

Global population of the Aquatic Warbler *Acrocephalus paludicola* - an overview



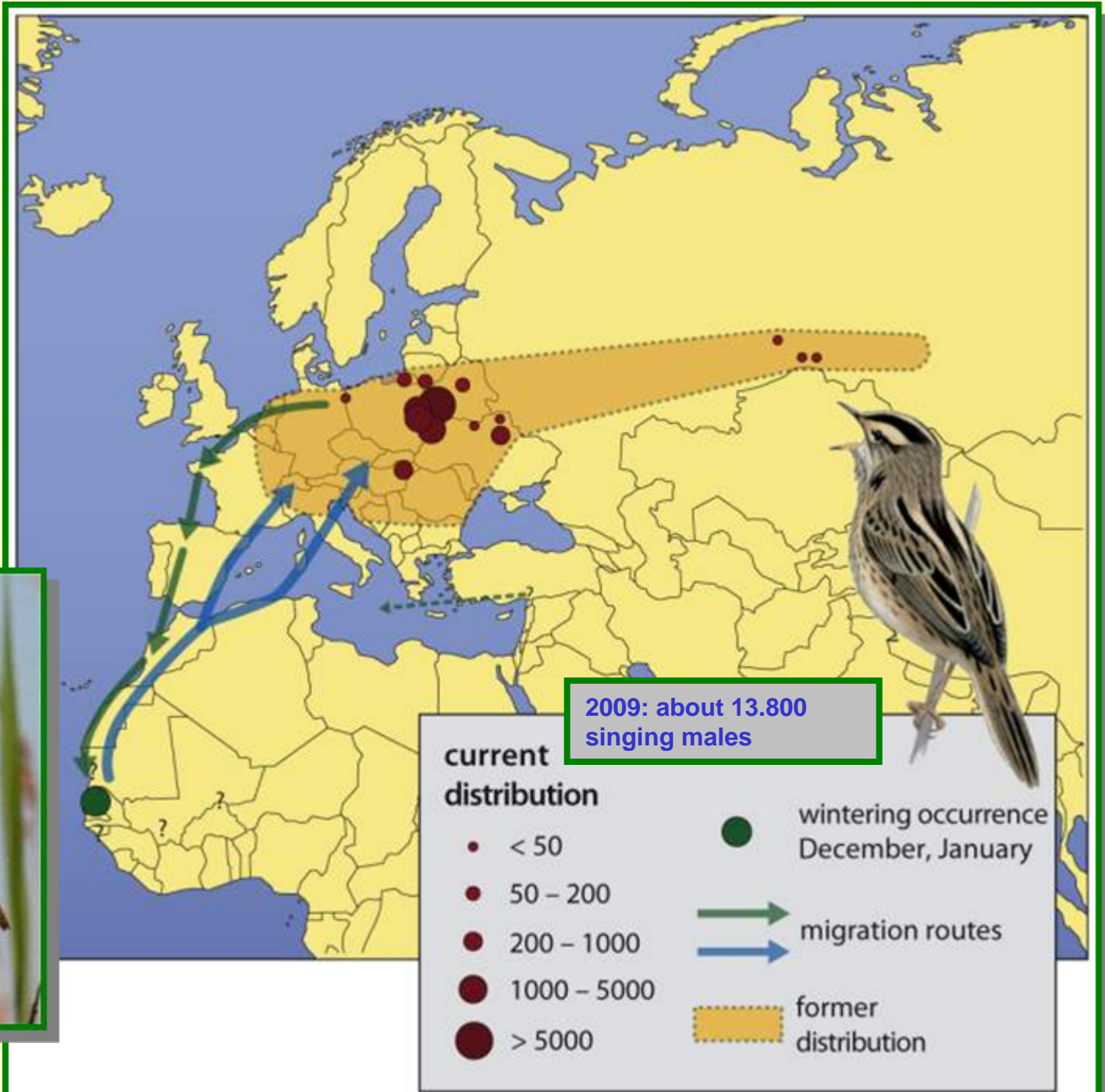
Martin Flade, Brodowin, Germany

on behalf of the
BirdLife International Aquatic Warbler Conservation Team

Main research activities of AWCT since 1995

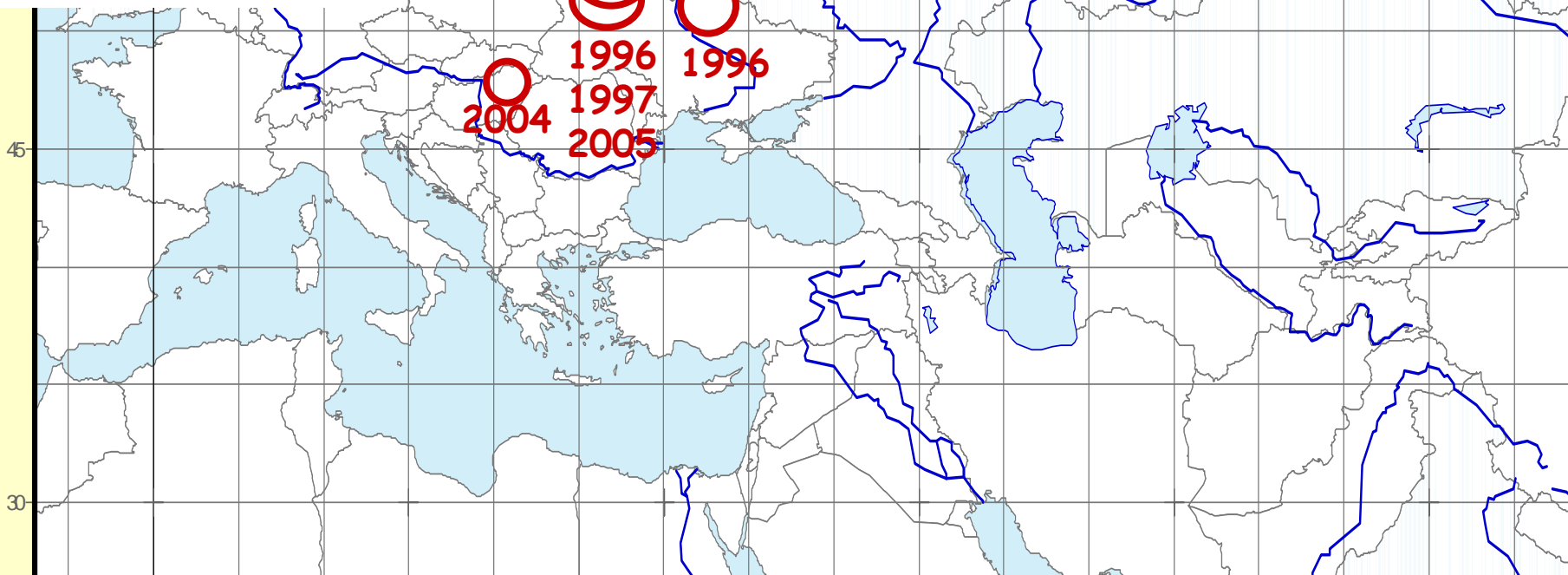
- ✓ Search for remaining AW populations in Europe and West-Siberia
- ✓ Systematic survey of Eurasian fen mires and their threat status
- ✓ Studies on breeding habitat structure and diet
- ✓ Studies on breeding biology, breeding success, predation
- ✓ Studies on mating system and reproduction system
- ✓ Analysis of the genetic population structure at different scales
- ✓ Studies on stopover behaviour and migration strategy
- ✓ Analysis of stable isotopes in AW feathers to identify wintering areas
- ✓ Desk study on and modelling of the potential African wintering grounds
- ✓ Search for AW wintering sites in West Africa (Senegal, Mauritania)
- ✓ Study on habitat features and habitat use, home range, seasonal movements and diet of wintering AW in the Senegal delta.

