

# Protection of Montagu's Harrier in Poland

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**INFRASTRUKTURA  
I ŚRODOWISKO**  
NARODOWA STRATEGIA SPÓJNOŚCI



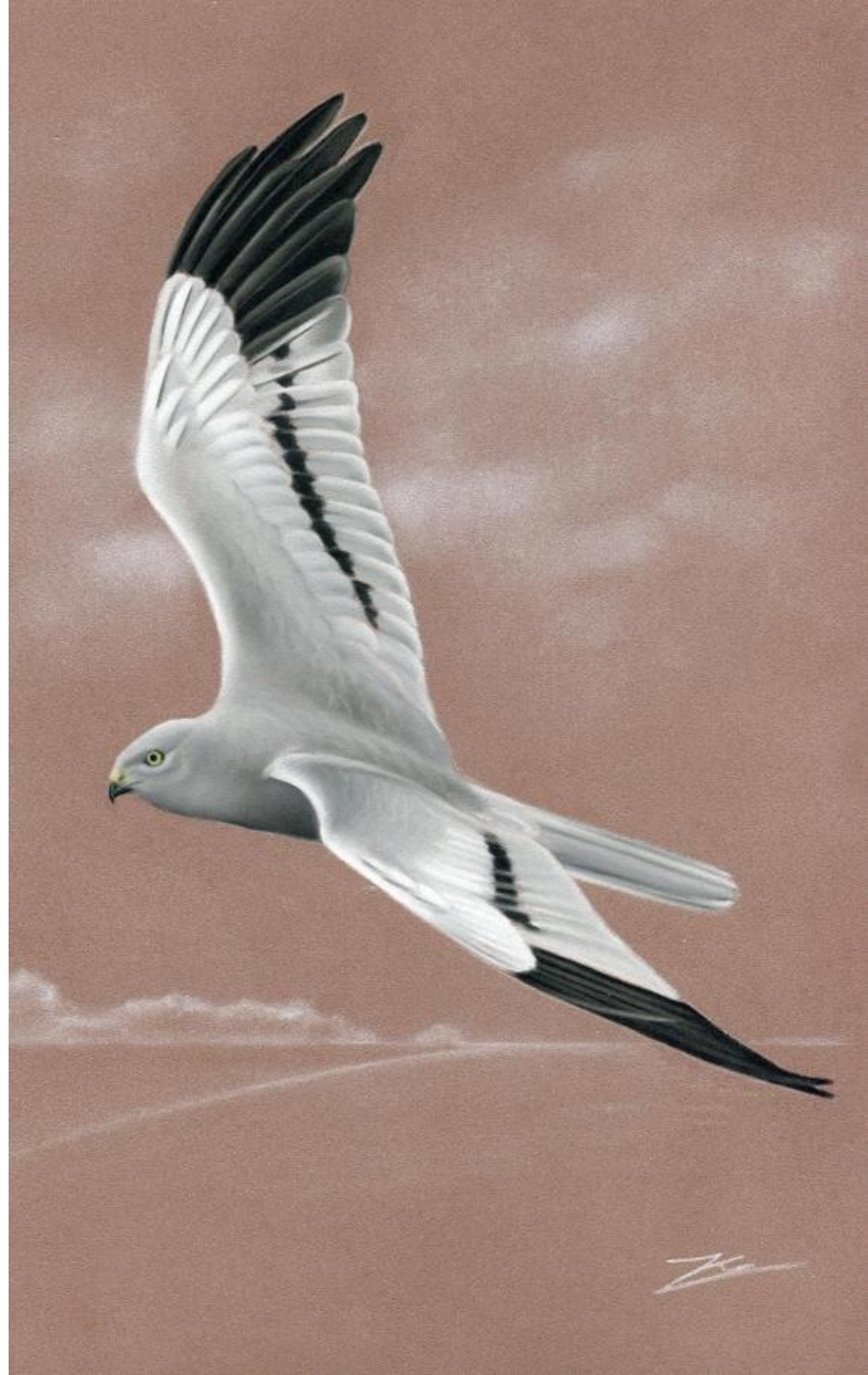
**UNIA EUROPEJSKA**  
EUROPEJSKI FUNDUSZ  
ROZWOJU REGIONALNEGO



Projekt współfinansowany przez Unię Europejską ze środków Europejskiego Funduszu Rozwoju Regionalnego w ramach Programu Infrastruktura i Środowisko



Dofinansowano ze środków Narodowego Funduszu  
Ochrony Środowiska i Gospodarki Wodnej



**The project was realized in the years 2013 – 2014**

**The activities:**

- Nest protection (9 sites);
- Reducing of fox population (600 individuals);
- Farmers education;
- Montagu's harrier Inventory in Natura 2000 sites;
- National Montagu's Harrier Census;
- Montagu's harrier monitoring in Southern Podlasie Region;
- Preparation of the National Action Plan for Montagu's Harrier;
- Promotion of agri-environmental program;
- GPS telemetry research (*habitat use and migration – 10 GPS-UHF loggers and 7 GPS/GSM-UHF loggers*)

