

in 1960-s, Aquatic Warbler was nearly continuously distributed in the Polesian lowland. There were c. 99 big fen mires (each of 1 000 ha and more) covering a total area of more than 900 000 ha. For that period the number of Aquatic Warblers is estimated at about 450 000 singing males.



Habitat classification

Eutrophic fen mire (Sedge-Hypnum mires – key habitats Zvanets, Sporovskoe)

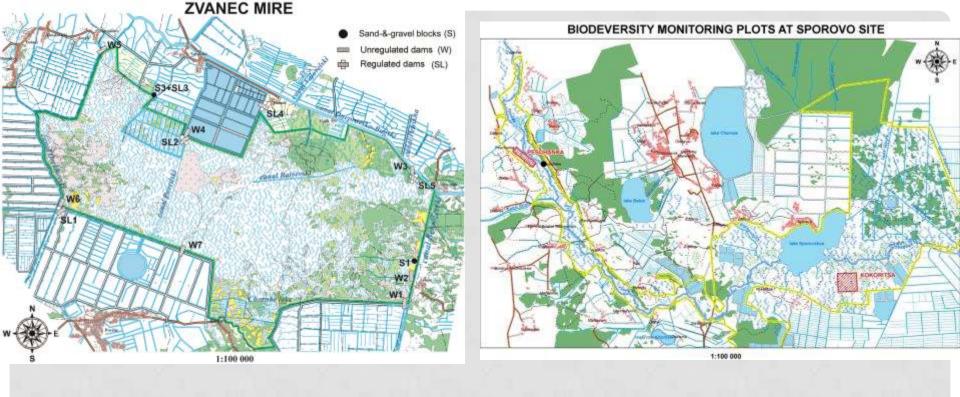
The high stable number of birds is ensured by the following: the large area > 1000 ha, different level of water, presence of suitable for breeding mire parts in different years.

Pure mesotrophic mire (remains of fen mires along the margins of raised bogs) (Dikoe, Servech, Olmany and Zaden): the number of Aquatic Warbler is not high (100 birds), but stable due to stability of the water regime. The species number is gradually declining as a result of habitat overgrowing with birch, willow trees and decline of mires' trophic status.

Suboptimal breeding sites presented by wet meadows: non-permanent habitats with the species number 0-30 birds, characterized by frequent long-lasting floods or droughts. Presence of Aquatic Warbler on such sites is connected with their distribution from the key habitats.

Habitat Classification

Plant community	Pure mesotrophic mire (Dikoe et al.)	Eutrophic fen mire (Zvanets, Sporovo)	Wet meadows
AW density male/100 ha	20-50	80-145	0-5
Water mineralization, mg/l	106.6	145-347	350-450
Caricetum elatae, %	9.6	81.1	0-5
C. lasiocarpae, %	45	5.2	0
C. acutae, %	0	0	60-90



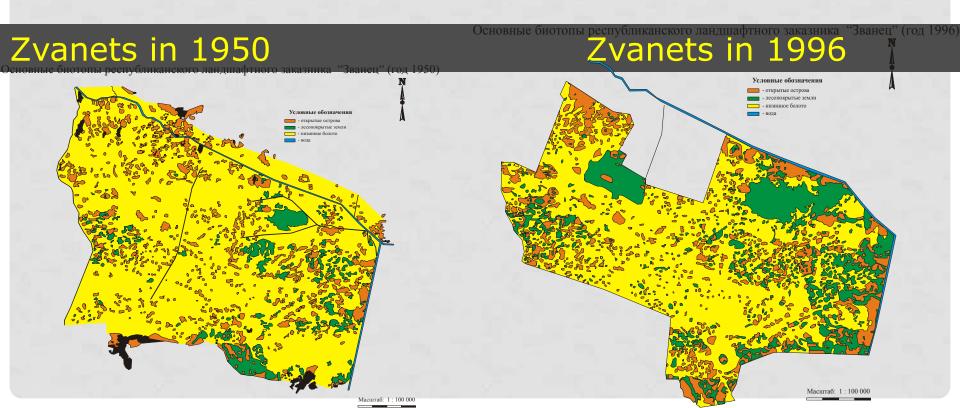
Eutrophic fen mire (sedge-grass mires) – the key habitats Zvanets, Sporovskoe.