Aquatic Warbler range





BirdLife AWCT expeditions since 1995

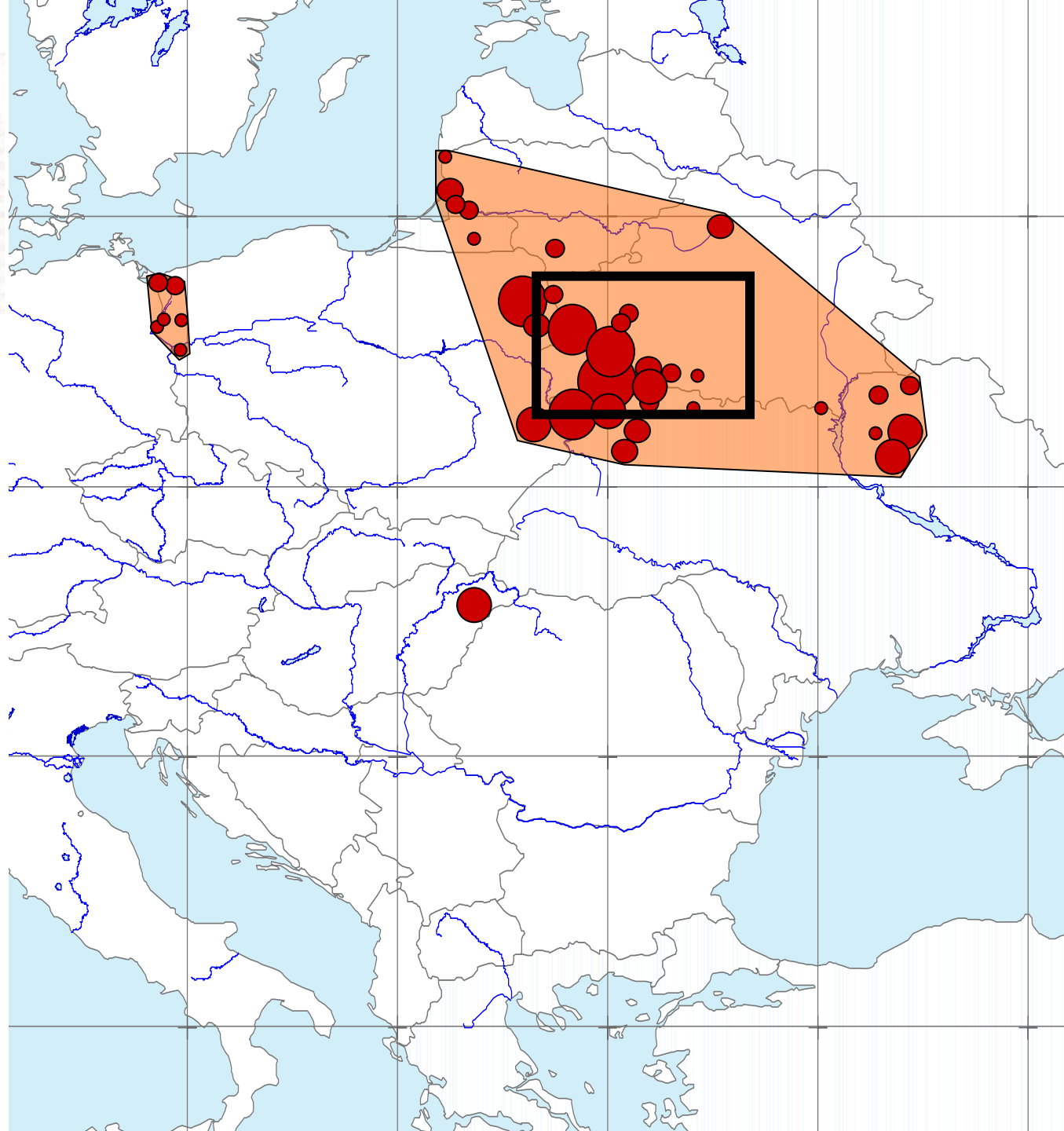


