

Data on the population and distribution of Hooded and White-naped Cranes in the Amur Region

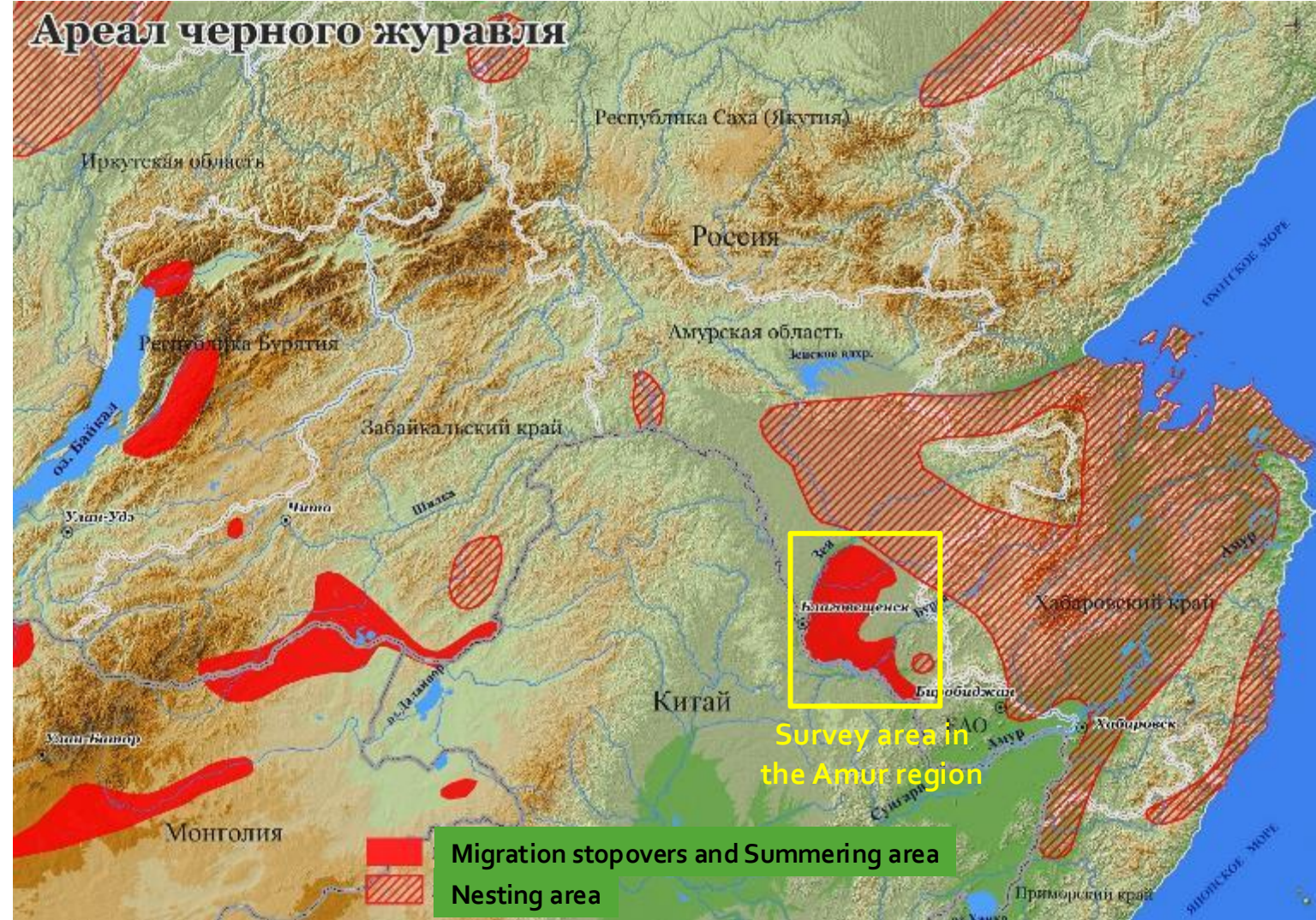
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Hooded Crane

