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AND NATURAL HABITATS

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Action plan
for the Common Hamster (*Cricetus cricetus*)
in North Rhine Westphalia (Germany)

Document
prepared by
the Ministry for Environment and Nature Protection, Agriculture and Consumer Protection
(MUNLV) of North Rhine-Westphalia (Germany)

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INTRODUCTION

The North Rhine-Westphalia Endangered Species Protection Programme for the Common Hamster was developed by the North Rhine-Westphalia Agency for Ecology, Land and Forestry (LÖBF) on behalf of the North Rhine-Westphalian Ministry for Environment and Nature Protection, Agriculture and Consumer Protection (MUNLV). The State of North Rhine-Westphalia aims through this programme to make a contribution towards protecting the common hamster, which is listed in Appendix IV of the Habitats Directive.

European agricultural policies have reduced Europe's common hamster populations to small remnants at the western limits of their former range. Consequently, effective and lasting stabilization of these populations requires coordinated action between EU member states within the framework of EU agri-environmental measures. Despite this, North Rhine-Westphalia attaches special importance to having a protection programme for the common hamster within its own region.

This is partly in recognition of the well known tenet of population ecology that it is crucial to stabilize stocks of a species at the limits of its natural range.

But it is also in recognition of the fact that the programme will yield insights that can help stabilize common hamster populations in other regions and EU member states where they are found. For this reason, the programme is initially limited to a period of five years.

The funds allocated to the programme amount to DM 2.5 million (DM 500 000 a year). This figure excludes measures yet to be put into action by the City of Aachen under its legal obligations to provide compensation for the Aachen-Heerlen industrial development.

With regard to management agreements in connection with arable farming, North Rhine-Westphalia plans to use co-financing in accordance with EC Regulation 1257/1999.

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A. Starting situation for species relief programme "The common hamster in North Rhine-Westphalia"

1. Occasion for species aid programme

Over the past ten to twenty years, there has been a dramatic decline in species in agrarian regions. One of the most affected species is the common hamster (*Cricetus cricetus* L.). Originally, the common hamster is very characteristic of structured agrarian regions with deep loess and clay soils where many species were found.

In **North Rhine-Westphalia**, it is a kind of leading species of the open Börde region of the Rhineland with its deep and fertile loess and clay soils, and it is thus representative of many other species living in farmland regions.

In North Rhine-Westphalia, the common hamster was included in class 1 "threatened by extinction" of the Red List in 1999 because of the strong decline in numbers over the past ten to fifteen years. According to the federal regulations for the protection of species, the common hamster is one species that requires particular protection.

Since 1992, because of its decline in numbers on a European level, the common hamster is also listed in the FFH directive in Annex IV as a threatened species that requires special protection and that is of common interest.

Selective measures of protection need to be taken at shorter term in order to preserve this species in North Rhine-Westphalia, and to increase its stock. These measures are combined in a species aid programme which is submitted for approval and which is also geared to the benefit of other species that are closely related to the common hamster in a biocoenotic context.

2. Biology

This 20 to 35 cm large rodent is characterised by striking colourful markings. The yellowish and brown skin contrasts the black belly fur. The head and flanks have white patches, and the paws are white and the short tail is reddish brown. An animal weighs between 200 and 250 grams.

The hamster shows most activity at dusk and at night, and it prefers to build its burrow in deep loess and clay soils. Normally, each animal has its own burrow which it bravely defends. In summer, most burrows are 40 to 50 cm beneath the surface of the earth whereas in winter this would be up to 2 m (protected against freezing), and burrows are divided into nest, storage and excrement chambers. Newly made burrows have a sloping tube that leads down into a nest chamber at its end. In most cases, there is a second exit in the form of a vertical chute 6 to 8 cm in diameter into which the hamster, which is not too nimble, will plunge if in jeopardy. With its strong and sturdy body, its middle-sized round ears, its short legs and strong feet, the hamster is well adjusted to living underneath the earth's surface.

In summer, this omnivore mainly eats plant (cultivated plant, green parts of wild field herbs, tubers and nodules, roots, seed and grain), but also animals (snails, beetles, earthworms, young common vole and others). In late summer, the hamster starts collecting corn, peas and beans, but also roots, wild herbs, pieces of turnip and the like in its cheek pouches, and carries them to its burrow as a winter reserve. The hamster hibernates from about October through April. During winter, the animals often awake from hibernation and fall back on their reserves collected in late summer and autumn. A fully grown hamster needs approximately 1.5 kg to 2 kg of winter reserve.

