards the project. Approx. 105 landowners participated and the overall attitude towards the project was very positive and enthusiastic. Furthermore Frederikshavn Municipality has conducted a telephone based survey amongst more than 50 % of the landowners – see map 4-6. Based on this the beneficiaries believes landowners in general will support the establishment of the landowner association – and the project as a whole.

The meetings of establishing the Landowner Association will be held in Jerup. The Municipality doesn't have local facilities at Jerup. The applicant believe, that it is of importance that meeting are held as close as possible to the project site in order to gain commitment and participation from landowners, so it is necessary to rent facilities.

The management of the association is described in Action F2.

Reasons why this action is necessary:

Due to the complex landowner / cadastral structure of the project area it is essential to create and maintain a common understanding. The establishment of a Landowner Association will ensure coherent and sustainable management covering all elements of the project.

The action is necessary to cope with threat no. 3: Structure in ownership and threat no. 4: inappropriate grazing and mowing. Please see description of these threats in section B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is creating a common understanding among landowners and thereby a coherent and sustainable management covering all the differences of the project area.

How was the cost of the action estimated?:

Different kind of expenses must be expected regarding establishing a Landowner association. The cost are estimated from similar experiences undertaken by NST. A total cost of 35,257 Euro divided between personnel, travel, external assistance (legal etc.) and consumables (meetings etc.).

It is anticipated that 20 meetings will be held at a cost of € 142.8 for room rental per meeting (totally € 2,856). Besides € 500 is allocated for IT-equipment.

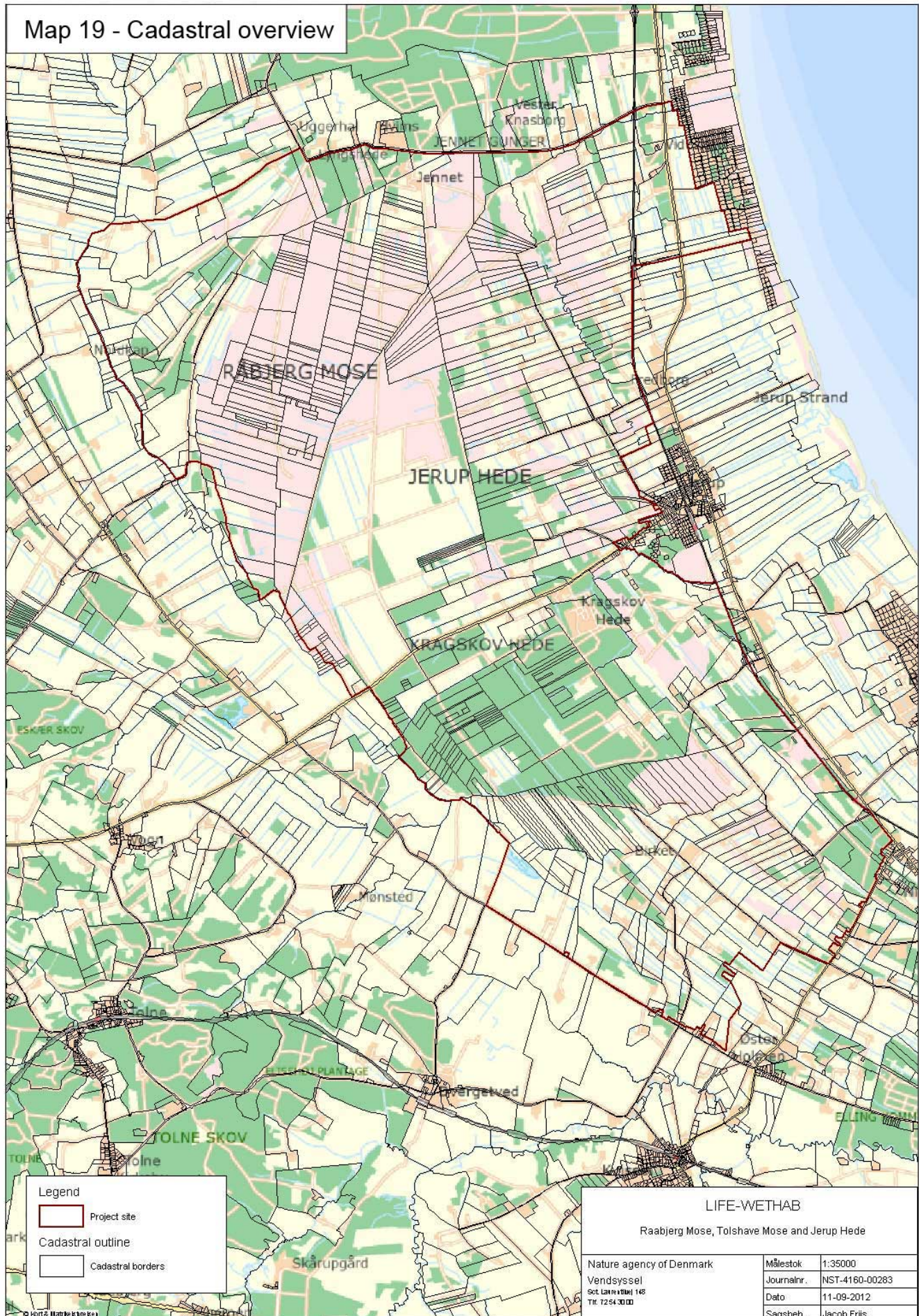
The travel costs are estimated to € 644. The calculation can be seen below;

The calculation for driving is based on the state rate and is set to kr. 4.00/km as a mean value for the period (kr. 3.82 in 2013) which equals € 0.537.

The project manager will attend meetings 10 times and will drive from Skagen to Jerup (60 km). $60 \text{ km} \times 10 \text{ trips} \times € 0.537 = € 322$

Academic employees from the Municipality will attend meetings 20 times and will drive from Frederikshavn to Jerup (30 km). $30 \text{ km} \times 20 \text{ trips} \times € 0.537 = € 322$

Name of the picture: MAP 19: Cadastral overview



A. Preparatory actions, elaboration of management plans and/or of action plans

ACTION A.3: Application for permits to carry out conservation actions

Description (what, how, where and when):

As the proposed actions individually, as a whole, and because of the geographical area covered, impose rather pervasive operations and changes to present land use the competent authorities will at a very early stage be involved in the project in order to obtain the necessary permissions in time.

According to the Nature Conservation Act the conservation actions will in some cases require a notification or permission from Frederikshavn Municipality. It is general practice in administrating this law to allow initiatives which has character of nature improving. The actions are very well qualified to improve the conservation status of the habitat types involved in the project and the actions are indeed nature improvement. Preliminary contacts to the Municipality will thereby ensure that these permissions will be obtained since the actions are in line with the national conservation plans for the project site.

Notification of, or permission from, the Municipality according to the Nature Conservation Act is required for the following conservation actions:

- C1: Clearing of woodlands
- C2: Partial clearing of woodlands
- C3: Clearing of invasive and non native species
- C4: Controlled burning
- C5: Grazing and mowing
- C6: Establishment of a cattle herd
- C7: Restoration of hydrology
- C8: Establishment of necessary infrastructure

The notification must be delivered to the Municipality 4 weeks before initiating the action.

Depending the extent and impact of the action a permission must be needed instead of just a notification. The application procedure for permission takes a maximum of 8 to 12 weeks.

The earliest start for these actions are planned to be as indicated in the timetable of the project proposal. The timetable leaves room to obtain the necessary permits before the individual conservation actions must be started.

Action C6 "Establishment of a cattle herd" might also require a notification according to the Departmental Order on EIA (Environmental Impact Assessment) in order to examine the need for a screening of the impact of the conservation actions at the environment. The competent authority is the Municipality. Since the purpose of the conservation actions is nature improvement it is expected that the screening will show no need for further investigations.

In areas designated as Special Conservation Areas an exemption from the Nature Conservancy Board will in

some areas be needed before carrying out the conservation activities of this project. Again no rejection is expected since the purpose of the conservation actions is nature improvement. The application procedure for an exemption takes a maximum of 8 to 12 weeks and the timetable presented in the project proposal gives enough time to obtain the necessary permits in time before the conservation actions must be started.

If the local authorities in some sub-sites - contrary to expectation - opposes to one or more of the conservation actions, the project manager will find an alternative solution together with the authority.

Agreements/contracts with land owners regarding actions being implemented on private land will be undertaken ongoing as the project gain pace.

Other agencies might also need to be notified e.g. when the C4-action is carried out the local fire brigade must be notified to avoid unnecessary emergency turn-outs. An overview of issues and who need to be notified will also be investigated under this action.

Reasons why this action is necessary:

It is necessary to obtain notifications or permissions before carrying out several of the conservation actions of this project. It is of vital importance that all environmental as well as other legislation is being respected.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is that the authorities in question will grant all necessary permissions to carry out the conservation actions in all of the projects sub sites.

How was the cost of the action estimated?:

Personal costs used with the process of gaining knowledge, with dialog with authorities and with the actual work of applying. A total cost of 10,652 Euro of applying for permits is expected.

B. Purchase/lease of land and/or compensation payments for use rights

ACTION B.1: Land purchase

Description (what, how, where and when):

The ownership structure in the project area, consisting of many small cadastral units often located remotely from any roads and tracks, makes the utilization of the units quite limited for many landowners. It is therefore the applicant's impression that a number of owners throughout the project area will be interested in selling their plot - especially in the most remote parts of the project area.

In general the Nature Agency only engages in acquisitions to secure nature conservation/restoration. If this application is granted by the Commission the Nature Agency consider the habitats and species in the project area secured and therefore individual acquisitions of less relevance. Therefore the possibility of buying land will only be used as a last resort, if the area in question has an important strategic location, holds important habitat types and/or species and attempts to come to a management agreement with individual landowners has failed. Moreover the applicant will guarantee that land will only be purchased if ensured, that the areas in question will be assigned to nature conservation permanently.

Issues regarding restoration of hydrology can often be difficult to agree upon, due to decreased accessibility and lower production capacity in context of grazing and mowing. Small plots can have a great significance for the hydrology of a much larger area and therefore the applicant consider this issue as most relevant regarding land acquisitions. The relevant areas lies within the area of hydrological interest. See MAP 18: Action A1.

Estimating the need of acquisitions is very difficult prior to the project start-up. However, the preliminary contact with landowners (according to the preliminary survey described in the technical part B4 "Expected constraints etc.") has shown that the majority is positive as to the implementation of the proposed actions. The applicant estimates that the option of purchasing will be relevant for approx. 20 hectares.

The price of land when purchased by NST must be approved by SKAT (DK Inland Revenue). The Nature Agency has earlier paid € 6,718 in four purchases in the project area during 2011 / 2012. A statement from Danish Inland Revenue confirms, that this price is reasonable. If however, land prices increases, the applicant agrees to take on the amount which exceeds € 6,718. The statement from Danish Inland Revenue has been attached to the reply of the question letter sent to the Commission the 14th of march 2013. Translated into English the statement says;

"The Inland Revenue has on the 17th of December 2010 received a request for a statement of the trade value of the real estate located on Blæsbjergvej 15A, 9982 Ålbæk.

The Inland Revenue has not physically inspected the real estate, but has estimated the price based on local knowledge and maps.

The real estate is a nature area with no buildings and is totally 7.6592 ha. It is located in the rural zone. There is no obligation of agricultural use. The real estate is located in a large bog area in a Natura 2000 site with nature- and hunting values.

The Inland Revenue has been asked to estimate if a trade value of 50,000 kr. per ha is a reasonable price.

The Inland Revenue confirms, that a trade value of 382,960 kr. for 7.6592 ha. is within the price range, in which the property can be assessed."

Reasons why this action is necessary:

The possibility of buying land plots is a strong instrument if a management agreement with land owners fails. The possibility aims to secure that the project area is coherent without enclaves where no habitat restoration and protection can take place.

Especially when carrying out hydrological actions purchase can solve problem that otherwise will be a risk to the project.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

Acquisition of specific areas (approx. 20 hectare) as to secure a coherent conservation of the project site and especially to ensure the possibility of raising subsoil water levels. The purchase of land is implemented to cope with threat no. 2 "Inappropriate hydrology (draining)" described in B2.

How was the cost of the action estimated?:

The highest purchase price the Nature Agency is permitted to pay per hectare has been set by SKAT (DK Inland Revenue), who has to approve all acquisitions made by the state. The price per hectare has been set to 6,718 Euro. This adds up to a total cost of 134,360 Euro. Beside there are associated charges of 4,027 Euro and personal cost of 3,990 Euro.

B. Purchase/lease of land and/or compensation payments for use rights

ACTION B.2: Purchase of property rights

Description (what, how, where and when):

To avoid re-cultivation of a number of former farming areas, now developing into important habitat types, acquisitions of property right might be a necessity. The areas in question are becoming or have the potential to become 4030, 6230* and/or 6410. Some of the areas are potential habitats for *Euphydryas aurinia*. See MAP 20 Action B2.

According to Danish legislation (Naturbeskyttelseslovens §19b) landowners can re-cultivate areas within Natura 2000 sites if they at present not are considered a habitat type. The areas in question have not been cultivated for many years and are moving towards a classification as a habitat types. During the past few years the Municipality has compensated the landowners with an annual payment for not cultivating these valuable nature areas. However, this is not sustainable as the Municipality is unable to raise funds continuously for this purpose and because landowners will re-cultivate the areas before the can be considered habitat types (to avoid restrictions). So, if a permanent solution is not found re-cultivation is unavoidable.

Preliminary dialog with the landowners in question indicates that they are willing to accept a one off payment. In return a declaration will be registered in the deed, so no future cultivation or use of pesticides will be legitimate.

It might be possible to buy the land instead of offering one-off compensations, but this will make it more expensive (agricultural land is by far more expensive than the non farmed land the applicant is expecting to buy in B1) and the result will be the same as the restrictions of the one-off compensations will be registered in the deed on a permanent basis or agreements/contracts will be made which include a clause committing not to compromise the investments/restoration made by the project, for a suitably long period (30 years or longer) or permanently.

The procedure of paying one-off compensation instead of buying land is expected to make it more feasible due to the fact that the landowner still maintain ownership and thereby certain rights e.g. the possibility to hunt.

Reasons why this action is necessary:

The action is necessary to avoid re-cultivation and use of pesticides on a number of areas (24.8 hectare) developing into important habitat types.

The action is necessary to cope with threat no. 4: inappropriate grazing and mowing. Please see description of this threat in section B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

By purchasing property rights on 24.8 hectare, which are developing into habitat types, re-cultivation and use of pesticides will be avoided.

How was the cost of the action estimated?:

The areas in question are distributed between four different landowners and the acreage adds up to a total of 24.8 hectare. Based on earlier compensations set by a valuation committee an estimated cost of 5,369 € per hectare is the level of payment. This adds up to totally 133,688 Euro. Adding associated charges and personal cost the total allocation is 139,293 Euro.

Name of the picture: MAP 20: Action B2



C. Concrete conservation actions

ACTION C.1: Clearing of woodlands

Description (what, how, where and when):

The applicant considers overgrowth as one of the main threat of the degradation of the targeted habitat types. Clearing will therefore have a substantial significance regarding the restoration of the project area.

Action C1 covers the project areas most vulnerable - wettest and coherent - sub-areas containing the targeted habitat types, primarily being under threat by overgrowth with native species.

The action aims to clear approx. 90% of the targeted woodland shown on MAP 21 Action C1. The action area adds up to 730 hectare. A few small groups (approx. up to 10% of the total area) of old Birch (*Betula spp.*), Scots Pine (*Pinus sylvestris*) and Common Aspen (*Populus tremula*) will be left to accommodate species which benefits from these ecological conditions. Also the large population of red deer, which is seen as an important habitat conserver, need tree stands as sanctuaries.

Due to a general principle of cost reduction as much as possible of the clearing will be carried out by machinery. However, a number of issues exist and the clearing will take many aspects into account. Depending on firstly the habitat and related species and secondly access, ground condition, tree species, stand age, stand density, stand volume and the existence of the geological remains of the beach ridge system clearing will be planned. The following approaches will be used:

- Clearing with a feller / buncher or feller / forwarder and manual labour. Trees will be bunched and chip harvested on site.
- Clearing with manual labour. Tree and or shrubs will be left on site or dragged together and burned.
- Clearing with manual labour of seedlings as a response to the seed pool in the ground. Will be carried out in the latter part of the project period.

It is important that the clearing actions take variables into account such as whether, time of year and species in the specific areas. Due to the wet environment clearing actions in the C1 areas is optimally carried out in August or September - or in a period of hard frost.

The beach ridge system complicates the clearing due to the fact that the peaty hollows are unable to carry machinery because of structure and high subsoil water level (e.g. transition mires). Generally machinery assisted by manual labour can clear the ridges and reach into the peaty areas. Furthermore trees on peaty ground can be felled towards the ridges by manual labour and pulled into dry ground by the machinery. Trees and scrubs will be bunched and chip harvested on the dry ridges.

In order for machinery to cover the entire area temporary access will be created using steel plates positioned perpendicular to the beach ridge structure. The machinery (feller / forwarder) will establish - and remove - this temporary infrastructure, which can be used to accomplish all actions in specific sub-areas. These actions will be carried in close accordance with Action C8 "Establishment of necessary infrastructure".

Areas which are not accessible by machinery will be felled by manual labour. Generally trees and scrubs on these areas will be left on the ground to decompose or burned on site. Burning requires extra attention to avoid unintentional fires in the peat.

Also other techniques will be undertaken e.g. an amphibious vehicle to transport staff and material to the inaccessible parts of the bog. Both winches and the amphibious vehicle can be used to drag trees felled by manual labour into range of the machinery.

Machinery will at all times be used in combination with manual labour as to secure a high environmental standard of the work and avoid damage to the beach ridge system, fragile habitats and sub-areas as well as areas with restricted carrying capacity. As machinery and manual labour work in tandem no exact split in acreage between them can be stated. An estimated distribution is that 30 % of the area will be covered by machinery and 70 % by manual labour – although weather conditions might alter this.

In order to examine clearing techniques and estimate adjacent costs a pilot project was conducted on 15.2 hectares in the bog area in the autumn of 2011. Experience from this project has proven that the clearing techniques described above can be implemented under the difficult circumstances on site.

