



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 report 2014

The annex contains following document:

1. Evaluation of project realization success (2014) report

Report on project

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

EVALUATION OF PROJECT REALIZATION SUCCESS (2014)

by Dr. Alexander Kozulin

2014

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

Objective 1 – Ensuring favorable conservation status of the Aquatic warbler* by means of restoration of unfavorably managed or abandoned habitats in most important known sites in Lithuania and Latvia and forming favorable habitat conditions for species conservation

ACTION A.1: Ex-ante and Post-ante monitoring of Aquatic warbler in the project sites

Development and approval of methodic for counts and mapping of singing males and breeding females.

Mapping of singing males two times during the breeding season on all project sites every year during project implementation (according to methods approved);

Absolute counts of singing males were carried out two times during the breeding season according to the methodic at all the project sites. Volunteers passed preliminary training were involved into counts. Position of each singing male was mapped. Thus, a quality results on number and location of all singing males at all the project territories were obtained in 2013 and 2014.

The results of counts have shown the decline of Aquatic Warbler number in 2013 on the project site Sysa from 22 birds in 2012 till 5 birds in 2013. In 2014 the population increased till 15 birds. On the project site Tyrai the number of birds at the beginning remained practically without changes (2012 - 30 birds, 2013 – 31), and in 2014 the population has increased till 38 birds. The number decline at Sysa is explained by the fact that the water level at this territory remains high till the mid June. It seems that some Aquatic Warblers from Sysa floodplain meadow moved in 2013 to the new territories opened by project actions (C1 action in particular). The distribution and number of Aquatic Warbler at Tyrai Site practically has not changed in 2013 despite the twice-repeated mowing of reeds in 2012. This fact could be explained by that mowing conducted only one year does not lead to full change of reed communities to sedge ones. Perhaps, the considerable weakening of reed communities and their replacement with sedges could be expected only on third year of mowing. Nonetheless, one male has already been recorded at the territory with rare reeds, where Aquatic Warblers were not registered earlier. Twice-repeated mowing of reeds was carried out and in 2013, which allows to assume gradual weakening of reeds, its replacement with sedges and distribution of Aquatic Warbler to new parts of Tyrai mire.

In 2014 the distribution of singing males has considerably changed: significant number of birds occupied the mowed areas, where reed stands become much sparser. This indicates that annual mowing leads to restoration of Aquatic Warbler habitats – open sedge mires.

Post-ante monitoring of counting Aquatic warbler singing males was carried out in summer 2014 following standard methodology. Overall counts of the species concluded a relatively big increase Aquatic warbler population – altogether 106 singing males were counted in 2014 (compared to 50 singing males in 2013). Doubled increase of the population can be explained by increased area and improved quality of breeding habitat as result of habitat restoration performed by the project, as well as by the maintenance of the optimal water level on the project areas. To some extent the positive effect also has possibly better breeding success in Lithuania due to negotiated postponed mowing.

1.1.1. ACTION A.2: Development of specific regional agri-environmental measures for important Aquatic Warbler sites in the Nemunas delta (start – Sept. 2010; end – Jan. 2012)

Complex of works on development and agreement of the new agri-environmental measures was implemented since the start of the project BEF LT: conceptual negotiations with competent authorities (Ministry of Agriculture and other) on agri-environmental measures; definition of management requirements for the Aquatic Warbler under agri-environmental measures; practical design of the measures and calculation of compensation payments.

Currently the measures are included in the draft proposal of new agri-environmental measures package under measure M214 (agri-environment regulated under Article 39 of the Regulation 1698/2005).

The agri-environmental measure for Aquatic warbler conservation is successfully included into the new Rural Development Plan (RDP) of Lithuania. The RDP has been already commented by European Commission and currently is in the process of negotiation and fine-tuning. The project team is constantly supporting Ministries of Agriculture and Environment providing additional information upon request and steering the process of negotiation with European Commission.

Steering the development process of the new RDP will continue until it will be formally approved, which is foreseen by the end of 2014.

Approval and realization of agri-environmental measures for important Aquatic Warbler sites will be one of the most important achievements of the project, as it will ensure the sustainability of project results – mowing of Aquatic Warbler habitats will be realized and after the project.

ACTION A3: Formation of ecological priority land-use plot in LT02-Tulkaragė project area (start – Sep. 2010; end – March 2013)

The action implementation is completed in summer 2013.

Action implementation is completed and has been reported in the previous reports.

As a result of actions taken, the responsible manager (Goldengrass) was found for the territory, which is interested in its usage taking into consideration the economic interest of the hosts and ecological need of the territory.

ACTION A.4: Development of the recommendations on the solutions for landowners to manage properly Aquatic Warbler habitats, ensuring sustainable economic benefit (start- Sept. 2010; end – Dec. 2012)

The action implementation is on-going.

Currently the draft of new RDP for the forthcoming financial period is available and is in the process of negotiation with the EC. It seems it will not have major changes, therefore review and finalization of the publication is in process. It is expected that this process will continue also in the beginning of 2015 when conditions of the new RDP will be officially confirmed.

