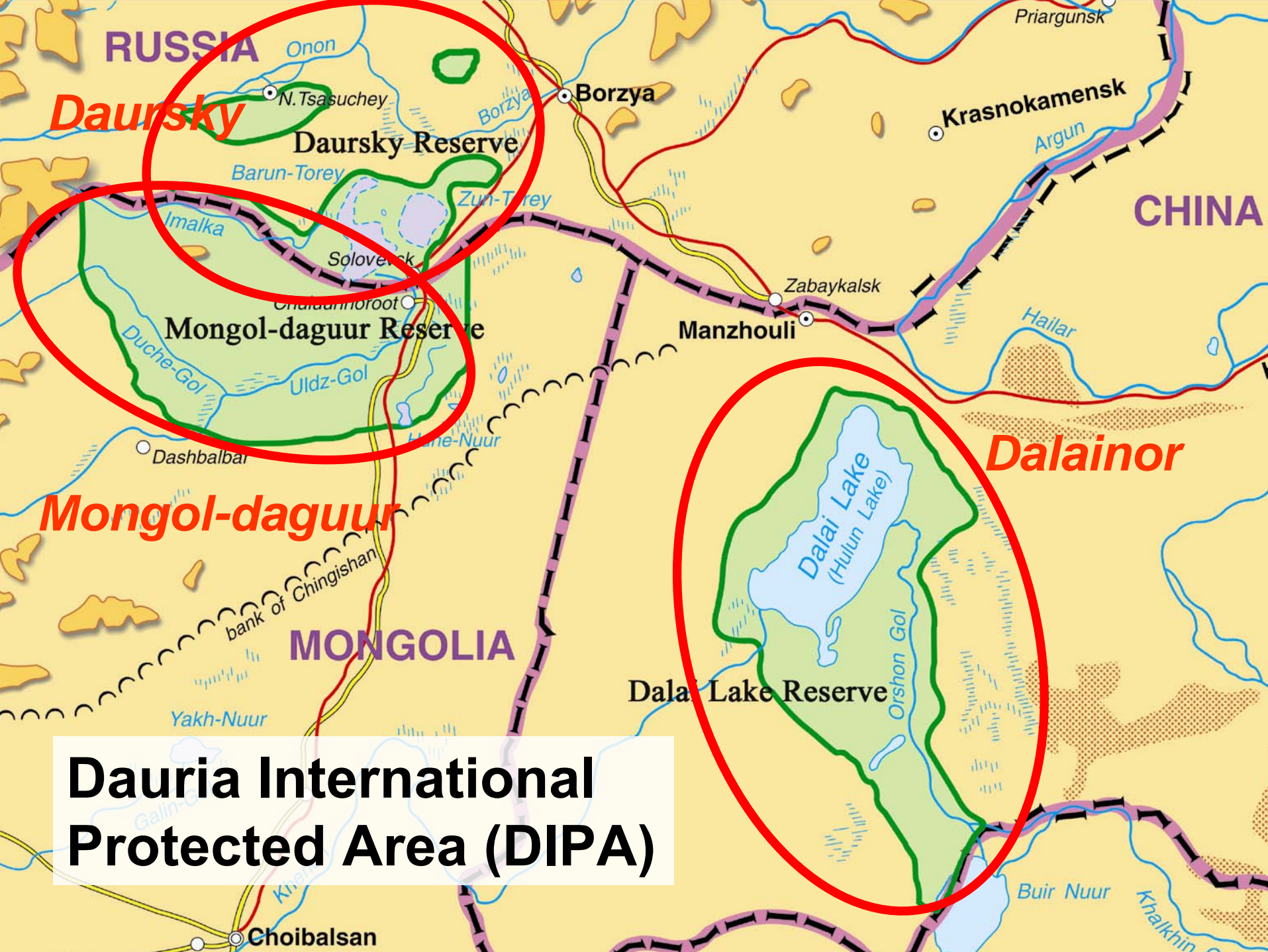
Two cranes are shown in flight against a clear blue sky. The crane in the upper left is a Red-crowned Crane, characterized by its black cap and neck. The crane in the lower right is a White-naped Crane, featuring a white cap and neck. Both birds have long necks and large, dark wings.

**Present status of  
populations of Red-  
crowned Crane and  
White-naped Crane in  
Dauria (upper reach of  
the Amur River)**

***Oleg Goroshko***

***Dauria International Russian-Mongolian-Chinese Nature Reserve***



**Dauria International Protected Area (DIPA)**

*Dauria*

*Dalainor*

*Mongol-daguur*

RUSSIA

CHINA

MONGOLIA

Daurisky Reserve

Mongol-daguur Reserve

Dalai Lake Reserve

Borzlya

Krasnokamensk

Zabaykalsk

Manzhouli

Dashbalbar

bank of Chingishan

Yakh-Nuur

Choibalsan

Onon

Borzlya

Barun-Torey

Zun-Tirey

Imalka

Solovevsk

Ghudaaninoroot

Dashbalbar

Yakh-Nuur

Galina

Kipchik

Priargunsk

Argun

Hailar

Dalai Lake (Hulun Lake)