Furthermore best practice experience generated in the Raised Bog project Life05 NAT/DK/000150 will be used or adapted to ensure the clearing will be implemented in an optimal manner.

For some areas the clearing will furthermore prepare the areas for grazing or mowing to secure the sustainable nature conservation management. Regarding these areas the clearing will furthermore be coordinated so the livestock can be put in the enclosures or mowing can take place shortly after to avoid regrowth.

Clearing of the substantial areas which cannot be grazed by livestock will be coordinated with the raise of subsoil water level (Action C7), as to minimize regrowth.

Technically the C1-areas which are to be cleared by LIFE-funding are divided into two. One area covering approx. 454 hectare with low tree density (0-10 m³ per hectare) in the main bog areas, and one area covering approx. 197 hectare with higher tree density (10-35 m³) located on the edges of the bog areas. LDP funds can be applied on approx. 79 hectares, which are not included in the financial calculation.

Action C-1 covers 730 ha. but only 610 ha. are considered as habitat types protected by the Habitat Directive. It is planned to clear 120 hectares of woodland outside the habitat types to control the seed source of invasive alien coniferous species and to create open areas as habitat for targeted bird species favouring this. The 120 hectares will host 53 hectares of enlarged targeted habitats, 35 hectares of 7110, 5 hectares of 4010, 10 hectares of 4030, 5 hectares of 6410, 1 hectare of 2130, 1 hectare of 2140 and 1 hectare of 6230. Approx. 50 hectares will be left for natural reforestation of indigenous tree species, and in the longer perspective host habitats of annex I, but not within the project period. The remaining approx 17 hectares will remain open as to improve conditions for the targeted bird species. These areas will be grassed, and only potentially develop into habitat types.

Reasons why this action is necessary:

The action is necessary to conserve, expand and enhance the following habitat types; 2130*, 2140*, 2190, 4010, 4030, 6230*, 6410, 7110*, 7140 and 7230. The action is necessary to accommodate Wood Sandpiper *Tringa glareola* and Short-eared Owl *Asio flammeus*. Furthermore the action C1 will stop natural regeneration and raise water table (by reducing water consumption).

The action is necessary to cope with threat no. 2 "Overgrowth by woody species", threat no. 5 "Invasive alien

plant species”, threat no. 6 “Fragmentation and/or reduction of habitat area” and threats no. 8: Deposition of airborne nitrogen. Please see description of these threats in section B2.

The actions will also take place outside the targeted habitats in order to stop unwanted reseeding from wood stands neighboring the habitats.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The clearing of trees and scrubs on 730 hectares, out of this 610 hectares are habitat types. See MAP 21: Action C1.

This action will be the most important regarding the expansion of the habitats 2140*, 4010, 4030. The aim is to contribute to the expansion of:

- 7110* by 50 hectare
- 4030 and 91DO by 10 hectare each
- 4010, 6410 and 7230 by 5 hectare each
- 2130*, 2140* and 6230* by 1 hectare each

The action will conserve and enhance 2130*, 2140*, 2190, 4010, 4030, 6230*, 6410, 7110*, 7140 and 7230. The action will accommodate all targeted species. Please see total expected results in section B1.

The action C1 will stop natural regeneration, raise water table (by reducing water consumption) and reduce predation on ground nesting birds.

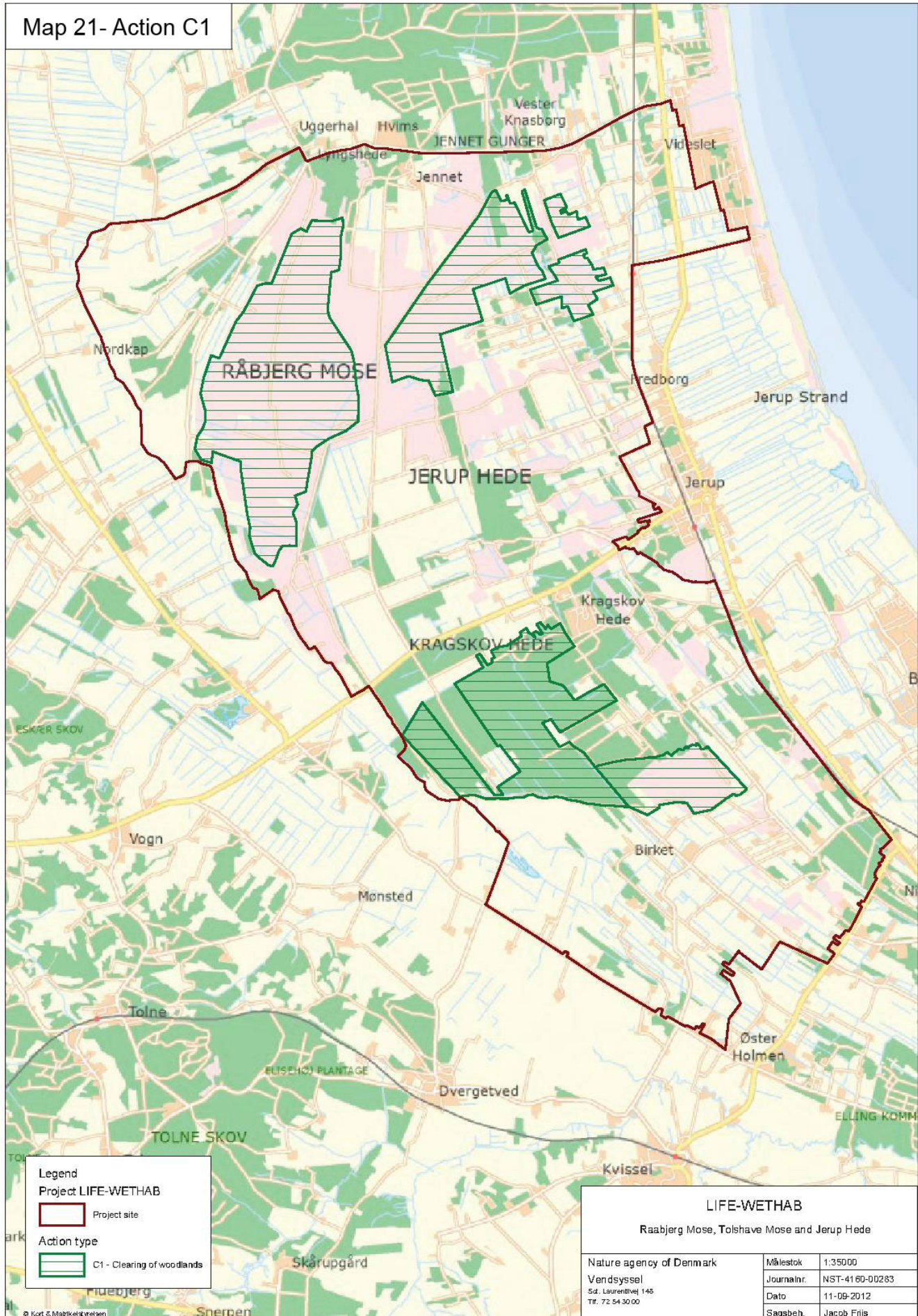
For some areas the clearing will furthermore prepare the areas for grazing or mowing.

Regarding the approx. 120 hectares outside the habitat types a clearing will also be implemented to control the seed source of invasive alien coniferous species and to create open areas as habitat for targeted bird species favouring this. The 120 hectares will host 53 hectares of enlarged targeted habitats, 35 hectares of 7110, 5 hectares of 4010, 10 hectares of 4030, 5 hectares of 6410, 1 hectare of 2130, 1 hectare of 2140 and 1 hectare of 6230. Approx. 50 hectares will be left for natural reforestation of indigenous tree species, and in the longer perspective host habitats of annex I, but not within the project period. The remaining approx 17 hectares will remain open as to improve conditions for the targeted bird species. These areas will be grassed, and only potentially develop into habitat types.

How was the cost of the action estimated?:

The costs estimations is based on the pilot project of a clearing of 15.2 hectare that NST implemented during autumn 2011 in the bog areas. A total allocation of 779.682 Euro is needed divided between external costs (665.697 Euro) to contractor, personal costs (60,294 Euro), equipment costs (33.557 Euro) and Consumables (20.134 Euro). Income from sale of wood chips has been included in the estimate of the contractor, hence the income is used to lower the project costs.

Name of the picture: MAP 21: Action C1



C. Concrete conservation actions

ACTION C.2: Partial clearing of woodlands

Description (what, how, where and when):

This action will take place where partial clearing of wooded areas (50%) is desirable (see MAP 22 Action C2). The designated areas covered by the C2 action are in close connection with other dense woodland areas both within and outwith the project area.

Action C2 covers the project areas less vulnerable, less coherent and dryer sub-areas also containing the targeted habitat types, but more fragmented than seen in the area covered by C1, the main threat still being overgrowth by woody species. In C2 the composition of woodlands are a mixture of native and non native species, of which some are established as commercial woodlands / stands.

All non native (e.g. *Picea sitchensis* and *Picea glauca*) including invasive alien species (e.g. *Pinus mugo*, *Pinus contorta*, *Prunus serotina*, *Rosa rugosa*, *Fallopia japonica* and *Amelanchier canadensis*) will be felled, leaving groups /smaller coherent woodlands consisting of native tree species (e.g. *Pinus sylvestris*, *Populus tremula*, *Betula* spp., *Quercus robur* and *Sorbus aucuparia*). Dependent on the specific area in question (if the area can develop into a highly valued light demanding habitat) also native trees would be felled. This partial clearing, leaving an outer frame of dispersed woodlands surrounding the core area (C1) with fragile habitat areas and randomly located smaller woodlands within the project area, have several benefits;

- To clear areas where hydrology can be improved and areas have potential to develop into high value habitat types.
- To create corridors between the light demanding habitats and stepping stones for species.
- The clear felling of invasive and non-native trees will prevent these species to spread into neighbouring habitats.
- To maintain / create daytime sanctuaries for the big herbivores - mainly red deer. Red deer have a tremendous effect on reduction of regrowth and is therefore highly valued. The project area and the arable land surrounding it holds a big population (estimated 300). To secure and maintain randomly located sanctuaries (small woodland blocks) throughout the project area will be of outmost importance.
- As areas surrounding the project area are under intense agricultural use the project area is under heavy influence by airborne nitrogen. To maintain an outer edge of surrounding woodlands will reduce airborne nitrogen deposition in sensitive habitat areas as tree canopies are able to catch a substantial proportion of this.
- To accommodate the biodiversity dependent on woodland species. The tree species sustained are predominantly Birch *Betula* spp., Aspen *Populus tremula*, Scots Pine *Pinus sylvestris* and Willow *Salix* spp. which all are native species adding highly to biodiversity.
- Respond to individual owners management wishes and respect their sense of ownership and commercial interests.

Regarding the red deer density the applicant does not consider it to be very high. At present, there is ample re-growth and natural seeding of essential species, e.g. *Betula*, in the annex 1 forest habitats, including in the 91D0*. However, if at any stage, the impact of red deer is considered to be negative, it is quite easy to minimise the impact by either establishment of temporary fencing, or by reducing the numbers of red deer. Booth techniques are well known to the applicant, who deals with negative impact of red deer in many other places. If the problem arises within the project area, the applicant ensures that necessary actions will be put in place.

In general the C2-areas will differ from the area covered by the C1-action by lower subsoil water level and higher timber volume in the individual stands / in the area. This also means that a higher percentage of the area can be managed using machinery. The applicant estimates that the distribution will be that 80 % of the area will be covered by machinery and 20 % by manual labour. Weather conditions might chance this distribution.

Trees and scrubs will generally be cleared mechanically, but machinery will at all times be used in combination with manual labour as to secure a high environmental standard of the work and avoid damage to e.g. geological remains (the beach ridge system), fragile habitats and sub-areas as well as areas with restricted carrying capacity. How the clearing will be undertaken will firstly depend on the habitat and related species and secondly access, ground condition, tree specie, stand age, stand density, stand volume and the existence of historic and archaeological remains.

The beach ridge system is also present in C2-action areas, which complicates the clearing. However, the subsoil water level is in general lower than in the C1 areas and temporary access as mentioned under C1 will only be necessary in some sub-areas.

LDP funds can be applied on approx. 16 hectares, which are not included in the financial calculation.

Reasons why this action is necessary:

The action is necessary to conserve, expand and enhance all the targeted habitat types; 2130*, 2140*, 2190, 4010, 4030, 6230*, 6410, 7110*, 7140, 7230, 91D0* (only with non native species). The action is necessary to accommodate *Tringa glareola* and *Asio flammeus* and *Euphydryas aurinia*. It will create corridors and stepping stones, prevent invasive and non-native species to spread, reduce airborne nitrogen, accommodate red deer and other species depending on woodlands of native tree species.

The action is necessary to cope with threat no. 1: Overgrowth by woody species, threat no. 3: inappropriate hydrology, threat no. 5: Invasive alien plant species and threats no. 7: Deposition of airborne nitrogen. Please see description of these threats in section B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The clearing of trees and scrubs on 189 hectares. See MAP 22: Action C2.

This action is the most important regarding enlarging the habitats 2130*, 6230*, 6410. The aim is to contribute to the expansion of:

- 7110* by 50 hectare
- 4030 and 91D0* by 10 hectare each
- 4010, 6410 and 7230 by 5 hectare each
- 2130*, 2140* and 6230* by 1 hectare each

The clearing action will contribute to the total result of conservation, and enhancement of the following habitats: 2130*, 2140*, 2190, 4010, 4030, 6230*, 6410, 7110*, 7140, 7230 and 91D0*. The action will accommodate all targeted species. Please see section B1 for the total expected result.

It will create corridors and stepping stones, prevent invasive and non-native species to spread, reduce

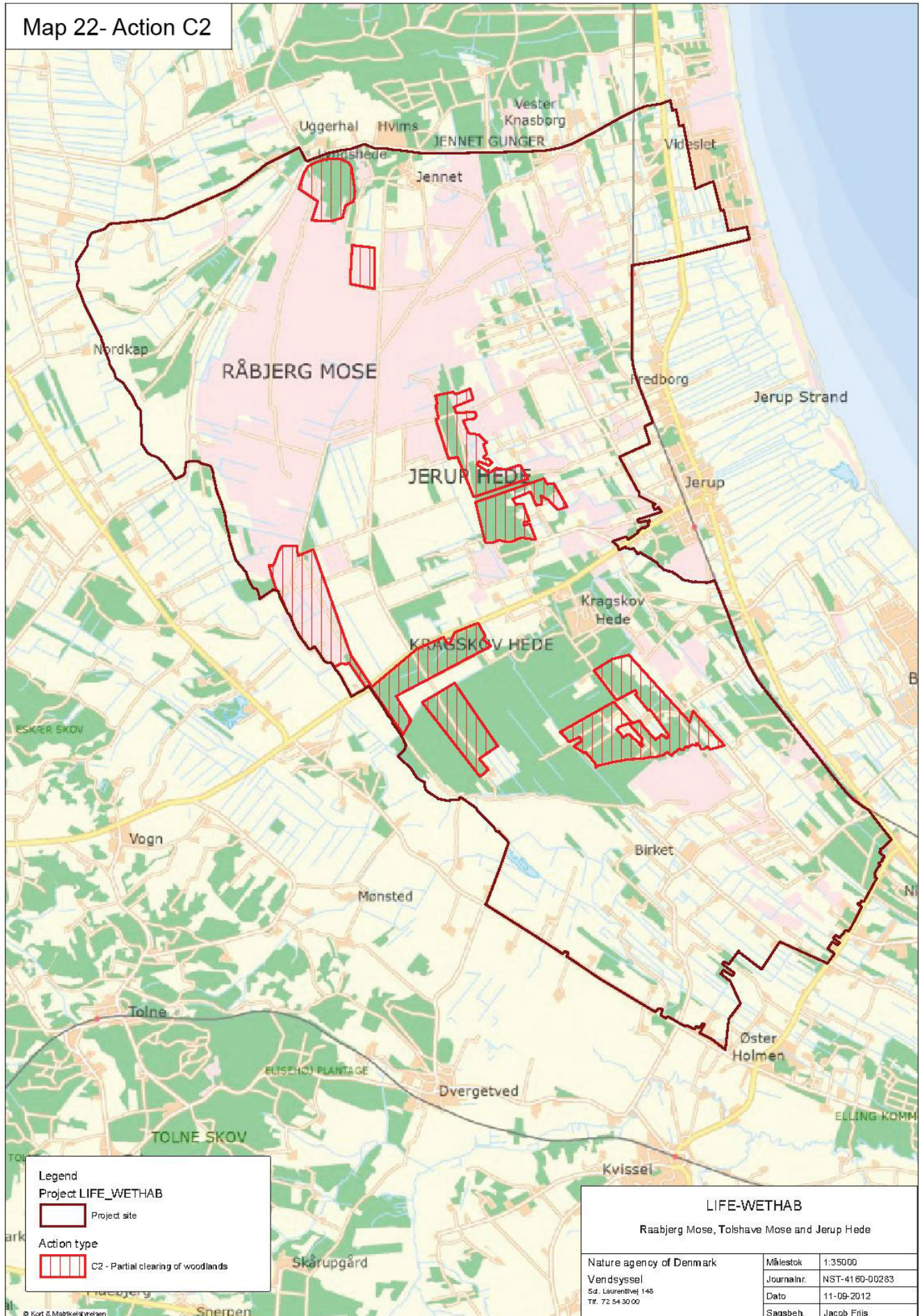
airborne nitrogen deposition.

For some areas the clearing will furthermore prepare the areas for grazing or mowing.

How was the cost of the action estimated?:

The costs are estimated partly by the pilot project of clearing in the bog during autumn 2011 and partly from local experience of foresters within the NST regarding density of timber volume and clearing costs on similar areas. A total allocation of 38,233 Euro is needed divided between external costs (1,576 Euro) to contractor and personal costs (36,657). Income from sale of wood chips has been included in the estimate of the contractor, hence the income is used to lower the project costs.

Name of the picture: MAP 22: Action C2



C. Concrete conservation actions

ACTION C.3: Clearing of invasive and non native species

Description (what, how, where and when):

Non native and invasive alien species are spreading throughout the project area.

Action C3 covers a part of the project area where woodlands, hedgerows and solitary trees are highly valued, adding to biodiversity without being a threat to the targeted habitats and species. However, these areas also contains a certain amount of non native and invasive alien species, which must be combated as to avoid future establishment on neighbouring targeted habitat types.

