

GENERAL DESCRIPTION OF THE SITE

Name: Klinteskoven (H150)

Total site surface area (ha): 1000 NUTS region code: DK006

Project site surface area (ha): 80

SPA¹ ⊕ **NATURA 2000 Code**: DK006X090 Community protection status:

pSCI

NATURA 2000 Code: DK006X090

Other protection status:

The site is included in Special Protected Area according to the Birds Directive, Site DK006X090. Klinteskoven (F90).

Partly protected under the general provision for nature types of the Act on Nature Conservation (§ 3);

Specific protection measures according to a Conservation Order of 18 nov. 1983 (reg.nr. 282202) apply to the site

Scientific description of site:

The site Klinteskoven is situated on the Høje Møn, a huge chalk formation with cliffs rising up to 100 meters above the Baltic Sea bordering the site on a stretch of 7 km. The site is dominated by large deciduous forests surrounded by dry grasslands and arable land with scattered smaller lakes or ponds, fens and moors. The dominant forest stands are beech including some very valuable areas with grazed forest.

Site Klinteskoven contains two of the most outstanding areas of dry grasslands, that is Jydelejet and Høvblege both within the project site. The underlying chalk formations are everywhere close to the surface or at surface. This has made it very difficult to use the areas as arable fields. Throughout centuries the two areas has been used as commons for grazing and for collection of firewood. This management together with the physical features - chalky hills - has formed the basis of an outstanding diverse vegetation including many species of rare orchids some of which has their only populations in Denmark at this site. After seizure of the traditional management in the last century the areas gradually became threatened with overgrowth, plantations of non-native coniferous tree species were established and at some areas fertilisers were applied to improve grazing value.

Importance of the site for the conservation of the species/habitat types targeted at regional, national and EU level (give quantifiable information wherever possible):

Site Klinteskoven is one of the most important sites for 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) in Denmark. The site host many rare species. Some has their only occurrence in Denmark at this site. The site is outstandig at an european level and for its importance for the conservation of the biological diversity in Denmark.

¹ SPA= special protected area pSCI= potential sites for community interest



MAP OF THE SITE OR SITES

The map or, where relevant, maps, at a scale of 1:100.000 (or more precise if necessary).

They must show the following information:

- for Member States the boundaries of the area proposed by the Member State under the Habitats Directive or classified under the Birds Directive. Always verify with the competent national authorities, that the boundaries you have are the official one for the sites targeted
- for 2004 accession countries and candidate countries the boundaries of the protected area
- the boundaries of the project area
- the location of the principal actions listed in section C of the form
- This map can be presented on a format larger than A4, if necessary.

Map no:

- 7.1: Project area and pSCI.
- 7.2: Current distribution of targeted habitats.
- 7.3: Ownership.
- 7.4: Location of management and restoration.
- 7.5: Areas grazed; currently and foreseen at end of project.

THESE MAPS ARE CONSIDERED AS BEING AN ESSENTIAL PART OF THE APPLICATION.

THEY MUST BE OF GOOD QUALITY, SHOWING THE SCALE, AND CONTAIN ALL THE REQUISITE INFORMATION LISTED ABOVE.



HABITATS DIRECTIVE ANNEX I {AND BERN CONVENTION RESOLUTION N $^\circ$ 4 (1996)} HABITAT TYPES PRESENT IN THE SITE AND DIRECTLY TARGETED BY THE PROJECT

<u>Priority</u>?: Tick if the habitat type is a priority one according to Annex I of the Habitats

Directive.

<u>Code</u>: Use only the NATURA 2000 codes (for habitats only listed in the Bern

Convention resolution use the corresponding code)

Name of the habitat type according to the Habitats Directive (or the Bern

Convention resolution).

<u>%</u>: % cover of the habitat type over the whole project site.

