

Waterbirds of Western Pomerania, Poland

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West Pomeranian Nature Society [Zachodniopomorskie Towarzystwo Przyrodnicze]

The society was founded in 1994 as West Pomeranian Ornithological Society by people interested in protecting birds and their habitats gathered around Ornithological Station „Świdwie” PAN...

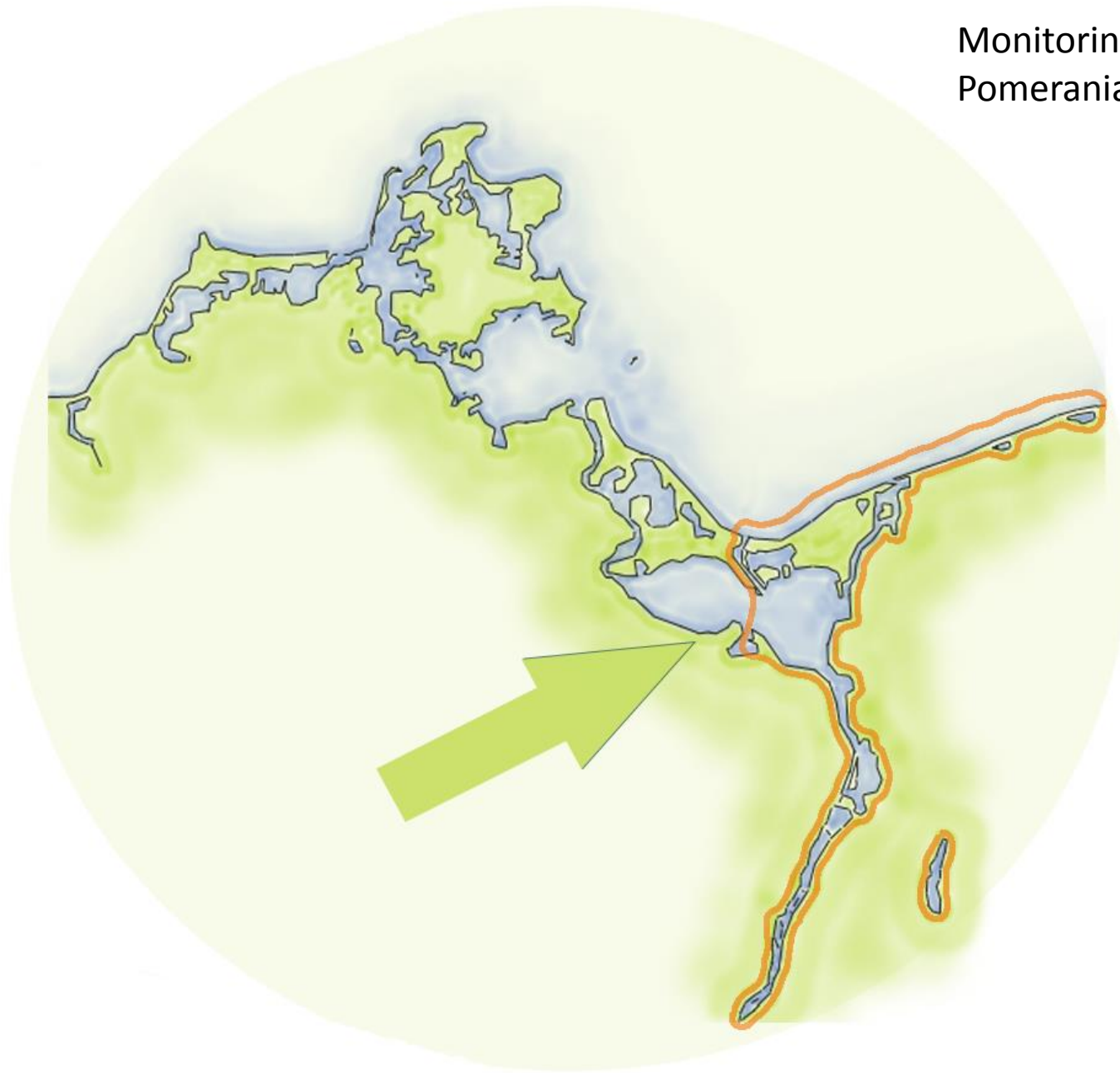
Two groups: MAMAL GROUP, BIRD GROUP
2006 change the name ZTP because of MAMAL GROUP

MAMAL GROUP conservation and study of European Bison from West Pomeranian population, Wolves and Lynx

BIRD GROUP conservation and study of West Pomeranian birds, projects examples:

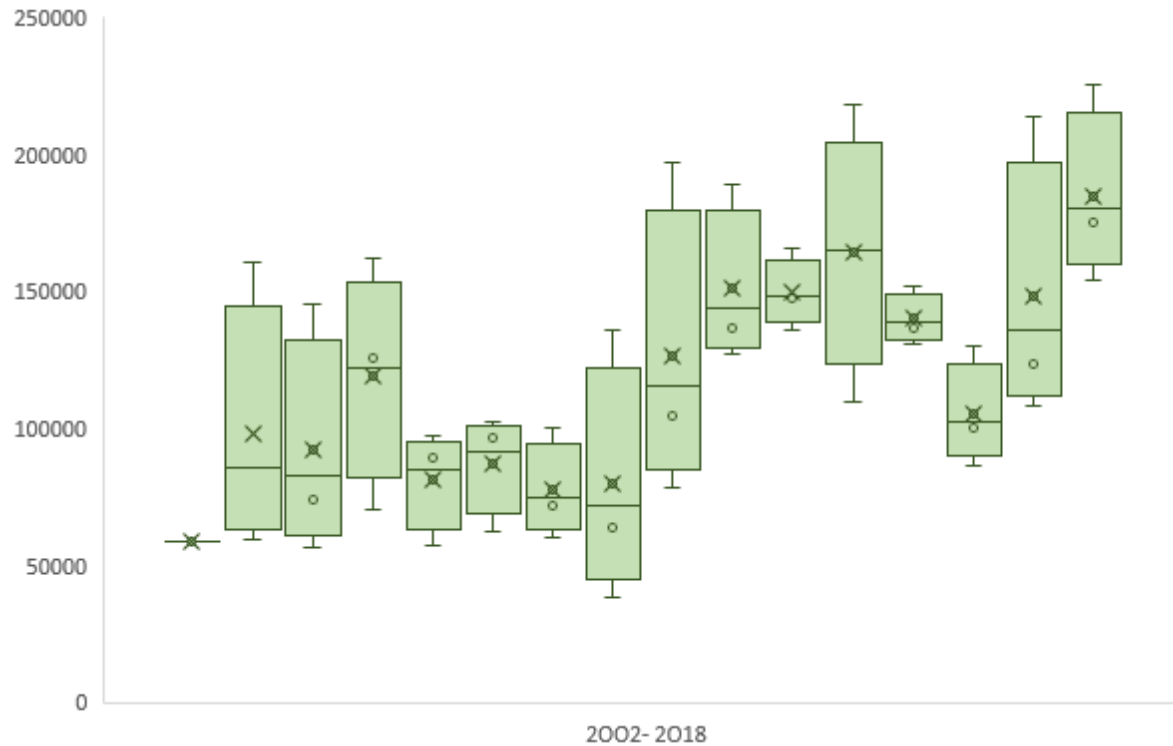
- * Conservation of Common Goldeneye,
- * Conservation of Barn Owl,
- * Conservation of Sand Mines Birds,
- * Active Protection and Monitoring of Krepa Marshes,
- * Active Protection of Black Tern in Lower Odra Valley,
- * Monitoring of Wintering and Migrating Waterbirds in Western Pomerania

Monitoring of Wintering and Migrating Waterbirds in Western Pomerania



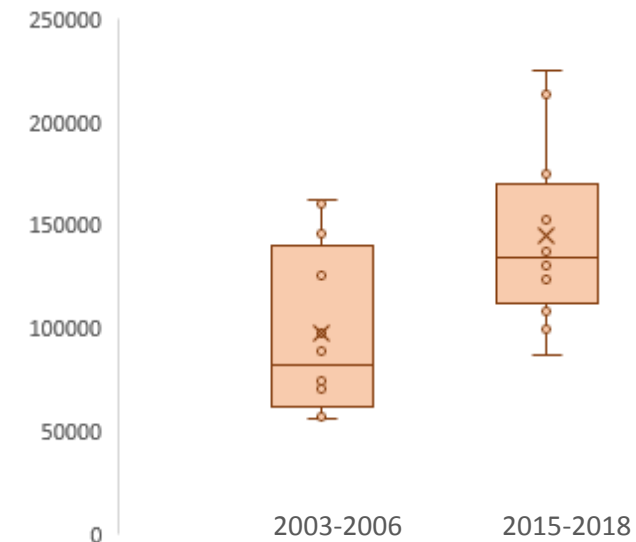
- Baltic Sea - the most important site for wintering waterbirds in WP
- 2001/2002 – 2017/2018 regular monitoring of the area
- Three counts during the wintering season (Nov, Jan, Mar)
- Data are sent to Wetland International <http://wpe.wetlands.org/search> and Helcom