The following invasive alien species are known to be present; *Prunus serotina*, *Rosa rugosa*, *Fallopia japonica* and *Amelanchier spicata*. Of these primarily *Prunus serotina* and *Amelanchier spicata* are considered particularly problematic.

Of non native species the following species are found within the project area; *Pinus contorta*, *Pinus mugo* and *Picea sitchensis*, of which primarily *Pinus contorta* and *Picea sitchensis* are considered problematic. See MAP 23 Action C3.

Regarding invasive alien species, recurrent treatment (stressing) is often a necessity for eradication and overall planning needs to be provided to prevent the species to disseminate.

As a consequence of this, the following will be implemented;

- Invasive alien species

- Regarding *Prunus serotina* and *Amelanchier spicata* the following methods will be applied;
 1. Felling followed by covering the stumps with heavy plastic / buckets
 or -
 1. Removal of outer bark and cambium - leaving the tree standing
 followed by -
 1. Subsequent establishment of new seedling will be up-rooted by hand
 or treated, using -
 1. Thermal methods (burning at very high temperature)
 or followed, using -
 1. Grazing

- Regarding *Rosa rugosa* the following methods will be applied;
 1. Mulching and / or mowing by machinery or - if smaller stands - using a strimmer.
 2. Continued mowing to be repeated throughout growing season and subsequent years
 or followed by -
 1. Thermal methods to be repeated throughout growing season and subsequent years

or followed, using –

1. Grazing

- Regarding *Fallopia japonica* the following methods will be applied;

1. Mowing (felling) using a strimmer
2. Establish full cover over the entire area using heavy plastic

- Non native species

- Regarding *Pinus contorta*, *Pinus mugo* and *Picea sitchensis* the following methods will be applied;

1. Mature or semi-mature stand or individual trees will be felled – primarily by chipharvesting
2. Younger stand or individual trees will be felled using a mulcher or simply felled to waste using a strimmer / chainsaw
3. Subsequent establishment of new seedling will be uprooted by hand and / or felled using a strimmer.

Where fencing and grazing (C5) will take place following clearing of invasive species, it must be implemented immediately as to prevent re-growth. Also mobile fencing can be used where grazing is not desirable as a long term solution, but only as a measure to eradicate the unwanted species. Experiments have shown that infected areas must be grazed over a period of 3-4 years before the eradication is successful, although this is species dependent. Earlier research regarding eradication of invasive species with livestock will determine the strategy and livestock breed to be used on specific locations / invasive species.

Besides grazing, mowing will be relevant using a small tractor mounted mower in combination with manually use of a strimmer as to secure the above mentioned stressing (and an organic structure and protection of sub-habitats and species). As a main rule mechanical operation must take place approx. once a fortnight during the growing season. However the interval between treatments is depended on the species.

Experiences accumulated by LIFE08/NAT/DK/000464 and LIFE11 NAT/DK/000893, both testing new methods of IAS control, will be taken into account. Also NOBANIS (North European and Baltic Network for Invasive Species) will be a source of information on methods. A close dialog and guidance from the University of Copenhagen will also secure that the newest methods will be undertaken.

Although the above methods are capable of eradicating the species is must be stressed that new seed might be carried to the area e.g. with the wind, why the need for control will be ongoing, also following the project period.

It is well known that any attempt to eradicate a number of invasive alien species is very challenging and quite often must be continued / repeated over time, both during individual growing seasons and subsequent, as to continuously stress the plant thereby leading to the eradication. The applicants therefore need to stress that the methods applied must be seen as a continuous and inseparable number of sub-actions – of which none can “stand alone” – leading to the desired result of eradication. First treatment is expected to take place in spring 2014 and will continue throughout the project period – and following.

The applicant is aware that recurrent activities are not subsidized by the Commission. However the applicant considers eradication of invasive species on a specific location as one initiative even though more than one treatment is necessary. To further argue our point of view the applicants would like to draw the attention to LIFE08/NAT/DK/000464 - action C7 - and LIFE11/NAT/DK/000893 – action C4 and C5 – which both operates with the same strategy of continued stressing – without being considered a recurrent activity.

The polygon of the C3-action covers a total area of 569 hectare where alien and / or non native species are present at 197 hectare. The precise coverage of individual species is however not known, why the precise distribution will be mapped during the initial phase of the project.

The following coverage (species presence) is although estimated;

- *Prunus serotina* - 25 hectare
- *Amelanchier spicata* - 5 hectare
- *Rosa rugosa*- 10 hectare
- *Fallopia japonica* - 0.1 hectare
- *Pinus contorta* - 50 hectare
- *Pinus mugo* - 100 hectare
- *Picea sitchensis* - 50 hectare

Although NST is the responsible beneficiary the action is planned to be carried out by staff of the Municipality of Frederikshavn thus to ensure knowledge of the area - and technology is given to the staff that will have to deal with the problems after project end. The Municipality is authority with regard to management of the Nature 2000 site.

Reasons why this action is necessary:

The action of eradicating non native and invasive species is a necessity as to prevent further dissemination and coverage. New populations will continuously be eradicated throughout the project area.

The action is necessary to cope with threat no. 1 "Overgrowth by woody species" and threat no. 5 "Invasive alien plant species". Please see description of these threats in section B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The clearing of non-native trees and scrubs on 196.5 hectares. See MAP 23: Action C3.

The expected result is an eradication of the majority of invasive alien species and other non native species and to prevent further dissemination and coverage. New populations will continuously be eradicated throughout the project area. However, a complete eradication cannot be expected within the project period. This issue will be addressed in detail in the After LIFE report.

The action contributes to the total expected results, and will together with restoration of hydrology be the most important contributor to the enhancement of 91D0* by 10 hectares. The action will contribute to all targeted habitats and species increase in conservation status. Please see section B1 for total expected results.

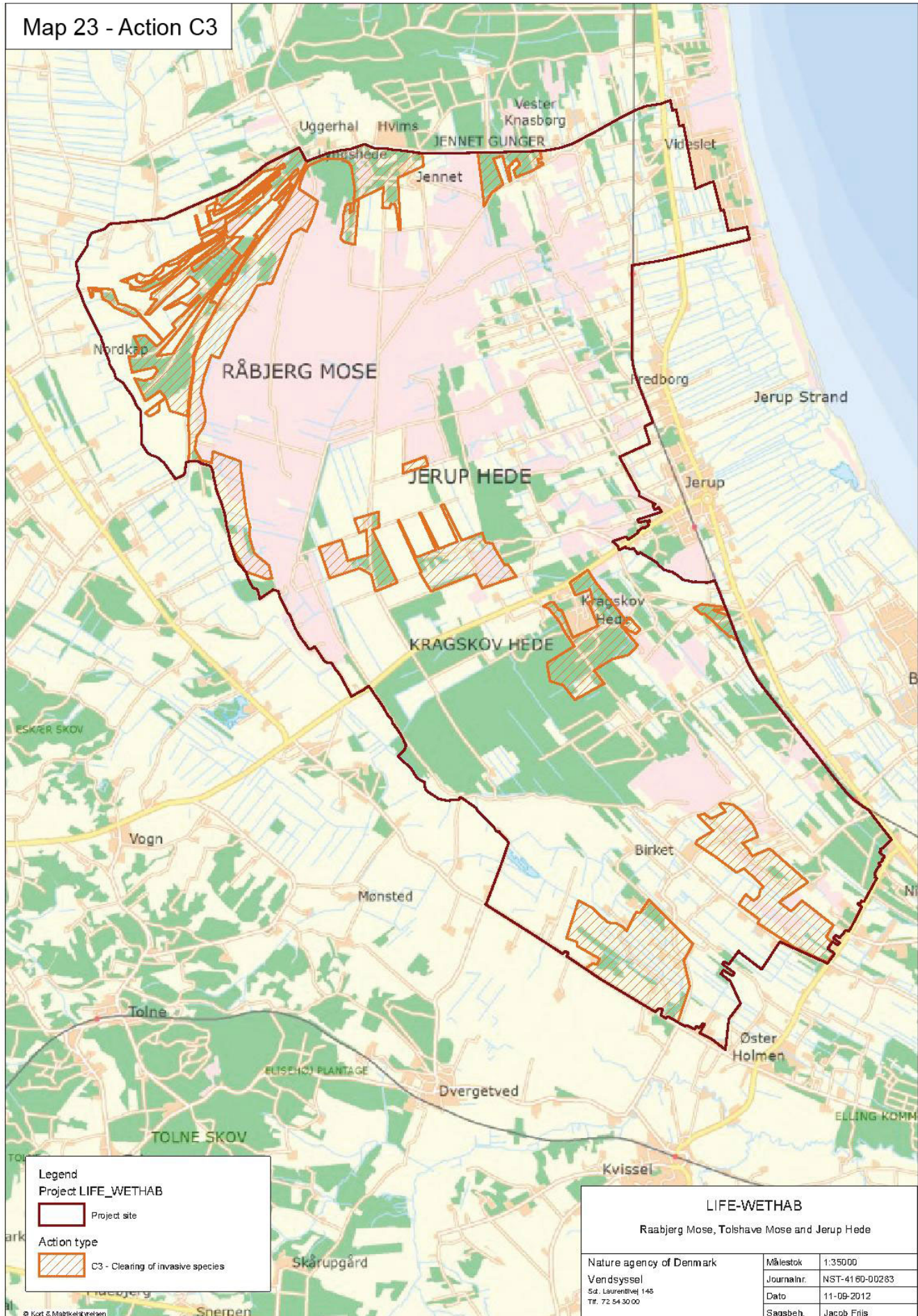
For some areas the clearing will furthermore prepare the areas for grazing or mowing.

How was the cost of the action estimated?:

Regarding clearing of non-native species the cost are estimated by local experience of foresters within the NST regarding density of timber volumes and clearing costs on similar areas. Regarding the clearing of invasive species the costs are estimated based on earlier experiences. The costs are calculated separately for every species, technique and size of area and finally added together.

A total allocation of 345,354 Euro is needed and divided between personal costs (319,639 Euro), consumables (21,506 Euro) and external assistance (4,209 Euro). Income from sale of wood chips has been included in the estimate of the contractor.

Name of the picture: MAP 23: Action C



C. Concrete conservation actions

ACTION C.4: Controlled burning

Description (what, how, where and when):

The action aims to be carried out on approx. 155 hectares within the project area and thereby enhance existing habitats and ensure expansion opportunities. See MAP 24 Action C4.

As fires – natural as well as provoked – can play an important role in the periodic renewal of especially dwarf bush vegetation and the nutrient depletion of the soil, controlled burning will take place throughout the project area. It is vitally important that burning is controlled and carried out in a mosaic over the relevant sites as to secure the maximum amount of diversity for species as well as habitats alike plus reduce the danger of overgrowth and eutrophication.

Where grazing by livestock is applied burning will also make the presently rather rough vegetation more palatable and digestible for the livestock hereby increase their condition and wellbeing again enhancing the overall forage intake.

In order to minimize risks of damaging bird nests the burning must not take place between 1st April and 31st August. The winter months are often too wet for burning, so March and October will be optimal months. However special consideration must be taken into account at every sub-site. The action will be carried out by a skilled labour force from primarily the Frederikshavn Municipality and the Nature Agency together with representatives from the Landowners Group and the local Fire Brigade. The action requires the purchase of different kind of equipments such as fire suits, flame-throwers and mobile water tanks with spraying equipment.

The actions polygon covers an area of 468 hectares, but due to humid areas and habitats not suitable for controlled burning, the net area is reduced by 66% and is estimated to 155 hectares.

The cost is high compared to “normal” controlled burning activities. The cost is higher than normal because;

- The burning does not take place on regular plain surfaces, but on long narrow ridges.
- Very poor or no accessibility for vehicles. This means equipment must be carried by manpower much longer distances than normal.
- There is a danger of igniting the peat. This means that the controlled burning will have to be planned and implemented with extra care and fireguards will have to control the sites for several days after the burning.

The applicant has based the cost calculations on the results from the ASPEA project. The conditions are more or less the same and therefore the applicant considers the estimations valid.

Reasons why this action is necessary:

Controlled burning is a vital tool in the ongoing nature conservation management of a number of light demanding habitats and this action is necessary to conserve, expand and enhance the following targeted habitat; especially 2140* and 4030. Furthermore the method can be needed after clearing of woodlands to remove deposited nitrogen in the litter layer, to secure development to e.g. 2140* and 4030.

The action is necessary to cope with threat no. 4: Inappropriate grazing and mowing and threats no. 7: Deposition of airborne nitrogen. Please see description of these threats in section B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

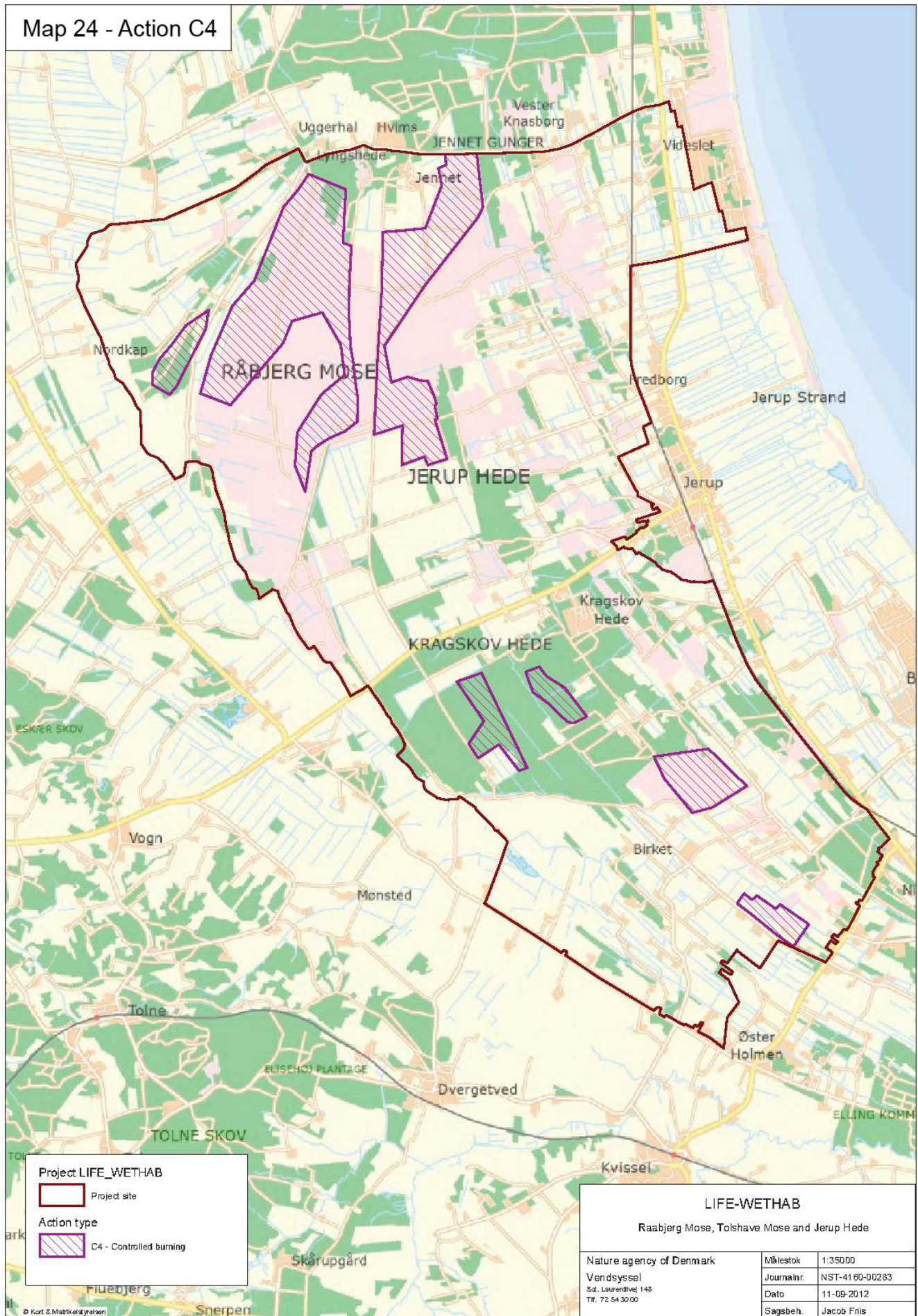
The expected result is a contribution to the total expected result of the project by conservation, expansion and enhancement of the following habitat types; 2140* and 4030*. The action will be implemented on approx. 155 hectares.

Please see description of the total expected results in section B1.

How was the cost of the action estimated?:

The NST uses burning on a regular basis as a conservation tool. The estimates are based on those experiences. A total cost of 110,033 Euro is needed divided between personal costs (93,099 Euro) and consumables (16,934 Euro).

Name of the picture: MAP 24: Action C4



C. Concrete conservation actions

ACTION C.5: Grazing and mowing

Description (what, how, where and when):

Grazing by livestock and mowing are important conservation strategies throughout the habitat area. See MAP 25 Action C5. Many of the areas in question were previously grazed by livestock, primarily cattle, sheep and to some extent horses. The main problem regarding an environmentally correct management of these light demanding habitats today is the change in farming structure, bigger farming units and loss of smallholding, together with a recent change in farming subsidies, all resulting in less livestock being available for these habitats. Together with action C6 "Establishment of a cattle herd" this action aims to address exactly this problem and re-establish the livestock herds needed.

If possible all areas covered by this action - where continued grazing or mowing is a prerequisite - will be gathered and managed in a number of grazing / mowing units containing one or several plots owned by different landowners. All individual landowners, where these actions are targeted, will be encouraged to join a grazing or mowing unit / group. The advantage of pooling land is coherent and united land management with the main objective being nature conservation.

The establishment of grazing and mowing units containing 1-5 landowners will be facilitated by the project work group and the interest sub-group of the association. The grazing / mowing interest group of the association - in close cooperation with the project work group - shall support these units regarding life stock management, nature conservation as well as advice regarding available subsidy schemes in context of grazing and mowing.

The farmers will get no direct income from the project to join grazing or mowing units. Appliance for subsidies will be the responsibility of the landowners, but guidance and coordination will be provided by the project. Offspring from the livestock will belong to the landowner, but at the end of the contract period or if the contract is annulled, the landowner must return the same number of livestock back to the project. A contract will be made between the project and landowners. The project will deliver clearing, fencing and livestock. In return the landowner will have to accept the premises of the restoration for a predetermined period or permanently.

