

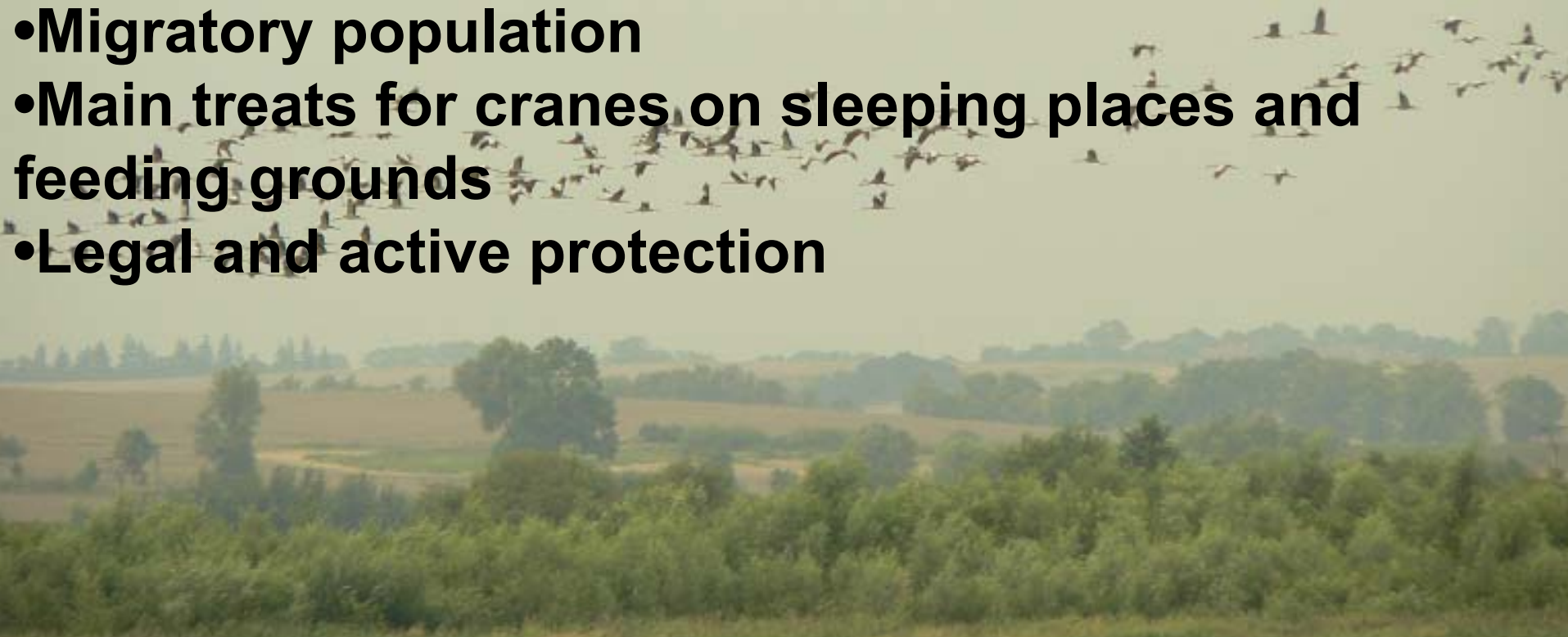
Study and conservation of cranes in Poland.



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The main aims of presentation

- Breeding population
- Non breeding population
- Migratory population
- Main treats for cranes on sleeping places and feeding grounds
- Legal and active protection



