



Content

Importance of fen mire and floodplain meadows for conservation of globally threatened biodiversity

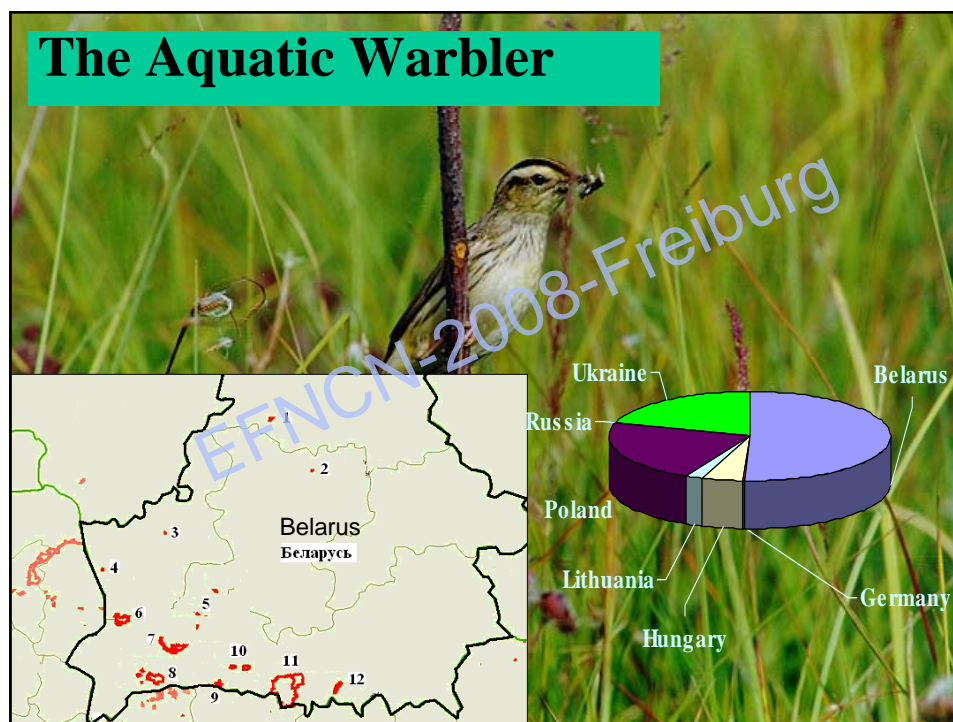
Main threats to open fen mire and floodplain meadow ecosystems

