

Aquatic Warbler in Poland

State of the population, source areas and small breeding sites

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Polish Society for the Protection of Birds

BirdLife Poland



Fundusze Europejskie
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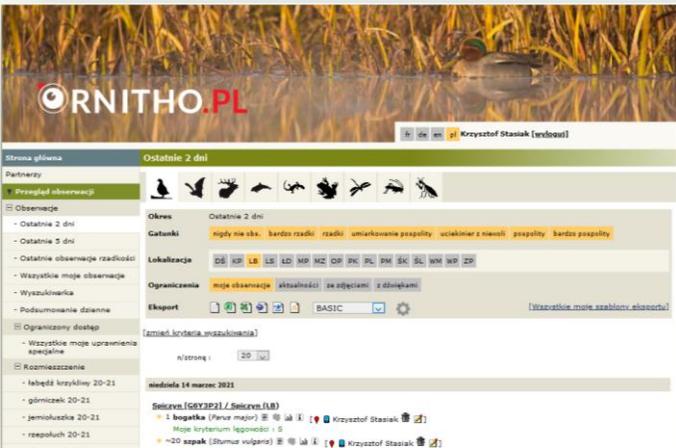
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30
years



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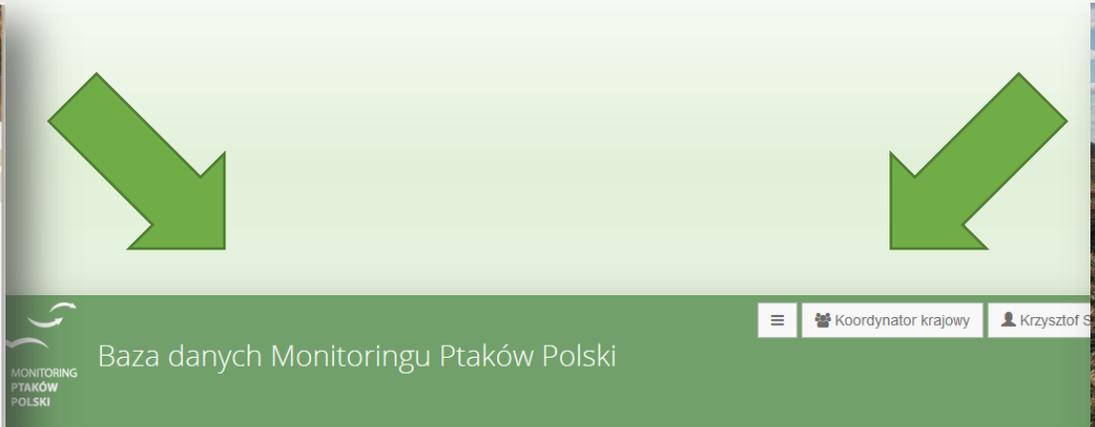
Citizen science

Aquatic Warbler monitoring

Monitoring wodniczki
Formularz liczenia na transektach

Obserwator (imię i nazwisko)	Krzysztof Stasiak		
Kod transektu	TLL11	Lokalizacja	Bagno Serebryskie
Data liczenia (ROK/MIESIĄC/DZIEŃ np. 2012.05.22)	2020.06.27	Numer kontroli (1/2/3)	3
Pogoda (1, 2 lub 3)	Zachmurzenie 1 Deszcz 1	Wiatr 1	Widoczność 1
Czas rozpoczęcia (godz:min)	19:30	Czas zakończenia (godz:min)	20:10

Kategorie odległości	Skala pogody			
	Zachmurzenie	Deszcz	Wiatr	Widoczność
1 0-25 m od linii transektu	1 0-33%	brak	brak lub słaby	dobra
2 25-100 m od linii transektu	2 34-66%	słaby	umiarkowany	średnia
3 powyżej 100 m od linii transektu	3 67-100%	silny	silny	słaba



Baza danych Monitoringu Ptaków Polski

MONITORING PTAKÓW POLSKI

Lista monitoringów / Lista podprogramów monitoringu

Podprogram: Wybierz z listy Koordynator: Wybierz z listy Pokaż zakończone

Aquatic Warbler data

Wyczyść Filtruj

Eksportuj jako CSV Excel PDF

Podprogram	Rok	Sezon	Status
Monitoring Wodniczki (Liczenie na transektach)	2020	lęgowy	Zakończone
Monitoring Wodniczki (Liczenie na powierzchniach)	2020	lęgowy	Zakończone