Breeding population in Poland

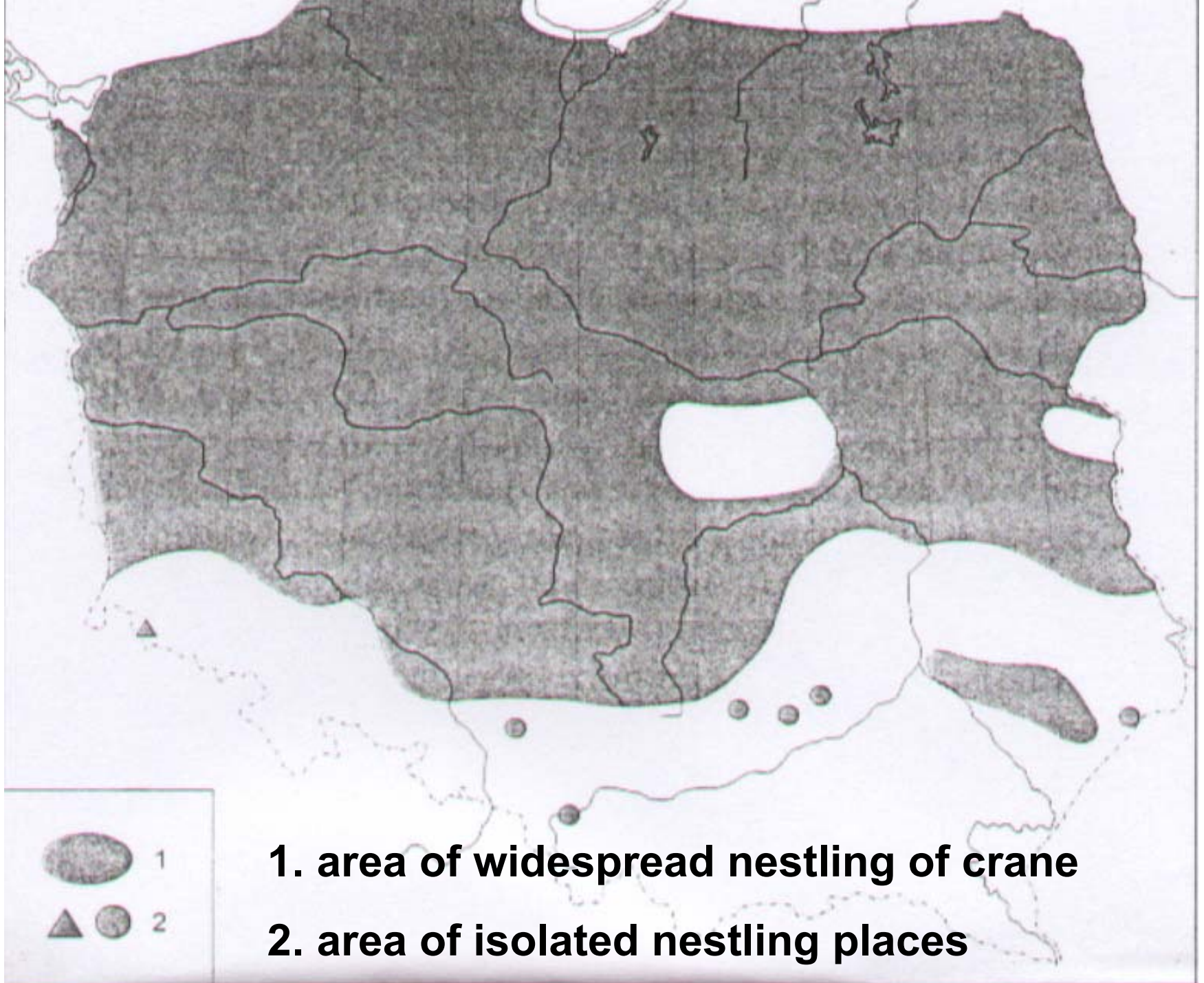
1970 – 1980 - 700–900 pairs

1980-1990 - 2 300–2 600 pairs

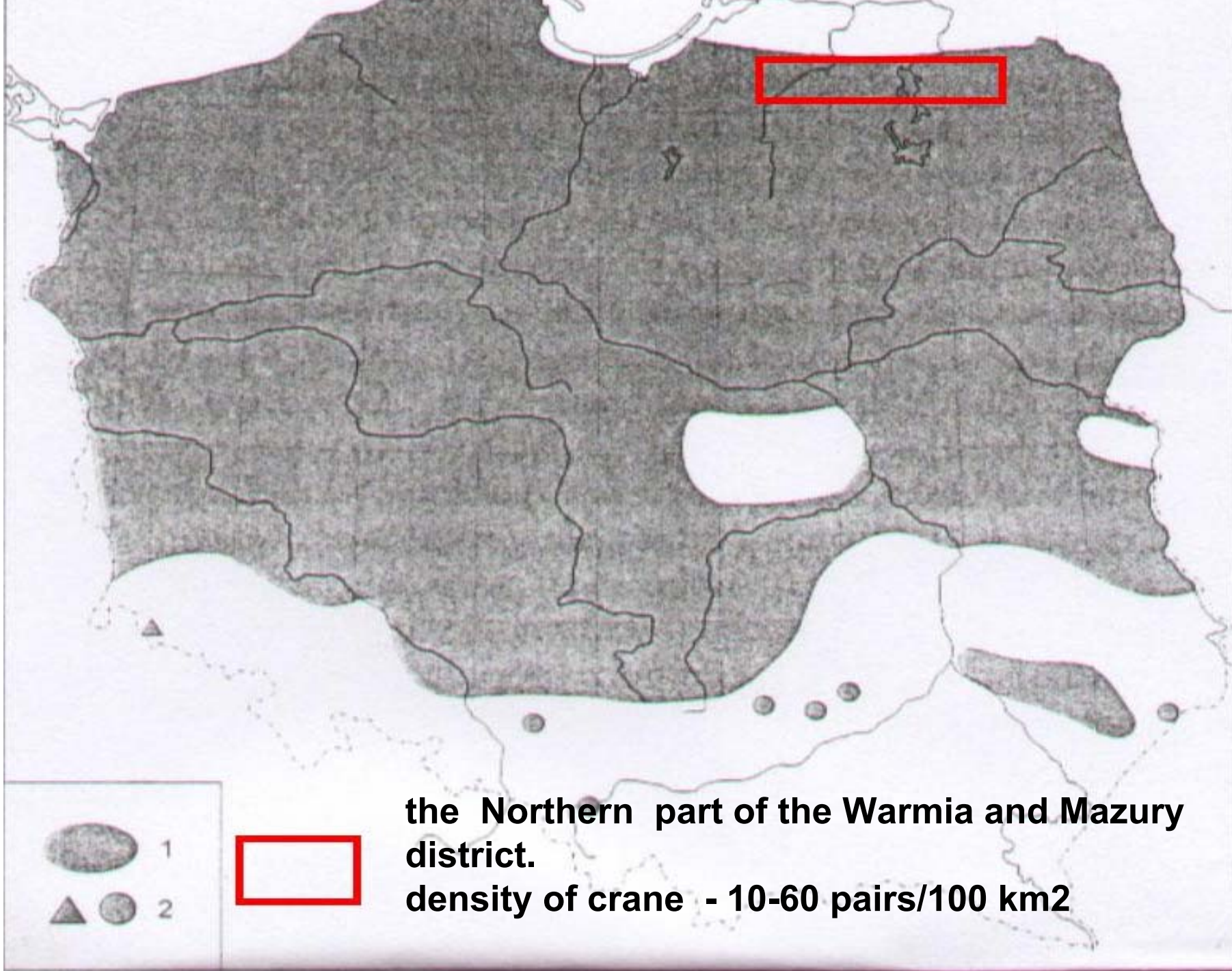
At the end of the past century - 5000 and 6000 pairs.

Between 2001-2006 the number of breeding pairs increase to 10 or even 12000.

Between 2001-2006 the increase of number of cranes during a year came to 5% on the average.



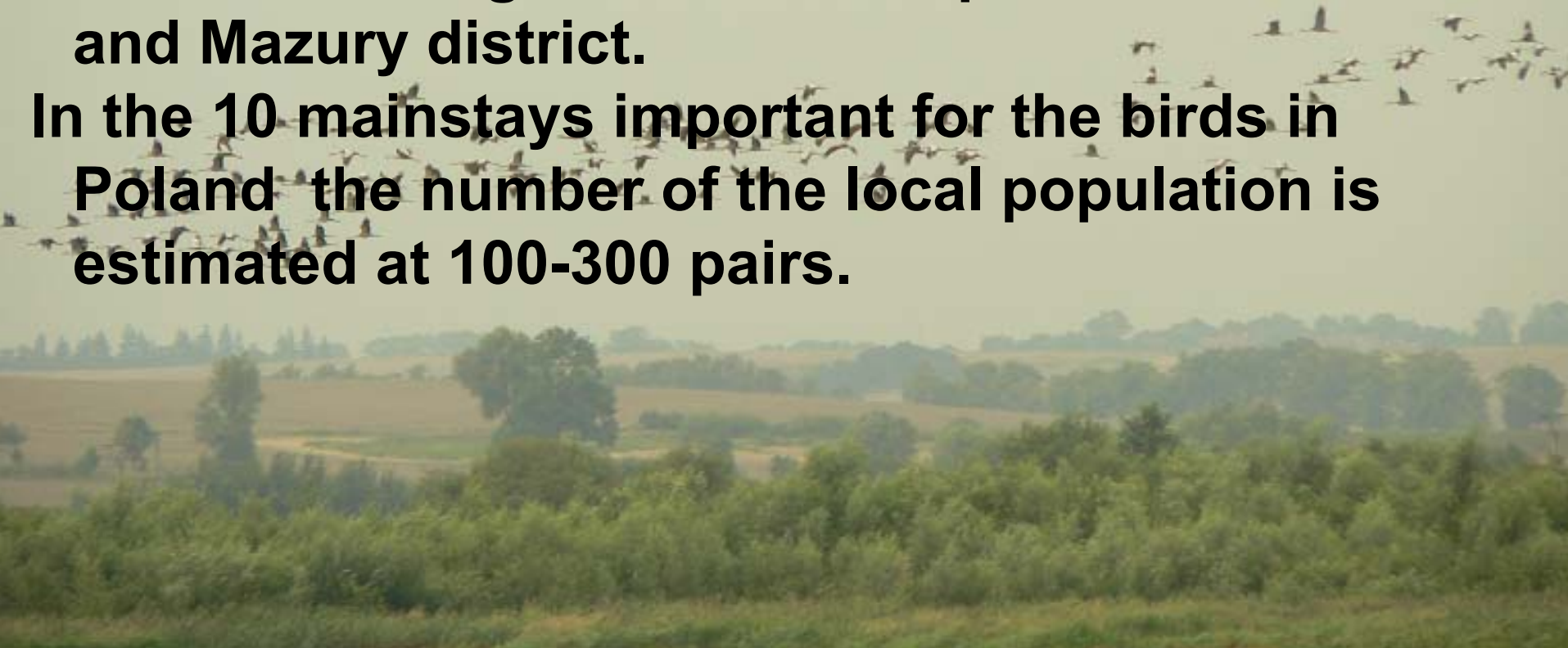
- 1. area of widespread nestling of crane**
- 2. area of isolated nestling places**