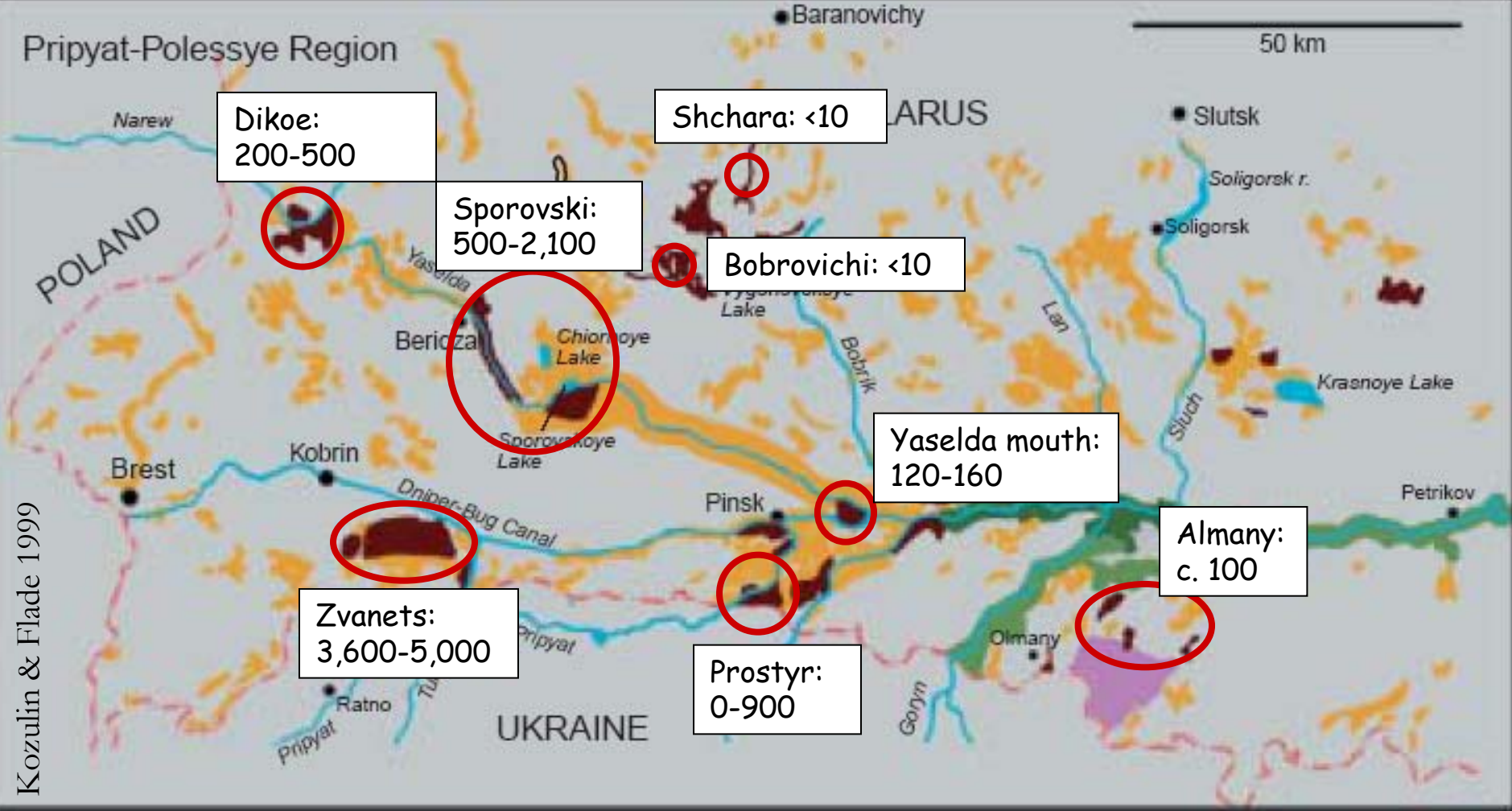
Aquatic Warbler



Current breeding distribution
(maximum number of singing males)