Pokaż 10 pozycji

Pierwsza < 1 > Ostatnia

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Direct information



OTOP projects and reserves

Aquatic Warbler monitoring on transects

methods



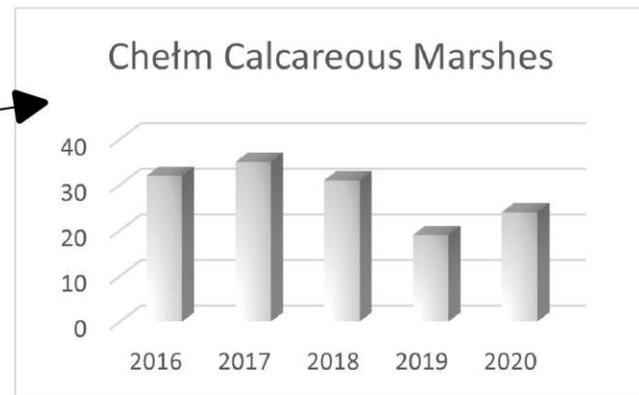
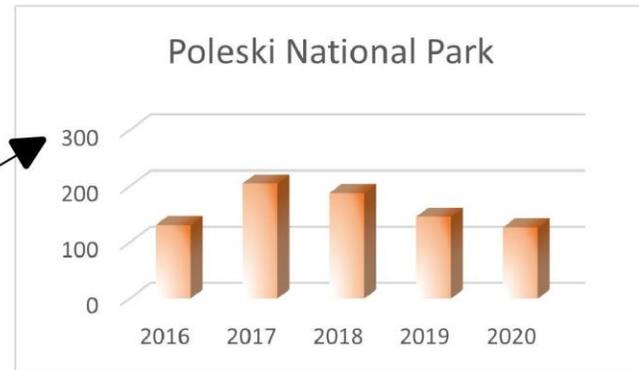
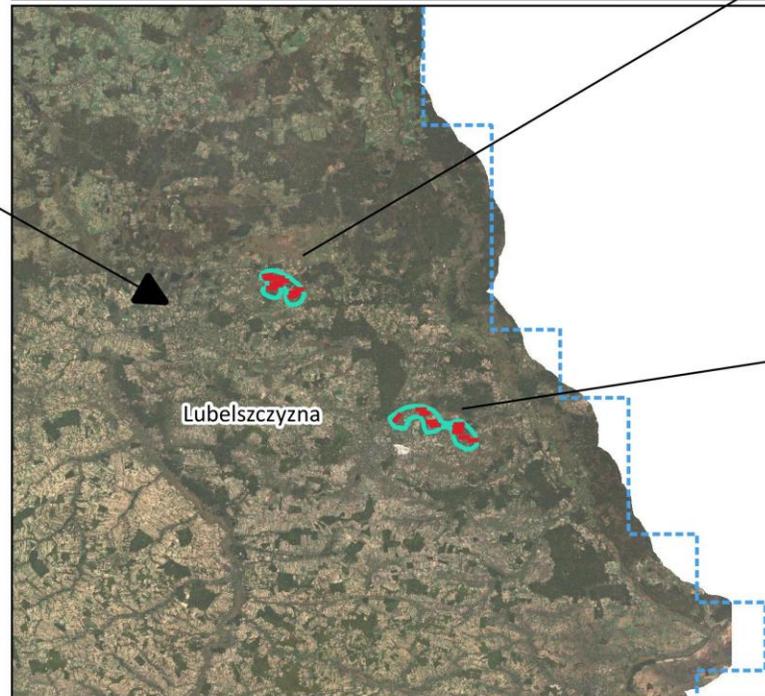
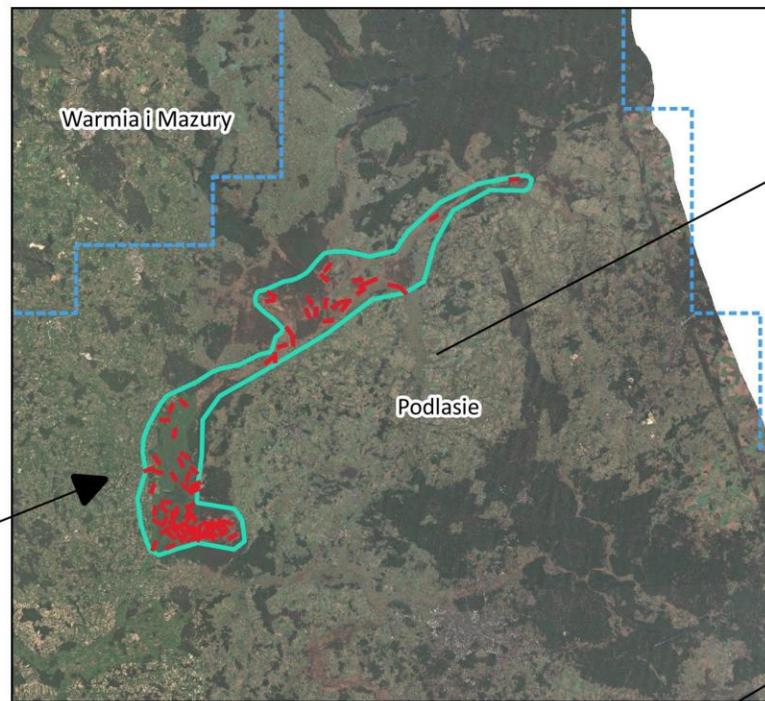
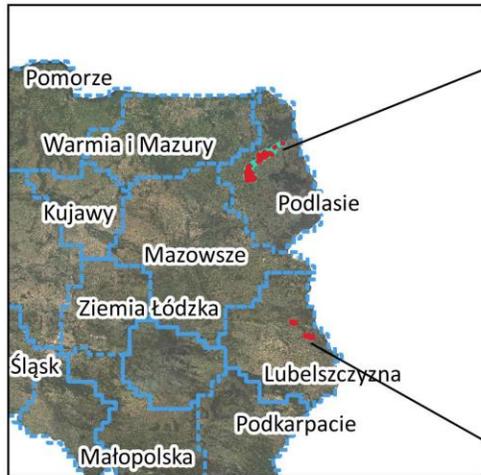
- 100 transects randomly placed within suitable habitats in 3 areas:
 1. Natura 2000 PLB200006 Biebrza Refuge (Biebrza river valley) – 50 transects in optimal AW habitats and 30 transects in suboptimal habitats.
 2. Natura 2000 PLB060001 Bubnów Marsh (Poleski National Park) – 10 transects within optimal AW habitats.
 3. Natura 2000 PLB060002 Chełm Calcareous Marshes (National Reserves) – 10 transects within optimal habitats, mainly with *Cladium mariscus*.
- Each transect is controlled every year. 3 surveys are conducted within a week, between 20th of May and 10th of June. Singing males are noted. The estimated number of birds is max out of 3 surveys.
- The main habitat information is gathered – type of land use, main group of plants, water level and suitability for AW.
- **The Aquatic Warbler monitoring is a part of the Monitoring of Birds in Poland, financed by the National Fund for Environmental Protection and Water Management.**