Breeding population

The greatest density - 10-60 pairs/100 km² - was indicated along the Northern part of the Warmia and Mazury district.

In the 10 mainstays important for the birds in Poland the number of the local population is estimated at 100-300 pairs.



Method

The counts of cranes were carried out at areas chosen by random selection all over the country. Between 2001-2006 the research included 27-31 areas (the size of everyone =10x10 kilometers). Counts were done at early spring after listening of voices of the pairs. About 40 co - workers took part every year at the counts.

A large flock of birds is seen flying across the sky in the background. The foreground shows a lush green landscape with trees and fields under a bright, slightly hazy sky.

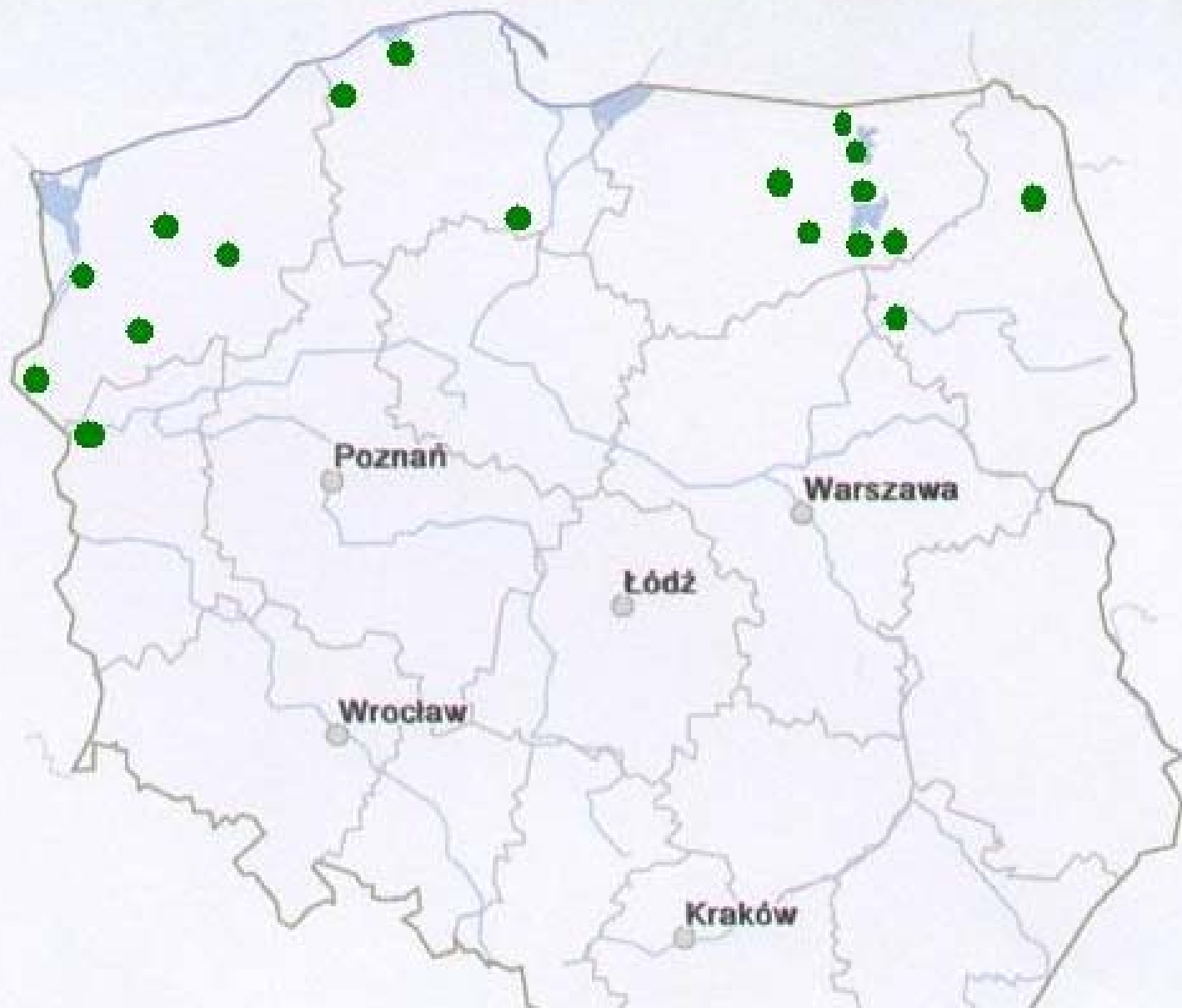
**The programme MFGP was coordinated
by Institute for Ornithology Polish
Academy of Science in Gdańsk.
Sponsored by Chief Inspectorate for
Environmental Protection and Institute for
Ornithology Polish Academy of Science in
Gdańsk.**

