



## **46. Annual Report 2013**

**Period of the Report:** 01.10.2012 – 30.09.2013

**State:** Federal Republic of Germany

**Name of the Area:** Lüneburg Heath, (Lüneburger Heide)

### **Central authority concerned:**

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<b><u>I.</u></b>	<b><u>GENERAL INFORMATION.....</u></b>	<b><u>3</u></b>
<b><u>1.</u></b>	<b><u>NATURAL HERITAGE.....</u></b>	<b><u>3</u></b>
1.1	ENVIRONMENT: CHANGES OR DETERIORATION .....	3
1.2	FLORA AND VEGETATION.....	5
1.3	FAUNA .....	6
<b><u>2.</u></b>	<b><u>CULTURAL HERITAGE AND SOCIO-ECONOMIC CONTEXT.....</u></b>	<b><u>8</u></b>
<b><u>3.</u></b>	<b><u>EDUCATION AND SCIENTIFIC INTEREST.....</u></b>	<b><u>8</u></b>
3.1	VISITORS – INFORMATION POLICY .....	8
3.1	SCIENTIFIC RESEARCH .....	9
3.2.1.	CURRENT OR COMPLETED RESEARCHES .....	9
3.2.2	SCIENTIFIC PUBLICATIONS AND CONFERENCES.....	9
<b><u>4.</u></b>	<b><u>SITE DESCRIPTION .....</u></b>	<b><u>9</u></b>
4.1	CHANGES IN LEGISLATION OR REGULATIONS.....	9
4.2	CHANGES IN OWNERSHIP TITLE .....	10
4.3	EXTENSION OR TRANSFER, NEW USES.....	10
<b><u>5.</u></b>	<b><u>SITE MANAGEMENT (MANAGEMENT PLANS, BUDGET AND PERSONNEL) .....</u></b>	<b><u>10</u></b>
5.1	IMPROVEMENTS MADE .....	10
5.1.1.	ECOLOGICAL ACTIONS .....	10
5.1.2	PROTECTION AGAINST NATURAL OCCURRENCES.....	12
5.1.3	ARRIVAL AND THOROUGHFARE (ROADS AND WAYS) .....	12
5.1.4	EQUIPMENT FOR FIELD STUDIES .....	12
5.1.5	WASTE MANAGEMENT .....	12
5.1.6	USE OF RENEWABLE ENERGY SYSTEMS .....	12
5.2	MANAGEMENT.....	12
5.2.1	ADMINISTRATIVE DEPARTMENT: CHANGES MADE .....	12
5.2.2	WARDENS’ DEPARTMENT: CHANGES MADE .....	12
5.2.3	INTERNAL POLICING MEASURES .....	12
5.2.4	INFRINGEMENT OF REGULATIONS AND DAMAGE; LEGAL ACTION.....	13
<b><u>II</u></b>	<b><u>INFLUENCE OF THE AWARD OF THE EUROPEAN DIPLOMA OF PROTECTED AREAS .....</u></b>	<b><u>13</u></b>
<b><u>III</u></b>	<b><u>REGULATIONS AND SUGGESTIONS FOR THE AWARD OR ITS RENEWAL .....</u></b>	<b><u>14</u></b>

# **I. General Information**

## **1. Natural Heritage**

### **1.1 Environment: Changes or deterioration**

#### **Weather**

The period of report started with an extraordinarily long and cold winter. Snow lasted until Easter and low temperatures with frost were measured as late as May. Sheep and goat flocks had to be kept in stables longer than usual and nature conservation management and grazing schemes started with delay.