Aquatic Warbler monitoring on small sites methods

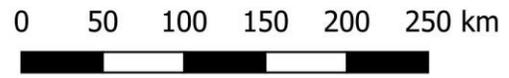
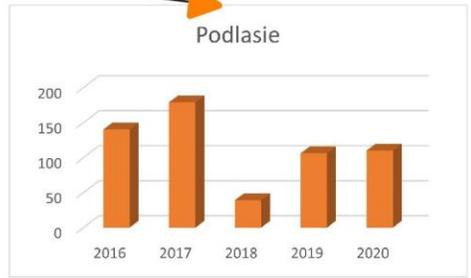
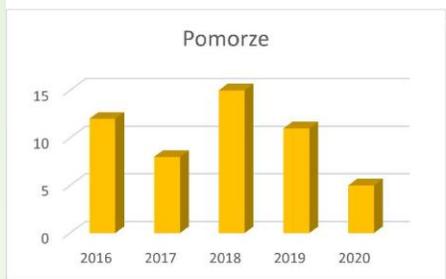
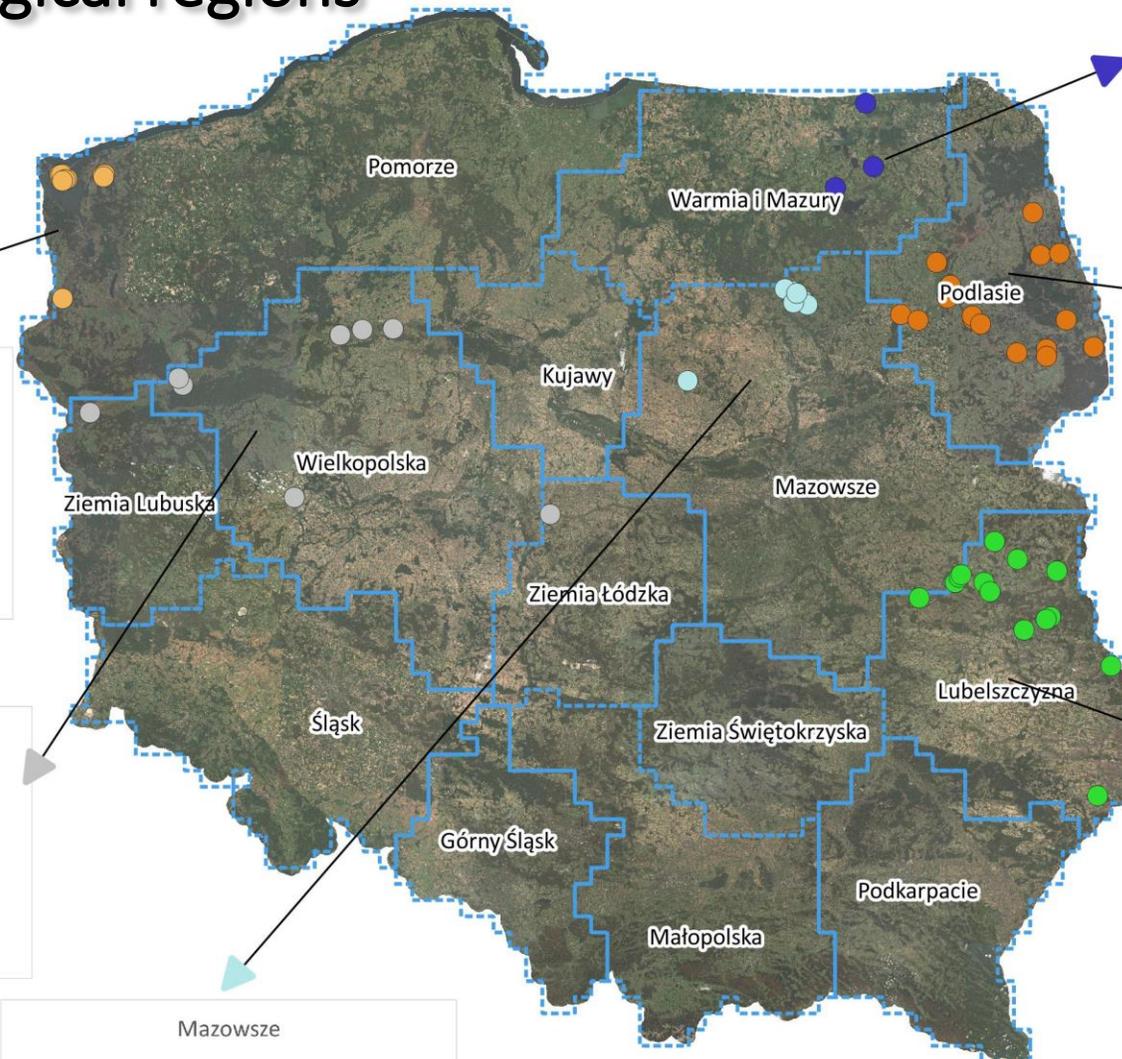


- Small sites are the landpatches where actual or historical data of Aquatic Warbler occurrence are available.
- Originally site was defined as an area of one or more patches of habitat suitable for AW, where birds were found. The size of those sites differed from about 50 ha to over 1000 ha. In 2021 sites definition changes to a centerpoint of each patch of habitat (within one „area” site up to 6 points are located, corresponding to 6 small patches of habitat separated by different structures).
- In 2021, 56 such points will be checked.
- Each site is checked twice each year, between 20th of May and 10th of June and between 25th of June and 10th of July. Singing males are noted. Both results are reported, the higher value is defined as the number of singing males on the site.