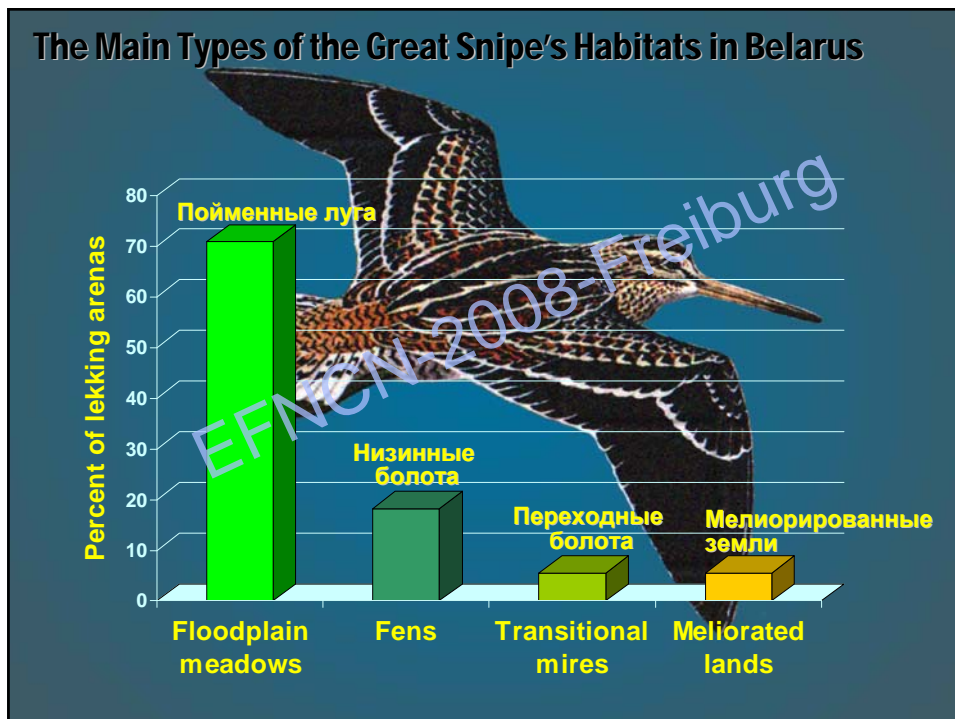
Fire as important factor for fen mire

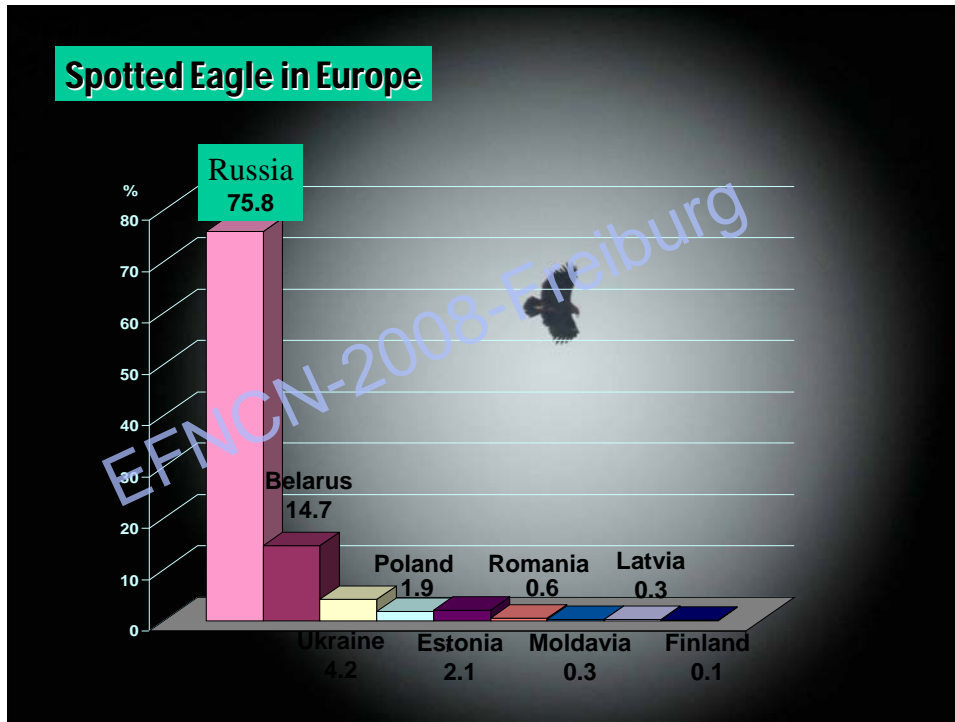
Impact of Fires on the Aquatic Warbler population and fen mire ecosystems

Required conditions for prescribed fire

Scientific name	Common name	2007 IUCN Red List Category	Status in Pripyat Polesia
<i>Branta ruficollis</i>	Red-breasted Goose	EN	A Rare Visitor
<i>Anser erythropus</i>	Lesser White-fronted Goose	VU	A Rare Visitor
<i>Aquila clanga</i>	Greater Spotted Eagle	VU	Centre of the Present Range
<i>Acrocephalus paludicola</i>	Aquatic Warbler	VU	Centre of the Present Range