Hamsters are loners and mate between May and July. After a gestation period of about 20 days, two to five are born under today's not optimal living conditions (previously this was four to ten), which are independent from an age of five to six weeks at the latest. Today, there is a second litter in the same year in a few cases only (previously two to three litters in one year), and only few females give birth to young ones two years in succession.

The females very much stick to their habitats and, according to studies conducted in Saxony-Anhalt and Heidelberg, live in relatively small territories (0.1 to 0.5 hectare). The territory of the polygamous males covers several female's territories and is about 1 hectare to two hectares in size. The

young animals seem to be very active while they are becoming independent, and tend to move farther away from the burrow (up to approximately 250 m, acc. to studies).

The estimated maximum lifespan of the common hamster is approximately four years. In Germany, most animals outlive one winter only, rarely two.

3. Habitat requirements

The common hamster, originally a dweller of the open and semi-open Eurasian steppe, turned into a very successful follower of cultivated plant as Man started cultivating the fields, probably starting as early as in early history.

Since the previous Ice Age, it is indigenous to Germany where it populates the open farmland in the Börde regions. It is here, in these regions where there is fertile farmland practically everywhere, that the common hamster finds the right soil to build its burrow in, viz. deep, dry loess and clay soils where the water table is at least 1.20 m below the surface.

The hamster avoids moist or stony soils, as well as normally higher regions above 400 m in altitude (in North Rhine-Westphalia, it currently is hardly found in altitudes above 200 m). The common hamster prefers summers warm and dry, and winters not too warm (continental climate).

In the agrarian regions of North Rhine-Westphalia, just like in the Netherlands or in the state of Saxony-Anhalt, the hamster prefers to build its burrow in wheat fields (mainly winter wheat). Cornfields offer better conditions than turnip or maize fields because the cornfield offers better and longer cover than turnip or maize fields where sufficient cover is available late in the year only. However, burrows were also found in turnip or barley fields (also in rye and oats). In the Heinsberg (Selfkant) district, burrows were found in a maize field, into which the animals probably moved in summer. Fodder plant for tillage lasting several years, such as lucerne or red clover, are much preferred habitats of the common hamster as there is not that much work going on in the fields and because these fields offer cover and food all year round.

In recent years, the common hamster seems to tend to build its burrow on the edges of the fields to an increasing extent, but also in waysides, embankments, in barren land or narrow defiles adjacent to fields, which offer food the whole year over. In intensively used farmland areas, burrows seem to be built in edge areas such as fallow land or stripes of fallow land, which offer quiet and food, specifically in spring, and protection and cover almost all year round. Those are areas of retreat for the common hamster.

According to the data available, today's main populations in North Rhine-Westphalia seem to be found in areas which are relatively undisturbed (little human population or traffic), which are often divided in small plots, which have deep soils and which possibly have been used somewhat more extensively, at least until a few years ago (e.g. remote fields in the border area).

Under less than optimal living conditions in intensively used farmland areas, almost only the best loess soils are populated.

4. Distribution and stock

In relation to the overall territory of this species, the common hamster populations in North Rhine-Westphalia in the Rhineland are the most westward populations found today. Together with the stocks found in the neighbouring Netherlands (Limburg province) this is the most westward out of several island-like subpopulations outside of the main territory which stretches from the Yenisey river or the Baikal lake in Russia to a line from Hanover to Thuringia in Central Germany.

Traditionally, the main territory of the common hamster in North Rhine-Westphalia is found in the Niederrheinische Bucht (Lower Rhine cove) to the left of the Rhine river. It coincides with the largest connected deposits of deep grey-brown podzolic soils in this country.

Between 1900 and 1990, the common hamster had populated an area on the left of the Rhine river from the northern edge of the Eifel mountains to the Lower Rhine. There are only few poorly documented indications of populations right to the Rhine river from after 1950 for the area around

Xanten, and from after 1960 for the area around Wülfrath. A credible report (from 1967/68) indicates a population near Duisburg right of the Rhine river.

Since the 70es, the areas populated in the Rhineland have clearly decreased, and there has been a major decline in the number of animals in North Rhine-Westphalia particularly in the past ten to fifteen years.

Today, there is only a fraction of previous numbers. For example, quite a few hamsters were observed around the town of Bonn in the mid-80s, but none are being reported from that area today .

