



LIFE18 NAT/NL/000716

Mid-term Report
Covering the project activities from 01/09/2019 to 31/03/2025

Reporting Date
30/06/2025

LIFE PROJECT NAME or Acronym
Pelican Way of LIFE

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2 List of key-words and abbreviations

BBF – Bulgarian Biodiversity Foundation
BSPB – Bulgarian Society for the Protection of Birds
CM – Consumable Costs
DP – Dalmatian Pelican
EA – External Assistance
EFA – Executive Forests Agency, Bulgaria
EQ – Equipment Costs
GWP – Great White Pelican
HEDNO – Hellenic Electricity Distribution Network Operator
HOS – Hellenic Ornithological Society
INFRA – Infrastructure Costs
IUCN – International Union on the Conservation of Nature
IWC – International Waterbird Census
MOEW – Ministry of Environment and Water (Bulgaria)
MTR – Mid Term Report
OC – Other Costs
OH – Overhead Costs
PE – Personnel costs
PNPD – Persina Nature Park Directorate
RE – (Stichting) Rewilding Europe
RDD – Rewilding Danube Delta
RU – Rewilding Ukraine
RFD – Regional Forest Directorate, Bulgaria
RIEW – Regional Inspectorate of Environment and Water, Bulgaria
SOR – Romanian Ornithological Society/BirdLife Romania
SPP – Society for the Protection of Prespa
TR – Travel and Subsistence Costs

3 Executive Summary

The project aimed at assuring the conditions for long-term conservation of the Dalmatian Pelican (*Pelecanus crispus*) in core areas in Greece, Bulgaria, Romania and Ukraine. Ukraine has been included in the project areas because the conservation of the species on the Ukrainian part of the Danube Delta is crucial for the conservation on the Romanian part, as this represents one population.

The project mainly aimed at:

- providing a solid knowledge base for the monitoring and management of the Dalmatian pelican;
- implementing concrete interventions to reduce mortality (illegal killing, electrocution) and to enhance the breeding success;
- gaining the support of the key stakeholders for the conservation of the Dalmatian pelican.

The main expected outputs of the project were:

Action A1/A5: The development of a knowledge base regarding Dalmatian pelicans and the standardization, at international level, of monitoring methods.

Action C1: The installation of bird diverters on powerlines in order to prevent mortality through collision/ electrocution.

Action C2: The development of a patrolling scheme in order to reduce disturbance, persecution and illegal killing.

Action C3: The construction/restoration of nesting platforms in order to facilitate breeding.

Besides this, a strong stakeholder involvement and capacity building component, carried out in the frame of the E actions, was raised the support to the core stakeholders (fishermen, boatmen etc.) for reducing illegal killing of the Dalmatian pelican.

The most important deliverables of the project were:

Action A1: A monitoring report that describes in detail the results of all the monitoring activities done in the target countries, such as population size and distribution, survival rates, breeding success, mortality factors etc.

Action A4: A GIS database that gathers and visualizes all the geographical data gathered regarding the target species.

Actions A2 and A3: Reports describing the main risks for the Dalmatian pelican: illegal killing and collision/electrocution along powerlines.

Action A5: A Monitoring Manual, which did not only serve as a guidance during the project but will do so also after it, and also by other parties involved in the conservation of the Dalmatian pelican.

Actions D: The report of the monitoring of the impact of the project activities on the Pelican population.

Actions E: A comprehensive set of audio-visual materials, awareness raising tools and gadgets, videos and media output and a range of awareness raising and educational events to gain the support for the conservation efforts.

The project has progressed successfully (see GANTT in Annex 1), although there have been some initial delays due to the outbreak of the COVID-19 pandemics. The limitations due to the pandemics have started right when the first field season of the project was planned to begin. Besides this, the installation of the bird diverters on powerlines started later than foreseen due to lengthy negotiations with the power companies.

In action A1 a first detailed evaluation of the status, distribution, movements and mortality rates of the Dalmatian pelican was made, mainly through tagging Pelicans, direct observations, telemetry, and coordinated Spring counts in all the countries. In the frame of Action A2 a methodology has been developed for the assessment of collision risk with powerlines and for the mapping high risk areas at key sites. This methodology has been used for the monitoring of the key intervention sites, where correction of lines was then carried out. This was done in parallel with Action A3 in which questionnaires for investigating the attitude towards fish eating birds were submitted to key stakeholders. The data collected in the frame of these actions have been gathered in a GIS database that was developed in Action A4 and is now available to be consulted. In order to make sure that all the actors involved in monitoring actions use the same approaches a monitoring manual has been developed in the frame of Action A5 following to the development of a dedicated workshop in which the methodological details were discussed.

Regarding the concrete interventions, after some initial delay due to negotiations with the power companies, over 11 km of powerlines have fitted with bird diverters in Romania and Bulgaria, and in Greece 4 km of lines have been completely insulate and another 4 km have been buried by the competent management company. Patrolling schemes have been activated in Greece, Bulgaria and Romania (Action C2) and have been used for patrolling until the end of the project and beyond. In Action C3, on the basis of the production of drawings of nesting platforms, 12 new platforms have been constructed (9 in Bulgaria and 3 in Ukraine) and the existing ones have been restored, leading to formation of a new Dalmatian pelican colonies. The success of all these activities have been monitored constantly (D1).

Also, the communication activities have progressed very intensively. In action E1 a visual archive was created, and 75+ short video clips were produced in different languages. 863.000 persons were reached through project website and social media and more than 10 million by media and other channels. Along with this various information materials (leaflets, banners, gadgets) have been produced and distributed during information activities (Action E6). Intensive experience exchanges have been carried out (Action E2) with representatives of 9 other LIFE projects and other experts. In the frame of Action E3 a rapid rescue corps has been developed, and its activities were documented in 2 video clips. School programs and materials have been developed in all the project countries and been used for educational activities (Action E4), involving hundreds of children. The international Pelican education camp held in the Romanian Danube Delta concluded the educational programs. The capacity building workshop for conservationists (Action E5) has successfully developed with the participation from Albania, Northern Macedonia, Montenegro, and Turkey. In Action E7 local guides and boatmen have been involved in 3 training workshops in Bulgaria and 2 in Romania. In the frame of Action E8 meetings and agreements have been made with tourism professionals in all the countries, a bird guide and birding leaflets have been produced (Greece) and visitor infrastructures have been developed (Bulgaria). In Action E9 The Pelican yard at Poda Center was entirely completed, and a surveillance system was installed, which was used also for educational purposes. Replication was encouraged through a training for boatmen and tourist guides in the Oder Delta (Action E10), and RE has developed a dedicated online learning tool, targeting at least 5000 rangers and nature guides. Besides this, the Pelican Way of LIFE partners contributed to the production of a feasibility study for the reintroduction of the pelican to the Netherlands and Belgium.

Due to the COVID-19 limitations most of the A Actions (except A4) have been blocked in the first months and therefore started with a delay. Nevertheless, the delays were fully recovered and in fact, actions C2 and C3 have started timely. Action C1 has suffered some delay due to

long-lasting negotiations with the competent power companies in Greece, Bulgaria and Romania. The biggest problem the project incurred was the start of the war in Ukraine, due to which the activities in this country have been severely affected, although not completely blocked.

No major changes have been made, only minor budget adjustments to better calibrate the activities (see chapter 8).

4 Introduction

The project targeted the Dalmatian Pelican (DP), listed in Annex I of the Birds Directive. The species is classified as Near Threatened in the global IUCN 2017 Red List and it is also listed in Appendix II of the Bern and Bonn Conventions and in Annex II of AEW. The world breeding population of the DP is estimated at 7,347-8,993 pairs with the Mediterranean-Black Sea flyway populations holding ca. 42-54% of the global population of the species. Its breeding distribution is still restricted to a small number of sites, which makes the species extremely vulnerable. The population increase has only taken place in few colonies, masking fluctuations and decreases that were observed elsewhere.

The Dalmatian Pelican faces a series of threats: collisions with powerlines, lack of suitable habitats, disturbance, direct persecution by fishermen and lack of knowledge by the local communities. These threats, combined with poor standardization in monitoring and reporting, make the fate of species dependent on conservation actions.

The project has been a major effort for the conservation of the Dalmatian Pelican, within EU and at global scale. It aimed to reduce the threats and to improve the habitats in 27 SPAs in Romania, Bulgaria, Greece covering all the EU breeding range and Ukraine. In addition, the project aimed to support some capacity building and research in Turkey, Albania, Montenegro and North Macedonia.

Being a fish-eating bird the conservation of the Dalmatian pelican has several socio-economic implications, which are actually one of the main threats (mentioned further up). Therefore the work with the mainly concerned stakeholders (mainly fishermen) has been one of the most important components of the project.

The project has applied a flyway approach, therefore the activities planned in Ukraine were important because pelicans breeding in the Romanian part of the Danube Delta often feed in the Ukrainian part. Important dispersal areas are also located in Ukraine, which is why it was considered crucial to enhance the conservation conditions also in this country. Similarly, supporting the conservation in the other countries along the flyway was expected to be beneficial for the population breeding in the EU.

To face these threats the Pelican Way of LIFE project had the following objectives:

- To improve the knowledge on the importance of specific threats, sites and the migration ecology to be used also in future management and conservation activities;
- To involve local stakeholders in a set of conservation measures to reduce illegal killing and disturbance at key sites along the flyway;
- To reduce direct mortality from collisions with power lines;
- To improve nesting conditions through habitat improvement actions and patrolling;
- To enhance community pride and support for the conservation of Dalmatian Pelican, and the N2000 sites
- To raise awareness of the local populations about the species and to increase the

engagement of stakeholders in the species conservation;

The outputs this project aimed to achieve are in line with those identified in the European Species Action Plan.

Hence, the main expected and achieved results were:

1. Improved knowledge of the numbers, distribution, nesting sites, key stopover and concentration areas to help better planning of the conservation actions. This has been achieved, in fact now a thorough knowledge basis, a GIS webtool and a standardized monitoring protocol are available.
2. Stabilization of the distinct Dalmatian pelican subpopulation in Western Greece, survival and stabilization of the newly established colonies in Belene (BG) and Lake Tasaul (RO), increase of the Dalmatian pelican population in EU by 5-10 % for 5 years. In Greece the population has indeed been stabilized, whereas in Romania and Bulgaria it has increased by 20% and 40% respectively. Data from Ukraine are not reliable due to difficult working conditions.
3. Improved breeding and roosting conditions through provision of new platforms in Bulgaria and Ukraine. Finally, 9 new platforms were built in Bulgaria and three in Ukraine, and the damaged ones were repaired or reconstructed.
4. Reduce species disturbance and mortality by persecution by introducing new patrolling and surveillance schemes in 7 SPAs in Romania, Bulgaria and Greece. The patrolling has allowed the protection of the colonies throughout the project, and the system is now ongoing.
5. Reduced collision with powerlines in Bulgaria, Romania and Greece through installation of bird diverters along powerlines (2 km in Bulgaria, 4 km in Greece and 4 km in Romania) in key SPAs of international importance for the DP. Finally, 11 km of powerlines were fitted with bird diverters (BG and RO), 4 km were completely insulated and 4 km were buried (GR).
6. Key stakeholders trained on mitigation and avoidance methods in order to reduce the conflict with fish eating birds and disturbance: aquaculture farmers, anglers, boatmen, tourist guides and Management Authority staff. The dissemination activities have reached representatives of crucial stakeholders and the evaluation in Action D3 has shown that indeed the project had a positive impact on stakeholders.
7. Experts from the project countries and Turkey, Albania, Montenegro and North Macedonia trained in pelican monitoring and conservation techniques. The training workshop was attended by 17 experts from Bulgaria, Albania, Republic of North Macedonia and Montenegro.

5 Technical part

5.1 Technical progress, per Action

Action A1. Study the current population status, movements, dispersal, threats and key sites along the flyway route

Objective of the action:

Monitoring of the conservation status and distribution of Dalmatian pelican through:

- Identify survival and mortality through telemetry and ringing
- Coordinated Spring counts
- Breeding and wintering population assessments
- Migration at bottleneck sites

Foreseen start date: 01.09.2019	Actual start date: 01.09.2019
Foreseen end date: 30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress:

Greece:

Telemetry and ringing activities

HOS conducted totally 11 trapping missions in the two project sites. In the first missions, the project staff was accompanied by experts from the Society for the Protection of Prespa who also joined in order to train and share their experience in trapping and tagging pelicans with HOS. The trapping missions proved more complicated than originally thought, as unlike other breeding colonies, DP in Amvrakikos and Messolonghi have numerous islets where birds can roost. In addition, water levels made difficult the manoeuvring of boats to grant fast access to the islets, making even more difficult the success of trapping attempts. Different trapping techniques and locations were tried, and while the purchase of two DP decoys seemed to help in the trapping of an adult and an immature, eventually the effort invested to trap adult individuals was deemed not to be cost-efficient and that a change of strategy was needed. Finally, it was decided that older juveniles should be tagged instead, as these were relatively easier to trap. In total, HOS tagged six individuals (three adults, one immature and two juveniles) in Amvrakikos and Messolonghi (one and five individuals respectively). Out of the six tagged birds two have died, while four are still alive, moving among and breeding in the wetlands of the western Greek coast. Additionally, throughout the project 113 chicks were also fit with coloured rings in their breeding colonies in Amvrakikos and Messolonghi. Both the GPS tracking and the colour ringing activities have helped confirm the existing theory that communication and exchange of the populations in Western Greece are with the northern populations is very scarce (although two juveniles have been confirmed to winter in Kerkini), and that birds do seem to limit their movements along the wetlands along the western coast of Greece. Again, young individuals might disperse further along the coast, reaching up to Montenegro, but in a very small percentage. Also, satellite telemetry has helped identify new wetlands intensely used by DP particularly during the winter months. All this new information gathered helps better design future conservation actions and to identify new important wetlands and movement corridors for the species.

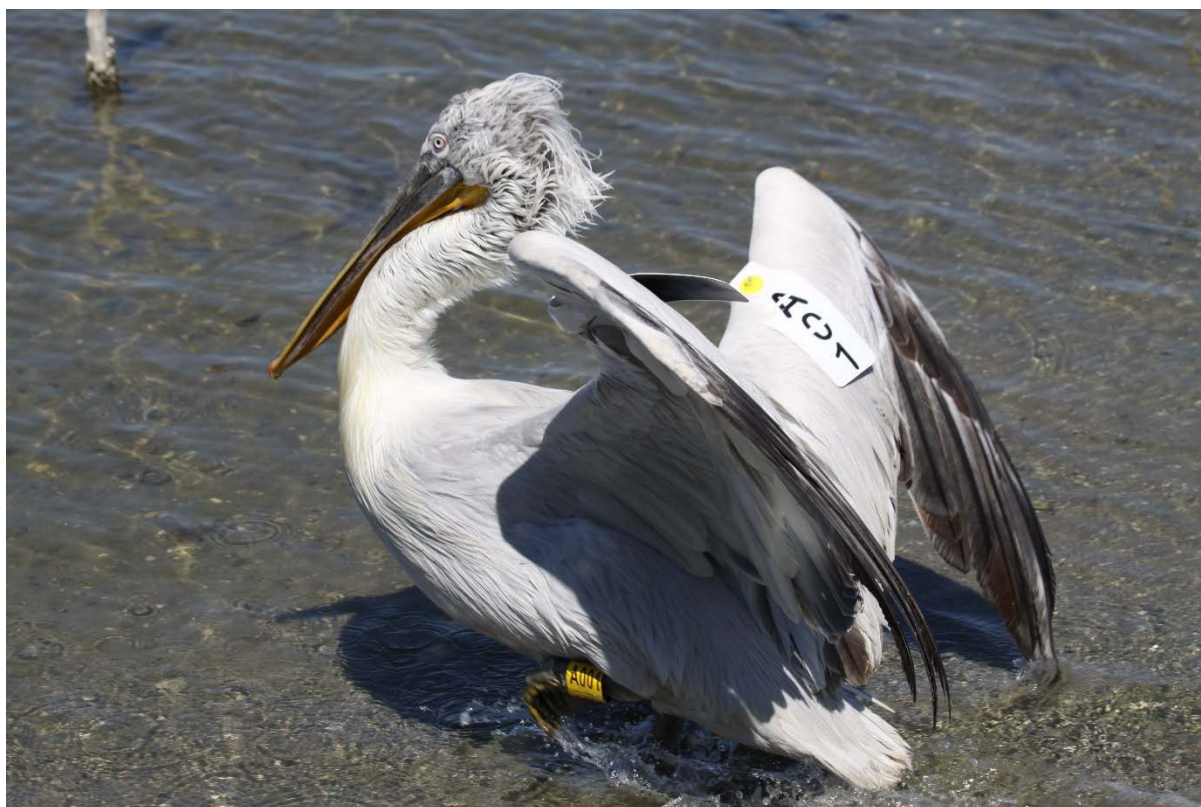


Figure 1. Anna – the adult female DP tagged and released in Amvrakikos @Spiros Konstas

Coordinated Spring counts

HOS was responsible to coordinate the Spring counts across the project countries but also neighbouring countries holding DP populations (Albania, Montenegro, North Macedonia and Turkey – Ukraine was able to participate only in the census of 2021). These counts were implemented together with the invaluable participation of management authorities of protected areas, environmental NGOs and many volunteers in order to cover as many as possible of the wetlands used by the pelicans during this time of the year. The first Coordinated Spring Count was planned for May 2020, and although all the necessary communications and networking were done, unfortunately Covid-19 restrictions made travelling impossible and the action had to be cancelled. Thus, the first coordinated spring count took place on 15/5/2021 with the participation of Greece, Bulgaria, Romania, North Macedonia, Montenegro, Albania, Ukraine (only the Danube Delta) and Turkey (only the Gediz Delta as the country was still in full lock down). After that, the spring census were carried out annually, more or less on the same date of May. There was a sharp decrease in the number of individuals counted in 2022 on account of the High Pathogenic Avian Influenza (HDAI) outbreak in March that year, that killed over 2.000 DPs only in Greece. Since then, numbers since to have been very slowly recovering. It should be noted that the overall pelican numbers is an underrepresentation as the counts in Turkey only partially cover all the existing wetlands in the country; nevertheless, each year the Turkish colleagues tried to increase and expand the number of wetlands monitored.

Breeding and wintering population assessments

Breeding assessments in the Greek project sites were implemented with the use of drones, although direct observations were also used on certain occasions if needed. Due to Covid-19 restrictions and the national legislation regarding the use of drones that requires the user to have a special license following training, it was not possible for HOS' drone pilot to complete

the training necessary in time for the drone photography to take place during the 2020 and the 2021 breeding seasons. Data was nevertheless obtained thanks to the collaboration with the Management Authorities of the protected areas of Messolonghi lagoon and Amvrakikos gulf, who either carried out their own drone flights or completed the counts through direct observation. Breeding seasons of 2022-2024 were monitored normally with the drone of HOS, with the exception of the assessment of the breeding success in Messolonghi in 2022, which was only partial as the water levels were too low for the boat to reach one of the breeding colonies. Breeding parameters in both colonies were relatively stable (see reports for action A1 and D1), as the decrease in numbers in Messolonghi in 2023 can be accounted for by the slight differences in methodology used; more importantly, thanks to the systematic monitoring and the use of drones, it was confirmed that no DPs died in either colony in the HPAI outbreak of 2022.

Wintering assessments of the DPs took place at the Greek project sites during the International Waterbird Census (IWC) programme, which takes place every year on the second and third weekend of January. An additional coordinated count was organised every year around the 20th of November to cover only the wetlands on the western coast of Greece, Albania and Montenegro as they are considered to be quite independent populations from those in the rest of Greece, Bulgaria and Romania. As in the Coordinated Spring Census, winter counts were also completed in collaboration with management authorities of the protected areas, other environmental NGOs and volunteers. After a sharp decrease in overall numbers detected in 2022, due to the HPAI outbreak, numbers picked up again in the following two years, reaching over 1.000 individuals.

Bulgaria:

Telemetry and ringing activities

BSPB successfully tagged totally 11 Dalmatian Pelicans with GPS-GSM transmitters (OrniTrack-P33). Eight of the birds were tagged during the winter months in the area of Atanasovsko Lake near the city of Burgas using a loop trap method. Three of the tagged pelicans were juveniles from the breeding colony in the Kalimok-Brushlen Protected Area. The project aimed to tag nine pelicans, so the target was achieved.

Unfortunately, six of the birds died. The causes of death were collision with power lines in Greece (1 case), collision with a transport barge on the Danube River in Bulgaria (1 case), illegal shooting in Ukraine (1 case), and entanglement in fishing nets in Bulgaria, Romania, and Ukraine (3 cases). The tracking data of the surviving tagged birds are publicly available through the project's account on Movebank.

During the project, the BSPB successfully ringed 42 Dalmatian Pelicans, with most of the birds marked during a ringing mission in the Kalimok-Brushlen Protected Area. Resighting data were received from Kerkini Lake in Greece, Sinoe Lake in Romania, Srebarna Lake in Bulgaria, the marshes of Persin Island in Bulgaria, and from sandbanks along the Danube River in both the Bulgarian and Romanian sections.

Coordinated Spring counts

Teams of experts and volunteers from the BSPB participated in the International Spring counts of the species in 2021, 2022, 2023 and 2024. During each year, surveys were conducted in the wetlands of highest importance for both pelican species in Bulgaria – Lake Srebarna, Persin Island, the Kalimok-Brushlen Protected Area, the Burgas Lakes, the Ovcharitsa, Rozov

Kladenets, and Studen Kladenets reservoirs, Lake Varna, and the islands and sandbanks along the Bulgarian section of the Danube River.