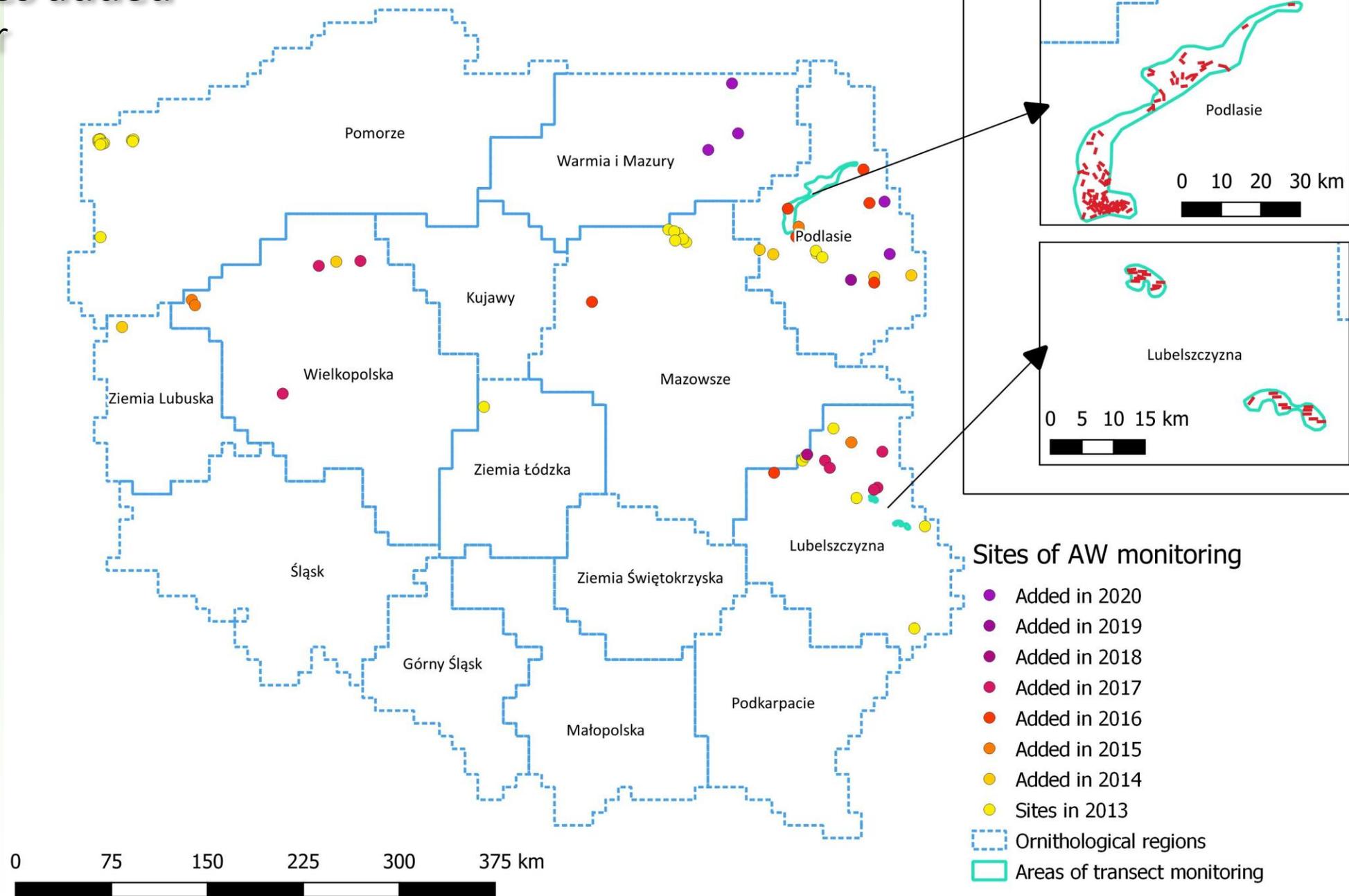
Main populations transects monitoring scheme



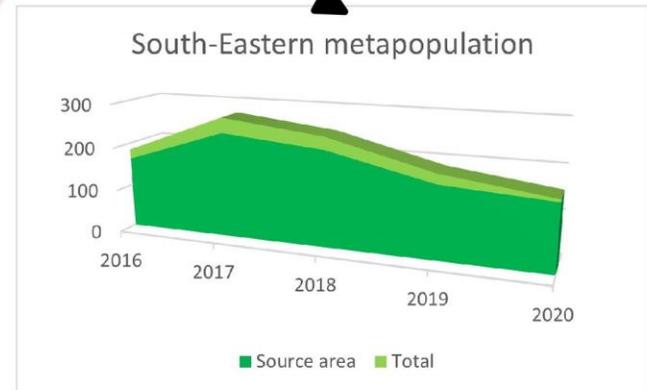
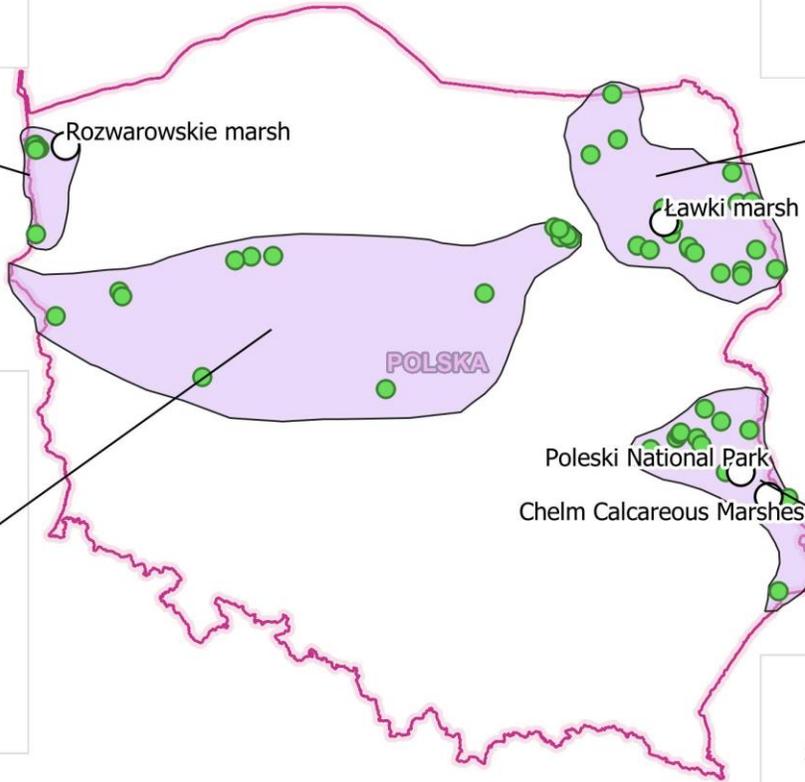
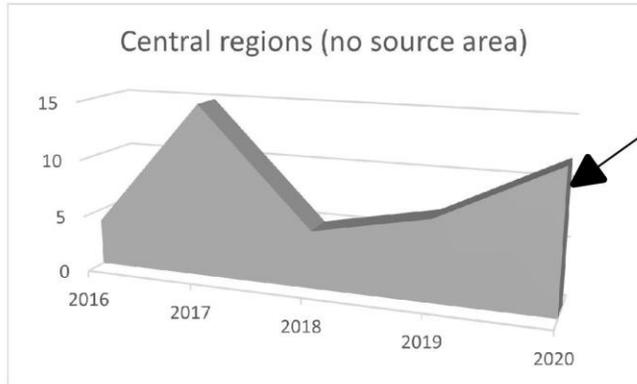
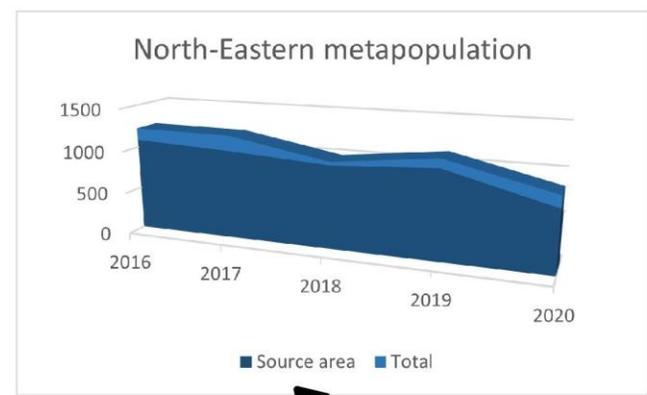
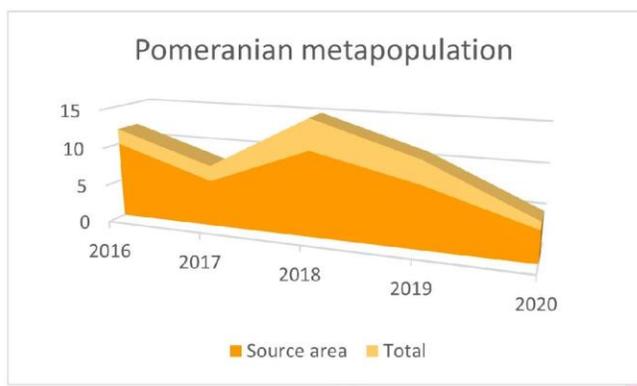
Small sites in ornithological regions sites monitoring scheme