Where grazing or mowing - or a combination - will be implemented depends on detailed discussion with all individual landowner and must take a number of issues into consideration, e.g. sub soil water levels, terrain, targeted habitats types and species.

Grazing:

Establishment of enclosures by fencing. Preliminary estimates predict there is a need to establish 23 new enclosures (approx. 45,000 meters of fencing). All new enclosures should be fenced in a manner capable of retaining cattle, but depending on the habitat / species management needed the fences might also be designed to retain horses and perhaps sheep as well. The establishment of new enclosures will be carried out as the clearing actions (C1, C2 and C3) gain pace.

It should also be stressed that all the habitats in need of grazing must be fenced in a manner (fence layout) securing the possibility of change in grazing regime depending on early fluctuations in vegetation, the appearance of undesirable species or for example the influx of invasive species as to secure or enhance the N2000 designation status.

Purchase of equipment will be carried out as need arises e.g. cattle pens (as fixtures in enclosures), mobile

water tanks and mobile fences (for maintaining high flexibility managing the livestock).

The livestock numbers needed to cover the area in question is based upon experiences from similar project. It is estimated, that 0.40 animal units per hectare (fluctuation 0.3 - 0.5) will be appropriate. Areas belonging to the State Prison, NST and a few other landowners is already being grazed (290 hectares) at a desired level. At the remaining 340 hectare there is a need for additional approx. 136 cattle and / or horses. A substantially number of livestock is all ready present within the project area and it is assumed that some landowners / farmers will be interested in expanding their livestock numbers - however, not to the needed level. This is why the need of establishing an additional herd of the correct breed is vital to the success of the project. The initially 50 cattle and the following offspring will contribute in reaching the desired level. See Action C6.

Galloway cattle - or a similar hardy breed - have proven effective grazing the habitats in question. As for horses there is a big interest for riding and breeding horses in the local community, why it is assumed that the horses needed can be sourced locally.

Expences of establishing new fences can be covered by the Rural Development Programme on 30 % of the areas, which means LIFE funds will be applied on 70 % corresponding to an area of 238 hectares.

Mowing;

Mowing is causing nutrient depletion of the soil and is therefore a strong instrument in areas where high nutrient levels endangers the habitats and grazing pose problems. The mowing intensity will depend on ground conditions, habitat types and targeted species. It is expected that mowing will take place one time as to prepare for further management. However some areas might only need mowing every second year.

A large proportion of the areas in question are not ready for mowing. Before they can be mowed they will have to undertake an initiating preparation with a mulcher or/and by manual labour with a strimmer.

As an average figure it has been estimated, that all mowing areas (157 hectares) will be mulched one time and mowed one time in the project period. € 121 has been allocated for mowing per hectare and € 536 for mulching. Mowing will be carried out by machinery.

The price for both moving and mulching is high due to fractured landscape and wet environment. Also special and more expensive mowing systems must be used to accommodate the chicks of *Crex crex*.

Reasons why this action is necessary:

Grazing and mowing is the only sustainable way of preventing re-growth and maintaining vegetation in desired conservation status. This action is necessary to conserve, expand and enhance the following habitat types; 2130*, 2140*, 4030, 6230*, 6410 and 7230.

The action is necessary to cope with threat no. 4: Inappropriate grazing and mowing and threat no. 8. deposition of nitrogen. Please see description of this threat in section B2.

Beneficiary responsible for implementation:

NST VSY

*Responsibilities in case several beneficiaries are implicated:**Expected results (quantitative information when possible):*

Grazing will take place at 630 hectares and mowing will take place at 157 hectares.

The result of the action is a contribution to the overall conservation, expansion and enhancement the following habitat types; 2130*, 2140*, 4030, 6230*, 6410 and 7230. Grazing and/or mowing is essentially and thereby the major action to reach favorable conservation status in the habitats 6230* and 7230.

How was the cost of the action estimated?:

The NST uses grazing and moving in a large extend as a conservation tool and the cost estimates are based on those experiences. Total costs of this action is € 271,549 divided between personal cost (€ 157,339) and consumables (€ 117,210). The estimations of consumables can be seen below.

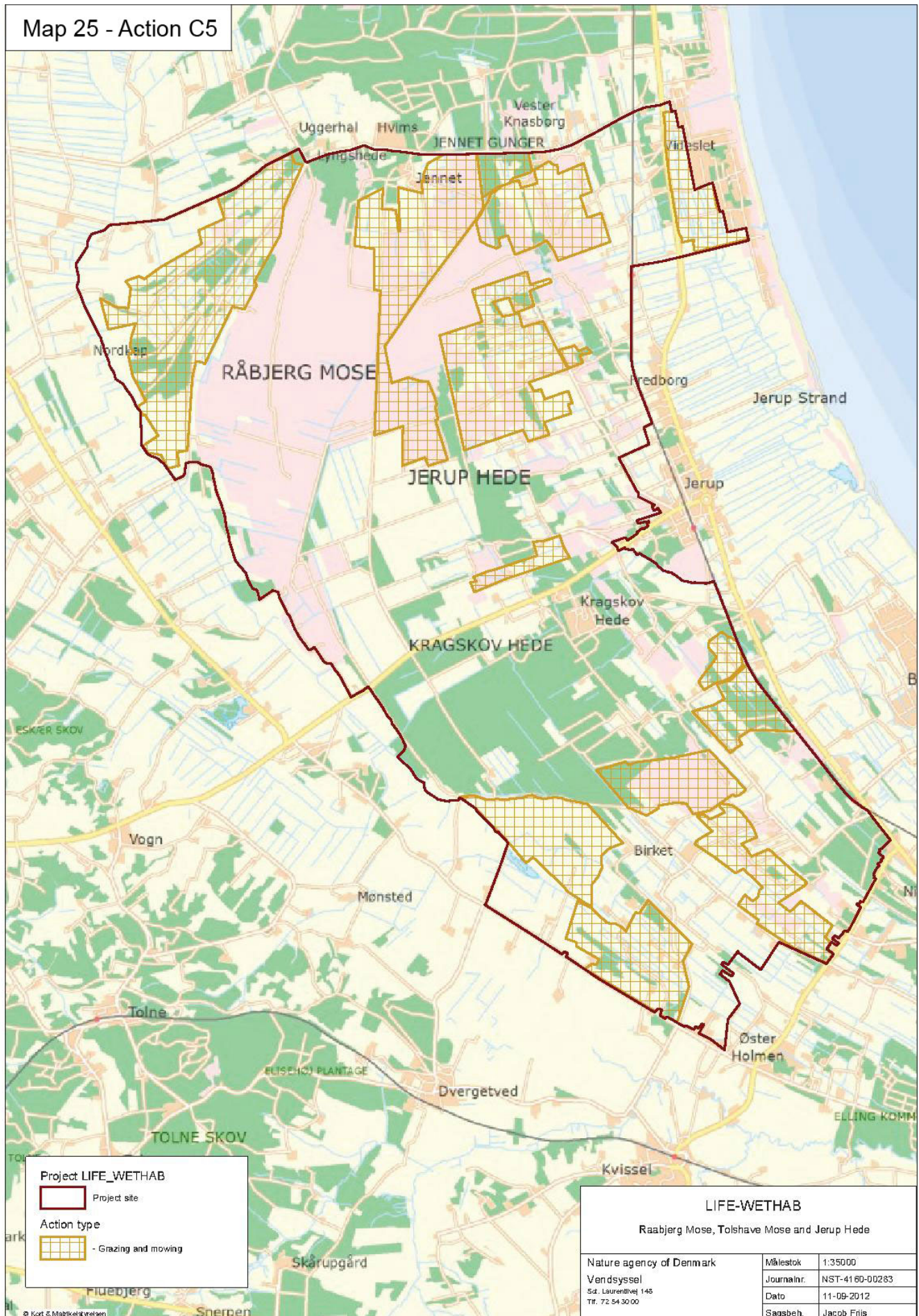
Direct fencing expenses:

New enclosures will be established on 340 hectares (238 hectares will be financed by the project and 102 hectares by RDP). With a mean size enclosure of 15 hectares 22.64 new enclosures will be established which correspond to 2,000 meters of new fence per enclosure. The total number of meters of new fence is 45,281 meters. The average cost per meter for fencing material is estimated to € 1.68 which accumulates to totally € 75,977. RDP will cover 30 % of the expenses and the rest by the project, totally € 53,183.

Misc. equipment expenses covered by the project;

12 x Solar power system.....	€ 16,107
12 x Voltage station B700.....	€ 6,443
11 x Batteries.....	€ 1,181
1 x Autowind for mobil fencing...	€ 1,503
20 x mobil fences (600 meters)...	€ 15,346
2 x mobile "fangfold".....	€ 7,248
1 x ATV.....	€ 9,396
Misc material.....	€ 6,711
<u>Total.....</u>	<u>€ 64,027</u>

Name of the picture: MAP 25: Action C5



C. Concrete conservation actions

ACTION C.6: Establishment of a cattle herd

Description (what, how, where and when):

To demonstrate livestock management in the context of nature conservation and as an initial help to the establishment of new grazing units, a herd of approximately 50 cattle of a hardy breed will be purchased. This action links directly to action C5 and for the same reasons as mentioned under C5.

To maximize the effect of livestock grazing knowhow and expertise is a prerequisite. It is important that the right number of cattle is put in the enclosures at the right time of year. Different habitat types require different intensity of grazing, and some habitat types may achieve a better conservation by sheep (initially) or horses. Advising about these issues and the issues mentioned in action C5 must be available to the landowners and demonstration on site is considered optimal. This will initially be the primary mission of the establishment of the cattle herd.

The cattle herd can furthermore serve as initial help to new grazing units. Grazing units consisting of up to - say five - landowners may add up to a considerable area, and to achieve the right grazing intensity a rather large number of cattle may be needed. The cattle will be distributed in an optimal manner coordinated by the grazing / mowing interest group of the association (together with the project work group).

The purchase of approximately 50 cattle (48 cows and 2 bulls) within the first years of the project period provides a possibility to increase the herd during the project period.

The livestock purchased by the beneficiaries in 2015 and 2016 will be lent to the grazing units. They will be responsible for the caretaking of the cattle as long as they are under their supervision. At the end of the loan agreement, the same number of cattle shall be returned to the grazing group / beneficiaries, who will distribute the cattle to other units. The grazing group shall ensure that the herds are held at the desired level and that livestock in excess will be delivered back to the beneficiaries. The beneficiaries provide the livestock, but will not take responsibility for the daily caretaking or wintering. The landowners (or grazing units) must sign a contract to take responsibility for the livestock as long as it is under their management. This includes all expenses.

As the majority of livestock needed for the grazing cannot be kept on the summer grazing sites during the winter period (November to April), as this could lead to damage to habitats and related species, a need to establish wintering possibilities might occur. Within the project site and close by there are good possibilities to purchase supplementary fodder and there are many small farmers surrounding the project area, with which agreements regarding wintering can be made. The State Prison has put forward a strategy to convert their traditional agricultural land management towards a more close-to-nature management. This involves a larger herd of livestock than they possess today and hence better possibilities for wintering. Agreements with the prison regarding wintering might also be a possibility in time.

It is essential to the project to maintain an extremely high animal welfare in general and thereby secure a positive perception in the public regarding the project.

Reasons why this action is necessary:

This action is necessary to demonstrate livestock management in a conservation context and to provide robust cattle to new grazing units. Grazing is the only sustainable way of preventing re-growth and keeping vegetation in a preferable conservation status. Furthermore grazing is used as a measure to conserve, expand and enhance the following habitat types; 2130*, 2140*, 4030, 6230*, 6410 and 7230.

Finally, this action will enhance and expand the opportunities for Marsh Fritillary (*Euphydryas aurinia*).

The action is necessary to cope with threat no. 3. Structure in ownership and threat and threat no. 4: Inappropriate grazing and mowing. Please see description of these threats in section B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

This action will demonstrate livestock management in a conservation context and provide cattle to new grazing units. The action will prevent regrowth and keep vegetation in a preferable state. Furthermore the action will conserve, expand and enhance the following habitat types; 2130*, 2140*, 4030, 6230*, 6410 and 7230. Furthermore, this action is expected to result in better conditions for Marsh Fritillary *Euphydryas aurinia*.

Furthermore the purchase of 50 cattle will ensure that 125 hectares will be grazed. This area will increase in the project period as the cattle breed.

How was the cost of the action estimated?:

It is expected that cattle can be purchased for approx. 671 Euro per head. This adds up to totally 33,557 Euro. Beside there are personal cost of 3,860 Euro and External costs of 2,013 Euro (legal advice).

C. Concrete conservation actions

ACTION C.7: Restoration of hydrology

Description (what, how, where and when):

Hydrological problems are regarded as one of the main threat causing the degradation of the habitat types. Actions must be implemented to raise subsoil water levels in order to restore present status. See MAP 27 Action C7.

Four methods will be applied regarding ditches; in-filling with soil, establish bungs, establish adjustable weirs or bringing maintenance to an end. The actions will consist of the following methods:

- In-filling with soil. If no specific interest is linked to the drain / ditch it will be filled in as to avoid further evaporation simply by using a digger. Although the majority of these drains are quite old, the soil excavated during the establishment still forms the “embankment” and can quite easily be relocated.

The old drains and ditches indeed have a very negative impact locally as they secure drainage as well as evaporation although not maintained, thereby delaying and / or preventing a more desirable development of the habitats in question. It is estimated that totally 3,800 meters will be filled in.

- Blocked using bungs. By inserting a heavy plastic / wooden plate (acting as a bung) thereby stopping the draining effect. This method is cheap and furthermore has the advantage of being moveable, if the management needs access to the upstream area with heavy equipment later on and / or i.e. substantial flooding creates problems in the catchment upstream. From an environmental point of view this method might also facilitate the natural development of desirable micro habitats over time. There will be a total need of 125 bungs.

- Blocked using adjustable weirs. By establishing adjustable weirs the subsoil water level can be controlled locally. In the central part of Raabjerg Mose and Tolshave Mose there is no commercial interest in keeping the subsoil water at a certain level. However, in the outer parts of the project area the water level must be controlled so that e.g. grazing is possible. Especially in the summer the peaty hollows in the ridge/hollow structure have a tendency to dry out. By being able to control the water level by adjustable weirs it would be possible to prevent these peaty hollows to dry out and still maintain the subsoil water at a level where livestock can graze or forestry on the dryer ridges can be managed. Furthermore the weirs can easily be adjusted in case of upland floods. There will be a total need of 23 adjustable weirs.

- Stop maintenance. To restore natural hydrology simply stopping the maintenance will in some instances be used as to secure a natural development of desirable micro habitats over time and without cost.

Besides the methods mentioned above best practice experience generated in the Raised Bog project Life05 NAT/DK/000150 will be used or adapted especially the knowledge about different materials used for blocking ditches.

The implemented actions will affect approx. 76,270 meters of drains and ditches. Approx. 3,800 meters of drains/ditches will be filled in and 125 bungs will block off ditches. Furthermore 23 adjustable weirs will be placed where there is a need to adjust subsoil water levels. Also actions regarding the streams running along or through the project area might be incorporated later on in the project or beyond. The actions of restoring hydrology will take place as the clearing initiatives gains pace / take place.

Reasons why this action is necessary:

It is necessary to raise subsoil water levels to minimize re-growth of trees and scrubs, and to conserve, expand and enhance the following habitat types; 2190, 4010, 6410, 7110*, 7140, 7230 and 91D0*

The action is necessary to cope with threat no. 3: Inappropriate hydrology and threat no. 1 Overgrowth with woody species. Please see description of these threats in section B2.

Beneficiary responsible for implementation:

NST VSY

*Responsibilities in case several beneficiaries are implicated:**Expected results (quantitative information when possible):*

Filling and blocking ditches will improve hydrology at up to 2054 hectares. See MAP 26 Action C7.

This action is the most important regarding enlarging the habitat type active raised bog 7110*. The aim is to contribute to the expansion of:

- 7110* by 50 hectare
- 91D0* by 10 hectare each
- 4010, 6410 and 7230 by 5 hectare each

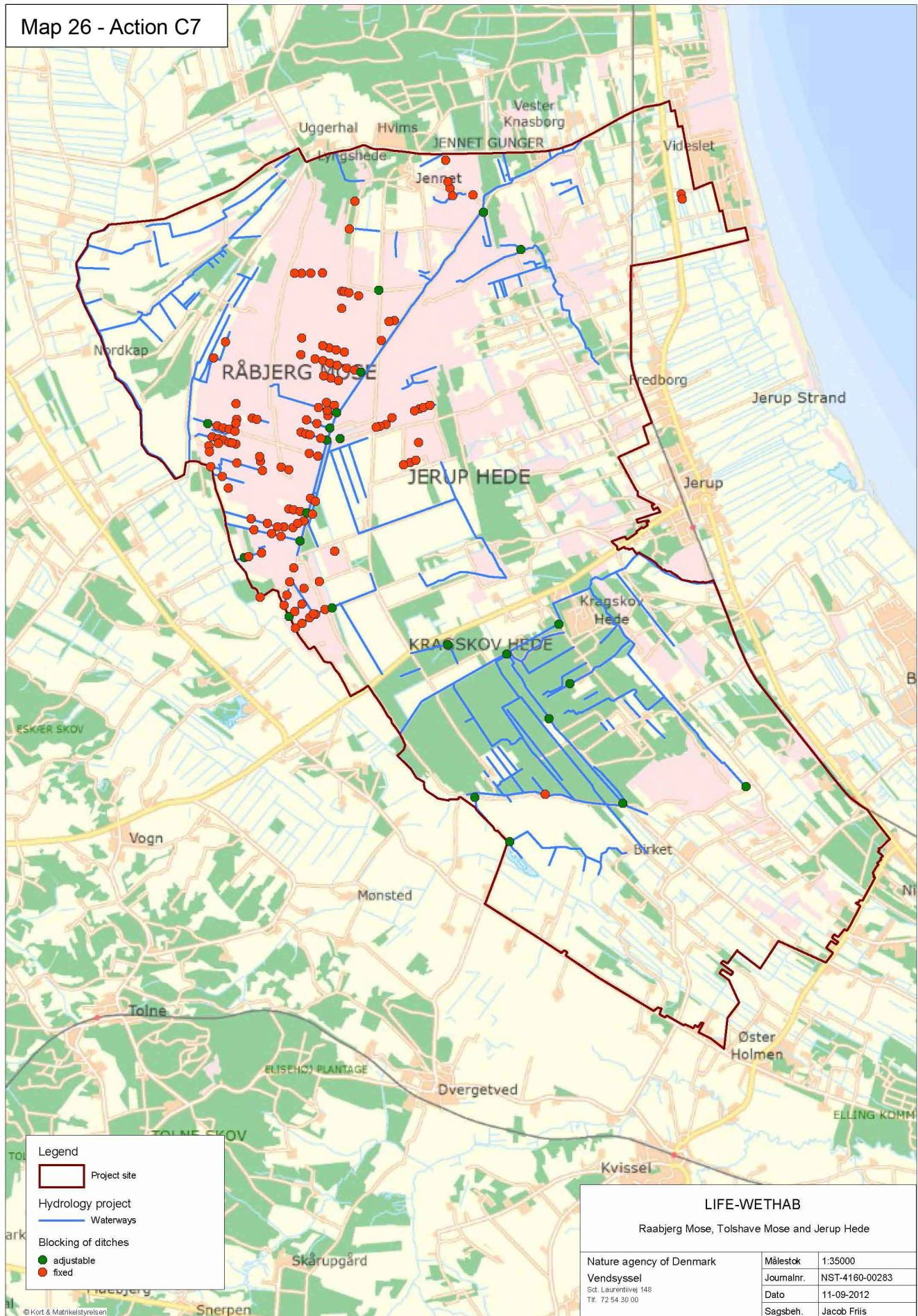
The expected result is a highly reduced regrowth of trees and scrubs and a better growth of *Sphagnum* spp. and there by contribute to the total expected result by conservation and enhancement of the following habitat types; 2190, 4010, 6410, 7110*, 7140, 7230 and 91D0*. This action will furthermore be the most important to increase conservation status of 4010 and 7140.