Area

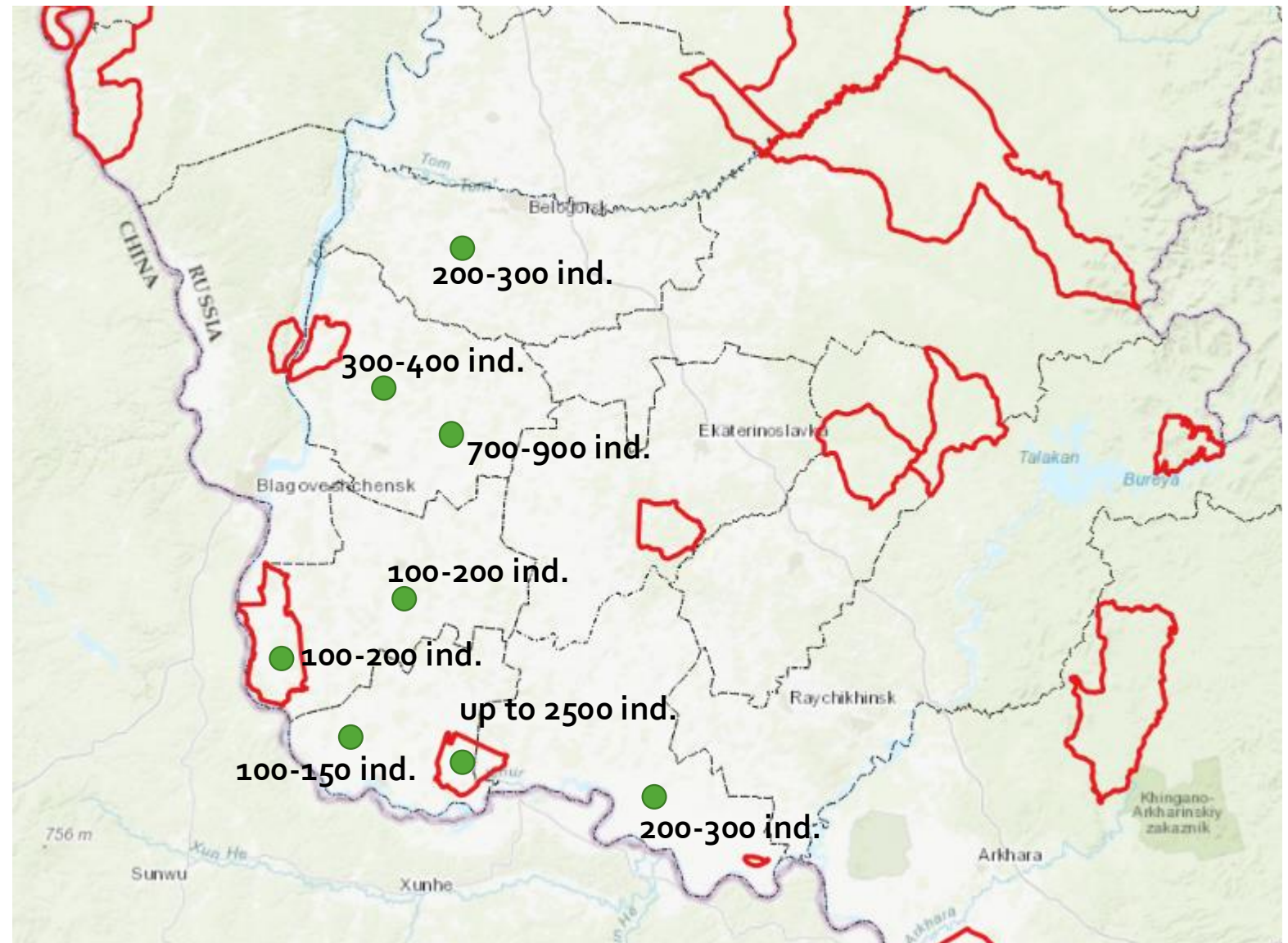


Hooded Crane

Numbers



- Counts in May during the spring migration and in October during the autumn migration



Hooded Crane

Population distribution during migration



- The main type of food at stopping places during the migration period is corn fields.
- Every year, farmers grow corn in new fields, and **flocks of cranes move to new feeding locations following the corn.**
- There are two types of corn fields in the Amur Region:
 1. Corn for silage feed for cattle. These fields are located near large livestock farms. This corn is harvested in early September. Cranes feed in these fields in the fall.
 2. Corn for grain. 70% of all corn fields in the region are occupied by this type of corn. It is harvested in November-December. Cranes feed in these fields only in the spring.

Standing corn is not available as food for cranes.



Hooded Crane

Summer distribution of
non-breeding cranes



- At the end of May, most of the mature cranes migrate north to the taiga part of their nesting range.
- Juvenile cranes remain in the southern Amur Region, dispersing across meadows and marshy areas among agricultural fields. They gather in groups of 10-20 individuals near bodies of water.



Hooded Crane

Difficulties in population census and monitoring



1. The nesting sites are located in very hard-to-reach taiga areas. No one conducts nest censuses.
2. During migration, flocks of cranes change their stopping and feeding sites. They are constantly on the move. It is impossible to establish a permanent observation and counting site for annual monitoring.
3. As a result, there are anecdotal data on population sizes from different locations in the region over a number of years, which are not compared or analyzed.



