

Stand 6.9.02



Stiftung bedrohte Tierwelt

Zoologische  
Gesellschaft

Frankfurt Zoological Society

### **Third (FINAL) Progress Report**

Project-title: Conservation of Rusne island in the Nemunas delta, Lithuania

Project number: FZS – 1294/02

Reporting period: 01.01.2004 – 31.12.2004

#### **1. Goals and objectives of the project**

##### **Goal**

- Contribute to the sustainable conservation of the nature heritage of the delta as the most important coastal area for migratory birds in the Baltic Region and as an essential element of EECONET.

##### **Objectives**

- Counteract grassland birds habitat degradation due to vegetation succession and meadows damaging;
- Aquatic Warbler conservation;
- Development of eco -agriculture and eco-tourism as tools for nature preservation.

#### **2. Description of the problem(s) to be solved by the project**

- Degradation of grassland birds habitats due to vegetation succession;
- Degradation of grassland birds habitats due to damaging of meadows;
- Declining of the Aquatic Warbler population;
- Uncontrolled tourism causes damage for nature and birds;
- Intensification of agriculture activities at certain areas of the island forms a threat for the birds.

#### **3. Short description of the project**

The project area, Rusne Island, belongs to the Eastern Baltic region. The island has a total area of 4691 ha and is the biggest one in the Nemunas river delta. The delta of the river Nemunas occupies an area of about 2000 km<sup>2</sup>, 662 km<sup>2</sup> of which belong to Lithuania, the rest lies in the territory of Kaliningrad Oblast (region), Russia. The island is bordered by two

branches of the Nemunas river: Atmata - in the north, Skirvyte - in the south. Curonian Lagoon borders it in the west. The Rusne island is a part of the Nemunas Delta regional park, which is established in 1992 and is devoted to the preservation of the landscape, ecosystem and cultural heritage of the lower Nemunas . The Nemunas delta has very high nature value for Lithuania and world-wide as well, it is a core area of the Lithuanian Ecological Network and of the Pan – European Ecological Network. The Nemunas delta regional park is a Ramsar site and has designated as SPA and potential SCI (potential Natura 2000 site).

Rusne Island is situated in the western part of Lithuania, Klaipeda County, Šilute district. On the island are located Rusne town and five villages. The island is connected to the continent through a bridge over Atmata river and a road between Rusne and Šilute town. (Almost every spring the road gets overflowed, then the connection is disrupted for a short time: about 1 - 2 weeks.) The coastal area has been an intensive agricultural area till the nineties, this situation changed with the collapse of the collective farms and the privatization when about 70% of the agricultural lands became in ownership of small farmers. Due to the small farm size and lack of equipment farming is not profitable and the majority of farms lead extensive farming. Some farmers are starting organic farming, but because of the small market their business is not going well either. In many cases the land is abandoned.

On locations with a history of agricultural use the vegetation is influenced by and adapted to cattle grazing and haymaking. The open meadows are especially important for migratory birds like geese, ducks and waders. Fish ponds that are pumped dry (but most of the pumping stations are out of function now) result in temporary mud- flats, which provides feeding grounds for migratory and breeding birds such as ducks, geese, herons, terns, gulls, waders and marshland species. Many species are breeding here or use the area as resting and feeding place during their migration. Several of them are considered internationally endangered. Some examples are: White-tailed eagle, Barnacle goose, Crane, Dunlin and Aquatic warbler. The Nemunas delta is one of the most important stopover areas in the northern part of the Western-Palearctic migration route.

Lithuania holds approximately 1.2-1.9 % of European Aquatic warbler population and six out of seven known breeding sites in Lithuania are located in Curonian lagoon region. The key breeding site for Aquatic warbler is located in the area of Dreverna (situated in the Nemunas Delta Regional Park, close to Rusne) and supports nearly 73 % of the total estimated national population. Bird monitoring during the last years has shown that the abundance of breeding Aquatic warbler is declining due to habitat changes.