Please see the total expected result in section B1.

How was the cost of the action estimated?:

Expences are estimated from knowledge gained from similar actions implemented in other places of restoring hydrologi. The expected result from the preliminary survey (A1) form the basis of the calculated costs. There will be a need for totally 92,777 Euro distributed between consumables (39,262 Euro), external assistance (28,665 Euro) and personal costs (24,850 Euro).

Name of the picture: MAP 26: Action C7



C. Concrete conservation actions

ACTION C.8: Establishment of necessary infrastructure

Description (what, how, where and when):

This action is targeting infrastructure needed for the implementation of the projects conservation issues. Today only few accessible tracks enter the main part of bog areas. The action will improve existing tracks and establish new – temporary – in specific locations as to secure the implementation of all C actions and future management input (movement of tractors and equipment, haulage of timber / chip wood, livestock and personal etc.) in an effective and economic manner. See MAP 27 Action C8.

The need for proper infrastructure action is linked to action C1-C7, but the action is particularly relevant in relation to the clearing actions, where a total of approx. 30,000 cubic meters of wood are needed to be transported from within the project area to roads capable of carrying heavy haulage. This equals up to 3,000 individual loads of chip wood.

Initially negotiations with all relevant landowners will take place in order to decide the infrastructure needed and at the same time agree on the future use of same infrastructure.

The improvement of existing tracks and the establishment of new temporary tracks add up to approx. 29,500 meters. The establishment of the infrastructure in question will be undertaken in line with other actions as to secure these actions implementation.

Reasons why this action is necessary:

This action is necessary to ensure access to all areas for implementation of action C1 to C7 and management purposes.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

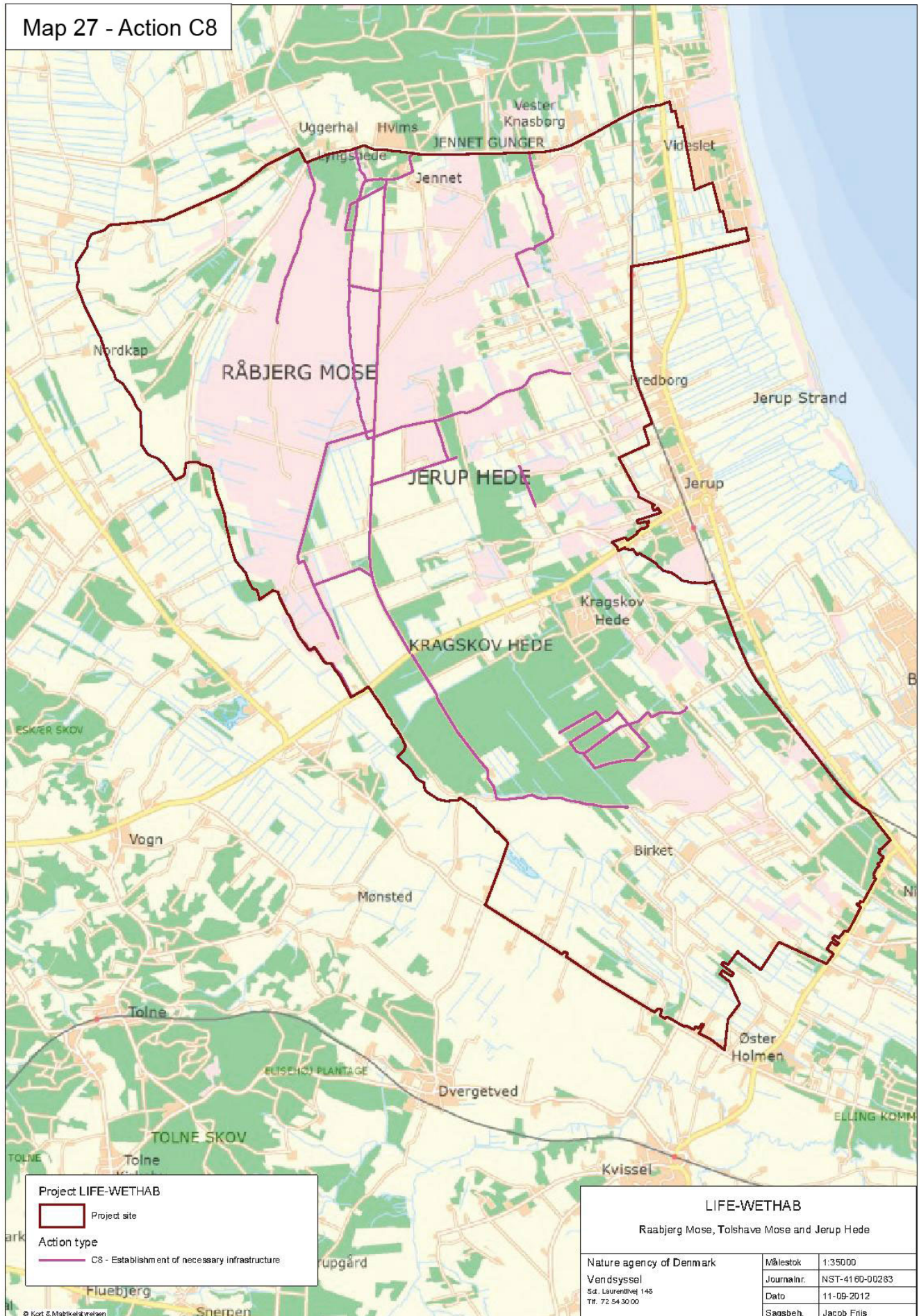
Expected results (quantitative information when possible):

The respected result of action C8 is that access to all areas for implementation of action C1 to C7 and management purposes will be provided.

How was the cost of the action estimated?:

NST regularly establish tracks in order to carry out clearings. The cost estimates of this action is based upon these experiences. The total allocation for this action is 77,403 Euro.

Name of the picture: MAP 27: Action C8



C. Concrete conservation actions

ACTION C.9: Culling of mink by trap

Description (what, how, where and when):

Many studies has shown that mink is a major treat to birds nesting on the ground. Especially for the low populations of targeted birds species predation by mink can have a devastating impact. Based on statistical surveys many mink is caught or shot every year in Municipality of Frederikshavn. The high population is mainly caused by large numbers of mink farms where escapees are unavoidable. Furthermore the environment in the municipality is suitable for wild minks which result in a high rate of reproduction.

Historically Denmark has had a big industry within small scale mink farming. Accidental releases has been frequent and the serious impact from mink on a number of species has often been debated in television, newspapers etc. There is a pronounced public awareness, that minks are a pest which can cause tremendous damage to nature habitats in line with rats in residential areas. The applicant doesn't consider there to be any risk of a negative public perception of the culling.

By implementing the restoration actions in the habitat area life conditions for a number of ground nesting birds are improved. However, if the population of mink is not reduces the population of birds will in best case only increase slowly. This is why a reduction of minks is crucial for the success of an overall improvement of the conditions for ground nesting birds.

Initially 15 mink traps will be bought and placed strategically throughout the habitat area. All aesthetical guidelines regarding animal welfare will be held (e.g. two daily inspections of the trap). It is also possible to apply permission to use instant culling by using traps on floating platforms with automatic culling and/or by sending SMS messages to the responsible person. In the municipality a regulatory corps consisting of local hunters will assist private landowners carrying out the regulations. Planning of the regulating will be undertaken by the regulatory corps, local hunter groups (Sporting Associations) and landowners. The project will be responsible for purchase of traps and facilitation of the regulation planning.

No systematically culling have ever been undertaken within the project site. The culling will start off in the very beginning of the project period and will continue periodically throughout the project period and beyond. Half the project period the culling will be financed by the project (from 01/08/2013 to 31/12/2015). The other half and beyond the beneficiaries will finance the culling without any cost for the Commission.

Other predators are also known to be present in the project area, Raccoon dogs (*Nyctereutes procyonoides*) being a fairly new predator in the project area. Studies have shown that it can course tremendous damage to ground nesting birds and amphibians. However, the population of raccoon dogs is still low and the issue is being targeted in LIFE09/NATSE/344 and will not be discussed any further in this project.

Red fox *Vulpes vulpes*, Hooded crow *Corvus cornix*, Eurasian magpie *Pica pica* and other predators of ground nesting birds are also present in the habitat area. However the populations of these predators are not considered a major threat to the ground nesting birds and as a starting point a direct effort to minimize the populations will not be made.

Reasons why this action is necessary:

This action is necessary to reduce the population of minks and thereby a direct improvement of conditions for ground nesting birds. The bird species in question are all the targeted: Wood Sandpiper *Tringa glareola*, Short-eared Owl *Asio flammeus* and Corncrake *Crex crex*.

The action is necessary to cope with threat no. 8: Predation. Please see description of this threat in section

B2.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is a reduction of the population of minks within the project area, thereby improving conditions for the recolonizing of *Tringa glareola* and *Asio flammues* and nesting of *Crex crex*

The action will thereby contribute to the total expected results for the bird species described in section B1.

How was the cost of the action estimated?:

The costs of this action is divided between consumables (purchase of mink traps) and personal cost of planning (project manager) and inspections of the traps. Totally this adds up to 5,392 Euro.

Note that the project only will finance the first half of the project period. The cost of culling in the other half will be covered by the beneficiaries.

D. Monitoring of the impact of the project actions

ACTION D.1: Monitoring of impact of targeted habitats and species

Description (what, how, where and when):

Monitoring of Habitats.

This project will combine the national monitoring in NOVANA described below with the necessary monitoring of other issues to document the effect of the actions of the project:

The mapping of habitats used for this proposal is from the period of 2004-2006.

The Danish mapping was formerly a part of the DEVANO programme now included in the NOVANA programme (National monitoring programme for water and nature). The mapping is both classifying the habitat and the status of condition by registration of various parameters as occurrence of plant species (including typical species), overgrowth, vegetation height, IAS etc.

A new mapping took place in 2010 - 2011, the data is though not yet final quality assured nor available. Due to national schedule next mapping will take place in 2017 - the second last year of this proposed project. If the mapping will be delayed or in other ways not be available at this time we will re-calculate the condition changing the parameters of overgrowth, vegetation heights, hydrology and invasive species in each managed unit of former mapped target habitats.

The Danish "Condition Assessment System" consist of a large number of variables with different weighting. All mapped "polygons" are classified in 5 classes, class 1 and 2 respond to favourable status of conservation and class 3-5 respond to unfavourable.

Additional to the mapping and/or re-calculating the status of conservation we will use NOVANA data of the specific monitoring of habitats within the area to analyse changes in frequency of typical plant species, though this parameter is more likely to change at a longer time scale. In this specific monitoring sub-programme frequency of plant species (including typical species) is monitored at a number of plots and chemical parameters as pH is measured. The sub-programme is not designed to give significant data on the specific sample sites but more as single samples that can be used to give the nation status. But combined data from the project's actions, the mapping of habitats and the specific monitoring of habitats it can give useful data in evaluation of the project.

The 10 sample sites in the project area are:

Sample site no. 0010. Habitat 4010. Yearly data 2004-2009 (40 plots), 2012 (10 plots).

Sample site no. 1048. Habitat 4010. Data 2006 (40 plots), 2012 (10 plots).

Sample site no. 1056. Habitat 4030. Data 2009 (29 plots), 2012 (10 plots).

Sample site no. 1058. Habitat 4030. Data 2009 (40 plots), 2012 (10 plots).

Sample site no. 4352. Habitat 2140*. Data 2012 (10 plots).

Sample site no. 4353. Habitat 2140*. Data 2012 (10 plots).

Sample site no. 4354. Habitat 2140*. Data 2012 (10 plots).

Sample site no. 4355. Habitat 2140. Data 2012 (10 plots).

Sample site no. 4323. Habitat 4030. Data 2012 (10 plots).

Sample site no. 4588. Habitat 6230*. Data 2012 (10 plots).

All 10 sample sites will be revisited in 2015 and 2018 (with 10 plots).

Water table will be measured by a new permanent tracker will in the NOVANA monitoring programme.

Issues not covered by NOVANA provided by this project is:

Area of enlarging the 7110* will be measured by area suitable for regeneration of raised bog.

Cover of Sphagnum. Measuring the cover of Sphagnum species yearly at 10 permanent plots in the Raabjerg Mose and dividing in "green" and "red" species.

Water levels will additional to the automatic NOVANA logger be measured at 10 spots after the blocking of ditches are completed.

Engagement. All cleared wood stands will be evaluated to the possible annex I habitat evolving, other managed areas with possible change of habitat type will also be evaluated; this will especially be relevant with hydrological changes and significant changes in grazing pressure.

Distribution of selected invasive alien plant species will be mapped at the start and end of the project. Control of invasive alien species will be monitored by plug samples of the different methods used.

Monitoring of Species

Marsh Fritillary *Euphydryas aurinia*

Marsh Fritillary *Euphydryas aurinia* is a butterfly known to show natural fluctuations in population size. It is also a species known to be dependent of a classic meta-population structure with sub-populations of various size and stability.

To evaluate dispersal it is important to locate flying imago butterfly in late May and early June. To estimate population size however counting larval web in August is the method most useful.

A yearly survey of larval webs in the project area. Some years covered by NOVANA some years covered by the project staff.

A yearly visit by project staff during the period with flying imago to estimate possible dispersal and the availability of flowering nectar plants.

Wood Sandpiper *Tringa glareola* and Short-eared Owl *Asio flammeus*.

Both of these bird species are presently extinct.

Measuring of suitable breeding area at end of the project. Measuring will be supplied with a description of the area and the elements (like: ponds, area free of trees and vegetation heights) that makes it suitable.

Presence of both species will be monitored in the last two years possible within the project period by visiting possible breeding ground in the optimal period.

Corncrake *Crex crex*.

In Denmark breeding Corncrake *Crex crex* is believed to arrive to the area medio or ultimo May, though an influx of young non-breeding males often arrives later in June or even July. It is therefore important to have an early survey of singing males in May to estimate breeding attempt. It is also important for proper management to map singing males later.

The May survey will often be at least two nights, since it is not possible to be certain about arrival date.

The project staff will undertake a survey. This must take place at night between 23-04h and in all 3-4 nights yearly is necessary.

Two cameras and two GPS machines are expected to be necessary to carry out monitoring. It must be emphasised, that if less electronic equipment is needed than foreseen - or equipment from other actions (e.g. F1) can be used - it will not be purchased.

Reasons why this action is necessary:

Monitoring is necessary to document and adjust actions taken.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

We expect to get the data necessary to document the expected results which is three singing male *Crex crex* in two sub areas and on suitable breeding area for both *Tringa glareola* and *Asio flammeus*.

How was the cost of the action estimated?:

The NST often participate in monitoring operations and estimated costs are based upon these experiences. The total cost of 51,244 Euro is distributed between personal costs (28,425 Euro), external assistance (20,134 Euro) and consumables (2,685 Euro).

D. Monitoring of the impact of the project actions

ACTION D.2: Assessment of the Socio-economic Impact and Ecosystem Restoration

Description (what, how, where and when):

The areas surrounding the project site is characterized by many small- and middle sized farms and a few small villages. Jerup, located east of project site with 634 inhabitants (2011), is the closest village.

The local communities can benefit in terms of increases in inhabitant numbers, accommodations (hotels/bed-and-breakfasts), horse rentals, employment (e.g. project staff and farms producing fodder and wintering) and revenue in local businesses in general. Also the production of timber and chips will have a socio-economic impact both locally and in a broader perspective. Many of the actions will be undertaken by local workers (contractors or employees of the beneficiaries) and especially during the project period enhanced activities in the local community can be expected, primarily related to the clearing of woodlands, increase in livestock numbers, the erection of fences and producing wintering fodder for the livestock, but also future maintenance of fences, awareness rising and environmental education (students and ecotourism).

Nature restoration is the central objective of this project and not a lot of resources within the project have been allocated to monitor the socio-economic impacts. The project will collect available information from other institutions and three key indicators will be followed;

1. Development in numbers of livestock (farming)

A state analysis of agriculture is carried out at least every fourth year by The Regional State administration. This analysis shows among others the development in stock numbers at a quite detailed scale (numbers of livestock on farm level). The development in the local farming industry can be monitored by measuring the development in livestock before, during and after the project (<http://www.jordbrugsanalyser.dk/webgis/kort.htm>)

2. Development in number of inhabitants (local community)

Danish Statistics conducts counting's of inhabitants. The development of inhabitants in the local community can this way be monitored.