In 2021, in total 513 Dalmatian Pelicans and 575 Great White Pelicans were counted in Bulgaria. In 2022, 473 Dalmatian Pelicans and 1,418 Great White Pelicans were recorded; in 2023, 308 Dalmatian Pelicans and 2,396 Great White Pelicans; and in 2024, 341 Dalmatian Pelicans and 647 Great White Pelicans.

The data collected through the International Spring Counts will contribute to improved knowledge and more effective conservation actions for both pelican species across the Balkan Peninsula. Transboundary cooperation is crucial for their protection.

Breeding and wintering population assessments

Monitoring of the breeding population of the Dalmatian Pelican in Bulgaria was conducted annually. In addition to observations from stationary points, drones were also used to monitor the birds. During the project, two new breeding colonies were established - in the Kalimok-Brushlen Protected Area and in the Mandra – Poda Complex SPA - as well as two new subcolonies at Mrtvo Marsh in Persina Nature Park and the Kalimok-Brushlen Protected Area. In addition to BSPB experts, dozens of volunteers participated in the monitoring of the breeding colonies.

In 2020, 80 breeding pairs were recorded in Bulgaria; in 2021 – 132 pairs; in 2022 – 55 pairs; in 2023 – 128 pairs; and in 2024 – 146 pairs. The low number of breeding pairs in 2022 was due to a record low water level of the Danube River, which caused the marshes on Persin Island to dry out during the breeding season, preventing pelicans from nesting there.

Thanks to the conservation activities implemented within the project, the breeding population of the species in Bulgaria has significantly increased.

An assessment of the wintering population of the species in Bulgaria was carried out through joint winter counts organized in both Bulgaria and Romania, as well as during the annual International Waterbird Census (IWC) conducted each year in mid-January.

Joint winter counts of the species in Bulgaria and Romania were organized in December 2021, 2022, 2023 and 2024. In 2024, a total of 1,333 Dalmatian Pelicans and 42 Great White Pelicans were counted in Bulgaria. For comparison, the 2023 count recorded 644 Dalmatian and 93 Great White Pelicans; in 2022 – 754 Dalmatian and an unspecified number of Great White Pelicans; and in 2021 – 1,469 Dalmatian and 48 Great White Pelicans. The highest numbers of Dalmatian Pelicans were consistently observed in the area of the Burgas Lakes.

Data on the wintering population of the species were also collected during the annual IWC, held each January. The BSPB serves as the national coordinator for this event in Bulgaria.

Monitoring migration at bottleneck sites

Regular monitoring of the species was also carried out during the migration period and post-breeding dispersal. All project sites were visited on a monthly basis from late January to early April, and from early July to early December in 2020 and 2021. Data were collected on the abundance and distribution of Dalmatian Pelicans, as well as on the most important stopover sites within the country.

The all collected data during the project is available on BSPB database system.



Figure 2. DP's breeding colony at Peschina Marsh captured by DJI Mavic 2 Pro, 2021



Figure 3. Catching and tagging DPs at SPA Atanasovsko Lake. February 2021

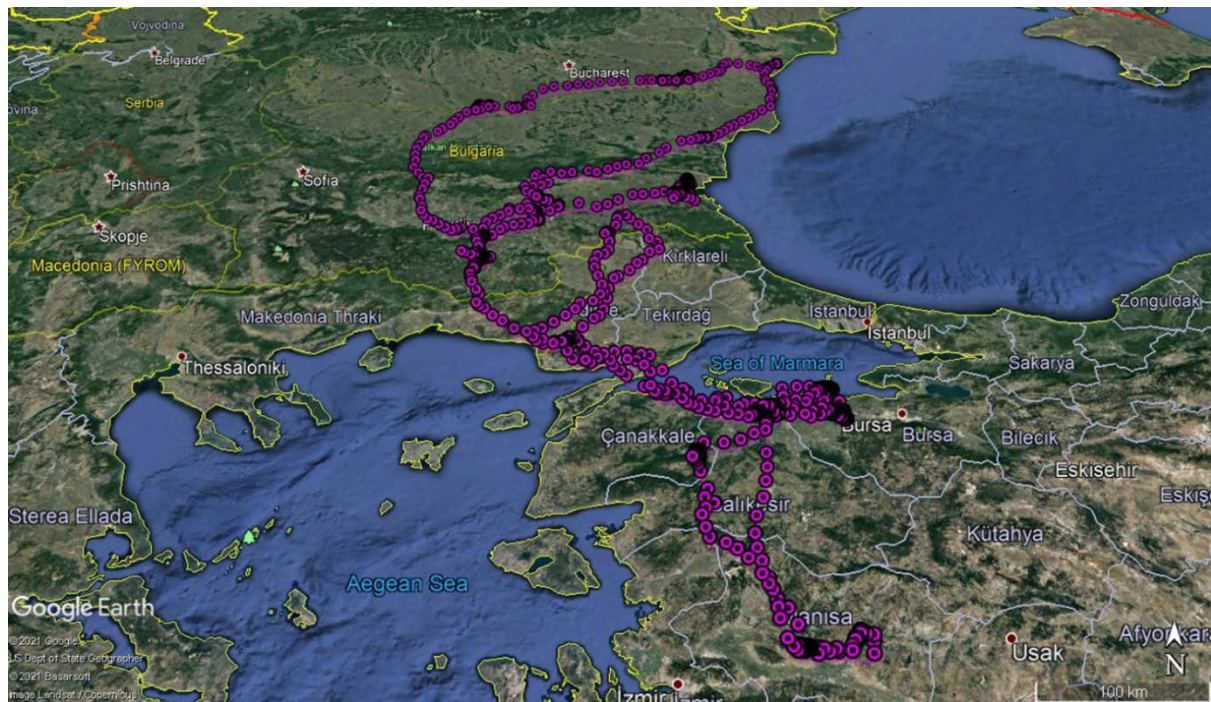


Figure 4. Maria's movements 22nd of February – 20th August

Romania:

In Romania conservation efforts for the Dalmatian Pelican (DP) have focused on tracking populations, assessing breeding and wintering trends, and mitigating threats along the flyway through coordinated activities including ringing, satellite telemetry, and aerial monitoring.

Telemetry and ringing activities

During 2020, multiple new schemes for using colour rings for tagging DP in different countries have been established in collaboration with the international coordinator of the scheme and both colour and metal rings have been ordered from the producers. Since 2020, intensive ringing activities have been conducted at key breeding colonies, notably Lake Tasaul and Lake Sinoie. Ringing of chicks has been performed in 2020 on the 22nd of May and in 2021 on the 5th of May at the colony of Tasaul in partnership with the Romanian Ornithological Ringing Centre. While in 2020 6 chicks of appropriate age for ringing have been tagged, in 2021 SOR team and volunteers managed to capture and ring 30 chicks in this colony. Ringing was suspended in 2022 due to the avian influenza outbreak, but resumed successfully in 2023 and 2024, with record numbers of 40 and 55 chicks ringed respectively at Lake Tasaul, and an additional 13 at Ceaplace. In 2025, 46 chicks have been ringed. Totally 205 chicks have been ringed. Blood samples from 50 chicks were collected in 2024 for DNA analysis. In 2023, trapping sessions for pelicans in order to deploy satellite transmitters have been organized during the end of November and the first half of December, in partnership with the Danube Delta Institute for Research and the Danube Delta Biosphere reserve Authority. The trapping sessions have been very successful, as the joint team has developed a new method that allowed to successfully trap, ring and equip 2 DP in frame of the PWOL project. Satellite tagging has been carried out throughout the season in 2024. Apart from attempts in April, on the 30th of May 4 free flying juveniles have been tagged at Ceaplace colony, Lake Sinoie, by a team of SOR and Danube Delta Institute. In addition, 3 more juveniles have been tagged in the Danube Free Sky LIFE project as part of the collaboration and networking between the two

projects. On the 21st of June a juvenile was tagged at Lake Tasaul. We currently have data from 7 satellite tagged individuals, of which 2 were lost during 2024 season. The remaining tags and the 2 recovered ones will be deployed in 2025.

Coordinated spring counts

Annual SE European DP censuses (2021–2024) have been conducted synchronously with the other partners across all major wetlands and project sites in Romania, including the Danube Delta and Black Sea coastal areas. Censuses have been carried out not only in all project sites (which basically cover all of the Danube basin and adjacent wetlands), but also additional sites along the Black Sea coast and eastern Romania. The Danube Delta and lagoon have been census using both aerial surveys and boat teams, in partnership with the Danube Delta Biosphere Reserve Administration. All results have been incorporated in the monitoring reports and in the media. The 2022 outbreak severely impacted breeding colonies, but recovery was noted in the following years. New sites have been included progressively based on observed Dalmatian pelican presence.

Breeding and wintering population assessments

Breeding season monitoring has been systematic in all breeding colonies in Romania from February through June each year using drones, ground surveys, and aerial flights, covering the entire breeding population in the country. In addition, a monitoring camera has been installed at lake Tasaul to provide live information on the status of the colony. Lake Tasaul where active conservation measures have been implemented has shown a notable increase in breeding pairs, from over 40 nests in 2021 to 93 in 2023 and 111 in 2024. A new colony was discovered in 2023 in the Danube Delta, and also another small one in 2025, with the help of data from satellite tags. The data suggests a strong recovery from the 2022 avian influenza losses.

Winter counts were held annually from 2020 to 2024. The 2023 count recorded 949 individuals, the highest since the project began. The 2024 count documented 896 pelicans, reaffirming stable wintering numbers across the Danube Basin and coastal Romania. Despite challenges, particularly from avian influenza in 2022, the Dalmatian Pelican population in Romania shows encouraging signs of resilience and growth. Coordinated fieldwork, scientific monitoring, and cross-border collaboration have been essential to achieving conservation targets and understanding population dynamics across the flyway.



Figure 5. DP colony at Ceaplace island during aerial monitoring in 2020 – detail



Figure 6. Colony at Lake Tasaul island in 2021 – drone footage capture from monitoring activities



Figure 7. Ringing of DP chicks at Lake Tasaul in May 2021

Ukraine:

The spring and wintering population assessments have been carried out in Ukrainian part of the Danube delta on schedule. In winter 2020 RU in partnership with the Danube Biosphere Reserve surveyed all the major wetlands along the Ukrainian stretch of the.

During the counts on 18-24 December 2020 in total 33 Dalmatian pelicans were counted mainly in the area of the biosphere reserve.

Coordinated spring counts

In 2020 the Coordinated Spring count has been implemented on 25-31 May along the entire stretch of the Danube delta in Ukraine. The counts were made from land, boats and use of drone in remote sites. In total we have scored 58 Dalmatian pelicans on the Ukrainian side.

In 2021 the count was organized during 15-22 May in the Danube delta part of Ukraine. The counts were slightly extended during the stormy weather conditions at these dates. During the survey, all major wetlands were covered but due to bad weather, some of the islands were not surveyed - Great Daller, and Little Daller, as well as Tataru island. But the results of previous years show that these areas are rarely used by pelicans. In total 83 Dalmatian pelicans were counted.

Spring counts in 2023 and 2024 were limited mainly to the upper parts of the delta due to the military restrictions and only a few individual DP were counted 5 and 1 respectively.

Breeding and wintering population assessments

Winter counts in 2022 were organised between 27 and 30 of December and only on the inner parts of the delta, including the Danube lakes. The access to the outer delta - the most important overwintering sites for the dalmatian pelicans in Ukraine was restricted since the beginning of the war in Ukraine. In total 21 Dalmatian pelicans were counted in Ukraine.

In 2023 and 2024 we could not organise winter counts over the war and could only resume in 2025 and again only on the inner parts of the delta and without access to the outer delta. There were only two individuals counted in winter 2025 in Ukraine.

The movements of the DPs have been made publicly available and can be viewed in a [Movebank](#) database. The results of these activities are summarized in the graphics below, and they can be found in the progress of Action D1 (further down), but also in the technical reports of Actions A1 and D1 (submitted through Butler), and in the technical report on satellite telemetry (Annex 3).

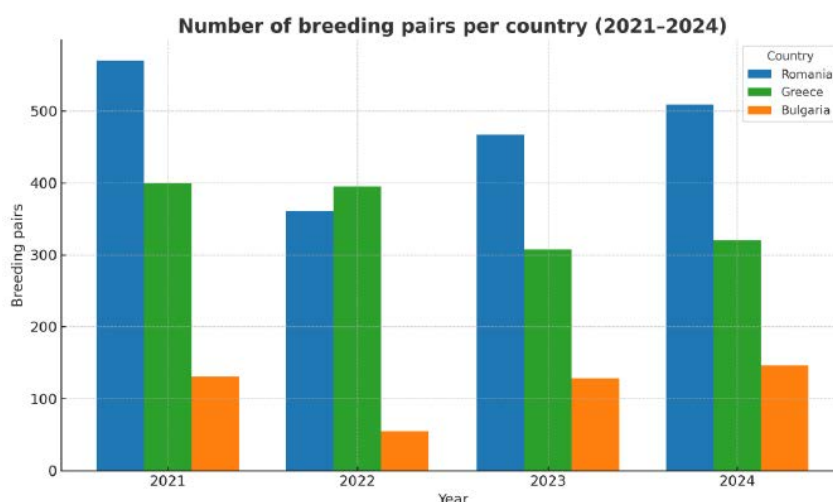


Figure 8. Number of breeding pairs in project areas by country

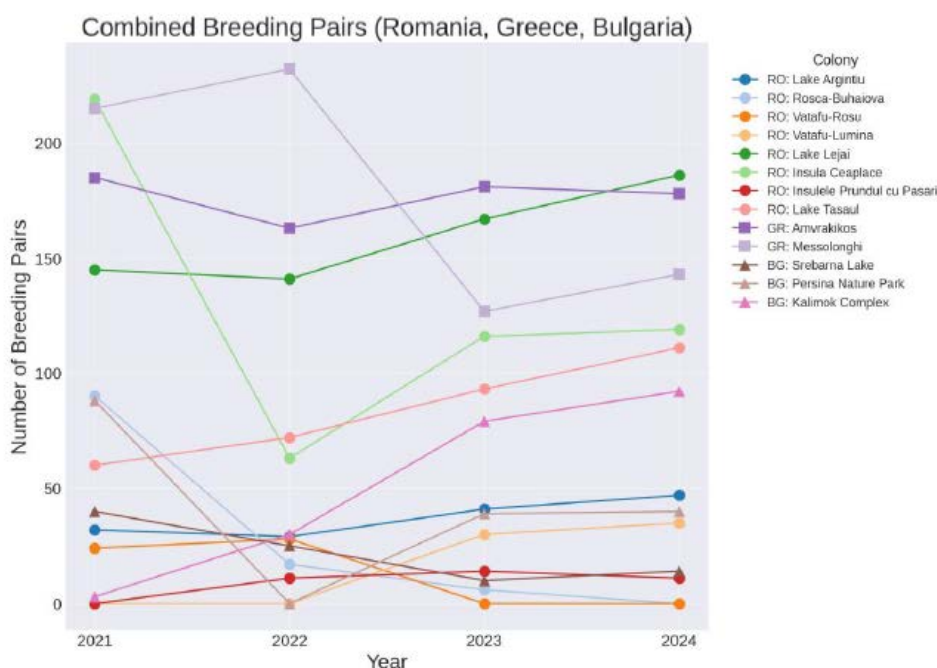


Figure 9. Number of breeding pairs in each colony

Problems/changes/delays:

Due to the COVID-19 restrictions delays occurred in the monitoring activities especially in Spring 2020, however, these have had no impact on the implementation of the action and the delays have been recovered in the winter 2020-2021 and in the following years the assessments were carried out smoothly except in Ukraine, where not all the activities could be carried out due to the war.

Deliverables:

Deliverables	Deadline	Comments
Two annual reports on monitoring activities	31.03.2022	Uploaded on Butler

Milestones:

Milestones	Deadline	Comments
1 st coordinated Spring count	31.05.2020	Achieved on 15/05/2021

Action A2. Assess collision risk with powerlines and mapping high risk areas at key sites*Objective of the action:*

Monitoring of mortality of Dalmatian pelican along power lines to assess the mortality, in Bulgaria, Greece and Romania. Production of a report to be disseminated to the local authorities.

Foreseen start date: 01.09.2019	Actual start date: 01.09.2019
Foreseen end date: 30.06.2021	Actual (or anticipated) end date: 30.06.2022

*Progress*Greece:

Monitoring the mortality of DPs at the Greek project sites began in July 2020 and was completed in June 2021. In total 12 monitoring surveys were conducted (once per month) in each project site during which the HOS field officer monitored the electricity lines where collisions have been reported in the past. In total, 13 DPs were found dead most likely from collision (7 in Amvrakikos and 6 in Messolonghi). Other species found dead, most likely from collision, were gulls, flamingos, egrets and a Mute Swan. Data were analysed and a report on collision risk was produced identifying the most dangerous lines where diverters should be installed. It was then submitted to the Hellenic Electricity Distribution Network Operator (HEDNO),

In November 2021 in the framework of the LIFE Bonelli eastMed Project (www.lifebonelli.eu), in which HOS was a project partner (including the Greek Ministry for the Environment) a Memorandum of Understanding – MoU was signed between the project and the HEDNO regarding minimizing mortality from collisions and electrocutions for the Bonelli's Eagle. Through this collaboration the use of diverters in order to prevent collisions was also promoted. Following the submission of the report on the collision risk of the DP, HOS continued regular meetings with HEDNO in order to pressure them to agree to the installation of diverters on the most dangerous parts of the network.

Bulgaria:

In March 2020 the methodology has been developed for the field survey and assessment of collision risk with powerlines and mapping high risk areas at key sites. It was then disseminated to other project partners – SOR and HOS.

The field surveys have been carried out by BSPB in April 2020 – June 2021 to assess the risks of collision with power lines in Bulgaria in the region of SPA Manda-Poda, SPA Burgas Lake,

SPA Ovtcharitza and SPA Rozov Kladenetz. Additionally, data were collected on dead pelicans in the studied areas during the regular monitoring in July 2021 - March 2022. Totally 39 power distribution lines with a total length of 62.9 km were patrolled and researched over in the study regions. Totally 38 dead pelicans (23 Great White pelicans and 15 Dalmatian pelicans) killed collisions with power lines were found.



Figure 10. DP found dead because of collision at SPA Mandra-Poda Complex, April 2020

Romania:

In Romania Dalmatian Pelican mortality caused by collisions with powerlines have been recorded in a couple of high-risk areas, notably at ROSPA0051 Iezerul Calarasi, ROSPA0031 Danube Delta and Razelm-Sinoie complex, and the Black Sea coast within the Danube Delta Biosphere Reserve. These incidents confirmed prior assessments that identified these zones as priorities for targeted conservation actions. In 2020, 2021 and 2022 SOR initiated contact with relevant stakeholders—including the Environmental Protection Agency, County Environmental Guard, Natural Protected Areas Agency, and the national electric utility company—to begin the installation of bird flight diverters to reduce collision risks. Coordination has been set up in an online meeting held on March 2, 2021, where SOR presented data from the affected sites and proposed technical solutions. Throughout 2021, powerlines near surveyed locations, including Lake Tasaul colony and other spring census sites, were monitored regularly. A dedicated meeting with the Danube Delta Biosphere Reserve Administration on May 14, 2021, focused on planning intervention measures in regions with confirmed pelican collisions. In 2022, further assessments were conducted during the mid-winter International Waterbird Census (IWC) and at regularly checked sites in Bistret, other sites along the Danube and the other significant project sites.

Problems/changes/delays:

In Romania the assessment the collision risk and gathering data for mapping high risk areas has been scheduled for the second half of the year 2021, when adult birds and juvenile started dispersing in larger numbers in sites along the lower Danube. This caused a slight delay in the closure of the action.

Deliverables:

Deliverables	Deadline	Comments
Report on collision risk for key sites in Bulgaria, Greece and Romania	31.12.2021	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
1 st study visit along the powerlines	31.05.2020	Achieved GR: 27/06/2020 BG: 04/04/2020 RO: 15/12/2020

Action A3. Investigate attitudes towards fish eating birds and identify potential conflict sites

Objective of the action:

Submission of questionnaires to key stakeholders regarding fish eating birds, as a basis to plan the E actions. It took place in Romania, Bulgaria and Ukraine. It was not foreseen in Greece, but is done anyhow with own means.

Foreseen start date: 01.01.2020	Actual start date: 01.01.2020
Foreseen end date: 31.12.2021	Actual (or anticipated) end date: 31.12.2024

Progress

Greece:

This action was not implemented in Greece, as there was no budget foreseen for the collection and analysis of the data. The relevant description was a small mistake in the proposal text.

Bulgaria:

In March 2020 the Questionnaire to investigate attitude towards fish eating birds and identify potential conflict sites has been developed by the BSPB Project Coordinator and disseminated to other project partners – SOR, RE, Danube Delta.

The BSPB project staff carried out 65 meetings and interviews with stakeholders (anglers, hunters, fishponds owners) in the regions of the project sites. 65 questionnaires related to investigating the attitude towards fish-eating birds have been filled.

Romania:

Since 2020, preparatory work began with sociologists from the University of Bucharest and stakeholders in the fishing industry to plan interviews exploring the conflict between the fishing industry and fish-eating birds. Between 2021 and 2022, structured interviews were conducted in locations including Iezer Calarasi, Mostistea, Ciocanesti, Tasaul, and the Danube Delta

Biosphere Reserve, involving fish farm managers, fishermen, local authorities, researchers, and community members. The interviews were concluded and the findings compiled into a report in 2023. In 2025, the Ministry of Environment launched a national compensation scheme for fish losses caused by these birds in Natura2000 sites. The compensation scheme, established by Government Decision no. 216/2025, addresses the financial losses suffered by fish-farms due to fish-eating birds, specifically in areas that are also designated as Natura2000 sites.

