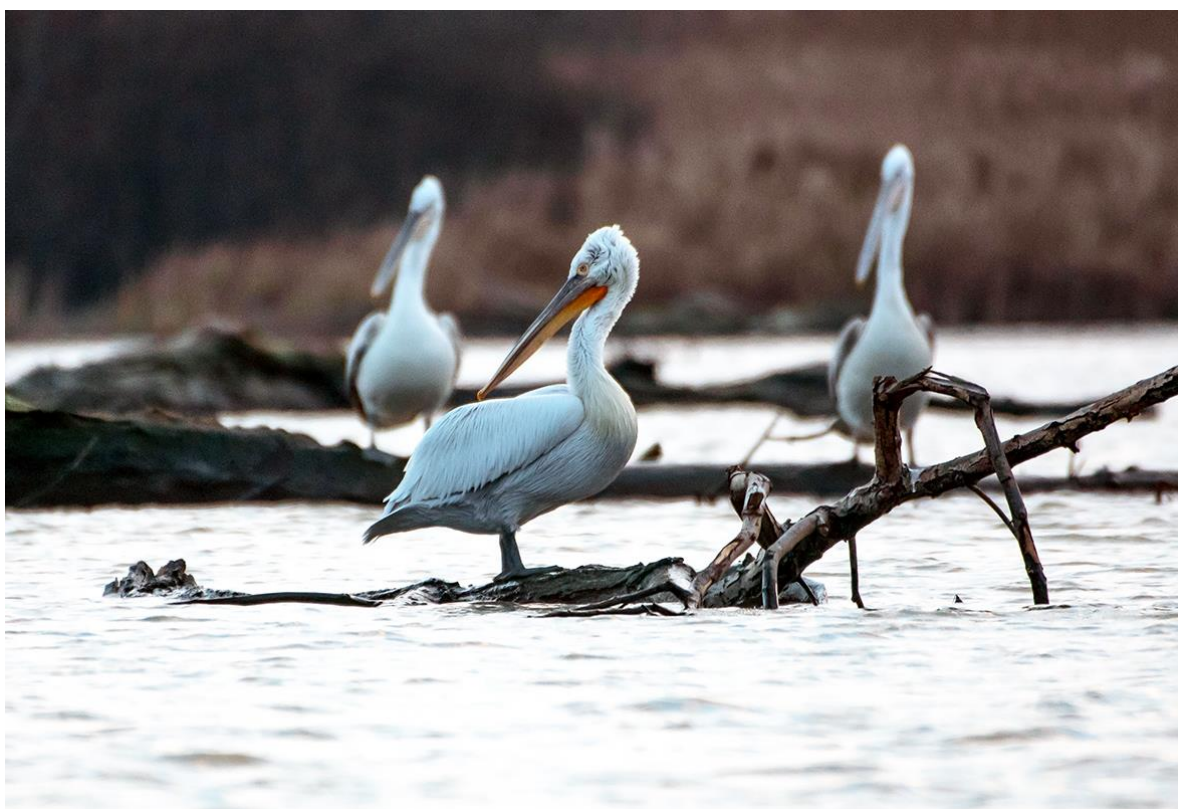


TECHNICAL REPORT

ACTION A.3

***Investigate attitude towards fish eating birds and identify
potential conflict sites***



***Conservation of the Dalmatian Pelican along the Black-Sea Mediterranean
Flyway/Pelican Way of Life
LIFE18 NAT/NL/000716
Rewilding Ukraine
2024***

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1. Introduction

Across Europe, interactions between fish-eating bird species – many of which are strictly protected under international and national legislation – and fish stocks have become increasingly contentious. These tensions are especially pronounced where commercial fishing and aquaculture take place in ecologically sensitive wetlands, including Natura 2000 sites and other protected areas. The presence of large piscivorous birds is often perceived as a direct threat to fish production and local livelihoods, particularly in regions where fishing remains a key economic activity. Such conflicts are intensified by overlapping legal, ecological, and economic priorities and by a general lack of scientific knowledge and awareness regarding the actual impact of these species on fisheries.

Ukraine shares many of these challenges. The Danube Delta and adjacent wetlands are important habitats for numerous fish-eating birds, including the Dalmatian Pelican (*Pelecanus crispus*), one of Europe's largest and most charismatic avian species. Globally classified as "Near Threatened" on the IUCN Red List, the Dalmatian Pelican is listed in the Red Book of Ukraine and enjoys legal protection. In the past, the species bred within the Ukrainian Danube Delta, but breeding has not been recorded in recent years. Nevertheless, the area remains important as a wintering and feeding ground, particularly around Kartal Lake and within the Danube Biosphere Reserve.