Hybrids of the common and hooded cranes

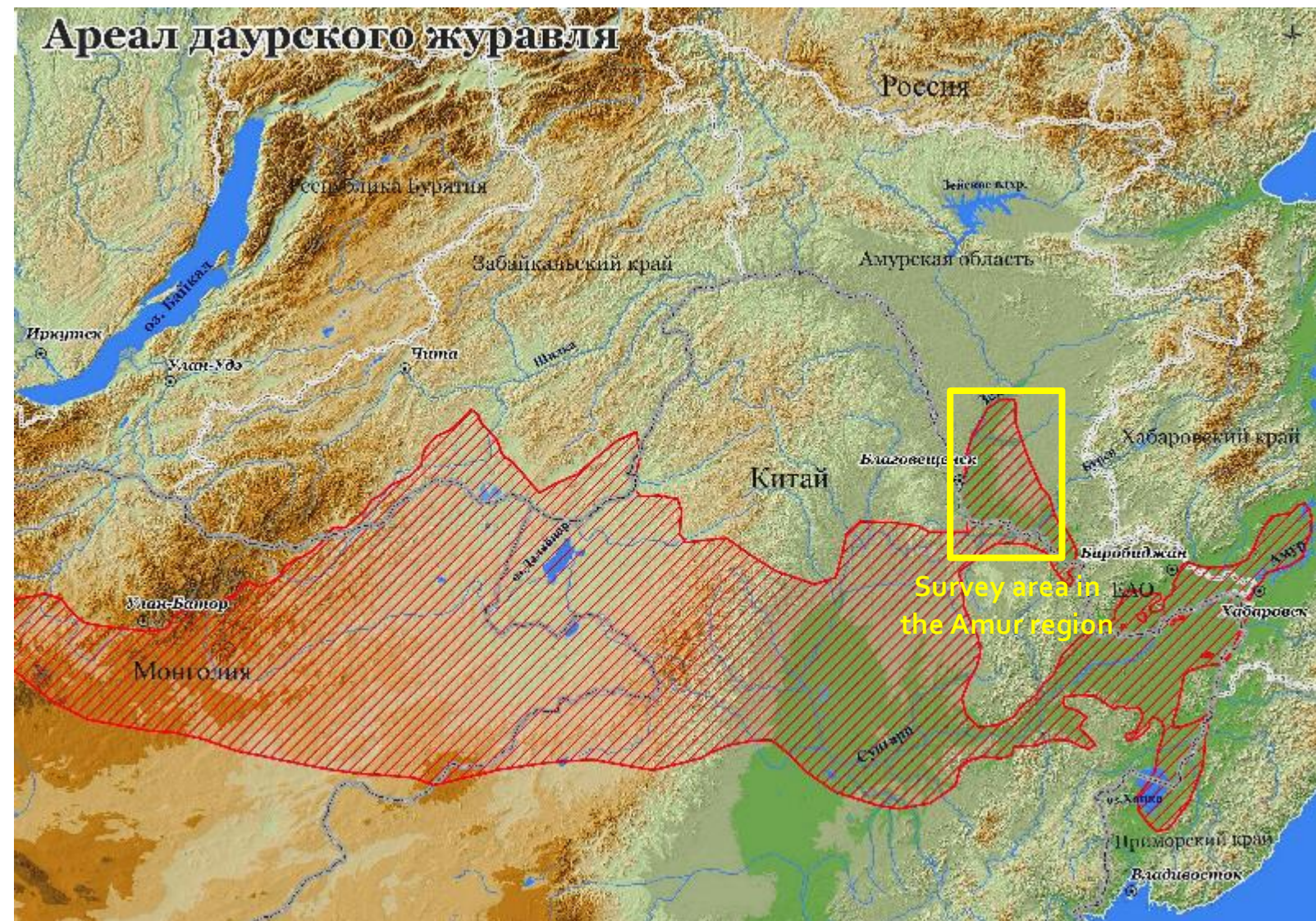


- Hybrids of the common and hooded cranes have become more common in mixed flocks at migration stopover sites.
- In October 2025, I encountered five individuals in a cornfield in the Ivanovo district.
- Such individuals have external characteristics of both species: a gray body, a white neck and head, and a black mask on the forehead.