- 0-10
- 10-50
- 50-200
- 200-1000
- 1000-5000
- >5000





Kozulin & Flade 1999



Aquatic Warbler and fen mires in Belarus



Zvanets, Belarus
24th of May, 1995





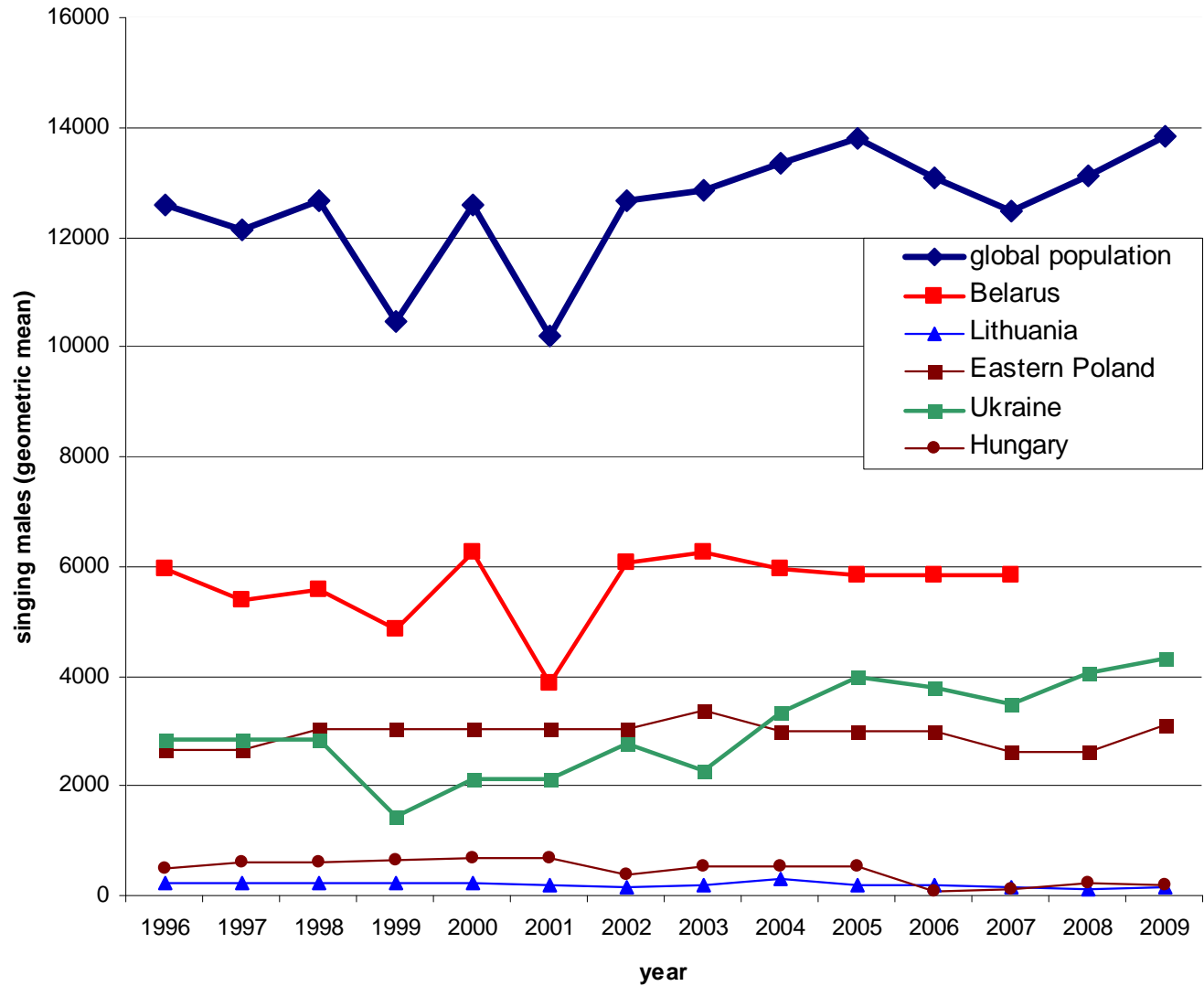
Borki, NW-Ukraine, summer 2005