The high stable number of Aquatic Warbler is ensured by the following: the large area > 1000 ha, different level of water, presence of suitable for breeding mire parts in different years.

Main threat

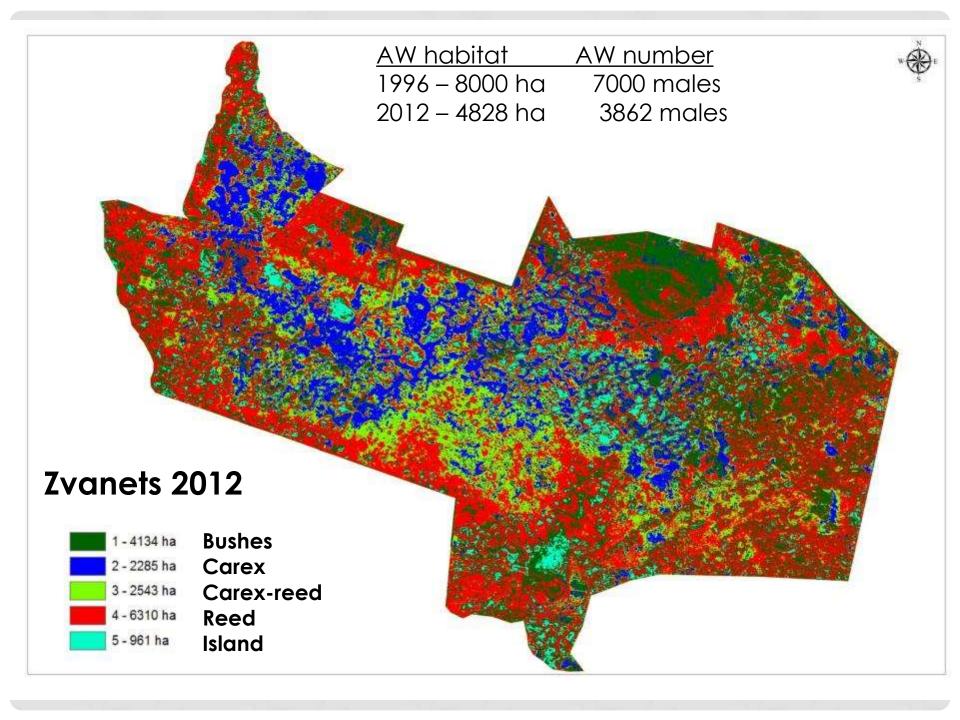
Owergrowing of open mire by shrubs %

	Споровский	Званец	Дикое	
	1950-2006	1950-2006	1950-2006	
Open fen mire	-20%	- 11,4%	- 10%	
Shrubs	+18%	+7%	+8%	







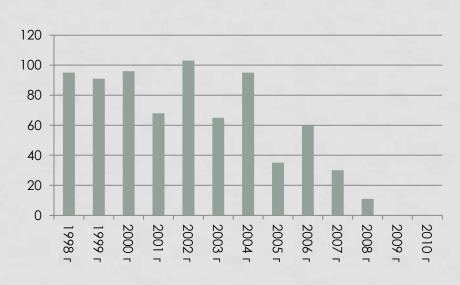


The state of the key Aquatic warbler habitats (Zvanets and Sporovskoe).