White-naped Crane

Area

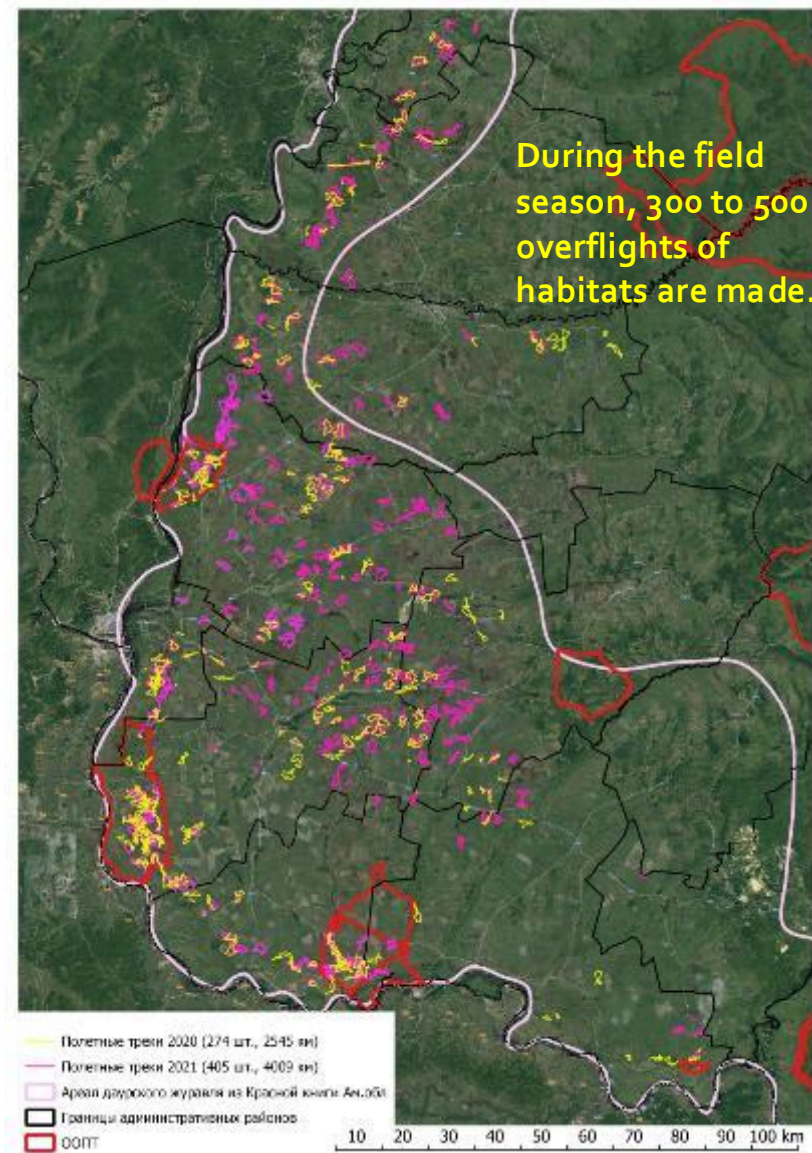


White-naped Crane

Accounting method

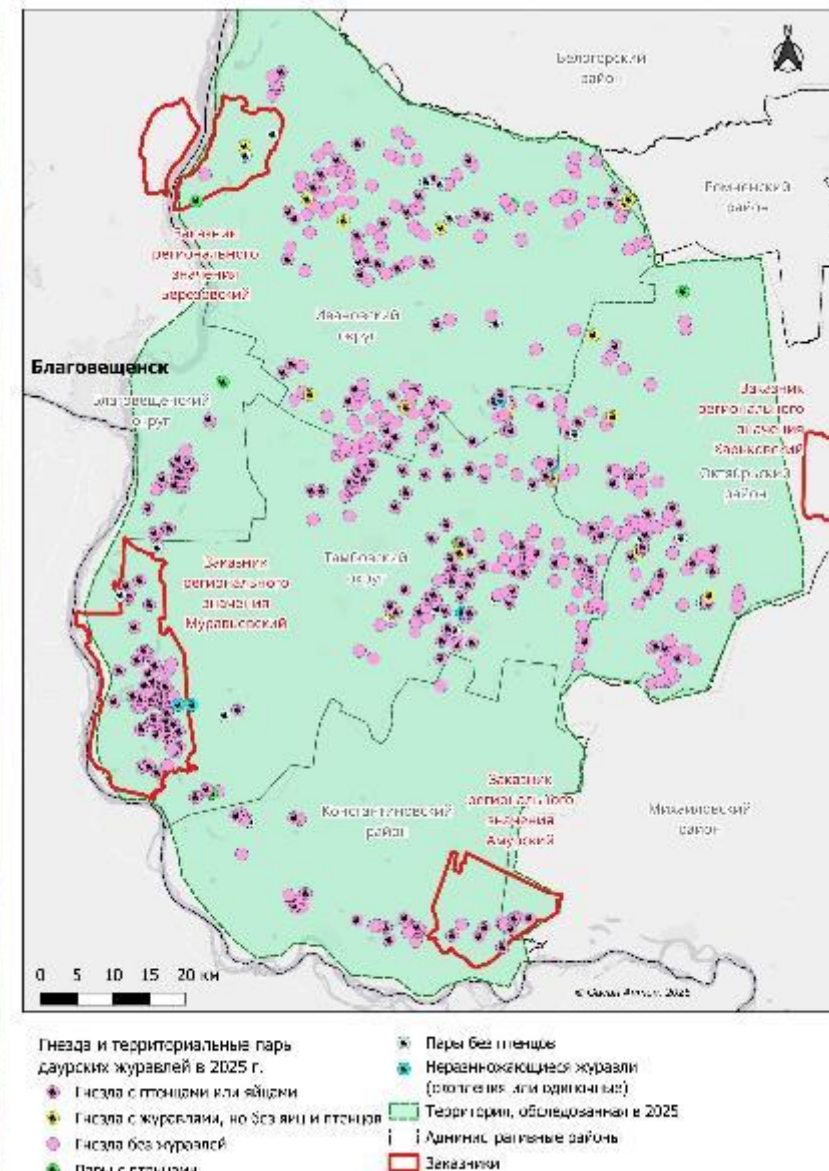