Non breeding population

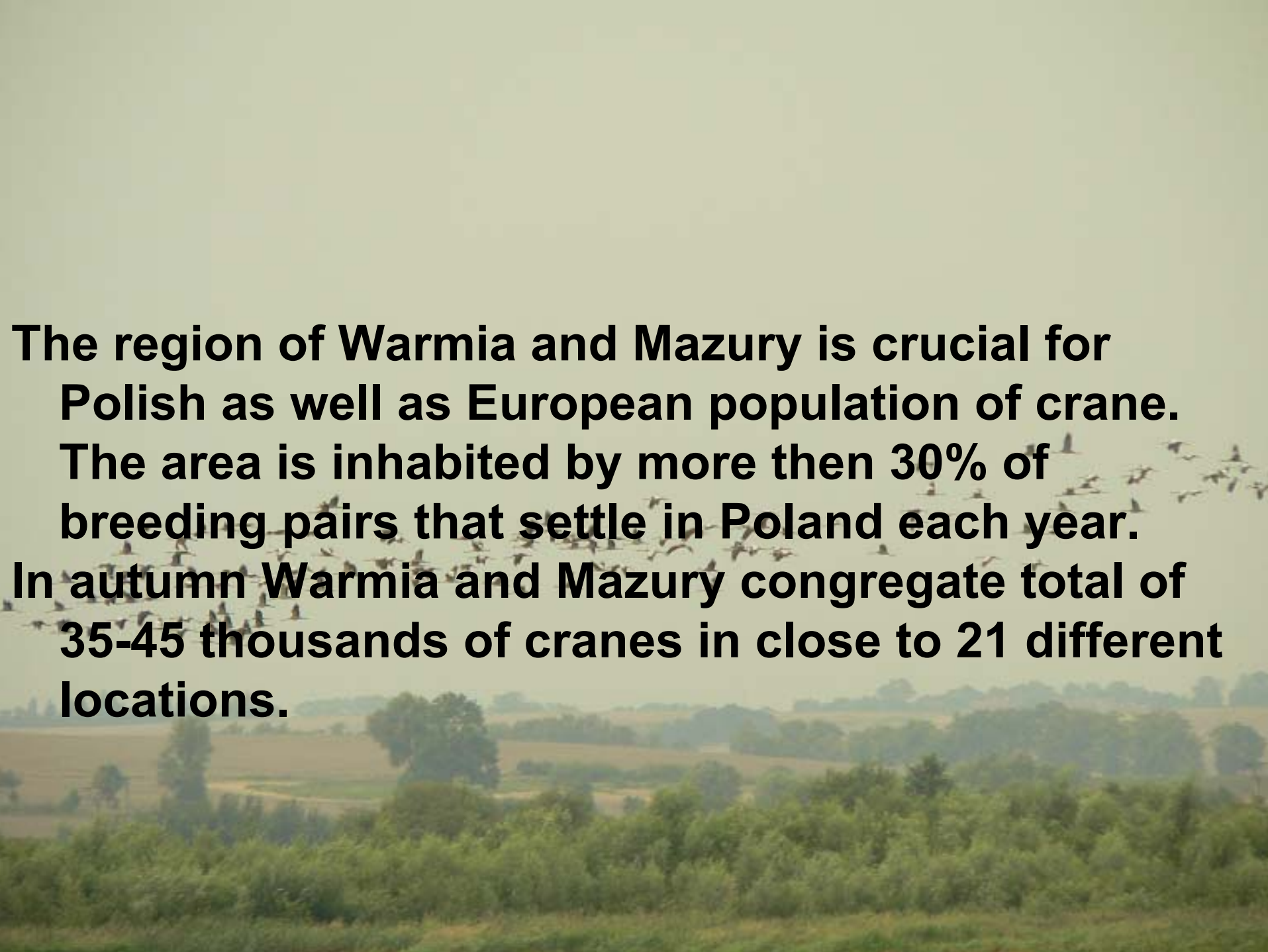
- **No complex data**
- **A clear increase**
- **Flocks numbering more than 500 birds appear on known sleeping places and feed on neighbouring fields during the whole vegetation season.**

Migratory population


- **No exact and complete data**
- **Increase of the number of birds has been affirmed at the well known mainstays.**
- **Changes are going on in the small sleeping places; some of them are disappearing, other ones are arising at 20-30 kilometres distance from those left.**



Sleeping places where more than 1000 cranes were observed during migration season

A landscape photograph showing a large flock of cranes flying in the sky. The cranes are scattered across the upper half of the image, appearing as small dark silhouettes against a light, hazy sky. Below the sky, there is a line of trees and a field of green vegetation. The overall scene is a natural, outdoor setting.

The region of Warmia and Mazury is crucial for Polish as well as European population of crane. The area is inhabited by more than 30% of breeding pairs that settle in Poland each year. In autumn Warmia and Mazury congregate total of 35-45 thousands of cranes in close to 21 different locations.

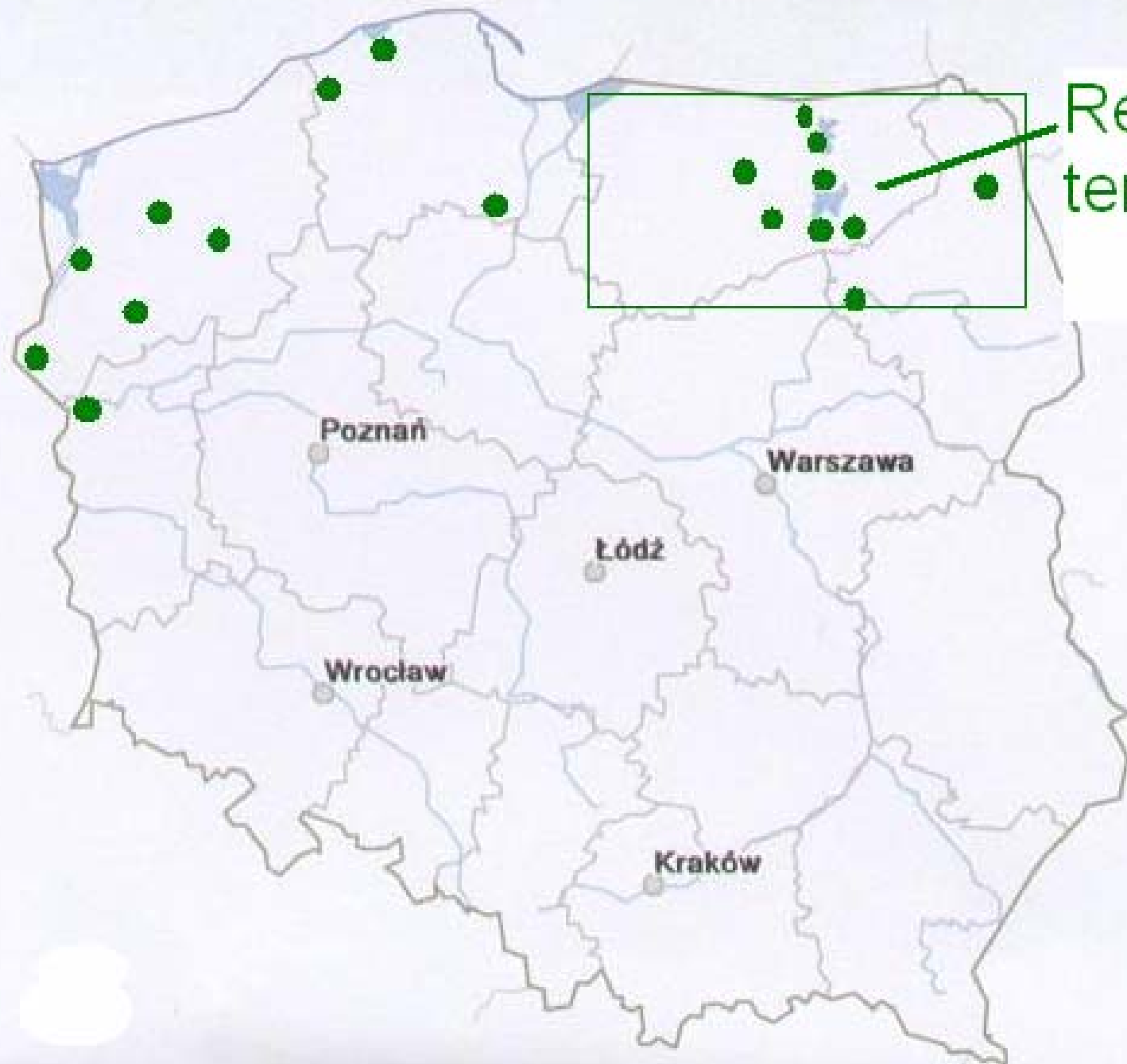
A landscape photograph showing a large flock of cranes flying in the sky over a field and trees. The cranes are scattered across the upper half of the image, with some appearing as small silhouettes against the light sky. The ground below is a mix of green trees and brownish fields, suggesting a rural or natural area. The overall scene is hazy, with a soft, diffused light.