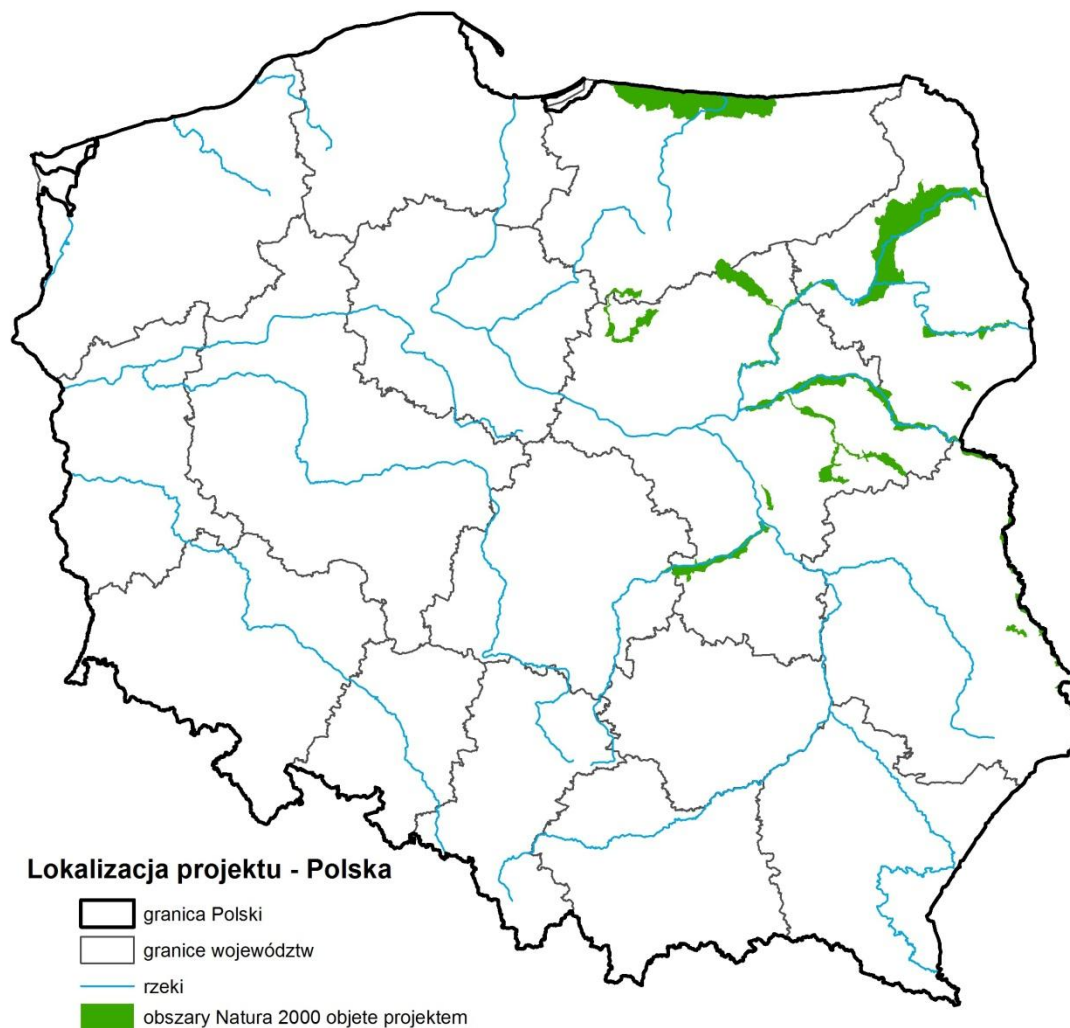




# Inventory in Natura 2000 sites in the years 2013-2014

## 15 important SPA:

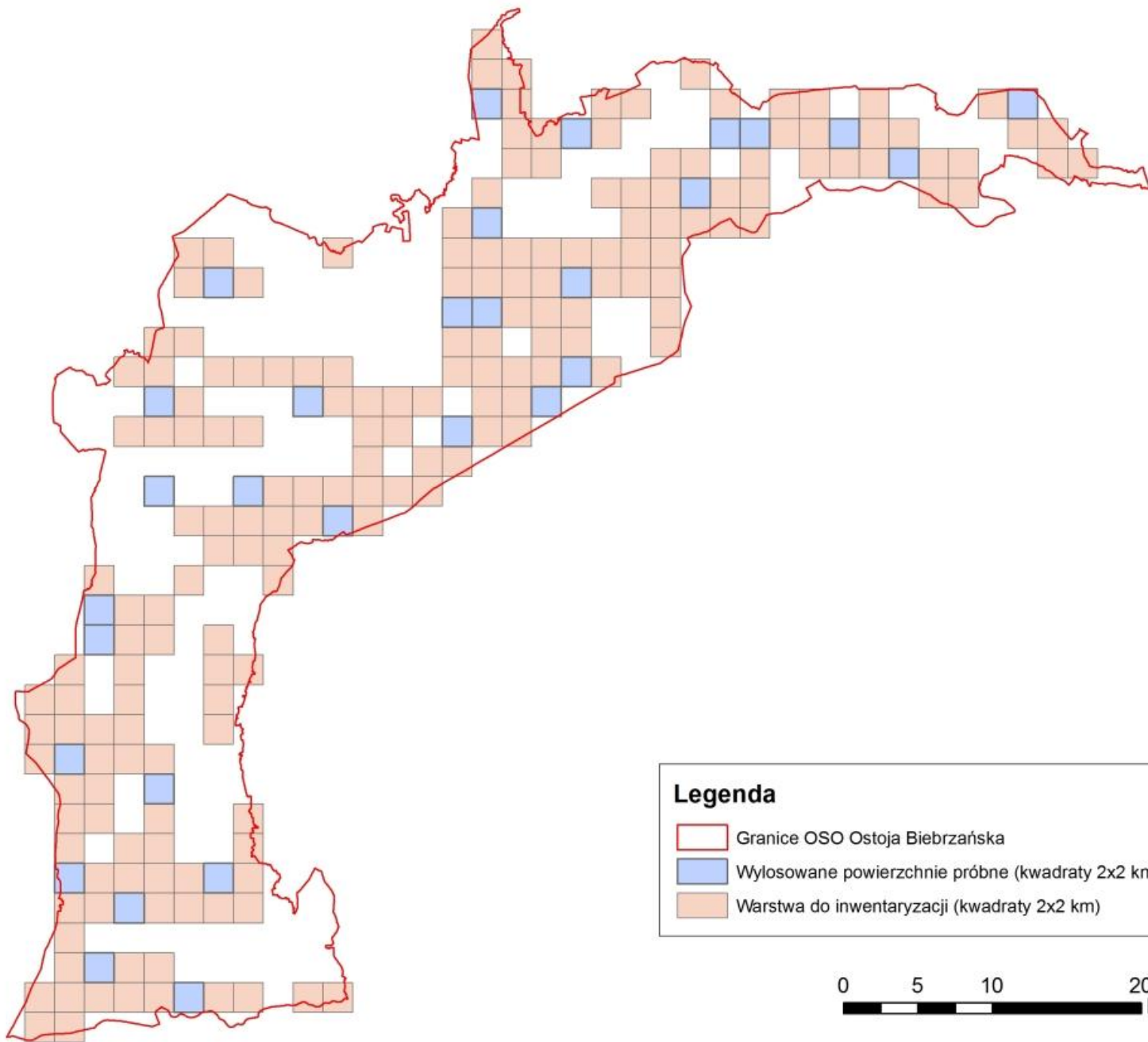
Biebrza River Valley  
Wizna Swamp  
Upper Narew River Valley  
Wkra and Mławka Rivers Valleys  
Upper Nurzec River Valley  
Lower Bug River Valley  
Middle Bug River Valley  
Warmia Site  
Chełmskie Calcareous Marshes  
Omulew and Płodownica Rivers Valleys  
Lower Narew River Valley  
Pilica River Valley  
Liwiec River Valley  
Kostrzyń River Valley  
Całowanie Swamp






**Biebrza River Valley - 148 508,8 ha**

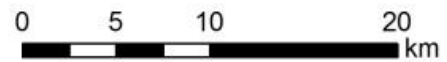


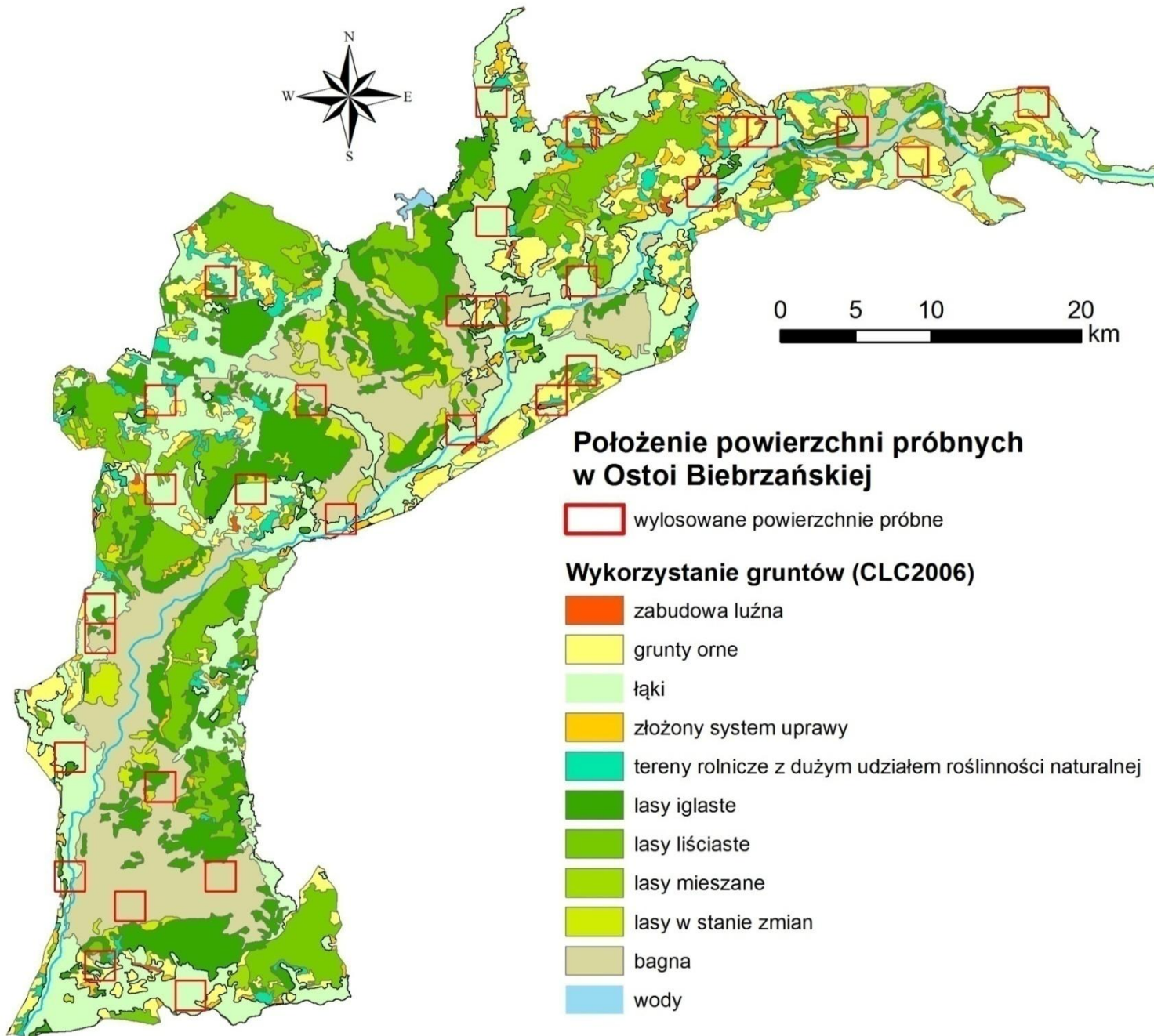




### Legenda

-  Granice OSO Ostoja Biebrzańska
-  Wylosowane powierzchnie próbne (kwadraty 2x2 km)
-  Warstwa do inwentaryzacji (kwadraty 2x2 km)