New sites added each year



Proposed range of AW metapopulations in Poland

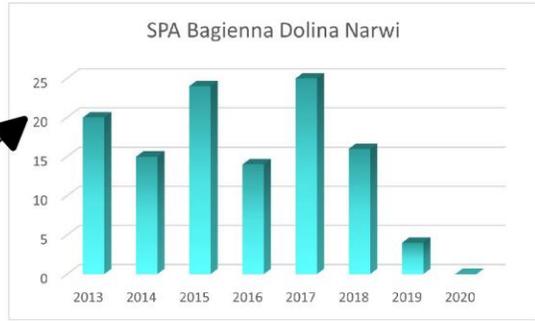
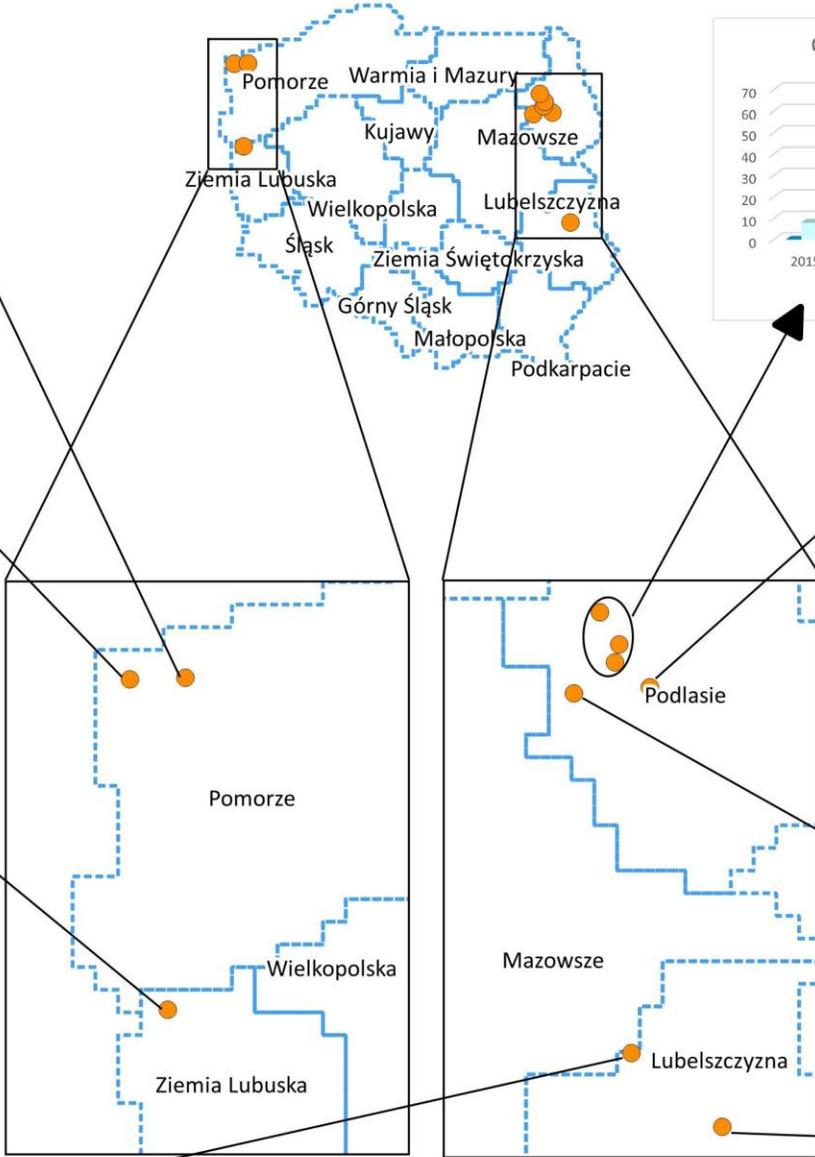
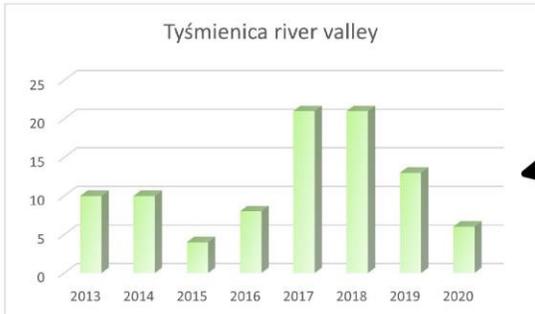
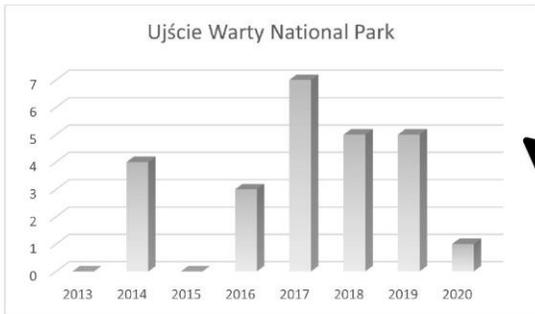
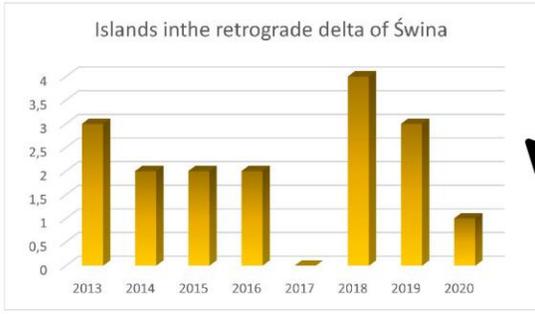