Ukraine:

The questionnaire was received from BSPB and translated into the Ukrainian language in 2020. Rewilding Ukraine made 4 interviews (out of 50) with fishermen around Kartal Lake in August 2020 and 2 interviews in July 2021 in Danube Biosphere Reserve, and 3 in August 2021 in Danube Biosphere Reserve and finally 10 interviews in 2024 in the Danube Biosphere reserve this making 19 interviews in total. Their results were analysed and the conclusions were drafted and included in an additional report (Annex 2).

Problems/changes/delays:

The action was delayed due to the COVID-19 pandemic. Restrictions on face-to-face meetings and interviews have had a significant impact on the implementation of this action during the first year and a half of the implementation of the project. Due to this fact, in Romania the planned interviews were finalised by the end of 2021. In Ukraine the war has also had a major impact on the possibilities of running the interviews with fishermen and stakeholders, which is why in this country the assessment was finalized at the end of 2024.

Deliverables:

Deliverables	Deadline	Comments
Reports on the finding by country, including methodology	18.12.2021	Submitted through Butler for BG and RO. Not done in GR. For UA the report is submitted in Annex 2

Milestones:

Milestones	Deadline	Comments
1 st interviews carried out in 6 project sites	31.03.2020	Achieved on: GR: foreseen December 2021 BG: July 2020 RO: foreseen until the end of 2021 and carried out during first half of 2022 UA: Finalized at the end of 2024

Action A4. Development of a GIS database of the project

Objective of the action:

Development of a GIS database to store all the information gathered during the project actions (population monitoring, mortality on power lines, implemented activities etc.).

Foreseen start date:	01.09.2019	Actual start date: 01.09.2019
Foreseen end date:	30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress

Tracking data of the tagged individuals were collected with a live data feed to the Movebank server (<https://www.movebank.org>) to which the collaborating partners have access (Annex 2 MTR).

A custom tracking plugin was integrated into the project website to support the monitoring of Dalmatian pelican movements. The online database initially included project areas, partial spring count data, and records of patrol activities and incidents.

Throughout the project, local teams tagged 23 Dalmatian pelicans, with all tracking data added to the database. The plugin allowed the public to track the movements of the tagged pelicans in near real time for the most recent one-year period by the link <https://life-pelicans.com/track-the-dalmatian-pelicans/>

Other data – including the results of the winter and spring counts, colony locations, identified threats, and the placement of platforms and information panels – was also collected by the partners and stored in the database.

Problems/changes/delays:

No major problems or delays occurred.

Deliverables:

Deliverables	Deadline	Comments
First maps	30.06.2021	Annex 2 MTR 1. Movebank map of tracked pelicans. 2. Map of colonies and observations data.

Milestones:

Milestones	Deadline	Comments
GIS database ready to store information from the project	31.12.2020	Achieved on 01.03.2020

Action A5. Develop common protocols and unify research and monitoring methodologies

Objective of the action:

Development of a monitoring protocol for Dalmatian pelican, providing guidance on standardized techniques, as a fundamental tool on which to base internationally shared and coherent management decisions. Production of an ageing field guide and monitoring manual to be used by non-specialized field technicians.

Training about the techniques to be organized for technicians.

Foreseen start date:	01.09.2019	Actual start date: 01.09.2019
Foreseen end date:	31.12.2020	Actual (or anticipated) end date: 31.12.2020

Progress:

A training workshop was held on 25th and 26th of February 2020 at Lemos, Greece. The workshop was led by experts from the Society for the Protection of Prespa (SPP). During the workshop, the project partners were trained in methods of monitoring, ringing and tagging of the Dalmatian Pelican and agreed on a series of technical aspects regarding the implementation of surveys, monitoring, ringing/tagging etc. (Annex 3 MTR). There was significant information exchange between project partners and external experts in order to evaluate the most

appropriate methods to fit transmitters and the best solutions to choose. Information was requested from and experience was exchanged with other LIFE projects implementing similar methods.

An Identification/Ageing Manual and a Monitoring Manual were produced by experts from SPP. The Manuals were disseminated to all project partners, caretakers, volunteers, institutions, members of Pelican Working Group and Pelican mailing group (PELECANUS GROUP) created a few years ago and maintained by project team members.

Throughout the duration of the project, partners were in close contact, exchanging information in order to have a common approach for our field activities.

The following participants took part at the meeting:

BSPB – Svilen Cheshmedzhiev (Project Coordinator), Vladimir Mladenov (Conservation officer for Burgas lakes), Anton Stamenov (field expert) and Vanya Georgieva (Project administrator)

PNPD – Stela Bozhinova (Director of PNPD and Project coordinator), Veselin Koev (PNPD Biodiversity Expert)

HOS – Manolia Vougioukalou (Conservation Officer), Victoria Saravia (Project Administrator), Panos Chaskis (Expert)

SOR - Sebastian Bugariu (Conservation Officer), Cătălina Pantilie (Project Administrator), Alida Barbu (Communication Officer)

Management Body of Messolonghi Lagoon – 3 field experts

SPP – Olga Alexandrou (Expert), Giorgos Castadorakis (Expert)



Figure 11. Workshop at Lemos, Greece, February 2020

Deliverables:

Deliverables	Deadline	Comments
Monitoring manual	31.12.2020	Annex 3 MTR

Milestones:

Milestones	Deadline	Comments
Implementation of workshop	31.01.2020	Achieved in January 2020

Action C1. Reduce collision risk for Dalmatian Pelican at key sites by installing bird diverters on power lines

Objective of the action:

Installation of bird diverters to reduce the risk of collision.

Romania: 4 km

Bulgaria: 2 km

Greece: 4 km

Foreseen start date: 01.01.2022	Actual start date: 01.01.2022
Foreseen end date: 31.12.2023	Actual (or anticipated) end date: 31.03.2025

Progress

Greece:

This action suffered delays in Greece due to the resistance encountered from HEDNO to install bird diverters on their network. HOS finally managed to overcome these problems with the signature of an MoU on the 20th of August 2024, in which HEDNO committed to completely insulate 4 km of dangerous powerlines in the southern part of Kleisova lagoon, in Messolonghi. In the meantime, HEDNO had also agreed and proceeded to bury another section of dangerous powerlines, around 4 km in the area of Tournida, in Messolonghi, an intervention that reduces the risk of both collision and electrocution to zero. HOS covered half of the costs of the materials needed for the insulation intervention. This new type of insulation means that the whole of the power line is completely insulated, as opposed to the more common insulators usually placed covering the pin, jumpers, etc and short sections of the power lines at the level of the pylons. Thus, this type of insulation makes it impossible for birds to suffer electrocution at any point along the 4 km of insulated network, an added value that directly benefits the conservation of other bird species in the protected area of Messolonghi. It should be noted that although materials suffered shipping delays and weren't available until February 2025, HEDNO still managed to complete the works by the end of March 2025. These interventions hugely reduce the risk of collision and electrocution for the DP colonies located in the Kleisova lagoon (as seen in the map below) as well as for other birds in the area.



Figure 12. Buried power line in purple and insulated line in red.

Bulgaria:

Bird diverters have been installed along 4.6 km of power lines located in the SW part of the Mandra-Poda Complex SPA by the Elektrorazpredelenie Yug EAD - the electricity distribution company operating in SE Bulgaria. This section of power lines is one of the highest-risk areas for both pelican species in the country.

Romania:

Several meetings have been organized with the electricity distribution company (initially Enel, which later in 2024 has been transferred to PPC) and Danube Delta Biosphere Reserve Authority until 2023 to agree on the location of the bird diverters along the high-risk power lines.

After reviewing offers and negotiating, bird flight diverters have been ordered and have been delivered at the beginning of May 2024. Totally 400 bird diverters (FireFly SF 10-70N) have been installed. Installation has been performed by the electricity distribution company in ROSPA0051 Iezerul Calarasi (100 pieces) and by the project personnel (SOR) in collaboration with the Danube Delta Biosphere Reserve Administration and the National Waters Administration (management of the powerline in question) – 300 pieces in ROSPA0031 Delta Dunarii si complexul Razelm-Sinoie. In total, 6.5km of powerline were covered (1.6km at ROSPA0051 Iezerul Calarasi and 4.9km at ROSPA0031 Danube Delta).

Deliverables:

Deliverables	Deadline	Comments
Maps of the power lines with bird diverters	31/12/2023	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
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Installation of bird diverters completed	31/3/2023	31/3/2025
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Action C2. Establish new patrolling schemes to prevent persecution, disturbance and illegal activities

Objective of the action:

Development of a patrolling scheme to reduce human-caused mortality of Dalmatian pelicans. It included the production of patrolling plans and presentation to the competent authorities; demonstration of patrolling activities; training of personnel to continue the patrolling.

Foreseen start date: 01.01.2020	Actual start date: 01.01.2020
Foreseen end date: 30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress

Greece:

HOS completed the patrolling plans (Annex 4 MTR and available on the project website), presenting them to all local and relevant authorities on two online meetings conducted on 10/12/2020 (Amvrakikos) and 11/12/2020 (Messolonghi). HOS hired two patrolling wardens (one for each project site) who conducted pilot shifts in December 2020 and begun implementing the patrol plan in January 2021. The schedule followed during throughout the project was from December to June in order to cover the species' breeding season, when the birds are most vulnerable to disturbance. Patrolling took place at both project sites also in coordination with the management authorities of the national parks. Although the patrolling shifts had to be limited due to COVID-19 restrictions during the first season of patrolling, the activities continued normally in the following seasons. Night patrols were also included in the patrolling scheme, and were implemented with the help of a night vision device purchased with the project budget. In addition, during every shift the HOS wardens would also monitor the existing colonies and the progress of the breeding efforts.

Totally 535 patrols were carried out in both project sites, 241 in Messolonghi and 294 in Amvrakikos. The number of incidents (disturbance, persecution) was small, probably due to the deterrent effect of the presence of the wardens. Only four incidents were recorded in Messolonghi, and 10 in Amvrakikos. Most of them were incidents causing some kind of disturbance to the nesting colonies, either due to noise, or caused by kite-surfers or boats coming too close to breeding islets. Three incidents involved persecution of birds although the species targeted was the cormorant, not the DP. Nevertheless, these incidents were dutifully addressed by the wardens as they can provoke disturbance. Incidents were dealt either by the wardens themselves (approaching the offenders and asking them to stop the disturbing activity) or by the management authorities after being informed by the wardens. No incidents causing major distress in the breeding colonies were reported, nor incidents leading to the death of any DP.

Bulgaria:

BSPB started preparing for the new patrolling schemes in September 2020. Then official letters were sent to competent authorities (MOEW, RIEW, EFA, RFD) with information about the starting of the new patrolling schemes around SPA Ovtcharitza, SPA Rozov Kladentz and SPA Studen Kladentz.

From January 2020 to March 2025 the BSPB Project Coordinator participated, together with the experts from PNPB, at the monthly field inspections within the newly Patrolling scheme in the region of Persina Nature Park.

A total of 172 patrols were carried out in the project sites, 136 in Persina Nature Park, 12 in Studen Kladenetz SPA, 12 in Rozov Kladenetz SPA and 12 in Ovcharitza SPA. The number of recorded violations was low. The main disturbance to the birds was observed at reservoirs in southern Bulgaria, caused using motorboats during the autumn–winter period.

In Persina Nature Park some of the patrolling visits were implemented with the participation of BSPB Project Coordinator and others were done by PNPB's forest ranger and experts from park administration.

The second part the development of the patrolling scheme in PNPB was outsourced to an external organization. The upgrade of the surveillance system was finalized in November 2023 and the necessary equipment was purchased - photo camera with high optic zoom lenses.

The video surveillance is combined with patrol visits performed by the project staff. The surveillance system provides real time view from the colonies in the Visitor Centre of Persina Nature Park.

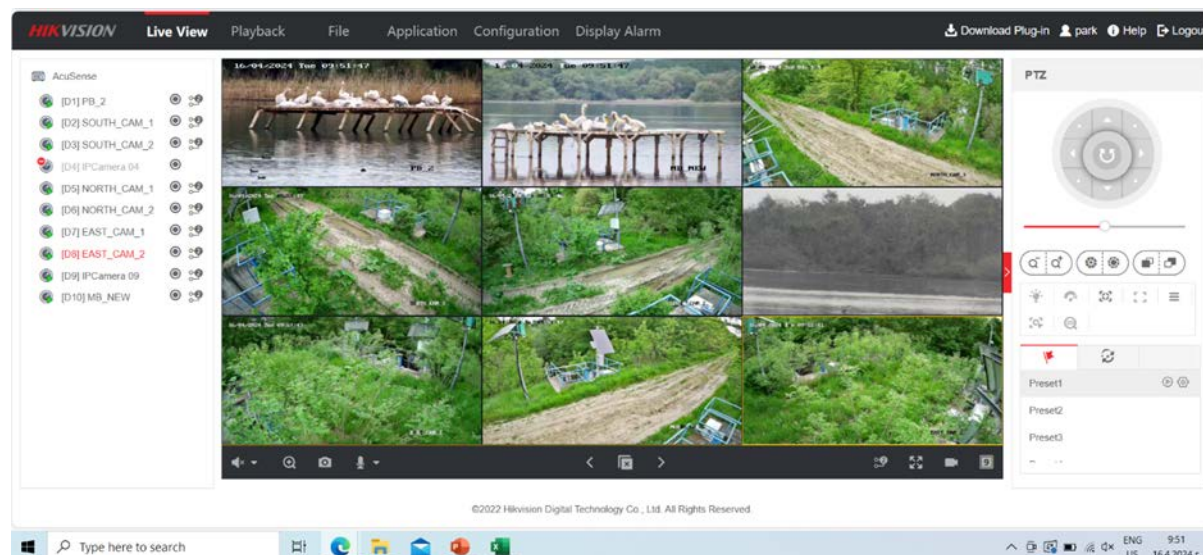


Figure 13. Interface of the surveillance system in PNPB



Figure 14. Surveillance system screen, DP colony in Peschina Marsh, 26 February 2025

Romania:

Between 2020 and 2024, consistent patrolling and monitoring activities have been carried out at Lake Tasaul according to the initial plan with totally 76 patrols implemented. In 2020, patrolling was conducted by the project staff in May and June. Plans to hire a dedicated patrol officer were put on hold due to pandemic restrictions, with SOR staff and volunteers temporarily assuming these responsibilities. In 2021, the project staff continued the work early in the season, and by late May, a patrolling employee was appointed. This employee collected data from the colony area and supported other SOR activities in the region such as tagging and participating in censuses. Additionally, contact was made with the local fishery to minimize disturbances from fishing activities on the lake. In 2022, due to the unavailability of the previously appointed patroller, the project staff resumed full responsibility for patrolling to maintain activity continuity. By 2023, regular patrolling was conducted throughout the breeding season. During this time, a new relationship was established with the company leasing fishing rights at Lake Tasaul, which also controls boat access. This collaboration proved successful in reducing disturbances and enhancing protection for the colony.

In 2024, a new patrolling employee was hired. This person has taken on multiple responsibilities, including participation in bird ringing and tagging actions and involvement in the international spring census. Ongoing coordination with the local fishery has continued to be effective in protecting the area from potential threats, with the current management showing openness to future collaboration. Additionally, a surveillance camera has been installed at the colony, enabling live monitoring throughout the breeding seasons to further support the protection of the breeding site.

As specified in the After-LIFE plan, the patrolling schemes will be carried on as follows:

In Greece patrolling of the will be carried on as part of the routine patrolling programme of the local Management Units using their existing staff and equipment.

In Romania patrolling will be carried out regularly at Lake Tasaul by SOR project staff and volunteers during monitoring activities with own equipment (optical equipment, drone) and in collaboration with the management of the fishery that ensures the presence of their own

wardens in the area. For the colonies located in the Danube Delta Biosphere Reserve, patrolling is being ensured by the management's body local rangers, and common activities with SOR staff will be organized regularly during the breeding seasons. The activities will be carried out with SOR own funds or in the framework of future projects/grants.

In Bulgaria the new established patrol scheme in Persina Nature Park will continue to be implemented with funds being covered by the Park's annual budget, as well as within the framework of new projects.

Problems/changes/delays:

COVID-19 pandemic, strong limitations and special measures limited the work with people, deliveries, signing of contracts and everything stopped for some months. However, these delays were then quickly recovered and the patrolling schemes were carried out in all areas where it was foreseen.

Deliverables:

Deliverables	Deadline	Comments
Patrolling plans for Amvrakikos and Messolonghi	30/09/2020	Annex 4 MTR

Milestones:

Milestones	Deadline	Comments
Patrol employee appointed at Lake Tasaul-Corbu and start patrolling	01/02/2020	Delayed due to Covid-19 Employed in May 2021
Presentation of Patrolling Plans to competent authorities	10/12/2020	Achieved on GR: 10 & 11/12/2020 BG: 18/09/2020 RO: Was not submitted to authorities because it was considered not useful - the National Agency for Protected Areas responsible for managing Lake Tasaul has no staff in the field
New DPPS set up and operating in Amvrakikos and Messolonghi	31/01/2021	Achieved on 13/12/2020
New patrolling and surveillance scheme operated on Belene Island	01/06/2021	First part - Achieved on January 2020 Second part - achieved 30.11.2023

Action C3. Improve breeding and roosting through artificial platforms at key sites along the flyway

Objective of the action:

Construction of new nesting platforms and restoration of existing ones:

Bulgaria: 4 new, 3 restored, maintenance of existing platforms

Ukraine: 2 new platforms

Foreseen start date: 01.01.2020	Actual start date: 01.01.2020
Foreseen end date: 31.12.2022	Actual (or anticipated) end date: 31.12.2024

Progress

Bulgaria:

During the project, the following artificial platforms were constructed by a team of BSPB and PNPB (Persin Island) experts and volunteers:

- 4 new wooden platform in Persin Island
- 2 floating platforms in the Mandra-Poda Complex SPA
- 1 wooden platform in the Mandra-Poda Complex SPA
- 2 wooden platforms in the Kalimok-Brushlen Protected Area

In addition, technical inspections and maintenance of all platforms were carried out every winter. At the same time, reed cutting was conducted, and the harvested material was used to cover the artificial nesting structures to ensure they remained in optimal condition and attractive for pelicans ahead of the breeding season.

Conservation volunteer camps were held in August 2021, 2022, 2023 and 2024 in the region of the Atanasovsko Lake SPA organized and coordinated by BSPB and they gathered more than 50 volunteers every year. During these volunteer summer camps, participants carried out a range of conservation activities, including the construction and maintenance of nesting platforms, reed cutting, cleanup of protected areas, monitoring of autumn bird migration in the Burgas region, training sessions on bird monitoring and identification. Special attention was given to the Dalmatian Pelican, recognized as one of the flagship and symbolic species of the Burgas Lakes region.



Figure 15. The artificial wooden platform at Peschina Marsh

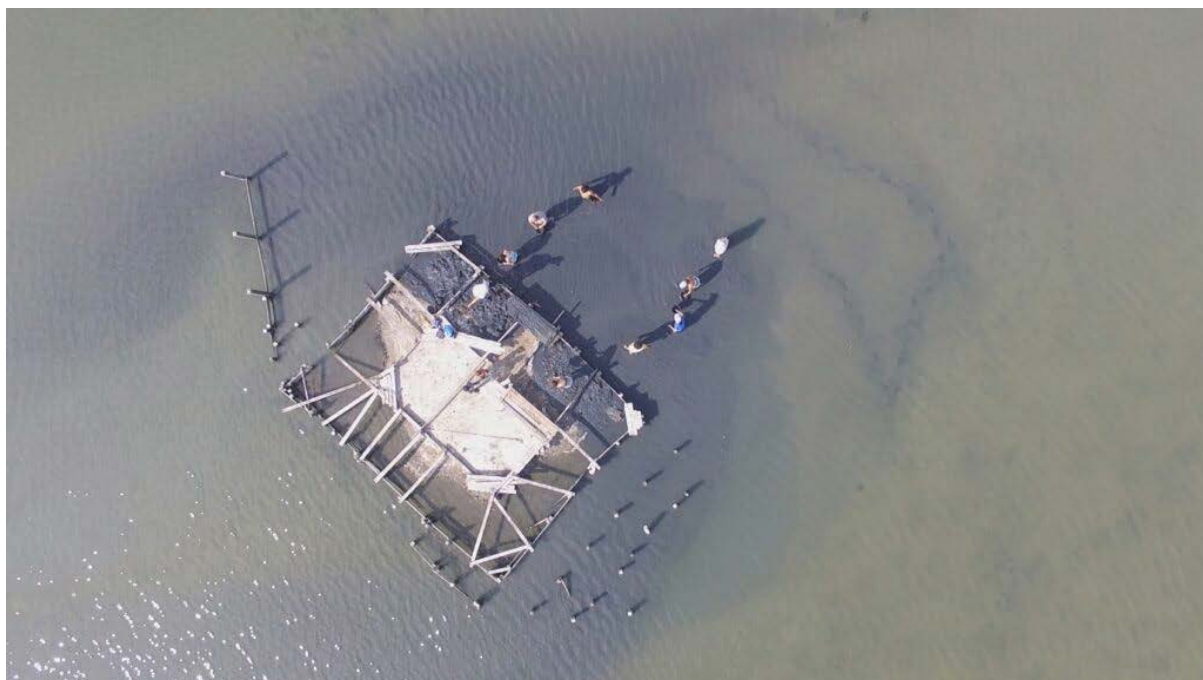


Figure 16. Repairing of the artificial island that used by pelicans at Atanasovsko Lake during the summer camp



Figure 17. Volunteers repairing of the artificial island that used by pelicans at Atanasovsko Lake during the summer camp



Figure 18. Training of the volunteers for observation of autumn migration of the soaring birds

During the project PNPD implemented yearly activities related to improve the nesting conditions of Dalmatian Pelican on Persin Island. The activities were related with maintenance

of the wooden artificial platforms in good condition to provide a safe and secure place for the breeding seasons of pelicans. Each year the technical conditions of the platforms was inspected by the experts of PNPD and the needed actions for repairing and covering with reed have been implemented.