Complete monitoring of the migratory population is being kept in the North-eastern part of Poland within the project “Protection of crane’s roosting areas and feeding grounds in the district of Warmia and Mazury in Poland”

Sponsored by EkoFund Foundation and GEF/SGP

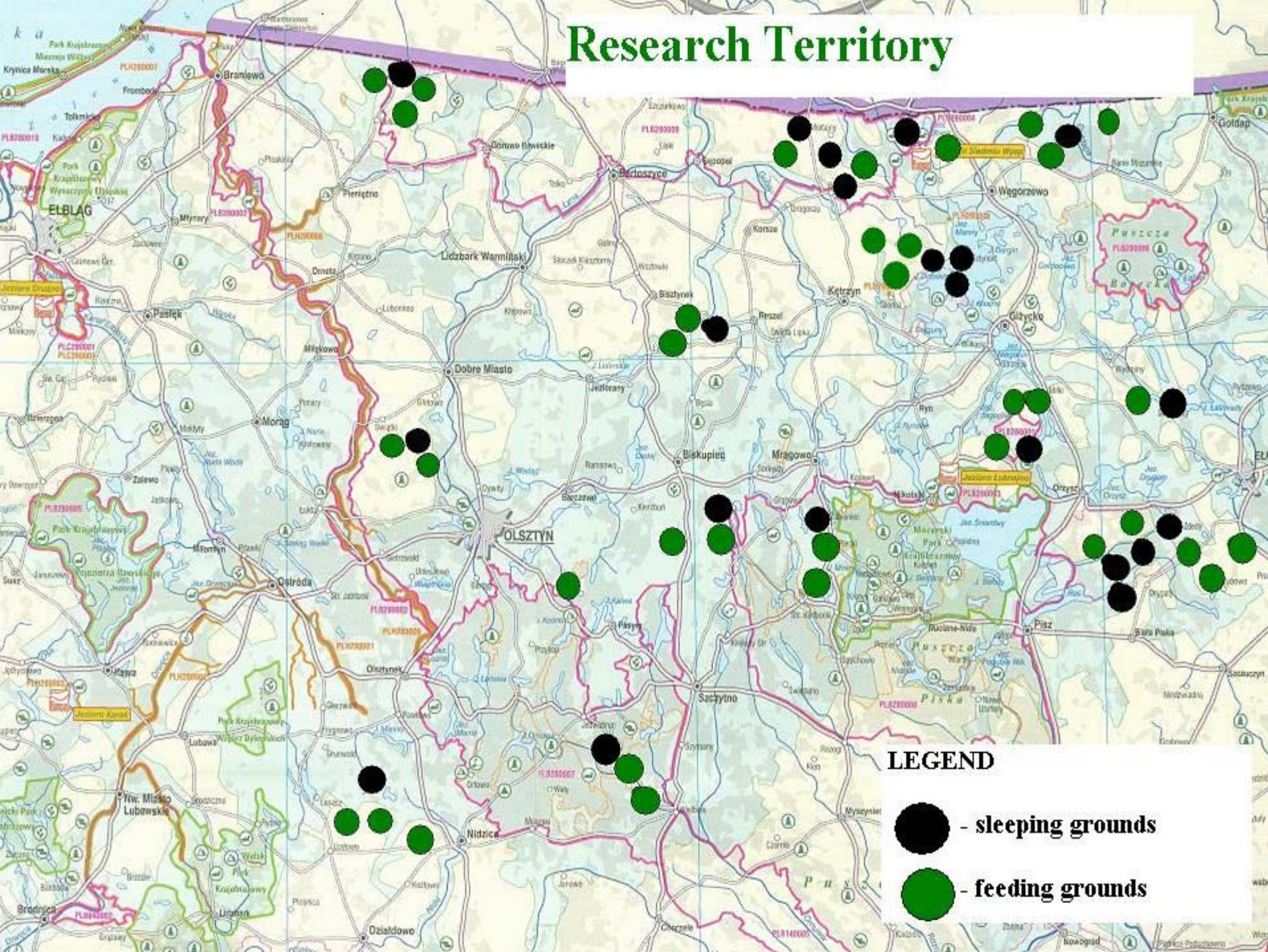
Monitoring included 21 sleeping places and 32 feeding grounds connected with sleeping grounds.





Research territory

Research Territory



LEGEND

- - sleeping grounds
- - feeding grounds

With our project we would like to point out some dangerous changes observed in biotopes inhabited by crane as well as same main threats for cranes.