Polish AW metapopulations

- Source areas ○
- AW monitoring sites ●
- Metapopulation estimated area ■

0 50 100 150 200 250 km



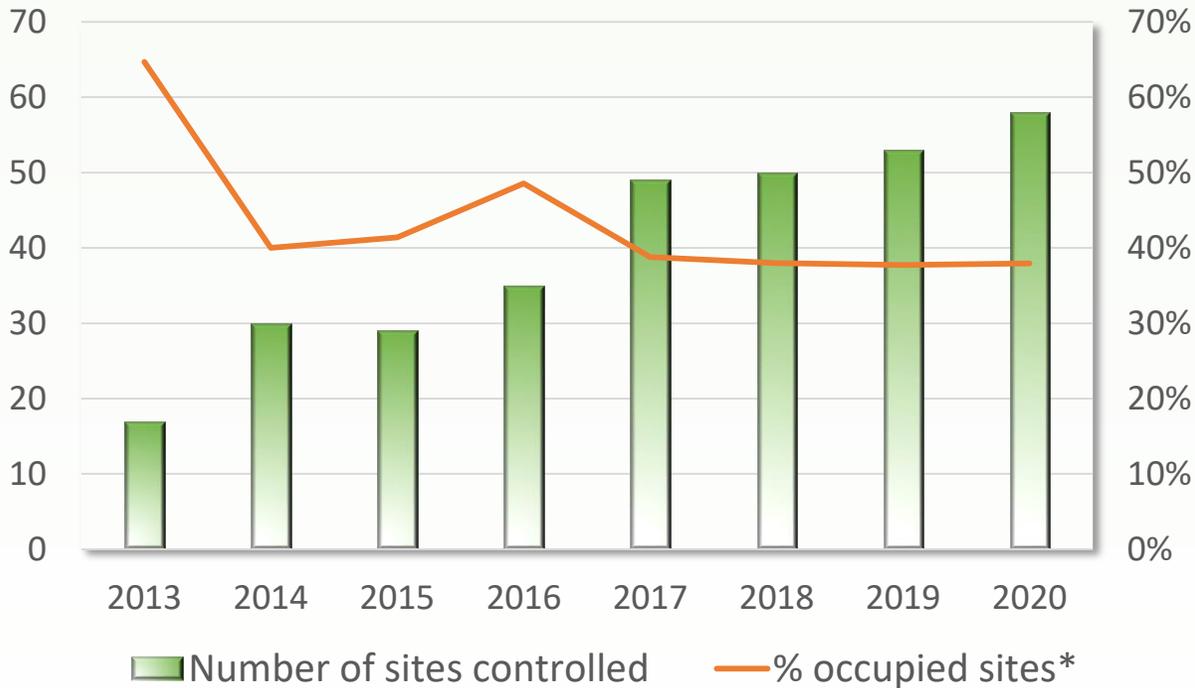


**Small sites
with stable AW population**

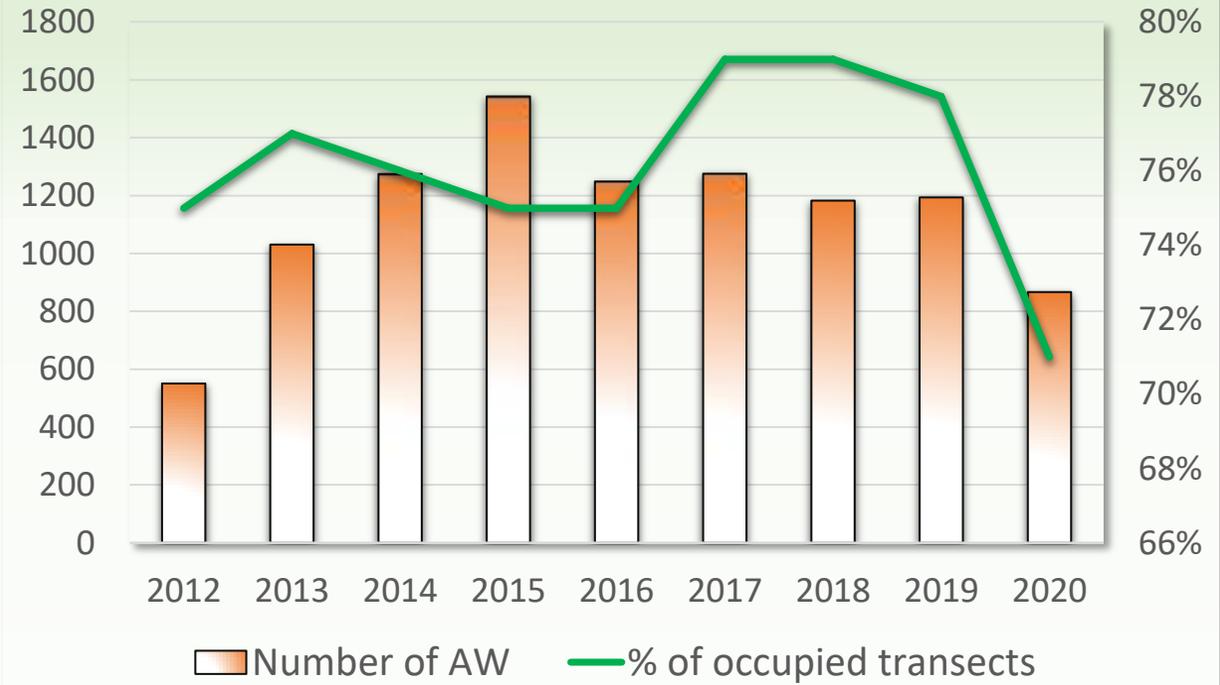