Despite its conservation status, the Dalmatian Pelican is often perceived by local stakeholders—such as fishermen, aquaculture operators, and landowners – as a competitor for fish resources. Similar perceptions exist toward other fish-eating species like the Great Cormorant. In the absence of robust data and informed dialogue, these negative attitudes can lead to direct and indirect persecution, including habitat disturbance, nest destruction, and even illegal hunting. This can severely undermine conservation efforts and contribute to further habitat degradation and species decline.

This report presents the first comprehensive study in Ukraine to assess public and stakeholder attitudes toward fish-eating birds and to identify potential sites of human-wildlife conflict. Conducted as part of Action A3 of the Pelican Way of LIFE initiative, this assessment includes surveys and consultations with key stakeholder groups, including fish farm owners, commercial fishermen, protected area managers, educators, and local communities. Special attention was paid to areas where significant overlaps exist between bird habitats and fishing activity.

The findings are intended to inform future conservation and management strategies, guide stakeholder engagement, and support the peaceful coexistence of nature and people. Moreover, they will contribute to the broader regional goal of securing a sustainable future for the Dalmatian Pelican and other species that share Ukraine's rich and dynamic wetland ecosystems.

2. Project sites in Ukraine

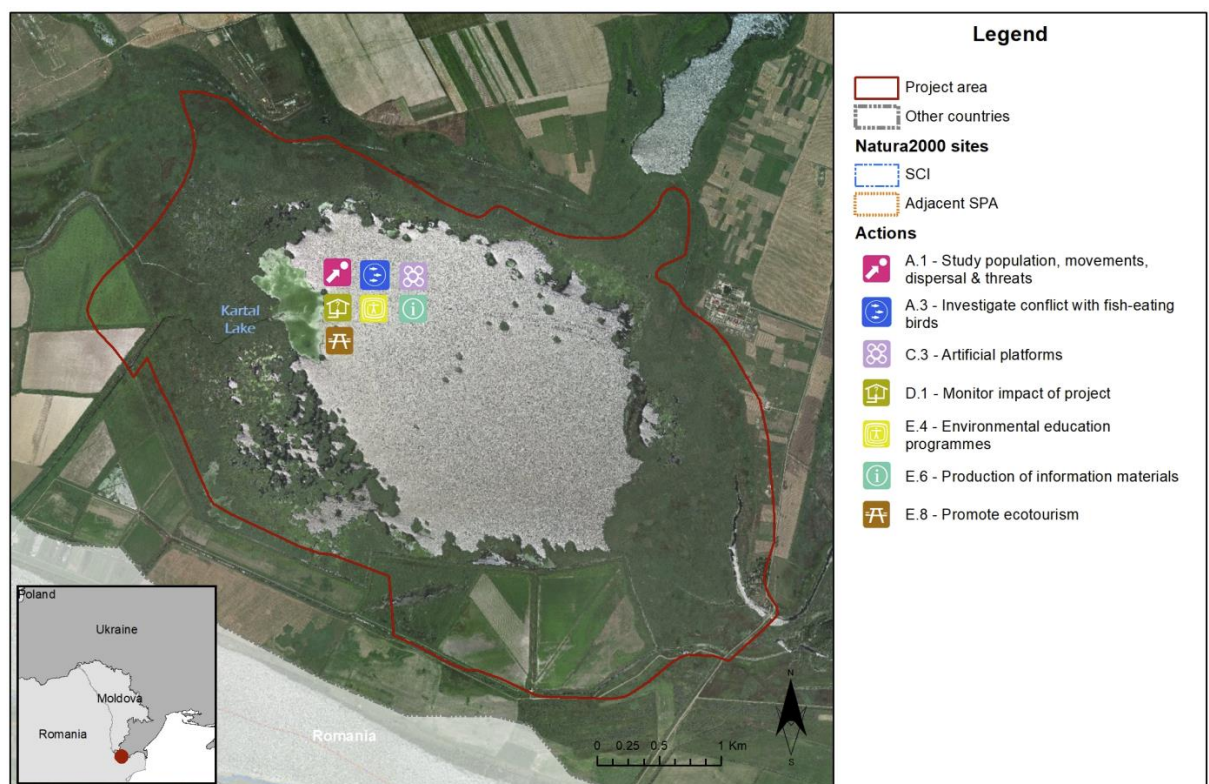
The survey was conducted in two project areas in the Ukrainian part of the Danube Delta, where conflict with fish-eating birds was anticipated. Fishing is one of the main forms of natural resource use at both sites, which can lead to conflict and, consequently, disturbance of pelicans and other waterfowl.

