

Conservation status of
the Aquatic Warbler
Acrocephalus paludicola
in Siberia



Martin Flade,
Aquatic Warbler
Conservation Team



Aquatic Warbler



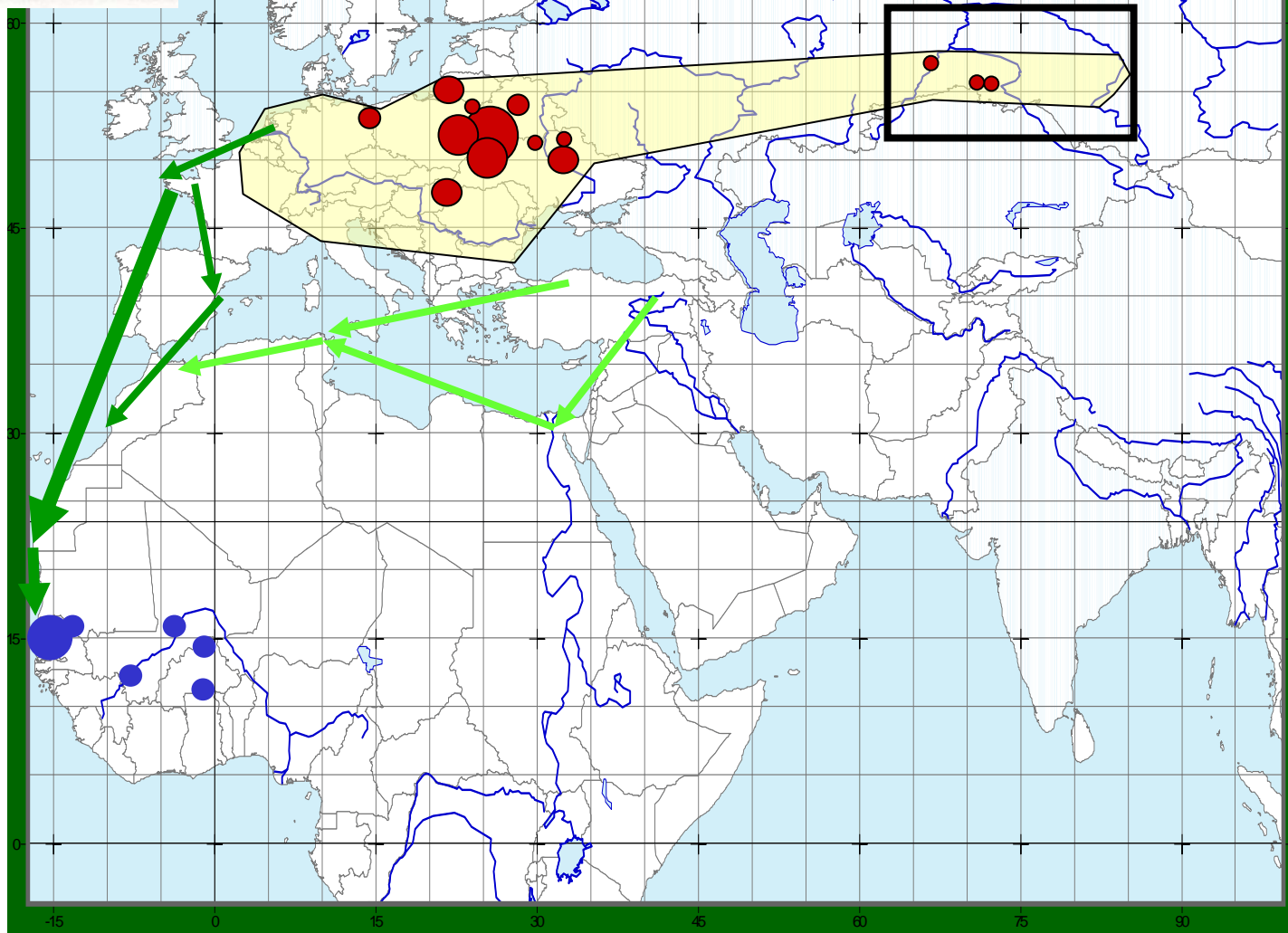
Global range

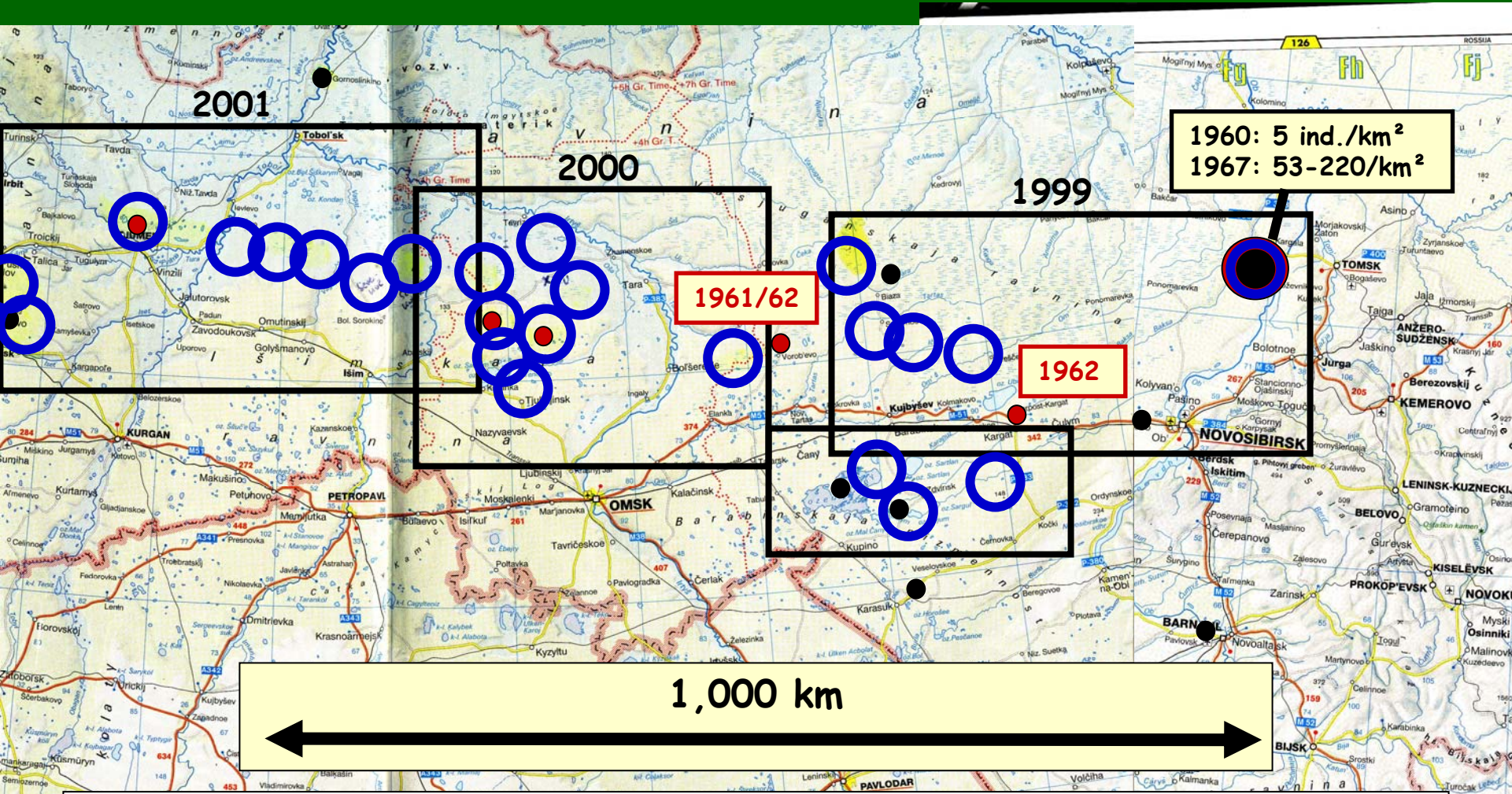
current breeding:

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

former range

migration

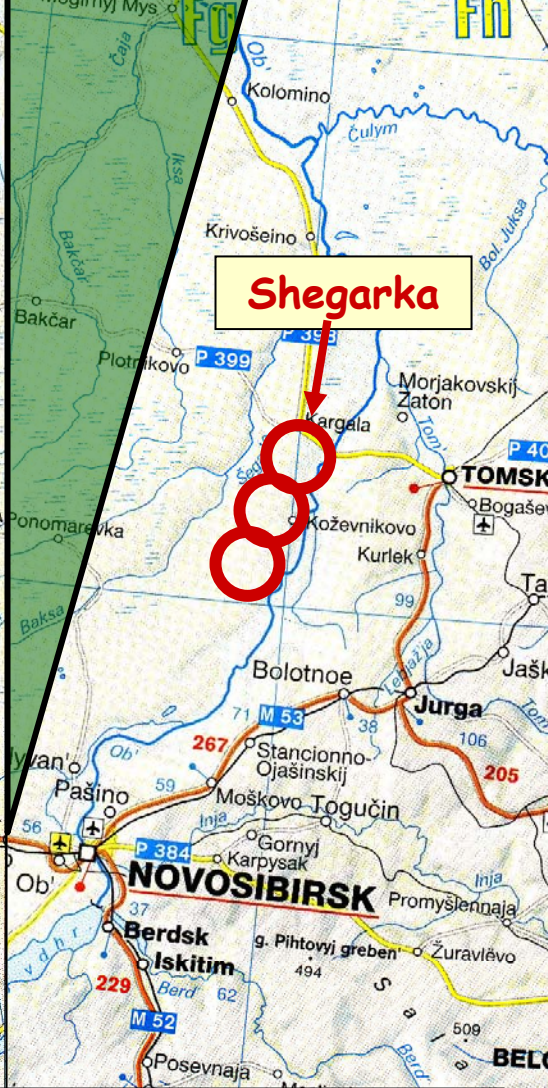




SW-Siberian plain between Ural and middle Ob

Southern Taiga and Forest Steppe zone


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



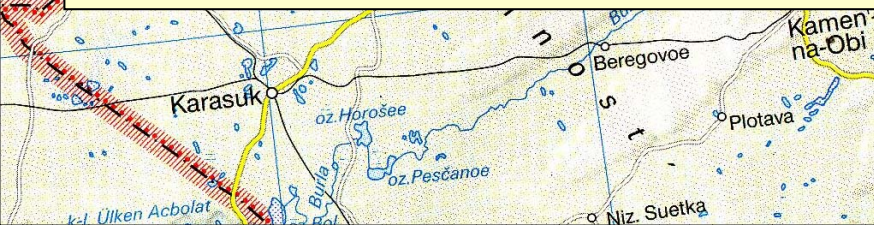
Survey area
1999:

SE-Vasyuganskoe

Barabinsk -
Novosibirsk -
Tomsk

 surveyed
fen mires

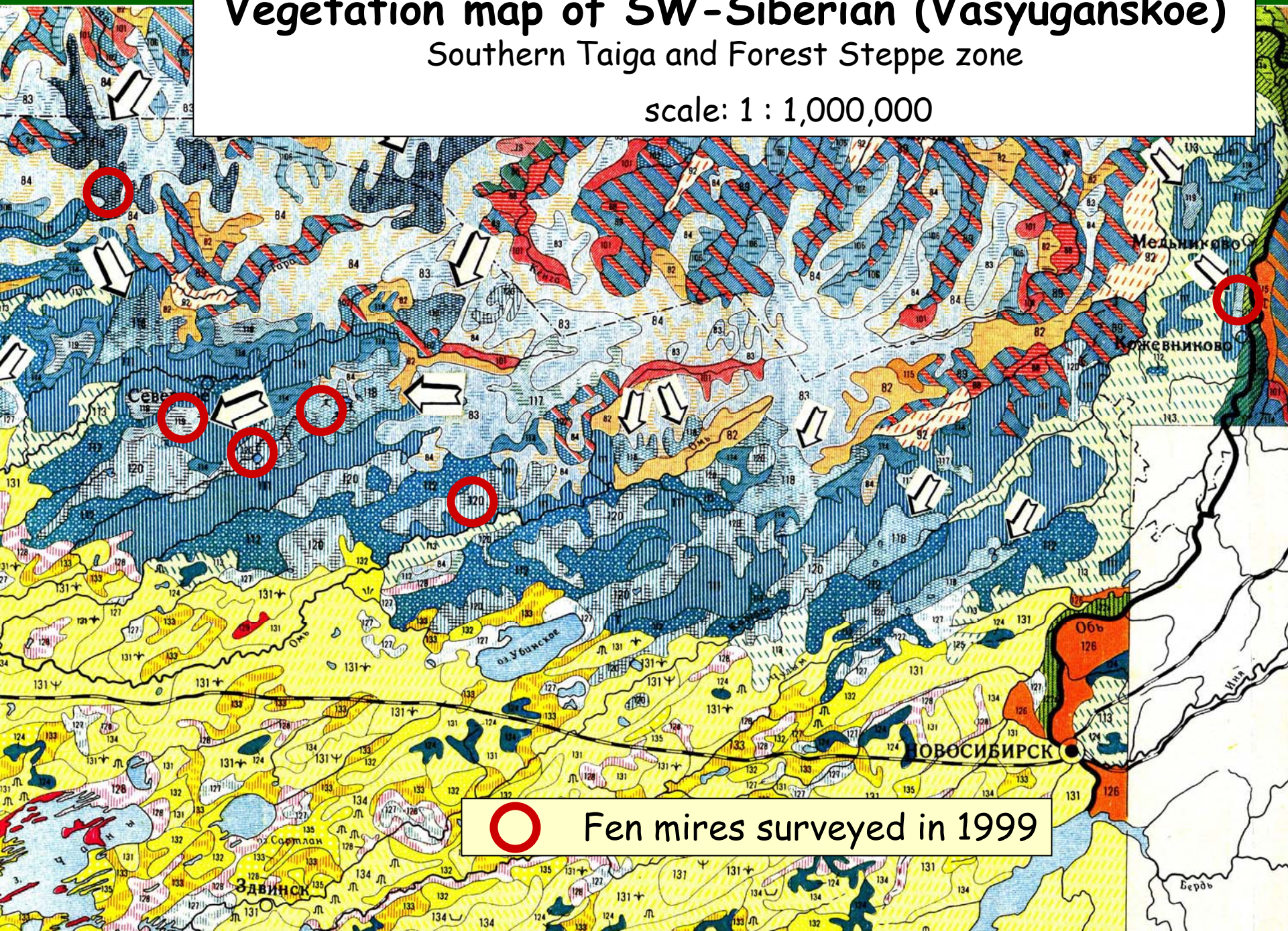
500 km



Vegetation map of SW-Siberian (Vasyuganskoe)

Southern Taiga and Forest Steppe zone

scale: 1 : 1,000,000



Fen mires surveyed in 1999

Siberia 1999:

Huge transport problems...



The Tara bridge at Mezhowka



Siberia 1999:

*Hard field conditions,
nasty animals...*

Nice coffee break („I survived Vietnam“)



„Moshka very klein, but bolshoj scheisse“



fresh Brown Bear foot prints beside
our tents...