Priority	Code	Name	%	Comments (conservation status,etc.)
DIRECTL	Y TARG	ETED HABITATS DIRECTIV	E ANNEX	(I HABITAT TYPES
X	6120	* Xeric sand calcareous grasslands	< 1*	Cover: 0,3 ha Representativity: B, Relative surface: C, Conservation status: C, Global assessment: B <i>Inside project area 0 ha</i> .
X	6210	Semi-natural dry grass- lands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	10*	Cover: 100 ha Representativity: A, Relative surface: B, Conservation status: A, Global assessment: A <i>Inside project area 22 ha</i> .
X	6230	* Species-rich Nardus grasslands, on silicious substrates in mountain ar- eas (and submountain ar- eas in Continental Europe)	< 1*	Cover: 8,7 ha Representativity: C, Relative surface: C. Conservation status:B, Global assessment: C <i>Inside project area 0 ha</i> .
		INTRIES: DIRECTLY TARGE ENTION RESOLUTION N° 4		BITAT TYPESACCORDING TO

^{*} The percentages given is relative to the *total* area of the pSCI. Information of the FFH representation inside the project area is listed in the "comments" column.



HABITATS DIRECTIVE ANNEX II {AND BERN CONVENTION RESOLUTION N $^\circ$ 6 (1998)} SPECIES PRESENT IN THE SITE AND DIRECTLY TARGETED BY THE PROJECT

G: GROUP: M=Mammals, A=Amphibians, R=Reptiles, F= Fish, I=Invertebrates, P=Plants

Priority ?: Tick if the species is a priority one according to Annex II of the Habitats
Directive

	DIRECT	LY TARGET	ED HABITAT	S DIRECTIVE AN	INEX II SPECIES	
	Priority	SCIENTIFIC	POPULATION SIZE FOR THE SITE (quantitative estimates)			
G		NAME	RESIDENT	MÍGRATORY		
		(IN LATIN)		BREEDING	WINTERING	STAGING
_						
C,	ANDIDATE	COUNTRIES	: DIRECTLY	TARGETED SPE	CIESACCORDIN	<u> G ТО</u>
Con	nments (cor	nservation sta	tus if known,	other listed specie	es that will benefit	,etc):



BIRDS DIRECTIVE ANNEX I {OR BERN CONVENTION RESOLUTION N° 6 (1998)} SPECIES PRESENT IN THE SITE AND DIRECTLY TARGETED BY THE PROJECT

Priority: Tick if the species is a "priority for funding under LIFE" according to the ORNIS Committee (see list in Annex 2 of this brochure).

SCIENTIFIC POPULATION SIZE FOR THE SITE (quantitative estimates)						
Priority	NAME	RESIDENT MIGRATORY				
	(IN LATIN)		BREEDING	WINTERING	STAGING	
DIRECTLY TARGETED ANNEX I SPECIES OF THE BIRDS DIRECTIVE						
CANDIATE COUNTRIES: DIRECTLY TARGETED SPECIESACCORDING TO THE BERN CONVENTION RESOLUTION N° 6 (1998)						
OTHER MIGRATORY SPECIES DIRECTLY TARGETED BY THE PROJECT						
Comments (conservation status if known, other listed species that will benefit etc):						



MAIN THREATS TO THE HABITATS/SPECIES TARGETED WITHIN THE SITES INVOLVED IN THE PROJECT

Threat 1:

Name of the threat:

Lack of grazing or inappropriate grazing regimes.

Description:

Traditional husbandry grazing has almost ceased in dry grasslands in Denmark. Most semi-natural grassland fragments are less attractive for grazing as they represent small distant places with relatively high cost of fencing and water supply for the livestock. On dry grasslands with lack of grazing or insufficient grazing pressure an overgrowth will take place, initially with tall grasses and herbal species invading from nearby areas including non-native species but also an initial overgrowth with scrubs and trees such as *Rosa sp.*, *Prunus spinosa* and *Abies alba*.

The microclimate will change resulting in unfavourable changes to the composition of the plant community and especially to the abundance of key plant species as well as insect species associated with the vegetation of open dry grassland. Summer grazing at a very high grazing pressure may be detrimental too. Although it may help controlling for potentially dominant herbs and grasses, this will often be at the expense of sensitive plant species and invertebrate species depending on flowering vegetation.

Location: (if relevant)

Impact on habitat/species (quantify if possible)
Grazing are needed for 14 ha of dry grassland at this site

Threat 2:

Name of the threat:

Encroachment with woody species (shrubs and trees)

Description:

As a result of the influence of threat 1 'Lack of grazing or insufficient grazing pressure' overgrowth with shrubs and trees over a maximum acceptable threshold have taken place. As a consequence of reduced grass cover, grazing has ceased completely and a succession towards closed forest proceeds rapidly.