No detailed scientific data are available for previous or current stocks of the common hamster in North Rhine-Westphalia as such data were not consistently collected for this species on a federal state level.

However, available sources (literature, collection documents, poll reports, regional systematic mapping, own selective research or similar) allow some estimates regarding the development of numbers and also give some idea regarding the area in North Rhine-Westphalia that has been previously populated or is being populated respectively by the common hamster today.

Putting all plane survey sheet quadrants populated by the common hamster in 1950 at 100%, only about 25% of all plane survey sheet quadrants west of the Rhine river were populated in 1997 (including any animals in the German/Dutch border zone), whereas this figure was 60% in 1980.

Major changes have occurred on the southern edge (foothills of the Eifel mountains) and on the eastern edge (Rhine river valley).

Hardly any current reports have been received for the centre of the area described here.

Current territory:

Reliable sources report current stocks in North Rhine-Westphalia merely in patches in the Niederrheinische Bucht (Lower Rhine cover) west to the Rhine river. Animals have been in the area between the towns of Bonn, Düsseldorf, Venlo and Aachen. In detail, the following observations of hamsters have been reported since the mid-90s:

• Heinsberg district:

- Selfkant (mainly around Pütt/Waldenrath), 1996 to 1999, 1991, and earlier;
- Erkelenz (1998 and 1971 to 1994);
- Geilenkirchen (1997);

• Neuss district:

- Dormagen (1998, 1995, 1993, 1991);
- Rommerskirchen (Butzheim), 2000;
- Jüchen (2000);
- Kaarst (1996 and early 90s);

• Düren district:

- Vettweiß (near Kelz in 1997, 1996, 1993, 1991, near Froitzheim in 2001, near Lückheim in 1996);
- Linnich (2000, 1994);
- Jülich-Koslar (2000)
- Düren-Arnoldsweiler (2001);
- Titz (up until approximately 1996);
- Langerwehe-Jüngersdorf (1996);

• Town of Aachen:

- Aachen-Horbach (1995 and earlier, up until 1998, since then no reports any more despite specific search);

• **Aachen district (northern part):**

- Alsdorf-Hoengen (2000);
- Baesweiler (2000);

• **Erftkreis district:**

- Pulheim (1999, 1995);
- Erftstadt-Bliesheim (1996);

• **Euskirchen district:**

- Zülpich (1997 – 2001);
- Euskirchen-Flammersheim (2nd half of the 90s).

Currently, the major areas are Selfkant (Heinsberg district), around Zülpich (Euskirchen district), near Vettweiß (Düren district), and around Dormagen (Neuss district).

Reports from recent years confirm the traditional main territory of the common hamster in the Zülpicher Börde (e.g. near Vettweiß and Zülpich).

Common hamsters have been reported for years or decades over and again for all current main territories (burrows, sightings of living and dead animals).

~~According to the available data, today's stocks in the Niederrheinische Bucht (Lower Rhine cover) are more or less small islands only, which at most get in contact with each other in gradation years. Incidentally, they are separated or isolated from each other through a dense network of barriers (motorways, settlements, industrial estates and so on), and there is no single self-contained hamster area.~~

Generally speaking, the current population density is very low. This is obvious from the few systematic regional mappings from the 90s when the burrows were counted within a certain area such as around Vettweiß (Düren district) in 1991 (HAHN 1991, mapping commissioned by the state ecological authority LÖLF), in the area east and west of Erkelenz (Heinsberg district) in 1993/1994 (BÄUMER & GASSMANN 1997, expert opinion commissioned by LÖBF), in Selfkant (Heinsberg district) in 1998/1999 (FEHR 1998 and 1999, mapping commissioned by the Rhineland Rhine regional authority – Mönchengladbach highways department). In few cases only, these surveys showed more than one burrow for an area of ten hectares of farmland on average (e.g. 1 burrow / 10 hectare farmland in Vettweiß and 1 burrow / 40 to 70 hectare near Erkelenz). A preliminary higher density was only observed within the area of the common partridge research project instituted by LÖBF near Zülpich (Euskirchen district): 16 burrows on 100 hectare in 1999.

It is necessary to exactly know the areas currently populated by the hamster in order to take selective measures of protection.

As current knowledge is sketchy (no systematic mapping of the Rhineland has been available so far), all potential areas should be searched for the last occurrence of living hamsters.