Zvanets, Belarus, June 2004



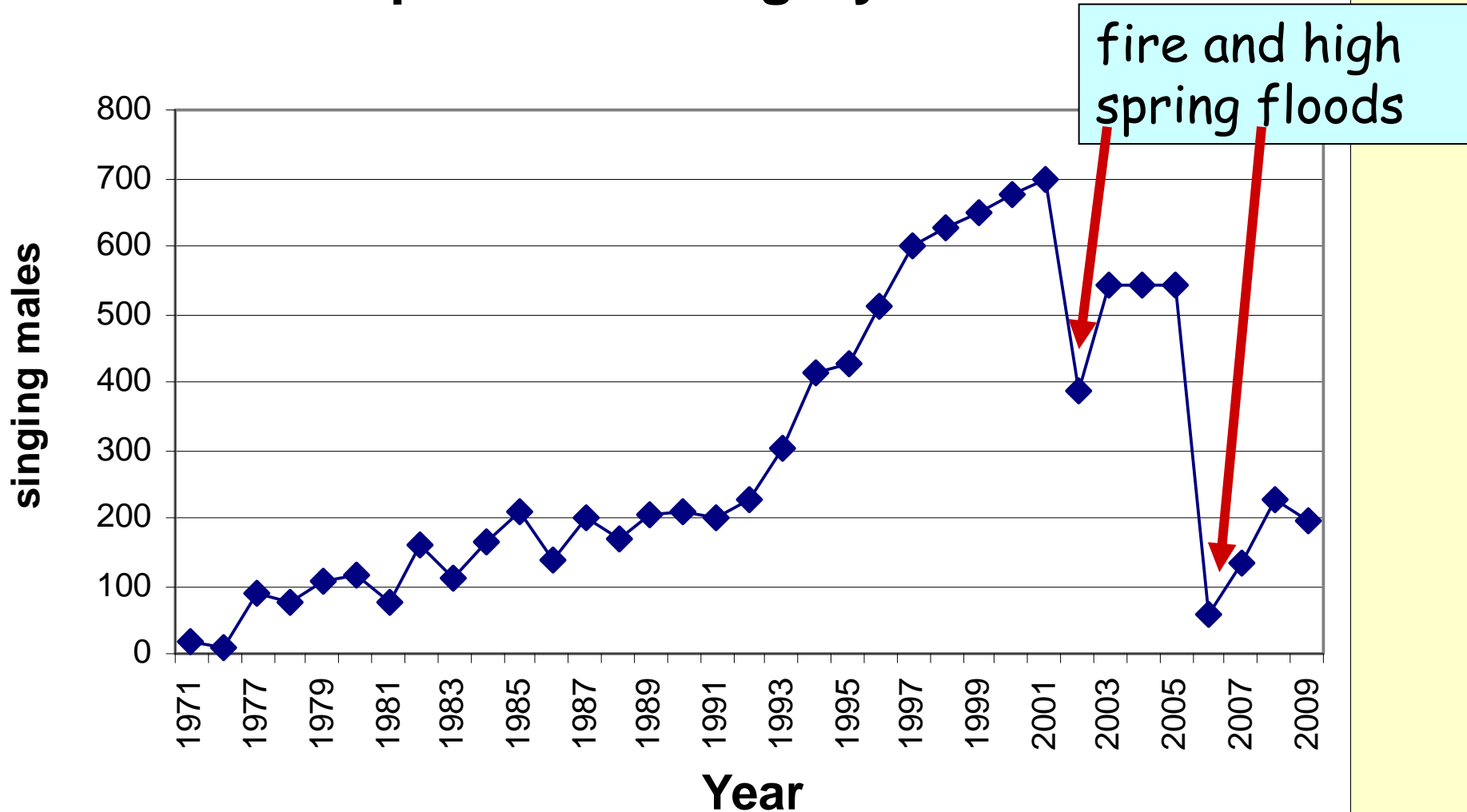
Aquatic Warbler: global population (estimates)



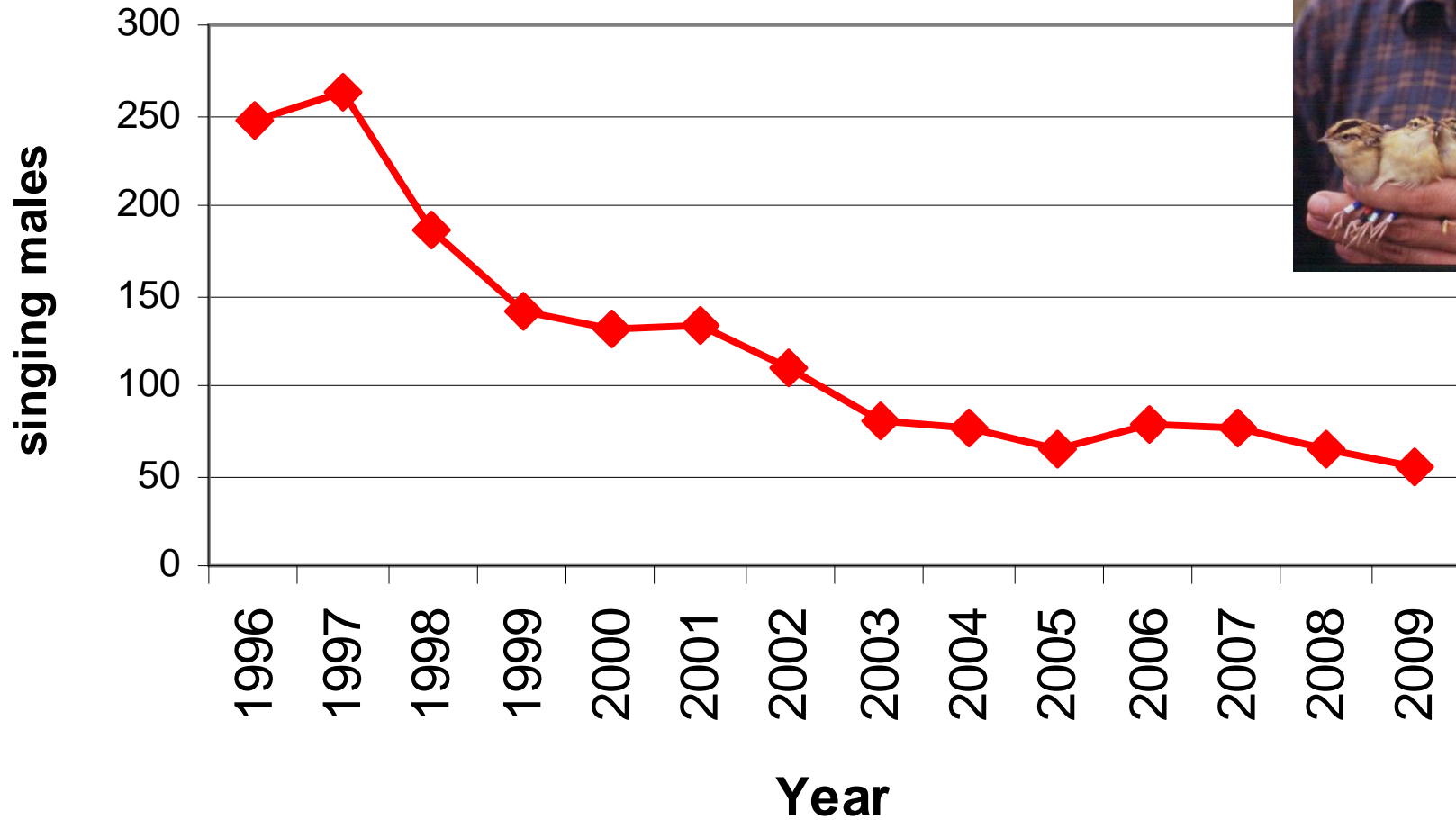
Current major threats to the central-European AW population:

- River bed deepening at the upper Ukrainian Pripyat
- to early mowing of polder meadows at the Lithuanian Nemunas delta
- Vegetation succession of fen mires speeds up

Aquatic Warbler: population development in Hungary 1971-2009



Aquatic Warbler: development of the Pomeranian population 1996-2009



Aquatic Warbler



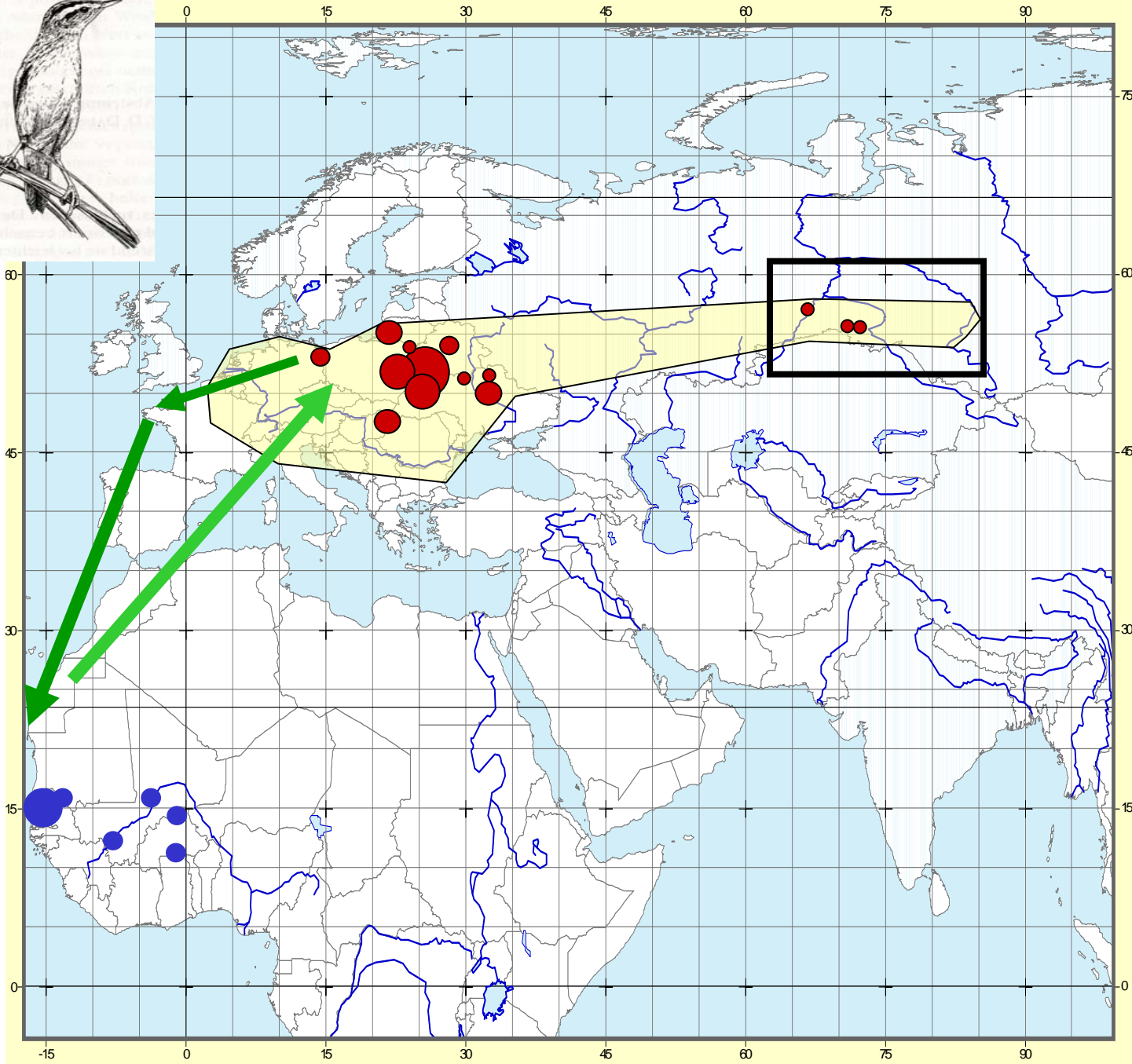
Global range

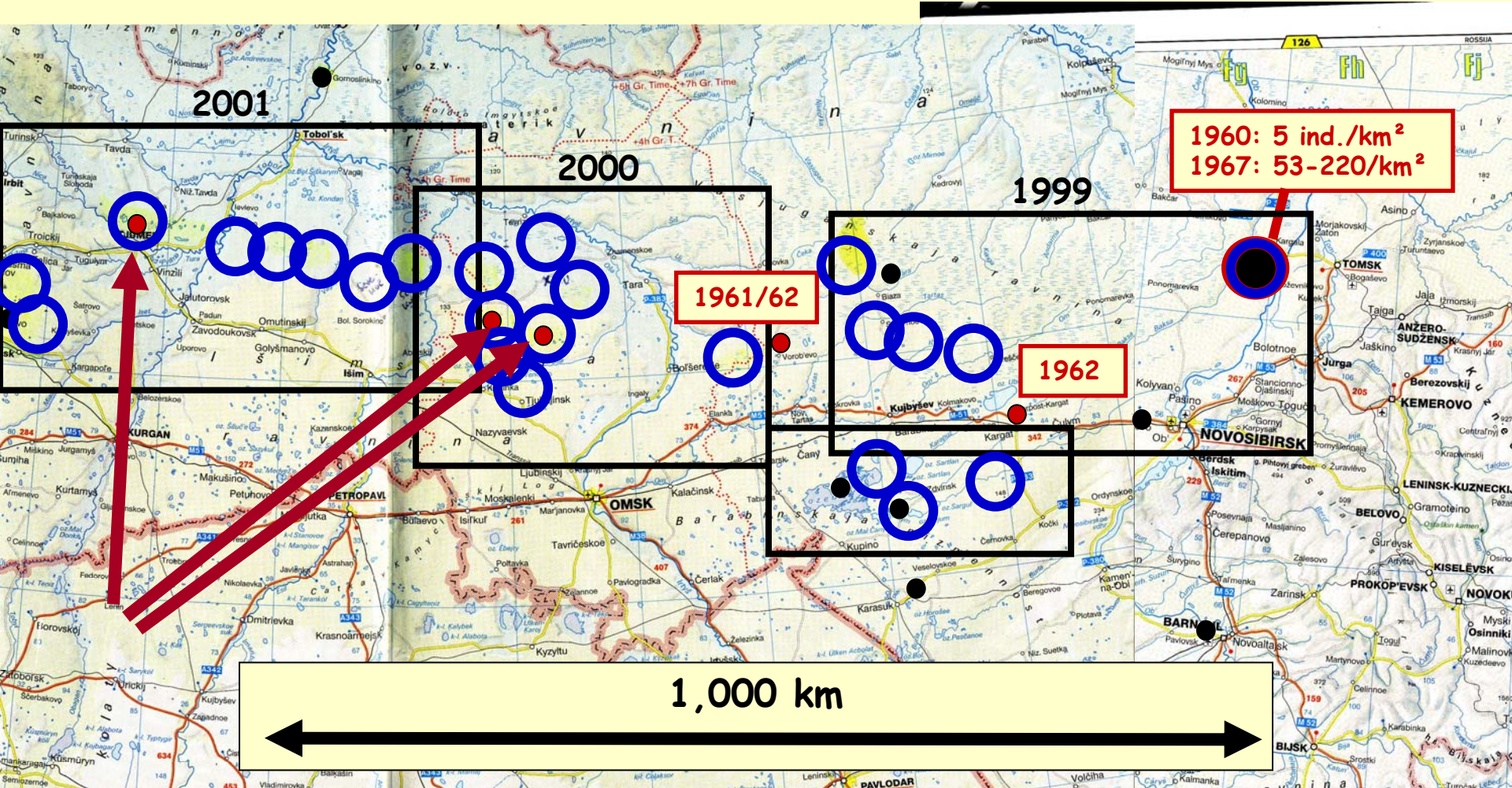
current breeding:

- <50
- 50-200
- 200-1000
- 1000-5000
- >5000
- Winter rec. (Dec., Jan.)