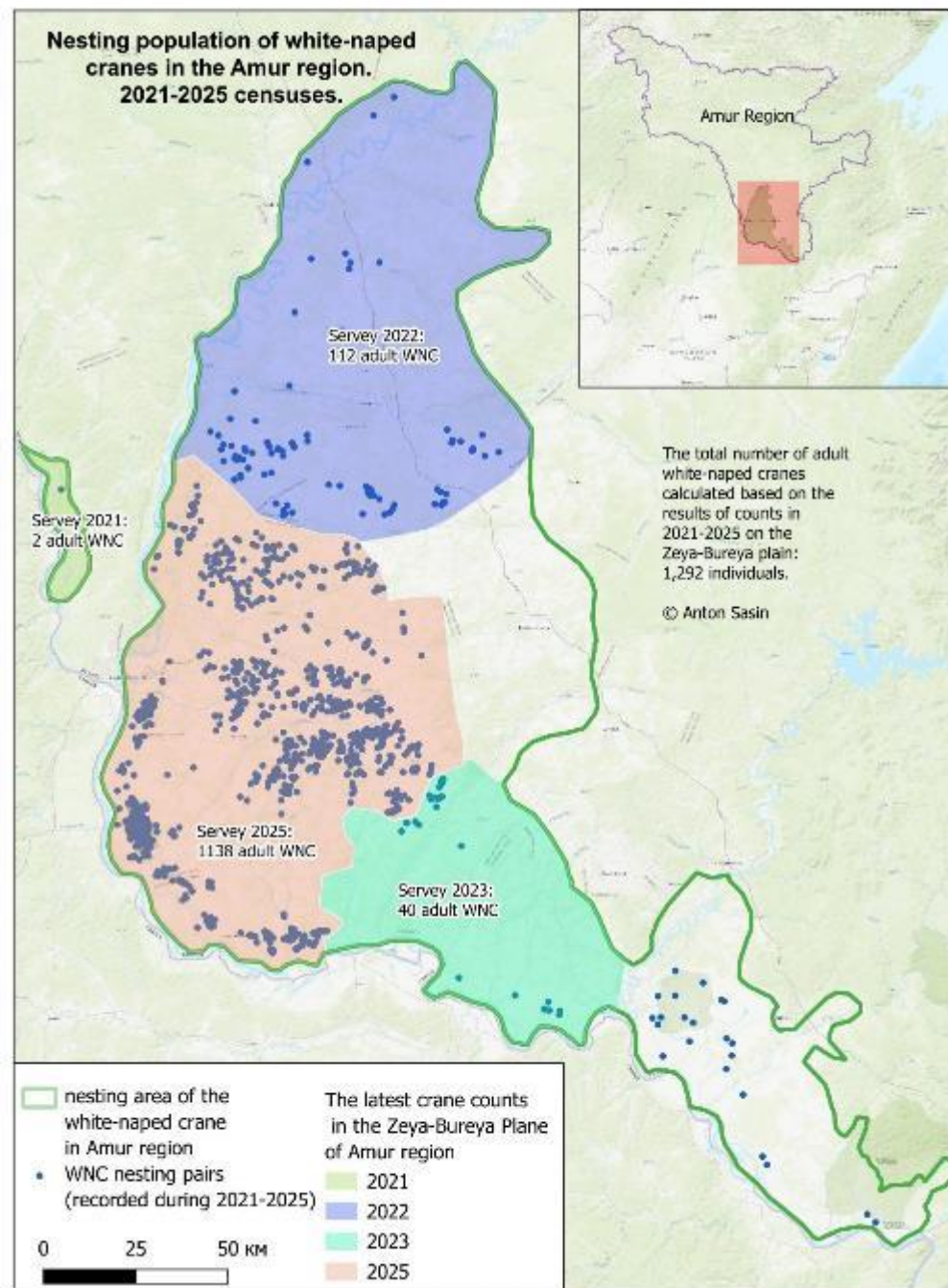


- Aerial survey of nesting habitats using a drone
- Monitoring of the white-naped crane population during nesting in Amur Region began in 2020.