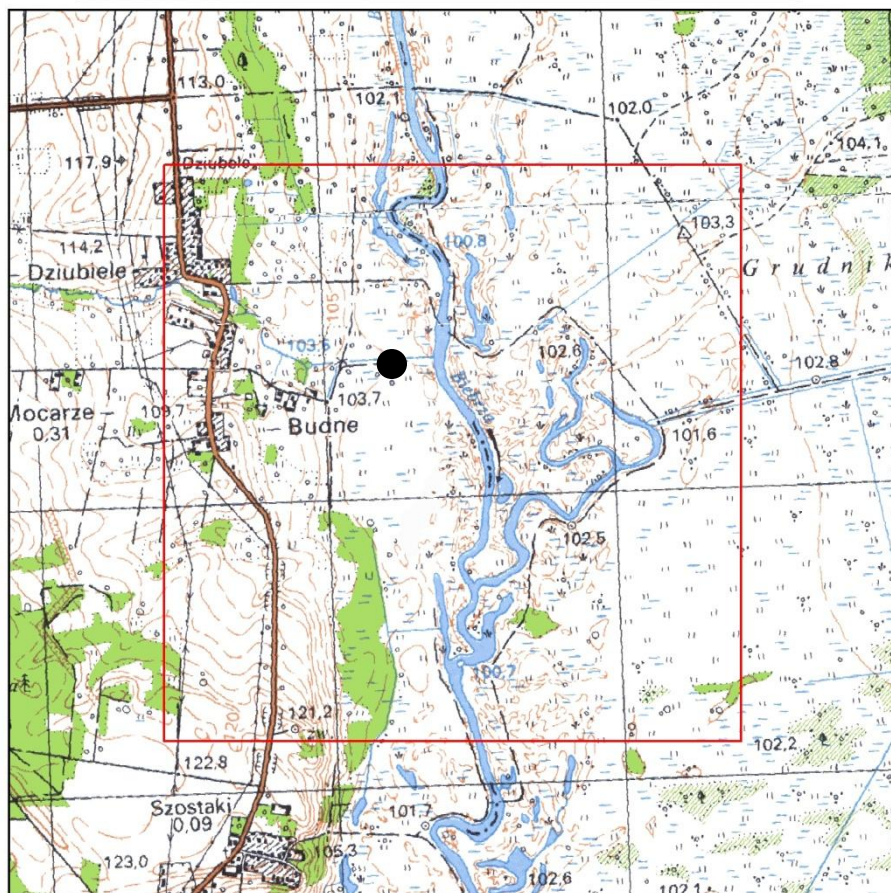
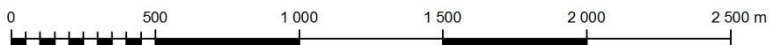






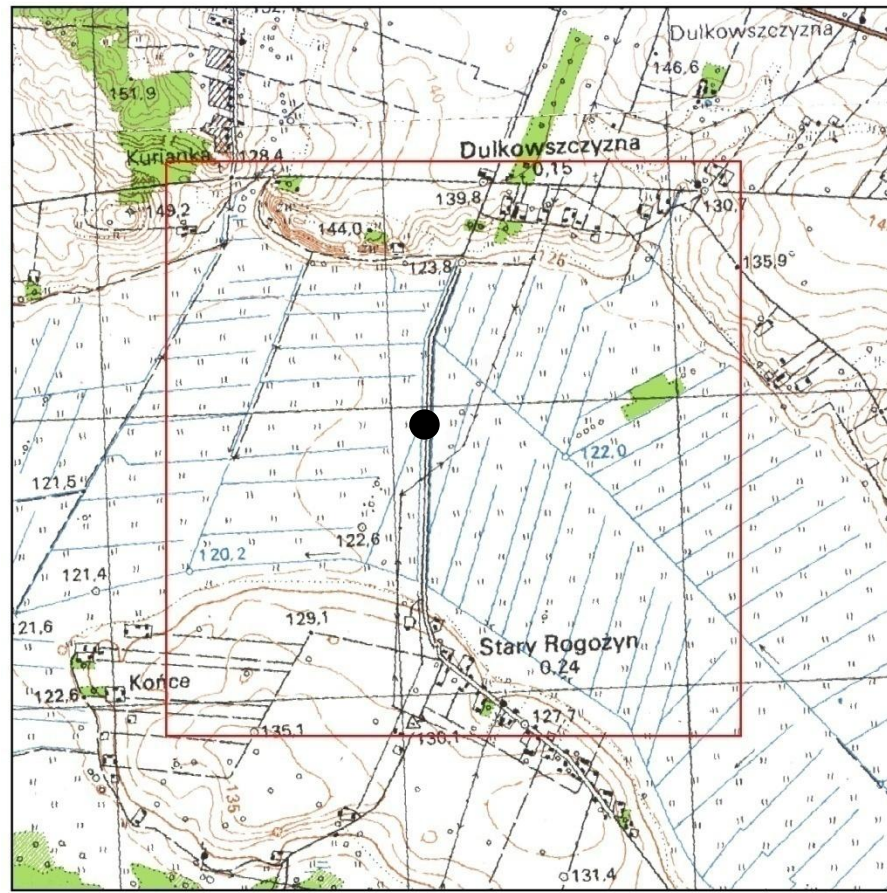
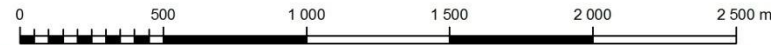
# INWENTARYZACJA BŁOTNIAKA ŁĄKOWEGO - OSTOJA BIEBRZAŃSKA

skala 1:15000	Imię i nazwisko obserwatora:	KONTROLA I	Notatki:	KONTROLA II	Notatki:
ID kwadratu w siatce: 730608	Adres korespondencyjny:	Data:		Data:	
	Nr telefonu, e-mail:	Temperatura:		Temperatura:	
		Zachmurzenie:		Zachmurzenie:	
		Kierunek i siła wiatru:		Kierunek i siła wiatru:	



# INWENTARYZACJA BŁOTNIAKA ŁĄKOWEGO - OSTOJA BIEBRZAŃSKA

skala 1:15000	Imię i nazwisko obserwatora:	KONTROLA I	Notatki:	KONTROLA II	Notatki:
ID kwadratu w siatce: 794660	Adres korespondencyjny:	Data:		Data:	
	Nr telefonu, e-mail:	Temperatura:		Temperatura:	
		Zachmurzenie:		Zachmurzenie:	
		Kierunek i siła wiatru:		Kierunek i siła wiatru:	

