



1. INTRODUCTION

Human-induced mortality is one of the primary causes of population decline amongst migratory and soaring birds in the Mediterranean. An alarming 12-37 million birds are illegally shot, trapped, or poisoned across the region annually, while electrocution and collision with energy infrastructure is a significant factor in the decline of threatened birds such as the Egyptian vulture and Bonelli's eagle.

Individual organisations have worked locally on these issues for years but through this programme, a coalition of 31 organisations from 22 countries has come to address conservation challenges collectively for the first time, together delivering three distinct projects on illegal killing, poisoning, and electrocution and collision with energy infrastructure.

Combining world-leading expertise in conservation science with effective engagement of diverse stakeholders, the partnership has provided a superb opportunity to reduce human-induced bird mortality by pursuing six objectives.

- By 2030, illegal killing of birds (IKB) is reduced by 50% across the Mediterranean (in comparison to a 2015 baseline).
- By 2022, targeted high risk (no-go) zones have no new energy infrastructure developments.
- By 2030, new windfarms and powerlines (approved after 2022) located in potentially sensitive areas have adequate and effective mortality prevention measures in place.
- By 2022, bird mortality by energy infrastructure is reduced by 50% in the blackspots across the project region.
- By 2022, lead ammunition is banned across the European Union.
- By 2022, poisoning is reduced in Spain, Cyprus and the Balkans compared to baselines established under this project.

Priority countries: Albania, Bosnia & Herzegovina, Croatia, Cyprus, Egypt, Greece, Italy, Lebanon, Montenegro and Slovenia for Illegal Killing of Birds; Egypt, Jordan, Greece, Morocco, Tunisia, and Spain for Energy Infrastructure, and Cyprus, Spain, Balkans, Greece, Morocco, Tunisia, Türkiye for Poisoning.

BUDGET ENGAGED

€8,940,000

BUDGET PER STRATEGY

- Knowledge, monitoring, research 19%
- Capacity building 7%
- Public Awareness 17%
- Policy and advocacy: 18%
- National frameworks 15%
- Site action 24%