*Wonderful
Shegarka mire
near Tomsk*

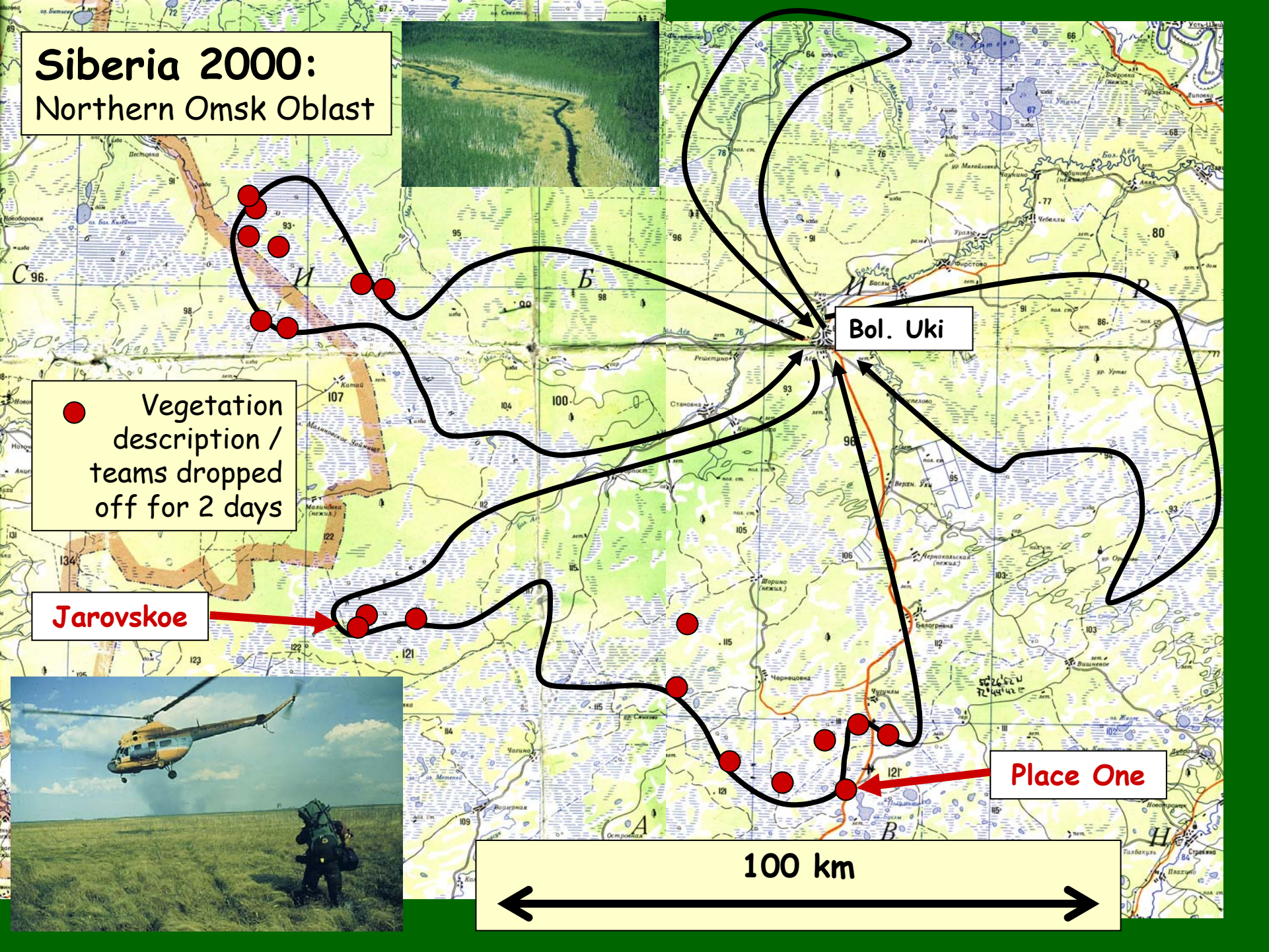
*Hundreds of singing
Aquatic Warblers in
1967 ???*





Major result 1999: We need a helicopter!

Siberia 2000: Northern Omsk Oblast



● Vegetation description / teams dropped off for 2 days

Jarovskoe

Bol. Uki

Place One

100 km



AWCT Siberia expeditions 1999-2001 (-2005)

Field work done in the mires

§ Description of mire vegetation and habitat structures (water table etc.)

§ measurements of trophic level and mineralisation of mire water;

§ breeding-bird survey (line transects);

§ searching for **Aquatic Warbler**, catching, blood and feather sampling;

§ helicopter count of Dalmation Pelican at Lake Tennis (northernmost colonie on the world), for Wetlands International;

§ catching and feather sampling of waders in the 1st calendar year (for Debbie Pain/RSPB, as Slender-billed Curlew surrogate species);

§ catching and feather sampling of Corncrakes (for Walther Wettstein);

§ catching and feather sampling of Bluethroats (for Ake Linstrom);

§ catching and feather sampling of fen mire warblers (for Debbie Pain).

