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*European Forum  
on Nature Conservation  
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# **High Nature Value farmlands: Recognising the importance of South East European landscapes**

## **CASE STUDY REPORT Gala i (Romania)**



WWF-DCP/EFNCP, 2008

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Recognising the importance of South East European landscapes**

CASE STUDY REPORT  
Gala i (Romania)

This report is produced as part of collaboration between the European Forum on Nature Conservation and Pastoralism (EFNCP) and WWF Danube-Carpathian Programme (WWF-DCP). Both organisations recognise the importance of certain farming systems for nature conservation. Between 2006 and 2008 a project was executed aiming at finding out at a local scale where agriculture overlaps with areas of High Nature Value in order to understand better the relation between both. The project consisted of six local workshops, three each in Bulgaria (Strandzha, Rusenski Lom and Western Stara Planina) and Romania (Sibiu, Mehedin i and Gala i), and a reporting seminar in Brussels. After concentrating on the ecological aspects, the workshops analysed the socio-economical needs of local farmers and identified where policy can be improved. In this way the project linked the developing concept of High Nature Value farming to the reality of farming and considered the practicalities of implementing the EU commitments on identifying and supporting HNV farming in different local situations. All findings were reported to relevant bodies from local to European level.

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## I. INTRODUCTION

Galați is a county (NUTS III level) in the East of Romania, situated in the Moldavian region and in the Pannonian biogeographical zone. The county has a total area of 4,466 km<sup>2</sup> and about 600,000 inhabitants, giving an average population density of 134 per km<sup>2</sup>. Agriculture and fisheries are the main economic sectors, with metallurgy, textile and ship building the main industries of the county. The county is situated in the lowlands, between the River Prut in the East and the River Siret in the West and South-West, both of which flow into the Danube, which forms the South-East boundary of the county.

The Prut River, which rises in the northern Carpathians, has a long floodplain; most of the settlements are located on the natural river terrace which rises to the west (the east bank is in the Republic of Moldova). To the north the county is hilly with more varied relief. Overall, the region still hosts patches of grasslands of high nature value where grazing takes place as well as extremely intensive arable fields of cereals and energy crops.



Map 1: Relief map of Romania



Map 2: Relief map of Galați County

## II. NATURE VALUES

The overall diversity of fauna of Galați County contains over 240 bird species, 26 mammals, 13 reptiles, 14 amphibians and 35 fish.

The project focused on the Lower Prut Floodplain which is also a Natural Park, and its adjoining territories. The Natural Park was established in 2004 and consists of a long, narrow stretch (122 km – 8247 ha) of floodplains and natural and artificial lakes along the Romanian riverbank of the Prut river in Galați county. In the South of Galați county, the Natural Park extends to the river's confluence with the Danube making a connection with the Danube Delta Biosphere Reserve. In this way, the Lower Prut Floodplain Natural Park is a major corridor for bird migration towards Northern and Western Europe.



The whole territory of the Lower Prut Floodplain Natural Park is included in the European Natura 2000 network as a Special Protection Area under the EU Bird Directive and (except for the Brates Lake) as a Site of Community Interest under the EU Habitat Directive.

Vulnerable habitats in the Natural Park are riparian forests, muddy river banks, fishponds and natural lakes, water meadows and low altitude grasslands. They host important populations of nesting, migrating and wintering bird species. From the total number of bird species from the Lower Prut zone (239 species), 50 species are included in the Romanian Vertebrate Red Data Book (2005). The Park hosts many bird species protected at EU level, as well as some species threatened at global level. These include Dalmatian Pelican (*Pelicanus crispus*), White-tailed Eagle (*Haliaeetus albicilla*), Saker Falcon (*Falco cherrug*), Lesser Spotted Eagle (*Aquila pomarina*), Corncrake (*Crex crex*), Red-breasted Goose (*Branta ruficollis*), Purple Heron (*Ardea purpurea*) and Black Stork (*Ciconia nigra*).

Beside the Lower Prut Floodplain Natural Park, a further 5 SPAs and 12 SCIs are proposed for designation in the county.