<i>Aythya nyroca</i>	Ferruginous Duck	NT	A Rare Breeder
<i>Falco vespertinus</i>	Red-footed Falcon	NT	A Rare Breeder
<i>Crex crex</i>	Corncrake	NT	Native
<i>Glareola nordmanni</i>	Black-winged Pratincole	NT	Rare Stray
<i>Gallinago media</i>	Great Snipe	NT	Uncommon Breeder
<i>Limosa limosa</i>	Black-tailed Godwit	NT	Uncommon Breeder
<i>Coracias garrulus</i>	European Roller	NT	A rare breeder







The spotted eagle habitats have been described according to 14 parameters on 65 sites.

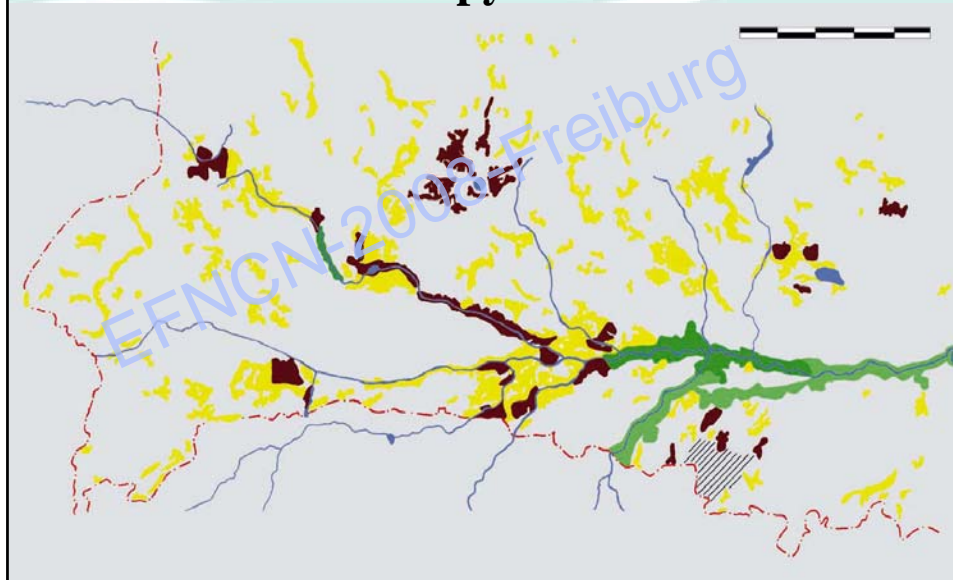
The sites have been divided into three groups according to the breeding density of the species.

