Aquatic Warbler and Biomass Use LIFE+ Nature Project

LIFE + Project "Facilitating Aquatic Warbler (*Acrocephalus paludicola*) habitat management through sustainable systems of biomass use" (LIFE09 NAT/PL/000260), called also "Aquatic Warbler and Biomass Use", concentrates on the species' sites in eastern Poland. Our activities are set on areas that hold 98% of Aquatic Warbler's polish population, which represents ca. 24% of its global population.



Main aims and activities in the project:

- Setting up and testing of innovative systems for the use of biomass from Aquatic Warbler sites. Biomass facilities will be established to produce heating fuel in form of briquettes or pellets from hay.
- Increasing area and improving quality of habitats suitable for Aquatic Warbler. Bush removal and first mowing (ca. 1,400 ha).
- **Regular ongoing management** on most of the projects sites area. After completing the project over 5,000 ha of Aquatic Warbler habitat will be regularly mown according to the species' requirement. This will be possible thanks to producing heating fuel/combustible material from the biomass. Income made on the product, with support of agri-environmental payments, will assure the continuity of ongoing management.
- Accepting Management Plans for every Aquatic Warbler site, taking into account species' habitat requirements.
- Education on species' conservation requirements and the need of reasonable management on its sites.





Aquatic Warbler's habitat after mowing Photo: Lars Lachmann



POLISH SOCIETY FOR THE PROTECTION OF BIRDS

Aquatic Warbler Conservation in Eastern Poland

LIFE+ Nature Project "Aquatic Warbler and Biomass Use"

o find out more about the project, visit: www.wodniczka.pl

Why Aquatic Warbler?

The Aquatic Warbler (*Acrocephalus paludicola*) is Europe's rarest migratory songbird, a species globally threatened. In the begging of 20th century the species used to be common and numerous, but during last century **the numbers of Aquatic Warbler decreased by about 95%.** Global population of the species counts only about 10,000-13,800 singing males (data from 2010).

Our country has a special responsibility for Aquatic Warbler's conservation – **Poland holds about 25% of total global population of the species.** The Aquatic Warbler is the most precious treasure of polish fauna. In 2009, Polish population has been estimated for ca. 3200 singing males.



The Aquatic Warbler is a habitat specialist. Over thousands of years it became adapted to breed in mesotrophic fen mires, a special type of groundwater-fed peatland rich in sedges, or in similarly structured wetlands. This type of periodically flooded mire once covered large areas in a belt from the Netherlands through central Europe to western Siberia. Nowadays almost all of those habitats where drained and the Aquatic Warbler, as well as many other species, have lost their habitat.

After having lost almost all of previously occupied sites, Aquatic Warbler became dependant on conservation management. Man is responsible for taking care for the species habitats, that must be properly watered and not overgrown with high vegetation (reed, bushes or trees). Aquatic Warbler conservation measures positively influence all parts of the environment, i.e. water regime, vegetation and open areas mammals, birds or insect.

What threats Aquatic Warbler?

- Main threats to this species are:
- Unfavorable changes in hydrological regime of key breeding sites of the species.
- Deterioration of habitat on key sites due to reed, bush and trees overgrow.
- Low awareness of Aquatic Warbler conservation needs amongst land users.
- No clarity about long-term management's financial feasibility.
- Problem with feasibility of removing biomass rising up during mowing.

Aquatic Warbler in its natural habitat Photo: Mateusz Matysiak – www.mateuszmatysiak.pl

Aquatic Warbler conservation in Poland. What have we already done?

Since 1991 the Polish Society for the Protection of Birds (OTOP-BirdLife Poland) has carried out regularly research on biology and abundance of Aquatic Warbler. During 2005-2011 period, in Biebrza Valley and Pomerania, OTOP was implementing a LIFE Nature project "Conserving Aquatic Warbler in Poland and Germany" (LIFE05NAT/PL/000101). As part of this project many of the areas were restored, needs of the species' conservation were established and technical and financial solutions were found to support large scale management of the species' habitats.

Furthermore, Polish Government signed "Memorandum of Understanding conserving conservation measures for the Aquatic Warbler", an international agreement on under the auspices of the Bonn Convention. What more, the General Directorate for Environmental Protection (GDOŚ) established in 2010 a Secretariat for the conservation of the species. OTOP in cooperation with GDOŚ has prepared the National Species Action Plan for the Aquatic Warbler.

How do we protect Aquatic Warbler in Poland? Current challenges.

OTOP in cooperation with partners is implementing a project "Facilitating Aquatic Warbler (*Acrocephalus paludicola*) habitat management through sustainable systems of biomass use" (LIFE09NAT/ PL/000260). This enterprise complements the activities of the previous project. It corresponds to two **most important issues in the management of the Aquatic Warbler sites** – use of mown biomass and lack of long-term funding of mowing, basic measure of the conservation.

As a result of mowing Aquatic Warbler sites, **a lot of biomass** (sedges, grasses, reed etc.) is being produced. The hay quality is poor (late mowing), and is not suitable for feeding the livestock.

In the previous LIFE project, OTOP conducted research to solve the problem of utilization of the cut vegetation. In turned out that the best possibility of use of the biomass is **briquetting and pelleting.** Briquettes and pellets are made of hay in the process of drying and compressing under a high pressure. These products are suitable for burning in heating ovens, may be used for example to heat buildings.

The "Aquatic Warbler and Biomass Use" project takes care of the interests of local communities. It assures actions focused on solving t problems of mown vegetation management in the way that is profitable for the land users. Sales of briquettes and pellets may cover the cost of mowing and biomass removal from the Aquatic Warbler habitats. Thus, it would be an extra, in addition to agri-environmental payments, to conserve nature on valuable areas.

