



Project „Securing sustainable farming to ensure conservation of globally threatened bird species in agrarian landscape“
Project No. LIFE09 NAT/LT/000233
is co-financed by the EU LIFE+ Programme, Republic of Lithuania, Republic of Latvia and the project partners.

Project partners:



Project success monitoring final report

The annex contains following document:

1. Evaluation of project realization success (2011-2015) report

Report on project

“SECURING SUSTAINABLE FARMING TO ENSURE CONSERVATION OF GLOBALLY THREATENED BIRD SPECIES IN AGRARIAN LANDSCAPE”

EVALUATION OF PROJECT REALIZATION SUCCESS (2011-2015)

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Methodology of the evaluation

This evaluation is carried out according to the *ACTION E.2: Monitoring/evaluation of project success*. (The expert will provide direct scientific advice to the project manager as well as nature conservation measures, he will travel to the project sites analyses data of post-ante monitoring and provide regular reports to the steering group).

Evaluation based on a preparatory study of documents related to the project cycle (project document, progress reports).

Information and data for the assessments of this evaluation have been obtained from:

Conduct desk-reviews, interviews and site-visits in order to obtain objective and verifiable data to substantive evaluation ratings and assessments;

Validate the strategies for management of project sites and monitoring of rehabilitation processes applied within the project;

Verify on-site immediate effects of rehabilitation from the biodiversity perspectives;

Interviews with Project Management Unit and key project stakeholders, and experts.

EVALUATION OF ACHIEVEMENT OF PROJECT OUTCOMES AND RECOMENDATION

Project Strategy Target (by project end)	Baseline	Result (by project end)	Source of verification
Development and approval of methodic for counts and mapping of singing males and breeding females	There was no approved methodic	Methodic is developed, and monitoring of the project's efficiency was conducted in accordance with this methodic: a) mapping of Error! Reference source not found. singing males surveys (2 counts annually); b) Error! Reference source not found. breeding success and c) detailed vegetation mapping (3 times during project duration).	Yearly project reports
Action A2: Development of specific agri-environmental measures for important Aquatic warbler sites in Nemunas delta	There were no Agri-environmental measures established. Farmers usually started mowing at the beginning of June, which led to losses of all Aquatic Warbler nests.	Agri-environmental measures for the conservation of Aquatic warbler in Lithuania designed and included in the national RDP for the period 2014-2020. The measure entered into force in 2015 (with participation covering more than 30% of the eligible area). Use of meadows after introduction of the Agri-environmental measures does not cause damage to the Aquatic Warbler and is economically effective for farmers.	
Action A3: Formation of ecological priority land-use plot in LT02-Tulkaragė project area	LT02-Tulkaragė project area was owned by the municipality before the project and was almost not used, which resulted in its complete overgrowth with shrubs and reeds.	LT02-Tulkaragė project area is leased for 25 years to the farmer JSC Goldengrass (AB2), who is interested in regular mowing. Currently, nearly all area related to this action is participating in the agri-environmental measure "Maintenance of aquatic warbler habitats in natural and semi-natural meadows".	
Action A4: Development of the recommendations on the solutions for landowners to manage properly Aquatic Warbler habitats, ensuring sustainable economic benefit	There were no recommendations on the solutions for landowners to manage properly Aquatic Warbler habitats, ensuring sustainable economic benefit.	Publication for landowners is successfully achieved towards the project end. It's important not only for the purpose of introducing farmers to available support mechanism and directing them to appropriate agri-environmental measures.	

<p>Action C1: Restoration of the main Aquatic warbler breeding site of Lithuania – Tyrai flooded meadows Project application planned to perform mowing twice in a year during two seasons (450 ha).</p>	<p>The most of the project area at the start of the project was overgrown with dense reeds (400 ha) and only 80 ha was represented by open sedge mire. Aquatic Warbler nested only on the sedge part. The Aquatic warbler population here was 30 males at that moment.</p>	<p>Due to annual mowing (500 ha) the reed communities have transformed to reed-sedge communities. Gradually from being nearly all located in the southern part of the area in 2011, birds gradually distributed towards northern parts and started to breed in previously abandoned sites. Aquatic warbler population here increased till 50 males. In order to ensure further recovery of the habitat and maintain its favourable conservation status for Aquatic warbler, associated beneficiary setup a nature conservation agreement with organization, which performs farming activities to maintain the site.</p>	<p>Report on mapping plant community, bird absolute counts.</p>
<p>Action C2: Restoration and further demonstrational management of the fens in the Žuvintas Biosphere Reserve: LT04/01-91 ha; LT04/02-97 ha; LT04/03-55 ha; LT04/04-50 ha; LT04/05-72 ha</p>	<p>The most part of the project sites was completely overgrown with shrubs, reeds and forest. Aquatic Warbler population here was 1 male.</p>	<p>The actions implemented for optimization of the hydrological regime and site clearing from reeds and shrubs let to restore open fen mires suitable for Aquatic Warbler (320 ha). Aquatic Warbler population here has increased till 7 birds.</p>	<p>The sites have been observed by the experts of international Aquatic warbler conservation team. They confirmed that the progress of habitat restoration was very successful and conditions for most of the area are suitable for Aquatic warbler breeding.</p>
<p>Action C3: Demonstrational restoration management of the wet meadows at lake Liepaja and Pape site – the former breeding site and stopover sites of the Aquatic warbler in Latvia LV05 – Lake Pape - 20ra; LV06 – Lake Liepaja – 100 ra</p>	<p>Prior to restoration, the area was very densely overgrown with shrubs and trees.</p>	<p>Planned habitat restoration work was successfully completed in 2014. No observations aquatic warblers have been recorded during breeding season, however areas remains important for aquatic warbler as it is expected that the species will come back for breeding after full recovery of population at Tyrai in Lithuania (LT01 project area).</p>	