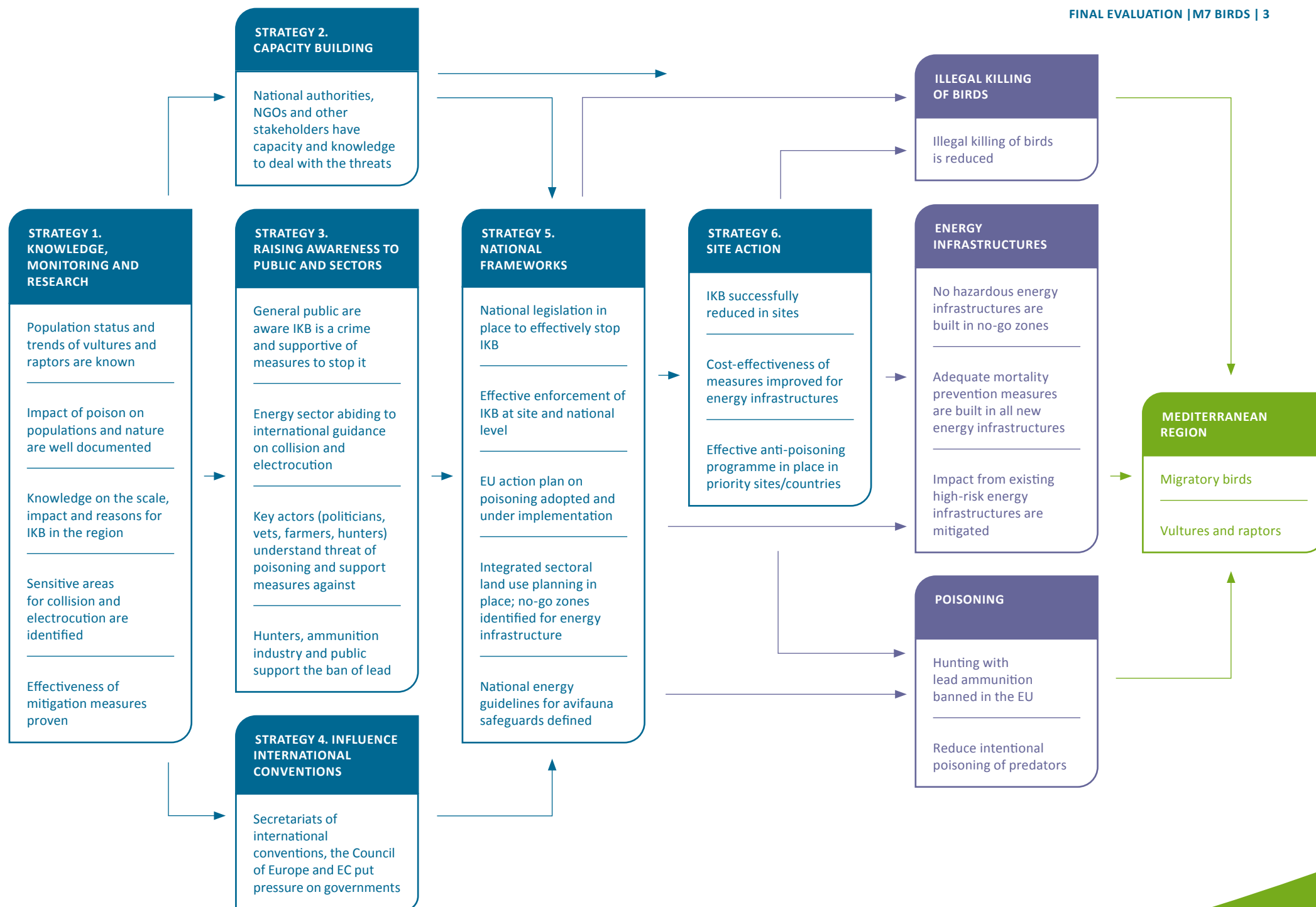


THE PARTNERSHIP



EURONATUR





2. PROGRESS AND ACTIVITIES

The work in this is based on a jointly developed Theory of Change comprising six strategies (see diagram on page 3) which we applied across three distinct projects designed to tackle bird poisoning and illegal killing, and mitigate electrocution and collision with energy infrastructure. To deliver on our objectives, we applied an innovative, multi-faceted approach including on-the-ground conservation actions in local mortality hotspots, capacity building to deal with systemic challenges, and policy and law change at national and international levels. We implemented a diverse but holistic set of activities that ranged from desk-based research to joint operations with enforcement authorities and/or retro-fitting high-risk energy pylons. We also applied adaptive management through engaging in regular knowledge exchange between key actors across countries, and undertook a structured impact evaluation to adapt ongoing work to changing conditions.

STRATEGY 1: KNOWLEDGE, MONITORING, RESEARCH

To identify bird mortality hotspots, understand socio-economic drivers, and assess impact of threats and mitigation efforts, we sought to establish robust baseline information and collect evidence about human-induced mortality. We used an innovative combination of methods including aerial photography, detection dogs, drones, GPS tagging, acoustic monitoring, and population viability analysis. Our activities included:

- monitoring bird populations and assessing their status and trends;
- monitoring threats and modelling their impacts on bird populations;
- identifying and monitoring mortality hotspots for the three threats;
- interviewing and surveying stakeholder groups and public.

STRATEGY 2: CAPACITY BUILDING

To equip the project team and stakeholders with the necessary skills to tackle threats effectively, we built capacity at national and regional levels. Beneficiaries included NGOs, governments, national authorities, the energy sector, hunters, and other stakeholders. Our activities included:

- creating opportunities for regular exchange across the network of conservation NGOs;
- knowledge-sharing across countries and stakeholders;
- training different stakeholders such as vets, lawyers, and energy distribution companies;
- supporting national academies, centres of excellence, and training centres.

STRATEGY 3: RAISING AWARENESS-WITH STAKEHOLDERS AND PUBLIC

To gain support for measures advocated by the three projects, we disseminated knowledge and information on threats to key actors including politicians, enforcement officials, vets, farmers, hunters, and the energy industry. We also engaged the broader public. Our activities included:

- raising awareness through traditional and social media as part of an international campaign (<https://flightforsurvival.org/>);
- national publicity campaigns such as photo exhibitions and drawing contests;
- strengthening collaboration with stakeholders through workshops and joint activities;
- capacity building such as involving livestock herders in reducing vulture poisoning in the Balkans.