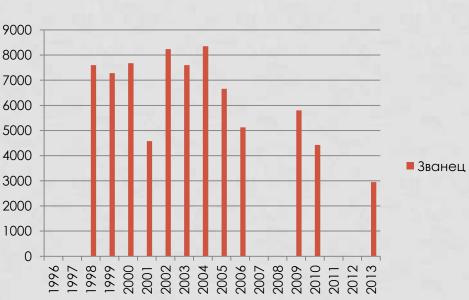
The reasons of overgrowing with reeds:

- The increased water level during the vegetation period;
- Violation of the water quality, coming from melioration systems.
- Absence of burning of old vegetation

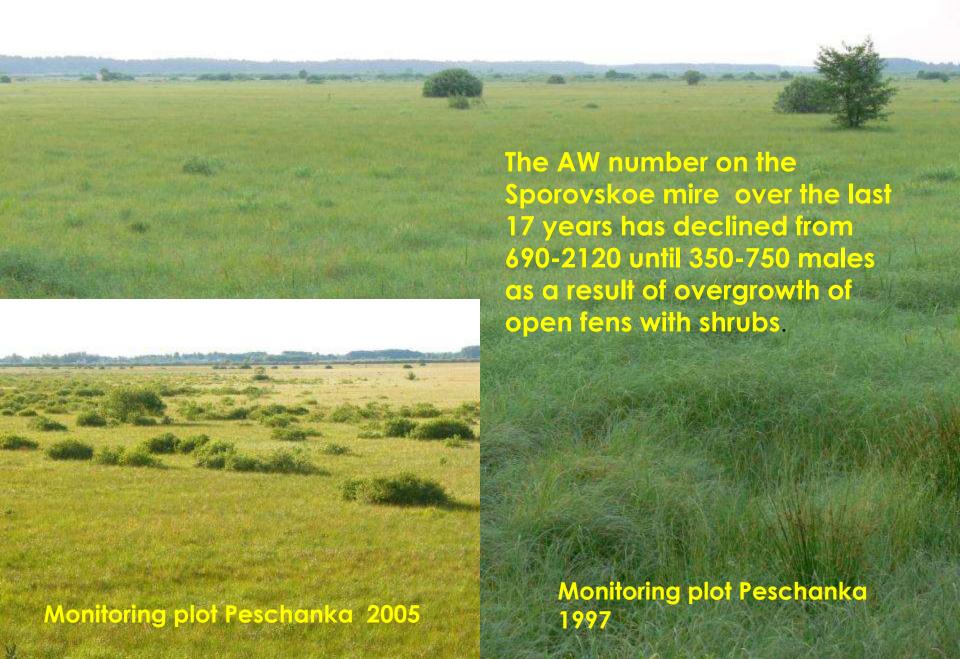
Dynamic of AW density (Povitie monitoring plot)



Dynamic of AW number on Zvanets

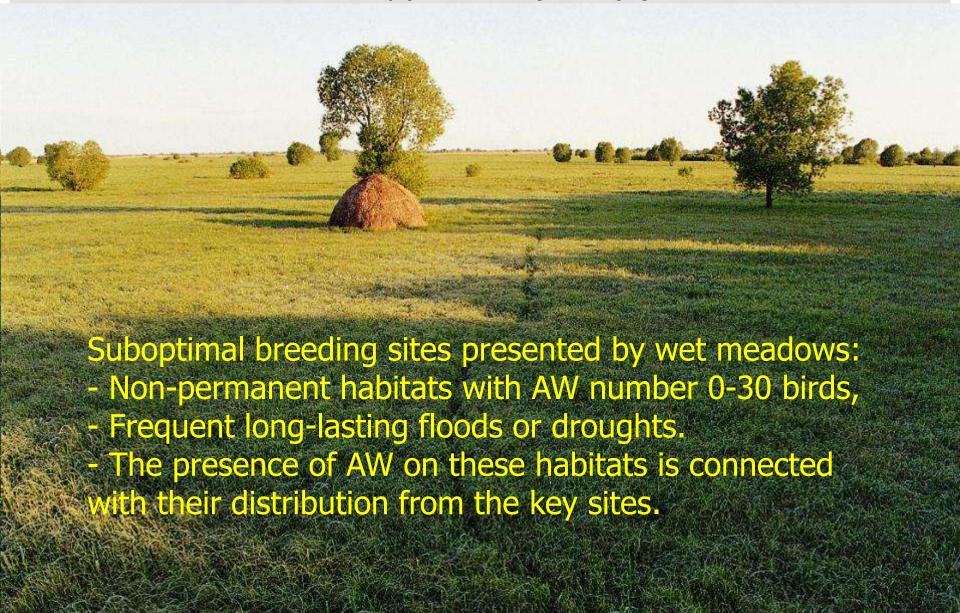


Fen mire Sporovskoe





Wet meadows of Pripyat river (Prostyr)