Orshon Gol

Buir Nuur

Khalkhin

# Dauria International Protected Area (DIPA)

*Daursky*

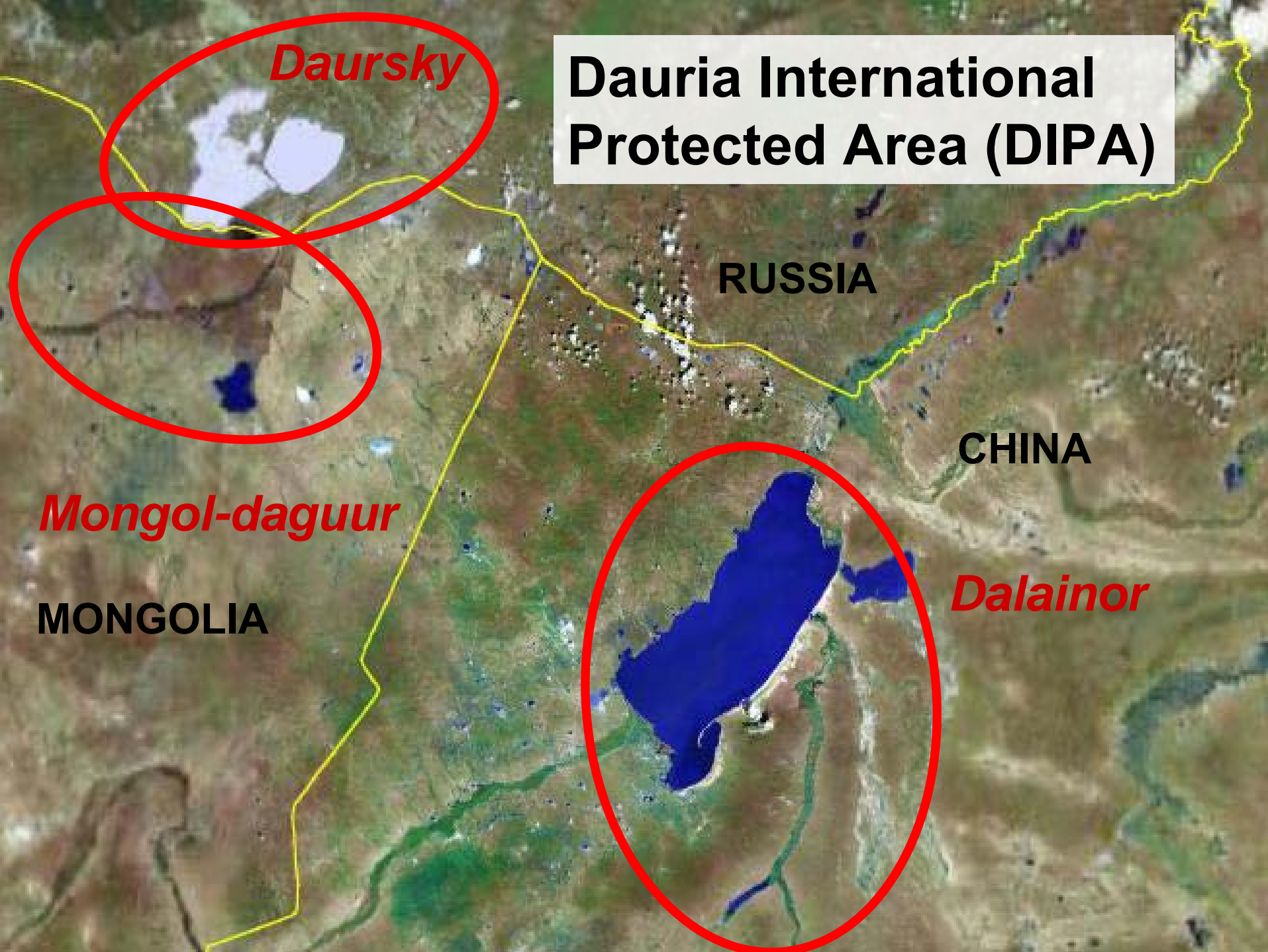
RUSSIA

CHINA

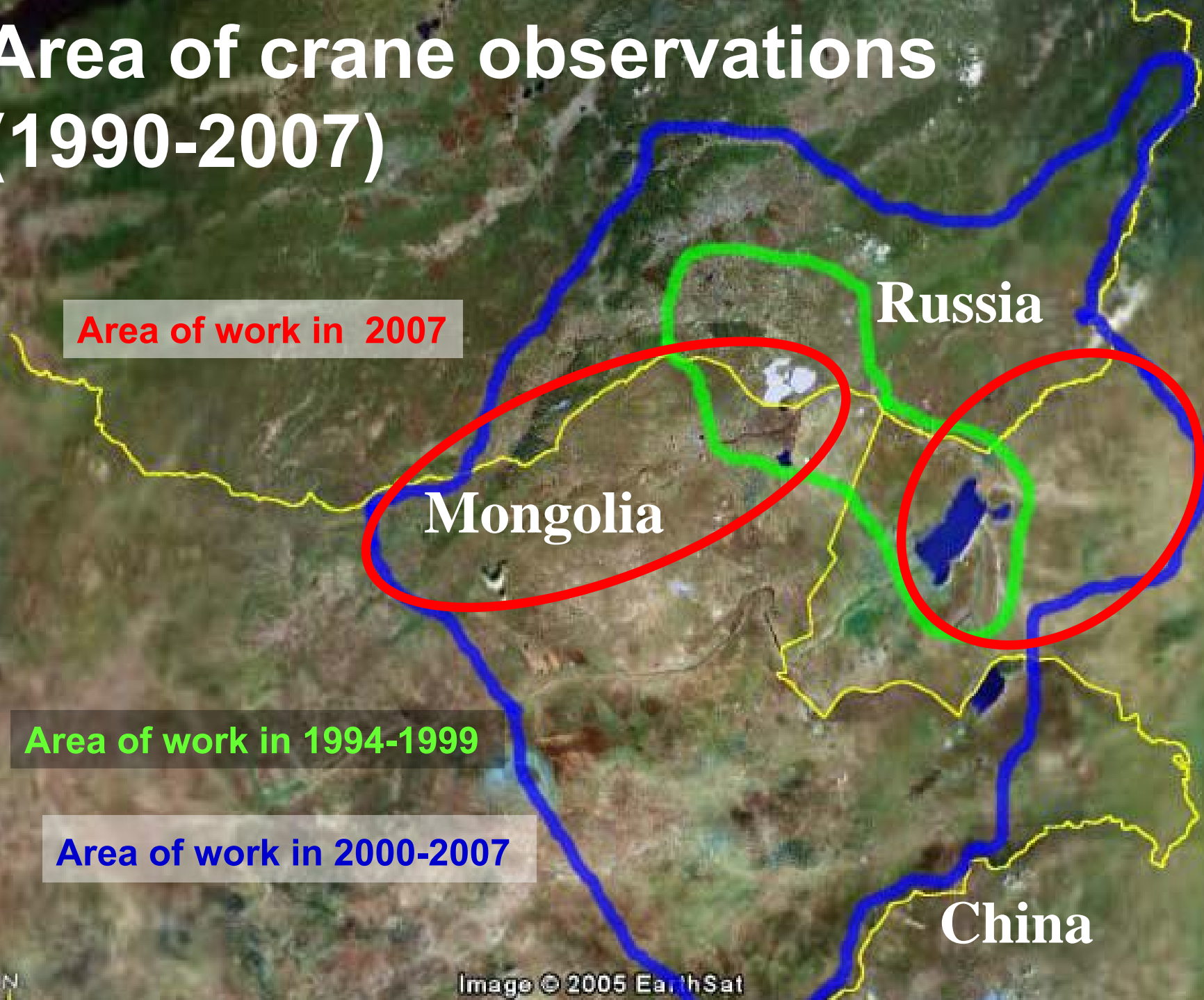
*Mongol-daguur*

MONGOLIA

*Dalainor*



# Area of crane observations (1990-2007)



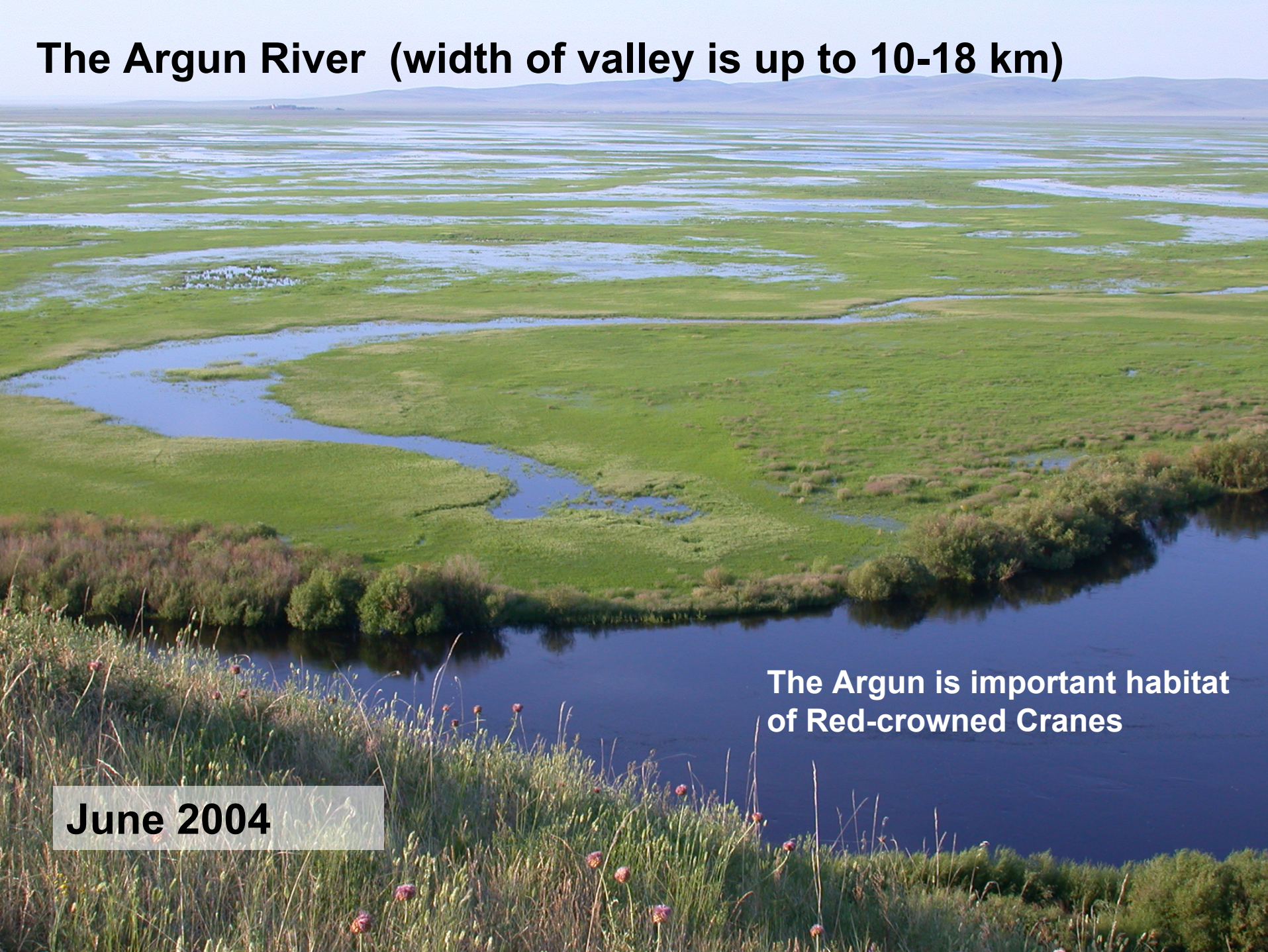


**Photo: *Torey Lakes  
are biggest in  
Transbaikalia  
(July 2000)***

# **The Uldza River – important habitat of White-naped Cranes**



# The Argun River (width of valley is up to 10-18 km)



The Argun is important habitat  
of Red-crowned Cranes

June 2004



**June 2007**



*Photo: The Torey Lakes (June 2007)*

30-years duration climatic cycles have great influence to ecosystems of Dauria.