Kartal lake

Kartal lake with a surface of ca 1500 ha was declared a Ramsar site of International importance and is also an Important Bird Area (UA081).

Kartal lake still retains a lot of natural values and properties. Despite the artificial water regime, the lake preserves typical and unique floodplain ecosystem of the Danube lakes. The lake has a status of a wetland of international importance mainly as a habitat for breeding and wintering birds, mammals, fish and amphibians. The lake maintains important biodiversity including rare plant communities of conservation importance. The lake is state's property and leased to concession to a private fishery company.

In spring – summer the lake supports up to 25 000 pairs of breeding birds and more than 40 000 during wintering and migration. The lake hosts more than 1% of the Pygmy cormorant European population and is an important site for foraging of Dalmatian Pelicans (*Pelecanus crispus*) during spring and summer. While in the site, the species suffers from disturbance due to fishing activity.

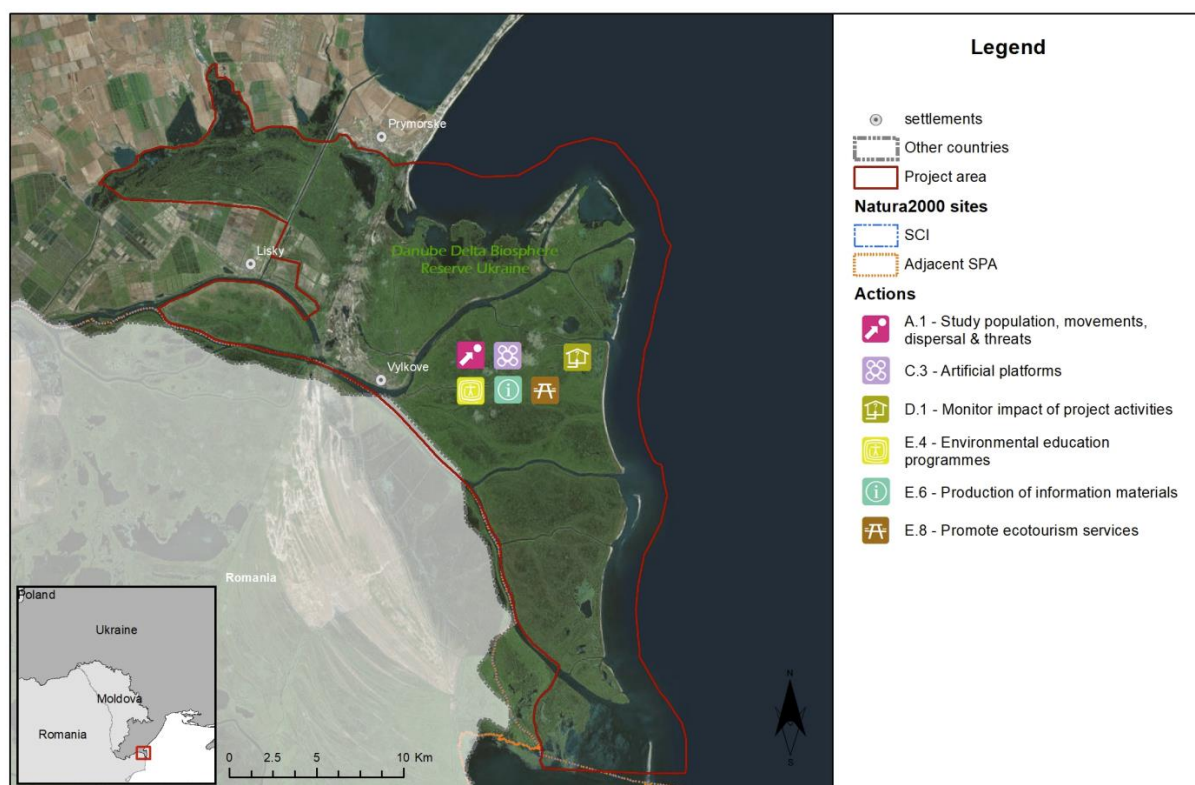


Danube Biosphere Reserve Ukraine

According to Ukrainian legislation the site with a surface of more than 50 000 ha is under protection as a biosphere reserve. The site was declared as RAMSAR site and also is an Important Bird Area (UA082).

