Conservation projects in East Poland aiming to enhance meadow waders productivity and future perspectives

Combined Meeting of the Breeding Range States under the AEWA Eurasian Curlew and Black-tailed Godwit International Working Groups
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Michał Korniluk, Edyta Kapowicz, Przemysław Obłoza

Research and Regional Conservation Coordinator in LIFE17 NAT/PL/000015
Natura International Polska

Fot. Wojciech Gotkiewicz
Bird Monitoring in Poland

- **CBS** – Common Bird Survey (1x1 km, 720 plots)
- **WBS** - Wetland Bird Survey (10x10 km, 45 plots)
- **GSM** – Great Snipe Monitoring (75 leks)

Chodkiewicz et al. 2021
Lapwing

73,000–105,000 p.

CBS VU ↓↓ 6%/year

Chodkiewicz et al. 2015

\[ \lambda = 0.987 \]

\[ \lambda = 0.940 \]

Chylarecki et al. 2018, 2021
Great Snipe

400–550 m.

**GSM VU** ↓↓ 8,2%/year

Population size index

Occupancy index

\( \lambda = 0,918 \)

Korniluk et al. 2015

Korniluk in. 2018, 2021
Black–tailed Godwit

1500-2000 p.
λ = 1,006, WBS

Chodkiewicz et al. 2015
Black-tailed Godwit distribution in Poland

1985-1993

2015-2018

Sikora i in. 2007

ornitho.pl
Habitat loss and low productivity

i.e. Macdonald & Bolton, 2008; Roodbergen, van der Werf, & Hötker, 2012, Leyrer 2018
Land use intensification and conversion of grassland into arable lands
Wetlands drainage and changes in the natural hydrological rivers regime
Land abandonment
Predation

1-3 ind./10 km

Grzapczyńska 2007
Recent conservation projects in East Poland aiming to enhance meadow waders productivity
Recent conservation projects in East Poland aiming to enhance meadow waders productivity

<table>
<thead>
<tr>
<th>Description</th>
<th>Years</th>
<th>EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active protection of the Great Snipe in rich fens and river valleys in the Natura 2000 SPA Knyszyńska Primeval Forest (PLB200003)</td>
<td>2017-2019</td>
<td>743 662</td>
</tr>
<tr>
<td>Implementation of the National Action Plan for Great Snipe in Poland - phase 1</td>
<td>2019-2023</td>
<td>2 165 055</td>
</tr>
<tr>
<td>Protection of waders with the use of grazing and small retention objects construction in the area of OSO Natura 2000 Knyszyńska Forest and Narew Upper River Valley.</td>
<td>2021-2024</td>
<td>893 200</td>
</tr>
</tbody>
</table>
Active protection of the Great Snipe in rich fens and river valleys in the Natura 2000 SPA Knyszyńska Primeval Forest (PLB200003)
This are one of our best waders habitats!

Fine, but were are the waders?
PLSKIE TOWARZYSTWO ROZWOJU PTAKÓW
Nesting success monitoring 2017-2019

- Intensive nests survey (every 3-7 days): Lapwing, BT Godwit, Great Snipe, Redshank
- Flotation, temp. dataloggers, habitat characteristics
- Nesting success - DSR (Mayfield 1961, 1975)
- Broods failure causes
Breeding waders within electro-fenceced area

- **BT Godwit**
- **Lapwing**
- **Redshank**
- **Great Snipe** *
- **Ruff**

* Number of males on lek
Breeding waders within electric-fenced area

3.4 nests/ha

Number of nests

- BT Godwit
- Lapwing
- Redshank
- Great Snipe*
- Ruff

* Number of males on lek
Nesting sukces 2017-2019

- 36.9%, N=28
- 39.5%, N=16

- 3.7%, N=9
- 2.1%, N=70

Probability of hatching
Nest predation causes in years 2017-2019 (N=83)

- Unknown
- Desertion
- Agriculture
- Trampling
- Predation – unclassified
- Avian predators
- Mammalian predators

Year: 2017, 2018, 2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Unknown</th>
<th>Desertion</th>
<th>Agriculture</th>
<th>Trampling</th>
<th>Predation – unclassified</th>
<th>Avian predators</th>
<th>Mammalian predators</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td></td>
<td></td>
<td>56%</td>
<td>31%</td>
<td>0%</td>
<td>0%</td>
<td>9%</td>
</tr>
<tr>
<td>2018</td>
<td>28%</td>
<td>23%</td>
<td>44%</td>
<td>16%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>2019</td>
<td>32%</td>
<td>30%</td>
<td>32%</td>
<td>13%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Protection of **waders** with the use of grazing and small retention objects construction in the area Natura 2000 **Knyszyńska Forest and Upper Narew River Valley.**
Knyszyńska Forest

- construction of electric anti-predatory fencing on 30 ha,
- construction of hydrotechnical infrastructure enabling water management on pastures:
  - culverts with damming
  - dikes
  - electric fence
Narew Upper River Valley

„Things to do” list:

- construction of electric anti-predatory fencing on 55 ha,
- construction of hydrotechnical infrastructure enabling water management on pastures:
  - weirs
  - culverts with damming
  - spillways
  - dikes
  - electric fence
Implementation of the **National Action Plan for Great Snipe in Poland - phase 1** LIFE17 NAT/PL/000015
Predators monitoring on two Great Snipe leks 2019-2022

Sezon 1

Sezon 2
Disturbances on Great Snipe leks:
2 lekking seasons, 2 leks, 196 nights

Number of events

93 %

n=314
What is the predation level on Great Snipe leks? = 0!
Future perspectives

Fot. Francisco Badilla
LIFE4WadersPL - Recovery of wet grassland wader populations in Poland through creation of large-scale conservation areas

- **Duration:** 2022-2027
- **Habitat improvement on 7 805 ha**
- **50% increase of breeding waders in 10 reserves**
- **Fledging success > 0.7 in electro-fenced areas**
- **Total budget: 9 445 073 EUR**
Main conservation actions

• Purchase of 220 ha of land
• Rewetting of 920 ha
• Restoration of 298 ha of abandoned meadows
• Introduction of grazing on 429 ha
• Predators control on 5,226 ha
• National black-tailed godwit survey
• Knowledge exchange with Western European organisations
Development of active protection in strategic areas

Introduction of agri-environmental schemes

Creating a refuge with high quality habitats

Nesting and fledging success monitoring

VHF monitoring of Lapwing and BT Godwit chicks survival and mortality causes

Adult BT Godwits GPS tracking
Thank you for listening