Because of the dry period in 2022, in July 2023 almost all Peschina marsh was covered by vegetation (*Rorippa amphibia*), also known as great yellow-cress. In the summer of 2023 these plants formed floating mass which was heavy enough to destroy the two pelican platforms.



Figure 19. One of the destroyed platforms in Peschina Marsh, July 2023

In December 2023 PNPD team and volunteers build 2 totally new wooden platforms in the water with the main goal of restoring the roosting and breeding place for the colony in Peschina Marsh. In the beginning of 2024, the platforms were covered with reed and ready to welcome the Dalmatian pelicans.



Figure 20. Covering the platforms with reed, Peschina Marsh, 2024.

During the breeding season in 2024, a floating ice destroyed the two platforms. At the end of 2024 with the remaining project budget was built 1 new platform, repairing of the other two

was done and bedding of reed on the 3 platforms. After that, one extra platform was built by PNPD end covered with reed to be ready for the new breeding season. Volunteers from the conservation camp in Persina Nature Park took participation in part of the activities. This platform construction was made possible through generous contributions, including the “Living Danube” award, donations from a nature-inspired film crew, support from individuals like Stoyan Mihov and long-standing efforts by like-minded supporters. The total number of the platforms at the end of PWOL Project for the territory of Persina Nature Park is 4.



Figure 21. New platforms, Persina Marsh, October 2024

Ukraine:

Research on different designs of platforms (Annex 5 MTR) from different parts of the project area was collected and analyzed. A lot of useful information and experience was received from SOR. and the final drawing of the platform for the Danube Biosphere Reserve was produced and communicated to the project management team in 2020.

One modular platform (60m²) has been produced and installed in Anankin kut of the Danube Biosphere Reserve following the original design: a floating construction on anchors, made of metal frame, mounted on plastic barrels and covered with flooring made of wooden planks with reed mats laid over the flooring.

In 2022 RU in cooperation with the Danube Delta Water Management Department (Ukraine) has built a second breeding platform for pelicans on the Kartal Lake with total surface area of 64 m².

And, finally in 2024 a third platform was built at the Ermakov Island of the Danube Biosphere reserve following the design of Anankin Kut.



Figure 22. A platform at the Ermakiv island with the dummy pelicans

Changes and delays

In Ukraine the development of the action was strongly hindered due to the war in the country, which made the activities on the field extremely difficult. Regardless of this the team of RU has managed to construct 3 nesting platforms.

Deliverables:

Deliverables	Deadline	Comments
Drawing of nesting platforms	31/03/2020	Annex 5 MTR
Maps with concrete locations of installed nesting platforms	31/12/2022	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
First floating platform built	30/09/2022	Achieved on: BG: February 2021 UA: June 2021

Action D1. Monitor the impact of the project activities on the target species

Objective of the action:

Monitoring of all the parameters that indicate the effectiveness of the interventions carried out in the project: disturbance, persecution, illegal fishing, effectiveness of patrolling schemes, effectiveness of roosting sites, breeding success and breeding pairs, overall numbers of pelicans

Foreseen start date: 01.06.2021	Actual start date: 01.01.2020
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Foreseen end date: 30.09.2024	Actual (or anticipated) end date: 31.03.2025
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Progress

The results of the monitoring of the parameters mentioned above were compiled in a technical report, which was produced at the end of the project and titled *Monitoring of the project activities' impact on Dalmatian pelicans - Report under Action D1*.

By means of a series of indicators, the effectiveness of the conservation actions implemented throughout the duration of the project was evaluated in the abovementioned report. A total of 783 patrols were conducted in the project sites, recording 20 disturbance and persecution incidents, mostly in Greece, with effective patrolling schemes reducing incidents over time. Illegal fishing was recorded in Bulgaria, but in low numbers. Half of them were recorded at the Mandra-Poda SPA, in Burgas, and therefore protocols were developed for increased control visits. 12 nesting platforms were built and repaired in Bulgaria and Ukraine, proving highly successful in Bulgaria, with breeding pairs and roosting birds increasing every year and reaching 132 breeding pairs. GPS tracking and ringing confirmed movement patterns and revealed threats like entanglement in fishing nets and collisions with power lines. Breeding success was stable or increasing in most colonies, despite challenges like the Avian Influenza outbreak in 2022.

In conclusion, the conservation actions implemented in the project were deemed effective and seem to have positively impacted Dalmatian pelican populations. Disturbance remains a localized threat, while illegal fishing and persecution and new threats such as net entanglement need further study. Nesting platforms proved to be a highly effective intervention that can increase breeding pairs in suitable habitats, while it was proven that continued monitoring and coordination among countries are crucial for ongoing conservation efforts.

In addition, under this action but also in the framework of action A1, an expert was hired to prepare a technical report (Dalmatian pelican monitoring with satellite telemetry Technical report under actions A1 and D1 – Annex 3) analysing in depth the data gathered by the satellite telemetry implemented in these actions. The analyses revealed that the northern populations (i.e. in Romania and Bulgaria) maintained significantly larger home ranges and core areas than the western pelicans, reflecting the broader and patchy wetland networks of Bulgaria, Romania, and adjacent countries. The mortality events (8) indicated diverse anthropogenic threats, including net entanglement and collisions with infrastructure. Two individuals died well outside their home ranges, implying heightened risk during long-distance travel, whereas others perished within intensively used sites, showing that hazards can also exist at the center of daily activities. What's more, further analyses proved that western pelicans' smaller home ranges were mostly contained within coastal SPAs (87–90% coverage), whereas the northern subpopulation, with extensive home ranges and high wetland use across multiple borders, had as little as 35–60% coverage, theoretically making them more vulnerable to threats. Overall, the findings highlighted subpopulation-level differences in Dalmatian pelican spatial behavior, potential seasonal adjustments in foraging distribution, and possibly the need for enhanced protective measures, especially for the more wide-ranging northern birds.

Changes:

Considering the great efforts spent on trapping and tagging pelicans, HOS considered it as an added value to the project to carry out a deeper and more detailed analysis of all the data gathered through telemetry with the data from the transmitters fitted on pelicans throughout the project. For this reason, in February 2025 an expert in habitat modelling and data analysis

was contracted, who produced a scientific report that provides further insight into the pelican movements and threats in the three project countries, complementing the information presented in the monitoring report prepared by the project partners in Actions A1 and D1.

Deliverables:

Deliverables	Deadline	Comments
Report of the annual activities	31/03/2025	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
Completion of annual monitoring for each subaction	31/07/2024	31/03/2025

Additional products:

Dalmatian pelican monitoring with satellite telemetry Technical report under actions A1 and D1 – Annex 3

Action D2. Monitor the effectiveness of bird diverters on power lines

Objective of the action:

Monitoring of the mortality of Dalmatian pelicans due to collisions with powerlines, 2 times per month in Summer and Winter

Foreseen start date: 01.01.2023	Actual start date: 01.02.2024
Foreseen end date: 30.06.2024	Actual (or anticipated) end date: 30.06.2024

Greece

Within the framework of the LIFE18 NAT/NL/000716 project for the conservation of the Dalmatian pelican (Action A2), field experts from the HOS assessed the effect of collisions on the Dalmatian Pelican in selected parts of the network within the National Parks and Special Protected Areas (SPA) of Amvrakikos wetlands and Messolonghi lagoon, where collision casualties have been found in the past. The particular areas were chosen as they host important Dalmatian Pelican colonies that belong to the western sup-population, which due to its small size is considered to be more vulnerable. The HOS monitored 14.7 km of medium voltage network from which 7.4 km were assessed to be dangerous and recommended for installation of bird diverters. Yearly estimate of Dalmatian Pelican casualties is at least 4% of the local population in the areas that were monitored.

Bulgaria

39 power lines with a total length of 62.9 km were surveyed over in the study regions. A total of 38 dead pelicans (23 Great White pelicans *Pelecanus onocrotalus* and 15 Dalmatian pelicans *Pelecanus crispus*) because of collision with power lines were found during the field survey under Action A2. An adult injured Dalmatian Pelican was found at Rozov kladenets dam and was rescued by a BSPB team.

Romania

In Romania, 57 sections of different power lines (both medium and high voltage) that are intersecting project sites or the vicinity have been examined throughout different years, also

during implementation of other monitoring activities, in most project sites (14). Besides direct survey, additional information has been collected from other volunteers and also information on collision locations in the past has been centralized in the report developed under Action A2. Based on the collected information under A2, a total of 22 dead pelicans (14 Great White pelicans *Pelecanus onocrotalus* and 8 Dalmatian pelicans *Pelecanus crispus*) as a result of collision with power lines were recorded. All the casualties have been recorded at 2 of the project sites (ROSPA0051 Iezerul Calarasi and the majority at ROSPA0031 Delta Dunarii si complexul Razelm-Sinoie).

The final report with results from the impact monitoring has shown that these activities have been extremely successful. Following the interventions on the powerlines (bird diverters in RO and BG and burying and insulation of powerlines in GR) in none of the project areas any further birds killed by powerlines were found during the monitoring activities.

Delays and Changes:

In Romania the installation of the diverters has been delayed to 2024 as described under action C1 due to the long-term negotiations with the companies involved. The monitoring of the power lines where bird diverters have been installed has been started immediately after their installation in 2024 and has been carried out until the end of the project. Monitoring will be continued also after the project ended.

In Greece, the burying of the lines meant that no monitoring of the effectiveness of the action was needed. However, in the section where the lines were insulated, due to its late completion (March 2025), HOS has carried out the monitoring throughout April-June 2025 and the results have been included in the general action report, which was already submitted through Butler but is re-submitted in Annex 4.

Deliverables:

Deliverables	Deadline	Comments
Monitoring report	30/06/2024	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
1 st monitoring visit	31/05/2023	February 2024

Additional products

Updated report following request in point 5 of the CINEA letter of 27/05/2025 and with information about powerlines in Greece – Annex 4

Action D3. Monitoring of the impact of the whole project

Objective of the action:

Analysis of the general impact of the project:

- Impact on nature conservation and biodiversity
- Socio-economic impact
- Impact on ecosystem services

Foreseen start date:	01.01.2021	Actual start date: 01.10.2022
Foreseen end date:	30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress:

The report was developed by a Hungarian expert company, GreenFormation: <https://greenformation.net/home/>.

The company was contracted in February 2023 and carried out the data collection and analysis during 2024 and delivered the report in February 2025.

GreenFormation evaluated the ecosystem services affected by project activities and the project's socio-economic impact on the project sites. To this end, they chose the most relevant ecosystem services, socio-economic impacts, and related indicators.

Within the ecosystem service assessment scope, together with the project team, the experts selected relevant ecosystem services that comply with the methodology on Mapping and Assessing Ecosystems and their Services (MAES) of the European Commission. Changes are expected to occur in these services as a result of the project's interventions, and assessing these changes enables the analysis of the project's overall impact. Based on this, they assessed species abundance and risk threat impacting their abundance as provisioning services, habitat improvement and disturbance as regulatory and maintenance services, and aesthetics, identity, tourism and recreation-related services of the project and its contribution to education and knowledge as cultural ecosystem services.

For the GreenFormation analysis employed a multifaceted approach to evaluate the project's impact. Socio-economic impacts were assessed by surveys for stakeholders and project partners, a literature review, and a desktop study. Secondary data and questions included in the stakeholder and partner questionnaire assessed the potential impact on ecosystem services.

Deliverables:

Deliverables	Deadline	Comments
Report on impact of the project	30/09/2024	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
Contract with subcontractor signed	01/04/2021	Postponed to February 2023

Action E1. Local, national and international media and multimedia communication activities supporting project activities and raising awareness amongst target audiences

Objective of the action:

Raising awareness among the general public through media communication activities:

- collection of photo/video material, production of short documentary
- production of website and communication through social media
- installation of 4 info panels
- local, regional, national media activities

Foreseen start date:	01.09.2019	Actual start date: 01.09.2019
Foreseen end date:	30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress

The project placed a strong emphasis on **visual communication**, making the collection of video footage and images a key preparatory action. This effort provided a critical resource for communication activities throughout the entire project.

In addition to building on an existing shared video archive between Rewilding Europe and its partners, this action also involved the **creation of diverse multimedia materials** – including professional photography, a short documentary film, video clips for social media promotion, and videos showcasing the region’s potential for **nature-based development**.

These materials were produced specifically to support project visibility and outreach, and they played a central role in engaging various audiences. All outputs from **Action E1** were actively used across the full suite of **E communication actions**, ensuring consistency and maximising the impact of the project’s messaging and public engagement efforts.

Task 1 – Photographic, video and other material to document and disseminate the conservation actions carried out under the project

An **audio-visual archive** was developed (Annex 6 MTR) to store all videos and images captured throughout the project. This centralised resource supports the communication activities of all project partners and was regularly updated with visual content contributed by each team. The archive also includes promotional materials such as the project logo and brand manual.

During the first year of the project, the communications team outsourced the development of a **project logo** through an online contest, with the goal of creating a distinctive and recognisable visual identity. Since its creation, the logo has been consistently used across digital platforms – including the project website and social media – as well as on printed materials.



To document conservation activities and wildlife, **nine professional photo and video missions** were carried out across the participating countries, along with more than 100 partner-led shoots. These efforts resulted in the production of **over 2,000 photos** and **75+ short video clips**.

In addition, **four major videos** were produced. These include a **12-minute documentary** detailing project actions ([watch here](#)) and a **5-minute promotional film** highlighting conservation efforts and raising awareness about the Dalmatian pelican ([watch here](#)).



Figure 23. Promotional 5-min video about the Dalmatian pelican

In 2020, **Bulgaria hosted a filming crew from the European Commission**, who documented the Dalmatian pelicans and the activities carried out under the PWOL project.

In 2025, [a video entitled “Big WINGS”](#) dedicated to the Dalmatian Pelicans in Greece and local people whose lives are connected to them (tourism professionals, local residents, scientists, fishermen) has been produced with the support of the HOS under the project (video available in EN & EL).

Task 2 – Production of a project website and use of social media to promote the species conservation among targeted audiences and the general public along the flyway

The main communication platform for the project was the website www.life-pelicans.com, developed at the start of the project. It provides comprehensive information about the project and pelican conservation efforts in Bulgaria, Romania, Greece, and Ukraine. The website presents the project’s activities, progress, results, and all publications produced throughout its duration. The goal was to ensure that stakeholders and the wider public were regularly informed.

The website was managed by the Communication Officer of Rewilding Ukraine, with regular content contributions from all partners. A **GIS plugin** was developed and integrated into the site to visualize the movement patterns of tagged pelicans. This feature allows users to track the movements of 23 Dalmatian pelicans in near real-time over the past year via the link: life-pelicans.com/track-the-dalmatian-pelicans. A total of **121 articles** were published on the site, attracting over **122,000 unique views**.

In addition to the website, several social media channels were created, including [Facebook](#), [Instagram](#), and a [YouTube project playlist](#). These platforms were used to share updates, highlight actions, and communicate progress on a regular basis. A total of **853 posts** were published across project social media accounts, reaching more than **735,000 people**.

Table 1 Detailed statistics of the reach in the owned project channels

OWNED CHANNELS		2020	2021	2022	2023	2024	2025	
Media type	Indicator	Total	Total	Total	Total	Total	Total	Grand Total
Website	Unique pageviews	2761	5956	10612	30715	70715	1700	122459
Website	Users	1450	2999	5473	7707	11522	604	29755
Website	News items	12	31	61	92	115	3	314
Facebook	No. of Posts	54	129	214	297	362	23	1079
Facebook	Total page likes	194	379	632	767	904	921	921
Facebook	Total reach	20603	63810	117752	152167	179221	10032	543585
Instagram	No. of Posts	45	109	190	265	326	23	958
Instagram	Total no. of followers	176	340	439	520	609	651	651
Instagram	Total shows	4494	14640	29077	42454	57661	9718	158044
YouTube	No. of videos	3	7	9	20	37	3	79
YouTube	Total views	1309	3870	5252	11939	15632	1200	39202

Furthermore, all project partners actively shared updates through their own communication channels, helping to promote the project and engage a broader audience to raise awareness and support for pelican conservation.

Task 3 – Installation of project information panels in the area of activities and production of a Layman’s report

In summer 2021, a unified design for **information panels** (Figure 16, Annex 7 MTR) was finalised to be used by all partners. This common format ensures visual consistency and a cohesive look and feel across the entire cross-boundary project area. The panels were produced and installed by the various partners during October and November at key locations such as visitor access points and infrastructure sites, supporting the interpretation of project activities on the ground. Each panel includes a section of site-specific information to enhance relevance and local value. All panels are bilingual – presented in English and the respective local language – and are weather-resistant with replaceable display surfaces. In addition, several partners produced extra panels to expand outreach and visibility.



Figure 24. Design of the project information panels

At the conclusion of the project, a [Layman’s Report](#) was produced, summarising the key actions implemented across all participating countries. Originally published in English, the report was also translated into Bulgarian, Romanian, Ukrainian, and Greek to ensure accessibility for local audiences.

The report was made available on both the official project website and the websites of all partner organisations. It was disseminated through stakeholder networks in each country, helping to raise awareness and share results with a broad audience.

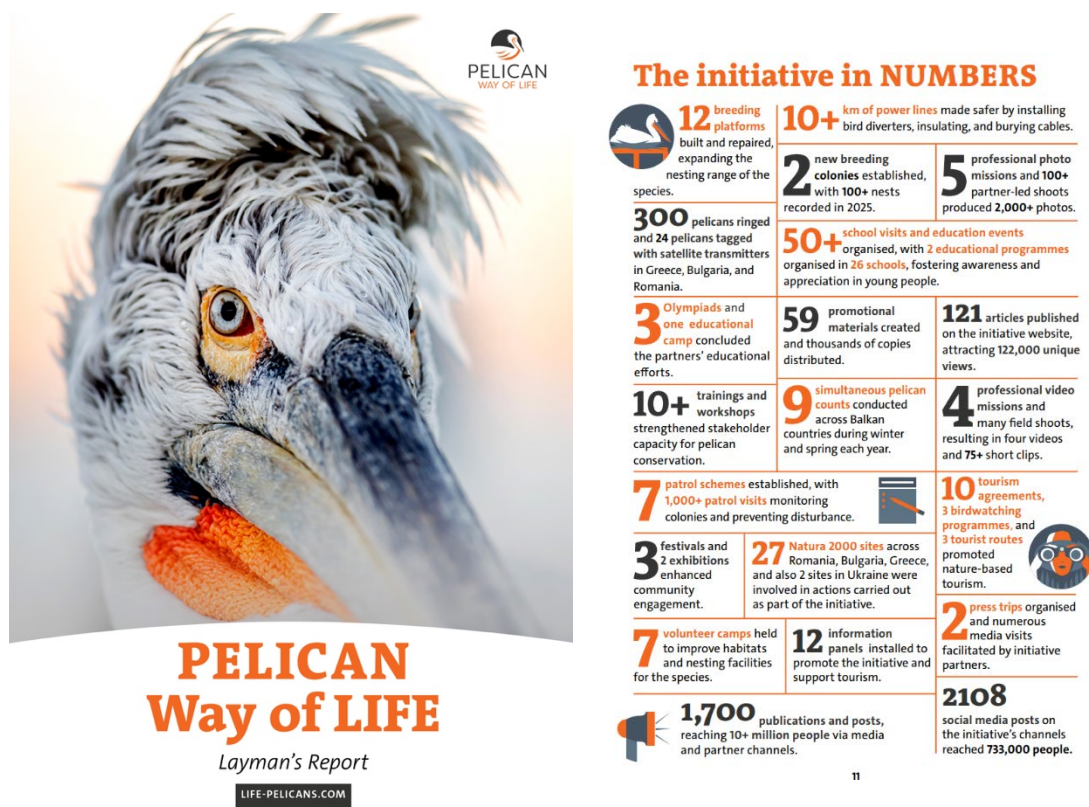


Figure 25. The front cover and a page from a Layman's report of the project

The **Layman's Report** will continue to be used as a communication tool and will be distributed at future events, meetings, and outreach opportunities both within the project area and beyond.

Task 4 – Local, regional and national media communication

To build stakeholder understanding and foster a positive attitude among local communities toward Dalmatian pelicans, the project aimed to secure broad media coverage across various channels. At the beginning of the project, a **media database was established** to monitor outreach efforts.

Each partner actively promoted the initiative through their websites, social media, press releases, TV and radio interviews. Additionally, a **press tour was organised in Romania** to help ensure the project's key messages reached diverse audiences across multiple countries. Over 70 press releases were distributed during the project.

Further media interest was generated through social media posts and the communication networks of individual partners. Notably, news about the construction and repair of breeding platforms, population censuses, and pelican tagging contributed to strong media visibility.



Figure 26. A press-tour to the pelican colony in Romania.

In total, over **1,700 media results** (TV, radio, print, web, including partners' online channels) were recorded, reaching an estimated audience of 10 million (see media database and coverage summary for details).



Figure 27. A radio interview with Svilen Cheshmedzhiev in Bulgaria, dedicated to the Dalmatian pelican conservation

Media coverage was strongest in the project's core countries – Greece, Romania, Bulgaria, and Ukraine – where both national and regional outlets engaged with the project. The initiative also gained international attention, highlighting its relevance in the broader European conservation landscape.

The overall tone of coverage was predominantly positive, with a focus on:

- Conservation successes
- Positive impacts on Dalmatian pelican populations and habitats
- Recognition of partner efforts and international collaboration

The initiative secured coverage in several high – profile outlets, significantly enhancing its visibility (Table 2.).