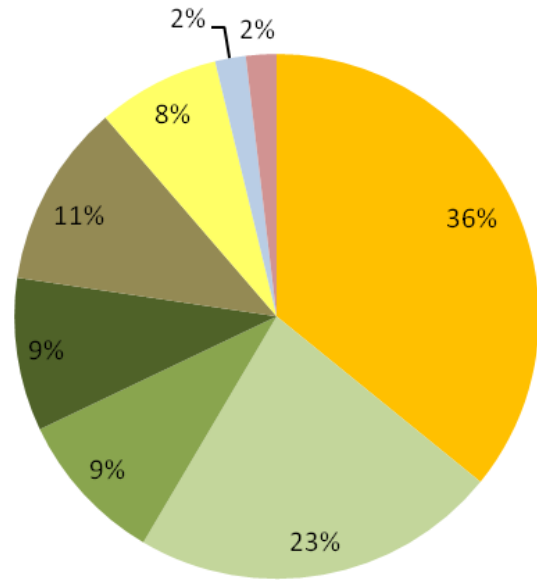


LP	Name of protected area	Area code	Voivodeship	Area (ha)	Population size by SDF	Population size by Wilk et al. 2010	Inventory 2013	Inventory 2014	Trend by PZO	The condition of the population by PZO
1	Chełmskie Calcareous Marshes	PLB060002	lubelskie	4 309,4	31-34	31-34	1-3	0-2		
2	Middle Bug River Valley	PLB060003	lubelskie	28 096,6	30	30	1-3	0		
3	Lower Bug River Valley	PLB140001	lubelskie /mazowieckie	74 309,9	23-30	23-30	2-4	0-1	↓	U1
4	Wkra and Mławka Rivers Valleys	PLB140008	mazowieckie	28 751,5	11-15	11-15	4-9	3-10	↓	FV
5	Upper Nurzec River Valley	PLB200004	podlaskie	3 995,1	9-18	9-18	2	2	↔	FV
6	Wizna Swamp	PLB200005	podlaskie	14 471,0	13-14	13-14	1-4	0	↓	U2
<b>7</b>	<b>Biebrza River Valley</b>	<b>PLB200006</b>	<b>podlaskie</b>	<b>148 508,8</b>	<b>97</b>	<b>97</b>	<b>1-4* (7-29)</b>	<b>7* (50)</b>	↓	<b>U2</b>
8	Upper Narew River Valley	PLB200007	podlaskie	18 384,1	5-45	36-45	0-3	0-1	↓	U1
9	Warmia Site	PLB280015	warmińsko-mazurskie	142 016,2	15-30	15-30	9-11	4-8		
10	Dolina Bzura River Valley	PL080	łódzkie	16 252	-	max. 25	b.d.	b.d.		
11	Całowanie Swamp	PLB140011	mazowieckie	4 214,9	2-3 p	2-3	0	0		
12	Liwiec River Valley	PLB140002	mazowieckie	27 431,5	brak	4-5	3-6	2-3		
13	Kostrzyń River Valley	PLB140009	mazowieckie	14 376,1	1-10	7-10	0-2	0		
14	Pilica River Valley	PLB140003	mazowieckie	35 356,3	4 p	2-3	0	0-1		
15	Low Narew River Valley	PLB140014	podlaskie	26 527,9	5-6	5-10	1-2	0-3		
16	Omulew and Płodownica Rivers Valleys	PLB140005	mazowieckie	34386,6	8-11	7-15	1	1-2		

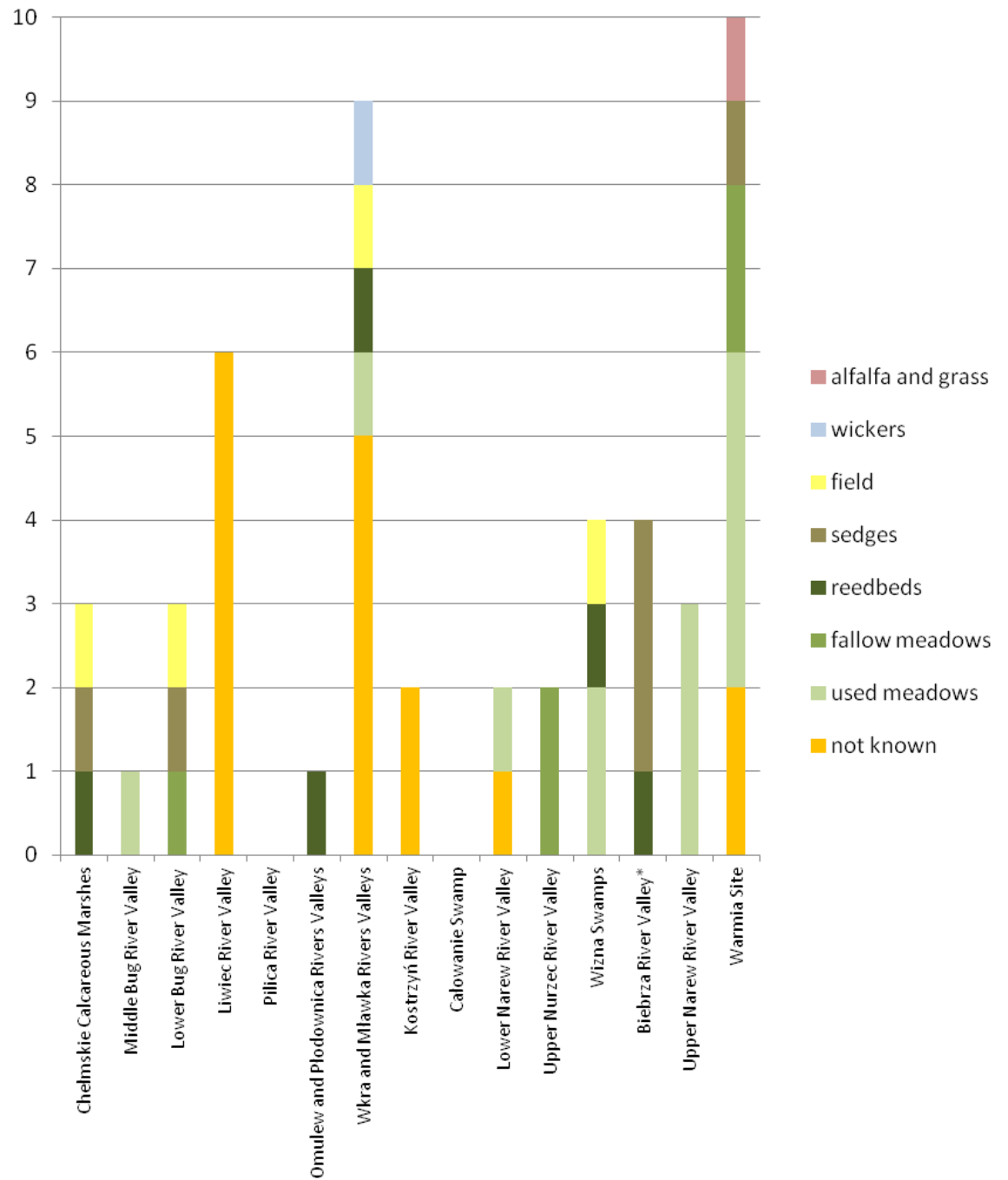
FV (proper), U1 (unsatisfactory), U2 (bad)

\*number of pairs found on 30 plots (squares 2 km x 2 km).





- not known
- used meadows
- fallow meadows
- reedbeds
- sedges
- field
- wickers
- alfalfa and grass



Habitat use (2013)

## Conclusions:

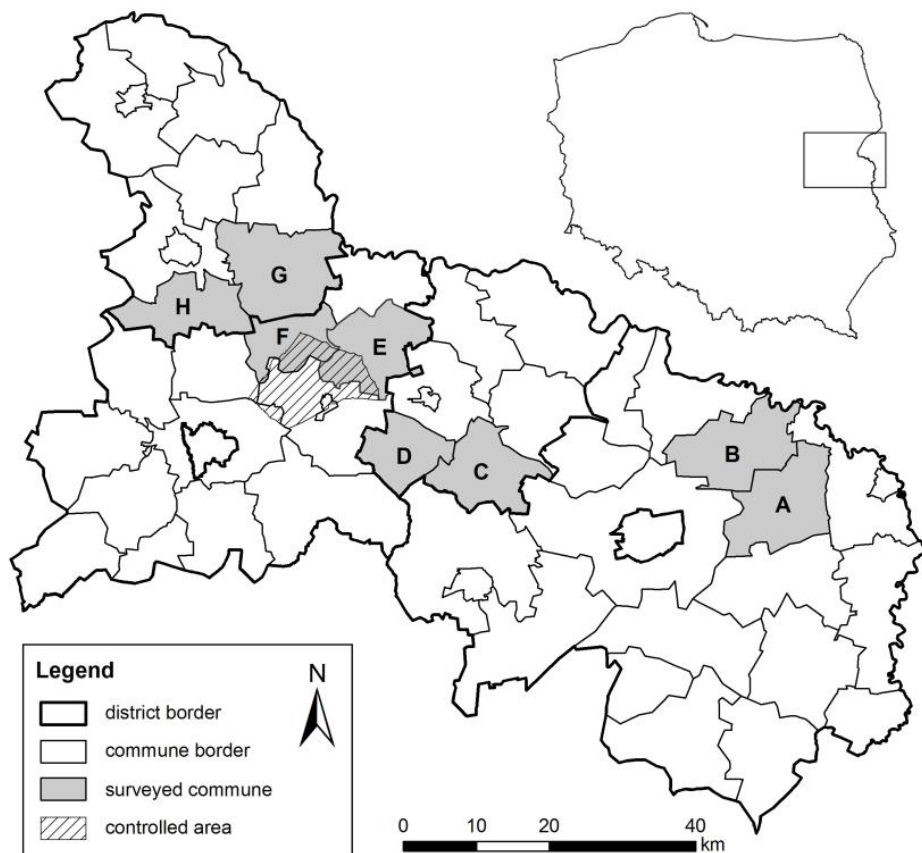
In all inventoried SPA nest no more than **100 pairs** of Montagu's harrier which represent only **3%** of national population of this species.

**97%** of national Montagu's harrier population nests in the agricultural landscape, mainly fields, which are mostly located outside the protected areas.