,'Place One'

*first singing
Aquatic Warblers
in W-Siberia,
22nd May 2000*



Jarovskoe, 25th May 2000





Birch group 'Hotel Aureola'



Jarovskoe, 25 May 2000



Siberia 2000 (Omsk, Alapy mire): „See you, darling!”



Martin, Janush, Mikhail, Sasha, Susanne, Torsten, Sebastian, Sergej, Vladimir, Benedikt, Jarek

Northern Omsk Oblast: area balance

Situation of type 118-120 mires according to the vegetation map, in spring 2000; figures indicate the area size of open mire in km²

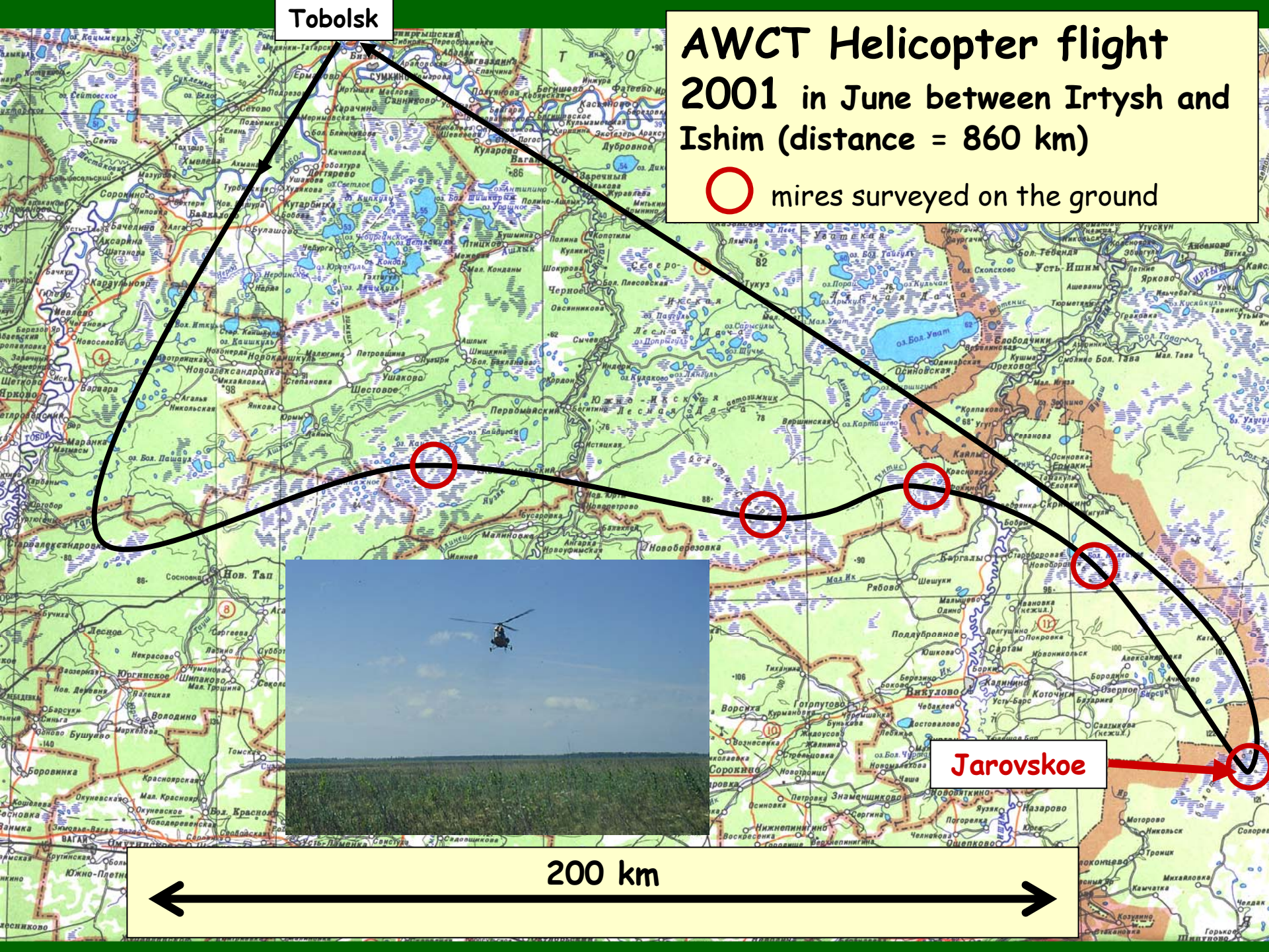
(total area of fen mires surveyed: 2,200 km²)