Birth breeding and stopover areas are currently very negatively affected by habitat changes on the Rusne Island and the Nemunas delta. Habitat changes are mainly caused by the following factors: 1)vegetation succession, 2) uncontrolled land use, 3) tourism development. The use of grasslands is very much decreased after the destruction of the collective farms, which results in overgrowing of the meadows with grass, reeds & bushes and transition of meadows into woodland. Habitat changes due to vegetation succession are currently the most important factor negatively affecting bird breeding places on Rusne. On the other hand, on several grasslands which are more close to Rusne municipality, the agricultural activities are intensifying which leads to overgrazing and decreasing of the natural values of these lands. Tourism development is a new and important feature of the local economy. Future uncontrolled development of the tourism sector and further intensifying the use of agricultural land will cause increasing of the number of conflicts between economical and nature conservation interests.

#### **4. Description of the solution of the project**

##### **4.1. Land Lease**

LGF would lease grassland areas in Uostadvaris winter polder, Rusne island, Nemunas delta regional. This area is very important for breeding birds, especially waders and resting site for migrating geese and waders. The area should be grazed and mowed to ensure good conditions for breeding and migratory birds.

##### **4.2. Management of grassland areas in Rusne island**

Management is done upon nature oriented conditions and includes mowing of meadows, removing of trees and bushes from grassland areas, and promoting the change of intensive into extensive grazing. LGF and RGF have been involved in grassland management activities for 5 years with success. They have managed areas, which before that had been abandoned for 5-6 years and were overgrown by bushes and reed beds. The follow up of these activities ensures good status of the breeding and migratory birds.

##### **4.3. Restoration of damaged meadows**

Restoration should be performed on meadows, which have been damaged by agricultural activities - plugging, or by the wild boar or geese.

##### **4.4. Management of Aquatic Warbler areas in Rusne Island & surrounding areas.**

Since 1998 LGF has started management of Aquatic warbler areas in Rusne island and in its surroundings - the Minija nature reserve and Dreverna area, which belong to the Nemunas Delta Regional Park. The management of these areas is extremely important to ensure good status of the breeding Aquatic Warbler Population.

##### **4.5. Raising of Public Awareness and Educational activities:**

- **Promoting of eco-agriculture.**

For the promoting of eco – agriculture LGF in co-operation with RGF are planning to organize workshops, seminars and excursions on farming and nature conservation. The activities would take place on Rusne island and Nemunas Delta Regional Park as well as “Silute Young Farmers School”. RGF are also planning to continue with publishing of the newsletter “Rusnes zinius” (Rusne news), which regularly treats problems on eco-agriculture; it appears 6 times per year.

- **Support to the establishing of a Tourist Information Center.**

To further improve the distribution of information on nature conservation to the increasing number of tourists (only the ethnographic museum has already more than 6000 visitors per year), LGF & RGF are planning to support the establishing of a Tourist Information Center in Rusne.

#### **5. Results**

##### **5.1. Land lease**

Lithuanian Fund for Nature has leased 56,55 ha grassland land in Uostadvaris polder, Rusne island, Silute district, the Nemunas delta (cadastre plot Nr. 8854-0001-:98). The land has been

leased for 10 years with the priority to lease it for longer period. The leased land is located in the nature reserve of Nemunas Delta Regional Park. In order to manage the leased land LGF organised mowing of the meadows as planned within the project, and further LGF succeeded to merge other funds and buy Hereford breed cattle for grazing. In 2004 the leased area was subdivided into 3 managed sectors: for mowing only, for grazing only and for mixed activities.

## **5.2. Mowing of grassland, cutting shrubs & bushes**

In 2004 LGF/RGF mowed 59,5 hectares (20,9; 30,1; 8,5 in the attached scheme) meadows in the leased land and 10 hectares meadows with reeds and shrubs. The majority of managed grasslands are located in the Uostadvaris polder.