3. Development in numbers of sleepovers (tourism)

Danish Statistics maintain a register of how many sleepovers the local hotels/bed-and-breakfasts accommodates on a "postal code" level. This way the development in tourism in the local community can be monitored.

It must be underlined that only a part of the projects activities will be reflected in socioeconomic issues in the local community. The project as a whole will have a broader impact. Assessment and monitoring will hopefully show the positive influence on the socioeconomic impact as the project gain pace while the impact on ecosystem restoration should be possible to pick up at the latter part of the project period and following.

Beside the monitoring described above the Project Manager will through out the project period keep accountings of e.g. employment of local workers.

The findings under this action will in consolidated form be part of the Final Report. Furthermore the project management will produce an annual overview to be included in the progress reports.

Reasons why this action is necessary:

Monitoring and assessment throughout the project phase is essential for future references and as a mean to demonstrate the benefits of the project to the community and others. It is also vitally important as a tool to guide the project / alter actions and methods applied throughout the project phase if needed.

Beneficiary responsible for implementation:

NST VSY

*Responsibilities in case several beneficiaries are implicated:**Expected results (quantitative information when possible):*

The expected result is that the assessment will demonstrate the benefits of the project to the community and others and that the results can be used in future references. It is also expected that the monitoring can be used as a tool to guide the project / alter actions and methods applied throughout the project phase if needed.

How was the cost of the action estimated?:

The Municipality of Frederikshavn will as mentioned monitor impact automatically and without cost to the project and likewise will the number of contracts drawn up be produced under the related actions, and at no direct cost under Action D2. However an allocation of 7,590 Euro is expected to the project manager to summarize results etc.

E. Public awareness and dissemination of results

ACTION E.1: Establishment of website on the Internet

Description (what, how, where and when):

The project will set up a website on the internet to promote and inform regarding the project, its progress and experiences. The website will present all relevant project information and material as well as the underlying considerations regarding the area, its designation and the planned nature conservations work.

The target audience is landowners, land managers, public bodies, universities / colleges, local community groups and other NGO's as well as people with a general interest in nature conservation and related topics. The site will furthermore contain information regarding Natura2000 including present links to other relevant sites and the EU LIFE+ program.

The site will be established during autumn 2013 by the Nature Agency and will run as a sub-site to the main site of the agency. The Nature Agency, Vendsyssel as well as Frederikshavn Municipality will also link to the site from their homepage.

The Natura2000 and LIFE+ logo will be mentioned in all documents as well as all audiovisual products.

Reasons why this action is necessary:

The website shall act as a vital tool to spread project information and results to all relevant target groups and individuals, being landowners, land managers, public bodies, universities / educational institutions, local community groups, NGOs' as well as people with a general interest in nature conservation and related topics. In a broader context the website shall increase awareness and understanding of the nature conservation issues.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The website will spread project information and results to all relevant target groups and individuals, being landowners, land managers, public bodies, universities / educational institutions, local community groups, NGOs' as well as people with a general interest in nature conservation and related topics. In a broader context the website shall increase awareness and understanding of the nature conservation issues. It is expected that a website of this character can reach approx. 100 "hits" (visitors) a day at the end of the project period.

How was the cost of the action estimated?:

Costs are estimated from earlier experiences of establishing a website. A totally allocation of 6,675 Euro is expected.

E. Public awareness and dissemination of results

ACTION E.2: Newsletter

Description (what, how, where and when):

The production of a quarterly newsletter to all landowners of the Landowners Association and other interested parties is an obvious way to disseminate news about the project. The newsletter will fully inform on all relevant subject related to the project and will be forwarded by e-mail or mail and also be available for downloading from the website.

Two short newsletters have at present been sent out to landowners, who have shown interest in the project (approx. 80). More newsletters will be composed when news of this application is received and ongoing. Newsletters will be sent out on a regular basis as from autumn 2013.

The Natura2000 and the LIFE+ logo will be mentioned in all documents as well as all audiovisual products.

Reasons why this action is necessary:

It is vitally important to establish and maintain a high level of information sharing with all participating persons (individual landowners) and groups (e.g. grazing communities) as to avoid misunderstandings and insecurity regarding the project, its management and its findings.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

To ensure a very high level of information to participating parties thereby increasing awareness, understanding and appreciation of the needed actions and management input leading to better individual management regimes, thereby benefitting overall conservation of habitats and species at the island. The newsletter will be available on a quarterly basis throughout the project period (and following). It is expected that all most landowner of the habitat area and other who have interest in project will receive the newsletter. This will add up to approx. 500 recipients per release.

How was the cost of the action estimated?:

Costs are estimated from earlier experiences of releasing newsletters. A totally allocation of 11,076 Euro is expected.

E. Public awareness and dissemination of results

ACTION E.3: Provision of information tables

Description (what, how, where and when):

Provide 8 information tables at strategic points of access covering the project site, see MAP 28 Action E3. The tables will contain information regarding the project, Natura2000, EU Life+, the habitats and species and the related nature conservation measures and activities.

The tables will furthermore inform visitors about “code of best practices” regarding access and behavior in the area. Each information table will describe the LIFE+ instrument, the support given and how the project helps establish the Natura2000 network. The Natura2000 and LIFE+ logo will be mentioned in all documents.

It is vitally important to promote the project and the project background to a wider audience as to secure a general understanding and furthermore avoid unnecessary disturbance to existing and potential habitats. The tables will be in Danish with a short summary in English.

Disturbance by humans and dog on lead is being managed by guidance through the tables providing general information about habitats and species plus a “code of best practice”.

Reasons why this action is necessary:

It is necessary that visitors have a possibility on site to get information about the project area and the conservations acts. Furthermore it is important as to secure that visitors are guided in a manner avoiding inappropriate consequences to habitats, species and livestock.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The provision of eight information tables. It is expected that people will get information on site about the project area and the conservations acts. Furthermore it is expected that visitors are guided in a manner avoiding inappropriate consequences to habitats, species and livestock.

How was the cost of the action estimated?:

Costs are estimated from earlier experiences of providing information tables. A totally allocation of 10,459 Euro is expected.

Name of the picture: MAP 28: Action E3



E. Public awareness and dissemination of results

ACTION E.4: Leaflets explaining the project and best practice

Description (what, how, where and when):

Production of a leaflet providing information regarding the project, Natura2000, EU LIFE+, the habitats and species and the related nature conservation measures and activities.

The leaflet will furthermore inform visitors about “code of best practices” regarding access and behavior in the area.

The leaflet will be in Danish with a short summary in English. The Natura2000 and LIFE+ logo will be shown.

The leaflet will be available at tourist offices, Frederikshavn Municipality, at the NST district office in Skagen and other neighboring NST district offices. The leaflet will furthermore be available by smart phones through a QR-code.

Furthermore a leaflet targeted landowner with information of best practice of management areas with Corncrake *Crex crex* and Marsh Fritillary *Euphydryas aurina* will be created.

Reasons why this action is necessary:

It is important to promote the project and the project background to a wider audience as to secure a general understanding. Furthermore it can reduce disturbance to existing and potential habitats and targeted species by humans and dogs in leash by guidance through the leaflet providing general information about habitats and species plus a “code of best practice”.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

A deliverable of 2000 leaflets. It is expected that the leaflet can promote the project and the project background to a wider audience as to secure a general understanding. Furthermore it is expected that it can reduce disturbance to existing and potential habitats and targeted species by humans and dogs on lead by guidance through the leaflet providing general information about habitats and species plus a “code of best practice”.

How was the cost of the action estimated?:

Costs are estimated from earlier experiences of making leaflets. A totally allocation of 4,754 Euro is expected.

E. Public awareness and dissemination of results

ACTION E.5: Layman's report

Description (what, how, where and when):

A Layman's report will be produced at the end of the project period to present the projects experiences to all landowners, land managers and other participants in the project directly as well as wider audience via the website. The report will be published in Danish as well as English.

The Natura2000 and LIFE+ logo will be mentioned in all documents as well as all audiovisual products.

The report should be a concise (max. 10 pages) and non scientific report covering all aspects of the project. The report should also include links to relevant homepages.

The Layman's report will be accessible on the internet. Furthermore a paper addition will be sent to relevant NGO, universities, nature conservation manager and others who might be interested. A 100 paper editions will be produced.

Reasons why this action is necessary:

It is important to inform regarding the projects findings in a popular manner to all involved or having an interest in nature conservation of light demanding habitats - in this case especially wet habitats - and related species.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

It is expected that all landowners or others having an interest in nature conservation of light demanding habitats is informed regarding the projects findings in a popular manner. There will be produced 100 pieces of a paper edition and the report will be accessible on the internet.

How was the cost of the action estimated?:

Costs are estimated from earlier experiences of making a Layman's report. A totally allocation of 2,599 Euro is expected.

E. Public awareness and dissemination of results

ACTION E.6: Report on control of invasive species

Description (what, how, where and when):

Reports will be produced at the end of the project period to present the projects experiences regarding the control and eradication of invasive species. As a minimum the report will contain information regarding *Prunus serotina* and *Amelanchier spicata*.

The reports will present the problems related to the two species and include a description of methods applied / tested and the results gained throughout the project.

The report will be conducted in partnership with University of Copenhagen, Forest & Landscape. The report will be published in Danish as well as English at project end and distributed directly via the project website, as well as the applicants own websites. Furthermore NST will secure that all relevant persons / bodies of their network, having an interest in the subject, will be informed regarding the report. Whether the report should be published and distributed in printed form must be decided upon at project end. The applicants are presently convinced that making the report available via the WEB is the most effective - both in terms of reaching a wider audience and in terms of cost.

The Natura2000 and LIFE+ logo will be mentioned in all documents as well as all audiovisual products.

It is essential to inform about the projects findings regarding these invasive species to all involved in nature conservation management of light demanding habitats as they are causing substantial environmental problems all over Europe.

It is indeed the applicants hope that the project - in close co-operation - with the University of Copenhagen are able to develop new or customized methods which can be used by a wide group of land managers in Denmark and abroad.

It is also important to secure that the projects findings are widely disseminated as present control methods quite often include the use of herbicides with a number of substantial negative side effects. The target audience is land managers from public and private institutions working with nature conservation management, landowners, universities / educational institutions, NGOs´ and specialists in Denmark and abroad.

Reasons why this action is necessary:

It is necessary to produce a concise report, covering all aspects of the control and eradication of *Prunus serotina* and *Amelanchier spicata* plus methods applied / tested and the result gained. The aim is to deliver an effective, practical, cost effective, non chemical and environmentally balanced method / methods combating *Prunus serotina* and *Amelanchier spicata*. If so achieved, the work will have great influence in a broad numbers of locations in Denmark and abroad.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is to produce a concise report, covering all aspects of the control and eradication of *Prunus serotina* and *Amelanchier canadensis* plus methods applied / tested and the result gained. The aim is to deliver an effective, practical, cost effective, non chemical and environmentally balanced method / methods combating *Prunus serotina* and *Amelanchier spicata*. If so achieved, the work will have great influence regarding land management on a substantial numbers of locations in Denmark and abroad. The report will of also give an overview of all invasive species controlled, the distribution before and after.

How was the cost of the action estimated?:

Costs are estimated from earlier experiences of making report on invasive species. A totally allocation of 7,376 Euro is expected.

E. Public awareness and dissemination of results

ACTION E.7: Final seminar

Description (what, how, where and when):

A seminar with land managers, nature management staff from Danish municipalities, local and central units of the Nature Agency, scientific specialist, NGOs´ and representatives from related industries where the methods and preliminary results of the project will be presented and discussed. The seminar will be held in the second half of 2018.

Participation of approx 60-80 professionals and specialists including 1-2 lectures from other countries. In addition a number of site managers from projects with similar objectives and habitats will be invited to participate.

The Natura2000 and LIFE+ logo will be mentioned in all documents as well as all audiovisual products.

A final seminar is important to compare results and experiences in Denmark and other European countries. The workshop will focus on disseminating ideas and knowledge on restoration and management of the involved habitats obtained during implementation of the project. The target audience is staff from public and private institutions working with nature conservation management, NGOs´ and specialists.

Reasons why this action is necessary:

It is necessary in order to exchange experiences in restoration and management between scientific institutions and land managers. Beside agenda, various papers and power point presentations produced by the project management for the final seminar (and during the project) it is assumed that a number of individuals participating will offer abstracts regarding own experiences related to subjects covered by the project. All material submitted / produced as part of the final seminar will be made available at the project homepage and distributed to the relevant network.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

A participation of 60-80 professionals and specialists. The expected result is the exchange of experiences in restoration and management between scientific institutions and land managers. Beside agenda, various papers and power point presentations produced by the project management for the final seminar (and during the project) it is assumed that a number of individuals participating will offer abstracts regarding own experiences related to subjects covered by the project. All material submitted / produced as part of the final seminar will be made available at the project homepage and distributed to the relevant network.

How was the cost of the action estimated?:

Accommodating at least 50 people for two days and preparations will cost approx 9,309 Euro. This is divided between consumables (10,067 Euro), personal costs (7,229 Euro) and external assistance (2,013 Euro).

F. Overall project operation and monitoring of the project progress

ACTION F.1: Project Management

Description (what, how, where and when):

The Nature Agency (NST) has the overall responsibility for the project. This includes the overall project administration, co-ordination and implementation of activities in all phases of the project. The project comprises actions within Natura2000 SAC DK00FX342 and SPA DK00FX006, involving NST-VSY (as coordinating beneficiary), Frederikshavn Municipality and The State Prison of Kragshovhede (both as associated beneficiaries). The management structure is described below and illustrated in Appendix 3.

A Project Steering Committee will be established consisting of the Head Forester from NST VSY, Head of Office from the Municipality and Head Inspector from the State Prison of Kragshovhede. The Steering Committee secures the coordination and the project progress by frequent and close contact to the project manager by mail and phone. Furthermore the Steering Committee will meet, personally, at least once a year. In addition to these meetings the steering Committee will meet virtual on video conferences, depending on needs. The project manager will be present at meetings in the Steering Committee.

The implementation and administration of all actions will be the responsibility of the Project Work Group who will refer to the Steering Committee. The Project Work Group will consist of a project manager (the workload is estimated as full time employment), an employee from the Municipality (approx. half time employment) and an employee from the State Prison (engaged in the project approx one month a year in average). All members of the Project Work Group will keep a close dialog and meet in person at least once a month.

The project manager employed and specifically seconded to the project by the Nature Agency is located at the NST-Vendsyssel unit. The project manager is in charge of the overall activities in all phases of the project. The project manager is also responsible of the project reporting including the compulsory delivery of

- An inception report within the first 9 month of the project period.
- A mid-term report to give a status of achievements (and compulsory for the mid-term pre-financing).
- A final report as to sum up all project achievements and experiences. To be delivered within three months following project end.

The project manager is also responsible of all financial issues, including all financial accounting, financial analysis of the actions, financial reporting and annually budgeting including budgetary control.

A Project Advisory board, consisting of experts on different aspects of nature restoration will be appointed to give their advice to the Project Steering Committee on project implementation. The board consists of professionals from;

- University of Copenhagen (KU) – regarding grazing, invasive species and habitat types
- Birdlife Denmark (DOF) – regarding bird habitats etc.
- Institute of Bioscience, University of Aarhus – regarding Marsh Fritillary

It should be stressed that the landowner association and individually landowners with insight in local conditions also will function as an advisory board to the project.

The project staff will consist of machine operators and workers. The Project Work Group will supervise and instruct the daily operation throughout the project area. This applies for both project staff and contractors.

A clerk will – as needs occur - be available to the working group regarding accounting, payroll and assist the project manager in making financial reporting. In general professionals employed by NST and Frederikshavn Municipality can be made available to the working group if specific requirements arise.

An audit carried out by an independent auditor nominated by the coordinating beneficiary in accordance with

article 32 in Common Provision is included in this action. The financial part of the application includes an expense earmarked for the auditor report. The amount is listed under "External assistance". NST can use the National Audit Office at "no costs", why no costs are charged to the project.

Reasons why this action is necessary:

The project management is essential for the control, administration and implementation of all other activities in the project. A well-managed project is the key to successful operations and implementation of the project as a whole.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is successful administration, operations and implementation of the project as a whole. The expected result is furthermore publication of all project material including the inception report, the progress reports and the final report.

How was the cost of the action estimated?:

The overall project management including e.g. composing of reports, budget management, coordination of actions, contact and coordination with the associating beneficiaries and authorities. A total cost of 262,120 Euro is estimated the main part being personal costs (233,663 Euro).

Of durable goods the following will be purchased; One computer, one printer, one camera, one laminator machine and one GPS. The total price of these objects is estimated to € 6,712.

The travel costs is estimated to € 11,024. The costs are estimated this way;

In the project period the project manager will drive from Skagen to the project site 220 times with an average driving of 80 km. $80 \text{ km} \times 220 \text{ trips} \times € 0.537 = € 9,451$

Academic employees from NST are going to the project site from Skagen 16 times. $16 \text{ km} \times 80 \text{ km} \times € 0,537 = 687 €$

Academic employees from the Municipality will go to the project site from Frederikshavn (30 km) 55 times. $30 \text{ km} \times 55 \text{ trips} \times € 0.537 = € 886$

F. Overall project operation and monitoring of the project progress

ACTION F.2: Management of the Landowner association

Description (what, how, where and when):

The Landowner association will be established to secure a continuous coordination and management of the habitat area. This being both during the project period and beyond in close dialog with the Municipality (the relevant authority). Throughout the project period the project workgroup must assist, facilitate and supervise the association and sub-groups. Many issues and landowners are involved which requires frequent meetings to facilitate, to inform, to debate and to make agreements/contracts.

The Landowner Association shall encourage all landowners to join the voluntary association (and subgroups). To promote memberships expenses of managing the association will be covered by the project in the project period. The project will, besides providing assistance, make sure all necessary expert knowledge is available to the association and sub-groups, this being particularly important for the two main issues of this project - grazing / mowing and nature conservation.

As a vital part of the ongoing co-operation between the project partners and the landowners association, meetings as well as site excursion for participating landowners will be conducted to inform on activities and management input through practical examples during the project period and following. The meetings / excursions will be under the leadership of the partners and should take place at quarterly frequency, although depending on actual activities.