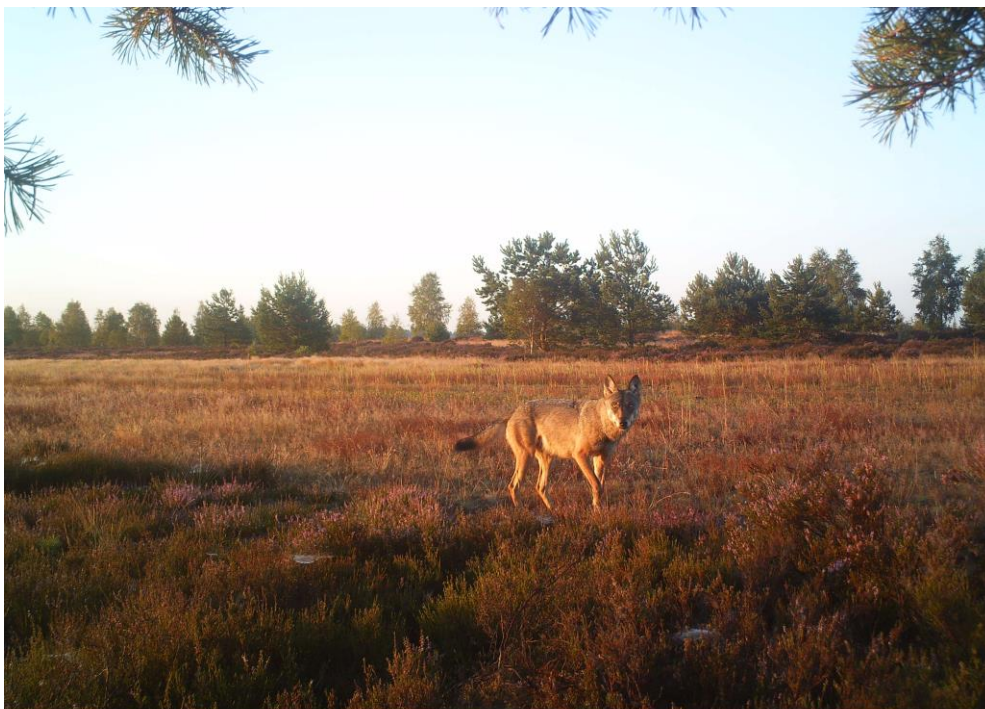
Spring and summer showed an average amount of rain and provided good growing condition during vegetation period. Calluna, the key species of Lüneburger Heide nature reserve provided a normal blossom in most parts of the reserve.

#### **Wolves**

The European wolf (*Canis lupus*) formerly extinct in Lower Saxony showed an extraordinarily increase of both, populations and individuals. There are now three packs of wolves raising whelps in Lower Saxony. Remains of the wolves (saliva, excrements) were genetically examined and 27 individual wolves could be distinguished.

The population "Munster", living some 20 km east of the nature reserve boundary, raised three whelps in 2012 and seven in 2013.

Automatic photo facilities provided several proves of single wolves in the centre of Lüneburger Heide nature reserve but no offspring so far.



Bushnell

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**Photo: VNP-Archiv/MSa.**

Wolves killed a couple of sheep in the south eastern region of Lower Saxony but so far not in the nature reserve.

## **New projects deteriorating the environmental situation**

### **Volkwardingen Wind Park**



**Photo: Simulation of wind turbines near “Totengrund”, the center of Lüneburger Heide nature reserve**

VNP is still very concerned about this project with seven wind turbines up to 185 m (height of driving collar) which will be erected only 1-2 km east of the reserve boundary.

Volkwardingen Wind Park will spoil the historic cultural landscape of Lüneburger Heide as the mills will be seen from all important view points within the reserve and outside. Even the most popular view point “Totengrund” which is also a place of high symbolic value for the history of nature conservation in Germany and the centre of the reserve will be influenced severely (see photo above).

VNP took legal action against the planning procedures but its complaint was taken down by court. The judges decided that VNP had no right (in terms of national and European legislation) to raise a lawsuit.

Another lawsuit, raised by one of the immediate neighbours of the proposed wind park was accepted by court and judicial proceedings are still going on. The “Vorrang- und Eignungsgebiet Windenergienutzung” (a planning zone) of “Regionales Raumordnungsprogramm” (regional planning document) was temporarily suspended by court.

The judges further complained that important aspects of the European Fauna-Flora-Habitat Directive were not sufficiently taken into account by Landkreis Heidekreis (the regional planning authority) and the environmental impact study was insufficient.

The project is now further delayed by insolvency of the investor company “Windwärts”.