In July-December were cut 6,4 km length strips along ditches and roads. Bushes were cut at the end of the winter and in the spring period.

In 2004 the Lithuanian Fund for Nature introduced grazing in the leased area as management measure additional to the mowing in order to keep better conditions for birds.. For this purpose LGF bought 16 adult and 9 young cows “Hereford” breed (the purchase was financed via the “Conservation of Rusne Island Project” supported by the GEF Small Grant Program in Lithuania). The cows are under control of a few local farmers. They are taking care for the cattle in the pastures during the summer period and are keeping the cattle in their own farms during the winter period.

Within the current project money were reallocated from the travel to the equipment budget and used to facilitate better wintering conditions in farms where LGF cattle is wintering

## **5.3. Restoration of meadows**

In 2004 there were no damaged meadows and this activity was not performed.

## **5.4. Management of Aquatic warbler areas**

LGF/RGF cleaned scrubs and bushes (8 hectares in total) in the Aquatic Warbler breeding area in Minija Nature Reserve. The activity was performed in September – November.

## **5.5. Activities on Raising of Public Awareness**

### 5.5.1. Support to Information centers

In 2004 LGF supported the information centers in Rusne: Nemunas Delta Regional Park, Kazimieras Banys farm –museum, Rusne Fund for Nature, Rusne Rural Tourism Association, Rusne Municipality. The Lithuanian Fund for Nature provided different information materials to the centres (“Nature Conservation Actualities”, “Rusne News” and others).

### 5.5.2. Training material for local farmers

Two training packages: one on Rural Development Programme and one on Agro-Environmental Schemes have been prepared and handled to Rusne farmers. These info packages were of a very good use for local farmers to better understand the governmental information on the items and to prepare timely their applications. Namely, the official governmental information was very short and unclear and without the LGF help the farmers would have to go to regional agro – services for help, which means to travel long distance and pay money for consultations. Official information on different measures usually is published quite late and farmers interested in it are not able to prepare applications in a short time.

Considering the Rural Development Programme and the Agro-Environmental Schemes LGF could use not yet published information from the Ministry of Agriculture and the farmers were informed and had more time for preparations. In 2004 there was no official information on some agro – environmental schemes, including late mowing of grasslands. This information was published only in March 2005, but Rusne farmers got the information in 2004 and had longer time to prepare applications.

Unfortunately Silute Young Farmer School stopped teaching of young farmers, and that is why LGF was not involved in providing of training material this year.

### 5.5. 3. Workshops

Two workshops for Rusne farmers have been organised. Both workshops focused on interpretation of the new forthcoming Rural Development Program: first of EU and second for the Lithuanian one. Two meetings with Rusne Fund for Nature members have been organised.

The workshops as well as the information packages facilitated better understanding of the Program and explained how to use it. Usually farmers are not following official information and they could miss it. During the workshops in 2002-2004 LGF staff and other lectures encouraged farmers to start eco-farming. The typical farmer is very conservative and is not willing to change farming approaches. As a result of different training a few farmers started eco-farming and increased incomes: they are not only getting money for eco-production but are also getting support from the government under EU funds. It is very important, that all farmers started ecologically friendly milk production. This means that they have to organize grazing and mowing of grasslands in environmentally friendly way – not early mowing and the density of cattle is limited.

### 5.5.4. Printed materials

Lithuanian Fund for Nature published 2 collared newsletters “Nature Conservation Actualities” (see attachment) in 1000 copies. 300 copies distributed in Rusne island and Nemunas delta regional park, others along of Lithuanian nature conservation authorities and protected areas administrations. This publication was published from merged funds and 20% of costs have been covered from FZS funds.

6 newsletters “Rusne News” were published and 200 copies of each issue were distributed among Rusne island inhabitants and tourists. For this publication were used merged funds (15% from FZS).

