

**GENERAL DESCRIPTION OF THE SITE****Name** : Svanninge Bakker, (H240)**Total site surface area (ha):** 125 **NUTS region code:** DK008
Project site surface area (ha): 125**Community protection status:** SPA¹ ○ **NATURA 2000 Code:**
pSCI ⊕ **NATURA 2000 Code** : DK008X327**Other protection status:**

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 2 December 1953 apply to parts of the site.

Scientific description of site :

Svanninge Bakker (Svanninge Hills) is a lateral moraine. After the formation of the moraine melt water has covered the area with sand and gravel. In the 19th century the area was primarily covered with dry grasslands and extensive farmed fields.

Afforestation converted large areas into coniferous plantations, but centrally in the site remained a larger complex of open areas, some of which has the characteristics of habitat type 6230*. The dry grasslands hold a vegetation of a considerable species diversity, which provides the basis for numerous insect species. In addition all known Danish reptile species are present in the site.

Today Svanninge Bakker consist partly of open spaces with solitary trees and partly of woodland. Parts of the open areas are grazed by sheep, goats and cattle.

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

The Svanninge Bakker site holds approx 32 ha of dry grasslands all together including a considerable proportion of the priority habitat type 6230*.

The implementation of this project on the areas managed by Danish Forest and Nature Agency and the County of Fyn will result in the restoration of the largest combined complex of dry grassland and heath land in the County of Fyn. The site will become a core area for the priority habitat type 6230* with the largest area of this habitat type in the county of Fyn. The site will thus contribute significantly to the geographical coverage of this habitat type in Denmark and support the overall coherence of the NATURA 2000 network for this habitat type at a biogeographical level.

Svanninge Bakker was in the 19th century one of the most important Danish habitats for insect fauna, but afforestation and unfavourable changes in management practices resulted in the disappearance of many rare species of butterflies. Parts of Svanninge Bakker are still important on a national scale from an entomological point of view as it still holds a diverse and rare fauna of insects.

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 APPLI-
CATION.

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° 4 (1996)} HABITAT TYPES PRESENT IN THE SITE AND DIRECTLY TARGETED BY THE PROJECT

- Priority ? :** *Tick if the habitat type is a priority one according to Annex I of the Habitats Directive.*
- Code :** *Use only the NATURA 2000 codes (for habitats only listed in the Bern Convention resolution use the corresponding code)*
- Name :** *Name of the habitat type according to the Habitats Directive (or the Bern Convention resolution).*
- % :** *% cover of the habitat type over the whole project site.*

Priority	Code	Name	%	Comments (conservation status, etc.)
DIRECTLY TARGETED HABITATS DIRECTIVE ANNEX I HABITAT TYPES				
	6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites)	< 1*	Cover: 1 ha Representativity: C Relative surface: C Conservation status: A Global assessment: C Inside project area 0 ha.
X	6230	* Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Europe)	8*	Cover: 10 ha Representativity: B Relative surface: C Conservation status: C Global assessment: B Inside project area 18 ha.
CANDIDATE COUNTRIES: DIRECTLY TARGETED HABITAT TYPES ACCORDING TO THE BERN CONVENTION RESOLUTION N° 4 (1996)				

* 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° 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*

DIRECTLY TARGETED HABITATS DIRECTIVE ANNEX II SPECIES						
G	Priority	SCIENTIFIC NAME (IN LATIN)	POPULATION SIZE FOR THE SITE (quantitative estimates)			
			RESIDENT	MIGRATORY		
				BREEDING	WINTERING	STAGING
CANDIDATE COUNTRIES: DIRECTLY TARGETED SPECIES ACCORDING TO						
Comments (conservation status if known, other listed species 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).*

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



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 74 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. At this site a former windfall plantation of 5 ha already cleared for the logs of timber requires further clearing

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: 22 ha

Overgrowth degree II: 5 ha

Overgrowth degree III: 0 ha

Overgrowth degree IV: 5 ha

Threat 3:

Name of the threat:

Invasion of non-native woody species in 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 show on the site map

Impact on habitat/species (quantify if possible)

A plantation of *Larix decidua* of the size 4 ha located closely 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 show on the site map

Impact on habitat/species (quantify if possible):

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

4 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 co-operation 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)

A footpath is needed to reduce the impact from 250.000 yearly visitors.

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.



PREVIOUS CONSERVATION EFFORTS ON THE SITES IN QUESTION

Previous conservation efforts has included establishment of fences for many dry grassland areas. Grazing with sheep and goats has been introduced as well as extensive clearings of scrubs (mostly *Sorathamnus scoparius*) and trees in order to re-establish the characteristic dry grassland flora. Clearing has been made with due consideration to the habitats of *Muscardinus avellarius* (Annex IV) leaving a scattered vegetation of bushes and trees.

THE SOCIO-ECONOMIC CONTEXT OF THE PROJECT

Svaninge Bakker is one of the most important areas for out-door recreation in the County of Fyn. Every year approx 250.000 persons visit the site.

The project area is partly government owned which surrounds a smaller part of land owned by the County of Fyn. The government owned land is managed by the local Fyn forest district which has and will cooperate closely with the Nature conservation Department of the county administration on the management of the site.

The local State forest district has regular consultations with local municipalities, NGO's and landowners 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.

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

Brief description of the project area:

Socio-economic context:

Relation between the proposal and other EU funds