STRATEGY 4: INFLUENCING INTERNATIONAL CONVENTIONS

To set ambitious international goals and ensure effective buy-in from government institutions, we engaged with relevant Multilateral Environmental Agreements. We helped to create new instruments, such as the Rome Strategic Plan for IKB (under the Bern Convention) and the Powerlines Working Group (under the CMS Energy Task Force). Our activities included:

- making CMS Energy Task Force, Raptors MoU and CMS-MIKT effective umbrella frameworks for supporting project objectives;
- mobilising the Bern Convention and AEWA to ensure support for project objectives;
- pushing for a full lead ban through the REACH process for full adoption by the EU;
- incentivising and pressurising governments to adopt best practices in addressing the three threats.

STRATEGY 5: NATIONAL FRAMEWORKS

To help scale impact from local to national level, we developed national guidelines on tackling threats and promoted its uptake and endorsement by national authorities. These included examples of best practice and case studies that could be adapted and tailored to meet national contexts. Our activities included:

- supporting development and promoting endorsement of national legislation tackling threats;
- enhancing technical capacity of enforcement agencies to deal effectively with threats at local and national levels;
- advocating development and implementation of national action plans on poisoning;
- advocating that sectoral land use plans recognize no-go zones for energy infrastructure in high-risk areas, along with developing and endorsing national energy guidelines for safeguarding birds.

STRATEGY 6: SITE ACTION

To address immediate threats to birds in the worst affected sites and demonstrate how change can be achieved, we took local site-based action to tackle threats in priority countries. Our activities included:

- removing illegal hunting hides, nets and traps, and apprehending illegal hunters;
- mitigating high-risk pylons at identified hotspots;
- detecting and removing poisoned baits and improving forensic investigation of poisoning incidents.

AEWA- African-Eurasian Waterbird Agreement

CMS- Convention on Migratory Species

ETF- Energy Task Force

IKB- Illegal Killing of Birds

MIKT- Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean

Raptors MoU- Raptors Memorandum of Understanding

REACH- Registration, Evaluation, Authorisation and Restriction of Chemicals

KEY LESSONS

1. The common Theory of Change united local, national and international work. Working as a unified coalition made us more effective in reaching and influencing key stakeholders.
2. Accurate data on the scale of bird mortality caused by the three threats was not available for many countries prior to this project. Developing scientific understanding and robust baselines by using rigorous methodologies was paramount in catalysing action and measuring impact.
3. History and context varies significantly between countries, and requires tailored approaches and strategies. Transfer of knowledge and best practice helped promote effective action by key government agencies and other stakeholders.
4. Engaging and building capacity amongst government enforcement and decision-making agencies led to a step change in tackling threats. Mainstreaming sustainability and consistency of effort across government policies and programmes is essential.
5. It was difficult to assess the impact of our communications in changing attitudes and behaviour. Better design, targeting, and monitoring of future communications activities will be important.
6. Faced with bird mortality due to collision and electrocution, energy companies were often reluctant to accept responsibility due to the costs of retrofitting hazardous pylons. As proved to be the case in Spain, overcoming this barrier requires a robust legislative framework.
7. The detection of illegal killing and poisoning of birds is labour-intensive and often dangerous, and requires ongoing investment and specialist skills.
8. Even when wildlife crime was detected and properly investigated, judicial systems often consider these crimes as minor and cases are often dismissed. Work with judges and prosecutors needs to be enhanced.

3. ACHIEVEMENTS AND IMPACTS

Overall, we now have far better knowledge of the scale, scope and impacts of the main threats facing migratory and soaring birds in the Mediterranean. We have successfully trained NGOs, government staff and law enforcement agencies in threat monitoring and prosecution. And we have reduced threats at a number of priority sites. Nevertheless, scaling impact to national and regional levels is hampered by lack of engagement and interest amongst decision-makers.

We reduced the use of poison baits in Spain by 34% between 2016 and 2019, and in the Balkans we saw a 18% decrease in the number of poisoning incidents in 2021 compared to the 2000-2020 yearly average. In the Balkans, six countries have implemented national anti-poisoning road maps. And hunting with lead gunshot was banned in EU wetlands in 2021, while the process to ban lead bullets in all terrestrial ecosystems across the EU is ongoing.

Baseline data collection about bird collision and electrocution has been greatly enhanced in the region, especially in the Middle East and North Africa. More than 2,700 pylons were retrofitted with prevention materials in several countries, including France, Italy, Spain, Jordan, Greece, Egypt and the Balkans. Dialogue with governments, NGOs and the industry was established and strengthened, including through the participation of more than 50 members and observers in the CMS Energy Task Force. Additional national energy committees, round tables and platforms were also established to promote no-go zones and bird-safe operation of power lines and wind farms.