Table 2 Media outlets covering activities of Pelican Way of LIFE

Outlet		Country	Highlight
BBC Ukraine/WorldNews		Ukraine	Highlighted the importance of pelican protection in Ukraine
NOVA TV		Bulgaria	Featured coverage on breeding success after decades
BTV		Bulgaria	Covered conservation challenges such as poaching threats
24 Chasa		Bulgaria	Focused on historic nesting success in the Burgas area
Skai.gr		Greece	Addressed the avian flu crisis and its impact
MEGA TV		Greece	DP tagging in Messolonghi area
ERT3 TV		Greece	Telemetry and other project actions & ecotourism
Hotnews.ro		Romania	Highlighted conservation messages for Romanian tourists

The long – term efforts of BSPB and Persina Nature Park Directorate (PNPD) to protect the Dalmatian Pelican in Bulgaria – including several actions from the Pelican Way of LIFE project – have been nominated for the prestigious Natura 2000 Awards!

The following **scientific publications** have already been produced:

- [Conservation Evidence – Artificial nesting platforms for Dalmatian pelicans](#)
- [Croatian Journal of Fisheries – Satellite tracking and range use of Dalmatian pelicans](#)

Artificial nesting platforms support population recovery of the Dalmatian pelican *Pelecanus crispus* along the Danube River in Bulgaria

Article Full-text available

June 2022

Conservation Evidence Journal

 Svilen Cheshmedzhiev ·  Emil Todorov ·  Veselin Koev · [...] ·  Yordan Kutsarov



Source

Figure 28. An article in the Conservation Evidence journal about the project actions.

Additional scientific papers are currently being prepared by project partners and are expected to be submitted for publication within the year:

- A paper based on GPS tracking monitoring evaluations conducted under Action D1.

- A study examining demographic drivers of colony dynamics, using data collected from Greece, Bulgaria, and Romania.

In parallel, project partners are contributing data collected under the Pelican Way of LIFE project to **publications led by external entities**:

- A study on the genetic dynamics of pelican populations, for which partners have provided genetic samples.
- A publication assessing the long-term impacts of Highly Pathogenic Avian Influenza (HPAI) outbreaks on wild bird populations. This paper is still in preparation and is expected to be submitted to the *Journal of Animal Ecology*, which carries a significant impact factor.

Problems/changes/delays:

Because of COVID-19 limitations we had to delay some of the photo and video missions. Also, press visits to the area were partly replaced by other awareness activities because of the same reason.

Deliverables:

Deliverables	Deadline	Comments
Audio-visual archive	31/03/2020	Annex 6 MTR
4 bilingual panels	31/05/2021	Annex 7 M TR (version EN+BG).
Documentary film about DP and project work	31/12/2022	Submitted through Butler
Publications media database	31/12/2024	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
Project website and social media created and operational	01/04/2021	Achieved 01/03/2020

Action E2. Networking with other projects

Objective of the action:

Activities to exchange information and expertise with other projects, and to develop potential cooperation.

Foreseen start date:	01.09.2019	Actual start date: 01.09.2019
Foreseen end date:	30.06.2024	Actual (or anticipated) end date: 31.03.2025

Progress

Greece:

As explained in more detail in the progress of Action A2, HOS was closely collaborating with the LIFE Bonelli east Med Project (www.lifebonelli.eu) regarding the promotion of the use of

bird diverters to the Hellenic Electricity Distribution Network Operator (HEDNO). HOS also networked with the LIFE10 NAT/GR/638 project (Safeguarding the Lesser White-fronted Goose Fennoscandian population in key wintering and staging sites within the European flyway) and reviewed its patrolling methodologies and equipment used.

HOS continued to have an important role after the Avian Influenza outbreak that took place during early spring 2022, aiming to have an overall overview of the situation at a national level, collaborating with SPP, NECCA, BirdLife and networking with HOS' own volunteers.

Bulgaria:

The project team actively engaged in networking and capacity-building efforts with other LIFE and conservation projects, participated in events, and contributed to outreach through media and education.

In January 2020, BSPB project staff established contact with colleagues from the LIFE Return of the Neophron (LIFE10 NAT/BG/000152) project to exchange experience on the implementation of interviews and questionnaires for Action A.3.

On May 5, 2020, the BSPB Project Coordinator participated in an online workshop under the LIFE for Danube Sturgeons project. Organised by WWF offices in Austria, Bulgaria, Romania, Serbia, and Ukraine, along with other key institutions, the workshop focused on "Engaging Fishing Communities in Conservation", and showcased good practices in working with local communities and stakeholders.

A training workshop was held on October 30, 2020, at the Wildlife Rehabilitation and Breeding Centre – Stara Zagora, managed by Green Balkans. BSPB staff received practical training in pelican catching and tagging techniques with patagial transmitters. Experts from Green Balkans also presented key actions from the LIFE for Lesser Kestrel (LIFE19 NAT/BG/001017) and Bright Future for Black Vulture (LIFE14 NAT/BG/649) projects.

In September 2020, an Internship Agreement was signed between BSPB and Business Academy Aarhus (Denmark) under the ERASMUS+ programme. A Hungarian student was trained for three months (September-November) in Dalmatian Pelican monitoring and research activities in the Bourgas Lakes region.

The project team maintained extensive networking efforts, including collaboration with:

- LIFE Danube Free Sky (LIFE19 NAT/SK/001023), Life Birds on Power Lines (LIFE16 NAT/BG/000612), and LIFE Safe Grid for Burgas, mainly on actions to prevent bird collisions with power lines.
- LIFE for Safe Flight (LIFE16 NAT/BG/000847) and experts from LIFE for Kresna Gorge (LIFE11 NAT/BG/000363) regarding bird handling and tagging methods.
- Lagoon of LIFE (LIFE17 NAT/BG/000558) for educational and informational activities, particularly around the First Festival of the Dalmatian Pelican in Persina Nature Park and other Burgas –based events.
- LIFE for Falcons (LIFE20 NAT/BG/001162) on the production of the 2024 calendar.

Three articles were published in the popular Bulgarian national magazine for ecology, business, and tourism “Ekologia 21” – in 2019, 2020, and 2021 – highlighting project progress and successful breeding seasons in Persina Nature Park.



Figure 29. An article about the project actions in the popular Bulgarian national magazine for ecology, business, and tourism

Romania:

Since 2019, SOR has been actively involved in international networking and technical exchange to support the objectives of the Pelican Way of LIFE project.

In November 2019, a SOR expert participated in the *Pelicans of the World* symposium, part of the 43rd Annual Meeting of the Waterbird Society, held at the University of Maryland, USA (Nov 6–9). This first-of-its-kind event brought together specialists from six continents to address topics such as pelican population trends, threats, migration patterns, and interactions with fisheries. The Pelican Way of LIFE project was presented both formally and informally, significantly boosting its visibility within the global scientific community. A summary was published online: [sor.ro article](https://sor.ro/article).



Figure 30. Networking with another LIFE projects

In 2020, SOR exchanged technical knowledge with the LIFE project LIFE14 NAT/BG/649, particularly regarding the use of patagial transmitters – special wing tags used for bird tracking. Vulture experts from the Bulgarian team provided guidance on safe and effective attachment methods.

In 2021, SOR began coordinating with the LIFE Danube Free Sky project (danubefreesky.eu), focusing on measures to prevent bird collisions with power lines in the Danube region. A key meeting with the Danube Delta Biosphere Reserve Administration (DDBRA) took place on May 14, followed by continued collaboration. In March 2023, joint meetings with DDBRA staff were held to prepare permit applications for pelican tagging and align activities with anti-collision measures.

This partnership continued in 2024, with meetings in April–May involving both DDBRA and the Danube Delta National Institute (DDNI) to plan bird tagging and diverter installation. Joint fieldwork included satellite tagging of juvenile Dalmatian Pelicans and a project site visit on June 3–4.

Additionally, SOR joined the SafeLines4Birds LIFE project (safelines4birds.eu), led by the Renewable Grid Initiative (RGI), to promote best practices for reducing bird collision and electrocution across Europe. SOR participated in two online sessions (September 21 and October 12) and an in-person seminar in Berlin (November 8–9), which brought together NGOs and grid operators. SOR endorsed the resulting position paper and joined the project's advisory board. The event report is available here: [Connecting Biodiversity – RGI](#).

1. Networking within Europe

Knowledge sharing within Rewilding Europe network:

Several in-depth stories about the Pelican Way of LIFE project, its key actions, and results to date were written and shared online through Rewilding Europe's partner network and broader

audience. These communications aimed to showcase the project's progress and share the knowledge gained.

In spring 2022, a webinar was organised, bringing together 30 participants from 11 European countries and India. The session focused on introducing the Pelican Way of LIFE initiative and efforts to improve conditions for Dalmatian Pelicans along the Black Sea–Mediterranean Flyway.

2. Networking beyond Europe

The Pelican Group (PELECANUS GROUP) is coordinated by SPP, a subcontractor in this LIFE project. Established in May 2012, the group now includes 78 members from 22 countries, connecting pelican experts from across the Old World.

Key specialists from SOR, HOS, and BSPB are active members of the group. The PELECANUS GROUP serves as an open platform and regularly welcomes news and announcements from project members, facilitating ongoing exchange and collaboration.

Deliverables:

Deliverables	Deadline	Comments
Article about project objectives and actions in popular journal	30/06/2021	Annex 8 MTR

Milestones:

Milestones	Deadline	Comments
1 st exchange of experience with similar LIFE project	31/06/2021	January 2020

Action E3. Deploy wide awareness raising campaigns to create informed understanding of Pelican conservation engaging local audiences

Objective of the action:

Awareness activities were foreseen to be carried out in Bulgaria and Romania. Included info trips along the Danube and other pelican areas, pelican festival, production of documentary.

Foreseen start date: 01.09.2019	Actual start date: 01.09.2019
Foreseen end date: 30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress

Greece:

In August 2020, HOS has participated at the local festival of Messolonghi by Locals, with a presentation for the Dalmatian Pelican and project actions, as well as the promotion of the area as a birding destination. More than 120 people attended the event.

On the 11th of October 2020, an open event has taken place in Messolonghi, Greece for the celebration of the World Migratory Day 2020 (<https://www.facebook.com/events/779606572862737/>). The event was organised in collaboration with local stakeholders and included birdwatching of the Dalmatian Pelicans and

other waterbirds, as well as tour guides and dissemination of info material. More than 150 people participated at the event.

In the framework of Eurobirdwatch celebrations, in October 2023, four events have taken place in Messolonghi with the participation of more than 150 people, mainly children. The events included activities and handicrafts for children as well as birdwatching and dissemination of project communication materials.

In March 2025, HOS has supported the Canoe-Kayak Marathon in Messolonghi, by providing all participants with the project communication materials (more than 200 people informed).

Bulgaria:

In October 2020, Bulgaria (BSPB) hosted a filming crew from the European Commission to document Dalmatian Pelicans and project activities under the *Pelican Way of LIFE* initiative.

A contract for the field expert responsible for establishing the Rapid Reaction Corps was developed in early June 2020, and the Corps was formally established in July 2020. BSPB experts, together with volunteers from the Corps, conducted ten field inspections in the Burgas Lakes region between August and December 2020, followed by three additional inspections in January, February, and March 2021. During these operations, four cases of poaching were identified – three at SPA Burgasko Lake and one at SPA Mandra-Poda Complex.

The Rapid Reaction Corps continues to operate in the area, conducting regular inspections and responding to emergencies as they arise. The relevant authorities, including the Executive Agency of Fisheries and Aquaculture and the Regional Inspectorate of Environment and Water – Burgas, are notified by Corps volunteers.

To raise public awareness, two video interviews highlighting the work of the Rapid Reaction Corps were produced. Additionally, a documentary film about the *Pelican Voyage along the Danube* was completed.

BSPB also signed a partnership agreement with the Pink Pelican Winery, under which 1 BGN from every bottle sold supports Dalmatian Pelican conservation in Bulgaria.

In recognition of its conservation work, BSPB presented the project during the official award ceremony of the PwC Bulgaria ESG Awards 2024.

The First Festival of Dalmatian pelican in Persina Nature Park, organized by PNPD took place at the beginning of July 2021 – 2 and 3 of July. The return of the pelicans was the topic of the event. It was organized as an informational and educational event with ecological themes. The purpose of the event was to increase public attention to the need to protect the Dalmatian pelican and to promote the return of pelicans as a nesting species in Persina Nature Park.

For the festival were produced: 2 billboards / billboard sheets/ installed in front of the Visitor Centre of Persina Nature Park /production of 1 of the billboards – co-financing from PNPD/, 1 banner for the festival. Some materials for "Festival of Dalmatian pelican" – tents, tables and chairs were bought. The spent amount for these materials was co-financing from PNPD.



Figure 31. The First Festival of Dalmatian pelican in Persina Nature Park, 2- 3 July 2021



Figure 32. Image of the banner produced for the festival



Figure 33. Image of the billboard produced for the festival

News item about the festival:

<https://life-pelicans.com/news/the-return-of-the-pelicans-the-topic-of-the-first-edition-of-the-festival-of-the-dalmatian-pelican/>

The second edition of the Festival of the Dalmatian Pelican, which had already become traditional and awaited, passed with many smiles, joyful emotions, and romantic sunsets on the Danube Riverbank. The Festival of the Dalmatian Pelican organized by PNPD was again an informational and educational event with a nature conservation focus.



Figure 34. Second Festival of Dalmatian pelican in Persina Nature Park, 3–4 June 2022

The “Festival of the Dalmatian Pelican” third extra edition organized by Persina Nature Park Directorate collected many smiles and beaming children’s faces. The event took place on May 26 and 27 on the yard of the park’s Visitor Center as part of the “Pelican Way of LIFE” initiative. In two days, hundreds of visitors joined the festival.



Figure 35. Third extra edition of the Festival of Dalmatian pelican, 26 – 27 May 2023

Deliverables:

Deliverables	Deadline	Comments
Video clips about the work of the Rapid Reaction Corp	30/06/2021	Submitted through Butler
Documentary about the Pelican voyage along the Danube	31/12/2022	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
Rapid Rescue Corp established	30/06/2020	Achieved 10.07.2020
First Pelican festival held	31/08/2022	Achieved 2-3 July 2021

Action E4. Develop a children and youth awareness programme of extracurricular activities related to pelicans

Objective of the action:

Development of awareness raising activities for children and young people: development of a school programme, lectures/seminars in schools, youth camps, educational visits

Foreseen start date: 01.10.2019	Actual start date: 01.10.2019
Foreseen end date: 31.12.2022	Actual end date: 31.03.2025

Progress

Greece:

The project's environmental education materials were designed and produced by the HOS Educational Team. The core material is a multi-page resource divided into seven thematic sections, covering topics such as the Dalmatian Pelican, its relationship with humans, the threats the species faces, and what actions we can take to help. It includes a Teacher's Guide with detailed instructions for educators and supporting informational texts.

The material is targeted at school pupils aged 9–16 (Primary and Secondary Education) and is designed to align with the national school curriculum. In addition, an outdoor activity field guide (in the form of a foldable leaflet) and a "Dalmatian Pelican Student Team" sticker were created and distributed to members of the Pelican School Network.



Figure 36. A presentation from an educational package developed in Greece

Since April 2022, 16 educational visits were carried out in 10 schools across Messolonghi and Amvrakikos, reaching a total of 415 pupils aged 9–15. These visits implemented the educational materials created during the previous reporting period and included field trips and an innovative “Vlogging Academy”. As part of the academy, students from the Secondary Art School of Messolonghi created and shared videos about Dalmatian Pelican conservation and received participation certificates.



Figure 37. A field visit together with the participants of the educational event in Greece.

An educational seminar for teachers of Primary and Secondary Education took place in Amvrakikos in September 2023, attended by 20 educators. The seminar featured oral presentations and a field visit with pupils. Teachers learned about the Dalmatian Pelican and how to effectively use the educational kit in their classrooms.



Figure 38. Educational seminar at Amvrakikos, Greece in September 2023.

In addition, two more educational events were organised in February and May 2023, in Lefkada and Messolonghi, respectively, with the participation of over 120 pupils, 12 educators, and 50 parents in total.

To foster ongoing engagement, HOS also established a Pelican Network, bringing together nine schools – five from Messolonghi and four from Amvrakikos. In Messolonghi, HOS collaborated with the local association Messolonghi by Locals to further strengthen school involvement in the network.

In total, more than 622 students and 96 educators from 19 schools have participated in the project educational activities, including kindergartens, primary and secondary education schools from the regions of Messolonghi, Arta and Lefkada.

Moreover, the educational leaflet (field guide) produced under the project is disseminated to school pupils during the educational activities of local Management Authorities of Protected Areas (in the areas of Messolonghi, Amvrakikos & Lake Kerkini) reaching more than 500 school pupils per year.

Bulgaria:

As part of the Pelican Way of LIFE project, the BSPB team conducted dozens of educational lectures and presentations across kindergartens, schools, and universities in various Bulgarian cities. These outreach efforts aimed to raise awareness about the Dalmatian Pelican, its biology, ecology, and the conservation actions carried out under the project.

Highlights include interactive workshops and presentations in Svishtov, Belene, Zlatograd, Vetrintsi, and Burgas, where students and teachers learned about the species' habitat, behavior, and the threats it faces. In February 2021, a workshop titled "The Birds Along the Danube River" engaged pupils in Svishtov, while later that year, BSPB experts reached even wider audiences through live online sessions and public events, such as the Vetrintsi Village Festival.

From 2021 to 2023, Bulgaria also hosted the National Ornithology Olympiad, attracting top students from 5th to 8th grade across the country, further promoting environmental education and youth engagement in bird conservation.

In total, more than 1,000 children were reached through these educational activities, helping to build a strong foundation of public awareness and support for the protection of the Dalmatian Pelican.

Pelican Youth Clubs have been established in Belene and Burgas, providing a structured platform for young people to engage more deeply with nature conservation.



Figure 39. Participants of the Pelican Youth Club in Belene

From 2022 to 2024 in order to involve university and school students in conservation work, three volunteer conservation camps were held in Persina Nature Park.

In the last days of September 2022, the First camp took place in the Persina Nature Park. It was the first educational and practical training, organized for university students by the Park Directorate. 20 volunteers came from Konstantin Preslavsky University of Shumen and Local High schools from Belene and Svishtov.

The second volunteer conservation camp organized by PNPD as part of the “Pelican Way of Life” initiative took place from August 27th to August 30th, 2023, and included a combination of fieldwork and lectures held at the Visitor Centre of Persina Nature Park. It was attended by students from the Erasmus+ project at “Dimcho Debelianov” High School in Belene.

The third edition of the volunteer conservation camp was held 17th – 20th of October 2024. Enthusiastic participants included students from Konstantin Preslavsky University of Shumen (Faculty of Natural Sciences, Department of Biology), Nikola Vaptsarov Naval Academy in Varna, Medical University of Varna, and several schools. Over four days, 25 young volunteers engaged in activities to improve and maintain habitats in Persina Nature Park.



Figure 40. Third volunteer conservation camp in Persina Nature Park, 17 – 20 October 2024

During the Project period, PNPD organized many interactive lessons and educational activities with students' clubs, kinder gardens, schools and universities. Dalmatian Pelican conservation was, is and will remain a very important topic in all educational activities and programmes of Persina Nature Park Directorate.

Romania-Ukraine:

The “Living Danube Delta” campaign engaged 16 schools across Romania, Ukraine, and Moldova, fostering a deeper connection between young people and the unique nature of the Danube Delta. A dedicated module focused on the Dalmatian Pelican, complemented by field visits that allowed students to observe the species in its natural habitat.

The multi-stage programme included online seminars for teachers, extracurricular lessons in schools, photo trainings, a contest, the formation of a youth club, and a youth camp within the rewilding landscape. The campaign began with bilingual online workshops (Romanian and Ukrainian), where educators were introduced to the programme's objectives and activities. These sessions also provided an overview of the developed educational materials – such as brochures for children and teachers, presentation slides, and interactive content – used in classroom activities.



Figure 41. Lesson at school as part of the educational program

In 2024, the Danube Delta Rewilders Camp, organized by Rewilding Ukraine and Rewilding Romania, introduced 30 local schoolchildren to the Dalmatian pelican through a special session led by Sebastian Bugariu from SOR. Participants also received educational materials and experienced unforgettable encounters with these iconic birds during field excursions in the heart of the Danube Delta.

In 2025, the Rewilding Romania team conducted a series of visits to local schools in the Danube Delta, Maliuc and Crisan, including presentations and interactive lectures about the species.

The SOR team visited 25 schools in the Danube Delta, Călărași, and Turnu Măgurele to introduce pupils to the Dalmatian pelican and other birds of the Delta through interactive lectures and activities.



Figure 42. The interactive school visit by the SOR team to the local school.

A range of educational materials was also produced for use during further school visits and events in both Ukraine and Romania. These included: 20 puzzles, 20 board games, 2 large games for events, 600 posters in Ukrainian and Romanian, and 200 educational handouts in Ukrainian. The “Living Danube Delta” educational brochure were printed in both languages, and 2 pelican figures were created for educational and awareness-raising events in Romania.