VNP once again asks for the assistance of the Council of Europe and its representatives to avoid the aesthetic devastation of one of the oldest “European Diploma Areas”.

### Ground water extraction

Hamburger Wasserwerke (City of Hamburg water works Company, HWW) applied for a new right of extraction of 16,6 Million m<sup>3</sup> per year. Authorisation procedures are still going on between HWW, the City of Hamburg, the District of Harburg and Lower Saxony Federal State.

In December 2013 the City of Hamburg and the Federal State of Lower Saxony signed a joint administrative agreement (“Verwaltungsvereinbarung”) to restrict ground water extraction to a limit of 16,1 Mio m<sup>3</sup> per year. In ten years’ time the agreement has to be reviewed and extraction rates adapted if necessary. The involved parties also agreed to a reversal of the burden of proof. Furthermore Hamburg Water will pay annually into a “water fund” to finance ground water protection measures.

### Traffic projects

Work on a **new motorway exit on BAB 7** a few kilometres east of the reserve boundary will start in February 2014. This large infrastructure project will channel traffic through a wooded area with very little vehicle movement so far. It also affects a population of sand lizards (*Lacerta agilis*).

To avoid road kill (particularly red deer and wild boar) and to safeguard walkers, cyclists and riders who use paths crossing “B3 new”, VNP demands:

- A speed limit of 70 km/h between new motorway exit and “Scharrl” roundabout.

## 1.2 Flora and Vegetation

**Table 1: Development of characteristic plant species in Lüneburger Heide nature reserve**

Species name	formerly	development
Viper’s grass / <i>Scorzonera humilis</i>	100 – 200 individuals	Individuals increased tenfold up to 2000 individuals
Dwarf everlasting / <i>Helichrysum arenarium</i>	1993 extinct	2013 12 habitats
Thyme dodder / <i>Cuscuta epithymum</i>	1993 5 territories	2013 more than 100 habitats
Marsh gentian / <i>Gentiana pneumonanthe</i>		Population doubled
Lichenic species / <i>Cetraria islandica</i> , <i>C. ericetorum</i> , <i>C. muricata</i> , <i>C. aculeata</i> , <i>Cladonia spec.</i>		Slight increase of populations