former range

migration

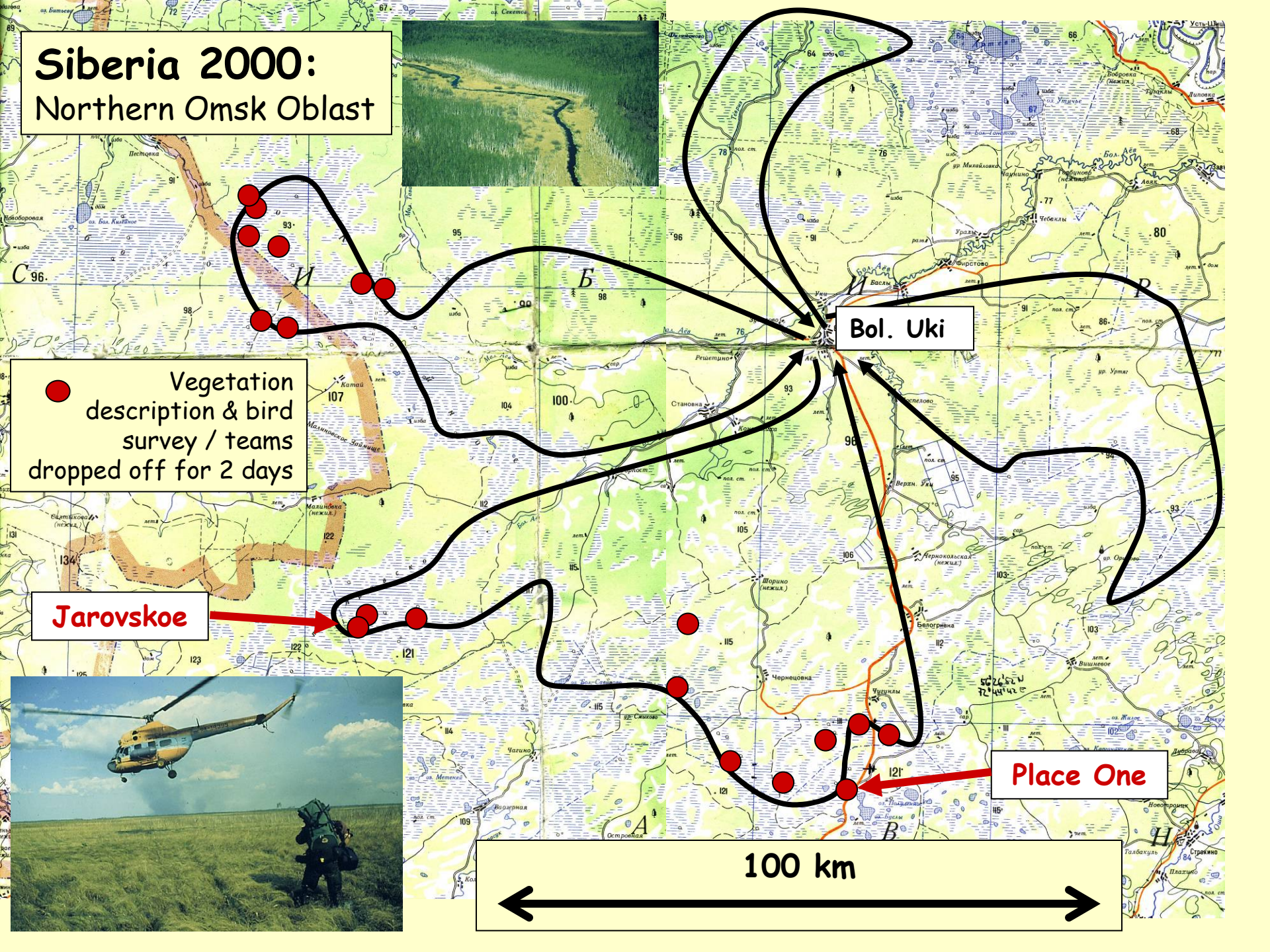




SW-Siberian plain between Ural and middle Ob
 Southern Taiga and Forest Steppe zone

- unconfirmed historical AW records
- confirmed AW records
- mires surveyed by AWCT 1999-2001

Siberia 2000: Northern Omsk Oblast



● Vegetation description & bird survey / teams dropped off for 2 days

Jarovskoe

Bol. Uki

Place One

100 km



,Place One' N Omsk

*First singing Aquatic Warbler in W-Siberia,
22nd of May, 2000*





Birch group 'Hotel Aureola'



Jarovskoe, 25 May 2000



The secret of Aquatic Warbler occurrence in W-Siberia

- tremendous drainage campaigns in central Europe/Russia starting in the 1950s
- concentration of reliable breeding records in W-Siberia in the 1960s
- increased occurrence of AW on migration in the E-Mediterranean 1958-66
- occupation of sites in W-Siberia extremely discontinuous, despite huge areas of suitable habitats
- song, biometric measurements and genetics of Siberian AW are not different.



The 'Exodus Hypothesis':

The strong occurrence of AW in W-Siberia in the 1950s/60s and recent disappearance was the result of a big exodus from central and eastern Europe to the east, initiated through large-scale drainage campaigns in the 1950s.

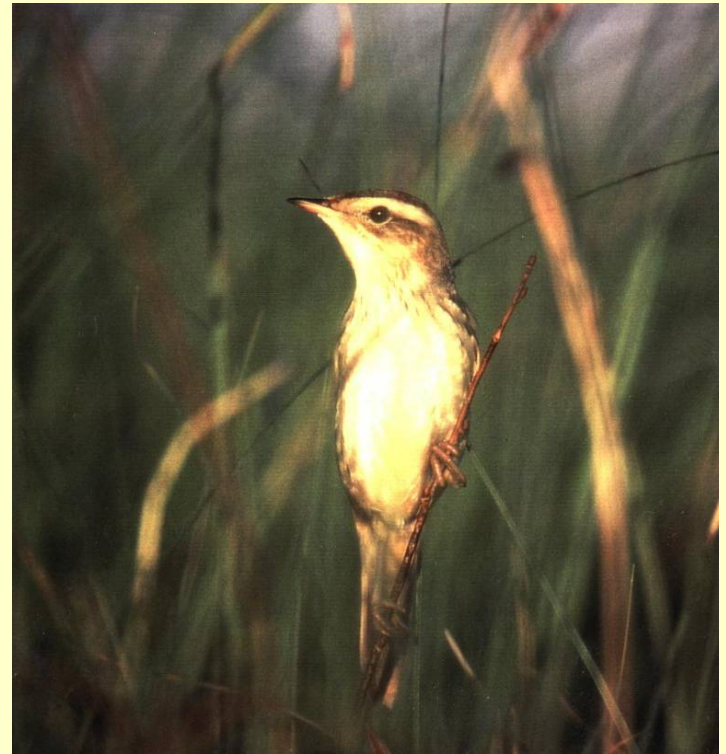
Summary:

Current status of the globally threatened Aquatic Warbler

- **Dramatic decline** of population size and range during the 20th century;
- Regular breeding occurrence at less than **40 sites in 5 countries only**;
- area of occupied habitat in Europe is **< 1000 km²** (30 x 30 km) in total;
- **90 % of the global population is concentrated to Polessye and E-Poland** (50,000 km²), **>50 % is concentrated in Belarus**, up to 40 % in one single mire.
- The isolated and probably genetically distinct or disconnected populations in **Pomerania and W-Siberia are critically endangered**.

**→ ,partial extinction' =
loss of genetic variability**

- **Only one important wintering site** (Djoudj area) known so far (2009).



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BirdLife Belarus (APB)

and

The members of the Aquatic Warbler Conservation Team,

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