5. Reasons for decline in stock

A decline in stock is obvious for the whole territory in which the common hamster still occurs.

The main reasons relate to major changes in farming methods and in the crop range that have occurred in the last few decades.

Whereas previous farming methods such as different crops on small plots, less intensive farming and harvesting methods offered favourable conditions for the hamster as there was sufficient food and cover almost all the time, as well as little intrusion, increasingly intensified and mechanized farming methods have increasingly affected the hamster's living conditions after World War Two.

There is a whole bunch of factors that affect the hamster:

- Large fields are harvested within short times, and often the stubbles are ploughed in immediately after the harvest (which results in lack of food, specifically at a time of year when the hamster usually starts collecting its winter reserve, and in loss of cover).
 - Use of biocides (which results in the destruction of sources of food; fungicides with the active substance of Vinclozolin may affect the common hamster via the food (lower reproduction)).
 - Narrowing down of edges of fields or waysides or elimination of small structures on parish land (which results in the loss of, or at least in a major reduction of, sources of food and areas of retreat).
 - Spreading of liquid manure (danger through larger amounts: as the common hamster is sensitive to smell, it is at least driven away, if not directly harmed).
 - Permanent decline in cultivation of grain on fertile soils (shift in crop range towards maize, potatoes, cabbage etc. – crops that are suited for use by animals to a limited extent only and which offer less cover over longer periods, which results in an increased danger of predation).
 - Loss of variety of agricultural and fodder crops, specifically an enormous decline in fields with fodder lasting several years (clover, lucerne, clover grass), a preferred habitat of the common hamster.
 - Intensive and frequent use of, sometimes heavy, agricultural machinery, which results in:
 - a) soil compaction after use of heavy machines, which may result in waterlogging and spoilage of food reserves,
- and
- b) damage to or destruction of burrows through soil cultivation such as deep ploughing, specifically affecting the burrows of young animals as these are not as deep and may be easily damaged or destroyed, thus certainly also resulting in loss of animals as such).

These factors mainly hold true for the period up until 1990.

- Larger cultivated plots (as a result, the plot borders are farther away from each other, and the hamster has to go larger distances in the event that its habitat undergoes unfavourable changes to get to the required food or winter reserve; in open land without much cover and with large fields and monocultures, this will increase the risk of falling prey to predators; it is also more difficult for the animals to evade to neighbouring areas).
- Alternation of crops is another factor adding stress on the animals (for example, if there is a change from corn to maize within the crop rotation of a field, the animal will abandon its burrow).

All in all, stress, lack of food (specifically in winter) and maybe the use of biocides result in a loss of vitality, which in turn entails a lower reproduction rate, increased proneness to diseases and a shorter lifespan as well as an increased risk of falling prey to predators.

Selective control of hamsters with poison (rodenticides) and traps as it was conducted on a large scale in East Germany up until the late 80s is said to have occurred on a regional or local and smaller scale in North Rhine-Westphalia, too, such as in the Heinsberg (BÄUMER & GASSMANN 1997), Düren, Aachen and Neuss (WEINHOLD, 2001 intermediate report) districts, for example.

Also the increasing sealing of the soil through development (residential and commercial) has major effects and eliminates or further limits the biosphere of the animals.

Strongly frequented highways or motorways isolate subpopulations from each other, with a threatening genetic isolation and increasing risk of mortality due to road traffic.

Thus, there is a whole variety of reasons for the decline in the numbers of hamsters. It was probably a combination of various factors that caused the quick and drastic decline of this species.

It is surely also a combination of various factors that is responsible for the strong fragmentation and thinning out of the stock in North Rhine-Westphalia. Besides the changes in farming, such as mechanisation and larger fields and the resulting loss of biosphere quality, the agglomerations along

the Rhine river and around the city of Aachen, which are quite large as compared to other German states, as well as open-cast lignite mining are probably a major factor.

Huge areas near Frechen, Hambach and Garzweiler fall victim to open-cast lignite mining, and such areas cannot be restored as habitats for the common hamster even after recultivation.

B Proposals for aid measures

Based on the information currently available, effective protection and increase of stock can be achieved **through a whole range of measures only. Such measures would specifically require a more extensive method of farming.**

In that, several components need to be considered simultaneously.