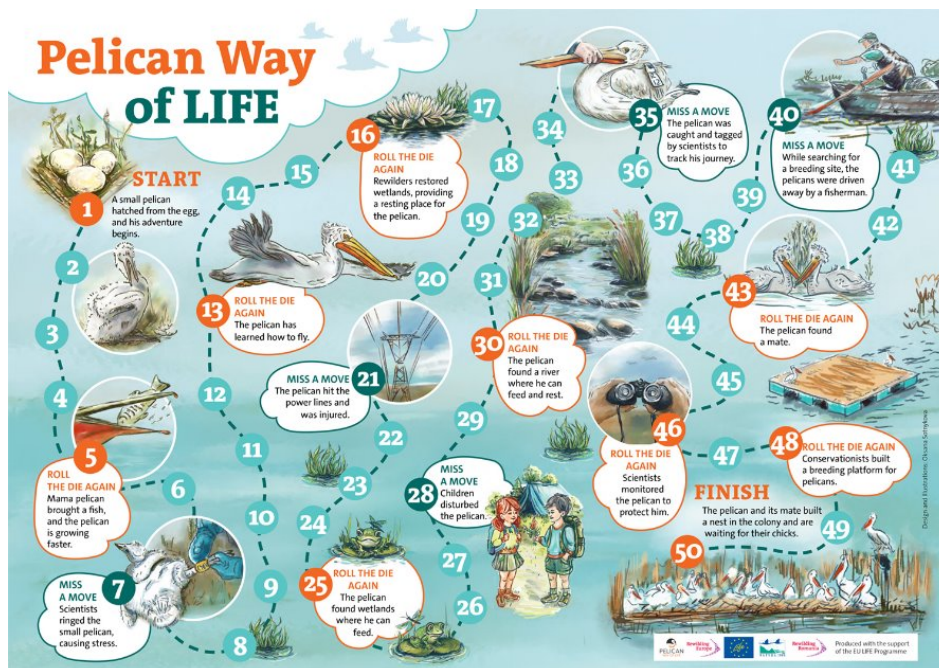


Figure 43. The board game about the Dalmatian pelican created in Ukraine and Romania

General:

In June 2023, the Pelican educational camp in the Danube Delta brought together over 50 participants from four countries to explore the world of Dalmatian pelicans and the vital role of rewilding in their return to European landscapes. Schoolchildren from Romania, Greece, Bulgaria, and Ukraine took part in the camp, held in the traditional Romanian fishing village of Sfântu Gheorghe. They were joined by educators from each country, who gained valuable knowledge and inspiration for future events, along with practical rewilding skills.



Figure 44. The participants of the Pelican Education Camp in the Danube Delta

The programme was led by conservation practitioners from all Pelican Way of LIFE partner organisations, featuring interactive lectures, wildlife-watching trips, and hands-on exercises.

A range of documents and materials was produced for the camp (diploma, posters, backpacks, infosheets and more). During the Camp all the participants also got a pack of branded materials produced earlier (T-shirts, pins, stickers, caps, project leaflet).

Deliverables:

Deliverables	Deadline	Comments
Educational material for children (GR)	30/09/2021	Delivered to monitor before monitoring visit 2022.

Milestones:

Milestones	Deadline	Comments
First educational activity in each country	21/12/2021	Bulgaria: 24-2-2021 Romania and Ukraine: summer 2023 Greece: April 2022

Action E5. Strengthen the capacity for pelican conservation in the key neighbouring countries sharing the Dalmatian Pelican subpopulation

Objective of the action:

The actions aimed at strengthening the capacities for Pelican conservation by increasing knowledge and unifying monitoring and management techniques. This was done by subcontracting external experts for the development of a knowledge exchange workshop, with participants from Albania and Northern Macedonia.

Foreseen start date: 01.04.2021	Actual start date: 01.04.2022
Foreseen end date: 31.12.2021	Actual (or anticipated) end date: 31.12.2022

A training seminar was held in Lemos, Greece, near Prespa Lake, on 22–23 June 2022 as part of the Pelican Way of LIFE project by the BSPB team. The workshop was specifically organized for experts from Albania, North Macedonia, Montenegro, and Turkey, with the goal of supporting replication and knowledge transfer across the wider region. Participants were trained in various methods for identifying the age and sex of Dalmatian Pelicans, and discussions were held on monitoring schemes, research protocols, ringing techniques, and the use of satellite transmitters.

This action contributed significantly to the transferability of project know-how and has expanded the impact of the initiative to neighbouring countries, laying the groundwork for future collaborations and regional alignment in pelican conservation. By sharing expertise beyond the project's core areas, the seminar supported one of the central goals of LIFE projects – replicating and scaling successful conservation practices. A detailed report on the seminar has been produced.

Thanks to this activity the monitoring and management techniques are now standardized across all the countries that host Dalmatian pelican populations, with an evident benefit at flyway level. As an example, following the workshop, in 2023, the Albania team of PPNEA (BirdLife Albania) managed to tag a Dalmatian pelican with a transmitter in Albania, with the support of the BSPB experts.

The long-term benefit of this will be a population-wide database of pelican numbers, movements, causes of mortality etc. and transnational management approaches can be planned by all the involved countries.



Figure 45. Participants at the training in Lemos

Problems/changes/delays:

Due to COVID-19 restrictions it wasn't possible to make the training in 2021 as foreseen. The action has therefore been postponed with 1 year and carried out in 2022.

Deliverables:

Deliverables	Deadline	Comments
Report on workshop outcomes	31/10/2021	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
Implementation of workshop	30/06/2021	22-23 June 2022

Action E6. Produce information materials to promote the species conservation among targeted audiences and the general public

Objective of the action:

Production of information materials to be used for awareness raising: t-shirts, stickers, posters, leaflets, vinyl blinds.

Foreseen start date:	01.09.2019	Actual start date: 01.09.2019
Foreseen end date:	31.12.2023	Actual date: 31.03.2025

Progress

In the first year of the project a brand manual was developed to ensure aligned branding by all partners. Following that, more than 50 different informational, educational and branded materials were produced in ca 37 500 copies in total by all the partners.



Figure 46. The 2025 calendar produced in Romania.

The wide range of materials included branded clothing, leaflets, brochures, info panels, calendars and posters, giveaway items, games and other materials for kids and more. Some materials were produced in the final months of the project using the remaining budget to ensure the continuation of awareness-raising activities after the project's conclusion.

The table summarizing all the produced materials in all the project countries is listed below. The electronic versions of all produced information and promotional materials are available on the project website.

Table 3 Numbers of different communication materials produced per country

Item	Greece	Bulgaria	Romania	Ukraine
Banners	2	4	1	1
Pins	1000			500
Stickers	2000	2054		1500
Leaflets*	17000	1000	700	700
Brochures	6500			100
T-shirts		450		250
Sweatshirts				20
Annual calendars		1220	70	1000
Face masks		500		
Flags		6		
Caps				100
Backpacks & Bags				65

<i>Diplomas</i>			<i>60</i>	
<i>Info panels</i>	<i>4</i>	<i>20</i>	<i>3</i>	<i>2</i>
<i>Posters</i>			<i>100</i>	<i>516</i>
<i>Games</i>			<i>21</i>	<i>21</i>

(* 200 also produced in English)

Deliverables:

Deliverables	Deadline	Comments
Gadgets	30/06/2020	Annex 9 MTR
Leaflets for Romania and Greece	31/12/2022	Submitted through Butler
2 annual calendars (BG)	28/02/2024	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
Initial set of printed communication materials	31/05/2021	Achieved on 03/2020

Action E7. Organize seminars and training courses on pelican conservation issues for key stakeholders

Objective of the action:

The action was specifically addressed to gain support of key stakeholders, mainly anglers/fishermen, through the production of a best practice manual (Romania) and training activities (Romania and Bulgaria).

Foreseen start date: 01.03.2021	Actual start date: 01.07.2022
Foreseen end date: 31.12.2024	Actual (or anticipated) end date: 31.03.2025

During the project period, the Bulgarian Society for the Protection of Birds (BSPB) organized three targeted seminars for key stakeholders in Bulgaria, with a particular focus on engaging anglers and fishermen – a group whose support is crucial for the conservation of the Dalmatian Pelican and the health of aquatic ecosystems.

The seminars took place in key locations within the project area: Belene (November 2022), Ruse (September 2024), and Burgas (March 2025). Each event aimed to raise awareness about the species, address potential concerns related to human-wildlife interaction, and highlight the benefits of conservation for local communities and fisheries.

Through open dialogue and exchange of knowledge, these seminars helped build trust, foster stakeholder cooperation, and strengthen local ownership of conservation efforts, thereby contributing to the long-term sustainability and support of the project outcomes.



Figure 47. The participants of the boatmen and tourist guides training in Romania

Best practice manual for boatmen and tourist guides was developed and two trainings for the boatmen and nature guides took place in Romania (Sfantu Gheorghe).

Problems/changes/delays:

The seminars/workshops have been postponed to 2022 due to COVID-19 pandemic and restrictions which made it impossible to organize physical meetings with the stakeholders.

Deliverables:

Deliverables	Deadline	Comments
Best practice manual for boatmen and tourist guides (RO)	30/11/2021	Submitted to monitor before monitoring visit in 2022

Milestones:

Milestones	Deadline	Comments
Implementation of first seminar/workshop with stakeholders	31/12/2021	November 2022

Action E8. Promote nature tourism services and products that stimulate pelican conservation

Objective of the action:

The action aimed at promoting tourism activities linked to the presence of Dalmatian pelicans: production of a birding guide, agreements with tourism entrepreneurs, birdwatching hides and programmes, informational panels and signboards.

Foreseen start date:	01.09.2019	Actual start date:	01.09.2019
Foreseen end date:	30.06.2022	Actual (or anticipated) end date:	31.12.2024

Progress

Greece:

To promote ecotourism and birdwatching in the project areas of Messolonghi and Amvrakikos (Greece), the Hellenic Ornithological Society (HOS) implemented a range of targeted actions. Two birding leaflets, available in both Greek and English, were produced for the project areas and disseminated through tourism professionals, information centres, national park visitor centres etc, and at the Global Birdfair in the UK. Additionally, a comprehensive birding guide for the Messolonghi region was prepared, available in Greek and English version. This edition features birdwatching routes, key birding highlights of the Messolonghi Lagoons, along with practical information and contact details. The complete version of the guide can be accessed at the link https://ornithologiki.gr/birding_messolonghi, where HOS is storing all birding guides produced under the project for the Messolonghi area.



Figure 48. The birding leaflet, available in both Greek and English, produced in Greece

To strengthen ties with the local ecotourism sector, HOS organized two seminars for more than 40 tourism professionals and local stakeholders, and held meetings to foster collaboration under the project.

As part of its outreach, HOS co-produced the 12-minute film “Big Wings”, focusing on Dalmatian Pelican conservation and ecotourism, with an emphasis on Messolonghi and Amvrakikos [also mentioned in Action E.1].

HOS also actively participated in local events such as the 2nd Messolonghi by Locals Festival (August 2020), where more than 120 attendees joined an oral presentation on the importance of the area for birdlife and its potential for birding tourism.

To celebrate World Migratory Bird Day 2020, an open event was held in Messolonghi in collaboration with local stakeholders. The programme included birdwatching activities focused on Dalmatian Pelicans and other waterbirds, guided tours, and dissemination of educational materials. The event drew over 150 participants, strengthening community engagement and raising awareness of the region's avian richness.

For the promotion of the areas of Messolonghi & Amvrakikos as worldwide birding destinations, the HOS has participated in July 2023 and 2024 at the Global Birdfair in Oakham UK, where banners highlighting the importance of western Greece wetlands for birdwatching tourism, with the Dalmatian Pelican as the birding ambassador, were displayed and project birding editions were disseminated to more than 1,000 visitors. In total, more than 3,000 people were reached.

Bulgaria:

As part of the project's efforts to strengthen eco-tourism and public engagement at the Poda Nature Conservation Centre (PNCC) in Bulgaria, the BSPB team implemented a range of infrastructure improvements and partnership initiatives. The contract for a dedicated Poda Centre officer was prepared by BSPB and finalized at the end of January 2020, ensuring effective coordination of activities on-site.

To support local, nature-friendly tourism, the BSPB team signed 10 partnership agreements between the Poda Centre and owners of family houses and small hotels. Additionally, they compiled a list of recommended community guides offering tourism services directly linked to the project, which is now shared with visiting tourists.

Site infrastructure was significantly upgraded by BSPB, including the installation of a new photographic hide, 2 wooden protective screens, 2 interpretation signs, a large billboard panel, and 2 solid benches with shelters. Pelican silhouettes were also installed to enhance the Centre's educational appeal.

To promote the Centre internationally, BSPB featured PNCC at the Global BirdFair 2023. Moreover, they developed 3 birdwatching programmes aimed at enriching the visitor experience and attracting eco-tourists to the region.

An article in Bulgarian and English promoting Persina Nature Park as a tourism destination was published in the popular national magazine "Cherga", which is distributed in airports and other key tourist locations across the country.

Romania and Ukraine

As part of tourism development efforts, Rewilding Ukraine, the Rewilding Danube Delta team, and SOR (Romanian Ornithological Society) created and installed a series of informational boards to raise awareness among local communities and visitors about the Dalmatian pelican and its conservation.

Rewilding Ukraine and Rewilding Danube Delta installed four boards at key locations: the Danube Biosphere Reserve Visitor Center in Ukraine and the Romanian communities of Crisan, Maliuc, and Letea. These displays highlight the Dalmatian pelican's role as an umbrella species, its significance for biodiversity, and its contribution to local ecotourism. They also

help visitors distinguish it from the Great White Pelican and offer tips on how to support conservation efforts.



Figure 49. The info board about the species, installed in Letea, Romanian Danube Delta

In addition, SOR produced and installed an information panel in Sfântu Gheorghe, near Melea, where a large pelican colony exists in a strictly protected area. Positioned along the boat tour route, the panel enhances visitor understanding of the species and its habitat while promoting responsible nature tourism.

Deliverables:

Deliverables	Deadline	Comments
Birding guide	30/09/2021	Submitted through Butler

Milestones:

Milestones	Deadline	Comments
All infrastructure in Danube Delta built and in use	30/04/2022	Canceled
Advertisement in a birdwatching/photo magazine	31/07/2022	End 2024

Action E9. Improve visitor's facilities to promote the species conservation among targeted audiences and the general public

Objective of the action:

Development of visitor's facilities linked to Dalmatian pelican, in Bulgaria.

Foreseen start date: 01.09.2019	Actual start date: 01.09.2019
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Foreseen end date: 31.12.2022	Actual (or anticipated) end date: 31.12.2024
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Progress

Bulgaria:

The Pelican Yard at the Poda Nature Centre has been fully completed by the BSPB team, offering visitors an engaging and educational space dedicated to the Dalmatian pelican. A large pelican silhouette has been artistically integrated into the newly constructed high-quality fence, giving the area a distinctive visual identity. To further enrich the experience, two life-sized pelican models and two informative stickers were installed, helping visitors learn more about the species in an accessible and visually appealing way.

As part of the infrastructure efforts to protect and monitor breeding sites, a video surveillance system was also installed in the Kalimok-Brushlen Protected Area, near the pelican nesting platform. This technology enables remote observation, improves site security, and contributes to more effective conservation management of this vulnerable species.



Figure 50. A video surveillance system in the Kalimok-Brushlen Protected Area

In 2020, PNPD started to look for a contractor for the creation of the 3D model of DP colony in the visitor centre. Because of the COVID-19 pandemic, the process stopped. In 2021 the multiple offers procedure took place. In the Spring of 2022 right before the first monitoring visit and the staff meeting in Bulgaria the 3D model of Dalmatian Pelican colony in the Visitor Centre of Persina Nature Park was ready. The 3D model of a colony of Dalmatian pelicans, is representing the life cycle of the species and a visualization of their habitat. The nests and bird figures are realistic, coloured to recreate the characteristic features of the species. The model also includes a sound system with real sounds representing the birds' colony behaviour and lifestyle, as well as sounds from the habitat's surroundings.



Figure 51. 3D model of DP colony in visitor center of PNP ready, Spring 2022

Deliverables:

Deliverables	Deadline	Comments
Report of the replicability actions	31/10/2024	This Deliverable was a mistake because the replicability activities took place in Action E10 and the report was submitted in that Action.

Milestones:

Milestones	Deadline	Comments
3D model of DP colony in visitor center of PNP ready	30/06/2021	Submitted through Butler

Action E10. Actions to guarantee replicability and sustainability of the project

Objective of the action:

The action aimed to encourage replicability of the project activities dissemination of the best practices and the identification of potentially interested parties.

Foreseen start date:	01.09.2019	Actual start date: 01.09.2019
Foreseen end date:	30.03.2025	Actual (or anticipated) end date: 30.03.2025

Progress

Initially the staff of the Pelican Way of LIFE project developed an internal plan on how to best encourage replication and uptake of the project activities, including the activities with the main upscaling potential, the main target initiatives and/or persons and what activities to carry out in order to encourage an effective upscaling.

The aspects with the highest upscaling potential in the project were the patrolling schemes, the commonly developed monitoring approaches and the well-coordinated transnational flyway approach, which impacted the population at a much higher scale than with single initiatives.

The activities that were identified as the most promising for encouraging the uptake of the best practices of the project were:

- To encourage the application of the commonly developed monitoring methods and protocol also in other countries that host Dalmatian pelican populations
- To expand to other territories the training of boatmen and tourist guides on how to reduce the impact of human activities on the pelican colonies
- To contribute with expertise to other pelican recovery initiatives

Specifically the following replication activities were carried out and the following results were achieved (see also deliverable “Report of Replication Activities”):

- A training has been carried out for nature guides in the Oder Delta (Germany and Poland) on 27-29 March 2023, replicating the boatmen training that was carried out in the Danube Delta (Action E8). The training was attended by 8 nature guides from the Oder Delta.
- The training guidelines originally developed for boatmen and nature guides in the Danube Delta (Romania) have laid the foundation for the creation of an innovative online learning tool, soon to be launched on Rewilding Europe’s Learning Portal.
- The staff of the Pelican Way of LIFE project contributed (also with a budget of 6.000 € - see chapter 8) to the production of a feasibility study for the reintroduction of the Dalmatian pelican in the Netherlands and Flanders. In summary, the text argues that the reintroduction of the Dalmatian pelican in the Netherlands is a realistic and potentially beneficial option for biodiversity and tourism.
- As a result of the training seminar held in the frame of Action E5 in Lemos, Greece, the technicians and researchers in Albania, Northern Macedonia, Montenegro, and Turkey are now using the monitoring scheme, developed in Pelican Way of LIFE, for monitoring the population in their countries.
- Thanks to the demonstrable impact of the Pelican Camps (Action E3), this is now becoming a permanent educational initiative, with the next edition planned for 2025. As the camp evolves into a long-term programme, it will serve as a model for similar initiatives across other rewilding landscapes in Europe. Its success demonstrates how experiential education can play a key role in shaping a rewilding culture – one that values coexistence, respect for wildlife, and sustainable engagement with nature.
- During the non-breeding season, Dalmatian pelicans (DP) are increasingly frequenting areas along the Danube bordering Romania and Serbia, notably around the Iron Gate and upstream regions of historical significance for the species. Observations typically record up to several dozen individuals. Following coordination between project staff and Birdlife Serbia, a proposal emerged to enhance the local population by installing artificial platforms in a nearby Serbian wetland. If funding is secured, the initiative will apply established project methods, demonstrating effective replicability.

Deliverables:

Deliverables	Deadline	Comments
Report with pictures of replication activities	31/12/2024	Submitted though Butler

Milestones:

Milestones	Deadline	Comments
At least one action has been successfully adapted and replicated	31/12/2024	June 2023

5.2 Evaluation of Project Implementation

– Methodology applied:

Action A1: Methodology applied for trapping and tagging DPs was agreed with DP experts from the Society of the Protection of Prespa – SPP and was been adapted to fit the needs of each project site. It has to be noted however that DP trapping is taking place for the first time in these project sites and has been proven to be more challenging compared to other sites as explained in the action project description. For example at the Greek project sites, fast manoeuvring with speed boats that would allow trapping of DPs (as it takes place at Kerkini Lake) is not possible due to the very shallow waters of the lagoons. The same applies to Romanian sites. The methodology used for the wintering DP assessment and the spring census follows the methodology used for the International Waterbird Census for already many years by the project partners. Monitoring of breeding sites was implemented following a common methodology designed by SPP experts for the project, based on their long experience monitoring pelican breeding sites in the north of Greece.

Action A2: Assessing the collision risk for DPs on electrical powerlines follows a simple but effective methodology adapted from already existing methodology that has mainly been developed and used for raptors. The methodology is very simple and can also be potentially used in citizen science projects.

Action A3: The investigation of attitudes towards fish eating birds and identification of potential conflict sites has been implemented in Bulgaria and Romania based on similar methodologies developed in the frame of other projects in Bulgaria and perfected in frame of the project. This allowed for a similar approach in conducting the interviews and data comparison.

Action A4: The development of the common GIS database has been based on bringing together all the project data in a common format, regardless in which country has been collected, for a unified analysis and presentation of data

Action A5: A training workshop was held on 25th and 26th of February 2020 at Lemos, Greece. The workshop was led by experts from the Society for the Protection of Prespa (SPP). During the workshop, the project partners were trained in methods of monitoring, ringing and tagging of the Dalmatian Pelican and agreed on a series of technical aspects regarding the implementation of surveys, monitoring, ringing/tagging etc. There was significant information exchange between project partners and external experts in order to evaluate the most appropriate methods to fit transmitters and the best solutions to choose. Information was requested from and experience was exchanged with other LIFE projects implementing similar methods.

An Identification/Ageing Manual and a Monitoring Manual were produced by experts from SPP. The Manuals were disseminated to all project partners, caretakers, volunteers, institutions, members of Pelican Working Group and Pelican mailing group (PELECANUS GROUP) created a few years ago and maintained by project team members.

Throughout the duration of the project, partners were in close contact, exchanging information in order to have a common approach for our field activities.

Action C1: similar methodologies have been applied in project countries namely Romania and Bulgaria for installing bird diverters and also new ones (with the use of drones in Bulgaria). The use of specific bird diverters has been the result of information exchange and know-how between several experts across countries and projects, based on the efficiency of these devices.

Action C2: Patrolling the project sites in collaboration and coordination with the relevant authorities and using appropriate equipment (telescopes and/or night vision) is an effective way to ensure prevention of events of DP disturbance. This collaborations maximises the presence of appropriate personnel in the field that also inform the wetland users (fishermen, hunters,

bird-watchers etc.) about the breeding sites of the DPs and the need for the species to remain undisturbed. Cost efficiency is considered at all times during action implementation. Tasks from a different actions are coordinated so that they can take place during single trips to the project sites thus reducing unnecessary spending from the travel and subsistence category.