## **5.6. Bird monitoring**

Bird monitoring has been conducted in manage areas of Rusne island and Aquatic Warbler breeding areas. Ecologist from Nemunas delta regional park Romas Mecionis and a student of Vilnius university performed bird monitoring and prepared the results.

Table 1. Results of 4 years monitoring of 5 rare grassland bird species in Uostadvaris polder, Rusne and Minija nature reserve, Nemunas delta.

Nr.	Species name	Number of birds per years			
		2001	2002	2003	2004
1	<i>Crex crex</i> *	44	52	50	36
2	<i>Limosa limosa</i>	36	41	45	43
3	<i>Gallinago media</i>	0	3	2	3
4	<i>Philomachus pugnax</i>	8	16	12	10
5	<i>Acrocephalus paludicola</i> **	5	14	17	22

\* - *Crex crex* decreased breeding pairs in all Lithuania.

\*\* - *A. paludicola* monitoring in Minija nature reserve

There is a tendency of increasing the abundance of majority indicator species in the managed areas. The distribution of breeding meadows birds (2002-2003-2004) is attached in the appendix to the report.

The increasing of the number of meadow bird species is shown in Fig 1 and the increasing of species diversity in the managed areas is shown in Fig 2.

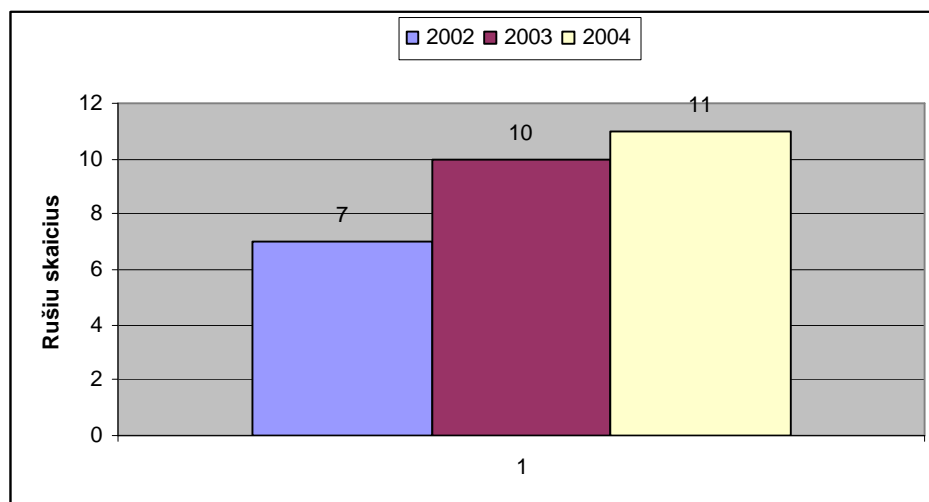


Fig. 1. Increasing number of all meadow bird species species in the monitoring plots (2002 – 2004) Y ordinates is the number of species.