## Montagu's Harrier monitoring in Southern Podlasie Region (9 sample plots)

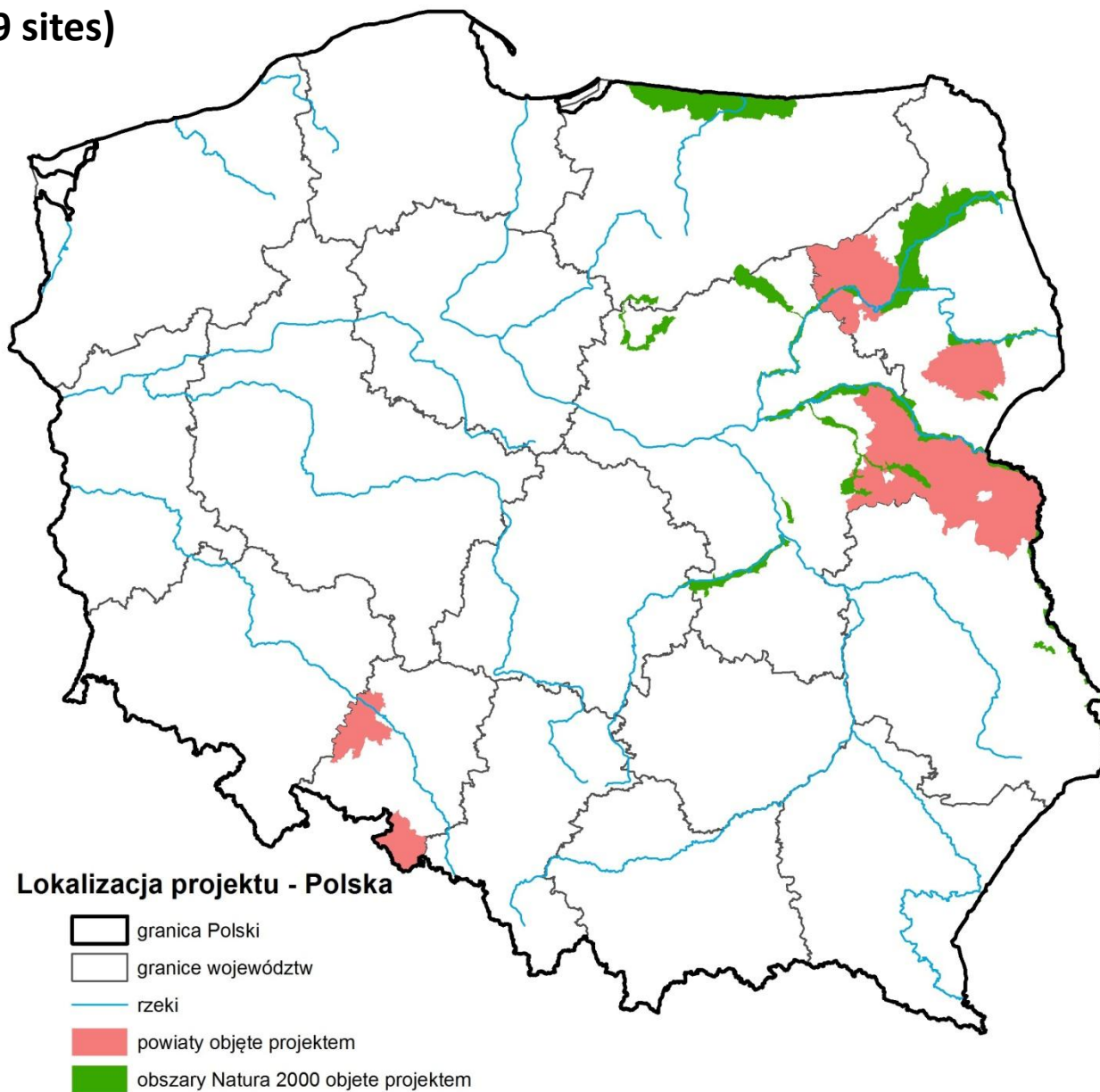


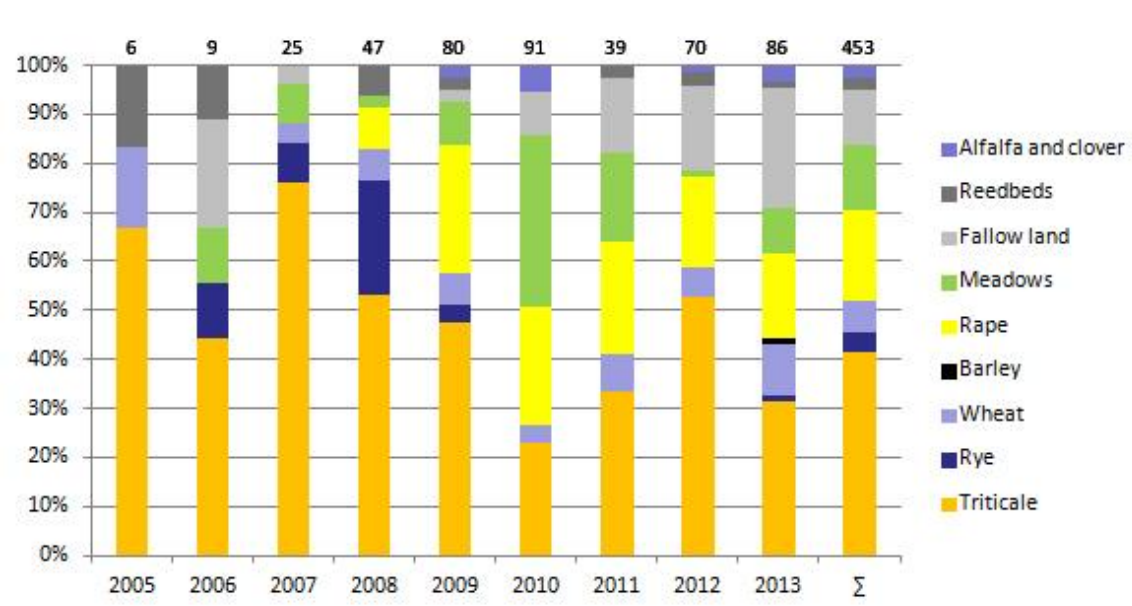
## Montagu's Harrier monitoring in Southern Podlasie Region (9 sample plots)

Number of pairs	Area (km <sup>2</sup> )	1996	1999	2006	2007	2008	2009	2010	2011	2012	2013	2014	Trend
Number of breeding site													
Zalesie Commune	147.16	5-6		3-5		2	2-3	2-3	3-4	3-5	4-5	3	?
		5		3		2	3	3	4	3	4	2	
Rokitno Commune	140.82				5	8	2-3	6-7	4-6	5-7	2-3	5	↔
					2	3	2	3	3	3	5	3	
Olszanka Commune	87.34				6	3-5	3-5	4-6	1-4	4-5	0	1	↓
					4	3	4	2	4	3	0	1	
Huszlew Commune	117.61					8-10	5-8	6-8	7	7	6-7	8	↔
						5	6	5	6	7	4	5	
Przesmyki Commune	117.13					10-11	10-12	8-9	5	8-9	6-9	9	↔
						5	6	4	3	5	3-5	6	
Paprotnia Commune	81.43					5	6	6-7	5-6	5-6	5	6	↔
						3	5	4	4	3-4	2	4	
Bielany Commune	109.60					2-4	3-5	8-10	4	3-4	4-7	3	↔
						4	3	5	2	3	3-6	3	
Repki Commune	168.79					7-8	5-6	8-9	8	4-5	8-15	14	↑
						6	4	5	5	4-5	7-13	9	
„Mordy”area	130		9			8-9	8	6-8	7-8	10-13	12-14	12	↑
						4	4	4	4	4-7	5	4	