Fen mires -
4,4 pairs/10,000 hectares.

Floodplains -
1.6 pairs/10,000 hectares.

Meliorated area -
0.1 pairs /10,000 hectares.

Change in the Distribution of Fen Mires in the Pripyat Basin

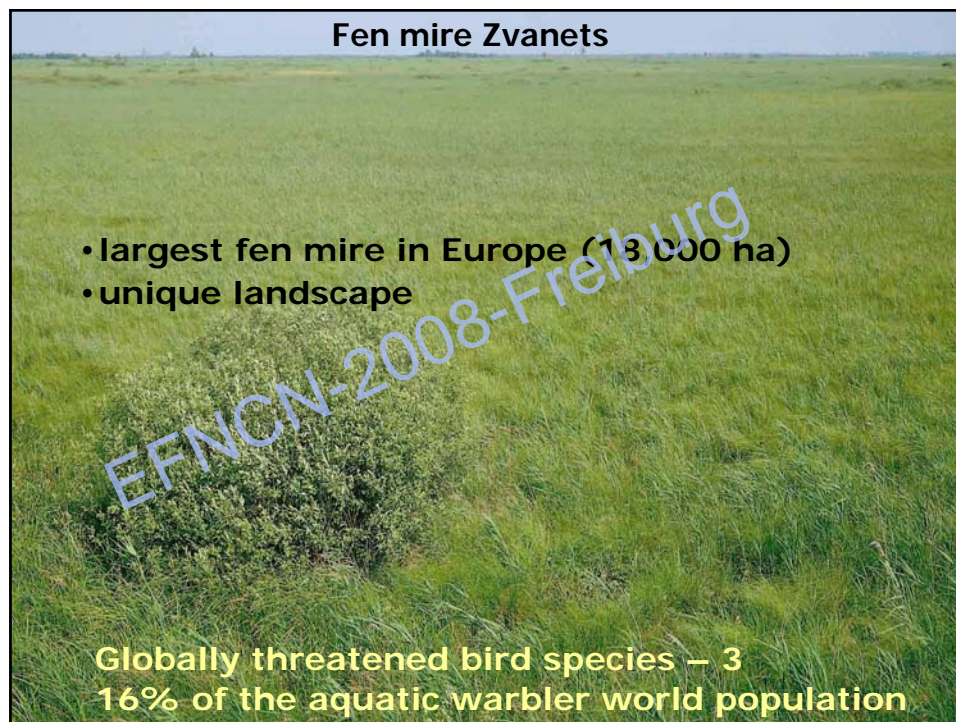


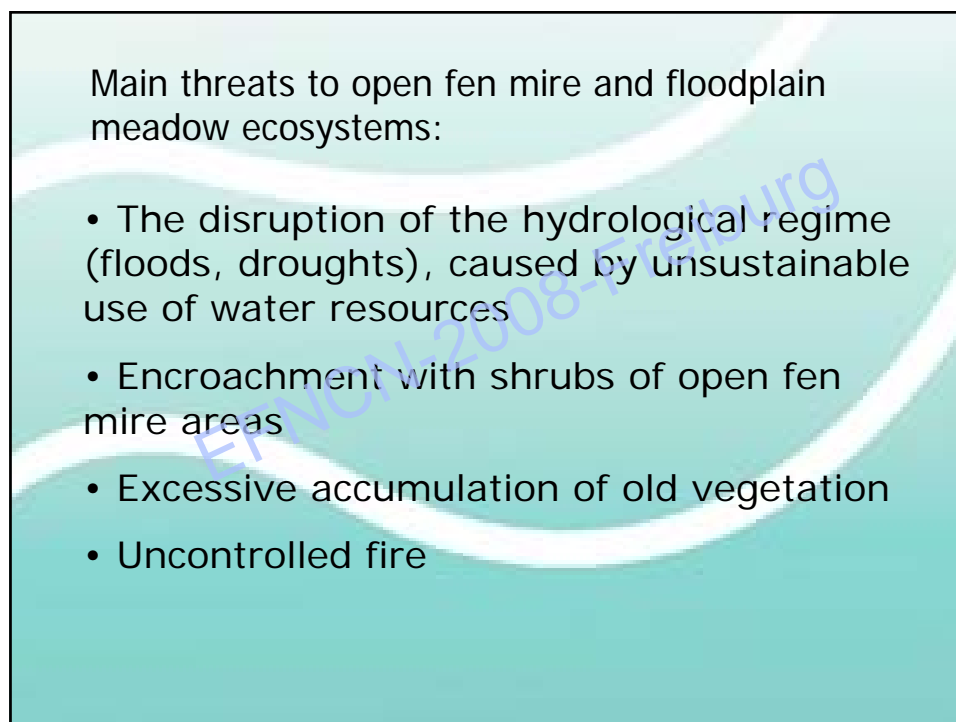
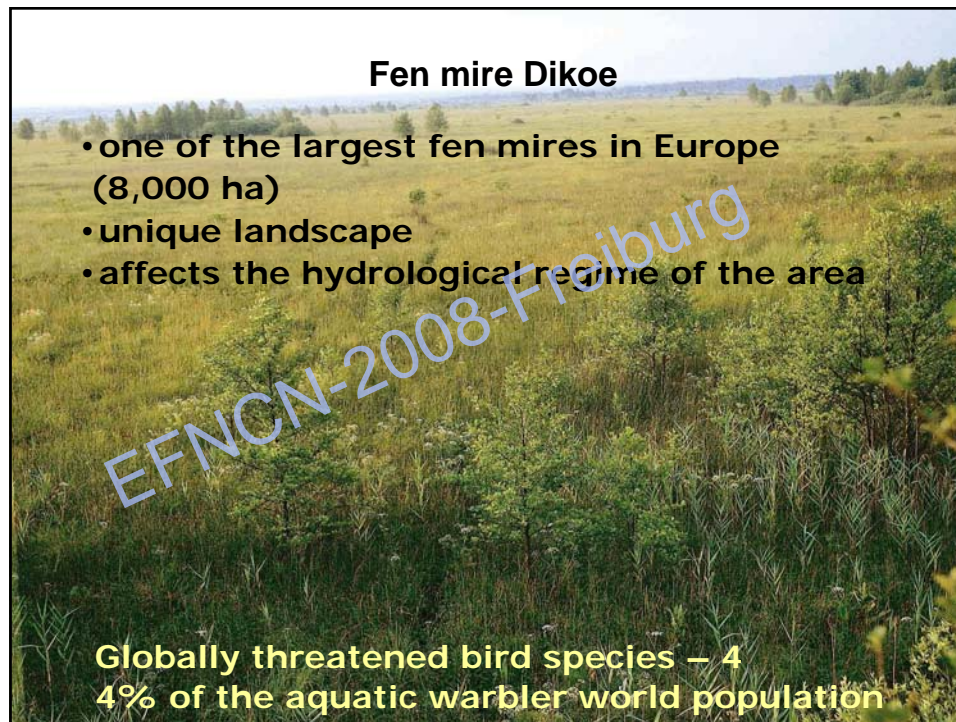
Change in the Area of Natural Peatlands in Belarus

In the 1960s – **2,939,000** hectares or 14.2% of the country.

1960-1990 - **54%** of peatlands were drained.

2002 – **1,345,000** hectares or 6.2% of the country.





One of the main threats:

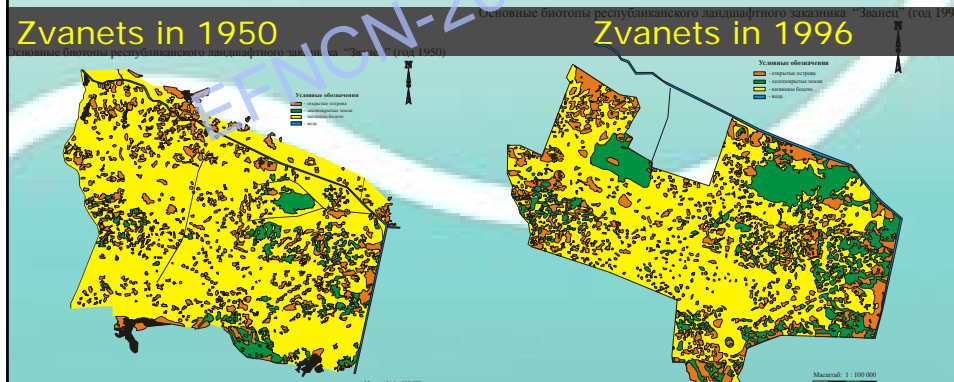


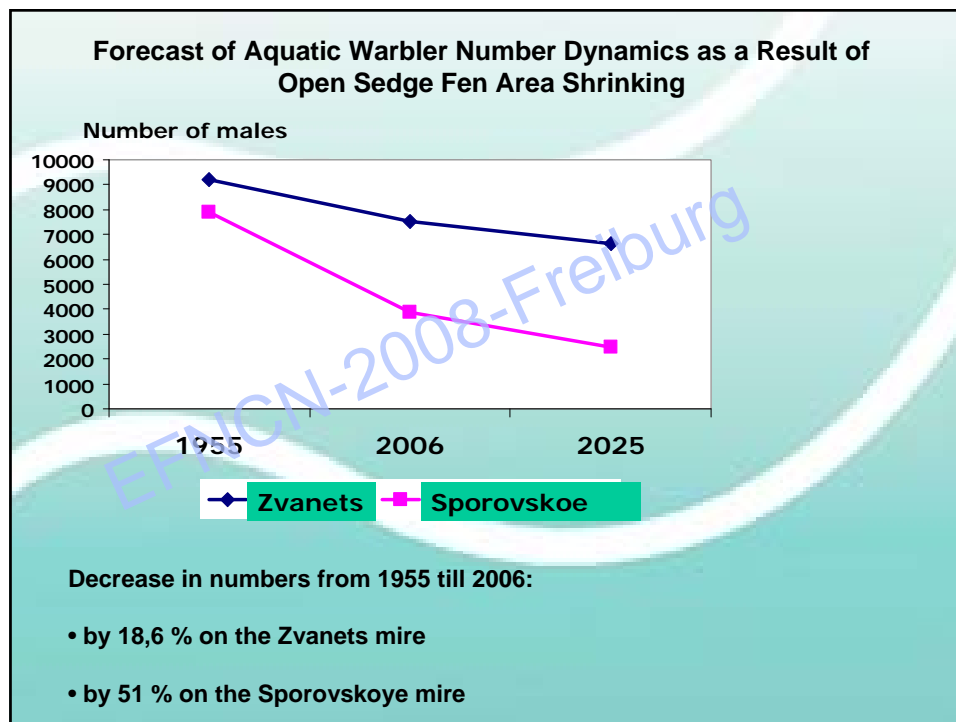
Encroachment of shrubs on open fen mire areas and meadows

Main threats

Encroachment of open fen mire areas with shrubs %

	Sporovo	Zvanets	Dikoe
	1950-2006	1950-2006	1950-2006
Open fen mires	-20%	- 11,4%	- 10%
Forest and shrubs	+18%	+7%	+8%