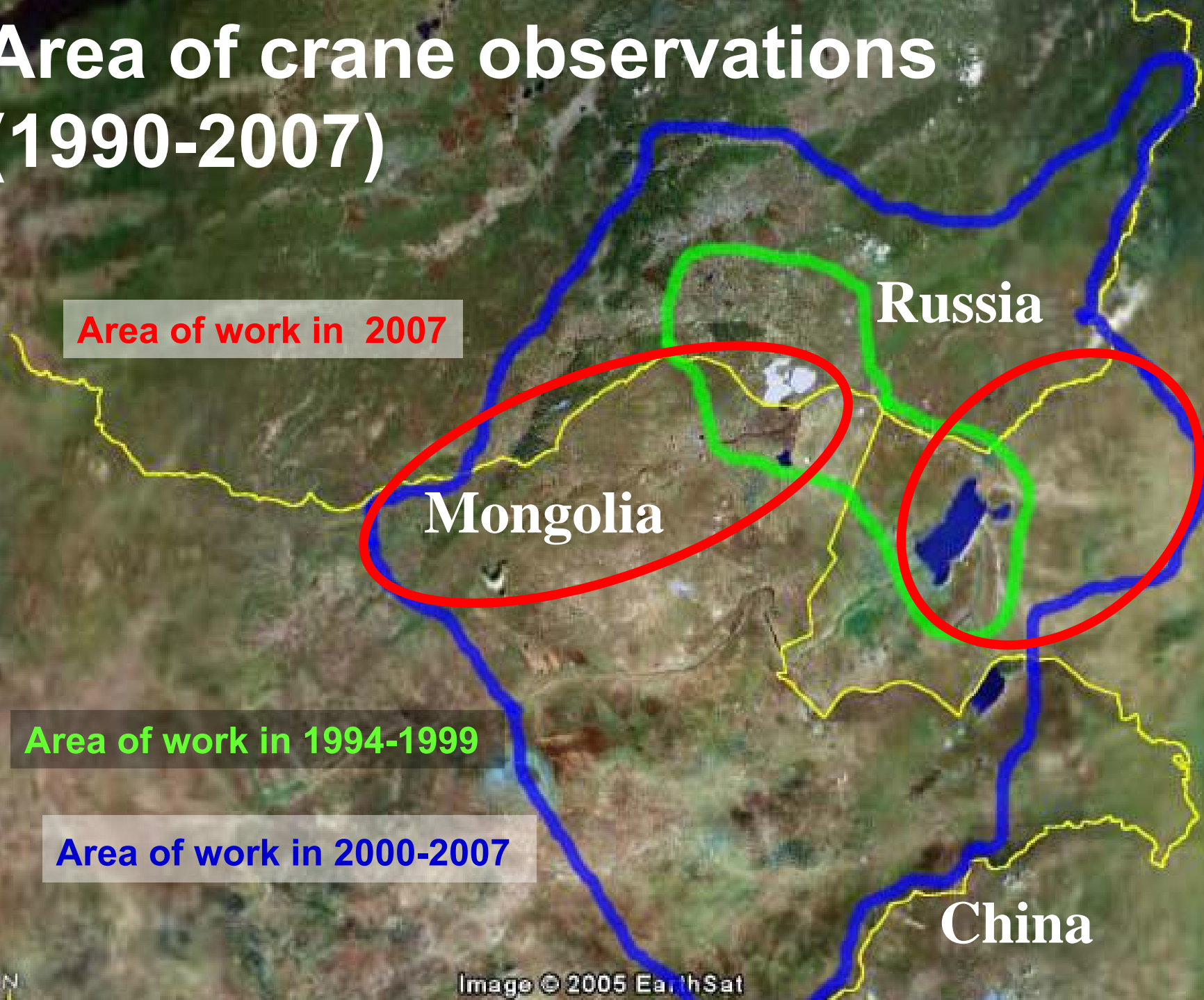
The present dry period is from 2000 to 2015(?)

In 2007 about 95% of wetlands in Dauria are completely dry.

Even Torey Lakes ( $S > 900 \text{ km}^2$ ) can become completely dry.



# Area of crane observations (1990-2007)



# Red-crowned Crane:

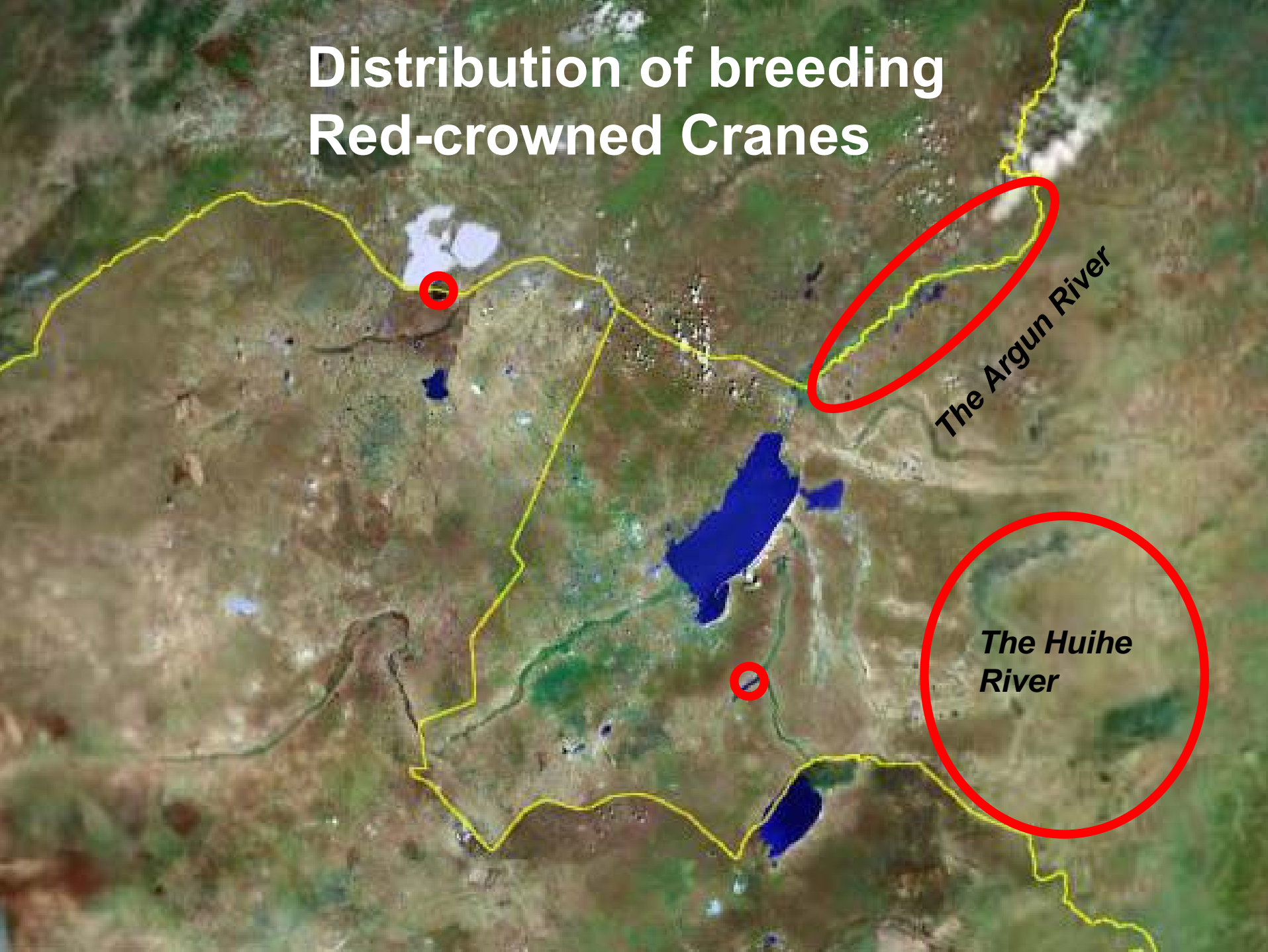


- During 2001-2002 - number of birds in Dauria increased much;
- In 2003 – first breeding on the Torey Lakes;
- In 2003 – more 26 pairs (probably about 50 pairs) inhabited on the Argun (it is – about 4% of world population);



- During 2001-2002 - number of birds on the Argun decreased in about 2 times.