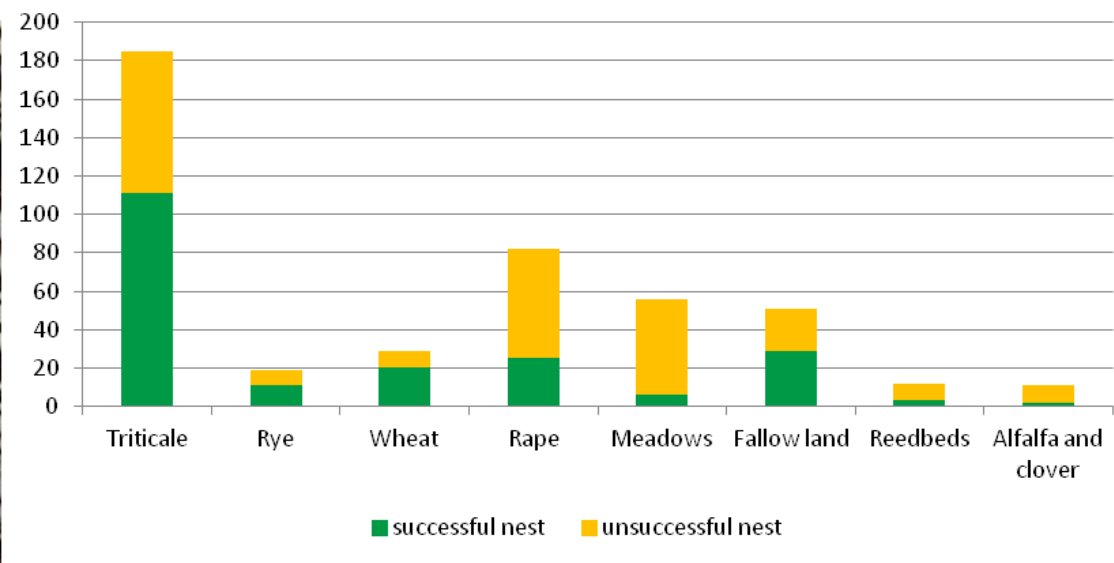


## Nest protection (9 sites)













































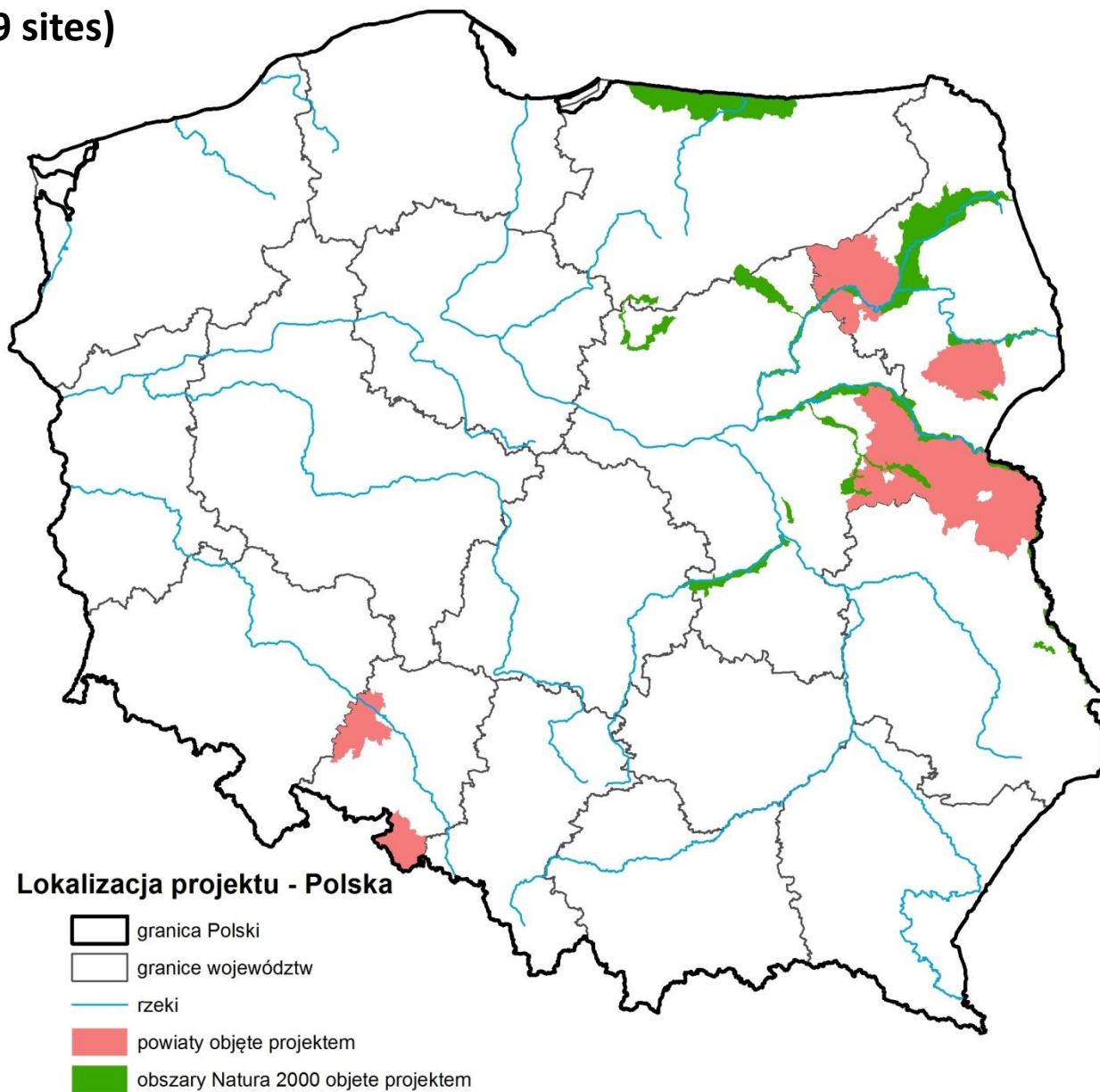






<b>2013</b>	<b>S Podlasie</b>	<b>N Podlasie</b>	<b>Opolszczyzna</b>	<b>Totality</b>
Number of detected breeding sites	68	15	8	<b>91</b>
Number of pairs in detected breeding sites	91	18	17	<b>126</b>
Number of protected nests	33	9	6	<b>48</b>
Number of pairs with known breeding result	74	18	17	<b>109</b>
Number of pairs with losses	33	8	10	<b>51</b>
Number of pairs with success	41	10	7	<b>58</b>
Breeding success (%)	55,4	55,5	41,1	<b>53,21</b>
Number of fledged young	100	23	14	<b>137</b>
Number of fledged young per nest	1,35	1,27	0,82	<b>1,25</b>
Number of fledged young per successful Bp	2,43	2,3	2	<b>2,36</b>
<b>2014</b>				
Number of detected breeding sites	76	40	4	<b>120</b>
Number of pairs in detected breeding sites	145	32	10	<b>187</b>
Number of protected nests	39	7	6	<b>52</b>
Number of pairs with known breeding result	108	28	10	<b>146</b>
Number of pairs with losses	41	9	3	<b>53</b>
Number of pairs with success	67	19	7	<b>93</b>
Breeding success (%)	62	67,8	70	<b>63,69</b>
Number of fledged young	173	41	25	<b>239</b>
Number of fledged young per nest	1,6	1,46	2,5	<b>1,63</b>
Number of fledged young per successful Bp	2,58	2,15	3,57	<b>2,56</b>

## Nest protection (9 sites)





## 9 distric - 9 persons

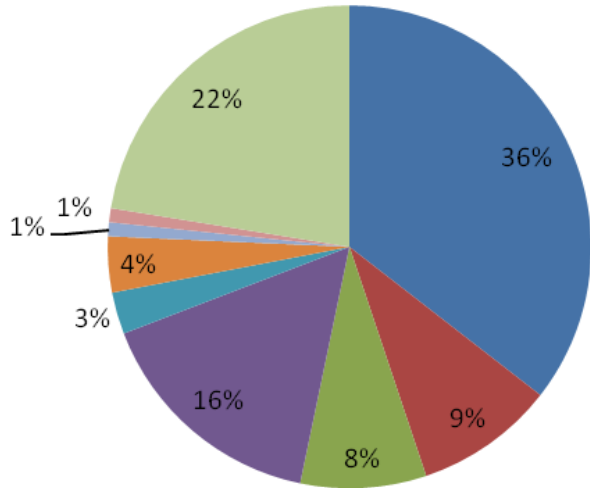
Dominik Krupiński, Andrzej Łukijańczuk, Mirosław Rzępała, Piotr Zabłocki, Michał Wolny, Paweł Mirski, Grzegorz Grygoruk, Michał Wolny, Karol Trzeciński.

Volunteers: Agnieszka Parapura, Piotr Pawłowski, Sylwia Anna Zgorzałek, Jacek Chyła, Kamil Taras, Paweł Nowak, Katarzyna Sartowska, Joanna Kremer, Mirosław Nestorowicz.