 	 	 	 	 	 		
				-		-	
				-		-	
 		200		10	5 %	-	
		120		70	58 %	50	42 %
			200	70	35 %	-	
			180	180	100 %	-	
			150	-		150	100 %
			700	500	70 %	-	
	500	470	1,230	830	38 %	200	9 %

Tobolsk

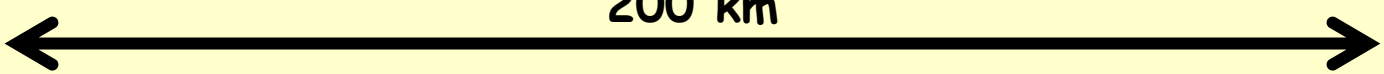
**AWCT Helicopter flight
2001 in June between Irtysh and
Ishim (distance = 860 km)**

 mires surveyed on the ground



Jarovskoe

200 km



North of
Tyumen'



*up to 8 singing
Aquatic Warblers in
June/July 2000*

(Konstantin Grashdan)



7 km N
Lake Busly



AWCT Siberia expeditions 1999-2001 (-2005)

Conclusions

- There are > 4,000 km² of +/- suitable fen mires left in W-Siberia;
- even in W-Siberia the fen mires are threatened through drainage and uncontrolled burning;
- slightly drained fens are threatened by abandonment of hay cutting;

- **Aquatic Warbler** occurs in very small numbers on vast areas; populations are shifting permanently, no regular breeding site is known;
- AW population size is estimated at (not more than) 50-500 males;
- Siberian AW population is completely isolated and is most likely going extinct;







- Breeding-bird communities of sedge fens have largely been surveyed, with many surprises out of the known range (e.g. Pallas Bunting, Little Bunting, Pallas' Grasshopper Warbler, Baillon's Crake, Honey Buzzard, Pallid Harrier, Swinhoe's Snipe, Scop's Owl...)