- natural succession.**
- drainage of marshes located among cultivated fields.**
- destruction of lake's shorelines, which very often are used by cranes as a night grounds.**
- scaring tactics used to drive cranes away from cultivated fields**
- progressing forestation of feeding grounds**
- receding water level**
- limitation of feeding base for cranes**

Legal protection (legislation)

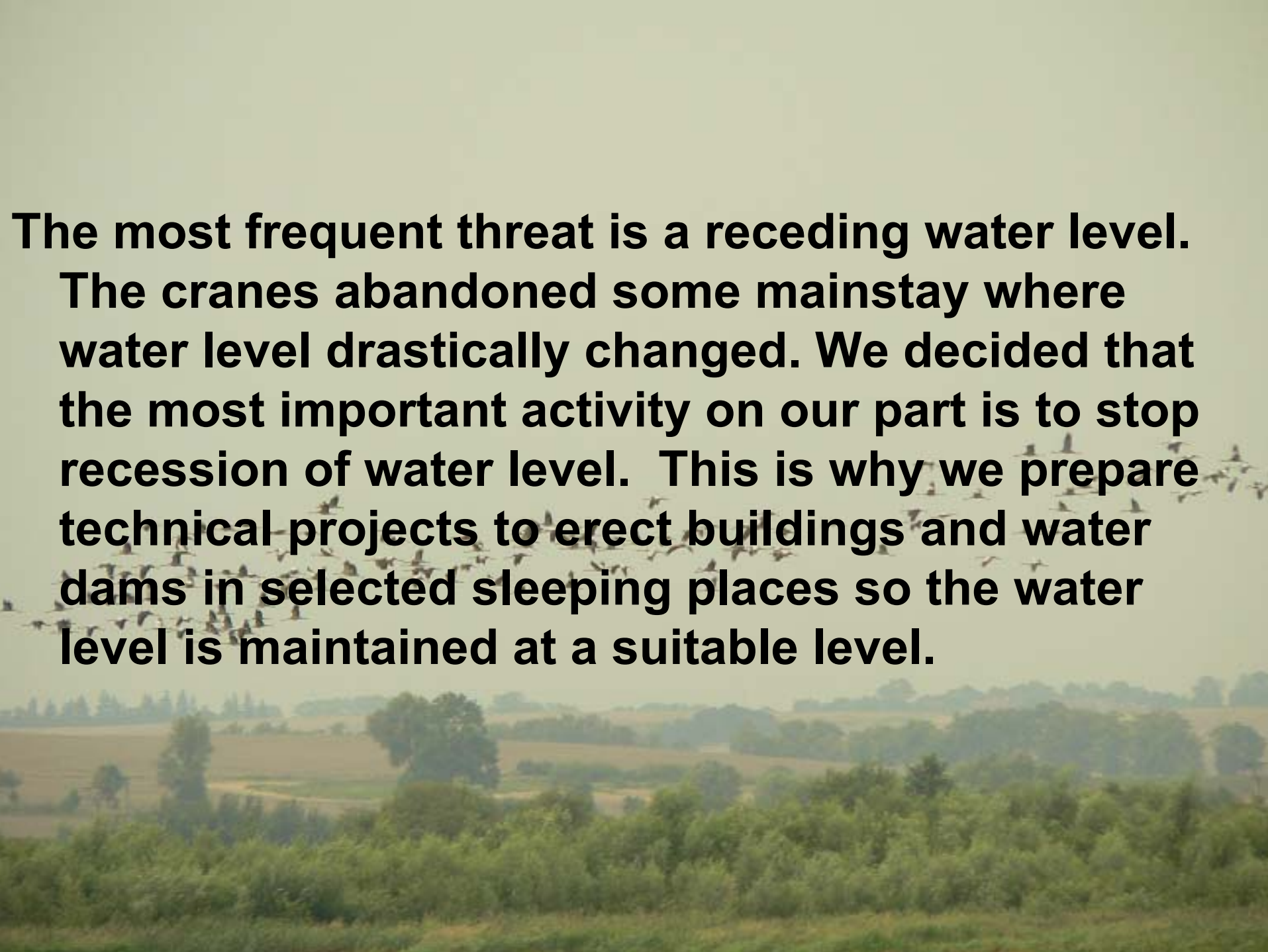
Complete documentation for:

- 2 nature reserves
- 34 landscape protection areas

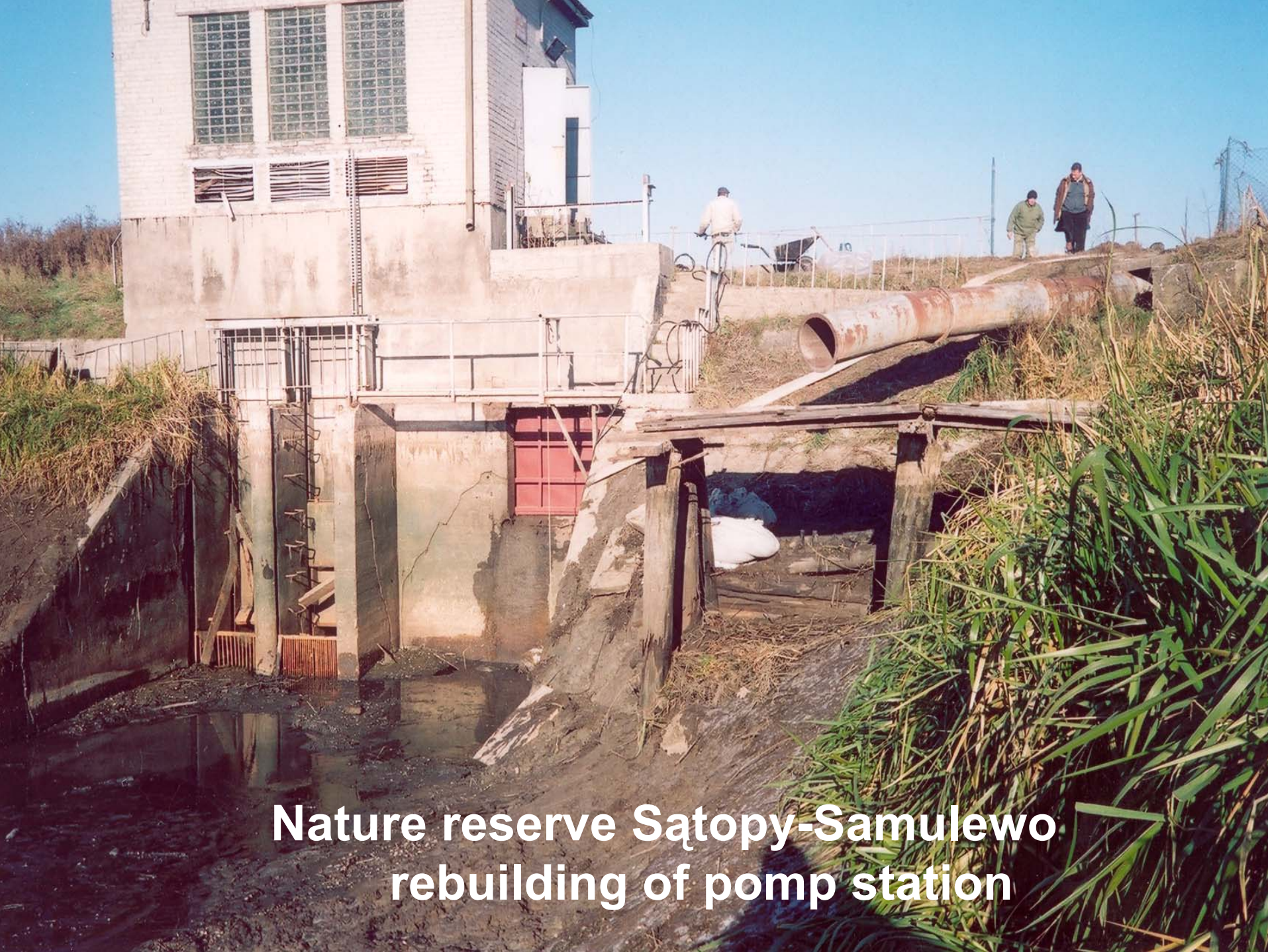
The Polish law concerning environmental protection does not foresee any indemnity for damages inflicted by cranes. The only possible method of protecting feeding grounds is to form areas of protected landscape.