Picture 1: Grazed wetlands on the Lower Prut floodplain



Picture 2: Typical Galați landscape with low, soft rolling hills. Note sandy pastures in background

Three bird species which are present in the county and relevant for open, usually farmed landscapes are Corncrake (*Crex crex*) – a world-threatened bird of rich grasslands, Red-footed Falcon (*Falco vespertinus*) – a bird of prey using open country with some trees and water nearby, and Lesser Grey Shrike (*Lanius minor*) – a bird of open small-scale lowlands. The three bird species are focal species in the Romanian agri-environmental measure “Important grasslands for bird species” (see further down). Other species occurring in Galați county on open, usually farmed habitats are European Ground Squirrel (*Spermophilus citellus*) and Montagu's Harrier (*Circus pygargus*), both EU priority species.

### **Corncrake (*Crex crex*)**

**Habitat:** rich grasslands, especially in the floodplain, crops areas: clover, lucerne, cereals.

**Nest:** on ground, in rich pastures and cereals.

**Food:** insects & their larvae, seeds, young plants.

**Threats:** intensive agriculture, damage of natural pastures, mechanized farming practices (mowing), hunting etc. Also substitution of cereal by maize.

**Measures for conservation:** maintenance of wet grasslands in the floodplain.

**Number of individuals in the area:** 30 – 40.



Picture 3: Corncrake (*Crex crex*)

### **Red-footed Falcon (*Falco vespertinus*)**



**Habitat:** forest edges, flooded forest, trees along the roads, group of trees in the plain areas.

**Food:** insects, frogs, lizards and sometimes small birds.

**Threats:** increase of human impact, deterioration of nest conditions, decrease of food resources.

**Population trend:** decrease of numbers at local level

**Number of individuals in the area:** 20 – 30

Picture 4: Red-footed Falcon (*Falco vespertinus*)

### **Lesser Grey Shrike (*Lanius minor*)**

**Habitat:** forest edge, flooded forest, open spaces with shrubs and trees, mosaics of arable land with pastures, trees along the roads.

**Food:** insects, snails, mice and sometimes small birds.

**Threats:** increase of human pressure, deterioration of nest conditions, decrease of food resources.

**Population trend:** increase of numbers at local level

**Number of individuals in the area:** 80 – 120



Picture 5: Lesser Grey Shrike (*Lanius minor*)

### III. LAND USE AND FARMING IN GALA I

Agriculture is the main land use in Gala i county representing 80% of its total area. The majority (81%) is arable land while grasslands (pastures and meadows) cover 12 %, followed by vineyards (5%) and orchards (0,5%) (Table 1). The share of vineyards and orchards shows a decrease of 16% and 25% respectively. This is due to the land restitution when many owners cleared their lands and converted them to arable. The national statistics do not reveal the share of abandoned lands which is estimated to be equally distributed among all land use classes.

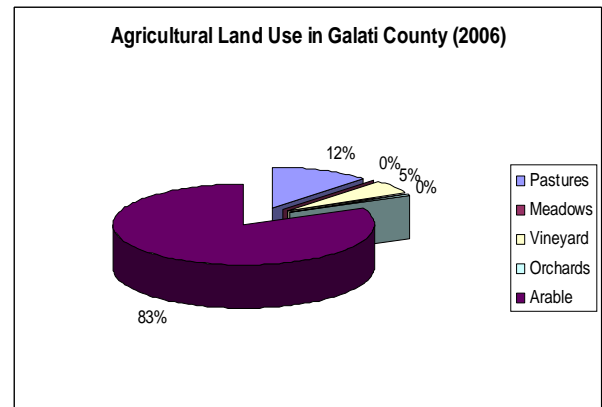


Table 1: Land use in Gala i county (ha)

<i>Year</i>	<i>Arable</i>	<i>Pastures</i>	<i>Meadows</i>	<i>Vineyards</i>	<i>Orchards</i>
1990	290 564	42 663	548	22 877	2 307
1995	290 630	43 564	597	21 801	2 214
2000	292 229	43 580	598	20 368	1 979
2006	293 237	43 663	656	19 316	1 716

Source: <http://www.Gala.i.insse.ro/main.php>

The area of Lower Prut Floodplain Natural Park covers 1 municipality and 9 communities with 23 villages. The settlements are generally placed on the mountain sides and the terrace platforms thus avoiding the floodplain areas.