At first, measures to preserve the animal stock should be taken in those regions where hamsters are currently found. The most important objective is to provide cover the whole year round, if possible, and to increase the variety and more generally the availability of food. The following measures have been mainly derived from the recommendations of the Common Hamster International Working Party, and modified to meet the specific situation in North Rhine-Westphalia.

1. General measures in agrarian regions

To increase the structural variety

- To reduce the size of fields (> 10 hectares), e.g. division into different crops;
- To preserve, improve or provide small structures without direct farming effect such as edges of fields, embankments, wide protective stripes around fields in close vicinity to farmland;
- To promote the provision of wide marginal stripes (min. 9 m) or nursing stripes with additional conditions on soils suited for the common hamster (soil cultivation only from mid-October, not deeper than 0.25 m, leaving stubbles and a stripe of corn, if possible).

In addition, fields on good soils for hamsters that are preliminarily not cultivated according to the EU set-aside scheme directive could be provided with vegetation preferred by hamsters (e.g. low-grade corn seeds, legumes).

2. Measures on cultivated farmland

Large-scale measures

- High share of stalk crops within the crop rotation (specifically winter corn), to promote the cultivation of fodder crops lasting several years (such as lucerne, clover), but also field beans and peas;
- No cultivation, or high share of late crops such as maize, sugar beet or potatoes;
- To the extent possible, no cultivation during the main activity period of the common hamster (i.e. before April, or after 30th September);
- No soil cultivation deeper than 25 cm;
- No spreading of liquid manure or sewage sludge;
- Use of mineral fertilizers as required and to meet the conditions of the respective site;
- Minimal use of biocides (and after mechanical weed control, if possible), and no use of rodenticides;
- Ploughing in of stubbles in autumn only (mid-October), letting long stubbles stand (min. 20 cm), if possible;
- Leaving a grain stripe after harvest (approx. 0.5 m to 2 m wide around the field for an area of one hectare).

Partial measures

Where these measures are not feasible for the full area, alternatively a **partial extensive cultivation** should be recommended in the form of wide **set-aside stripes** (min. 12 m) within large fields.

This stripe should be min. 10 m away from the edge of the field, and provided with a vegetation preferred by the hamster such as winter crop (sparse sowing), lucerne, or a mixture of lucerne/clover, or another special mixture (to be decided based on local conditions). There should be no nitrogen fertilization (specifically no liquid manure), normally no reaping (except for lucerne), no use of biocides (specifically rodenticides), and no weed control of any kind.

This stripe can be positioned in a flexible manner (it can be moved under certain conditions after two years at the earliest). Adjacent stripes should be max. 100 m to 200 m away from each other.

Both types of measures may reasonably supplement each other within networking strategies.

3. Spatial limitation of aid measures

The populations in the Rhineland are generally sparse to very sparse, and separated from each other by a dense network of motorways, settlements and industrial or commercial premises. It is thus necessary to include any area with known current populations into this protection programme. Areas with smaller populations should be included, too. It is the **objective** to preserve any local or regional residual stock of common hamsters, and to strengthen these populations to a point where additional negative factors such as diseases or bad weather periods will not eliminate any more subpopulations and where this species will spread into adjacent territories again. This is the only way to guarantee the survival of this species in North Rhine-Westphalia.

These measures to be taken for the sake of the common hamster may at the same time raise the chances of survival for other threatened species such as the common partridge, the skylark, the grey bunting, the European hare, field wild herbs, or different types of beetles.

At present, we know of **9 regions** where significant populations of common hamsters were observed in the past five years. These are the areas of

Selfkant, Vettweiß, Züllich, the southern part of the Neuss district [Dormagen, Rommerskirchen], Erkelenz, the northern part of the Düren district [Linnich, Jülich], Düren, Pulheim, the northern part of the Aachen district. The four areas mentioned first above are the main areas.

Within these regions, ten percent for each undivided farmland area of 50 hectares with a current common hamster population should be prepared to provide favourable conditions for the hamster through implementing the above measures as required based on current knowledge (see section B, item 2). **These measures should be applied to plots with burrows in the first place, and then to adjacent areas.** Normally, this land should have a soil structure suited for the common hamster (min. 75 soil points or above-average soil within the region, good aeration and workability, no water-logging strata to a depth of min. 2 m).

In regions with major populations (such as Selfkant, Zülpicher Börde), three to five such areas or units should be set up to support the animal stock on the short term. Thus, an overall 12 to 15 such areas will be required to be included in the protective measures.