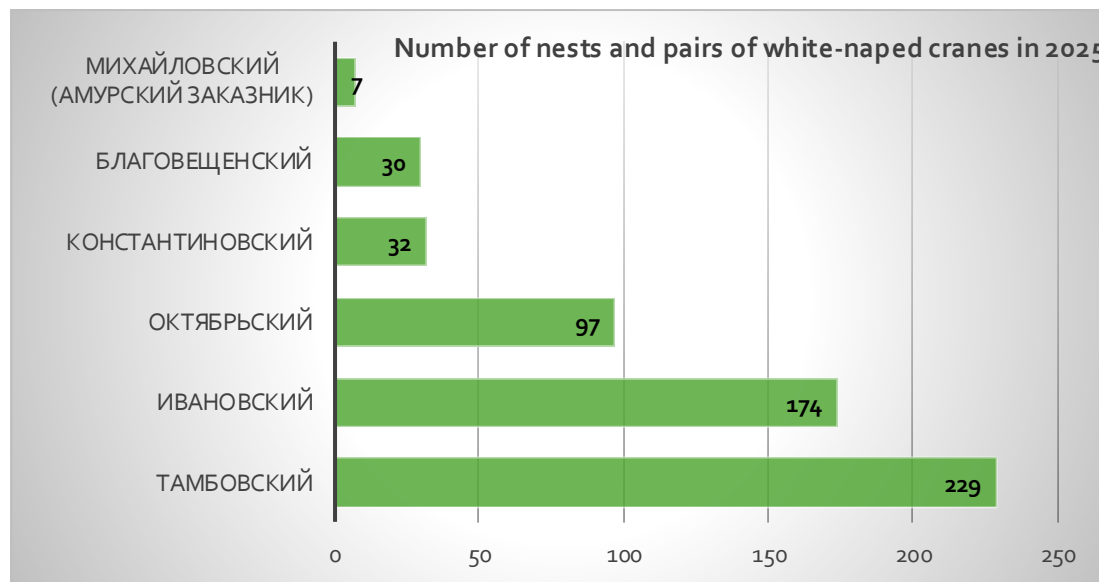
White-naped Crane

Distribution of the nesting population in the Amur region



White-naped Crane

The number of nesting pairs

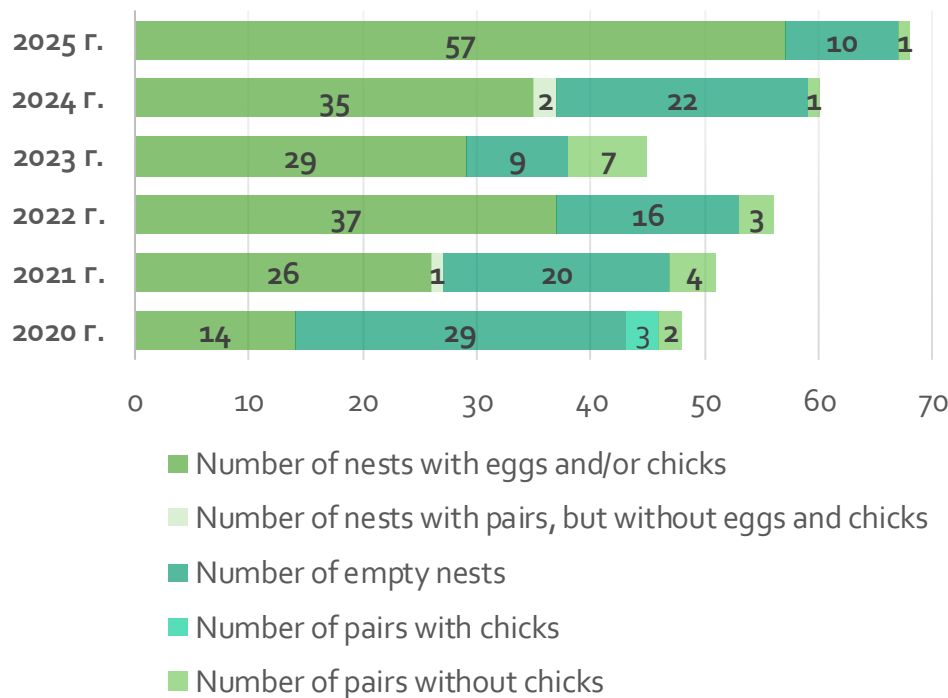


White-naped Crane

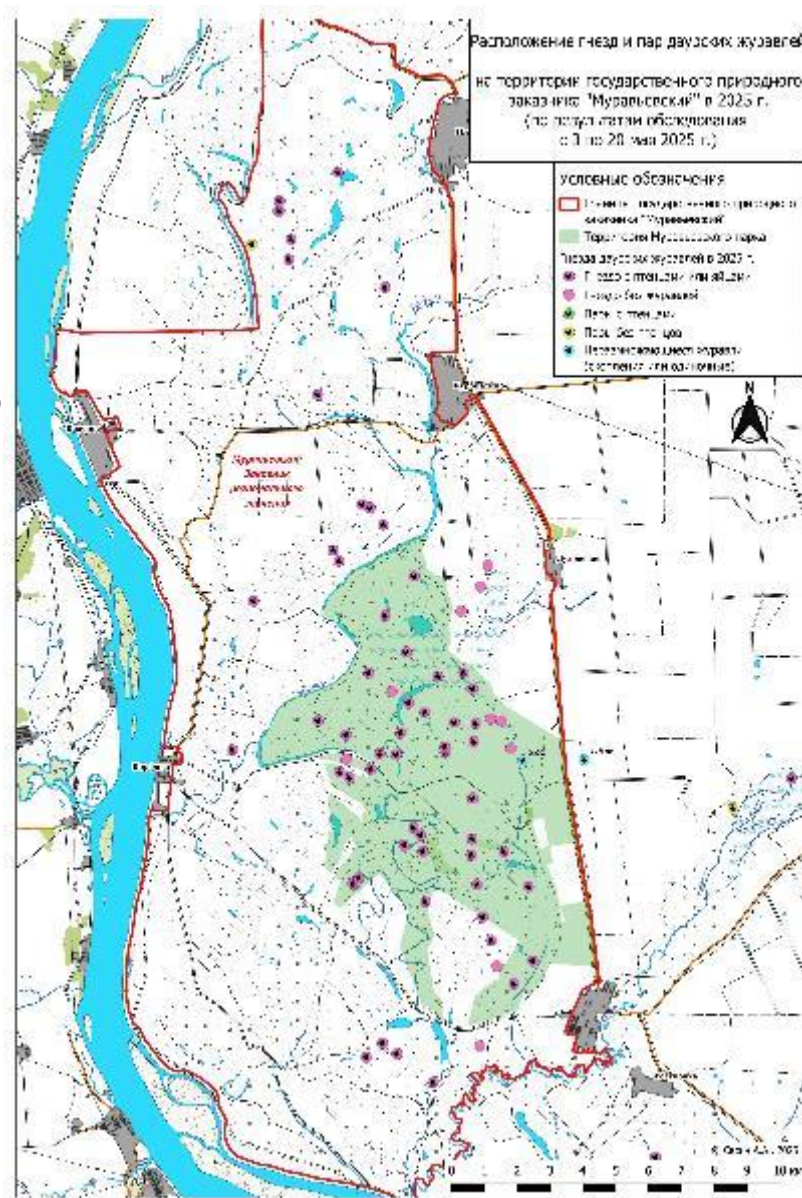
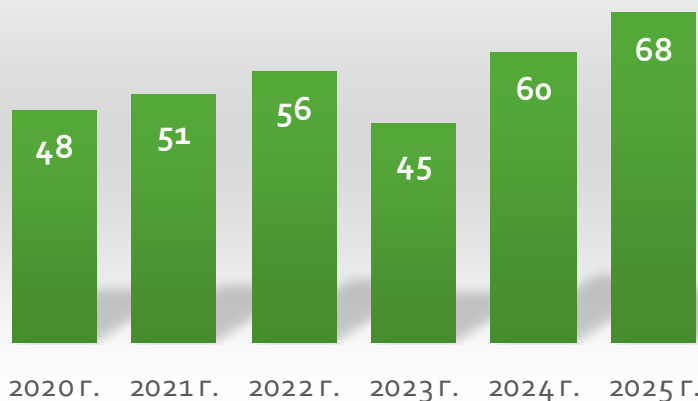