The total area of these settlements is 65 481 ha of which 53 368 ha (81%) are agricultural land (Table 2). Even on the floodplains the main land use is still arable, mainly for cereals but increasingly for energy crops. The pastures represent 12.8% of the area and are located mostly outside the floodplains of the Prut river on the higher ground. Hay meadows on the floodplains make up only 0.4% of the total land use. Other remaining floodplain grasslands are used for grazing by sheep and cattle when river levels are low.

The average farm size in the county is 3.06ha, but in some communities it is as high as 5.93ha. Most of these farm holdings are subsistence and semi-subsistence in character. In some cases, they form small privately managed associations.

Vineyards and wine production are also an important part of the economy of the region.

Table 2: Agriculture area in the settlements around Lower Prut Nature Park

<i>Areas</i>	<i>ha</i>	<i>%</i>
Arable lands	43 216	81.0
Grasslands	6 827	12.8
Hay-meadows on floodplains	207	0.4
Vineyards and vine nurseries	2 990	5.6
Orchards and trees nurseries	128	0.2
TOTAL	53 368	100

Forests cover 4996 ha and are used mostly for fire wood and construction material. The forested areas are under strong pressure and their total territory is decreasing in the last two decades.

### **Livestock farming**

Cattle decreased significantly after the end of the State cooperative farms in the area. The capacity of the available land to sustain animal breeding is still calculated on the basis of the total forage area and/or total grassland. This approach masks the clear distinction between intensive and extensive systems. However from the statistical data that is available for some of the communities we can see where the intensive cooperative farms were and still are based (table 3). The village of Vân tori even after a ten-fold reduction in the number of animals is still the most intensive location for cattle breeding. On the other hand the village of Oancea has preserved almost the same structure of its cattle farms. The high intensity there is explained by the small area of pastures and hay meadows rather than the large number of animals.

Table 3: Indicator cattle per 100 ha grasslands (1985 - 2003)

<i>Community</i>	<i>1985</i>	<i>1995</i>	<i>2003</i>
Cavadine ti	220.13	56.74	67.15
Suceveni	251.44	70.60	44.50
Oancea	50.83	78.55	43.11
Vi de ti	193.10	74.85	77.94
M st cani	267.64	119.31	120.52
Folte ti	1355.45	118.59	67.59
Frumu i a	909.92	115.81	75.38
Tuluce ti	1774.74	232.70	376.52
Vân tori	4068.18	301.75	444.69

Source: The National Institute of Statistics

The number of sheep in the proximity of the Lower Prut Floodplain Natural Park has fluctuated somewhat. During the decade after 1990 their number almost halved. However, by 2005 the number of sheep had returned to the pre-1990 level. This positive trend is due to the fact that sheep are more flexible and less capital-intensive than cattle, yielding a diversity of products (cheese, meat, skin, wool); and there is a growing demand for lamb both within Romania and for export. The industrial use of wool is significantly reduced and most of it is used in the household. The other products (dairy or meat) are sold on the local or regional markets. The community of Mastacani has the highest sheep density: 141.73 sheep per 100 ha in 2003.

Table 4: Number of sheep around the Nature Park

<i>Animals/year</i>	<i>1990s</i>	<i>1990s</i>	<i>2000s</i>
Sheep – total number	43 592	26 730	43 800

Source: The National Institute of Statistics

Horses and donkeys are reported as important not only as providers of traction in subsistence farming, but also as important elements in the local diet. Furthermore, donkey breeding is currently a profitable activity as the demand on the Italian market is extremely high.

#### IV. HIGH NATURE VALUE FARMLANDS IN GALA I

The area is very representative of the intensively managed territories in the lowlands of the Lower Danube. It is a mixture of alluvial and (on higher grounds) sandy grasslands, mosaic gardens near the villages as well as vast areas of intensively managed agriculture fields in the floodplain.

The area around the Lower Prut Nature Park has the following types of High Nature Value farmlands:

##### 1) HNV Type 1: Semi-natural grasslands:

- Extensive grazing taking place in the floodplain grasslands of the Lower Prut;
- Extensive grazing taking place on the pastures situated on the higher grounds of the county (< 300 m) and generally nearby the villages.