~~It should be tried to connect neighbouring populations (through field marginal stripes, nursing stripes, wide waysides etc.) to facilitate genetic exchange.~~

C Programme

~~1. Collection of data on hamster population in North Rhine-Westphalia~~

1.1. Measures already in progress

~~Annual mapping by the City of Aachen of the area of the Aachen-Heerlen cross border industrial development.~~

~~In 2001, mapping of the north of Aachen by the City of Aachen.~~

~~Report: Protection Strategy for Common Hamsters in North Rhine Westphalia, by Dr. Weinhold, University of Heidelberg.~~

~~1.2. Measures to be conducted in 2002~~

~~Evaluation of measures conducted before 2002.~~

~~Mapping of the common hamster populations in North Rhine Westphalia by the North Rhine Westphalia Agency for Ecology, Land and Forestry in subsequent years for final identification for the programme of priority areas that have good success prospects.~~

~~2. Protection Programme~~

~~2.1. Measures already in progress~~

~~Ongoing optimization of the 43 ha compensation area secured so far in Horbacher Börde and of the 7.5 ha of arable land additionally contributed by the City of Aachen.~~

~~2.2. Measures in 2002~~

~~Final implementation of the protection measures as set out in Section B as part of municipal authority cultivated landscape programmes (Heinsberg, Neuss, Düren, City of Aachen, Aachen, Euskirchen) or as a Land special action plan.~~

~~Preparatory measures:~~

~~a. Development of model management agreements in consultation with the Chamber of Agriculture (funding amounts to be decided by March 2002).~~

~~b. EU notification of the programme.~~

~~c. Management agreements to be entered into by municipal authorities within
— the framework of their cultivated landscape programmes or by the farming
— inspectorates on behalf of the state of North Rhine Westphalia.~~

~~2.3. Evaluation~~

~~Action taken to be subjected from 2003 to annual review by the North Rhine Westphalia Agency for Ecology, Land and Forestry. As with similar projects in other German federal states, the development of the hamster stocks in the selected areas is to be monitored annually (mapped in spring and summer) for an initial period of five years as a meaningful way of evaluating the efficiency of the measures used. The monitoring can be done at selected trial sites. Measures are to be modified as necessary in line with any new findings. Mapping is then to continue every two years for a further six year period. This is important, among other things as a way of demonstrating the duty of care owed by farmers within such a project and to identify any lasting changes in population trends.~~

~~3. German/Dutch cooperation to stabilize and reintroduce the common hamster in the German Dutch border region~~

~~Based on the data available in spring 2002, North Rhine Westphalia is offering its participation in the common hamster reintroduction programme over a trial period of five years to increase and stabilize the current populations in the German Dutch border region (see map) or to reintroduce the common hamster to the region.~~

~~The North Rhine Westphalia Agency for Ecology, Land and Forestry has been commissioned with scientific monitoring of the project.~~

~~Common hamsters should generally only be set free in areas where they are already present. Accordingly, reintroduction should begin in the sites that have already been optimized with regard to habitat improvements for common hamsters as part of the City of Aachen compensation plan in 2000 and 2001.~~

~~Monitoring on completion of the trial will establish to what extent such measures can be successful in other areas of North Rhine Westphalia or in the Netherlands.~~

~~The North Rhine Westphalia environment ministry (MUNLV) will constitute a joint working group with its Dutch partners to this end.~~

~~D—Financing~~

~~The programme has been allocated DM 2.5 million (DM 500 000 a year) by the State of North Rhine Westphalia. Assuming an average contribution of DM 1800 to DM 2200 (for upwards of 75 points), the programme can thus incorporate a minimum area of 200 ha (a hamster territory with one male and several females covers one or two hectares). The sums under management agreements can be adjusted as part of the annual evaluation.~~

~~The programme will be EU notified after submission of the calculations for the compensatory amounts as specified earlier (section 2.2.a).~~

~~Appropriate programme units will be added to the municipal authority cultivated landscape programmes.~~

~~Until the revised municipal authority cultivated landscape programmes and the corresponding co-financing by the EU are approved, the measures will be carried out as an immediate action plan financed solely out of North Rhine Westphalia state funds and administered through the farming inspectorates.~~

~~E—Reports~~

~~The North Rhine Westphalia Agency for Ecology, Land and Forestry will present a summary of conducted measures together with an evaluation in an annual report.~~

~~The report will be submitted to the EU Environment Directorate General by the German Federal Government.~~