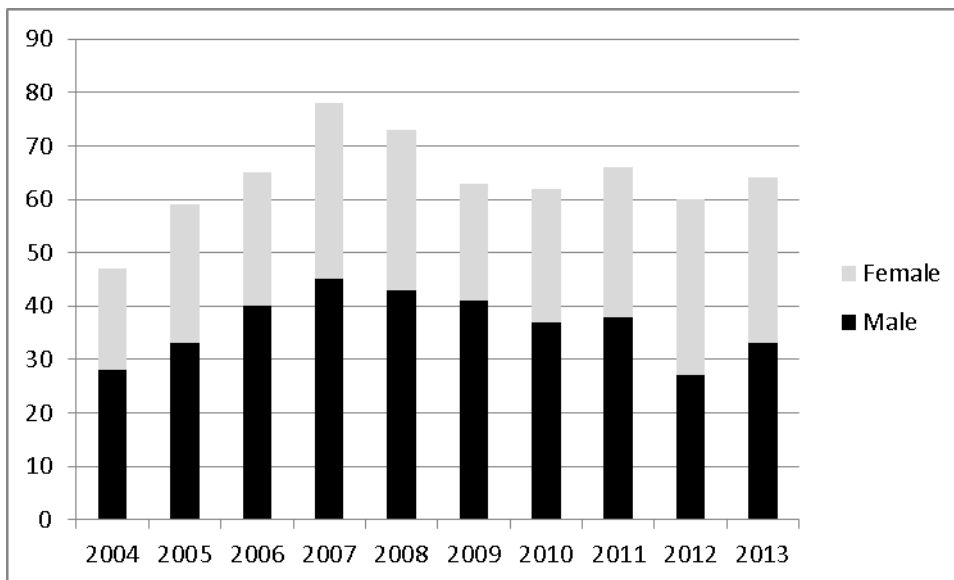
## **1.3 Fauna**

### **Birds**

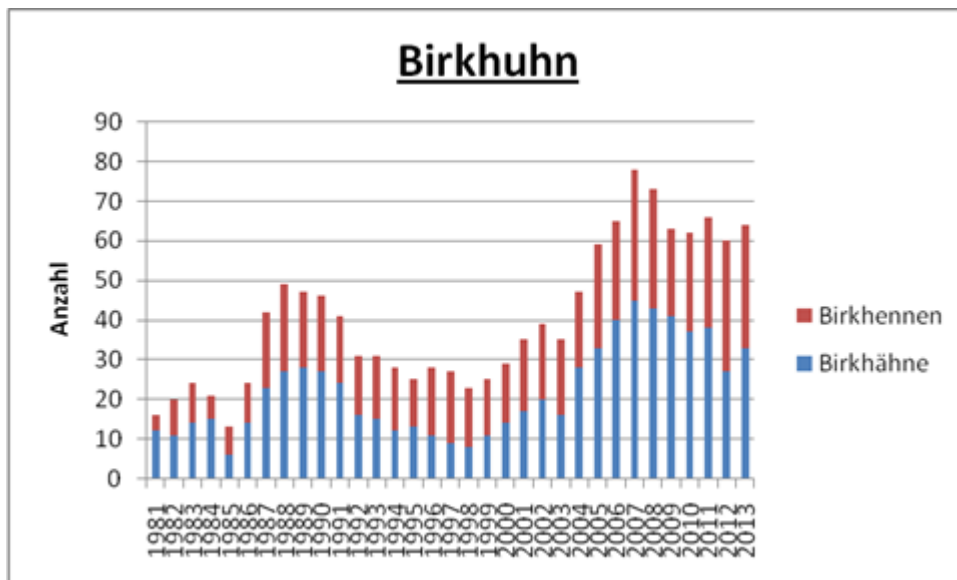
#### **Black grouse**

The Black Grouse (*Tetrao tetrix*) is the key species of large calluna heath lands and the “coat of arms” or symbol of nature conservation in Lüneburger Heide nature reserve. It is highly endangered in Lower Saxony (Federal State Red List Class 1, threatened with extinction) with a population of 220 individuals (2005, Source: NLWKN).

The population of black grouse (see diagram below) shows a slight curve during the last ten years with a peak in 2007 with nearly 80 individuals. After a decline (2007-2009) the population was stable during the last four breeding seasons with an average of 60 individuals and 64 in spring 2013.



**Diagram 1: Number of Black Grouse 2004-2013, Source: VNP**



**Diagram 2: The long-term development of the Lüneburger Heide population of Black Grouse**

## Hoopoe

In 2012 Hoopoes (*Upupa epops*) nested and raised chicks for the first time since decades. The species was extinct in Lower Saxony until then. It now shows a positive development in Lüneburger Heide nature reserve. In 2013 Hoopoes were spotted and heard in several locations. A family with five individuals was seen near Wulfsberg in the center of the reserve.

## Osprey

In 2013 a couple of ospreys (*Pandion haliaetus*) nested near Lüneburger Heide nature reserve but unfortunately left the clutch unsuccessfully.

## Great reed warbler

A couple of great reed warbler (*Acrocephalus arundinaceus*) nested in “Holmer Teiche”, an area of ecological valuable carp ponds. This warbler species is highly endangered and in class 1 of the regional “red list”.

**Table 2: Development of characteristic bird species in Lüneburger Heide nature reserve**

Species name	formerly	development
Wood lark / <i>Lullula arborea</i>		Slightly positive development
Eurasian nightjar / <i>Caprimulgus europaeus</i>		Slightly positive development
Stonechat / <i>Saxicola rubicola</i>	1993 -39 territories	2013 more than 80 territories
Northern wheatear / <i>Oenanthe oenanthe</i>		Decline of territories
Lapwing / <i>Vanellus vanellus</i>		Decline of territories
Curlew / <i>Numenius arquata</i>		Decline of territories

## Mamals

### Otter and beaver

The European otter (*Lutra lutra*) was formerly extinct in Lüneburger Heide nature reserve and most parts of Lower Saxony. The population recovered and otters spread from Elbe river westwards and recently reached the northern part of the reserve.