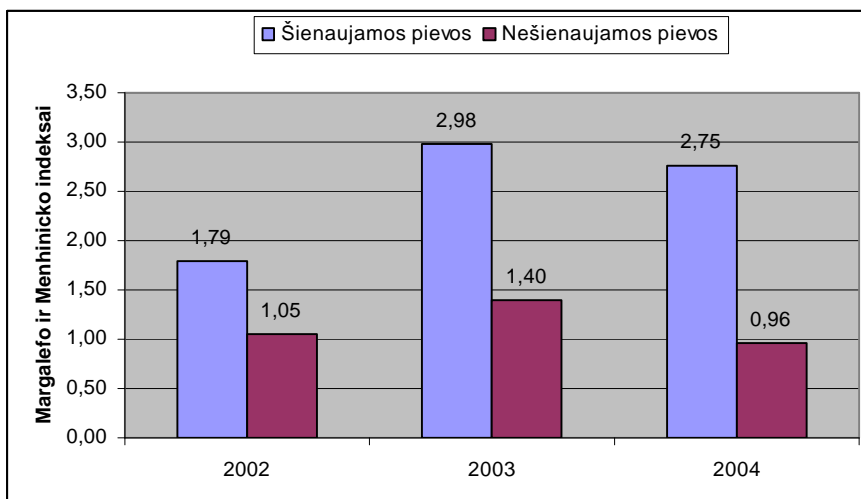


Fig. 2. Abundance of species according Margalef and Menchin index (the index gives the species diversity). The blue color (sienaujamos pievos) is for mowed, and the red color (nesienaujamos pievos) for not mowed meadows.

### 5.7. Plant monitoring

Plant monitoring has been carried out in Uostadvaris polder in the area which is leased for Lithuanian Fund for Nature. It started first time in 2003. The areas of 56 hectares is divided in 3 zones managed with different regime and 1 not managed zone. One zone is going to be for grazing only, second for mowing and grazing, third one for mowing only and last on not managed at all as control zone. 6 big plots have identified in the area. Plant species and abundance have been measured in each plot. Measurements of plants were performed at different smaller plots: 1 m<sup>2</sup>, 5 m<sup>2</sup>, 12,5 m<sup>2</sup>, 25 m<sup>2</sup> and 50 m<sup>2</sup>. This activity will continue and the results could give some indications after 3 years monitoring.

The plant monitoring has been performed by Dr. Valerijus Rasomavicius, senior researcher of Institute of Botany.

#### **Successes or failures of project results. What are the reasons for that?**

The project has met his most important objectives and it could provide best practice for others to learn from what concerns nature conservation and involving of local society in the developing of ecological agriculture and eco-tourism as way to nature preservation and sustainable development.

Most important project successes are:

- There is already an important visible result of the grassland management: following bird census in Rusne island, especially in Uostadvaris polder, **there is a tendency of increasing grassland indicator species abundance.**
- LGF managed abandoned meadows involving local farmers in mowing of grasslands and cutting shrubs and trees and also for taking care of LGF cattle for grazing. For the farmers the management activities were possibility to increase incomes. Some farmers used the hay or reeds. Farmers also benefit from getting free possibility to prepare silage.

- During the project period, as a result of the LGF work, few farmers certified own ecological (organic) farming and they produce ecological friendly milk and meat. LGF provided the farmers with relevant information and organised trainings. RGF organised trips to eco-farms and involved farmers in discussions, encouraged them to start first steps forward new farming approaches.
- More local people are involved in eco – tourism. Local people are interested in getting higher incomes, but they understand that by preserving nature they could get more money. Eco-tourism could attract more visitors than ordinary tourism. Local people are also proud to say that they preserve nature, but of course not all. Number of visitors increased very much. In 2004 around 8000 visitors visited Kazimieras Banys farm – museum, where they got lectures not only on history of Rusne, but also on nature conservation.
- With the initiative of LGF/RGF was established the Rusne Municipality Information Center. Further, LGF/RGF provides all information centers in the region with information materials.
- The involvement of the local society could insure sustainability of the project.

#### Description in the ‚Logical Framework’ as in the application:

Goal	Objectives	Measures and activities	Result	Proof for the result
Contribute to the sustainable conservation of the nature heritage of the delta as the most important coastal area for migratory birds in the Baltic Region and as an essential element of EECONET.	I. Counteract grassland birds habitat degradation due to vegetation succession and meadows damaging	1. Land lease  2. Mowing of abandoned meadows and cutting of scrubs and reeds along ditches and roads	Land leased 56,55 ha (grassland ) in Uostadvaris polder, Rusne island, Silute district for for 10 years (cadaster plot Nr. 8854-0001-:98  Management of abandoned meadows from August to November: - 59,5 ha meadows mowed; - 10 ha meadows with scrubs & reeds mowed; - 6,4 km scrubs & bushes length strips cut.	Agreement with Silute district land management service (translated to English)  Bird monitoring shows increasing the abundance of grassland species indicators.
	II. Aquatic Warbler conservation	Restoration and management of Aquatic warbler breeding areas in Rusne and surrounding areas	8 ha Aquatic warbler breeding area has been mowed	Bird monitoring shows tendency if increasing the number of Aquatic Warbler