<p>Action C4: Restoration of the former important Aquatic warbler breeding site – Tulkiarage polder of the Nemunas delta SPA (Lithuania) Targeted total area of habitat restoration – 400 ha. Setup of 2 water gates, Restoring 200 meters of polder dyke</p>	<p>The project territory was completely overgrown with reeds and shrubs. The hydrological regime was not stable and completely dependent on the water level in the bay because of faulty dam.</p>	<p>Overall planned restoration work was fully implemented and further exceeded by more intensive mowing suppressing reed vegetation. As vegetation monitoring concludes, reed vegetation significantly weakened and its density substantially reduced. In 2016 one Aquatic warbler singing male was already observed in central-northern part of the project area. Since 2016, the area participates in the agri-environmental schemes</p>	
<p>Action C5: Demonstration management of grasslands for Aquatic warbler conservation in Šyša polder (60 ra)</p>	<p>early mowing by farmers causing significant (probably total) destruction of broods</p>	<p>Planned restoration and demonstration management activities were fully implemented and exceeded (targeted 111 ha instead of planned 60 ha). In addition to initially planned conservation measures, implemented individual negotiations with farmers (in 2012 and 2013) to postpone mowing activities in sites where AW singing males were mapped was very successful, likely had a important contribution to AW population recovery observed in next years.</p>	
<p>Action C6: Demonstration of the innovative usage of late-cut biomass</p>	<p>The technology of pellet production from biomass collected in the protected area was not applied on any of the Lithuanian protected areas.</p>	<p>The plant for the production of pellets from plant biomass was launched and is operating. Pellets are used in a low-calorie boiler, which heats the administrative building of the Zhuvintas reserve. Experience in the production and use of pellets is widespread.</p>	
<p>Action C7: Pilot testing and demonstration of Aquatic warbler conservation agri-environmental measure</p>		<p>Agri-environmental measures are developed and passed the necessary procedures of agreement and approval and are introduced. It is one of the most important achievements, which let to ensure sustainability of the project results after its ending.</p>	

The main achievements of the project in the area of sustainable management of fen mires, which should be spread in Lithuania and other countries.

1. In Poland and other countries Ratrač is used for mowing of mires, but there are some negative issues connected with its use: large fuel consumption, the negative impact of crawler belts on the surface of the mire, it can't be used for other activities. It was decided by the project to use light tractor with dual wide wheels for works in mires. The experience has shown the evident advantage of using such a tractor for mire mowing: minor impact on the soil, manoeuvrability, low fuel consumption, high efficiency, compatibility with various attached mechanisms. Having studied the experience of the

- Life project, similar tractors have been purchased in Belarus and are successfully used for mowing the Sporovskoye mire.
2. The example of the project area Tyrai demonstrated the possibility of transformation of reed communities into sedge ones due to 4-5 years of mowing. There was no experience of transformation of reed communities to sedge by means of annual mowing in Europe prior to the present project LIFE. When planning similar projects for managing fen mires and meadows, regular mowing can be with certainty planned for restoration of sedge mires on place of dense reed stands basing on the experience of the LIFE project.
 3. The experience of clearing mires from shrubs was demonstrated on the project area Zuvintas by means of mulching not only elevated parts, but also roots. Such technology prevents shrubs recovery the next year. This technology is already replicated in Belarus in the project ClimaEast on mires Zvanets and Sporovskoe.

Recommendation for the further sustainable management of fen mires as habitats for the Aquatic Warbler and other unique biodiversity.

It is necessary to continue searching possibilities of economically effective use of mire vegetation biomass, which will let to ensure their constant mowing and thus, conservation of Aquatic Warbler. At present, economic efficiency of mire mowing is ensured by payments to farmers under agro-environmental measures. It is necessary to find ways of effective use of mire plant biomass without payments, which will allow regular mowing of mires and their maintenance in open state.

The project has shown that the state of fen mires is mainly defined by the hydrological regime, and in case of its disruptions, other management activities are not effective. The project has organized the management of the water regime in the Sysa and Tulkiarage polders during the project actions implementation, but it is necessary to introduce legally established rules for water regime management, which will let to maintain optimal level regime after the project. Partially this problem is solved by the fact that land users themselves are interested in preserving the aquatic warbler and will maintain the necessary water levels.