General information about waterbirds wintering in Western Pomerania



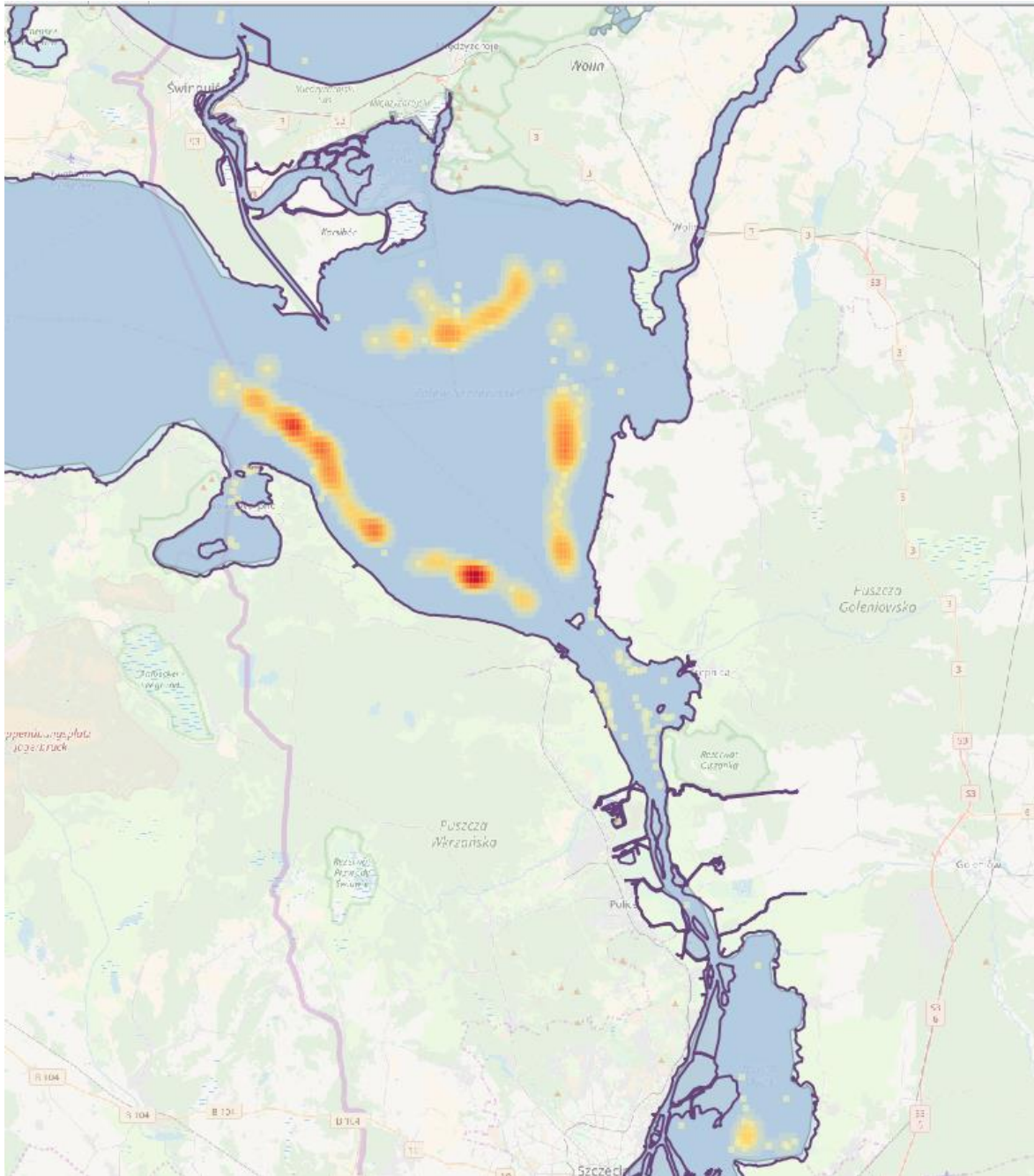
Numbers of all waterbirds counted in Western Pomerania in seasons: 2001/2002 – 2017/2018.
 Mean, median, minimum and maximum values of counts during the season (November – January – March).

Mean of all waterbirds: 116 000 (range: 38 000 – 225 000)
 2002-2018
 Mean 2003-2006 = 97 000 (56 000 – 162 000)
 Mean 2015-2018 = 145 000 (86 000 – 225 000)



Mean, median, min. and max. values... from four seasons in the beginning of the study and four recent seasons.