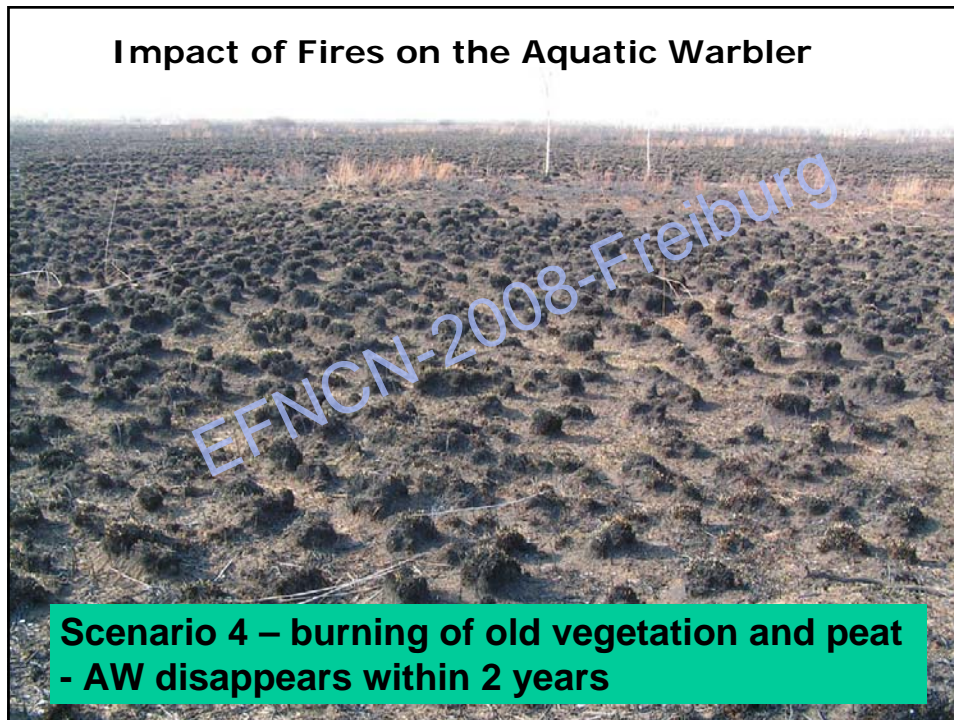
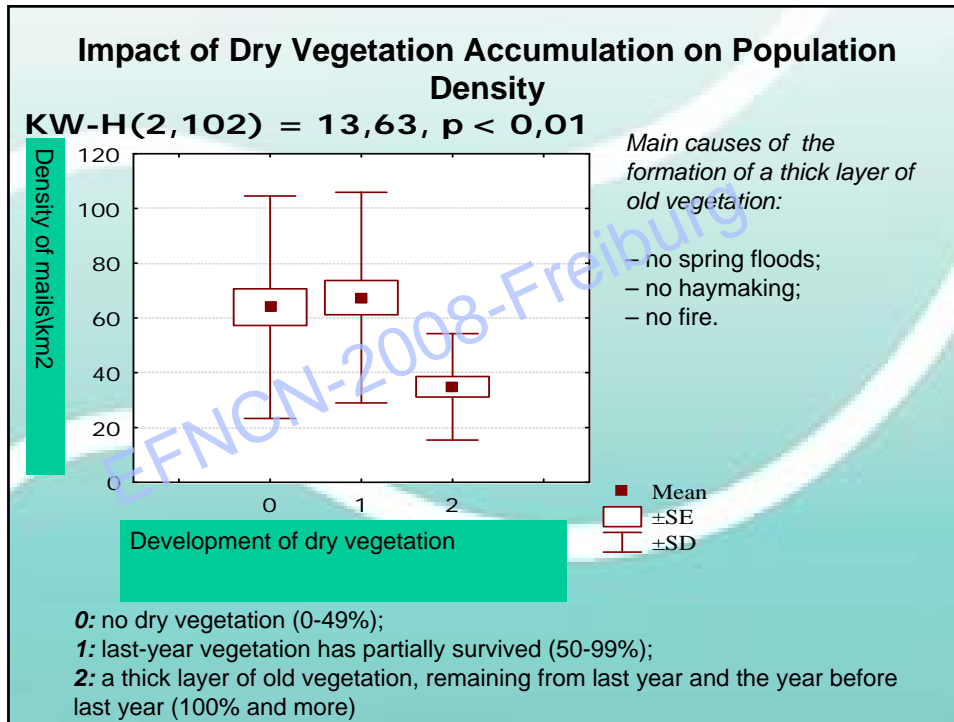




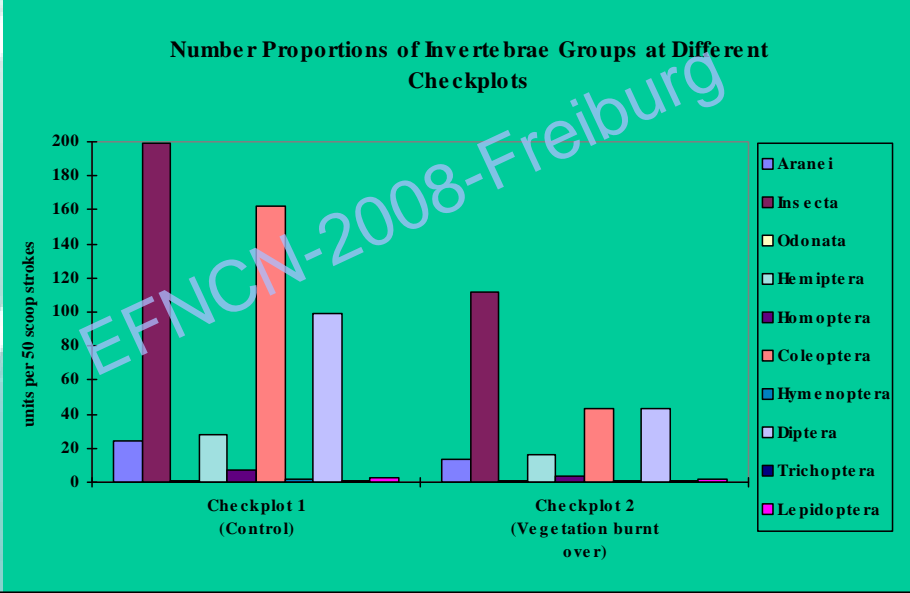
One of main threats:
Encroachment of open mire areas with
reeds