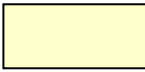
Aquatic Warbler



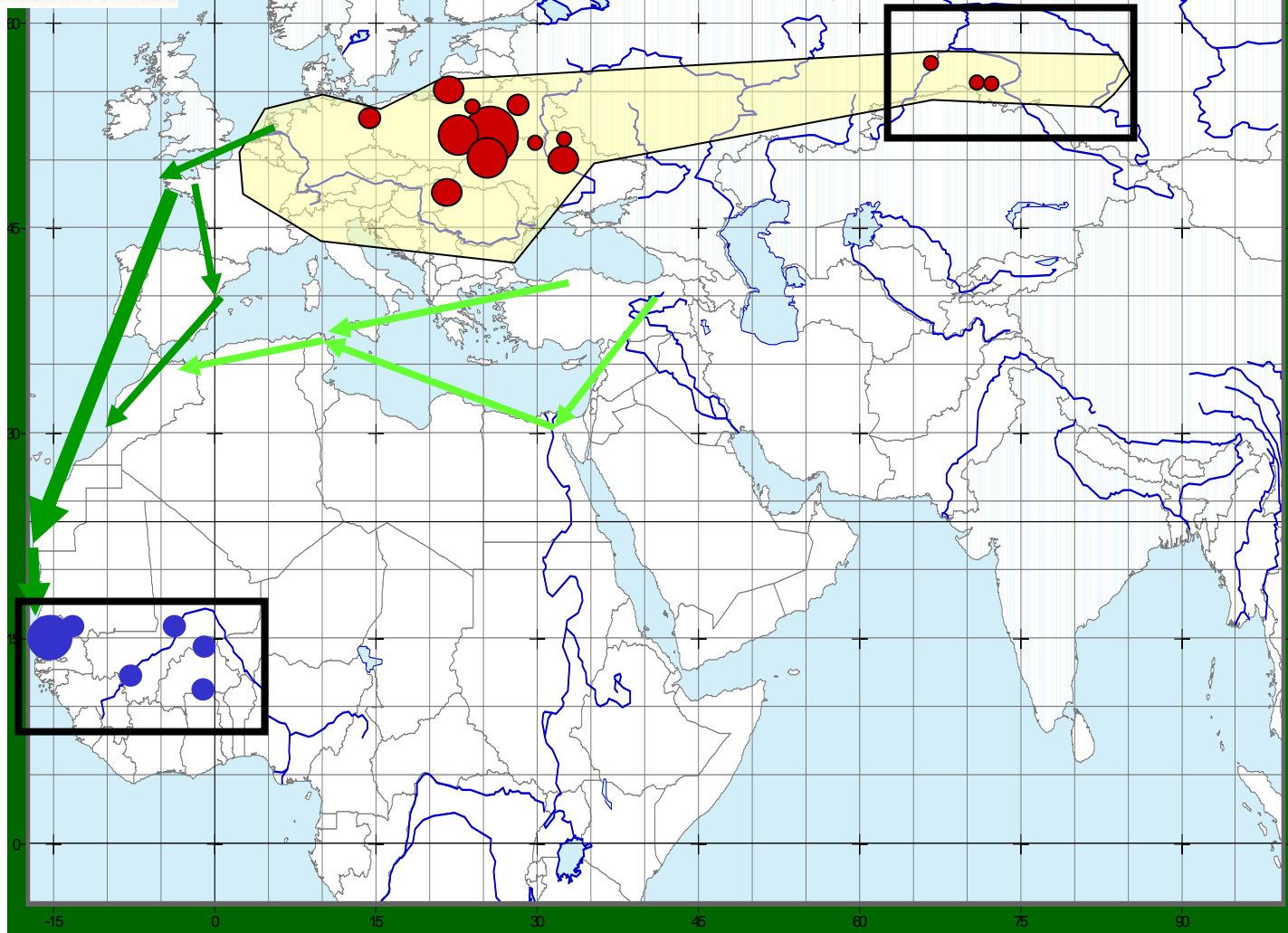
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The secret of the Aquatic Warbler in W-Siberia

Putting facts together:

- There is a conspicuous concentration of reliable breeding records in W-Siberia (collected specimen, nests found, big numbers of singing AW) in the 1960s.
- At the same time, there was an increased occurrence of AW on migration in the E-Mediterranean and Middle East (4 out of 10 records: 1958, 1964, 65, 66).
- At the same time, tremendous drainage and land reclamation campaigns started in central Europe and European Russia.
- The occupation of sites in W-Siberia was (and is still) extremely discontinuous (no permanent breeding sites, maximum was 2 subsequent years).

=> see the „Gypsy Theory“ according to RAVKIN:

„There exists a small breeding population of AW of nomadic character in W-Siberia, which is much smaller than the habitat capacity“.

- Song and biometric measurements of Siberian AW are not different.
- Despite huge areas of suitable habitats in W-Siberia, the conditions for AW are pessimal:
 - migration distance to W-Africa is as twice as long as from Polessye (and AW obviously is not capable to make long non-stop flights),
 - due to climatic reasons, only 1 annual brood is possible (lower reproduction).



The '*GULAG*' Hypothesis:

The strong occurrence and recent disappearance of the Aquatic Warbler in W-Siberia was the result of a big exodus from central and eastern Europe in the 1960s to the east, leading into pessimal breeding sites.

This exodus was initiated through large-scale drainage campaigns in central and E-Europe which started in the early 1960s.

Waiting for the helicopter...



... bye bye !