Footprints along small brooks and in the vicinity of Holmer Teiche carp ponds were regularly found.

The beaver was also extinct and started its resettlement after the Fall of the Wall, when individuals from the last population near Dessau (former GDR) spread along the Elbe river and reached West Germany in the 1990th. Beavers are now frequently seen all along the Elbe and even established population along Seeve and Luhe, tributary streams of the Elbe with springs in Lüneburger Heide nature reserves.

**Table 3: Development of characteristic insect species**

Species name	formerly	development
Blue-winged grasshopper / <i>Oedipoda caerulescens</i>	1993 1 small territory	2013 more than 1000 territories
<i>Platycleis albopunctata</i>	1993 extinct	2013 several 100 individuals
Alcon Blue / <i>Phengaris alcon</i>		Negative development

## 2. Cultural heritage and socio-economic context

No changes

## 3. Education and scientific interest

### 3.1 Visitors – Information policy

VNP operates three visitor information centres (Heathland Centre Undeloh, Open Air Museum Wilsede and Nature information house, now called “Bienenwelten” Niederhaverbeck).

#### **Wilsede Open Air Museum**

Wilsede Open Air Museum “Dat Ole Hus” is one of the oldest open air museums in Germany. Table 4 shows the number of visitors in the last two years.

A new exhibition comparing heath land agriculture and alpine farming was installed in the neighbouring exhibition building “Emhoff sheep stable”. In 2013 VNP celebrated its 100 year-long commitment to preserve “Ober- und Untersulzbachtal”, two alpine valleys, which are now part of Austrian national park “Hohe Tauern”.



**Table 4: Number of visitors in Wilsede Open Air Museum**

	Visitors in 2012	Visitors in 2013
<b>Museum Wilsede</b>		
Total	11315	11739
Adults	9082	9912
Children	2233	1827

### **Bienenwelten (Bee Information Centre)**

In autumn 2013 a new exhibition was opened in the former Nature information center Niederhaverbeck. The old building was renovated and furnished with interactive information panels showing various aspects of wild and domestic species of bees and traditional forms of beekeeping. The new exhibition costed 100.000 euros. It was co-financed by EU, State of Lower Saxony (80%) and VNP (20%) using the program “Natur erleben” (experience nature).

### **Guided tours**

Employees of VNP carried out several guided tours. 675 guests were shown the historic village of Wilsede, VNP farm “Hof Tütsberg” and the new bee information centre. 1406 people took part in guided tours in Heathland Centre Undeloh, a small museum built in 2009.

185 guests used the offer to get general information about the work of VNP and the management schemes to safeguard the unique landscape of Lüneburger Heide.

In 2013 VNP offered special arrangements for business companies to spend one day in the nature reserve. Four firms took part in this new scheme.

### **Pupils’ Farm at Wilsede**

The project “Pupils Farm” was started in September 2010 with grants from Alfred Toepfer Stiftung F.V.S. Hamburg. In 2013 six classes spent a week in Wilsede with shepherds, farmers, foresters, beekeepers, craftsmen and cooks of VNP. A grant from Veolia Environment trust enabled VNP to create a pupils’ garden in Wilsede.

## **3.1 Scientific Research**

### **3.2.1. Current or completed researches**

No changes

### **3.2.2 Scientific publications and conferences**

No changes

## **4. Site description**

### **4.1 Changes in legislation or regulations**

No changes

## **4.2 Changes in ownership title**

Purchases, long term leases and swaps of properties are important to secure valuable biotopes and create a habitat network between Lüneburger Heide nature reserve and other important reserves and breeding habitats particularly of Black Grouse. The following table shows the changes in ownership titles.