These meetings / excursions will start in the autumn of 2013 and are seen as vitally important to give all participating landowners a chance to gain experience from the project as well as exchange knowledge with other participants. It is likewise equally important for the project management to gain experience from the landowners, of which many carry a tremendous experience in land management and livestock husbandry.

The fact that the area covered by the project is owned by 554 individuals, coherent management is considered impossible unless all individual is brought to a common understanding. This action (together with A2) is in reality the key to success or failure of the sustainability of the long-term conservation of the habitat area. This is why great effort must be applied throughout the establishment phase of the landowner association and sub-groups.

It must be stressed, that the outcome of action A2 will determine the final managerial structure of the landowner association and sub-groups.

Reasons why this action is necessary:

This action is necessary to secure a long term sustainable management regime capable of conducting appropriate sustainable management in the project period and beyond. It should be achieved in a manner securing a sustainable position for the association as well as their members. The latter is of outmost importance as to secure future membership and a united, positive, attitude towards the setup as a whole.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is a long term sustainable management regime capable of conducting appropriate sustainable management in the project period and beyond. It should be achieved in a manner securing a sustainable and healthy financial position for the association as well as their members. The latter is of outmost importance as to secure future membership and a united, positive, attitude towards the setup as a whole.

How was the cost of the action estimated?:

The cost of managing the Landowner association is estimated to a total of 64,527 Euro. This includes personal costs (43,507 Euro), consumables (20,134 Euro) and travel expenses (886 Euro). The estimates is based on earlier experiences of holding meetings, talking to landowners etc.

It is estimated that landowner meeting requiring large meeting rooms (with a price of € 142.80) will be held in average once a month throughout the project period. $60 \text{ meetings} * € 142.80 = € 8,568$.

In between smaller meetings requiring small meeting rooms will be held two times a month. $120 \text{ meetings} * € 71.40 = € 8,568$

€ 2,998 is be allocated to buy one computer and one projector which is necessary to carry out and facilitate meetings.

The travel expenses where calculated this way; Academic employees from the Municipality will go to the project site from Frederikshavn 55 times. $30 \text{ km} * 55 \text{ trips} * € 0.537 = € 886$

F. Overall project operation and monitoring of the project progress

ACTION F.3: Overall project monitoring and monitoring of project progress

Description (what, how, where and when):

Careful project monitoring will be carried out throughout the project period to ensure satisfactory deliveries. The results of the project monitoring will be reported in the activity reports. It is of outermost importance that the project in a highly professional manner maintains focus and stride to deliver all actions as per the timetable set.

The monitoring will be based on “monitoring indicators” and “sources of verification”, e.g. as follows:

Monitoring indicator (Source of verification in brackets)

Planning of overall project activities (Implementation, milestones, timetable and ongoing adjustments)

Landowners Association established (Association statutes)

Interest groups established (Minutes and election of office bearers)

Ongoing progress regarding all planned actions - A, C, D and E (Data collection in GIS systems, spreadsheets, financial reports etc.)

Website (Availability on the internet)

Leaflets (Available as per time target)

Information tables (Available as per time target)

Report invasive species (Available as per time target)

Final seminar & publications (Implemented as per time target)

After LIFE plan (Implemented as per time target)

Activity reports throughout the project (As a minimum updated a report once a quarter)

The initial work, regarding all A-actions, is of paramount importance to the projects survival and timetable.

Any deviation or delay from the set targets / timetable must be met by the project management instantly.

Reasons why this action is necessary:

Monitoring shall secure the successful operation and implementation of the project including alterations to actions and methods if needed and following consultation with the LIFE organization. In project management it is importance to measure and document the project results on a regular basis so that progress can be monitored by the project board and others.

Beneficiary responsible for implementation:

NST VSY

*Responsibilities in case several beneficiaries are implicated:**Expected results (quantitative information when possible):*

The expected result of project monitoring and monitoring of project progress is to secure the successful operation and implementation of the project including alterations to actions and methods if needed and following consultation with the LIFE organization. In project management it is importance to measure and document the project results on a regular basis so that progress can be monitored by the project board and others. So, the overall expected result is the implementation of all deliveries (actions) of this chapter.

How was the cost of the action estimated?:

A total allocation of 23,898 Euro is expected allocated to the overall project monitoring, all personal costs.

Name of the picture: MAP 28: Action E3



F. Overall project operation and monitoring of the project progress

ACTION F.4: Networking with other projects

Description (what, how, where and when):

This action will ensure the exchange and dissemination of experience by networking with other projects.

This includes:

1. Participation in 'LIFE platform meetings'. These meetings are annual meetings between participants in Danish and Swedish LIFE projects with the aim to exchange and disseminate experiences with LIFE projects.
2. Participation in a Danish ERFA group consisting of representatives from Danish LIFE projects.
3. Visiting other LIFE projects related to the management of light demanding habitats and related species. Especially three other LIFE-project in progress will be closely followed, more specifically Life LAESOE (NAT/DK/000893), Life Lille Vildmose (NAT/DK/000102) and Life Aurinia NAT/DE/0000010.

Networking will take place throughout the project period of 2013 - 2018.

Reasons why this action is necessary:

It is necessary in order to ensure the exchange of experience regarding conducting and managing LIFE+ projects plus the exchange of project results between LIFE+ projects and others.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The expected result is exchange of experience regarding conducting and managing LIFE+ projects plus the exchange of project results between LIFE+ projects and others. It is expected that the Project Manager, the Manager of the Municipality and a NST academic employee will take two trips of 3 days to project outside Denmark. Beside visits to LIFE-projects within Denmark will be carried out continuously.

How was the cost of the action estimated?:

A total sum of 26,175 Euro is allocated for networking with other projects. To trips of three days with three participants is the main expense. Personal costs are 21,343 Euro and travel costs are 4,832 Euro.

The travel costs are estimated this way;

The rate is estimated to € 268 per person per day including travel expenses. 3 persons on two three-days trips which adds up to totally 18 days. $18 \text{ day} \times \text{€ } 268 = \text{€ } 4,824$

F. Overall project operation and monitoring of the project progress

ACTION F.5: After-LIFE Conservation Plan

Description (what, how, where and when):

An After-LIFE report will be produced as a separate chapter of the final report. The plan will set out how future management of the project sites will be continued. The long term management of the sites is although already assured with the adoption of the Act on Environmental Objective requiring a Natura2000 plan for all Natura2000 sites.

The After-LIFE Conservation plan will – on the basis of the Natura2000 plans and the experience gained during project implementation – give details regarding what actions will be carried out, their timing and the responsibilities for carrying out such actions together with a description of the sources of financing.

The report and its recommendations must be concise and based on broader points of (local) view regarding the sustainable management of the areas as to secure its long term success.

Reasons why this action is necessary:

An After-LIFE Conservation plan is essential to secure the long term sustainability of the project. A report (3-5 pages in Danish) will be produced to be included in the Final Report.

Beneficiary responsible for implementation:

NST VSY

Responsibilities in case several beneficiaries are implicated:

Expected results (quantitative information when possible):

The After-LIFE Conservation plan will be produced to secure the long term sustainability of the project and the report (3-5 pages in Danish) will be included in the Final Report.

The report and its recommendations must be concise and based on broader points of (local) view regarding the sustainable management of the areas as to secure its long term success.

How was the cost of the action estimated?:

DELIVERABLE PRODUCTS OF THE PROJECT

Name of the Deliverable	Number of the associated action	Deadline
A website established to disseminate results and provide information	E 1	01/10/2013
The production of a quarterly newsletter to all landowners	E 2	01/10/2013
An inception report	F 1	01/04/2014
Report on monitoring 2014	D 1	31/12/2014
A leaflet explaining the project in general.	E 4	01/04/2015
Provision of eight information tables	E 3	01/04/2015
Report on monitoring 2015	D 1	31/12/2015
A mid-term report to give a status of achievements	F 1	01/06/2016
Report on monitoring 2016	D 1	31/12/2016
Report on monitoring 2017	D 1	31/12/2017
A Corncrake and Marsh Fritillary leaflet released	E 4	01/01/2018
Report on control of invasive species	E 6	01/05/2018
A final report as to sum up all project achievements and experiences	F 1	30/06/2018
An After-LIFE Conservation Plan	F 5	30/06/2018
Monitoring report of impact of the project actions	D 2	30/06/2018
Overall report on monitoring to be included in the final report	D 1	30/06/2018
The publication of a Layman's report	E 5	30/06/2018

MILESTONES OF THE PROJECT

Name of the Milestone	Number of the associated action	Deadline
Contract made with consultancy to implement hydrological survey	A 1	01/08/2013
Networking with other projects	F 4	01/08/2013

Purchase of traps and initiation of culling	C 9	01/08/2013
1st newsletter prepared	E 2	01/10/2013
A well established project management setup	F 1	01/10/2013
Launch of a website on the Internet	E 1	01/10/2013
The establishment of a Landowner Association	A 2	01/10/2013
Preliminary contact to all relevant authorities regarding timetables and possible difficulties in obtaining permissions	A 3	01/11/2013
First mapping of IAS distribution ended	C 3	01/12/2013
Initiating the establishment and first Annual General Meeting (AGM) of the landowner association	F 2	01/12/2013
An overall monitoring plan prepared	D 1	01/01/2014
Contact regarding systematic exchange of knowledge established to at least three other Life+ projects	F 4	01/01/2014
First permissions granted by relevant public agencies	A 3	01/01/2014
Identification of hydrological problems as well as actions to be implemented	A 1	01/01/2014
First assembling (AGM´s) in interest groups	F 2	01/02/2014
Regular meetings and excursions regarding issues of the sub-groups	F 2	01/03/2014
Identification of plots to be relevant for acquisition	B 1	01/05/2014
Initiating establishment of necessary infrastructure	C 8	01/05/2014
Initiation of clearing of invasive and non-native species	C 3	01/05/2014
Participation in the first a Danish ERFA group	F 4	01/08/2014
Participation in the first 'LIFE platform meetings'	F 4	01/08/2014
Permanent Sphagnum-plots established	D 1	01/10/2014
Partial clearing of woodlands, 100% of the total area (189 hectares)	C 2	31/12/2014
The first mapping of invasive alien species	D 1	01/01/2015
Provision of information tables	E 3	01/04/2015

Purchase of 25 robust cattle to be distributed among grazing units	C 6	01/04/2015
Purchase of property rights completed	B 2	01/05/2015
The preparation of a leaflet explaining the project	E 4	30/06/2015
Procurement of land plots completed	B 1	01/08/2015
Excursions to at least three other LIFE+ projects to exchange knowledge	F 4	01/01/2016
Removal of all non native species	C 3	01/01/2016
Purchase of additionally 25 robust cattle to be distributed among grazing units	C 6	01/04/2016
Establishment of necessary infrastructure, 100 % (29,462 meters)	C 8	01/05/2016
Clearing of new growth as a response to the seed pool in the ground	C 1	01/02/2018
Clearing of woodlands, 100% of the total area (730 hectares)	C 1	01/02/2018
Enclosures and mowing activities on 100% of total area (787 hectares)	C 5	01/02/2018
Filling/blocking of drains and ditches, 100% (3800 meters filled in and 148 blockings established)	C 7	01/02/2018
The preparation of a leaflet regarding Corncrake and Marsh Fritillary	E 4	01/02/2018
Controlled burning at 100% of the total area (154 hectares)	C 4	01/04/2018
19th and last newspaper prepared by project	E 2	01/05/2018
All monitoring done by end of project	D 1	01/06/2018
At least 75% of all landowners are members of the association	F 2	30/06/2018
Completion of networking with other projects (concluded by final seminar)	F 4	30/06/2018
Final seminar	E 7	30/06/2018
Removal of the majority of populations of invasive species and a strong weakening of remaining populations	C 3	30/06/2018

ACTIVITY REPORTS FORESEEN

Please indicate the deadlines for the following reports:

- Inception Report (to be delivered within 9 months after the project start);
- Progress Reports n°1, n°2 etc. (if any; to ensure that the delay between consecutive reports does not exceed 18 months);
- Mid-term Report with payment request (only for project longer than 24 months)
- Final Report with payment request (to be delivered within 3 months after the end of the project)

Type of report	Deadline
Inception report	30/03/2014
Progress report	15/05/2015
Midterm report	30/06/2016
Progress report	15/08/2017
Final report	30/09/2018

TIMETABLE

Action		2013				2014				2015				2016				2017				2018					
Action number	Name of the action	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV		
A. Preparatory actions, elaboration of management plans and/or of action plans:																											
A.1	Hydrological Survey			■	■																						
A.2	Establishment of a Landowner Association			■																							
A.3	Application for permits to carry out conservation actions			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■							
B. Purchase/lease of land and/or compensation payments for use rights:																											
B.1	Land purchase			■	■	■	■	■	■	■	■	■															
B.2	Purchase of property rights			■	■	■	■	■	■	■	■																
C. Concrete conservation actions:																											
C.1	Clearing of woodlands								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C.2	Partial clearing of woodlands					■	■	■	■																		
C.3	Clearing of invasive and non native species				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C.4	Controlled burning									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C.5	Grazing and mowing									■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C.6	Establishment of a cattle herd									■	■	■	■	■													
C.7	Restoration of hydrology								■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
C.8	Establishment of necessary infrastructure						■	■	■	■	■	■	■	■	■												
C.9	Culling of mink by trap			■	■	■	■	■	■	■	■	■	■														
D. Monitoring of the impact of the project actions:																											
D.1	Monitoring of impact of targeted habitats and species			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
D.2	Assessment of the Socio-economic Impact and Ecosystem Restoration					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
E. Public awareness and dissemination of results:																											
E.1	Establishment of website on the Internet			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
E.2	Newsletter			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
E.3	Provision of information tables					■	■	■	■																		
E.4	Leaflets explaining the project and best practice						■	■	■	■								■	■	■	■						
E.5	Layman´s report																				■	■	■				
E.6	Report on control of invasive species																				■	■	■	■			



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FINANCIAL APPLICATION FORMS

Part F – financial information

Budget breakdown cost categories	Total cost in €	Eligible Cost in €	% of total eligible costs
1. Personnel		912,446	34.33 %
2. Travel and subsistence		17,369	0.65 %
3. External assistance		929,417	34.97 %
4. Durable goods			
4.a Infrastructure	34,603	34,603	1.30 %
4.b Equipment	79,509	79,509	2.99 %
4.c Prototype	Not applicable		
5. Land purchase / long-term lease /one-off compensation payments		273,411	10.29 %
6. Consumables		254,836	9.59 %
7. Other Costs		0	0.00 %
8. Overheads		155,969	5.87 %
TOTAL	2,657,560	2,657,560	100 %

Contribution breakdown	In €	% of TOTAL	% of total eligible costs
Requested EU contribution	1,328,780	50.00 %	50.00 %
Coordinating Beneficiary's contribution	681,997	25.66 %	
Associated Beneficiaries' contribution	646,783	24.34 %	
Co-financiers contribution	0	0.00 %	
TOTAL	2,657,560	100.00 %	

Cost category in Euro									
Project action	1. Personnel	2. Travel	3. External assistance	4.a Infra-structure	4.b Equipment	5. Land	6. Consumables	7. Other	TOTAL
A1 Hydrological Survey	5,109	0	46,980	0	0	0	0	0	52,089
A2 Establishment of a Landowner Association	30,915	644	1,342	0	0	0	2,856	0	35,757
A3 Application for permits to carry out conservation actions	10,652	0	0	0	0	0	0	0	10,652
B1 Land purchase	3,990	0	0	0	0	138,247	0	0	142,237
B2 Purchase of property rights	4,129	0	0	0	0	135,164	0	0	139,293
C1 Clearing of woodlands	60,294	0	665,697	0	33,557	0	20,134	0	779,682

C2 Partial clearing of woodlands	36,657	0	1,576	0	0	0	0	0	38,233
C3 Clearing of invasive and non native species	194,755	0	4,209	0	0	0	21,506	0	220,470
C4 Controlled burning	93,099	0	0	0	0	0	16,934	0	110,033
C5 Grazing and mowing	50,814	0	103,526	0	0	0	117,209	0	271,549
C6 Establishment of a cattle herd	3,860	0	2,013	0	33,557	0	0	0	39,430
C7 Restoration of hydrology	22,366	0	28,665	0	0	0	39,262	0	90,293
C8 Establishment of necessary infrastructure	8,197	0	34,603	34,603	0	0	0	0	77,403
C9 Culling of mink by trap	1,197	0	2,517	0	0	0	1,678	0	5,392

D1 Monitoring of impact of targeted habitats and species	28,425	0	20,134	0	2,685	0	0	0	51,244
D2 Assessment of the Socio-economic Impact and Ecosystem Restoration	7,590	0	0	0	0	0	0	0	7,590
E1 Establishment of website on the Internet	3,990	0	2,685	0	0	0	0	0	6,675
E2 Newsletter	7,720	0	2,685	0	0	0	0	0	10,405
E3 Provision of information tables	1,197	0	1,208	0	0	0	8,054	0	10,459
E4 Leaflets explaining the project and best practice	2,741	0	1,342	0	0	0	0	0	4,083
E5 Layman´s report	1,995	0	604	0	0	0	0	0	2,599
E6 Report on control of invasive species	3,114	0	3,591	0	0	0	0	0	6,705

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E7 Final seminar	7,229	0	2,013	0	0	0	10,067	0	19,309
F1 Project Management	233,663	11,007	4,027	0	6,712	0	0	0	255,409
F2 Management of the Landowner association	43,507	886	0	0	2,998	0	17,136	0	64,527
F3 Overall project monitoring and monitoring of project progress	23,898	0	0	0	0	0	0	0	23,898
F4 Networking with other projects	21,343	4,832	0	0	0	0	0	0	26,175
F5 After-LIFE Conservation Plan	0	0	0	0	0	0	0	0	0
Overheads									155,969
TOTAL	912,446	17,369	929,417	34,603	79,509	273,411	254,836	0	2,657,560

Coordinating Beneficiary's contribution				
Country code	Beneficiary short name	Total costs of the actions in € (including overheads)	Beneficiary's own contribution in €	Amount of EU contribution requested in €
DK	NST VSY	1,363,994	681,997	681,997