Overgrowth has been categorised into four degrees of overgrowth:

Overgrowth degree I: 5-25% cover of shrubs and trees
Overgrowth degree II: 25-50% cover of shrubs and trees
Overgrowth degree III: 50-75% cover of shrubs and trees
Overgrowth degree IV: > 75% cover of shrubs and trees

Location (if relevant)

The location of areas with overgrowth is shown on the site map



Impact on habitat/species (quantify if possible):

Impact on at this site from overgrowth:

Overgrowth degree I: 1 ha
Overgrowth degree II: 9 ha
Overgrowth degree III: 6 ha
Overgrowth degree IV: 11 ha

Threat 3:

Name of the threat:

Invasion of non-native woody species into grassland vegetation, deriving from plantations or naturalised populations adjacent to areas of dry grassland

Description:

Throughout the country and especially on land less favourable for intensive agricultural use (i.e. dry grassland, heath-land or infertile sandy soils) plantations mostly consisting of non-native coniferous tree species have been established through the last 50-100 years. The plantations were established with the purpose of providing shelter for game species, protection from strong winds and shifting sand and to a lesser degree for timber and wood production.

These plantations are a permanent source of seeds from non-native tree species that due to their location is a permanent threat to nearby dry grasslands. In addition, a number of invasive woody species have been particularly successful invaders of dry grassland localities, most notably *Sarothamnus scoparius* and *Rosa rugosa*, but also, on calcareous soils, *Berberis vulgaris*.

Location: (if relevant)

The location of plantations to be removed is shown on the site map

Impact on habitat/species (quantify if possible)

Plantations of non-native tree species of the size 11 ha located adjacent to the dry grassland.

Threat 4:

Name of the threat:

Fragmentation of dry grasslands

Description:

In Denmark remnant patches with natural and semi-natural dry grasslands habitats are mostly located as long narrow strips on the slopes of river valleys, along the coast or on hill ridges. This characteristic has made dry grasslands especially vulnerable to fragmentation caused by conversion of segments hereof into arable land, use for plantations, unintended loss of fertilizer or pesticides from adjacent rotational fields or intensification of the use for grazing by application of fertilizers and/or pesticides.

Fragmentation causes one ore more of the following effects:

Populations of characteristic species (key species) becomes smaller and are in risk or local extinction

Re-colonisation of locally extinct species is prevented by increased distance to the closest remnant population.

The unfavourable borderline/area ratio gives rise to greater impact from adjacent areas of arable land where pesticides and fertilisers are applied.





The dispersal of seeds by grazing animals becomes restricted as the movement of these animals becomes more and more restricted.

Location: (if relevant)

The location of areas to be restored into dry grassland are shown on the site map

Impact on habitat/species (quantify if possible):

Former dry grassland located adjacent to the dry grassland habitat areas.

11 ha of presently plantation.

Threat 5:

Name of the threat:

Low or no support for the conservation of dry grassland among landowners and the public

Description:

There is among landowners and their professional organisations as well as among the public in general a low level of understanding of the crucial importance of the unique qualities of dry grasslands. That goes both for their characteristics as habitat types as well as for their contribution to the conservation of biodiversity in Denmark and Europe. Dry grasslands does not have such spectacular appearances as other habitat types, and there is thus a need for promotion of the assets of dry grasslands among landowners and in the local communities in order to gain support for their conservation.

Location: (if relevant)

Not relevant

Impact on habitat/species (quantify if possible):

The future protection of dry grassland habitats in Denmark will depend to a large degree on the cooperation between nature managers, experts and local landowners. The valuable grassland area is divided on a very large number of small remnant grassland fragments, and conservation efforts can thus not be focused in a few large reserves. The limited knowledge basis of local landowners is considered a serious constraint to a successful future conservation of grassland habitats.

Threat 6:

Name of the threat:

Insufficient management capacity

Description:

There are shortcomings in the capacity of staff of the counties nature conservation departments responsible for managing privately owned land and of the state forest districts of the Danish Forest and Nature Agency responsible for government owned land concerning management of dry grasslands. There is a need for training in the range of adequate management techniques and up-to-date knowledge on the latest research results as well as an exchange of experience between managers.

Location: (if relevant)

National level



Impact on habitat/species (quantify if possible):

Insufficient capacity concerning management methods will lead to delays in implementation of adequate conservation measures and possibly introduction of inappropriate management measures.