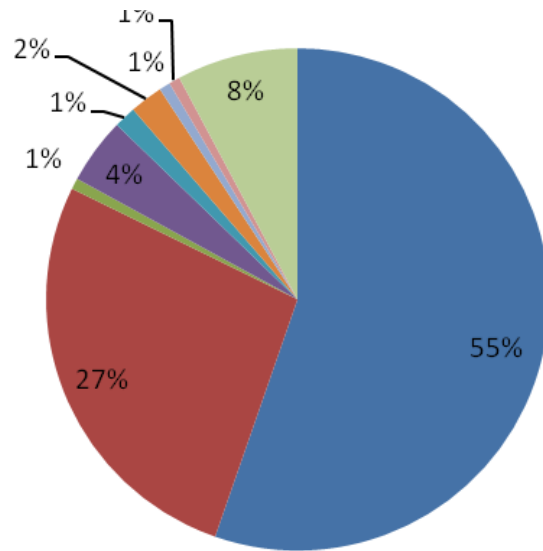
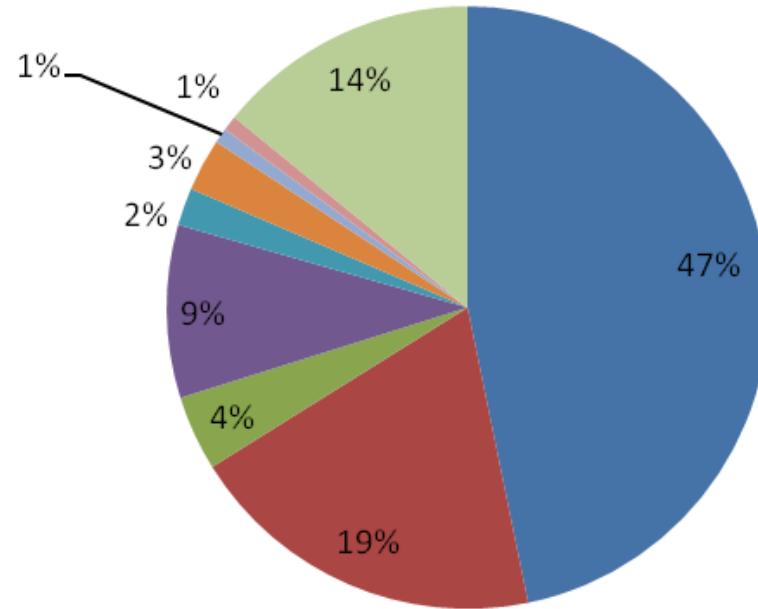
Number of detected breeding sites	91	120	<b>211</b>
Number of pairs in detected breeding sites	126	187	<b>313</b>
Number of protected nests	48	52	<b>100</b>
Number of pairs with known breeding result	109	146	<b>255</b>
Number of pairs with losses	51	53	<b>104</b>
Number of pairs with success	58	93	<b>151</b>
Breeding success (%)	53,21	63,69	<b>59,21</b>
Number of fledged young	137	239	<b>376</b>
Number of fledged young per nest	1,25	1,63	<b>1,47</b>
Number of fledged young per successful Bp	2,36	2,56	<b>2,49</b>



**2013 (n=107)**



**2013-2014 (n=248)**



**2014 (n=141)**

- triticale
- wheat
- barley
- rape
- alfalfa and gras
- meadows
- sedges
- reedbeds
- fallow land

**Breeding habitats**



# Volunteers











29/07/2014








## Reducing of fox population

- Contracts with 19 hunting clubs (2 districts of Polish Hunting Association)
- 600 fox individuals hunted

A photograph of a fox sitting in a field of tall green grass. The fox is looking directly at the camera with large, upright ears. A white thought bubble with a blue outline is positioned in the lower-left foreground, connected to the fox by three small white circles. The background is a soft-focus green field.

No, I did not eat these harriers.  
I am vegetarian!



## Preparation of the National Action Plan for Montagu's Harrier

1. Creation of a working group.
2. Consultation of the Plan project during the meetings with GDOŚ representatives (once every three months).
3. Public consultation during 6 workshops organized in main cities of 6 different provinces: Warszawa, Białystok, Poznań, Lublin, Wrocław, Łódź.
4. Plan project submission in GDOŚ on 15.11.2014.
5. Approval of the Plan by GDOŚ and its implementation.





## What information we can find in the Plan project?

- description of the current situation
- identification and description of main threats
- proposed actions for the achievement of specific objectives
- description of actions, including:
  - *mode for carrying out of action*
  - *location*
  - *involved in the implementation of the action*
  - *calculation of costs*
  - *proposed methods of financing*
- proposed protective measures
- proposed information, education and communication activities
- monitoring methodology and it's range
- proposed scope of research
- proposed management structure
- timetable for implementation
- defining result indicators and methods of their evaluation

It is necessary to prepare the **European Action Plan for the Montagu's Harrier!**