Associated Beneficiaries' contribution				
Country code	Beneficiary short name	Total costs of the actions in € (including overheads)	Associated beneficiary's own contribution in €	Amount of EU contribution requested in €
DK	FK	1,226,066	613,033	613,033
DK	KSH	67,500	33,750	33,750
TOTAL Associated Beneficiaries		1,293,566	646,783	646,783

TOTAL All Beneficiaries		2,657,560	1,328,780	1,328,780
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Co-financiers contribution	
Co-financier's name	Amount of co-financing in €
TOTAL	0

Direct Personnel costs

				Calculation =>	A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)	
NST VSY	A 1	Temporary staff specifically hired for this project	Project Manager	399	10	3,990	
NST VSY	A 2	Temporary staff specifically hired for this project	Project Manager	399	27	10,773	
NST VSY	A 3	Temporary staff specifically hired for this project	Project Manager	399	8	3,192	
NST VSY	B 1	Temporary staff specifically hired for this project	Project Manager	399	10	3,990	
NST VSY	B 2	Temporary staff specifically hired for this project	Project Manager	399	1	399	
NST VSY	C 1	Temporary staff specifically hired for this project	Project Manager	399	81	32,319	
NST VSY	C 2	Temporary staff specifically hired for this project	Project Manager	399	47	18,753	
NST VSY	C 3	Temporary staff specifically hired for this project	Project Manager	399	14	5,586	
NST VSY	C 4	Permanent staff or civil servant	Forest Worker, NST	293	253	74,129	
NST VSY	C 4	Temporary staff specifically hired for this project	Project Manager	399	41	16,359	
NST VSY	C 5	Temporary staff specifically hired for this project	Project Manager	399	20	7,980	
NST VSY	C 6	Temporary staff specifically hired for this project	Project Manager	399	5	1,995	

Direct Personnel costs

				Calculation =>	A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)	
NST VSY	C 7	Temporary staff specifically hired for this project	Project Manager	399	33	13,167	
NST VSY	C 8	Temporary staff specifically hired for this project	Project Manager	399	14	5,586	
NST VSY	C 9	Temporary staff specifically hired for this project	Project Manager	399	3	1,197	
NST VSY	D 1	Temporary staff specifically hired for this project	Project Manager	399	25	9,975	
NST VSY	D 1	Permanent staff or civil servant	Academic Employee, NST	365	25	9,125	
NST VSY	D 2	Temporary staff specifically hired for this project	Project Manager	399	5	1,995	
NST VSY	E 1	Temporary staff specifically hired for this project	Project Manager	399	10	3,990	
NST VSY	E 2	Temporary staff specifically hired for this project	Project Manager	399	10	3,990	
NST VSY	E 3	Temporary staff specifically hired for this project	Project Manager	399	3	1,197	
NST VSY	E 4	Temporary staff specifically hired for this project	Project Manager	399	5	1,995	
NST VSY	E 5	Temporary staff specifically hired for this project	Project Manager	399	5	1,995	
NST VSY	E 6	Temporary staff specifically hired for this project	Project Manager	399	5	1,995	

Direct Personnel costs

				Calculation =>	A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)	
NST VSY	E 7	Temporary staff specifically hired for this project	Project Manager	399	7	2,793	
NST VSY	E 7	Permanent staff or civil servant	Academic Employee, NST	365	5	1,825	
NST VSY	F 1	Permanent staff or civil servant	Academic Employee, NST	365	7	2,555	
NST VSY	F 1	Permanent staff or civil servant	Head Forester, NST	466	7	3,262	
NST VSY	F 1	Temporary staff specifically hired for this project	Project Manager	399	500	199,500	
NST VSY	F 2	Temporary staff specifically hired for this project	Project Manager	399	34	13,566	
NST VSY	F 2	Permanent staff or civil servant	Academic Employee, NST	365	34	12,410	
NST VSY	F 3	Permanent staff or civil servant	Academic Employee, NST	365	14	5,110	
NST VSY	F 3	Permanent staff or civil servant	Project Manager	399	34	13,566	
NST VSY	F 4	Permanent staff or civil servant	Academic Employee, NST	365	7	2,555	
NST VSY	F 4	Temporary staff specifically hired for this project	Project Manager	399	34	13,566	
FK	A 1	Permanent staff or civil servant	Manager, Municipality	373	3	1,119	
FK	A 2	Permanent staff or civil servant	Manager, Municipality	373	54	20,142	
FK	A 3	Permanent staff or civil servant	Manager, Municipality	373	20	7,460	
FK	B 2	Permanent staff or civil servant	Manager, Municipality	373	10	3,730	
FK	C 1	Permanent staff or civil servant	Manager, Municipality	373	34	12,682	

Direct Personnel costs

				Calculation =>	A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)	
FK	C 2	Permanent staff or civil servant	Manager, Municipality	373	14	5,222	
FK	C 3	Permanent staff or civil servant	Worker, Municipality	244	627	152,988	
FK	C 3	Permanent staff or civil servant	Manager, Municipality	373	81	30,213	
FK	C 4	Permanent staff or civil servant	Manager, Municipality	373	7	2,611	
FK	C 5	Permanent staff or civil servant	Manager, Municipality	373	54	20,142	
FK	C 5	Permanent staff or civil servant	Worker, Municipality	244	93	22,692	
FK	C 6	Permanent staff or civil servant	Manager, Municipality	373	5	1,865	
FK	C 7	Permanent staff or civil servant	Worker, Municipality	244	27	6,588	
FK	C 7	Permanent staff or civil servant	Manager, Municipality	373	7	2,611	
FK	C 8	Permanent staff or civil servant	Manager, Municipality	373	7	2,611	
FK	D 1	Permanent staff or civil servant	Manager, Municipality	373	25	9,325	
FK	D 2	Permanent staff or civil servant	Manager, Municipality	373	15	5,595	
FK	E 2	Permanent staff or civil servant	Manager, Municipality	373	10	3,730	
FK	E 4	Permanent staff or civil servant	Manager, Municipality	373	2	746	
FK	E 6	Permanent staff or civil servant	Manager, Municipality	373	3	1,119	
FK	E 7	Permanent staff or civil servant	Manager, Municipality	373	7	2,611	
FK	F 1	Permanent staff or civil servant	Manager, Municipality	373	68	25,364	
FK	F 1	Permanent staff or civil servant	Technical Director, Municipality	426	7	2,982	

Direct Personnel costs

Calculation =>				A	B	A x B
Beneficiary short name	Action number	Type of contract	Category/Role in the project	Daily rate (rounded to the nearest €)	Number of person-days	Direct personnel costs (€)
FK	F 2	Permanent staff or civil servant	Manager, Municipality	373	47	17,531
FK	F 3	Permanent staff or civil servant	Manager, Municipality	373	14	5,222
FK	F 4	Permanent staff or civil servant	Manager, Municipality	373	14	5,222
KSH	C 1	Permanent staff or civil servant	Manager, Stateprison of Kragsskovhede	373	41	15,293
KSH	C 2	Permanent staff or civil servant	Manager, Stateprison of Kragsskovhede	373	34	12,682
KSH	C 3	Permanent staff or civil servant	Manager, Stateprison of Kragsskovhede	373	16	5,968
TOTAL =>					2,689	912,446

Travel and subsistence costs

				Calculation =>	A	B	A + B
Beneficiary short name	Action number	Destination (From / To)	Outside EU (YES / NO)	Purpose of travel/number of trips and persons travelling, duration of trip (in days)	Travel costs (€)	Subsistence costs (€)	Total travel and subsistence costs (€)
NST VSY	A 2	Jerup	No	Meetings of establishing a landowner association. Project manager. 1-day trips 10 times of 60 km per trip (rate of € 0,537 per km)	322	0	322
NST VSY	F 1	The project site	No	Project management. Project Manager. 1-day trips 220 times of 80 km per trip (rate of € 0,537 per km)	9,450	0	9,450
NST VSY	F 1	The project site	No	Project management. Academic employee, NST. 1-day trips 16 times of 80 km per trip (rate of € 0,537 per km)	671	0	671
NST VSY	F 4	Other LIFE projects within EU	No	Networking. Project manager, Municipality manager and NST academic employee. 2 travels of 3 days. Totally 18 days of € 268 per day	4,832	0	4,832
FK	A 2	Jerup	No	Meetings of establishing a landowner association. Manager, Municipality. 1-day trips 20 times of 30 km per trip (rate of € 0,537 per km)	322	0	322
FK	F 1	The project site	No	Project management. Manager, Municipality. 1-day trips 55 times of 30 km per trip (rate of € 0,537 per km)	886	0	886
FK	F 2	The project site	No	Management of the landowner association. Manager, Municipality. 1-day trips 55 times of 30 km per trip (rate of € 0,537 per km)	886	0	886
TOTAL =>					17,369	0	17,369

External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs (€)
NST VSY	C 1	Estimated costs of hiring contractors. Approx. 15 separated contracts will be subject to limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary in order to clear woodlands. Contractors will be hired to clear woodlands both with machinery and manpower. The contracts will be designed with guidance from specialist within this field.	451,980
NST VSY	C 9	Estimated costs of hiring a contractor. No public tender is necessary.	Expenses of setting and inspecting traps. This will be carried out by locals e.g. landowners and/or hunters.	2,517
NST VSY	D 1	Expenses of external assistance of monitoring. 2-4 contracts will be subject to limited public tender (in compliance with rules regarding the interval € 3,356 - € 13,423).	Necessary in order to monitor the impact of targeted habitats and species. This will be carried out by specialists on this field.	20,134
NST VSY	E 1	Expenses of external assistance (setting up website). No public tender is necessary.	Necessary to get the website up and running. This will be carried out by specialists on this field.	2,685
NST VSY	E 2	Expenses of external assistance. The purchase can be carried out in regular terms.	Necessary to emmit a Newsletter. Expenses will cover editing, setting up layout and printing.	2,685
NST VSY	E 3	Expenses of external assistance. No public tender is necessary.	Necessary to putting up information tables. Expenses will cover editing, setting up layout and printing.	1,208
NST VSY	E 4	Expenses of external assistance. No public tender is necessary.	Necessary to emmit a leaflet. Expenses will cover editing, setting up layout and printing.	1,342
NST VSY	E 5	Expenses of external assistance. The purchase can be undertaken in regular terms.	Necessary to publish the Layman´s report. Expenses will cover editing, setting up layout and printing.	604

External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs (€)
NST VSY	E 6	Expenses of external assistance. One contract will be the subject to limited public tender (in compliance with rules regarding the interval € 3,356 - € 13,423).	Necessary to emit a report on control of invasive species. Expenses will cover editing, setting up layout and printing.	3,591
NST VSY	E 7	Fee of external presentations of relevant issues. No public tender is necessary.	Necessary in order to hold a final seminar. The presentations will be carried out by specialists within the different issues.	2,013
NST VSY	F 1	Expenses of external audit. One contract will be subject of limited public tender (in compliance with rules regarding the interval € 3,356 - € 13,423).	Necessary to compose an auditor report. This will be carried out by specialists on this field.	4,027
FK	A 1	Expenses of hydrological survey performed by consultancy. One contract will be subject to limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary to map hydrological status and actions to rectify. This will be carried out by specialists on this field.	46,980
FK	A 2	Expenses of legal advise in the construction of the landowner association. No public tender is necessary.	Necessary to establish a sustainable construction of the association. This will be carried out by specialists on this field.	1,342
FK	C 1	Estimated costs of hiring a contractor. Contracts will be subject to limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary in order to clear woodlands. Contractors will be hired to clear woodlands both with machinery and manpower.	180,160
FK	C 2	Estimated costs of hiring a contractor. Contracts will be subject to limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary in order to carry out a partial clearing. Contractors will be hired to clear woodlands both with machinery and manpower.	1,576

External assistance costs

Beneficiary short name	Action number	Procedure	Description	Costs (€)
FK	C 3	Estimated costs of hiring a contractor. One contract will be the subject to limited public tender (€ 3,356 - € 13,423).	Clearing of the non-native species. Contractors will be hired to clear woodlands both with machinery and manpower.	4,209
FK	C 5	Estimated costs of hiring a contractor. Contracts will be subject to limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	One time mulching/mowing of areas in question to prepare further management. This will be undertaken by contractors.	103,526
FK	C 6	Expenses of legal advise regarding ownership-structure of cattle purchased by project. No public tender is necessary.	Necessary in order keep an ongoing management using a cattle herd. This will be carried out by specialists within legal advise.	2,013
FK	C 7	Estimated costs of hiring a contractor. One contract will be put forward by limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary in order to restore natural hydrology. This will be carried out by specialists on this field.	28,665
FK	C 8	Estimated costs of hiring a contractor. One contract will be put forward by limited public tendering (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary to carry out other conservation initiatives. This will be carried out by contractors with skills of establishing and restoring tracks.	34,603
KSH	C 1	Estimated costs of hiring a contractor. Contracts will be subject to limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Necessary in order to clear woodlands. Contractors will be hired to clear woodlands both with machinery and manpower.	33,557
TOTAL =>				929,417

Durable goods: Infrastructure costs

Beneficiary short name	Action number	Procedure	Description	Actual cost (€)	Depreciation (eligible cost) (€)
FK	C 8	Estimated cost of track material. Approx. four contracts will be subject to limited public tender (in compliance with rules regarding the interval € 3,356 - € 13,423).	Necessary in order to establish tracks to implement actions. The track material will consist of natural materials such as gravel and pebbles.	34,603	34,603
TOTAL =>				34,603	34,603

Durable goods: equipment costs

Beneficiary short name	Action number	Procedure	Description	Actual cost (€)	Depreciation (eligible cost) (€)
NST VSY	D 1	Purchase of two cameras and two GPS machines. No public tender is necessary.	Necessary to carry out monitoring. Academic employees will use the equipment to implement the monitoring.	2,685	2,685
NST VSY	F 1	Purchase of one computer, one camera, one laminator and one GPS machine. The single object does not exceed € 3,356, so no public tender is necessary.	Necessary to carry out project management by the project staff	6,712	6,712
NST VSY	F 2	Purchase of one computer and one projector. No public tender is necessary.	Necessary in order to manage the landowner association by the project staff	2,998	2,998
FK	C 1	Purchase of an argocat. One purchase will be undertaken by limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101)	Necessary in order to clearfell wet and difficult accessible areas	33,557	33,557
FK	C 6	Expenses of buying 50 cattle. 3-4 purchases will be undertaken by limited public tender (either in compliance with rules regarding the interval from € 3,356 - € 13,423 or € 13,423 - € 67,101)	Necessary in reaching the needed number of cattle and as demonstration of live stock management.	33,557	33,557
TOTAL =>				79,509	79,509

Land purchase or long-term lease of land / use rights

				Calculation =>	A	B	C	(A x B) + C
Beneficiary short name	Action number	land purchase / long-term lease / one-off compensation	Description	Estimated cost per hectare (rounded to the nearest €)	Area (hectares)	Associated charges (€)	Expected cost (€)	
NST VSY	B 1	Land purchase	Purchase of land in order to secure coherent management	6,711	20.00	4,027	138,247	
FK	B 2	One off compensation	One-off compensations in order to avoid recultivation and use of pesticides	5,369	24.80	2,013	135,164	
TOTAL =>						6,040	273,411	

Consumables

Beneficiary short name	Action number	Procedure	Description	Costs (€)
NST VSY	A 2	Rental of meeting rooms. It is anticipated that 20 meetings will be held at a cost of € 142.8 for room rental per meeting	To facilitate and enhance the formation of a landowner association it is necessary with meeting rooms close to the landowners (in Jerup).	2,856
NST VSY	C 1	Estimated cost of fuel, repairs and other consumables of the argocat. The single consumable does not exceed € 3,356, so no public tender is necessary.	An argocat is necessary in order to clearfell wet areas. To implement these project objectives fuel and maintainance is a necessity.	20,134
NST VSY	C 4	Purchase of burning fire suits, fire initiators, mobile water tanks, ect. The single consumable does not exceed € 3,356 so purchases can be undertaken in regular terms (no public tender is necessary).	To implement controlled burning fire equipments is a necessity both in regard to safety and to undertake the burning.	16,934
NST VSY	C 7	Purchase of bungs and adjustable weirs. One purchase will be undertaken by limited public tender (in compliance with rules regarding the interval € 13,423 - € 67,101).	Equipment in order to stop ditches which is necessary to reach the hydrological restoration.	39,262
NST VSY	C 9	Purchase of mink traps. No public tender is necessary.	Equipment in order to catch minks	1,678
NST VSY	E 3	Expenses for misc. materials of information tables. Purchases can be undertaken in regular terms.	Materials in order to manufacture the information tables	8,054

Consumables

Beneficiary short name	Action numbe	Procedure	Description	Costs (€)
NST VSY	E 7	Estimated expences of consumption and misc. material. The siminar consists of several different costs and hence the single cost does not exceed € 3,356, so no public tender is necessary.	Expenses of the final seminar, where results and experiences will be shared and discussed.	10,067
NST VSY	F 2	Rental of meeting rooms. 60 meetings in big meeting rooms (€ 142.80) and 120 meetings in a small meeting rooms (€ 71.40).	Necessary in order to manage the landowner association. To secure the participation of landowners it is necessary with meeting near the project site (in Jerup).	17,136
FK	C 3	Purchase of termal heat equiptment, folio ground cover ect. The equipment consists of several different costs and hence the single cost does not exceed € 3,356, so no public tender is necessary.	Necessary in order to eradicate invasive species and secure that the C3 action will succeed.	21,506
FK	C 5	Purchases of fences, poles, power stations ect by limited public tender in compliance with rules regarding both the interval of € 3,356 - € 13,423 and € 13,423 - € 67,101. Approx 10 purchases.	Necessary to establish enclosures and all adjacent equipment to implement grazing on the areas in question.	117,209
TOTAL =>				254,836

Overheads

Beneficiary short name	Total direct costs of the project in €	Overhead amount (€)
FK	1,017,723	73,179
KSH	67,500	0
NST VSY	1,142,957	82,790
	2,228,180	155,969

Proposal attachments				
			Included?	
Attachment title	Attachment type	Yes	No	
public body declaration	public body declaration			
Appendix 3 Management Chart	other document			
Appendix 1 Organizational Chart of the Landowner association	other document			
Appendix 2 Area distributions	other document			