**Table 5: Purchases and leases of habitats**

<b>Size (in ha)</b>	<b>Biotope</b>	<b>Location</b>	<b>Kind of Ownership title</b>
0,0356	Path	Within NSG*	Sold to Hanstedt Community
3,2	Forest	Within NSG	Longterm lease
2,7	Grassland	Within NSG	External donation and Purchase
1,2	Moor	Within NSG	Purchase
101,9	Forest	Within NSG	External donation and Purchase
0,132	Heathland	Within NSG	External donation
0,05	Arable land	Within NSG	External donation
0,06	Path	Within NSG	External donation
1,07	Courtyard	Within NSG	External donation and Purchase

\* NSG = Naturschutzgebiet i.e. Nature Reserve

## **4.3 Extension or transfer, new uses**

No changes

# **5. Site management (management plans, budget and personnel)**

## **5.1 Improvements made**

### **5.1.1. Ecological actions**

The following table shows the amount of all conservation measures in the reserve carried out by VNP in 2013.

**Table 6: Conservation measures 2013**

<b>Kind of conservation work</b>	<b>Habitat type</b>	<b>Amount 2012</b>	<b>Amount 2013</b>
Removing unwanted shrubs and trees ("Entkusseln"), mechanically	Heath land	1090 ha	800 ha
Removing unwanted shrubs and trees ("Entkusseln"), special	Heath land		47 ha

machinery			
Mowing calluna plants ("Heidemahd")	Heath land	82,5 ha	72 ha
Removing heather vegetation and humus ("Schop- pern")	Heath land	5,05 ha	32,18 ha
Removing heather vegetation, humus and a few centimetres of mineral soil ("Plaggen")	Heath land	3,04 ha	4,67 ha
Burning heather vegetation ("Heidebrand")	Heath land	80,02 ha	24 ha
Security swaths for burning heather, mowing with special machinery	Heath land	12,4 ha	
Removing mosses from heather vegetation	Heath land	2,35 ha	
Mowing wet grassland	Grass land	45 ha	
Removing <i>Prunus serotina</i>	Fringes of woodland / heath land	60,8 ha	
Conservation schemes for fringes within woodlands	Woodlands	5,08 ha	
Removing <i>Picea abies</i>	Along brooks		
Breeding habitats for Northern wheatear ( <i>Oenanthe oenanthe</i> )	Heath land		5 stone cairns
New ponds	Grass and Heath land		5 ponds
Removing mud from existing ponds	Holmer Teiche	4,5 ha	
Restoration work on existing pond banks	Holmer Teiche		
Planting oak trees in species poor pine woods	Pine Woodlands		35 ha
Planting an orchard			0,4 ha
Clipping hedges			4 km
Replanting shrubs in hedges			700 shrubs
Planting lime tree avenues			1 km

### Hoopoe-Project

"Bingo Environment Trust" supported VNP with 47.000 euros to create a habitat network and breeding facilities for hoopoes. This formerly extinct bird (see chapter 1.3) needs caves in tree trunks or stone pillars to create breeding burrows. VNP started to plant a new orchard with old species of fruit trees, planted a new lime tree avenue, built new stone cairns and set up nesting boxes (see table above).

## **Swallow-Project**

During the last decades swallows lost many of their breeding places due to restoration work or demolition of old buildings. VNP in cooperation with "Verein Naturparkregion Lüneburger Heide" took part in the EU swallow campaign and set up a so called "swallow hotel" i.e. a high pillar with artificial nesting boxes to safeguard and support the remaining swallow populations.

### **5.1.2 Protection against natural occurrences**

No changes

### **5.1.3 Arrival and thoroughfare (roads and ways)**

In June 2013 a special path suitable for wheelchairs was restored in Niederhaverbeck. The wheelchair path was originally set up in 1998 but had become degenerated. Donations of a local construction company and several volunteers from VNP made an extensive restoration of the 3,5 km long path possible.

Bispingen Tourist Board, Center Parcs Company and volunteers from Bispingen community developed and signposted 14 new thematic routes for walkers and cyclists in the eastern and central part of the nature reserve around Bispingen.

### **5.1.4 Equipment for field studies**

No changes

### **5.1.5 Waste Management**

No changes

### **5.1.6 Use of renewable energy systems**

No changes

## **5.2 Management**

### **5.2.1 Administrative department: changes made**

No changes

### **5.2.2 Wardens' department: changes made**

VNP still employs four part time rangers. There is no public funding for this ranger service and VNP demands:

- an equal treatment of Lüneburger Heide nature reserve, one of the largest FFH areas in Germany, and national parks, where ranger service is financed by the Ministry of the Environment.