Species group		species	Index values								
			2013	2014	2015	2016	2017	2018	Mean 2013-2018	Trend in the Study area	Trend in the whole Baltic or population
All ⁽²⁰⁰²⁻²⁰⁰⁶⁾			1.533	1.683	1.436	1.081	1.520	1.896	1.525	↑↑	→
Surface feeders all ⁽¹⁹⁸⁵⁻¹⁹⁹⁰⁾			0.645	0.867	0.715	0.519	0.566	0.601	0.652	↓	?
Surface feeders	Black-headed Gull		0.480	0.625	0.591	0.373	0.608	0.442	0.520	↓↓	→?
	Common Gull		0.658	0.834	0.974	0.451	0.627	0.851	0.732	↓	→?
	Herring Gull		1.151	1.599	0.760	1.026	0.403	0.743	0.947	→	↓
	Great Black-backed		0.156	0.934	0.508	0.503	0.222	0.533	0.476	↓↓	↓
Pelagic feeders all ⁽¹⁹⁹²⁻¹⁹⁹⁴⁾			0.445	0.381	0.427	0.442	0.364	0.467	0.421	↓↓	↑
Pelagic feeders all ⁽²⁰⁰²⁻²⁰⁰⁶⁾			1.060	0.906	1.016	1.052	0.867	1.112	1.002	→	↑
Pelagic feeders	Smew		0.211	0.203	0.179	0.071	0.108	0.167	0.156	↓↓	↑
	Goosander		0.355	0.188	0.166	0.281	0.194	0.206	0.234	↓↓	↓
	Great-crested Grebe		2.134	4.722	3.426	3.081	2.225	4.084	3.279	↑↑	↑
	Great Cormorant		9.695	13.11	20.94	16.34	15.66	21.28	16.171	↑↑	↑
Benthic feeders all ⁽¹⁹⁹²⁻¹⁹⁹⁴⁾			1.012	1.395	1.102	0.820	1.372	1.394	1.183	↑	↓
Benthic feeders all ⁽²⁰⁰²⁻²⁰⁰⁶⁾			2.129	2.936	2.319	1.725	2.886	2.933	2.488	↑↑	↓
Benthic feeders	Common Pochard		0.242	0.155	0.153	0.059	0.113	0.212	0.156	↓↓	↓
	Tufted Duck		0.901	1.228	1.170	0.962	1.482	1.492	1.206	↑	↓
	Greater Scaup		1.403	2.378	1.247	0,988	1.941	1.767	1.621	↑↑	↓
	Common Goldeneye		0.775	0.734	1.005	0.436	0.505	0.767	0.704	↓	↑
	Eurasian Coot		1.399	1.256	1.507	0.884	1.382	1.718	1.358	↑	↓
Grazing feeders ⁽²⁰⁰²⁻²⁰⁰⁵⁾			0.369	0.361	0.314	0.140	0.200	0.516	0.317	↓↓	→
Grazing feeders	Mute Swan		1.409	1.143	1.256	1.396	1.078	1.522	1.301	↑	↑/→
	Whooper Swan		1.700	0.899	0.630	0.687	0.995	0.973	0.981	→	↑/→
	Bewick's Swan		0.604	0.396	0.434	0.245	0.491	0.585	0.459	↓↓	↓
	Been Goose		0.814	0.851	0.743	0,257	0,420	1.241	0.720	↓	↑
	White-fronted Goose		0.405	0.142	0.260	0.106	0.250	0.475	0.273	↓↓	→
	Graylag Goose		3.042	3.147	2.580	1.837	3.486	6.325	3.403	↑↑	↑
	Barnacle Goose		9.000	15.00	6.000	17.33	15.67	28.22	15.22	↑↑	↑
	Mallard		0.931	0.828	0.820	0.659	0.850	1.159	0.874	→	→



Spatial distribution and density

Greater Scaup *Aythya marila* spatial distribution and density
During two seasons 2016-2017 nad 2017-2018

Spatial modeling (Kernel density estimate) using three
variables:
longitude, latitude and numbers.
Quadratic interpolation with fixed interval of bandwidth
in CrimeStat IV software (Levine 2010).



Fot. Dawid Kilon

Nearest future plans

1. Continuation of monitoring in the coming seasons
2. Widening the monitoring so as to cover a larger area and longer time.
3. Publication of results and analysis in the form of a book.
4. Educational campaign in schools and in the field.



Fot. Miłosz Kowalewski



fol. Miłosz Kowalewski

STRONA GŁÓWNA

STATUT

ZARZĄD

SPRAWOZDANIA

KONTAKT

ŻUBRY ZACHODNIOPOMORSKIE

nas
artoteka ptaków
oservacje
głoszenia
nki

rtoka Pomorska

czenie ptaków
odnych

Pomorzu Zachodnim

WEST-POMERANIAN NATURE SOCIETY

ORNITHOLOGICAL GROUP

Western Pomeranian Waterbird Census, Poland



THANK YOU!



References

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