In general livestock keepers are divided into two types. The first is the village sheep keeper: in each community there are about 2 or 3 collective sheep flocks (sometimes mixed with goats) using the surrounding lands, especially grasslands and stubble fields. Each flock has its shepherds nominated by the community. Typically these flocks graze on communal land, although not exclusively. The other type of user is the individual farmer with larger herds of cattle or sheep who is able to manage the flocks separately from the community flocks. They have an agreement with the community administration on which communal land they can use. Individual farmers in the floodplain often have extensive private grazing lands too. In general there are no conflicts of land use in the region.

The highest concentrations of the three focal birds Corncrake (*Crex crex*), Red-footed Falcon (*Falco vespertinus*) and Lesser Grey Shrike (*Lanius minor*) in Gala i County can be found in and around the HNV Type 1 grasslands in the floodplain. However, the birds are not confined to the grassland habitats. Corncrake makes use of cereal cropland as well, while Red-footed Falcon and Lesser Grey Shrike make use of forest patches in the floodplain for nesting and feeding.

##### 2) HNV Type 2: Mosaic of small-scale cropland, grasslands and perennial crops:

- Mostly represented by the small mosaics formed by vineyards, orchards, small strips of grasslands near lowland villages

This is the HNV type for which we have the least specific information due to the fact that it is mostly considered as village gardens with very small parcels. For example in the village of Mastacani the village gardens are 10% of the total agriculture land. In practice every villager has his/her parcels there. Most of them would have animals as well, so in this sense they are also farmers. However, the purpose of their management is purely subsistence with some produce going to the local market in rare occasions.



### 3) HNV Type 3: Habitats of species of European importance

- The majority of the farmlands in Gala i: intensively managed, fertilised and often drained arable croplands in the Lower Prut floodplain as well as overgrazed or intensively mowed grasslands.

The main issue with this type of HNV farmland in Gala i is the presence of bird species of high conservation value associated with these intensive farmlands. This type of HNV farmland does not exhibit the HNV characteristics such as presence of semi-natural vegetation at large scale, diversity of land cover and overall low-intensive land use. Hence there is no or little relation between the farming system and the presence of rare species. Typical bird species of high conservation value are migrating waterfowl feeding on highly nutritious crops such as winter wheat e.g. Lesser White-fronted Goose (*Anser erythropus*) and Red-breasted Goose (*Branta ruficollis*). Also raptors such as Saker Falcon (*Falco cherrug*) and Montagu's Harrier (*Circus pygargus*) make use of HNV Type 3 farmlands as well as HNV Type 1 grasslands in and around the floodplain.



Picture 6: Patches of forests and HNV Type 1 grasslands in the Lower Prut Natural Park



Picture 7: Intensively farmed, drained arable farmland near the city of Gala i (Type 3 HNV farmland)

## V. CASE STUDY FARMS

Two farms were visited during the workshop in Gala i in April 2008.

### A. Farm of Ivan Angelica, village of Mastacani

The dairy farm is situated in the floodplains of the Lower Prut River. Mr. Angelica manages a total of 50 ha of which 25 ha are his land and 25 ha are rented. The farmer produces silage, maize, lucerne and oats on 30 ha, the other 20 ha are haymaking lands.

He has 44 dairy cows and 8 calves which are kept in a semi-intensive system. The farm itself is located in a former cooperative building (there are another 4 or 5 farmers in the same locality). The cooperative area is fenced and thus animals are only taken on the 'grasslands' within the boundaries of the fences. The farm is surrounded by intensively managed cereal fields and thus it is almost impossible for the farmer to reach other grasslands even if he wanted. Hay is stored in a neighbouring facility and is given to animals on a daily basis together with other feed.

This farm itself did not appear to be HNV, although patches of grassland in the surrounding landscape probably were semi-natural and therefore of interest. In some cases they might be used by this farmer, although the main users probably are village sheep flocks.

The milk produced on the farm is sold to a milk processor. In terms of meeting hygiene requirements for the dairy production the farm would need significant investments.