Landscape protected area legislation prohibits alterations in the methods of cultivation and urban development such as:

- Prohibits changes in activities causing modification in water relation.**
- Prohibits destruction of small reservoirs of water, old-river beds and wetlands.**
- Prohibits burning of vegetation.**
- Prohibits erection of new structures.**
- Prohibits execution of terrestrial works permanently changing shape of the landscape.**
- Supports maintenance of open drainage ditches and sewers.**

The background of the slide shows a vast, hazy landscape with rolling hills and a dense forest of green trees in the foreground. A large flock of birds is captured in flight, scattered across the upper half of the image, creating a sense of movement and activity. The overall tone is somewhat muted due to the haze.

The most frequent threat is a receding water level. The cranes abandoned some mainstay where water level drastically changed. We decided that the most important activity on our part is to stop recession of water level. This is why we prepare technical projects to erect buildings and water dams in selected sleeping places so the water level is maintained at a suitable level.



**Nature reserve Sątopy-Samulewo
rebuilding of pomp station**





Nature reserve Nietlickie Swamps – dam on main drainage ditch.

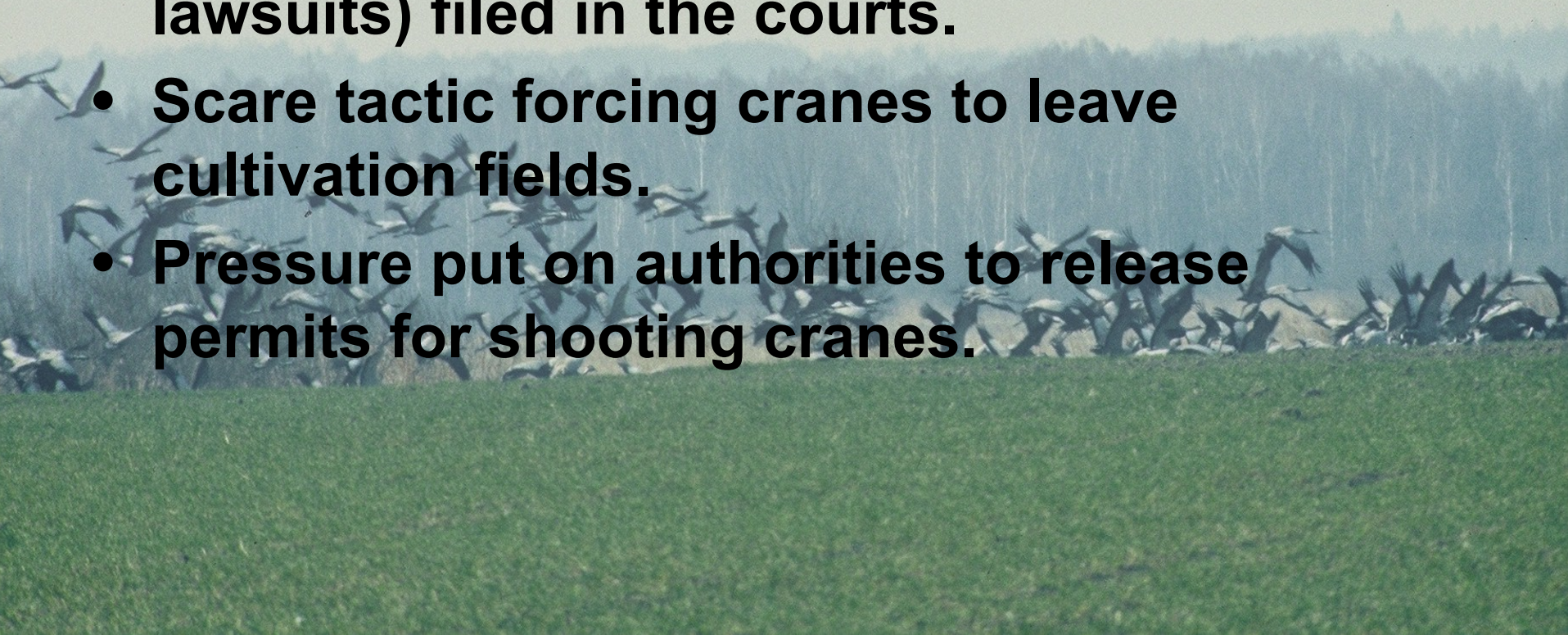
Dam on Swiecek River

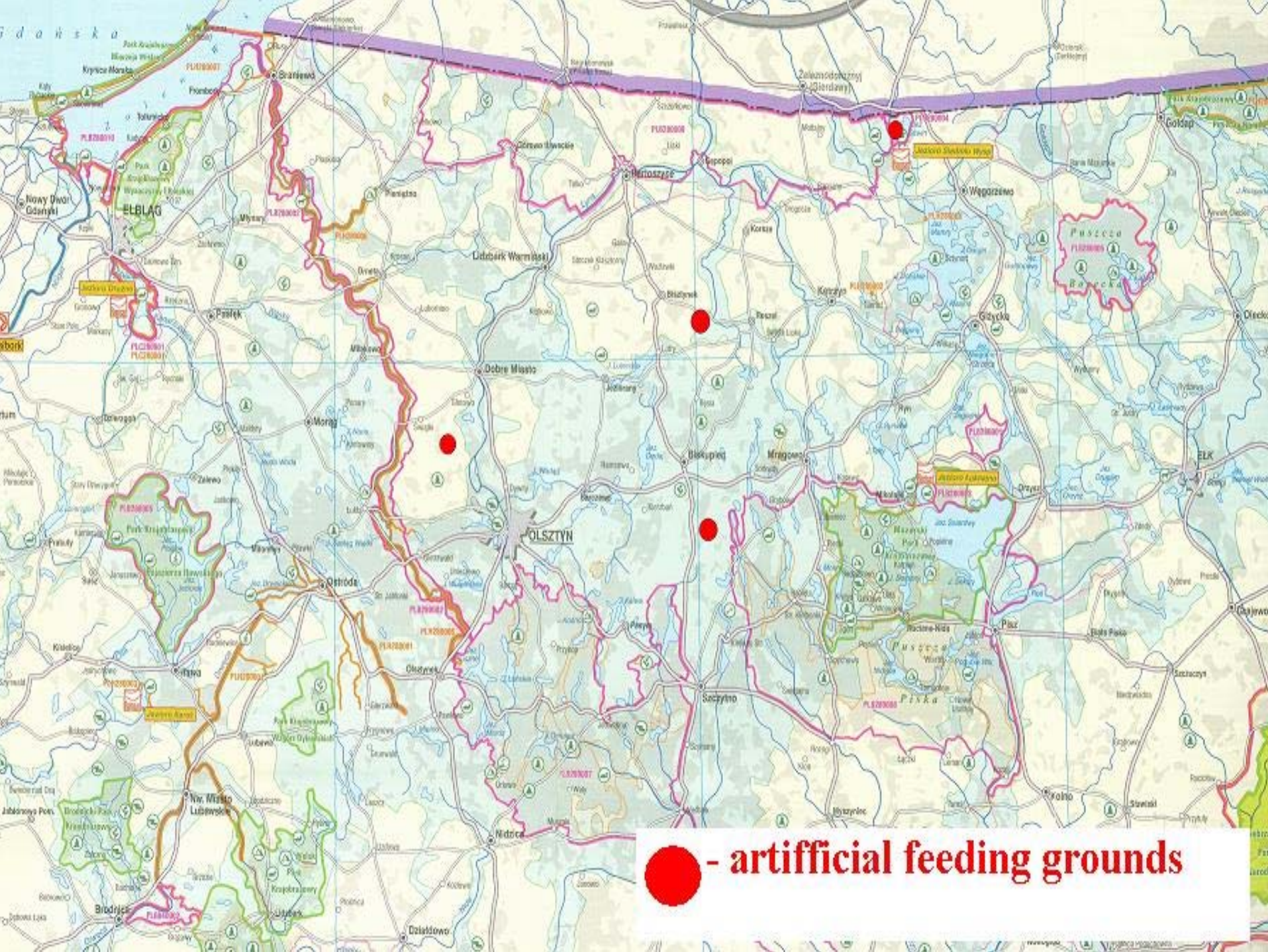




**Pond in the nature reserve
Lake of Seven Inlands**

- **Increasing number of applications for monetary compensation.**
- **Increasing number of legal actions (or lawsuits) filed in the courts.**
- **Scare tactic forcing cranes to leave cultivation fields.**
- **Pressure put on authorities to release permits for shooting cranes.**





 - artificial feeding grounds

**In an attempt to decrease conflicts
we establish artificial feeding
grounds.**

On the feeding grounds we will have:

- **Germinating/growing wheat (corn).**
- **Non-harvested grain**
- **Stubble**

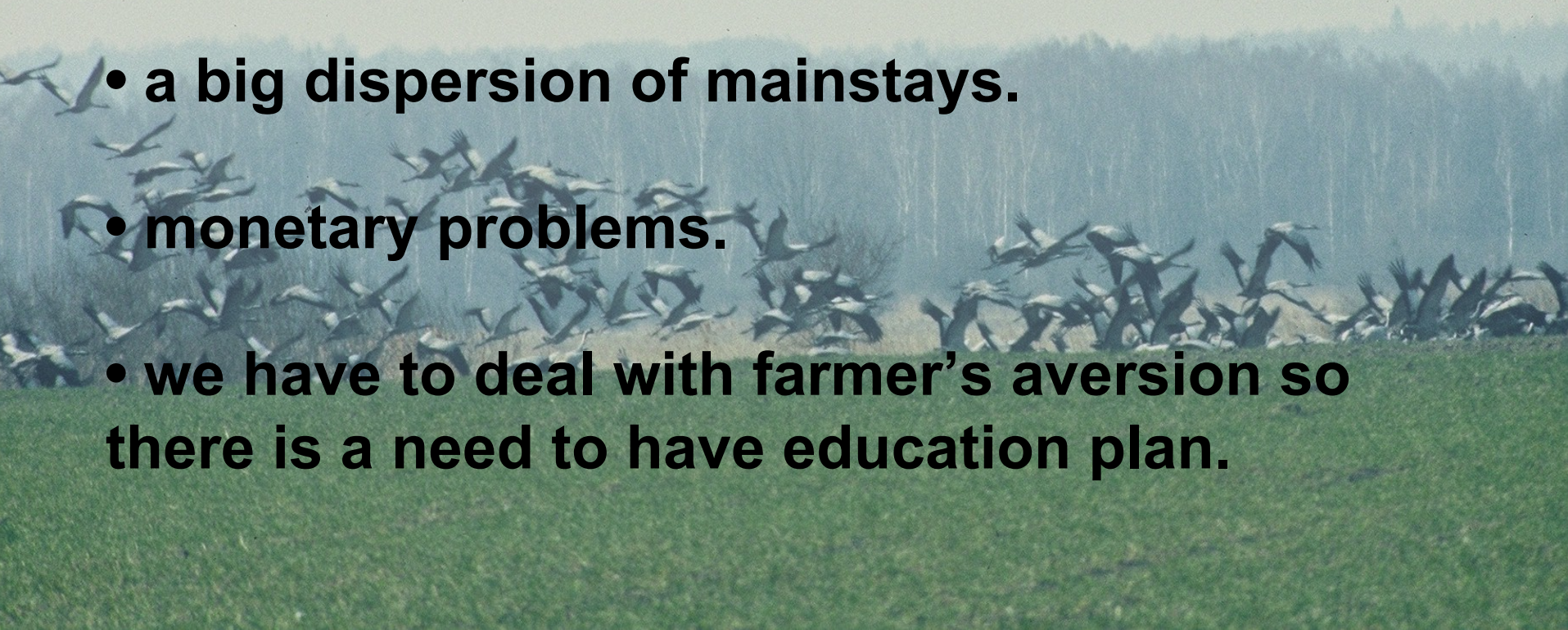


Satopy-Samulewo **– an example of feeding ground.**



We have difficulties with introduction of an artificial feeding ground

- large number of sleeping places and connected with them feeding grounds.**
- a big dispersion of mainstays.**
- monetary problems.**
- we have to deal with farmer's aversion so there is a need to have education plan.**



Thank you