Monitoring in nature reserves



WNC in the Muravyevsky Wildlife Refuge



Total nests and breeding pairs

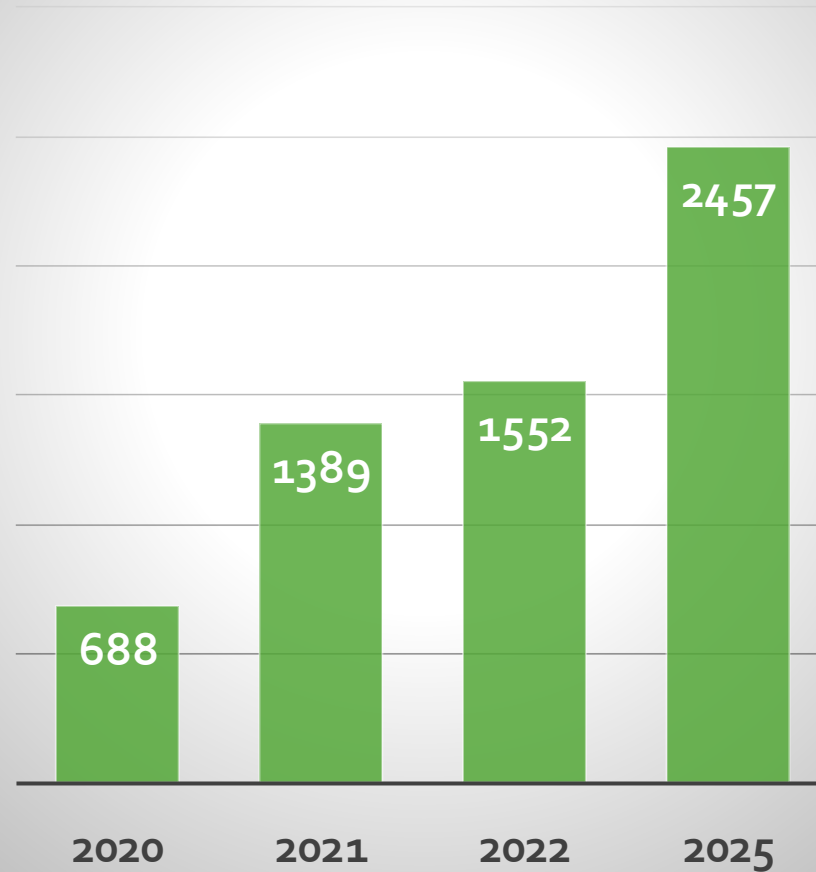


White-naped Crane

Total estimated population



Estimated population of white-naped cranes on the Zeya-Bureya Plain (ind.)