Results

of two subroutines of AW monitoring scheme

AW on small sites

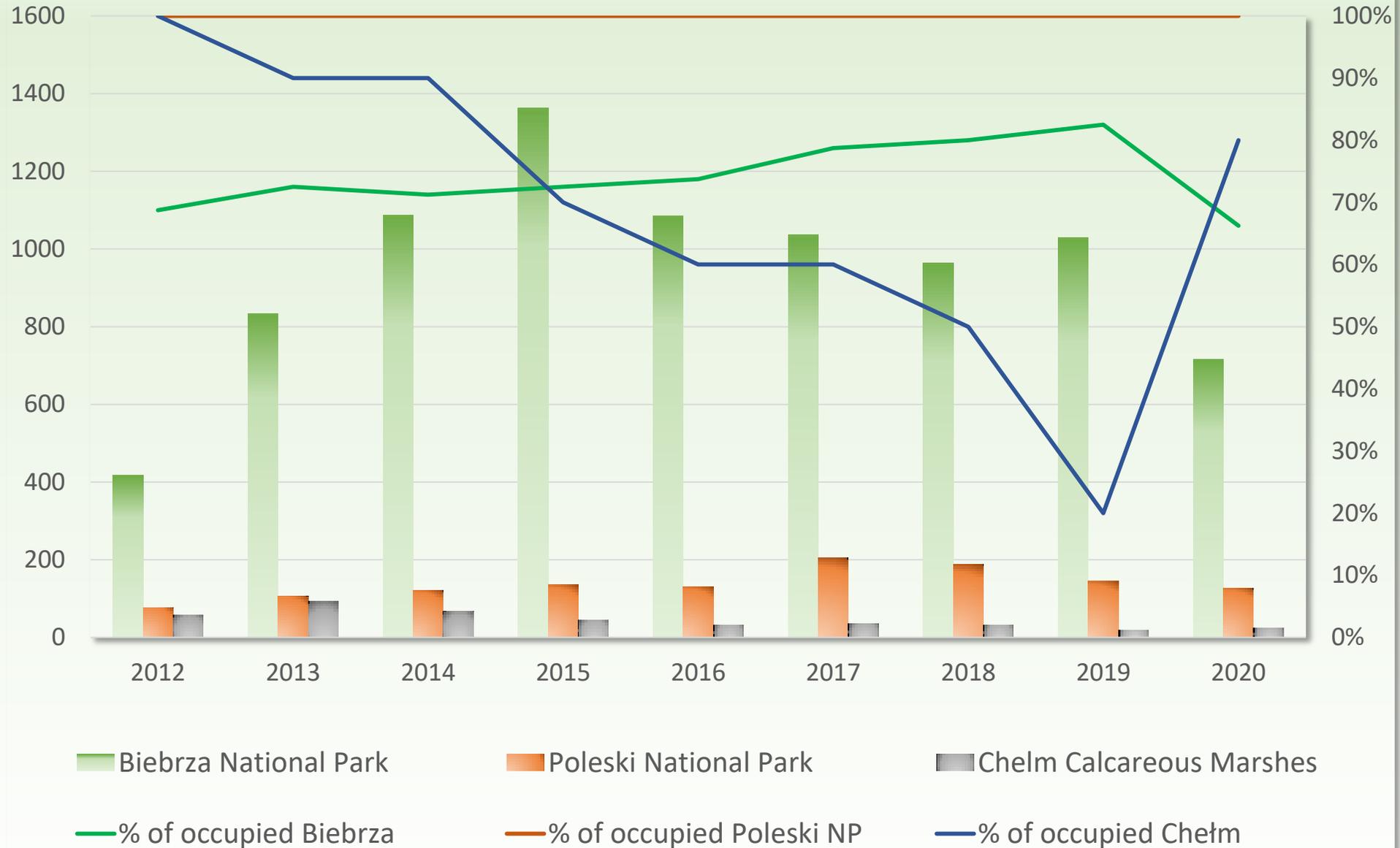


Results of transect monitoring



*100% is different for different years and means the total number of sites monitored.