The project experts have conducted the large work on evaluation of experience in management of Aquatic Warbler habitats not only in Lithuania, but also in other countries, and such publication will be undoubtedly useful for organization of protection and sustainable use of Aquatic Warbler habitats throughout the whole distribution range.

C. Concrete conservation actions

LT1 TYRAI Action C1: Restoration of the main Aquatic warbler breeding site of Lithuania – Tyrai flooded meadows

(The area of habitat suitable for AW is 950 ha. 450 ha of Aquatic Warbler habitat restored/managed eliminating dense reed stands and scarce bushes).

The 2014 was significantly dryer, which allowed to access most wet patches of the area as well as perform mowing quite quickly. This resulted that we manage to increase the area total mowing area.

During the 2014 season distribution of aquatic warblers showed that breeding range has increased to the habitat restoration areas, which can be evaluated as good success of restoration work.

Altogether habitat restoration activities in 2014 were successfully implemented in whole project area covering 530 ha. The amount of harvested biomass was 2000 bales.

The major challenge during the reporting period for this action was handling of harvested biomass. Part of the biomass has been processed by the associated beneficiary (AB) JSC Goldengrass in frame of project action C6, however it was not being able to process whole harvest (it is estimated that during 2013 and 2014 season weight of the harvest is app. 1800 tones).

The project team has partially solved the problem of biomass use. However, it should be noted, that the effective way of using mire biomass has not been found until now not only in Lithuania, but also in the world. At present, attempts are being made and new approaches to the use of plant biomass are being developed, but the technologies are still not fully developed.

LT04 ZUVINTAS Action C2: Restoration and further demonstrational management of the fens in the Žuvintas Biosphere Reserve – the oldest known breeding site of the Aquatic warbler in Lithuania (start – Jan. 2011; end – Aug. 2015)

(The area of suitable for AW habitat is 328 ha).

Recommendations 2013:

Zuvintas mire is isolated from other Aquatic Warbler habitats. So, the breeding success of the population should not be influenced by high floods or droughts to maintain the Aquatic Warbler population stable. Several years with high water level during the breeding season could lead to disappearance of Aquatic Warbler from this site due to high mortality of birds on wintering grounds and impossibility of birds' distribution from other areas. Thus, it is very important to optimize the water level at the fen mire, especially in case if Aquatic Warblers will be translocated here from other habitats.

- It is necessary to conduct analysis of available data on hydrology, to implement additional investigations of water level dynamics (if necessary) and to develop recommendations on optimization of hydrological regime of lake-mire complex Zuvintas. The goal of this work should be development of recommendations on optimization of hydrological regime and its restoration to natural state, existing before the melioration in the catchment. The water regime could be simulated on the basis of water regime typical for most natural sedge fen mires: 10-30 cm above the soil surface during spring flood (March-April), near the soil surface during vegetation period (May-July), below the soil surface till 30 cm during summer-autumn mean (August-October). Such water regime is typical for sedge communities and will prevent their overgrowing with reeds.

Action implementation is on-going.

During the reporting period, action implementation has been successfully on-going. Habitat restoration activities continued involving purchased tractor and special mowing device "Brielmaier". Habitat restoration work continued during nearly whole reporting starting at winter 2013, ending to autumn 2014.

Observation of water level dynamics of the years in the project area, indicated the trend that over the past years, water level is getting higher at the areas LT04/01 and LT04/02. This causes more permanent high water level in the area decrease of water fluctuation dynamics. Such conditions become more favourable for reed vegetation and therefore decrease habitat quality for aquatic warbler. Mowing of the area is also becoming more problematic. Project experts concluded that such conditions are possibly caused by the fact that the old drainage channel separating the areas LT04/01 and LT04/02 is overgrowth and needs slight cleaning. This was suggested to carry out by the project and finance it from existing budget savings. Consultation with the external monitoring team concluded such activity as well justified and reasonable, it was also principally accepted by EC with the letter Ares(2014)3623882-31/10/2014.

During the summer 2014 dry weather conditions was ideal to carry out this work, therefore 1640 meters of the channel was cleaned. Impact of this work will be observed during summer 2015 and reported in the project final report.

Thus, recommendations of the year 2013 are implemented, and the results will be assessed at the end of the project.

PAPE SITE, LAKE LIEPAJA 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

Removal of trees and bushes, cutting of reed stands with the prototype tractor and manually, taking-away the biomass

From previous reporting period remaining untouched 5 ha restoration area in Pape site (LV05 project area) has been cleared from woody vegetation at the end of 2013. Further, in 2014 restoration area has been extended and addition 9 ha area was cleared from woody vegetation. During the year 2013, 14 ha have been mown in Pape site. During summer 2014, 22 ha of area have been mowed twice to suppress regeneration of woody offshoots on restored areas. These activities completed planned restoration activities in this project area. Second mowing finalized already after the reporting period.

The other site at Liepaja (LV06 project area) within this action was mowed at the end of the season in 2013. Performed habitat restoration covered 96,9 ha area. Performed restoration completed planned project activities in the project area.