- Considering that 32 pairs produced a total of 53 chicks, the average brood size in 2025 was 1.66 chicks per pair ($n = 32$). Extrapolating this value to all nests with eggs ($n = 210$), as well as to nests already abandoned by cranes after chick hatching ($n = 287$), the total estimated population of White-naped Cranes in the surveyed area in 2025 is calculated as: $(210 + 287) * 1.66 + 287 * 2 + 1,058 = 2,457$ individuals.



White-naped Crane

Features of nesting conditions
in the Amur region



- Main breeding habitats where crane nests were found are so-called “limans” – swampy depressions of roughly circular shape, 100–500 m in diameter, located among agricultural fields or small forest patches, often with a shallow waterbody in the center. On the extensive floodplain and valley wet meadows of the rivers in the Zeya–Bureya Plain, White-naped Cranes rarely nest, with few exceptions.
- This is likely due to two factors:
 1. floodplains are almost annually exposed to spring grass fires,
 2. periodic rises in water level during the spring–summer period often floods nests.
- For these reasons, cranes prefer isolated breeding habitats with a relatively stable water level (up to 1 m) and protection from fires provided by surrounding fields.



White-naped Crane

Threats to the WNC in the Amur region



1. Spring wildfires
2. Spring floods during nesting season
3. Agricultural reclamation of wetlands
4. Pollution from agricultural pesticides

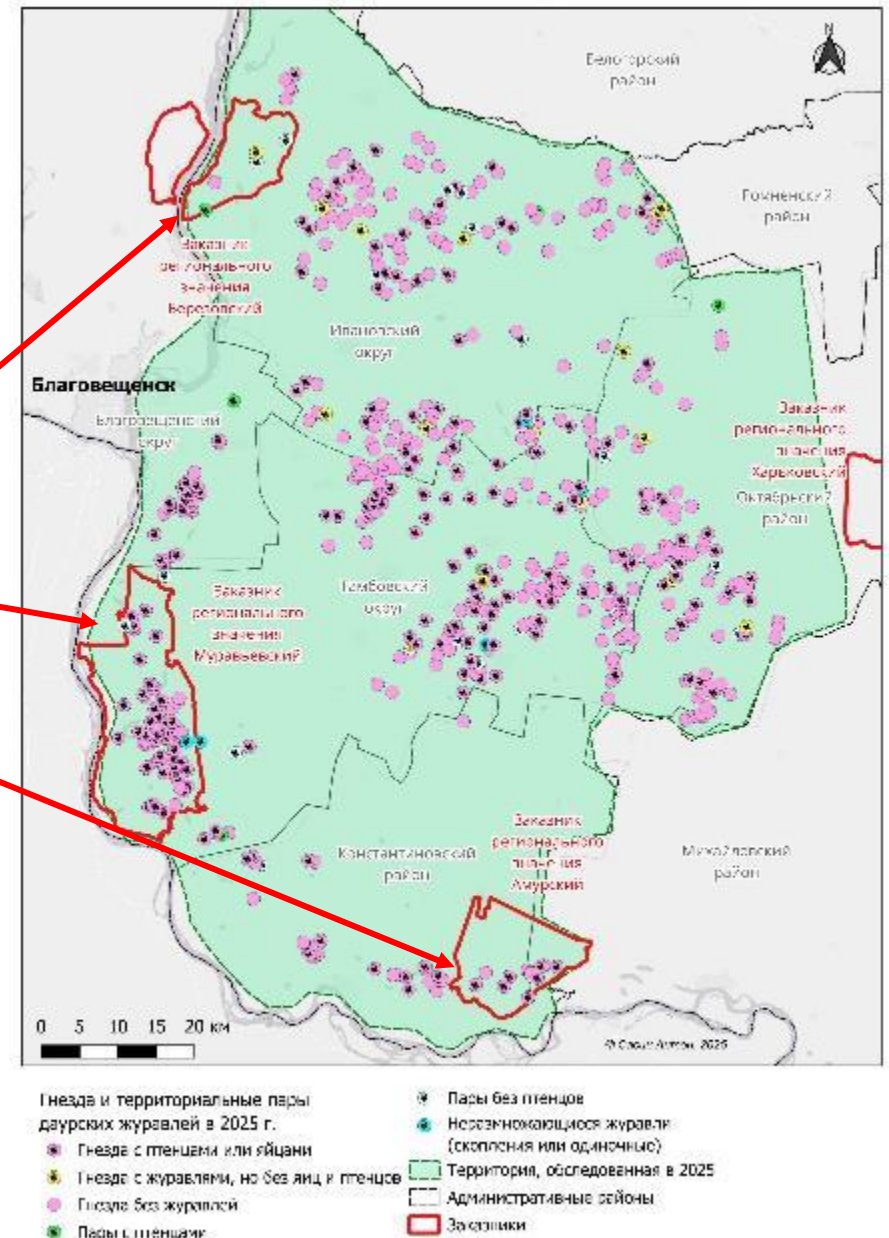


White-naped Crane

Protection of the WNC in the Amur region



- Khingan Nature Reserve
- Berezovsky Wildlife Refuge
- Muravyevsky Wildlife Refuge
- Amursky Wildlife Refuge



The End