### **5.2.3 Internal policing measures**

No changes

#### **5.2.4 Infringement of regulations and damage; legal action**

No changes

## **II INFLUENCE OF THE AWARD OF THE EUROPEAN DIPLOMA OF PROTECTED AREAS**

### **Volkwardingen Wind Park**



**Photo: Simulation of wind turbines near “Totengrund”, the center of Lüneburger Heide nature reserve**

**Volkwardingen Wind Park will spoil the unique landscape of Lüneburger Heide!**

**Even the most popular view point “Totengrund” which is also a place of high symbolic value for the history of nature conservation in Germany and the centre of the reserve will be influenced severely (see photo above)!**

**VNP is very concerned about the absolutely insufficient consideration of aesthetic and cultural values of national importance!**

**VNP is shocked by the unnecessarily exaggerated planning procedures conducted by Landkreis Heidekreis!**

**VNP forcefully asks for the assistance of the Council of Europe and its representatives to avoid the aesthetic devastation of “European Diploma Area No.1”!**

### **III REGULATIONS AND SUGGESTIONS FOR THE AWARD OR ITS RENEWAL**

Stiftung Naturschutzpark is still extremely concerned about the **recent agricultural development within** Lüneburger Heide nature reserve and neighbouring areas. Funding for biogas plants and high subsidies for maize cultivation resulted in severe problems concerning scenic quality and ground water extraction for field irrigation.

In 2013 owners of four biogas plants in Bispingen Community, few kilometres east of Lüneburger Heide nature reserve, applied for planning permission to extend production capacities. This will intensify land use and the amount of energy crops grown further.

Stiftung Naturschutzpark appeals to the Council of Europe to use its influence to make agricultural policy in Europe more environmental friendly. VNP demands from EC agricultural policy:

- **Grants for ecological farming and conservation projects in NATURA 2000 areas must be raised to a level that allows farmers to compete with the recent profits derived from energy-crop farming. VNP is concerned that otherwise maize cultivation within the NATURA 2000 area will even more be extended.**

It is crucial that heath land (Calluna heath on sandy soils or bog) remains on the list of agricultural land defined by EC. Discussion is going on in Germany to eliminate heath land from this list. This would be the end of EC agricultural funding for heath land, as only defined agricultural land is entitled to benefit from EC agricultural subsidies:

- **The elimination of heath land from the list of agricultural land would be disastrous for all heath lands in this area.**

The Federal State of Lower Saxony denies owners of heath land the right to apply for the European single payment scheme ("Betriebsprämie"). Other EC countries like Great Britain define heath land as agricultural land and all farmers in GB are allowed to apply for this basic and extremely important agricultural funding. In Great Britain: "Eligible land is defined as any area of your holding taken up by arable land and **permanent pasture**, except for:

- Forested areas,
- Areas used for non-agricultural activities"

(<http://www.businesslink.gov.uk/bdottg/action/detail?itemId=1082224051&r.i=1082224313&r.l1=1081597476&r.l2=1082184851&r.l3=1083731939&r.l4=1082215665&r.s=sc&r.t=RESOURCES&type=RESOURCES>)

Farmers using heath land for sheep grazing in Lower Saxony are severely discriminated in relation to their European neighbours. VNP demands:

- **Heath land must be put on a par with other agricultural categories and derive the same agricultural subsidies, particularly "payment entitlements" ("Zahlungsansprüche") as grassland and other forms of grazing land.**

VNP asks all European experts of nature conservation and all politicians to safeguard and defend the last coherent heath land habitats of central Europe from further negative effects of recent agricultural policy, bureaucracy and large infrastructure projects.

VNP would very much appreciate the visit of agricultural experts and influential European politicians to inform about the severe problems in Lüneburger Heide nature reserve. VNP needs the assistants of the representatives of the Council's institutions to safeguard Lüneburger Heides' future.