Picture 8: Cattle grazing on species-poor grassland in the fenced-off area next to the cooperative building



Picture 9: Species-rich hay from nearby floodplain meadows, part of the daily diet of the cattle

## **B. Farm of Radu Gheorghe, town of Târgu Bujor**

The farm of Radu Gheorghe is situated in the more hilly areas of Gala i county nearby the town of Târgu Bujor. The farmer manages a total of 39.5 ha of which 27 ha are leased from the commune. The majority of the land is used for grazing and hay-making. Lucerne is produced on 4 ha.

Mr. Gheorghe has 360 sheep. The herd is mixed of the breeds “urcan ” and “ igaie”. The average grazing density on his farm is about 9 sheep/ha which is relatively intensive (0.9-1.35LU/ha). Both actual grazing densities and specific biodiversity data are missing to determine whether this is a HNV farming system. As semi-natural vegetation is present at large scale (see picture 10), a move to a less intensive grazing regime would most probably increase biodiversity on his farm. Mr. Gheorghe produces both milk and cheese and sells them on the market of Târgu Bujor.



Picture 10: Sheep/goat grazing near Târgu Bujor on semi-natural (wet) grasslands (HNV Type 1). Glimpse of Type 2 HNV farmland in background



Picture 11: HNV Type 1 semi-natural grasslands in fore- (alluvial) and background (sandy) near Târgu Bujor

### C. Village of Mastacani

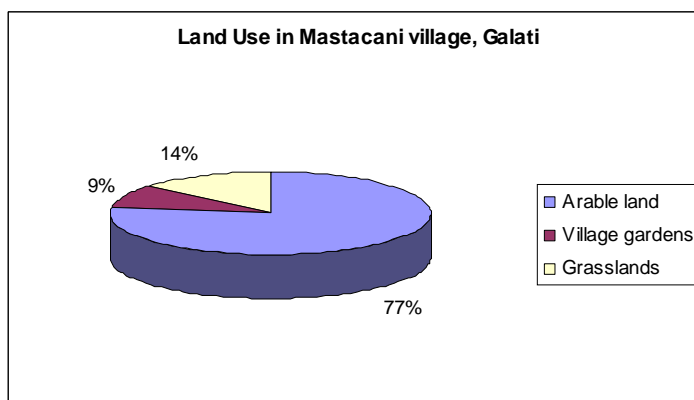
In the case of Gala i, the team decided to take a closer look not only at the farm level situation but also at the village level. This was mostly justified by the two types of users of common land and the need to see what would be the level of intensity for the grazing of the common lands.

The total agriculture land in the village of Mastacani is 6504 ha. The village gardens extend to 602 ha and the grasslands to 880 ha. The other 5022 ha is made up of arable land.

The privately owned grasslands are 580 ha, the municipal ones are 180 ha. There are also 120 ha of reforested land which used to be grazed but due to land slides was reforested.

Table 5: Number of animals in Mastacani (2008)

<i>Animals</i>	<i>Numbers</i>
Cattle	1142
Sheep	9105
Goats	377
Horses	765
Pigs	950
Poultry	31870
Beehives	50



There are two groups of grazing animals in Mastacani:

- Farmers' animals: animals graze on the farmers' own pasture or on common pastures. There are 33 registered farmers dealing with sheep and/or goat breeding and 3 farmers engaged in cattle breeding.
- Local people's animals (villagers who have 1 or 2 cows or under 10 sheep): animals graze on common pastures or on former irrigation canals or wooded land.

The officially declared grazing density is as follows:

- Sheep and/or goats: 12-15 animals per ha
- Cattle or horses: 5 animals per ha

The grazing density in either group of animals is extremely high according to these (official) figures. Information is missing about the actual grazing density and the importance of feed concentrates in the diet of the animals. Given the serious lack of grassland resources in the region overgrazing is inevitably going to cause serious problems on the last remaining areas of nature value in the county. Furthermore, more and more land is being used for energy crops production, so at some point the costs of the concentrated forage for the animals is going to be too high for many of the farmers.

## VI. POLICY ASPECTS

The Gala i case brings to light the necessity to complete the Agri-Environment Programme with measures supporting intensively farmed HNV lands, the reintroduction of the measure concerning protection of riparian habitats (initially proposed to be included in the Agri-Environment Programme), regulating the grazing period/practices in the case of wet

grasslands around important bird areas; as well as to extend the HNV grasslands package to new areas.