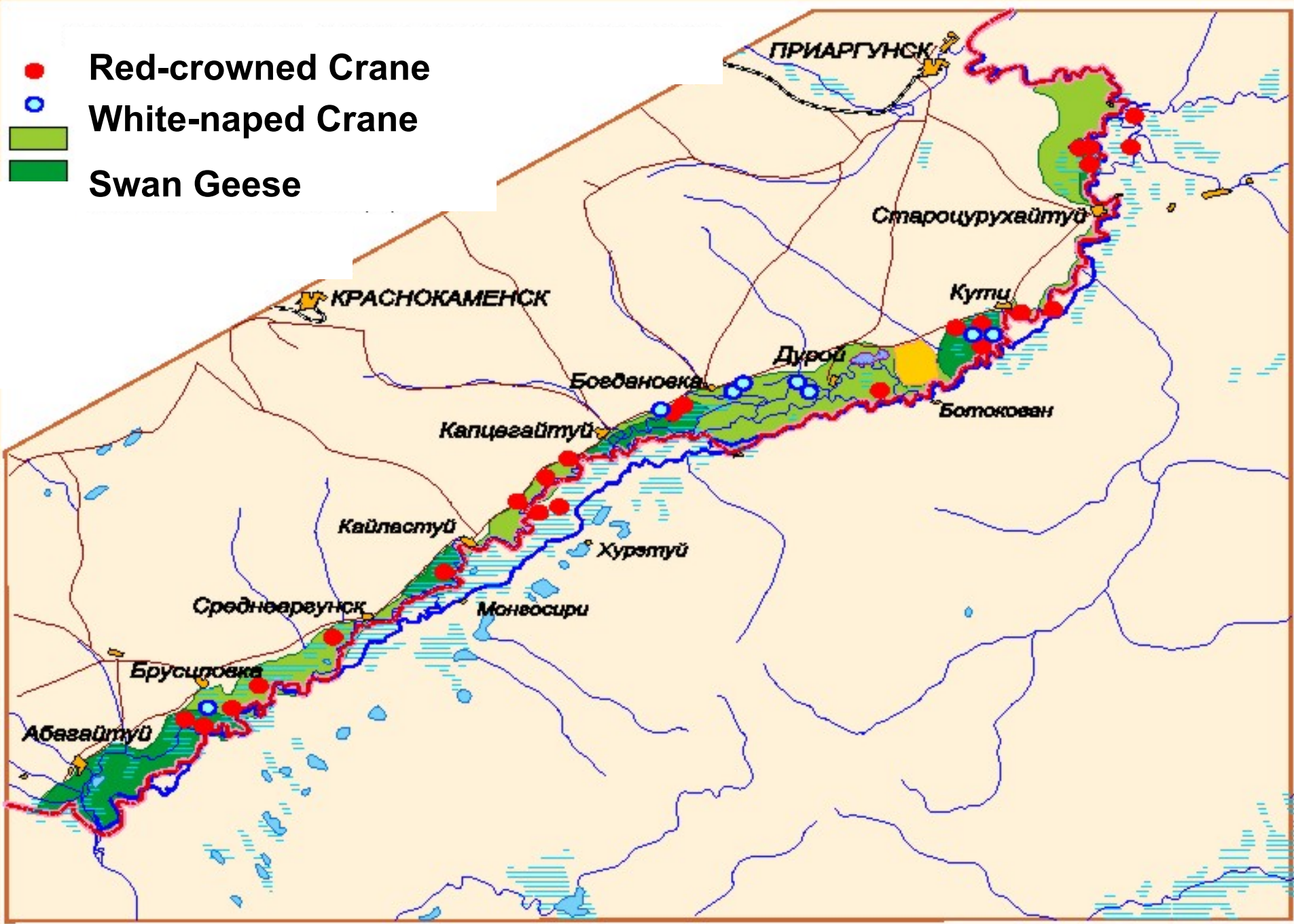
# Distribution of breeding Red-crowned Cranes



*The Argun River*

*The Huihe River*

- Red-crowned Crane
- White-naped Crane
- Swan Geese



# Habitats of the Red-crowned Cranes on the Argun – cereal and sedge meadows





**Habitats of the Red-crowned Cranes on the Argun – reeds**

# The breeding site on the Argun in June 2004





**The same place in June 2007**



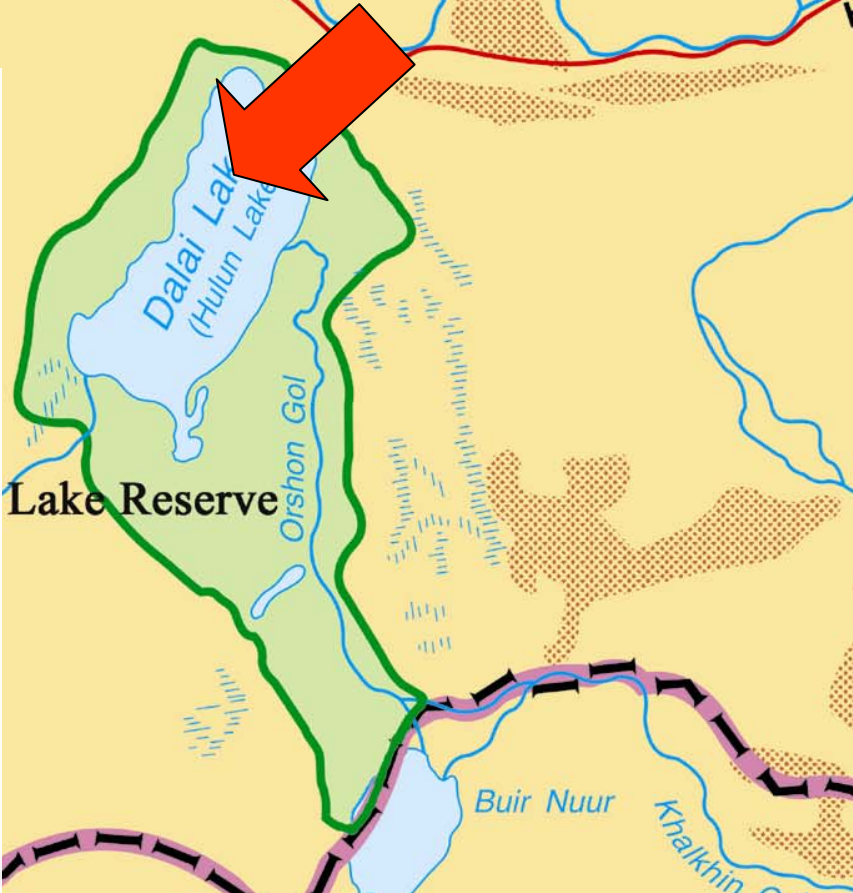
**During 2005-2007 biodiversity significantly decrease  
(mainly because the Argun have low flow about 1.5 km<sup>3</sup> in year)**





# Threats

**Chinese government plans to realize in next future the very dangerous project of Hailaer-Argun River Water-Diversion (up to 1.5 km<sup>3</sup> of water in year). The project will result in huge damage to biodiversity all global Dauria ecoregion ( especially dramatic influence during dry climatic periods)! The spacious Argun wetlands will be dry, populations of Red-crowned Crane and Swam Goose will disappear.**