Assessment of the habitat state after the implementation of the project measures has shown that open fen mires are restored in the close to natural state. The species composition of birds and insects is changing, but the Aquatic Warbler has not appeared here yet, which could be connected with the small habitat area and its distance from the breeding range.

LT02 TULKIARAGE Action C4: Restoration of the former important Aquatic warbler breeding site – Tulkiarage polder of the Nemunas delta SPA

(The area of habitat suitable for AW is 400 ha. 400 ha of Aquatic Warbler habitat restored/managed eliminating dense reed stands and scarce bushes).

This territory under necessary management could potentially become one of the most important for several threatened bird species.

Despite considerable difficulties, the project team jointly with the project partner JSC Goldengrass fulfilled a row of preparation activities to ensure the possibility to ecologically and economically sustainable management of this territory:

- restoration of the polder dykes in order to fix the holes (total 5 big holes) causing uncontrolled water flow into the project area;
- the experience on modernization of machinery for work under waterlogged conditions obtained;
- the experience on reed elimination obtained;
- the solution for water level regulation in polder was found and tested. It was decided to use mobile water pump, which would effectively pump out water from the polder and thus reduce water level allowing continuing habitat restoration work;
- the Company JSC Goldengrass constructed the factory for pellets production from vegetation biomass, and all the cut biomass is immediately used with economic profit, which ensures the necessary management and after the project's end.

During the reporting period, habitat restoration work has been performed in 2014. During the season whole project area has been successfully mowed – habitat restoration was implemented in 450 ha area. Most difficult to access areas have been mown with a new purchased mowing device “Brielmaier”, which have proven to be a very good tool for extreme conditions, which does not leave soil compression traces even in very humid conditions. As the weather conditions have been relatively dry and suitable to access the area, majority of the area has been managed with double-wheel tractors, which performed cutting since July 2014.

The possibility of water level regulation should be ensured, which allows the formation of favourable for threatened birds habitats, as well as possibility to mow the area during proper period. For long-term management of the area it is necessary to raise funds for reconstruction of the dam, protecting the polder from water level changes in the bay.

LT03 SYSA Action C5: Demonstration management of grasslands for Aquatic warbler conservation in Šyša polder

The area of habitat suitable for AW – 300 ha. The area suitable for AW, sustainably managed (late mowing, without nests disturbing) – 60 ha in 2014. Water level in May-June is about the soil surface.

Recommendations 2013:

- to develop and approve with local authorities the regulations of exploitation of polder system for maintenance of optimal water levels for conservation of Aquatic Warbler and ensuring stable hay making. Optimal water levels at polder could be reached by means of regulating of water release by pumping station and establishment of overflow optimal level on the sluice. The water level dynamic at the most of the polder's area in vegetation period should be as following: near the soil surface (0 - -10 cm) from the mid May till the end of June; then from the beginning of July till the end of September the water level should be lowered till 20 cm and lower below the soil surface.
- taking into consideration that the polder territory is divided by small parts between many owners, it is necessary to start work on their integration, or these owners could delegate the work

on mowing to other special organization. Otherwise, the mowing for production of energetic pellets will be unprofitable later.

The project team held the necessary negotiations with local authorities and landusers, and agreed on measures to regulate the water level on the polder. This made it possible to ensure an optimal hydrological regime on the most part of the polder. Besides, negotiations with farmers resulted in the cessation of the early mowing on parts where the Aquatic Warbler breeds.

These taken measures let to increase the population of the Aquatic Warbler till 15 birds in 2014.

Objective 2 – Establish and promote favorable and sustainable conditions for farmers/landowners to implement conservation measures by renewed agro-environmental schemes and supported by alternative economic solutions

1.1.2. ACTION C.6: Demonstration of the innovative usage of late-cut biomass(start – Jan. 2011; end – Aug. 2015)

Implementation of the action C6 is very important for ensuring the sustainability of the project and sustainable use of habitats with economic benefit for land users. Considerable success was reached to the end of 2014.

AB Zuvintas biosphere reserve continued demonstration activities of the pelleting facility. In order to have a “full cycle” the biosphere reserve administration set up (outside of the project budget) a boiler for administration building heating, which is running on grass pellets. This provided good conditions to practically test and demonstrate various aspects of using late harvesting biomass. Demonstration activities performed during the reporting period included 3 events for specialized target groups gathered more than 70 participants.

Besides practical demonstration of pelleting activities during specialized events at the place, efforts were also focused on explaining pelleting experience at media.

Processed pellets during demonstration activities were used for heating of Zuvintas biosphere reserve administration building. At the same time, efforts were spend on looking for possible markets to sell pellets as product: use of pellets as bedding material for horses; organize its proper packaging and logistics; to promote biofuel pellets arriving from the “aquatic warbler fields”.

Action C7: Pilot testing and demonstration of Aquatic warbler conservation agri-environmental measure

Action implementation is on-going without delays

One of the most important achievements of the project is development and introduction of the agri-environmental measure to maintain Aquatic Warbler habitats in optimal state, and as a result, population increase till ecologically potential values.