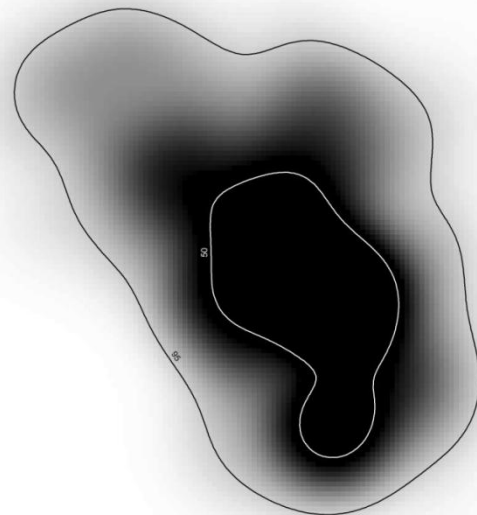
**GPS Telemetry Research**





Yes, that's right! Dominik in fieldwork, it happens 😊

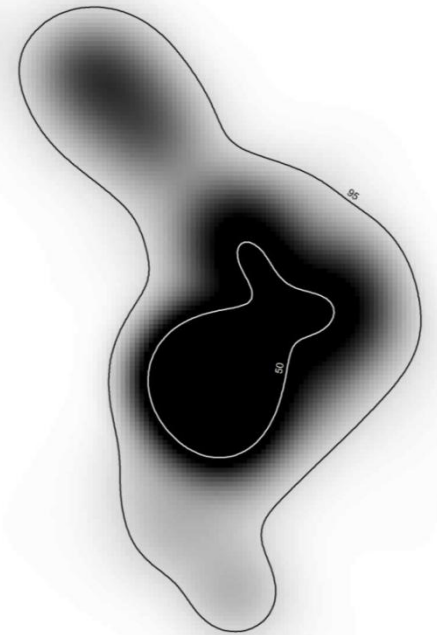




„Karol”  
50% kernel – 1 335 ha  
95% kernel – 6 254 ha



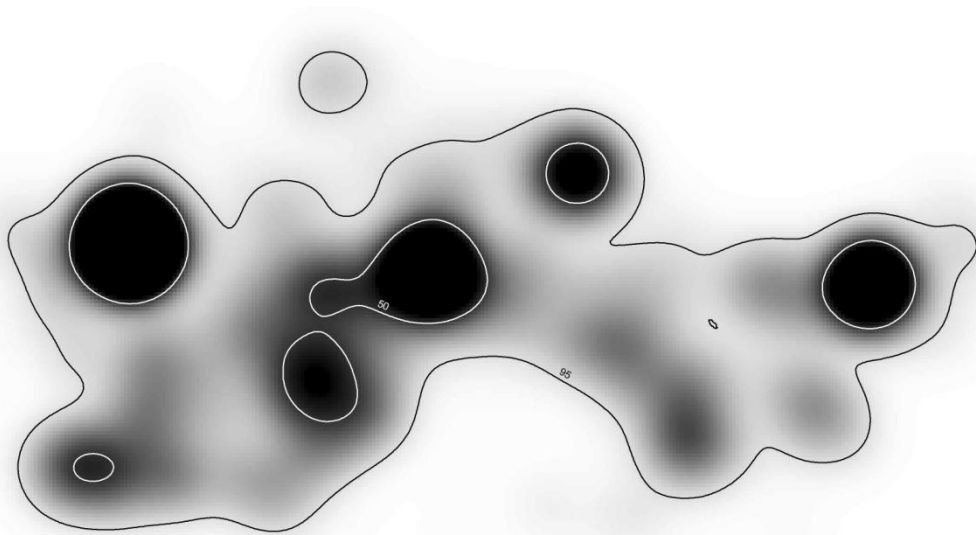




„Przemek”  
50% kernel – 957 ha  
95% kernel – 5 701 ha





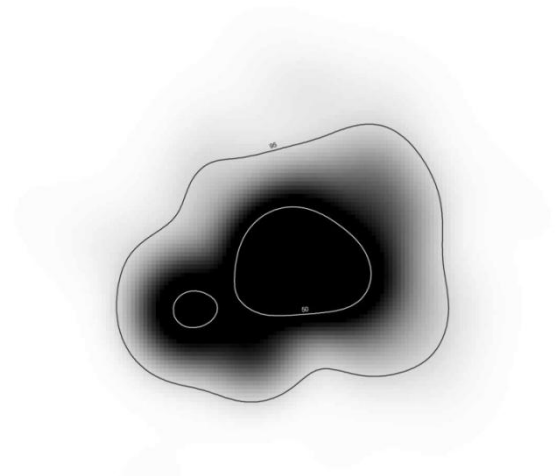


**„Aleksander”  
(the biggest home range)**

50% kernel – 2 682 ha  
95% kernel – 17 531 ha

**Home range (n=15)**

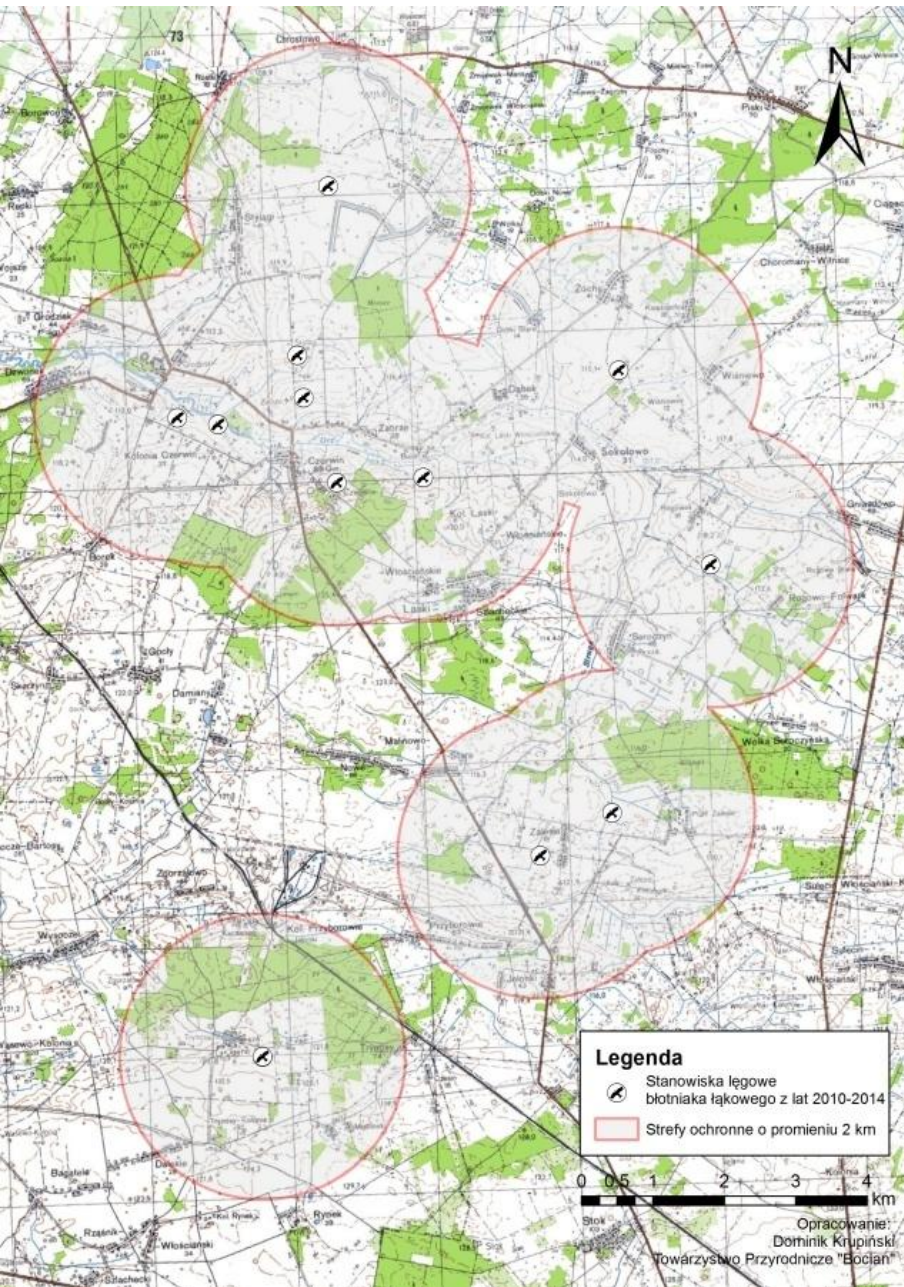
50% kernel – 1 244 ha  
95% kernel – 8 186 ha



**„Eugeniusz”  
(the smallest home range)**

50% kernel – 756 ha  
95% kernel – 3 999 ha







**Aleksandra**



**Elżbieta**



**Aneta**



**Marta**



Monika





<http://pygargus.pl/telemetry>





## **Summary**

### **Why is it necessary to undertake active conservation measures?**

1. Montagu's Harrier is strictly protected in Poland (needs active protection!).
2. It is placed in Annex I of the EU Birds Directive.
3. Large part of the EU population (>20%) of this species nests in Poland.
4. We are observing negative trends in national population (monitoring data).

### **What are the main problems?**

1. It is not listed in the Polish Red Data Book of Animals (2002 edition).
2. 98% of the national population nest in the agricultural landscape in places located outside the protected areas (small chance to get financial support from funds).
3. Only one institution in Poland financing actions in national scale – The National Fund of Environmental Protection and Water Management.
4. Insufficient financial support from public local funds, not to mention local authorities who are not interested in species protection.
5. Little involvement of people (both professionals and volunteers) in the active protection of nests.
6. Little interest in protection of the species by other NGO's.



## In field studies participated:

Dominik Krupiński, Mariusz Grzeniewski, Lechosław Kuczyński, Michał Żmihorski, Jerzy Lewtak, Marta Lewtak, Mirosław Rzępała, Przemysław Obłozza, Maciej Cmoch, Andrzej Łukijańczuk, Karol Trzciniński, Paweł Mirski, Grzegorz Grygoruk, Piotr Zabłocki, Michał Wolny, Grzegorz Grzywaczewski, Tomasz Łukasik, Piotr Dębowski, Sylwia Anna Zgorzałek, Jacek Wełniak, Paweł Białomyzy, Michał Korniluk, Marek Elas, Łukasz Wardecki, Krzysztof Kajzer, Adam Dmoch, Rafał Kryza, Katarzyna Sokołowska-Kryza, Tomasz Rafalski, Wojciech Grzesiak, Radosław Kozik, Agnieszka Grajewska, Szymon Czernek, Wojciech Okliński, Agnieszka Sereda, Jarosław Mydlak, Krzysztof Szulak, Marek Jobda, Paweł Szałański, Rafał Rzepkowski, Adam Dombrowski, Rafał Szczęch, Marek Kowalski, Karol Kustus, Marek Bełtot, Paweł Szczepaniak, Krzysztof Kuś, Piotr Pawłowski, Jacek Chyła, Katarzyna Sartowska, Joanna Kremer, Paweł Nowak, Mirosław Nestorowicz, Agnieszka Parapura, Kamil Taras.



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Dofinansowano ze środków Narodowego Funduszu Ochrony Środowiska i Gospodarki Wodnej



## **In field studies participated:**

Dominik Krupiński, Mariusz Grzeniewski, Lechośław Kuczyński, Michał Żmihorski, Jerzy Lewtak, Marta Lewtak, Mirosław Rzepała, Przemysław Obłóza, Maciej Cmoch, Andrzej Łukijańczuk, Karol Trzcíński, Paweł Mirski, Grzegorz Grygoruk, Piotr Zabłocki, Michał Wolny, Grzegorz Grzywaczewski, Tomasz Łukasik, Piotr Dębowski, Sylwia Anna Zgorzałek, Jacek Wełniak, Paweł Białomyzy, Michał Korniluk, Marek Elas, Łukasz Wardecki, Krzysztof Kajzer, Adam Dmoch, Rafał Kryza, Katarzyna Sokołowska-Kryza, Tomasz Rafalski, Wojciech Grzesiak, Radosław Kozik, Agnieszka Grajewska, Szymon Czernek, Wojciech Okliński, Agnieszka Sereda, Jarosław Mydlak, Krzysztof Szulak, Marek Jobda, Paweł Szałański, Rafał Rzepkowski, Adam Dombrowski, Rafał Szczęch, Marek Kowalski, Karol Kustus, Marek Bełot, Paweł Szczepaniak, Krzysztof Kuś, Piotr Pawłowski, Jacek Chyła, Katarzyna Sartowska, Joanna Kremer, Paweł Nowak, Mirosław Nestorowicz, Agnieszka Parapura, Kamil Taras.



Wojewódzki Fundusz  
Ochrony Środowiska  
i Gospodarki Wodnej  
w Warszawie



**Photos:**

Andrzej Łukijańczuk

Romuald Cisakowski


Mirosław Rzępała

Dominik Krupiński

Marta Lewtak







Is this the end?  
I'll miss public tenders!

**Thank you for your attention!**