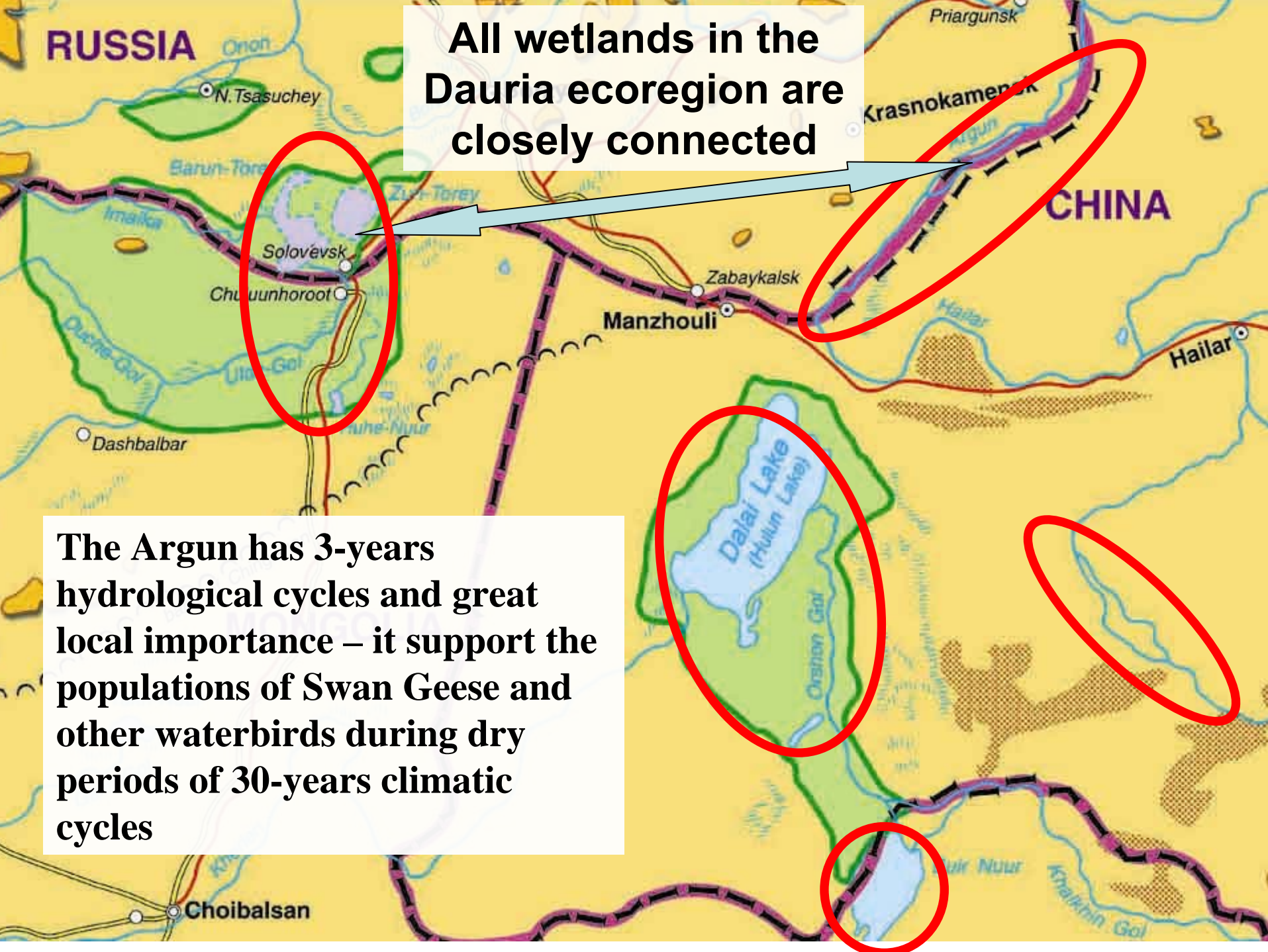


**RUSSIA**

**All wetlands in the Dauria ecoregion are closely connected**

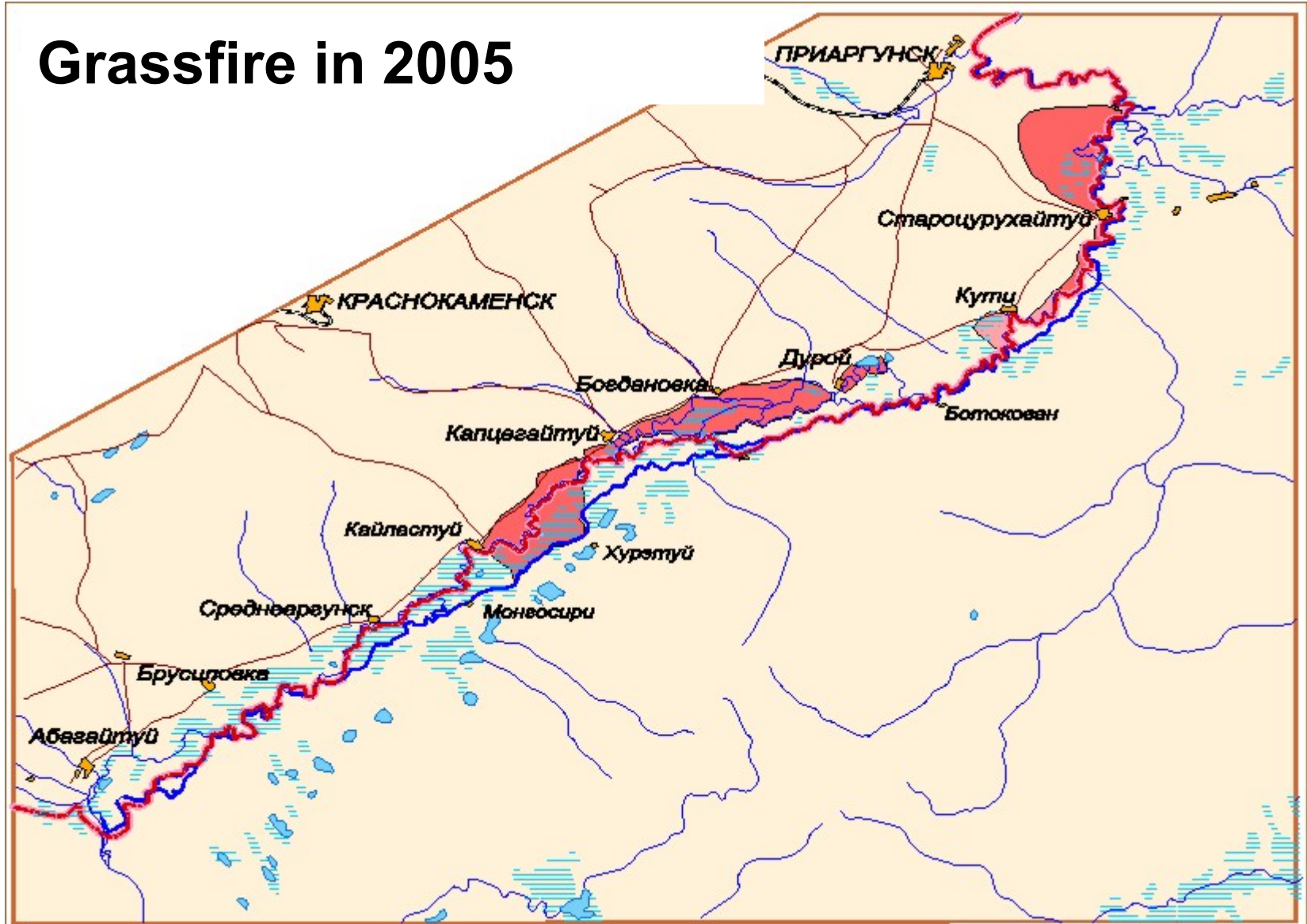
**CHINA**

**The Argun has 3-years hydrological cycles and great local importance – it support the populations of Swan Geese and other waterbirds during dry periods of 30-years climatic cycles**