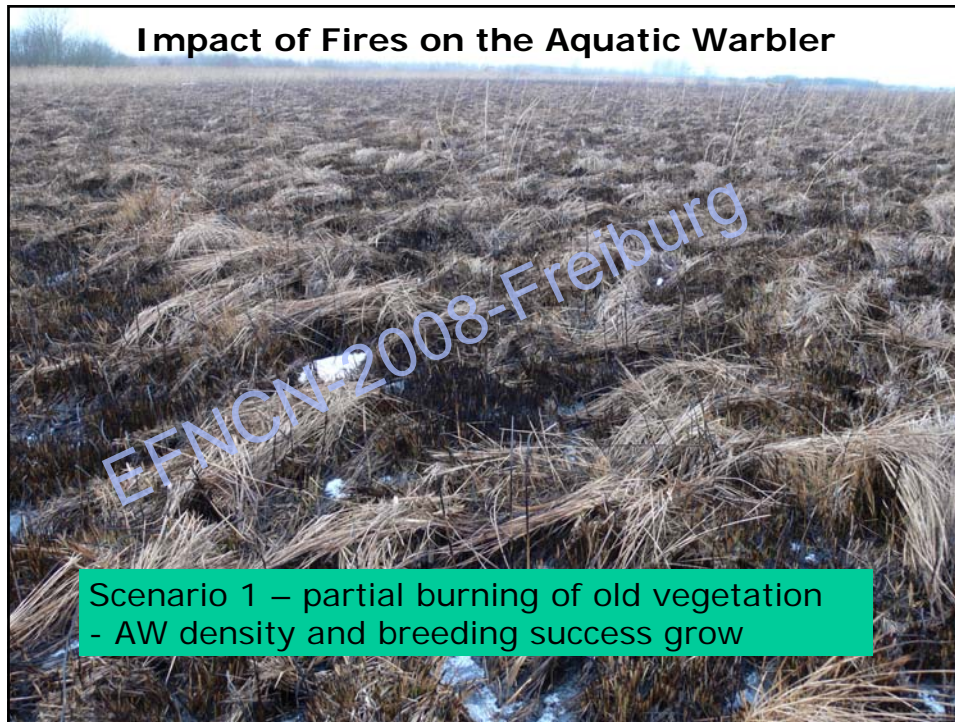
1.5 - 2 times decrease in number in burnt areas was reported for spiders and major taxonomic groups of insects: *Diptera*, *Coleoptera*, *Hemiptera*, *Homoptera*



Scenario 2 – complete burning of old vegetation (but not burn mosses and peat)
 - AW density does not change, breeding success declines, density growing during subsequent years



Impact of Fires on the Aquatic Warbler



The main skill which helps the aquatic warbler to adapt to fires with the absence of old vegetation for disguising its nests is the ability to build them in original ways.

In a burnt-out tussock:
-no dry grass because of fire.

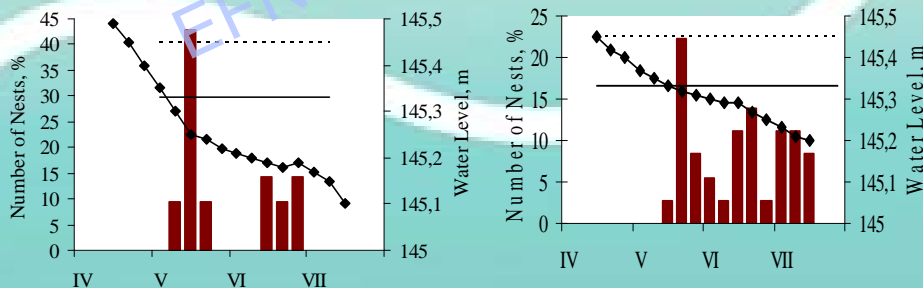
Under cover of green vegetation only:
-no dry grass because of fire.