Threat 7:

Name of the threat:

Adverse impacts from visitors (tourists)

Description:

At sites known to be visited by large number of people, either local or tourists, due to their natural beauty or proximity to mayor tourist attractions, deterioration is a threat to the favourable conservation status. Potential conflicts with visitors and grazing cattle, sheep or horses and the wear and tear from visitors might de-motivate farmers from providing livestock for an appropriate grazing of the grasslands or from entering into management agreements at all.

Location: (if relevant)

The subsites Jydelejet and Høvblege receive altogether a very large number of visitors each year.

Impact on habitat/species (quantify if possible):

Large number of tourists will damage the sensitive vegetation by the tear imposed by their movements on the ground. Key plant species may be subject of illegal picking. Litter will be thrown. Grazing will not be optimal.

Threat 8:

Name of the threat:

Habitat quality for the population of *Maculinea arion* at site Klinteskoven

Description:

Maculinea arion requires the presence of significant populations of *Thymus pulegioides* and *Origanum vulgare* for feeding and in addition significant populations (inhabited anthills) of *Myrmica sabuleti* as this species is host to the larva and pupae of *Maculinea arion*. *Maculinea arion* has a very restricted home range and is not able to migrate over longer distances. These characteristics of its biology make the species extremely vulnerable to management affecting the quality of its habitat and to fragmentation of its habitats.

Location: (if relevant)

Site Klinteskoven, subsites Høvblege and Jydelejet

Impact on habitat/species (quantify if possible): The species is in risk of extinction from Denmark.



Threat 9:

Name of the threat:

Isolation of the population of *Maculinea arion* at subsite Høvblege in site Klinteskoven Description:

The only remnant population of the Annex IV butterfly species *Maculinea arion* in Denmark has its habitat at the dry grasslands (6210) of the locality Høvblege situated in the southern part of the pSCI Klinteskoven. The present populations size is approx 100-300 specimens

Maculinea arion has a very restricted home range and is not able to migrate over longer distances. This characteristic of its biology make the species extremely vulnerable to fragmentation of its habitats.

Until 1986 a population of *Maculinea arion* existed at the subsite Jydelejet within the site Klinteskoven.

Location: (if relevant)

Site Klinteskoven, subsites Høvblege and Jydelejet

Impact on habitat/species (quantify if possible): The species is in risk of extinction from Denmark.



PREVIOUS CONSERVATION EFFORTS ON THE SITES IN QUESTION

As for all areas under the management of State forest districts a general management plan exists for the site giving general directions for the management.

The subsite Høvblege (78 ha) was bought by the Danish Forest and Nature Agency in 1992 and extensive clearings and mowing were initiated.

The populations of rare orchids are being monitored.

Agreements with tenants on grazing of the existing dry grasslands has been made and in addition mowing of the larger herbal vegetation takes place as does clearing of some of the overgrowth with bushes and trees.

THE SOCIO-ECONOMIC CONTEXT OF THE PROJECT

The project area is government owned land managed by the Danish Forest and Nature Agency.

The local Falster forest district has regular consultations with local municipalities, NGO's and landowner's organisations in an Advisory Board concerning the management of all areas under its responsibility. The Advisory Board will be consulted during implementation of the project.

The action C.1 (removal of plantation) on the area 'Havrelukke' will require a dispensation relative to the provisions of the Conservation Order of 18. November 1983. The dispensation will have to be granted from the independent Regional Nature Conservation Board. Furthermore the implementation of the action will require an amendment of the overall Management Plan by the Director General of Danish Forest and Nature Agency.

RELATION BETWEEN THE PROPOSAL AND OTHER EU FUNDS

See Form 26 Complementary of other EU Funds



GENERAL DESCRIPTION OF THE SPECIES TARGETED

Name of the species:
Ecology of the species:
General distribution of the species at European and national level and population trends:
Size of the population target by the project (e.g. n° of individuals, % of European and/or national population):
Main threats to the population targeted:
Threat 1:
Name of the threat:
Description:
Impact on species:
Threat 2
Etc.
Conservation measures already taken or proposed for the species at Community or national level :



PROJECT AREA AND SOCIO-ECONOMIC CONTEXT

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Brief description of the project area:	
Socio-economic context:	
Relation between the proposal and other EU funds	