# Grassfire in 2005



**About 60-80% of wetlands on Russian site of the Argun are burned every year.**

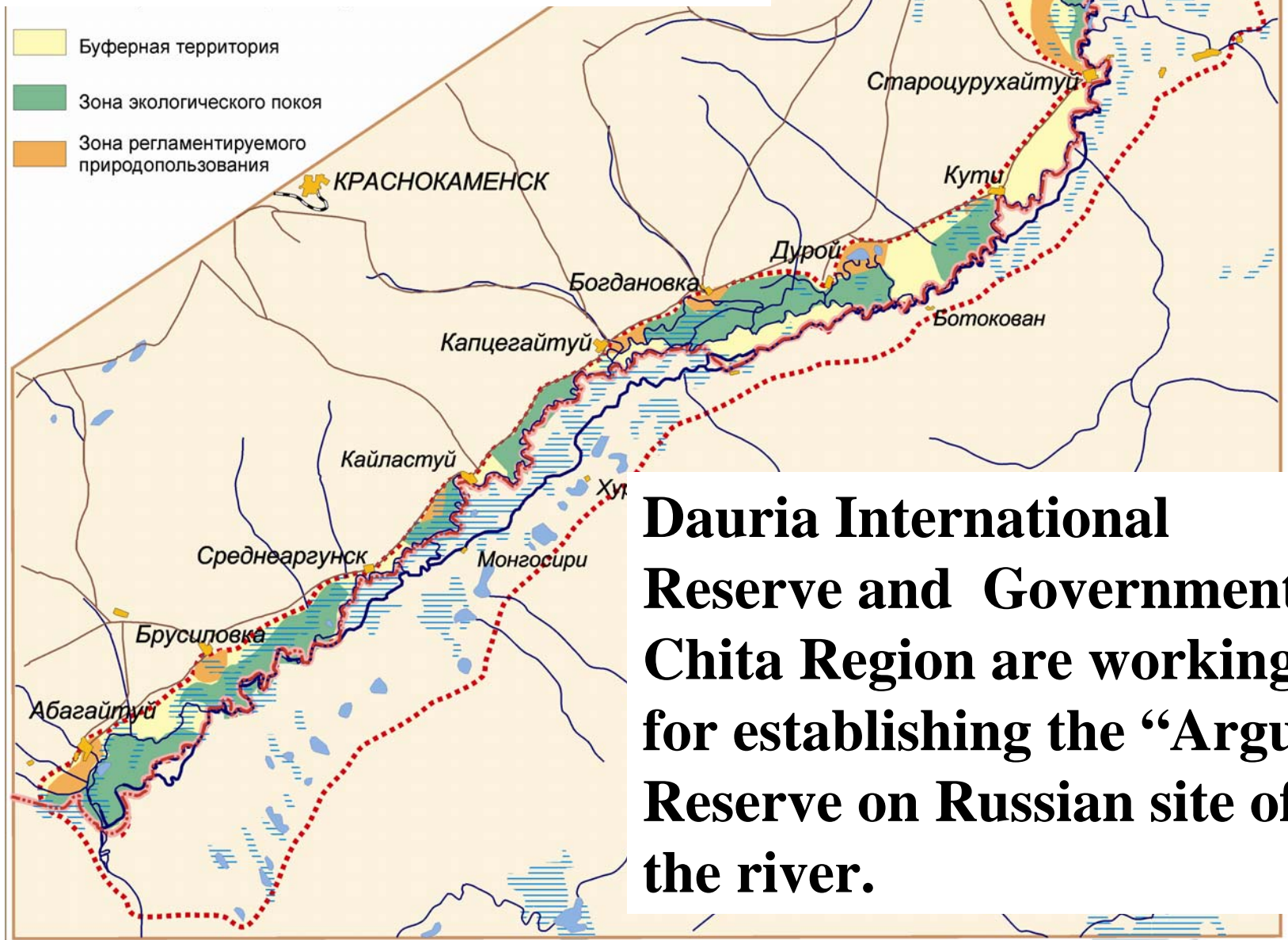


Poaching





# Scheme of the Russian “Argun” Reserve



**Dauria International Reserve and Government of Chita Region are working for establishing the “Argun” Reserve on Russian site of the river.**

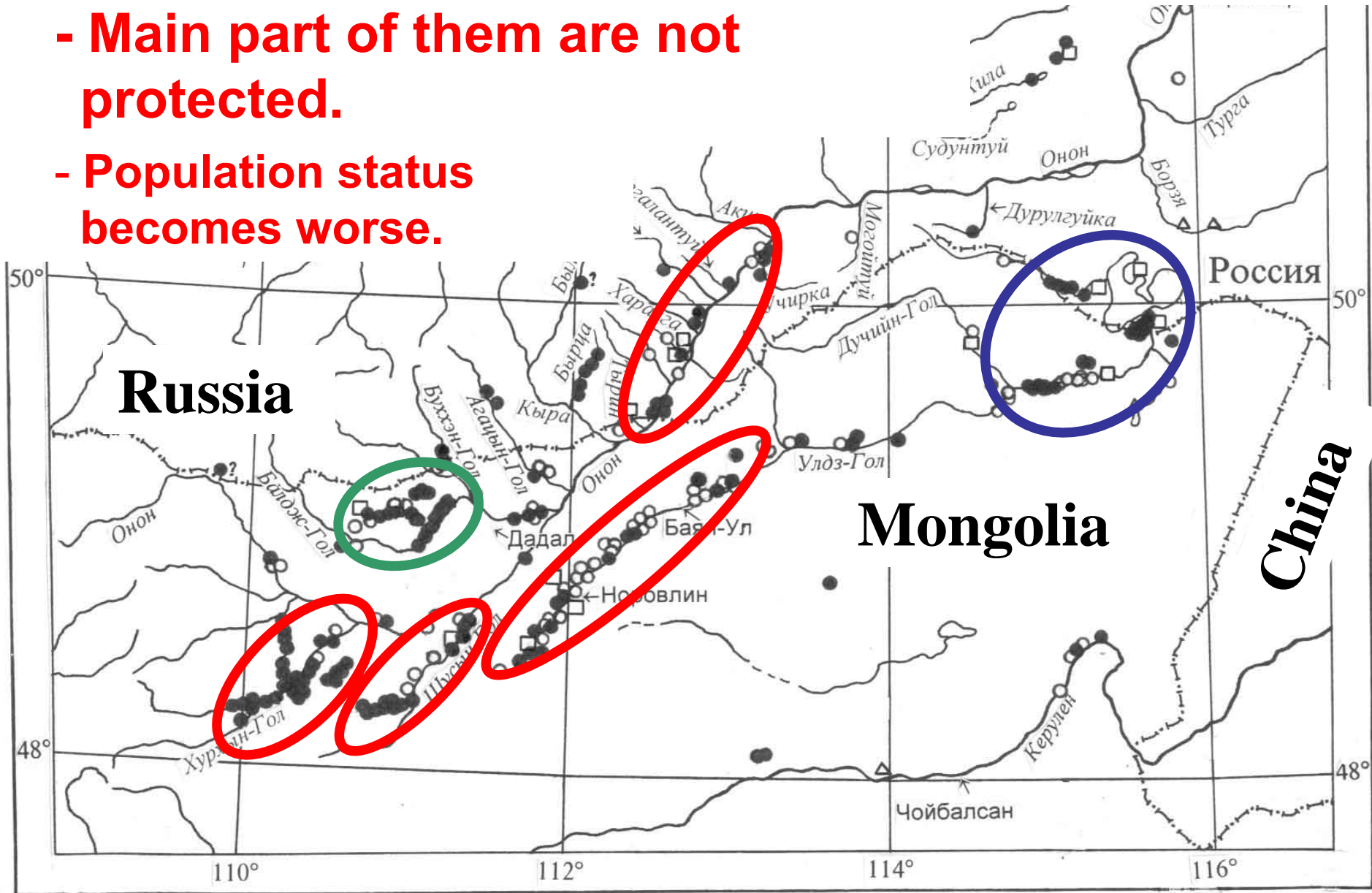
# **Dauria is key habitat of White-naped Cranes in the world**

**- 254 territorial families were found during 1990-2000 (estimated number - 500-600 families; about 1400 birds in total - 23% of world population ;**

**- The Uldza and Onon Riders are main habitats).**

# 6 internationally important habitats were found.

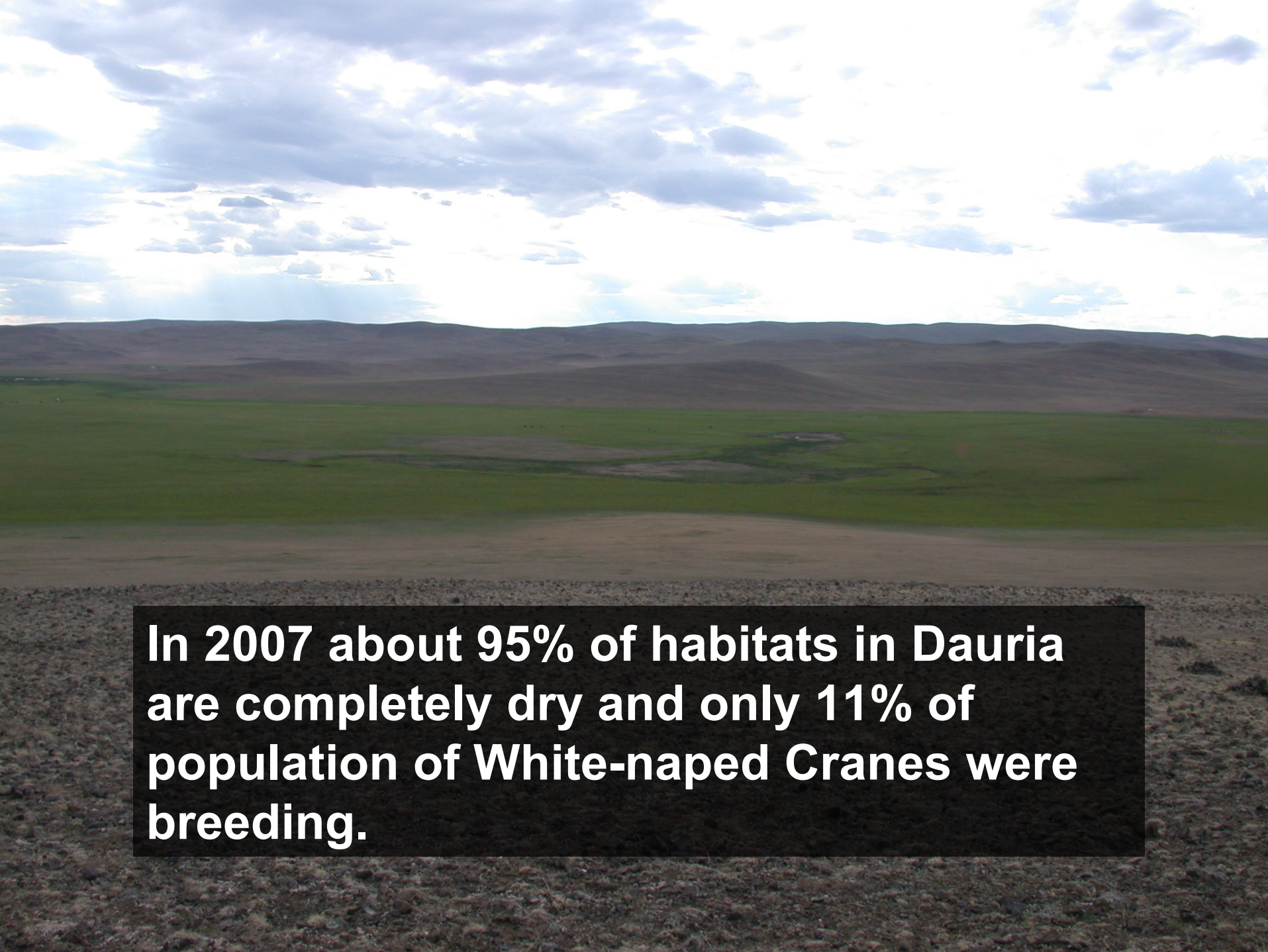
- Main part of them are not protected.
- Population status becomes worse.