Action C3. Improve breeding and roosting through artificial platforms at key sites along the flyway has been implemented following extensively shared information both between project partners and external available information, especially regarding the technical specifications, detailed construction etc. The transfer of information regarding has been a key point of communication between pelican experts across different countries.

Action D2: The main aim was to study the effectiveness of the selected bird diverters and other mitigation measures by comparing the bird mortality before/after installation and by monitoring of bird reactions, reaction distances and other important parameters on the same section of non-marked and marked power lines with the same site-specific conditions. The methodology of the study under Action D2 is similar to that of the study under Action A2. The power lines marked with bird diverters must be inspected once each month with a recommended period of minimum 10 months, with at least 20 and at most 30 days between walk-arounds. In Bulgaria regular monthly field visits of power lines with installed bird diverters in the region of SPA Mandra-Poda Complex were conducted by BSPB experts in the period from February 2024 to February 2025. During these field visits, no injured or dead pelicans were found around the power lines with bird diverters. In Romania following the installation of the bird diverters in the 2 project areas (ROSPA0051 and ROSPA0031), regular visits have been performed to these sites during the second half of 2024 to February 2025. During these surveys, no additional casualties (injured or dead pelicans) have been detected around the power lines equipped with diverters. In Greece the buried section of the power line needed no subsequent monitoring to prove their effectiveness for obvious reasons. The insulated section unfortunately was delayed due to shortage of materials and long delivery dates, and thus insulation works were finalized in March 2025. HOS will carry out the monitoring efforts of the insulated line from April to June 2025 with its own funds and update the current report with the results of said monitoring with the Final report. Insulation of the line will have an added value to other bird species in the area suffering from electrocution when perching on the pylons as these lines reduce the risk of electrocution to zero.

Table 4 Summary of project progress

Action	Foreseen in the revised proposal	Achieved	Evaluation
A1. Study the current population status, movements, dispersal, threats and key sites along the flyway route	Objectives: Monitoring of the conservation status and distribution of Dalmatian pelican Expected results: 25 DPs tracked, improved knowledge on stop-over sites and concentration areas, stabilization of western population in GR, survival, protection and stabilization of the newly established colonies in “Martvo Blato” on Persin Island, territory of Persina Nature park (BG) and Lake Tasaul (RO), increase of the Dalmatian pelican population in EU by 5-10 % for 5 years	A total of 24 birds were tagged with patagial GPS-GSM transmitters, 11 in Bulgaria, 6 in Greece and 7 in Romania. 309 birds were ringed in total with colour plastic rings in Bulgaria, Greece and Romania (where an additional 46 juveniles have been ringed after the project completion). The number of DP nests show increase in all project sites, 3 new nesting platforms occupied in BG and also new colony established in BG. Substantial increase of breeding population at Lake Tasaul colony in Ro. Considerable recovery of the breeding population following the HPAI Avian Influenza event in 2022. Considerable improvement of knowledge regarding numbers and population structure in all project countries and region following the implementation of 4 years of	Evaluation of the status, distribution, movements and mortality rates of DP is achieved. The information is structured primarily in the D1 and A1 reports.

		Spring Census and 4 years of Winter Census throughout the project.	
A2. Assess collision risk with powerlines and mapping high risk areas at key sites	Objectives: Assess collision risk with powerlines Expected results: mapping high risk areas at key sites	The methodology for the field survey and assess collision risk with powerlines and mapping high risk areas at key sites has been developed and disseminated. Monitoring the mortality of DPs at the Greek project sites begun in July 2020 and was completed in June 2021. In total 12 monitoring visits were conducted (once per month) in each project site during which the HOS field officer monitored the electricity lines where collisions have been reported in the past. In total, 16 DPs were found dead most likely from collision (10 in Amvrakikos and 6 in Messolonghi). The field survey has been carried out by BSPB in April 2020 – June 2021 to assess the risks of collision with power lines in Bulgaria. Additionally, data were collected on dead pelicans in the studied areas during the regular	All gathered data has been compiled into the final reports for Greece, Bulgaria and Romania, available on the project website and shared with electricity distribution companies and protected area authorities. Completed.

		monitoring in July 2021 - March 2022. A total of 39 power distribution lines with a total length of 62.9 km were walked and researched over in the study regions. A total of 38 pelicans (23 GWPs and 15 DPs) were found dead. In Romania Dalmatian Pelican mortality caused by collisions with powerlines have been recorded in a couple of high-risk areas, notably at ROSPA0051 Iezerul Calarasi, ROSPA0031 Danube Delta and Razelm-Sinoie complex, and the Black Sea coast within the Danube Delta Biosphere Reserve. These incidents confirmed prior assessments that identified these zones as priorities for targeted conservation actions.	
A3. Investigate attitude towards fish eating birds and identify potential conflict sites	Objectives: investigate the attitude of key stakeholders including fishermen and owners of fisheries and reservoirs towards fish-eating birds; collect information on losses or perception of losses and identify potential sites with risk of persecution.	The Questionnaire to investigate attitude towards fish eating birds and identify potential conflict sites has been developed and disseminated among the project partners. This action was not implemented in Greece, as there was no budget	The Final Reports with analysed data from Bulgaria, Romania and Ukraine have been produced and uploaded on the project web site. Completed.

	Expected results: identify potential conflict sites	foreseen for the collection and analysis of the data. BSPB project staff carried out 65 meetings and interviews with stakeholders (anglers, hunters, fishponds owners) in the regions of the project sites. 65 questionnaires related to investigating the attitude towards fish-eating birds have been filled. In Romania between 2021 and 2022, structured interviews were conducted in locations including Iezer Calarasi, Mostistea, Ciocanesti, Tasaul, and the Danube Delta Biosphere Reserve., involving fish farm managers, fishermen, local authorities, researchers, and community members. Rewilding Ukraine made 4 interviews (out of 50) with fishermen around Kartal Lake in August 2020 and 2 interviews in July 2021 in Danube Biosphere Reserve, and 3 in August 2021 in Danube Biosphere Reserve and finally 10 interviews in 2024 in the Danube Biosphere reserve this making 19 interviews in total.	
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A4. Development of a GIS database of the project	Objective and expected results Development of a GIS database to store all the information gathered during the project actions	The database has been developed, data have been provided by the partners and included, it was constantly updated.	The database provided important indication to the partners for the implementation of the activities.
A5. Develop common protocols and unify research and monitoring methodologies	Objectives: developing a common standardized methodology for the monitoring of DP, as a fundamental tool on which to base internationally shared and coherent management decisions Expected results: common monitoring protocols and unified monitoring methodologies	A training workshop was held on 25 th and 26 th of February 2020 at Lemos, Greece Identification/Ageing Manual and Monitoring Manual have been produced by experts from SPP. The Manuals have been disseminated to all project partners, caretakers, volunteers, institutions, members of Pelican Working Group and Pelican mailing group (PELECANUS GROUP) created a few years ago and maintained by project team members	Completed
C1. Reduce collision risk for Dalmatian Pelican at key sites by installing bird diverters on power lines	Objectives: Reduction in mortality caused by collisions with overhead powerlines Expected results: to mount diverters on about 2 km of power lines in Bulgaria, 4 km in Amvrakikos and Messolonghi in Greece and 4 km in Lakes Tasaul-Corbu	In Greece HEDNO committed to completely insulate 4 km of dangerous powerlines in the southern part of Kleisova lagoon, in Messolonghi. In the meantime, HEDNO also proceeded to bury another section of dangerous powerlines, around 4 km in the area of Turlida, also in Messolonghi.	Completed.

	and Danube Delta Biosphere Reserve, respectively, in Romania.	Bird diverters have been installed along 4.6 km of power lines located in the SW part of the Mandra-Poda Complex SPA by the Elektrorazpredelenie Yug EAD - the electricity distribution company operating in SE Bulgaria and BSPB. In Romania, a total of 400 bird diverters (FireFly SF 10-70N) have been installed. Installation has been performed by the electricity distribution company in ROSPA0051 Iezerul Calarasi (100 pieces) and by the project personnel (SOR) in collaboration with the Danube Delta Biosphere Reserve Administration and the National Waters Administration (management of the powerline in question) – 300 pieces in ROSPA0031 Delta Dunarii si complexul Razelm-Sinoie. In total, 6.5km of powerline were covered (1.6km at ROSPA0051 Iezerul Calarasi and 4.9km at ROSPA0031 Danube Delta).	
C2. Establish new patrolling schemes to prevent persecution,	Objectives: To improve nesting conditions through patrolling	Patrolling schemes were activated in all relevant project sites, implementing a total of 783 during the whole of the project in BG,	Collaboration with local authorities within the patrolling schemes and dissemination of information during the patrols to the local community

disturbance and illegal activities	Expected results: Reduce species disturbance and mortality by persecution by introducing new patrolling and surveillance schemes at 7 SPAs - Belene Islands Complex, Ovcharitsa, Rozov Kladentes, Studen Kladentes, Lakes Tasaul-Corbu, Amvrakikos Gulf and Messolonghi wetland.	GR & RO. No mortality of DP was observed by persecution and only 20 disturbance events were recorded that were reported to the relevant authorities and/or addressed by the project team. In addition, in 2023 the PNPd upgraded the video surveillance system, completing the patrolling scheme and being used in combination with patrols.	and fishermen has proven to be very valuable tools in reducing disturbance.
C3. Improve breeding and roosting through artificial platforms at key sites along the flyway	Objectives: To improve nesting conditions through habitat improvement actions. Building of new platforms, enlargement and repairing the existing platforms during the project period and bedding of reed. Expected results: Improved breeding and roosting through artificial wooden platforms 1 build platform and enlargement and repairing the existing.	- 12 platforms constructed (9 BG+3 UA) - repairing of 7 roosting and breeding platforms yearly where it is necessary - bedding of reed on the new ones and on the other existing platforms yearly The implementation of the action took place throughout the project period. The first new platform was built in 2020 by BSPB and the field work was supported by the PNPd team. Since then, until the end of the PWOL project, the partners' teams have implemented on the field all necessary measures to improve nesting conditions through habitat improvement actions: construction of new	Improving the breeding and roosting through habitat improvement actions in combination with the reducing of species disturbance and mortality by persecution (Action C2), led to: - formation of new DP colonies - increasing the number of nesting pairs

		platforms, enlargement and repairing the existing platforms during the project period and bedding of reed.	
D.1 Monitoring of the impact of the project actions on the target species	Objectives: Evaluation of the effectiveness of the conservation actions implemented during the project. Expected results: Monitoring of the impacts of the conservation actions implemented on the populations of DP helps assess their efficiency and need to continue in the future with possible modifications or adaptations.	A report was produced showing that although implemented actions benefitted the DP populations, most threats are still present, if in smaller degree, and thus conservation actions should continue in the future to ensure the positive results in the longer term.	The report successfully summarizes the positive impacts of all the project activities.
D.2 Monitor the effectiveness of bird diverters on power lines	Objectives: Evaluation of the effectiveness of installed bird diverters Expected results: Monitoring of the powerlines where bird diverters are mounted will provide information on their effectiveness. Comparing the outcomes of monitoring surveys with baseline data for mortality from past studies as well as from Action A2, will allow assessing effectiveness of diverter placement.	GR: HOS monitored 14.7 km of medium voltage network from which 7.4 km were assessed to be dangerous and recommended for installation of bird diverters. Yearly estimate of Dalmatian Pelican casualties is at least 4% of the local population in the areas that were monitored. No casualties were recorded after the corrections of the power lines was implemented BG: 39 power lines with a total length of 62.9 km were surveyed over in the study regions under Action A2. A contract was signed	The final report with results from the impact monitoring has been produced.

		with a field expert who will carry out the impact monitoring along 4.6 km of powerlines during April – December 2024. RO: following the installation of the bird diverters in the 2 project areas (ROSPA0051 and ROSPA0031), regular visits have been performed to these sites during the second half of 2024 to February 2025. During these surveys, no additional casualties (injured or dead pelicans) have been detected around the power lines equipped with diverters.	
D3. Monitoring of the impact of the whole project	Objectives: Analysis of - Impact on nature conservation and biodiversity - Socio-economic impact - Impact on ecosystem services Expected results: Report summarizing the impact of the project	An analysis of the impacts on Pelican conservation, biodiversity, ecosystem services, socio-economic conditions was made by an external group of experts.	The evaluation of the impact is positive, with the pelican populations increasing after a decrease in 2022 due to Bird Flu. All the interventions have been successful in terms of conservation and the project has had an important impact for the local stakeholders.
E1. Local, national and international media and multimedia communication activities	Objectives: Raising awareness among the general public through media communication activities Expected results:	- 121 articles published on the website, attracting more than 120,000 unique views. - 853 social media posts on the initiative's channels reached 735,000 people.	The communication activities were highly successful, achieving excellent coverage in both traditional and social media. A comprehensive media database and audiovisual archive were developed and regularly updated, containing a wealth of photo

	- collection of photo/video material, production of short documentary - production of website and communication through social media - installation of 4 info panels - local, regional, national media activities	- Media database and audiovisual archive were created and continuously updated throughout the project. - The 1,700 publications and posts, reaching ca 10 million people via media and partner channels. - 5 professional photo missions and 100+ partner-led shoots produced 2,000+ photos. - 4 professional video missions, and many field shoots, resulting in four videos and 75+ short clips. - 12-mins documentary about the species and the conservation efforts on it. - Final 5-minute promo video about the species. - Layman's report is prepared and translated to local languages. - Bilingual information panels were designed and installed in all the countries. - GIS plugin was developed and integrated into the website to visualize the movements of tagged pelicans. - One press-tour was organised in Romania. - 2 scientific publications were published, 2 more are under preparation by the partners, and 2	and video materials, including extensive original video content. The outreach efforts effectively engaged diverse target audiences — including local communities and stakeholders, tourists, scientists, and the general public — to build long-term support for conservation actions focused on the Dalmatian pelican.
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		are being prepared by external parties.	
E2. Networking with other projects	Objectives: Promoting the objectives, activities and results of the project through sharing experience with other projects and initiatives. Expected results: Promotion of the goals, actions and achievements of the project	An exchange of experiences with at least nine LIFE projects, as well as other conservation initiatives and groups, took place during various events and through direct contacts and collaborative actions. Three articles were published in a popular Bulgarian journal. Additionally, a webinar for members of the European Rewilding Network, along with several in-depth stories shared through Rewilding Europe's communication channels, helped disseminate information to a wide range of stakeholders across Europe.	The action was successfully overimplemented, although some in-person meetings were replaced by online ones due to the COVID-19 pandemic.
E3. Deploy wide awareness raising campaigns	Objectives: Promoting the objectives, activities and results of the project through organizing public campaigns Expected results: Raising awareness and ecological culture among the general public	Three editions of the Festival of the Dalmatian Pelican were organized in Persina Nature Park (2021–2023), supported by various promotional materials. The Rapid Reaction Corps was established in 2020, and two video interviews were created to promote its work. A documentary on the conservation of the Dalmatian Pelican along the Danube was also produced.	Local communities and the general public were actively engaged and informed through a series of actions. Some activities were even overimplemented, such as the third edition of the festival and hosting a European Commission filming crew in Bulgaria to document project activities, among others.

		Additional awareness-raising activities took place in both Bulgaria and Greece, targeting the general public and local communities.	
E4. Develop a children and youth awareness programme	Objectives: Development of awareness raising activities for children and young people: development of a school programme, lectures/seminars in schools, youth camps, educational visits Expected results: Develop a children and youth awareness programme	Extensive educational efforts were implemented across all project countries. In Greece, a comprehensive educational kit and a creative "Vlogging Academy" were developed for schools; the team conducted around 20 school and field visits, reaching over 600 pupils, while nine schools joined the newly formed Pelican Network. A series of events for teachers complemented the educational activities. In Bulgaria, over 1,000 students were engaged through dozens of school lectures and public events, including three editions of the National Ornithology Olympiad. Three volunteer conservation camps were held in Persina Nature Park, and Pelican Youth Clubs were established in Belene and Burgas. Romania and Ukraine collaborated on the <i>Living Danube Delta</i>	Numerous educational activities helped reconnect children with nature and engaged young people more deeply in conservation efforts, building a strong foundation of public awareness and support for the protection of the Dalmatian Pelican. All educational actions were highly successful and well-received by pupils and teachers across all participating countries.

		campaign, involving 16 schools and producing multilingual educational materials, games, and field experiences to connect students with nature. Around 30 school visits complemented the education actions in Romania. The educational actions culminated in an international Pelican Education Camp in Romania in 2023, bringing together children and educators from four countries.	
E5. Strengthen the capacity for pelican conservation in the key neighbouring countries	Objectives: Development of a capacity building workshop for conservationists in the target countries and from Albania and Northern Macedonia.	A training seminar was held in Greece in June 2022 gathering the experts from Albania, North Macedonia, Montenegro, and Turkey, with the goal of supporting replication and knowledge transfer across the wider region.	This action contributed significantly to the transferability of project know-how and has expanded the impact of the initiative to neighbouring countries, laying the groundwork for future collaborations and regional alignment in pelican conservation.
E6. Produce information materials to promote the species conservation among targeted audiences and the general public	Objectives: Production of information materials to be used for awareness raising: t-shirts, stickers, posters, leaflets, vinyl blinds. Expected results: Have availability of promotional materials to raise awareness	A brand manual was developed to ensure aligned branding by all partners. Following that, more than 50 different informational, educational and branded materials were produced in ca 37 500 copies in total by all the partners. The wide range of materials included branded clothing,	All planned materials were produced, along with additional resources developed within the available budget. The majority of these materials were disseminated to relevant target audiences throughout the project's duration. Some materials were created in the final months to be distributed later, ensuring the continuation of awareness-raising

		leaflets, brochures, info panels, calendars and posters, giveaway items, games and other materials for kids and more.	activities beyond the project's conclusion.
E7. Organize seminars and training courses on pelican conservation issues for key stakeholders	Objectives: Ensuring support of local communities and stakeholders for the Dalmatian pelican conservation. Expected results: Development of a manual for boatmen and tourist guides, organisation of seminars and workshop for stakeholders	Three targeted seminars for key stakeholders were organised in Bulgaria: Belene (November 2022), Ruse (September 2024), and Burgas (March 2025). Best practice manual for boatmen and tourist guides was developed and two trainings for the boatmen and nature guides took place in Romania (2021-2022).	The guide is developed, the seminars and workshops took place in Bulgaria and Romania.
E8. Promote nature tourism services and products that stimulate pelican conservation	Objectives: promoting tourism activities linked to the presence of Dalmatian pelicans. Expected results: production of a birding guide, agreements with tourism entrepreneurs, birdwatching hides and programmes, informational panels and signboards	Targeted ecotourism and awareness-raising actions were carried out across all project countries. In Greece, the Hellenic Ornithological Society produced and disseminated a birding guide and two leaflets, organized seminars for tourism professionals, and held or joined public events, including World Migratory Bird Day and Global Birdfair. Additionally, the video	These initiatives strengthened local engagement, enhanced visitor experiences, and promoted the long-term potential of sustainable ecotourism in pelican habitats. With the outbreak of the war in Ukraine, the construction of watching hides was cancelled due to safety concerns and logistical constraints.

		Big Wings on ecotourism and pelicans was produced. In Bulgaria, BSPB upgraded infrastructure at the Poda Nature Conservation Centre, signed partnerships with local tourism providers, and developed birdwatching programs to attract eco-tourists. An article promoting Persina Nature Park as a tourism destination was published in a popular national magazine. Romania and Ukraine installed educational panels at 4 key locations.	
E9. Improve visitor's facilities to promote the species conservation among targeted audiences and the general public	Objectives: Improve visitor's facilities to promote the species conservation among targeted audiences and the general public Expected results: Development of visitor's facilities linked to Dalmatian pelican, in Bulgaria	The Pelican Yard at the Poda Centre has been fully completed. Two life-sized pelican models and two informational stickers about the species were also installed. The fence at the Poda Nature Centre is now in place. A 3D model of a Dalmatian pelican colony was created and installed at the Persina Nature Park Visitor Centre. Additionally, a video surveillance system was installed in the Kalimok-Brushlen Protected Area.	The action was completed to create memorable visitor facilities that support Dalmatian Pelican conservation.

E10. Actions to guarantee replicability and sustainability of the project	Objectives: Encourage replicability of the project activities. Expected results: Development of a replication plan and the identification of potentially interested parties. One replication case is identified in the Oder delta.	Training for nature guides in the Oder Delta (Germany and Poland) on 27-29 March 2023, replicating the boatmen training that was carried out in the Danube Delta. Online learning tool developed regarding best practices for boatmen and nature guides. Contribution to the production of a feasibility study for the reintroduction of the Dalmatian pelican in the Netherlands and Flanders.	The action is progressing as foreseen, and will surely yield more than one replication case.
F1. Project management including monitoring project progress	Objectives: Guarantee the correct management and implementation of the project in agreement with all the relevant rules and procedures Expected results: The actions are developed as foreseen, in line with planned time frame and budget, and planned deliverables and milestones are met.	Kick-of meeting made in November 2019, two more in-person staff meetings made in 2022 and 2024. 25 online meetings made. Technical development regularly monitored by Regional Coordinator and Project Manager. Quarterly reports made throughout the project. Expenses monitored on a quarterly basis.	The project has been developed smoothly without major problems. The COVID 19 limitations caused few delays in the A and E actions, but all of them have then been recovered soon and did not have any impact on the achievement of the project objectives.

- Indicate which project results have been immediately visible and which results will only become apparent after a certain time period.