Remarkable for its high number of bird species depending for nesting, migration and feeding on farmlands, the studied area has a very poor coverage by the measures meant to provide compensatory payments and financial support.

Although Corncrake, Red-footed Falcon and Lesser Grey Shrike are the bird species included in HNV package 3 “Important grasslands for bird species”, Gala i County is not among the eligible areas. Furthermore, the measure is meant to start as a pilot for introducing the Natura 2000 payments in 2010 and is going to be extended every year to new eligible areas. This measure is offering 101 euro/ha/year. Together with the Romanian Ornithological Society WWF-DCP has started to prepare the justification for introducing Gala i on the list of eligible areas.

Grasslands in the area are representative examples of HNV farmland in non-montane Romania. However, there is not sufficient data and knowledge to clearly understand the relation between biodiversity and farming in the different habitats in and around the Lower Prut Natural Park. Therefore it is difficult to point out which farmlands are valuable from nature conservation point of view and which not. Nevertheless, it is unfortunate that the remaining patches of natural vegetation in the region are being abandoned from the policy perspective. Farmers involved in sheep grazing are under the pressure of meeting more and more standards and at the same time have very limited grazing resources. Their operations are significantly threatened due to the fact that most of the support is provided on an area-basis and thus on the one hand they need to buy external feed for their animals, and on the other they cannot get available public funding.

Currently, their main support comes from the national payment per animal (10 euro/sheep) and the SAPS payment of 50 euro/ha.

The high fragmentation of land ownership and the poverty of local farmers constitute the main gaps in formulating a coherent planning of the region of the Park, but also in applying for direct payments and agri-environment measures (eligibility criteria: minimum 1 ha of land comprised of parcels of min 0.3 ha).

There is one measure for arable farmers in the agri-environment programme: the package for winter green cover. There is a list of crops recommended and the biomass has to be incorporated into the soil by March of the following year at the latest. This measure has a secondary benefit of helping to combat the serious soil erosion of arable lands in the area.

There is also a poor level of knowledge among farmers regarding good agriculture practices and about farming in general, which has led to soil erosion, overgrazing and inappropriate drainage.

A scheme combining vocational training with the development of a more locally-based agriculture consultancy service would contribute for a better understanding of the responsibility that farmers have for maintaining the landscape and biodiversity, but equally for increasing the competitiveness of farming through improving the farming practices.



## VII. RECOMMENDATIONS

The main recommendations from the Gala i workshop are related to the national agri-environmental programme.

### 1. Identification of HNV farmland

Collect baseline information of farmland with some nature values such as the actual intensity of land use and link this with ecological requirements of certain indicator or focal species. A better understanding of the relation between farming and biodiversity can be used to design better support to improve the HNV quality in Gala i and other lowland and non-montane areas.

### 2. National agri-environmental programme and its local implementation

- **Extending the areas of HNV package 3** “Important grasslands for bird species” to new areas, and especially areas with recognized nature values as IBAs, Natura 2000, etc.
- **Introduce a HNV package for grasslands under the pressure of overgrazing** and target it to the lowland areas of Romania. Due to the natural suitability for intensive production the last remaining grassland areas in the lowlands are important patches of (high) nature value and critical habitats/refuges for many flora and fauna species.
- **Reintroduce a measure for managing riparian habitats.** This measure should also be targeted at lowland river basins as well as floodplains and support the introduction of more extensive forms of land management in these areas.

### 3. Training and advisory services to farmers

The need to provide intensive training and advice to farmers at the lowest possible level was once again confirmed during the local workshop. It is very important that sufficient technical knowledge and capacity is available to farmers and they do not have to travel tens of kilometres to get it. The advice and training should not only focus on the application process (which all agree is important) but also on everyday management of the farm in terms of adaptation to new (hygiene) requirements, GAEC, nature values, and economic management.

EFNCP is a Europe-wide network which raises awareness of the importance of low-intensity farming for nature conservation and aims to improve the way public policies respond to the needs of these farming systems.

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WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature

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