	<p>III. Development of eco – agriculture and eco – tourism as tools for nature preservation</p>	<p>Raising of public awareness and education activities: 1) Promoting of eco-agriculture; 2) Support of established tourism information center and development of eco-tourism; 3) Education of general public on nature conservation.</p>	<p>- Publishe 2 issues and distributed “Nature Conservation Actualities”; - 6 issues of “Rusne News” have been published and distributed among Rusne inhabitant (each issue 200 copies); - 2 training packages on Rural Developing Program has been produced and distributed among Rusne farmers; - 2 workshop on Rural Development Program were organised to Rusne farmers; - Information materials on eco-farming, eco-tourism have been distributed to Silute district information and tourism centers - It is very important that all farmers started ecologically friendly milk production. This means that they have to organize grazing and mowing of grasslands in environmentally friendly way – not early mowing and the density of cattle is limited. - More local people are involved in eco tourism development. Eco-tourism could attract more visitors than ordinary tourism.</p>	
--	---	---	--	--

## **6. Additional and further actions taken (or to be taken)**

LGF is partner of “Life – Nature” project management of coastal zones along Baltic Sea, but this project is aimed to management of *Calidris alpina* breeding sites. But the leased area is now not a breeding site of these species, while in n former time these species were breeding in the Uostadavris polder. If the project is approved, LGF is going to negotiate with the applicant organisation concerning the management of the area leased by LGF in order to get back extincted species and insure better conditions for birds.

## **7. Public relations**

1 article has been publish in national level magazine “Magazin on Nature”, 2 articles have been published in newspaper “Nature Conservation Actualities” and 1 in “Rusne News” on projectactivities. Updated web site: [www.glis.lt](http://www.glis.lt)

## **8. Further Sponsors and supporters to the project**

EAF gave small grant for land lease for 30 years. Unfortunately recent funds for managing of nature are not available in EU and Lithuania (except “Life – Nature”). All structural Fund for managing nature are available for state and municipality authorities. NGOs can apply only for financial support for informing society on environment quality. No further sponsors can be foreseen recently. Private sponsor are not willing to support nature conservation activities.

## **9. Contacts**

### **International project coordinator:**

Daniela van Elburg - Velinova  
EUCC – the Coastal Union  
Breestraat 89A  
Postbus 11232  
2301 EE Leiden  
The Netherlands  
Phone: +31-71-5122900  
Fax: + 31-71-5124069  
E-mail: [d.vanelburg@eucc.net](mailto:d.vanelburg@eucc.net)  
Website: [www.eucc.nl](http://www.eucc.nl)

### **Local project leader:**

Pranas Mierauskas  
Lithuanian Fund for Nature  
Algirdo St. 22-3  
03012 Vilnius  
Lithuania  
Phone: +370-5-2310700  
Fax: +370-5-2310441  
E-mail: [Pranas.m@glis.lt](mailto:Pranas.m@glis.lt)  
Website: [www.glis.lt](http://www.glis.lt)

**10. Financial report:**

**The financial report is herewith attached.**

**The receipts to the financial report, the bank transfer receipts and the financial report prepared by LGF are separately attached.**

**11. Annexes to the progress report:**

***Annex 1.* Distribution of breeding birds in the leased area in the years 2002, 2003 and 2004**

***Annex 2.* Two numbers of “Nature conservation actualities”, published by LGF**

***Annex 3.* Two numbers of the newsletter “Rusne news”, published by RGF.**

Distribution of breeding birds in the leased area in year 2002