AW number prediction without management:

If the rate of overgrowth with reeds and shrubs will be the same, the number of Aquatic Warbler on the key areas will decline rapidly. The AW number will decline on the Zvanets mire from 3000 till 400 birds to the year 2030, and on the Sporovskoe – from 500 till 150 birds.

The AW number decline on the key habitats will lead to decline of post breeding dispersion of young birds, and as a result, to number decline and disappearance of the species from suboptimal habitats.

The AW number on fen mire parts preserved among raised bogs will decline gradually because of continuing process of reduction of ecosystem productivity, and as a result of habitat overgrowth with birches and willows.

The species conservation strategy

Conservation of the AW and increase of its number is possible under condition of restoration or creation of a network of large fen mires – the key species habitats with optimal conditions for the species, located close to each other. This will ensure the rapid number increase up to ecologically maximal values and significant growth of post breeding dispersion of young birds to potential habitats, including suboptimal ones, within the distribution range.

The main measures on the key habitats

- To maintain the optimal hydrological regime
- To organize the implementation of measures aimed at enlargement of the area of open sedge fen mires (mowing of reeds and shrubs with biomass removal, burning of vegetation, etc.).







NATIONAL ACTION PLAN for implementation of the Memorandum of Understanding concerning Conservation Measures for the Aquatic Warbler*

#	Activities	Outcomes	Agencies in charge	Timefram e (years)
	Introduce an efficient system of clearing and use of the shrub and reed biomass in wetlands crucial for the species conservation: Zvanets Republican Landscape Reserve – 3500 ha; Sporovsky Republican Biological Reserve – 500 ha; the Dikoye Swamp – 300 ha; Servech Republican Hydrological Reserve – 150 ha	approximately 50% of degraded habitats of aquatic the warbler (open sedge fens)	Executive Committee, Kobrin Regional	2020

The main measures envisaged by the National Action Plan (2015-2016)

Introduce an efficient system of clearing and use of the shrub and reed biomass in wetlands crucial for the species conservation:

Zvanets Republican Landscape Reserve – 3500 ha;

Sporovsky Republican Biological Reserve – 500 ha;

the Dikoye Swamp – 300 ha;

Servech Republican Hydrological Reserve – 150 ha

Establish and provide for the operation the center for management of the aquatic warbler key habitats at the premises of the Sporovsky Republican Biological Reserve, including procurement of necessary equipment

Make arrangements for and perform hydrological regime improvements in fens – key habitats of the species: Zvanets Republican Landscape Reserve, the Dikoye Swamp

Creation of new potential habitats for the aquatic warbler by means of habitat restoration and resettlement of birds.

The main measures envisaged by the National Action Plan (2015-2016)

Carry out (when necessary) controlled vegetation burning to prevent fen mires overgrowth with reeds and shrubs in the Zvanets Republican Landscape Reserve, Sporovsky Republican Biological Reserve and the Servech Republican Hydrological Reserve.

To estimate the effectiveness of implementation of the habitat management measures (clearing, controlled burning, groundwater control) by means of comparative analysis of AW density dynamics, the condition of plant associations, insect species composition and biomass, and the aquatic warbler population state.

Carry out general public awareness campaigns on the importance of preserving fens as key habitats of the aquatic warbler.

Measures of the Action Plan are planned to be implemented due to financing within the framework of the following projects:

- Progect UNDP-EU «Clima-East: Conservation and sustainable management of peatlands in Belarus to minimize carbon emissions and help ecosystems to adapt to climate change" 2014-2017 (1,5 mln US)
- Progect UNDP-GEF "Conservation-oriented management of forests and wetlands to achieve multiple benefits" 2016-2020 (4.2 mln US)
- The State Protected Areas Programs