The Kiliya Delta, the only growing part of the Danube Delta and one of Europe's youngest landforms, remains largely in its natural state and supports exceptional biodiversity. As part of the Danube Biosphere Reserve, it is one of Europe's key biodiversity hotspots, particularly known for its importance to birdlife, including waterfowl and species with special conservation status. The area is dominated by reed beds interspersed with slow-flowing waters, freshwater and saline lakes, forest patches, lagoons, and floating reed islets – covering over 70% of the reserve's surface. These diverse aquatic habitats are vital for nesting and roosting birds such as gulls, terns, waders, and pelicans, including breeding attempts by the globally threatened Dalmatian Pelican. Ermakov island of the Danube Biosphere reserve with total area of about 2400 ha is one of the hot spots for biodiversity and important bird breeding and roosting site.

From time to time, Dalmatian Pelicans attempt to breed within the Ukrainian Danube Biosphere Reserve, primarily in areas along the sea coast. Approximately 150 individuals remain in the region throughout most of the year, making it an important site for the species. In addition to being a potential breeding ground, the area also serves as a key roosting and foraging habitat for Dalmatian Pelicans. In recent years, the number of wintering birds has been gradually increasing, likely due to milder winters associated with climate change.



3. Objectives of the survey

The survey was conducted as part of the Pelican Way of Life initiative, with three objectives in mind:

- Investigating the attitude of key stakeholders including fishermen and owners of fisheries and reservoirs towards fish-eating birds;
- Collecting information on losses or perception of losses;
- Identifying potential sites with risk of persecution.

4. Methodology

Interviews were conducted in two initiative areas in Ukraine where conflicts with fish-eating birds were anticipated: Lake Kartal and the Danube Biosphere Reserve (primarily involving residents of Vylkove town). To explore the nature of these conflicts, a dedicated questionnaire was developed in March 2020 by the BSPB Project Coordinator. This questionnaire was translated into Ukrainian and served as the foundation for all interviews (Annex 1).

The survey was conducted in two phases: from August 2020 to August 2021, and at the end of 2024. COVID-19-related restrictions on face-to-face meetings and interviews significantly affected the implementation of the survey during the first year and a half of the project. Later, the war also had a major impact on the ability to conduct interviews with fishermen and other stakeholders. As a result, the assessment was only finalized at the end of 2024.

In total, 19 interviews were carried out: four near Lake Kartal in August 2020, two in the Danube Biosphere Reserve in July 2021, three more in August 2021, and ten in the Reserve during the 2024 phase.

The questionnaire guided face-to-face, open-format interviews with selected stakeholder groups. Data collection during the first phase was carried out by Rewilding Ukraine staff, while in the second phase, a trusted local stakeholder – well known in the area after more than 20 years of residence – conducted the interviews. This familiarity helped build trust and encouraged candid responses.

Target respondents included professional and recreational fishermen, fishpond and aquaculture operators, fishery managers and staff, anglers, nature managers, and representatives of relevant local authorities. Interviews were conducted anonymously and often framed as informal conversations to foster openness and increase the likelihood of receiving honest, detailed answers. The interviewer filled in the questionnaire only after the conversation concluded.

The questionnaire covered seven main themes:

1. Overview of fishing activity, including trends and socio-economic context;
2. Challenges affecting fishing operations;
3. Presence and behavior of fish-eating birds (species, abundance, trends);
4. Conflicts or problems caused by these birds;
5. Current measures taken by fishery operators;
6. Suggested solutions for mitigating conflicts;
7. Additional concerns (e.g., hunting, locally raised issues).

Each interview concluded by assessing the respondent's stance on the use of illegal methods as a form of conflict mitigation.

Given the relatively small sample size, the survey was not statistically representative. Instead, a thematic and holistic analysis was applied, aiming to understand how people perceive and interact with fish-eating birds, and how these attitudes are shaped by their socio-economic and cultural context. Findings were summarized and presented in this report.

5. Analysis and conclusions

Nineteen questionnaires from Ukraine were collected and analyzed, all completed by **fishermen, fish pond workers, and managers** of various ages from the Danube Delta and Kartal lake area.

Fishermen do not consider **fish-eating birds** a major problem for their industry. If they have any concerns, they are mostly directed towards **cormorants rather than pelicans**.

However, **fish pond owners and workers** see these birds as a significant issue, as they prey on fish in their ponds and also cause diseases. To deter them, they regularly employ various methods, including **signal tapes, night-time spotlights, patrolling boats, and noise scarers**. While their primary complaints also focus on **cormorants**, they express concerns about **pelicans** as well.

Most respondents, particularly fishermen, **hold a positive view of pelicans**, appreciating them as a **symbol of the Danube Delta**. In contrast, **fish pond workers** tend to be less favorable toward pelicans.

Some respondents suggest solutions to mitigate **human-wildlife conflicts**, such as **educational initiatives, school engagement, compensation for fish farms, designated feeding areas for birds, and regulating great cormorant populations**.