GR: DP colonies are mainly left undisturbed at all project sites and as a result the DP breeding numbers are relatively stable. This is an immediate and visible project result. Reduction of DP mortality due to collisions on electricity wires in Messolonghi will surely be felt thanks to the burying of a 4km section of dangerous lines, while the insulation of another 4km section in this same wetland has also contributed to reduce collision mortality as so far no birds have been recorded dead under the insulated power lines.

RO: The DP colony at Lake Tasaul reached record numbers of breeding pairs in 2020 and 2021—the highest since its establishment in 2012. Except for 2022, when HPAI Avian Influenza caused a temporary decline, the colony has shown a steady increase. This success is due to improved protection, regular patrolling, and reduced disturbance, supported by effective communication with local stakeholders, especially the fishing company leasing the fishing rights on the lake. It is currently the second-largest DP breeding colony in Ro. This is one of the most important direct results of the project, which is also a major, long-term achievement.

Monitoring data will be used to update the National Species Action Plan, forming the basis for future conservation efforts. The project also strengthened the national network of volunteers and specialists working on pelican conservation as an immediate result.

Efforts to reduce pelican collisions are already immediately visible results and are expected to have lasting impact. Collaboration with the electricity transmission system operator (TSO) has been a key immediate outcome and will facilitate similar initiatives elsewhere.

Additionally, the compensation scheme established by Government Decision no. 216/2025 provides financial relief for fish-farms affected by fish-eating birds in Natura2000 sites. This will have a direct immediate impact in reducing the conflict between fish-eating birds and the fishing industry.

UA: the first breeding platform was built in Anankin Kut in 2021 but we had no access to it since 2022 and could not check if it was used for breeding or roosting. The other two platforms were built in 2022 at Kartal lake and 2024 in Ermakov island. The platform on Ermakov was not occupied in 2024, although the pelicans used it for roosting. We could not check any of the platforms in 2025 over the military restrictions, although a dalmatian pelican tagged in Bulgaria has used a platform at Kartal lake intensively during 2025 for several months, but no confirmed breeding yet.

BG: The first visible project result is increasing the number of the breeding pairs in Persina Nature Park from 24 pairs in 2019 to 88 pairs in 2021. In 2021 new breeding colony has been established in Kalimok-Brushlen Protected Area. The breeding population of the species in Bulgaria increased to 144 pairs in 2024. Bird diverters have been installed along 4.6 km of power lines located in the SW part of the Mandra-Poda Complex SPA. During the impact monitoring under action D2, no bird carcasses were found by the BSPB team, which proves the high effectiveness of these devices.

- If relevant, clearly indicate how a project amendment led to the results achieved and what would have been different if the amendment had not been agreed upon.

No project amendments have been made.

- Describe the results of the replication efforts.

The results of the trainings (boatmen training in Oder Delta, learning platform) will be visible on the longer term.

The contribution to the study for the reintroduction of the Dalmatian pelican in the Netherlands and Belgium is an important tool on which now this reintroduction is being planned. Furthermore, an initiative for the reintroduction for the Dalmatian pelican is nowadays also being launched in the UK, also inspired by the up-mentioned document.

As a result of the training seminar held in the frame of Action E5 in Lemos, Greece, the technicians and researchers in Albania, Northern Macedonia, Montenegro, and Turkey are now using the monitoring scheme, developed in Pelican Way of LIFE, for monitoring the population in their countries.

The training camps are becoming a permanent educational initiative, with the next edition planned for 2025. Considering the big success of these initiatives and the great interest raised among children this will have a long-term impact in terms of raised awareness on nature conservation topics in general.

Following coordination between the project staff and Birdlife Serbia, a proposal emerged to enhance the local population by installing artificial platforms in a nearby Serbian wetland. If funding is secured, the initiative will apply established project methods, demonstrating effective replicability.

- Indicate the effectiveness of the dissemination activities and comment on any major drawbacks.

Public awareness and dissemination actions were implemented as planned, with many activities overachieved – especially in media outreach, education, and the production of promotional materials. Items such as posters, leaflets, banners, calendars, stickers, and T-shirts were produced and widely distributed at public events and through partner networks. Some materials were created in the final months to be distributed later, ensuring the continuation of awareness-raising activities beyond the project's conclusion.

Although some activities were delayed due to COVID-19 and the war in Ukraine, most were successfully resumed or adapted, with only the construction of a birdwatching hide under Action E8 not completed.

Media engagement was strong from the beginning and grew steadily, especially during events like the avian flu outbreak, bird tagging, and the construction of breeding platforms. The project received extensive media coverage, reaching an estimated 10 million people, including features in high-profile outlets such as BBC Ukraine, NOVA TV (Bulgaria), Skai.gr (Greece), and Hotnews.ro (Romania). A press tour was eventually held in Romania, and the second planned tour was replaced by expanded education efforts.

Educational materials and programs were developed in all partner countries, with implementation exceeding expectations. Highlights included the international Pelican Education Camp, which brought together pupils and educators from across the project area. Numerous public events – festivals, youth camps, bird censuses, Rapid Reaction Corps actions – effectively engaged local communities and volunteers, strengthening long-term support for pelican conservation.

To visually document the project, nine professional photo/video missions and over 100 partnered shoots were conducted, resulting in more than 75 video clips and four major films, including a high-quality promotional video on Dalmatian Pelican conservation.

Communication actions ensured strong outreach through online and offline channels. Regular updates, field visuals, and stakeholder engagement were supported by the project website (www.life-pelicans.com), social media platforms, and participation in major events like the UK Global Birdfair. Information panels were installed in key sites across Romania, Ukraine, Greece, and Bulgaria, including visitor centres and breeding locations.

The project also fostered knowledge exchange with other LIFE and conservation initiatives, focusing on topics like pelican tagging and reducing mortality from power lines. Collaboration occurred through joint online and offline meetings, expert workshops, and publications in national and scientific magazines. Several capacity-building workshops further supported local stakeholders, while tourism infrastructure, guides, and information boards promoted nature-based tourism and community support for Dalmatian Pelican conservation.

– Policy impact

GR: Patrolling and monitoring actions at the GR project sites provided added value to also other Annex I species as both sites are also Ramsar wetlands. Amvrakikos wetland hosts 16% of all Greek wintering waterbirds whereas Messolonghi lagoon host the highest diversity of waterbirds in Greece. Project action implementation also contributed to the fulfilment of the International Species Action Plan for the DP. After the avian influenza outbreak in 2022, HOS, with SPP in the lead, pushed the relevant public authorities to correctly address the situation and implement all necessary measures to hinder the spread of the disease. Data collected in the project's framework has been used in the recent reassessment of Greece's Red List of endangered species, which has remained in the category Vulnerable. Data has also been used in the current monitoring for the reporting under article 12 of the Bird Directive.

UA: Results of monitoring and census of DP will be taken into account for managing and regulating the tourism after the war by the Danube Biosphere Reserve. Based on the public consultations and justification documentations prepared and submitted by the RU team, Kartal Lake as a former breeding site and a place for a breeding platform constructed in 2022 was declared a protected area during the project lifetime.

BG: The project activities contributed to the implementation of the National Action Plan for Conservation of the Dalmatian Pelican in Bulgaria 2013 – 2022 and the International Single Species Action Plan. In addition, the project activities such as regular monitoring and patrolling contribute to the better protection of other protected and endangered waterfowl species (listed in Annex I and protected by Bulgarian Biodiversity Act – Annex 2 and Annex 3) found at all project sites in Bulgaria.

RO: Monitoring data will be used to update the National Species Action Plan, forming the basis for future conservation efforts. Once formally endorsed by the managing authority (Ministry of Environment), it is expected to become the main policy tool for the conservation of the species.

In 2025 The Romanian government launched a national compensation scheme through Government Decision no. 216/2025 to financially support fish-farms affected by fish-eating birds, specifically in areas designated as Natura2000 sites. This measure is especially relevant for the large lakes along the Danube, which serve both as fish-farms and critical habitats for the Dalmatian Pelican, making them among the most important sites for the species in

Romania. As such, the scheme plays a key role in addressing the long-standing conflict between the fishing industry and fish-eating bird species. Although not a direct output of the project action, the initiative has been long supported by the SOR, as financial compensation for such losses was identified as a priority in the National Species Action Plan for the Dalmatian Pelican in Romania. The current implementation of the compensation scheme is in line with measures outlined in the plan and represents a significant step forward in reconciling economic activity with species conservation.

5.3 Analysis of benefits

1. Environmental benefits

a. Direct / quantitative environmental benefits:

GR: Patrolling of the DP colonies in GR safeguards the SPAs overall and the conservation benefits are already apparent from the very low number of disturbance and persecution events and the stable numbers of DP nests. The reduction of these events has had a positive effect also on other waterbird species present in those wetlands, particularly fish-eating species such as the Great and Pigmy cormorants. In addition, the increased vigilance for avian influenza in pelicans likewise benefits other waterbird species vulnerable to the disease. The insulation of 4 km of power lines plus the burying of another 4 km section in Messolonghi, has greatly reduced the risk of collision and electrocution for Dalmatian pelicans but also for other bird species, particularly large birds such as flamingos, swans and gulls, but also raptor species such as the Common buzzard and harrier species.

BG: The project activities also have a positive impact on the ecological condition of the project Natura 2000 sites. The regular presence of the project's experts in the respective areas contributes to the minimization of the limiting factors - drying of wetlands, burning of reeds, change in land use, monitoring of the non-investment intentions etc.

RO: regular presence and patrolling as well as communication with local authorities in the frame of the project contribute to diminishing the specific threats for the DP and also other protected water bird species in the project site, especially since the project sites host colonies of protected bird species. Monitoring at the colonies located in the lagoons of the Danube delta also highlighted the need for more targeted management of water levels, for the benefit of the islands where the colonies are located. This aspect will in turn benefit other bird species as well. In addition, efforts to reduce collisions of pelicans by placing bird diverters across 6.5 km of line also benefits several other species of birds, as they are located in biodiverse areas.

UA: The project has a positive impact on the conservation status of Kartal lake. The Kartal lake, being a Ramsar site, was declared a protected area benefitting many of the rare and endangered species of flora and fauna. Communication to the local communities and authorities diminished the threats and raised awareness of conservation needs for the pelicans. The results of bird census and monitoring will be used for better management of visitors in the Danube Biosphere Reserve.

b. Qualitative environmental benefits

The qualitative environmental benefits of the conservation actions implemented are substantial. The reduction of human disturbance contributes to a more stable environment for wildlife helping biodiversity to thrive. Insulation of power lines reduces mortality of protected species, particularly during breeding -a critical and vulnerable time- contributing to healthier and more stable populations. Awareness activities as well as activities promoting eco-tourism in the area ensure that the protection of the area continues in the longer term, as the local community is

engaged and has learned to value the wetlands. In this line, in Greece the importance of the Messolonghi wetland has been thus highlighted that the municipality of Messolonghi is currently preparing a LIFE proposal targeting the wetland's water quality and level of pollution, with a clear view to protect the pelicans and the wetland's biodiversity.

2. Economic benefits

GR: HOS has employed 2 local conservation officers that live locally at each project site (non-qualified staff) to carry out the monitoring and patrolling activities, as well as a local ornithologist to help with the trapping and tagging of pelicans. Other economic benefits created by the project in the project areas is their increased attractiveness for ecotourism, especially for birdwatchers, promoting these two areas as great birdwatching destination and providing the know-how and tools to develop this economic activity. Increased number of ecotourists benefits the wider community (hotels, restaurants, coffee places, etc), while ensuring activities are carried out in a respectful and sustainable way for pelican populations, and other waterbirds and wetland wildlife.

BG: Conservation and the presence of Dalmatian pelicans can have a beneficial effect on the local economy. An example of this is the municipality of Belene, which is located within the boundaries of Persina Nature Park. Thanks to the breeding colony of Dalmatian pelicans, which was formed on Persin Island in 2016, the number of tourists visiting the town to observe the pelicans has sharply increased. The same situation was registered after the establishment of the new breeding colony in the Kalimok-Brushlen Protected Area. The number of tourists visiting the area has increased sharply. A project is currently being implemented in the area, through which a tower will be built to observe nesting pelicans, as well as a shelter for photographing waterfowl, which will further contribute to the popularization of the Tutrakan region.

RO: the DP colony at lake Tasaul had record numbers of DP breeding pairs in 2020 and 2021 since the colony has been established. The presence of pelicans is currently a main attraction for local visitors, especially at local restaurants, for which there is a direct economic benefit. Good communication of project actions contributes directly to implementing the required protection measures for the species in the breeding sites. In the Danube Delta there have been economic benefits through ecotourism, promoting sustainable fishing practices, and conservation funding, as the species attracts wildlife photographers and nature tourists, generating income for local businesses such as tour operators, accommodations, and restaurants. This tourism creates jobs and supports rural economies where the role of the DP as a flagship species has been highlighted. The implementation of the project has directly contributed to this and has supported local economy by local implementation of activities and by promoting training and also education.

UA: The economic benefits were minimal and impossible to estimate for the moment being. The war has essentially stalled all the tourism activities in the Ukrainian part of the Danube Delta. Most of the outer delta is completely closed for visits. However, the project has raised the awareness of the value of the pelicans in general and importance of good management of visitor. This may result in better tourism management and economies. The recent initiative of rehabilitation of war veterans at the natural site that included a visit of war veterans to Ermakov Island with introduction of value of the nature of the delta also included presenting our efforts on conservation of pelicans. RU is already planning an extension of this initiative beyond 2025, which generates a new flow of specific tourism in the area.

3. Social benefits (e.g. positive effects on employment, health, ethnic integration, equality and other socio-economic impact etc.).

The project had a positive impact on stakeholders, especially those working in the tourism sector. The stakeholders support the project and its activities, as most who filled out the

questionnaire think the pelicans and their conservation are important, and the project contributed to achieving this goal. Those who heard about the project and knew its activities were slightly more supportive, highlighting the importance of project-related dissemination and awareness-raising activities. Stakeholders also mentioned that more of these communication activities would benefit the project.

The project not only contributed to pelican conservation but positively impacted other benefits the project areas provide, like education, habitats, aesthetic experience, recreation and tourism. Through these improved benefits, people visiting or working in these areas also benefit financially (especially those working in the tourism sector) or in other ways (e.g., spiritually). According to the answers, the project did not generate any costs for most stakeholders.

These facts were demonstrated by the fact that in the final impact analysis on average, more than one-third of the respondents (39%) stated that they benefit financially from the conservation of pelicans (they mainly work in the tourism sector), 33% of the stakeholders stated that they benefit in other ways (spiritually, recreation, enhanced working conditions, etc.), while 29% of them stated that they do not benefit.

4. Replicability, transferability, cooperation:

The bulk of the project actions have taken place in Romania, Bulgaria, Greece and Ukraine, but activities will also be implemented to secure the feeding, roosting, and breeding territories and wintering grounds along the flyway in Albania, Turkey, Northern Macedonia and Montenegro, with strong emphasis of exchange of experience and applying common methodologies. Hence, the project has had important international implications and could be considered truly transboundary.

This applies also to the monitoring and tagging activities, which have been disseminated to other countries in Europe in the frame of the training in Action E5. Thanks to this now coherent and coordinate monitoring activities are carried out, which lead to a more reliable set of information on which to plan conservation interventions.

GR: In the framework of the LIFE Bonelli eastMed Project (www.lifebonelli.eu), in which HOS is a project partner (including the Greek Ministry for the Environment) a Memorandum of Understanding – MoU was signed in November 2021 between the project and the HEDNO regarding minimizing mortality from collisions and electrocutions for the Bonelli's Eagle. This collaboration helped reach the agreement to correct power lines in Messolonghi for the benefit of the existing breeding pelicans. The knowledge and experience with the complete insulation of power lines in Messolonghi – as opposed to the installation of insulating caps - can now be transferred to other areas where insulation of power lines is also needed and HOS will continue its collaboration with HEDNO to replicate this action to other wetlands or electrocution hotspots, and is already preparing a new LIFE project on power lines insulation in other parts of Greece and targeting other bird species. The environmental education material designed for this project is completely available online and can be downloaded for its use by other schools in other areas holding pelican colonies.

BG: The BSPB has become also part of the new DANUBE FREE SKY project (LIFE19 NAT/SK/001023), where the Dalmatian Pelican is one of the targeted species. That is a result of the exchange of knowledge and networking meetings between the projects in the EU. The project team actively engaged in networking and capacity-building efforts with other LIFE and conservation projects, participated in events, and contributed to outreach through media and education. The project team maintained extensive networking efforts, including collaboration with: LIFE Danube Free Sky (LIFE19 NAT/SK/001023), Life Birds on Power Lines (LIFE16 NAT/BG/000612), and LIFE Safe Grid for Burgas, mainly on actions to prevent bird collisions with power lines; LIFE for Safe Flight (LIFE16 NAT/BG/000847) and experts from LIFE for Kresna Gorge (LIFE11 NAT/BG/000363) regarding bird handling and tagging methods;

Lagoon of LIFE (LIFE17 NAT/BG/000558) for educational and informational activities, particularly around the First Festival of the Dalmatian Pelican in Persina Nature Park and other Burgas –based events; LIFE for Falcons (LIFE20 NAT/BG/001162) on the production of the 2024 calendar.

RO: cooperation and networking with other LIFE projects has been very valuable for the implementation of specific activities such as using telemetry and assessing the collision risk on powerlines. Information has been exchanged extensively on these subjects with similar projects such as LIFE14NAT/BG/649 about using specific patagial transmitters and LIFE Danube Free Sky for assessing the collision risk on power lines. Best practices for implementing activities to avoid the collision risk with power lines have been extensively exchanged also by collaborating with LIFE project SafeLines4Birds. In addition, collaboration and know-how regarding efforts on establishing new breeding sites for pelicans through the use of platforms has been transferred by the project team to other countries, in order to support the potential gradual expansion of the DP range. Such example is the cooperation with Serbia (where data from satellite transmitters has indicated an increased presence of pelicans outside of the breeding season) and also Georgia.

5. Best Practice lessons: briefly describe the best practice measures used and if any changes in the strategy employed could lead to possible adjustment of the best practices.
GR: Best practice was followed throughout the project and particularly in action A1 (DP monitoring), A2 (collision monitoring) and C2 (combined patrolling schemes), as practices developed in previous projects and conservation initiatives were used in the PWOL project. Trapping methods (action A1) were implemented following the best practice available but were improved and adapted to the specific conditions of the project areas. As bird diverters could not be installed in the Greek power lines (action C1), HOS negotiated the installation of the best insulation method and materials available, thus adapting the common best practice usually implemented to the given the circumstance.

BG: The construction of artificial platforms in suitable habitats has an extremely positive impact on the condition and distribution of the Dalmatian Pelican. This is a good practice that can be applied in the future in suitable places and habitats in order to attract the species to breeding. Thanks to Dalmatian pelican decoys, a new breeding colony of the species was created in Bulgaria. This practice is now being used in other Balkan countries

RO: Best practices have resulted from the implementation of actions A1, specifically through common, joined monitoring over which information on how to implement different subactions was extensively shared and exchanged, both between project partners and third parties. In addition, A2 (collision monitoring), C1 (specific use of bird diverters to avoid risk collision) and C2 (combined patrolling schemes), have been based on practices developed in previous projects and successfully implemented. Information on the specific type of diverters based on efficiency and how to implement the set-up has been exchanged and applied by the project team.

UA: The practices of common, joined monitoring was shared with a neighboring large National Park of Tuzlovsky lagoons and results exchanged, There's a plan of joint census efforts and monitoring of pelicans in the future. The construction of artificial platforms in suitable habitats has a positive impact on at least roosting conditions for pelicans and other water birds. Depending on the impact of breeding, which will be further assessed, this may be deemed as a good practice that can be applied in the future in suitable places and habitats in order to attract the species to breeding.

6. Innovation and demonstration value:

In Bulgaria the bird diverters have been installed with the use of a simple commercial drone. This was the first time this method has been used. It has been very efficient and can be a good practice for future similar cases.

The use of real-sized dummy pelicans that are installed on artificial platforms to attract pelicans is an innovative method. Thanks to this method, a new breeding colony of the species was formed in Bulgaria in 2021. Copies of these dummies were successfully used in Greece by HOS to increase the chances of trapping pelicans.

The provision of breeding platforms has provided a clear demonstration value on how breeding substrate can help sustain the natural populations of DP, and lead to an increase in population if all other conditions are met. This also has a replicability value, as similar activities (both by creating platforms or artificial islands) can be transferred to other areas and also different countries, in order to contribute to an increase of breeding opportunities for the species.

7. Policy implications:

RO: Monitoring information resulted from the project has been directed towards the assessment of the IUCN National Red List status of the DP. Furthermore, it contributes to the implementation of the International and National Species Action Plans for the DP. As a result of monitoring data, specific management prescriptions will be suggested for inclusion in the management plans of the Natura 2000 sites that are project sites. As foreseen, the SDFs of the Natura 2000 sites in which the Dalmatian pelican was missing have been updated to include the species.

In Romania a significant obstacle in implementing the project has been the lengthy time required to obtain permits for certain activities, such as trapping and tagging birds. The national bureaucratic process often results in delays of several months, which can hinder or negatively affect the execution of these actions. Given that the Ministry of Environment formally supports LIFE projects from the outset, the permitting process for such projects should be streamlined to enable more efficient and timely implementation.

The project areas include some SPAs key for migrating and wintering pelicans such as Yazovir Rozov kladentets and Yazovir Ovacharittsa that were rarely subject of conservation actions up to now. By implementation of actions related to minimizing the hunting pressure, stop poaching and illegal fishing, as well as marking dangerous power lines (Actions C1, C2, E3) the level of disturbance and mortality is reduced and conservation status improved for all the waterbirds – more than 60 species, both threatened and migratory non-threatened species.

The project also directly contributed to reducing the threats identified in the new International Species Action Plan for the Dalmatian Pelican developed in the frame of Project LIFE EuroSAP (LIFE14 PRE/UK/002).