# Breeding habitats in 1999





A wide landscape of rolling hills and a large green field under a cloudy sky. The foreground is a dry, brownish field. The middle ground is a large, flat green field. The background consists of rolling brown hills under a sky filled with white and grey clouds.

**In 2007 about 95% of habitats in Dauria are completely dry and only 11% of population of White-naped Cranes were breeding.**

# Typical breeding habitats of White-naped Cranes



# Typical breeding habitats of White-naped Cranes

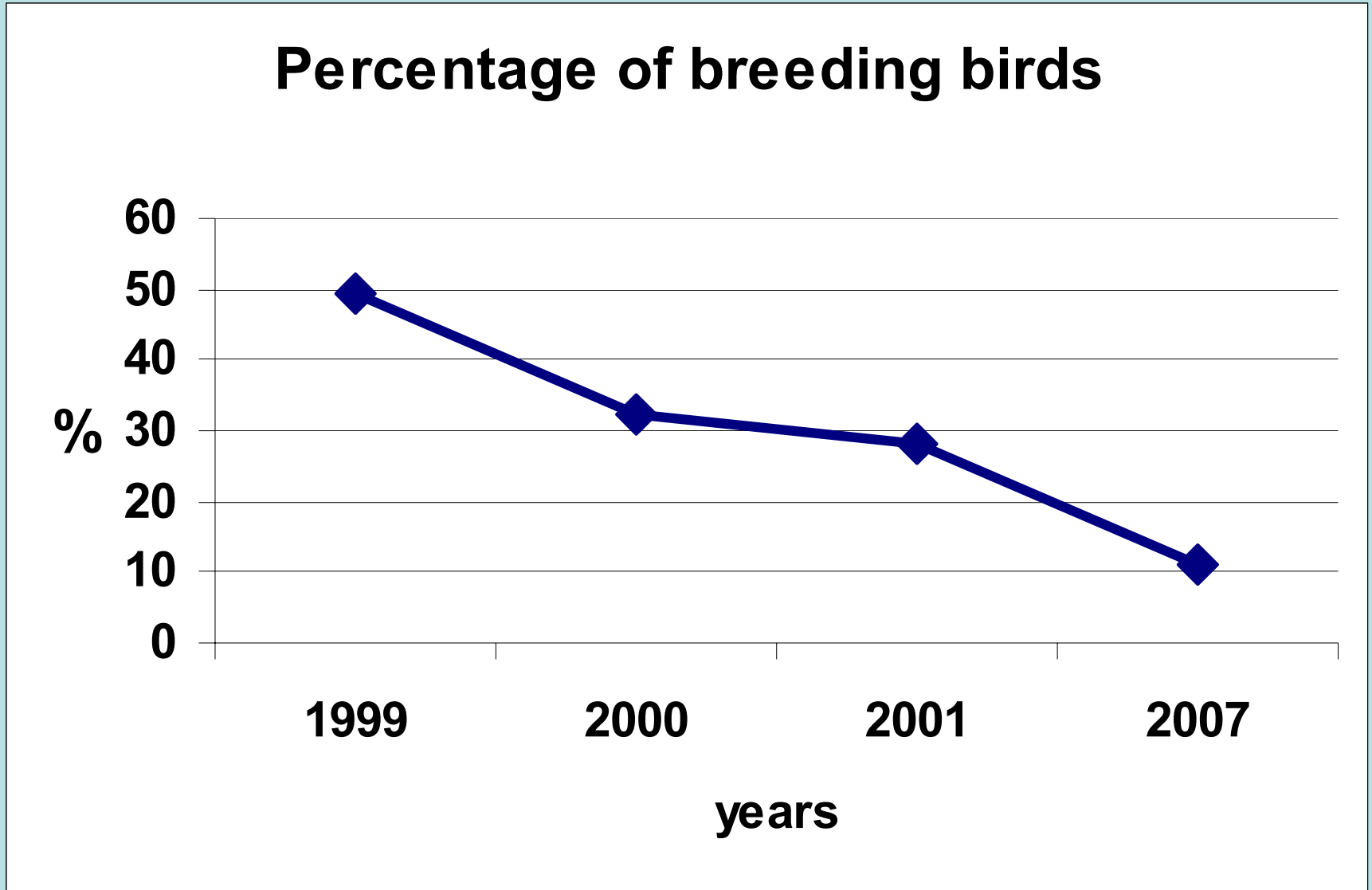




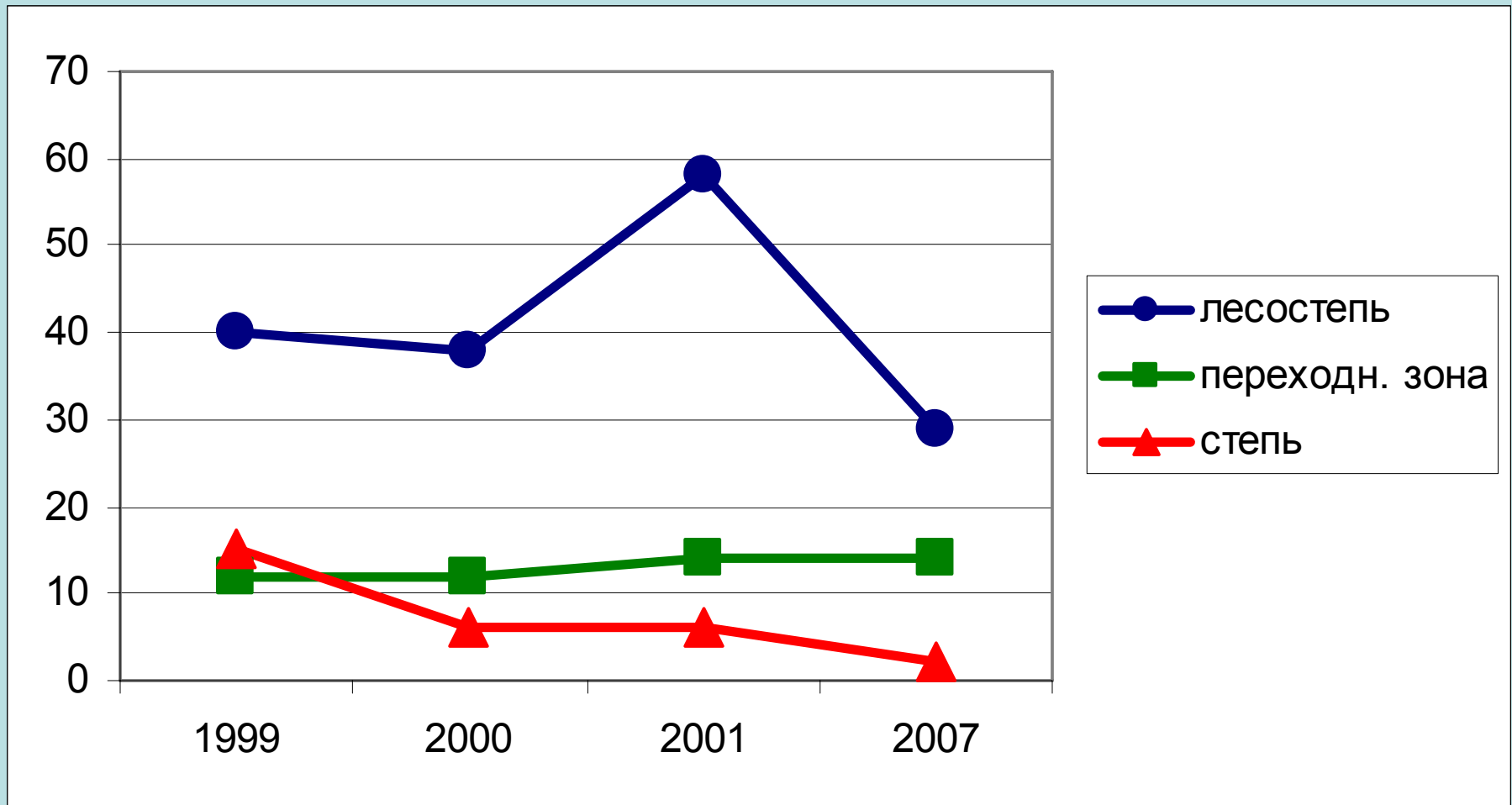
# Breeding habitats during drought (2004)