Regardless of their views, all respondents **oppose illegal bird control activities**.

Annex 1. Questionnaire in Ukrainian

Анкета

Особиста інформація співбесідника

Дата інтерв'ю: код SPA:
Ім'я та вік:
Рід занять:
Організація/Агентство:.....
Населений пункт:
Інше:

Питання:

1. Скільки років ви проживаєте в регіоні? Ви багато років працюєте в цій сфері?
Скільки років ви рибалили/полювали в цьому районі?

.....
.....

2. Чи задоволені Ви своєю роботою та доходом? Чи достатньо риби?

.....
.....

3. Скільки ставків/рибних господарств/водосховищ ви маєте під своїм доглядом?

.....
.....

4. Чи є в місцевості достатньо ресурсів для вашої роботи/рибні
ставки/водойми/мисливські угіддя?

.....
.....

5. Чи є якась інфраструктура для догляду за вашою роботою/тваринами/рибними
ставками/водоймами? Якщо так, чи в хорошому стані?

.....
.....

6. Чи вірите ви, що ваші діти у майбутньому продовжать цю роботу? Чому?

.....
.....

7. Чи спостерігали ви якісь зміни в присутності диких птахів або ссавців протягом останніх десяти років? Якщо так, то який вид і які могли бути причинами цих змін?

.....
.....

8. Чи мали місце пошкодження вашої продукції за останні десять років? Оцініть їх за об'ємом (1 – маленькі, 2 – середні, 3 – великі, 4 – дуже великі)).

.....
.....

Хвороби Нелегальні дії..... Рибоїдні птахи.....

Погані погодні умови..... Ссавці..... Інше.....

9. У разі збитків щодо виробництва риби, наприклад через рибоїдних птахів або ссавців, які заходи ви вжили, щоб адаптуватися до цього?

.....
.....

10. Чи ви задоволені підтримкою, яку ви отримуєте від Державного агентства меліорації та рибного господарства України щодо їхньої реакції на вашу ситуацію та наданої компенсації? Для кожної оцінки: 1 - Зовсім ні, 2 - Трохи, 3 - Не зовсім, 4 - Цілком задоволений

Відповідь..... Компенсація

.....
.....

11. Чи знаєте ви про акваекологічні заходи? Що ви про них думаєте?

.....
.....

12. Яких змін потребує система державних компенсацій?

.....
.....

13. Що ви думаєте про птахів? Чи завдають вони шкоди?

.....
.....

14. Чи відомі вам випадки переслідування птахів, таких як чаплі, баклани та пелікани?

.....
.....

15. Хто, на вашу думку, має причини переслідувати рибоїдних птахів? Оцініть кожну групу: 1 – Дуже важливо, 2 - Важливо, 3 – Менш важливо, 4 - Неважливо.

Рибалки..... Мисливці..... Браконьєри.....

Власники рибних господарств або водойм

Інші.....

.....

.....

16. Які з птахів у центрі негативної уваги – баклани, чаплі, пелікани, качки, орлан-білохвіст тощо.?

.....

.....

17. Які основні види пошкоджень завдають ці рибоїдні птахи? Опишіть їх і дайте оцінку їх розміру за останнє десятиліття (1 - малі, 2 - середні, 3 - великі, 4 - дуже великі)).

.....

.....

18. Чи могли б ви вказати райони, де найчастіше відбуваються переслідування або негативні випадки з рибоїдними птахами?

.....

.....

19. Чи відомі вам види діяльності (відстріл, руйнування гнізд, відгін, накриття рибника), пов'язані з рибоїдними птахами, які використовуються у вашій місцевості? Опишіть їх і розподіліть за ступенем використання: 1 – Мало, 2 – Середньо, 3 – Багато, 4 – Дуже багато.

.....

.....

20. Які ваші пропозиції щодо мінімізації рівня конфлікту між людиною та рибоїдними птахами в регіоні?

.....

.....

21. Чи вважаєте ви, що вживаються заходи для запобігання цьому конфлікту? Якщо так, то які?

.....

.....

22. Ви коли-небудь бачили пеліканів у регіоні? Коли, де, скільки?

.....
.....
23. Вам подобаються пелікани? Що ви думаєте про Пеліканів??

.....
.....

24. Ви коли-небудь знаходили мертвого пелікана? Якщо так, чи маєте ви уявлення про причину його смерті?

.....
.....

Наприкінці інтерв'ю спробуйте зрозуміти, чи виступають респонденти за чи проти використання незаконних дій для запобігання конфлікту між рибоїдними птахами як формального методу контролю, і відзначте це.