Results of transect monitoring



Year 2020

weather anomalies



Burned meadows in Wieprz river valley (150 ha)

- Drought in 2019 and snowless, warm and dry winter 2019/2020 resulted in very low water level in rivers and ground.
- Lack of backwaters in river valleys (Biebrza, Wieprz and others) increased the risk of fire spreading after burning meadows by local people. Fire in Biebrza valley consumed over 5,000 ha, in Wieprz river valley over 150 ha in just one part.
- The result was lower availability of wetland area for birds in May.
- In mid June, heavy rains were noted, giving the amount of water similar to average sum for 6 months. Rivers level rapidly increased (in small ones like Tyśmienica over 1 m in a week), flooding beside areas up to 0,5 m.
- After water level decreased, the gradation of mosquitos was noted.

Threats

to the population
of Aquatic Warbler in Poland

1. Source areas:

- Biebrza river valley – drought, fires, overgrowing as a result of problems with agreements between the National Park administration (representing the Polish Government) and farmers who conduct mowing
- Poleski National Park (Bubnów) – plans for the construction of a hard coal mine at the border of the Aquatic Warbler area
- Marshes near Chełm – drought, fires, groundwater level changes

2. Small sites:

- drought, overgrowing and habitat loss, abandonment, drying by melioration, changes of use, fires



Perspectives

to the population of the Aquatic Warbler in Poland



Main impact of the biggest subpopulations, even if the changes there are small

The status of the big populations will depend on the land management all over those sites

Revealing new small sites may be both a result of widespreading the AW population and better exploration of suitable habitats

The 2021 survey within the AW monitoring will deliver important data on the status of the population after the sharp decline in 2020. The weather seems to be promising...

Thank you for your attention



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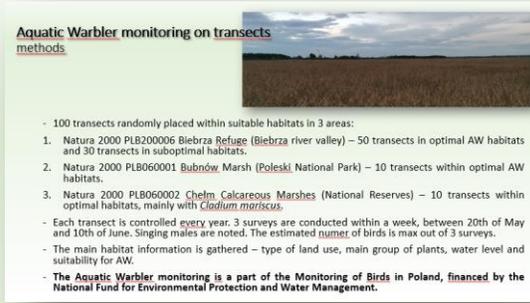


30
years





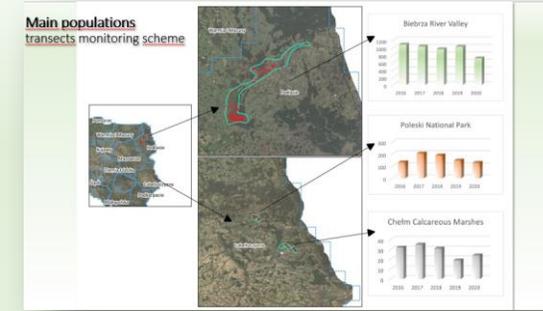
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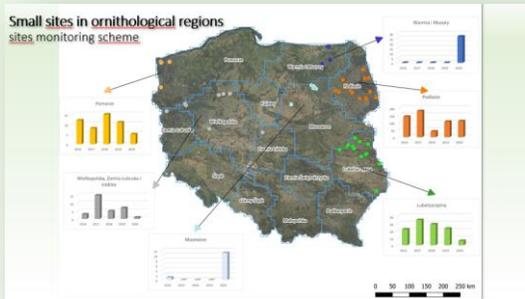
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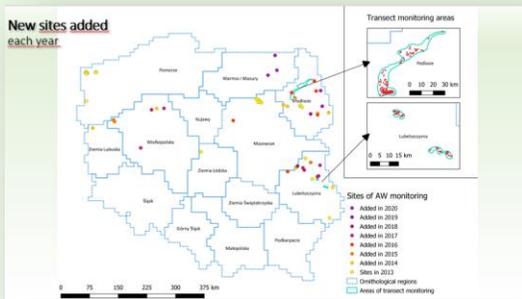
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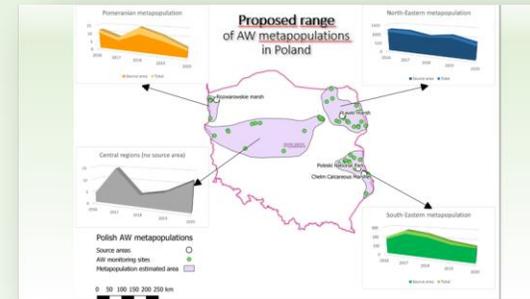
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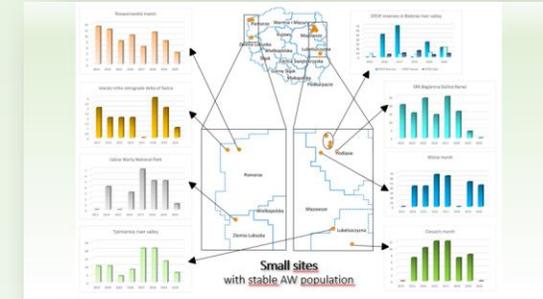
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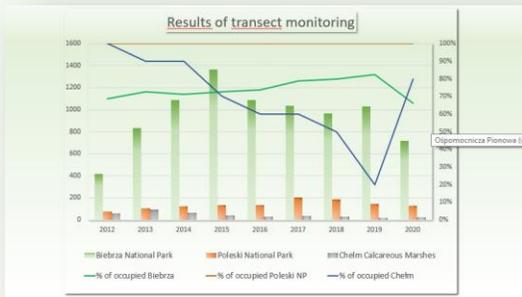
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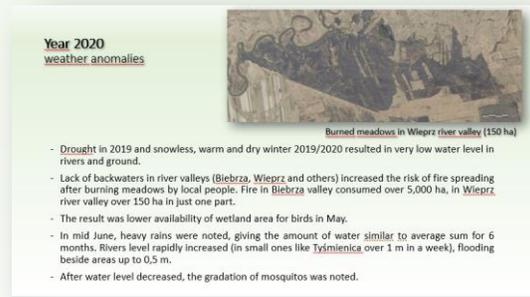
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12



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Number 14 – perspectives for the population