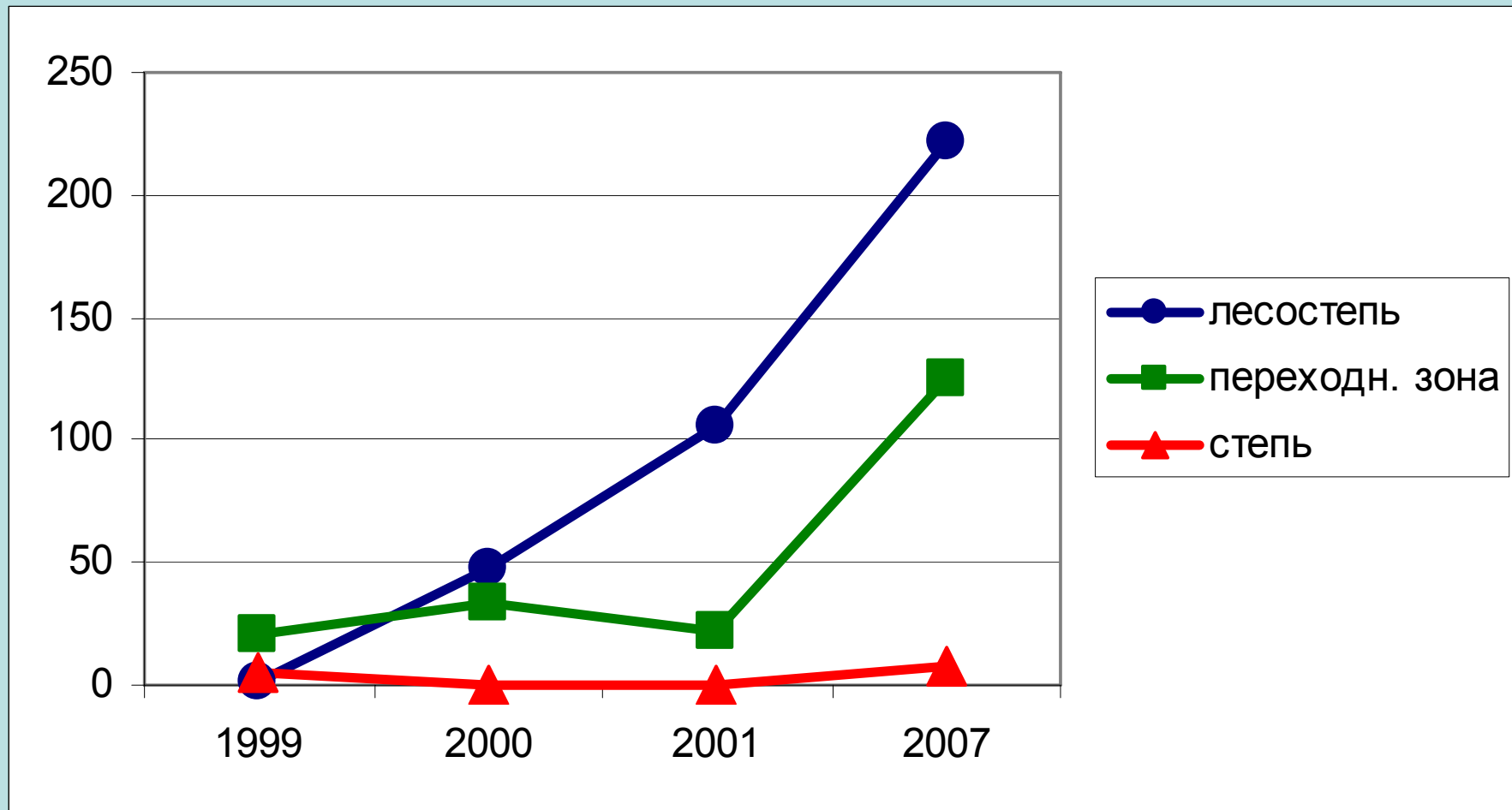
# Percentage of breeding birds (1999-2007)



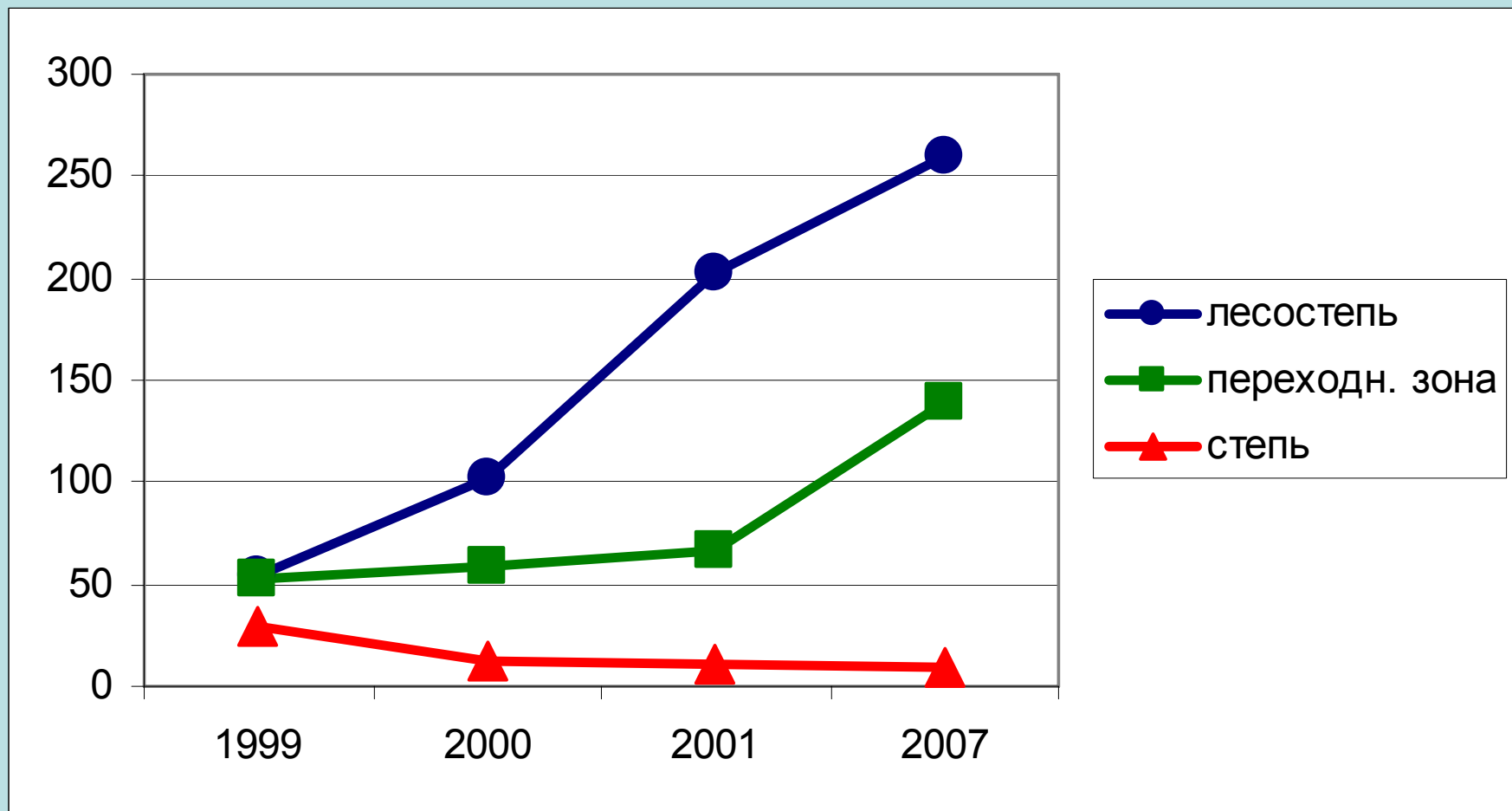
# Dynamic of number of breeding White-naped cranes in Dauria (1999-2007)



# Dynamic of number of not-breeding White-naped cranes in Dauria (1999-2007)



# Dynamic of total number of White-naped cranes in Dauria (1999-2007)







**Present status of White-naped Cranes is critically bad.**

**Species needs in urgent conservation actions.**