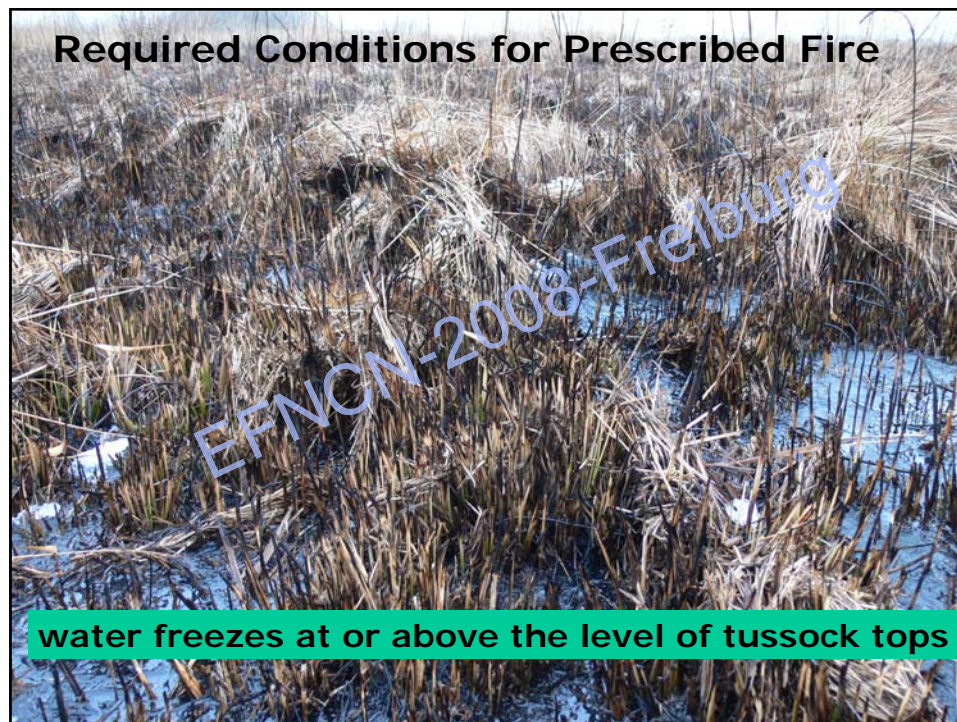


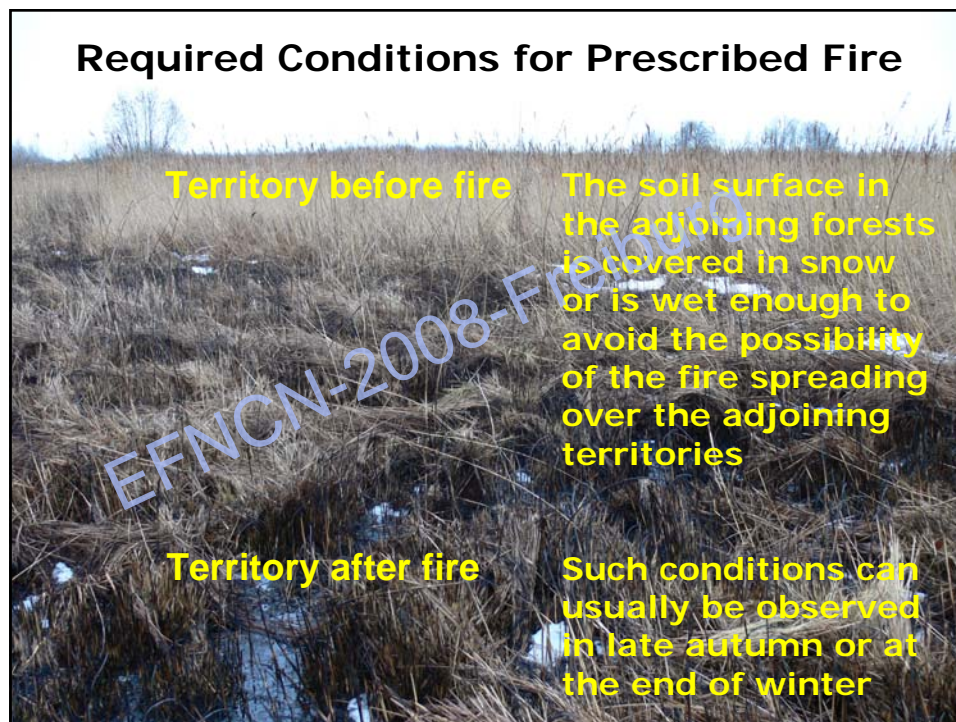
Another adaptation to fires that the aquatic warbler has is the ability to bide its nesting time. With no old vegetation, a significant part of birds begin nesting only after green vegetation has fully developed and therefore can be used for disguise.

Favourable conditions:
2 peaks of nesting during the breeding season

Per year with vegetation burning:
nesting times are prolonged







Advantages of Prescribed Fire:

- Improvement of vegetation efficiency
 - Increase in insect biomass
 - Good conditions for nesting due to the partial preservation of old vegetation
 - New habitats for open sedge fen species are created by burning down dense reedbeds
 - Shrubs are prevented from spreading by being burnt down
 - Spring fire hazards, which are dangerous for man and ecosystems, posed by dry mires are eliminated
- EFN-CN-2008-Freiburg

Decree of the President of Belarus (December 8, 2005)

Rules on Running Hunting Businesses and Procedures for Hunting

It is prohibited for artificial persons and citizens, including individual entrepreneurs, to burn dry vegetation and its standing remainder on agricultural and other lands. It is prohibited to burn reeds, rushes and other wild vegetation in places situated near wildlife habitats and breeding places. The only exception is scientifically-based burning of the aforementioned plants for improving habitats of red-listed species in Belarus.