Through this project in seven of the ten target countries, IKB was significantly reduced at priority sites, in four cases by more than 50%, including at Terbufi plain in Albania, where an estimated 35,000-42,000 birds are saved annually compared to a 2015 baseline. Site or national level enforcement, legislation and IKB national action plans were enhanced or improved in the majority of target countries. Governments in more than 54 countries across the Mediterranean and Europe have committed to reducing illegal killing by 50% by 2030 and have agreed to a zero tolerance approach to IKB.

CASE STUDY: BUILDING OPERATIONAL CAPACITY TO COMBAT WILDLIFE CRIME

Having well-trained and engaged enforcement agencies is vital to successfully implementing policies against the illegal killing of birds. The Wildlife Crime Academy (WCA), an initiative we developed with support of various donors, including the MAVA Foundation and the EU LIFE Programme, trained a total of 66 government officials from 14 countries from Europe, North Africa and the Middle East in the last three years. Training covered all the different aspects of illegal killing, trapping and poisoning, and addressed identification, forensic investigation, toxicological analysis, and criminal persecution. The WCA builds on the best practices and experience of the Spanish government, especially Junta de Andalucía. Country-to-country support, best-practice sharing and joint identification of needs resulted in several successful investigations at national-level and an increase in the number of reported cases. For more information about the ongoing work and development plans of the WCA visit this website <https://balkandetoxlife.eu/wildlife-crime-academy/>.



In the Wildlife Crime Academy, enforcement agents from dozens of countries have been trained on techniques to investigate wildlife crime

CASE STUDY: BIRD-SAFE ENERGY DEVELOPMENT IN JORDAN AND EGYPT

Identifying and addressing bird mortality caused by power lines and wind farms requires good scientific and technical knowledge, and the ability to engage industry and national governments. With support from the MAVA foundation, Jordan and Egypt have become champions in promoting bird-safe energy infrastructure in the Mediterranean. Key to this success were the development and application of country-specific guidelines following multi-stakeholder consultation, training of technical staff in specially established centres of excellence, and measures to reduce risks from existing dangerous energy infrastructure. In 2020, Jordan received the Good Practice of the Year Award from the Renewable Grid Initiative for outstanding ideas in grid development and mainstreaming soaring bird conservation in its energy sector. In the same year, Egypt received the Energy Globe Foundation's World Award for mainstreaming conservation of migratory and soaring birds in key productive sectors along the Red Sea/Rift Valley flyway. Both countries are sharing their approaches and experience, including through the CMS Energy Task Force, a multi-stakeholder platform that works towards reconciling renewable energy developments with bird conservation.



Bird surveys on mortality caused by collision with powerlines at the Western Gulf of Suez and Sinai indicated over 300 white Storks and White Pelicans casualties from 2019 to 2021 only

KEY IMPACTS

The project has delivered high-impact outcomes in threat mitigation, capacity building, and awareness-raising across target countries, suggesting we are on track to deliver significant benefits for biodiversity conservation in the Mediterranean. Although the metrics are global, here are a few examples showcasing local and regional highlights from our three projects:

1. Our awareness-raising campaign reached over 15 million people globally;
2. In Spain, 1,500 police experts were trained to investigate wildlife crimes efficiently;
3. In Cyprus, since monitoring began in 2002, illegal trapping has been reduced by 84%;
4. In Western Europe and Egypt, a hunting moratorium on Turtle dove was put in place following concerted advocacy efforts;
5. In Slovenia, 1,266 high-risk pylons were insulated, reducing the probability of electrocution and collision;
6. In the Balkans, Griffon vulture populations have increased by 22% over the last seven years as a result of reintroduction programmes and mortality reduction;
7. In Catalonia, insulation of just 30% of the most dangerous pylons in Bonelli's eagle territories helped increase adult survival to levels supporting long-term population viability. In this area the population is now increasing after years of severe decline.
8. For the first time, North Africa has an assessment of the conservation status of nesting populations of raptors. The impact and distribution of threats is being monitored by an international network of 25+ organisations to support development of preventive and mitigation measures.

4. WHAT WILL HAPPEN NEXT

We remain committed to tackling the principal threats to migratory and soaring birds in the Mediterranean. We recognise that some of the initial challenges we faced will continue, including the need for greater stakeholder buy-in, political will, and enforcement capacity, but we are confident that our proven and newly developed strategies can meet them.

We will focus on scaling conservation impact at local sites to national level through enhanced government commitments. In many ways, our work will continue to deliver on strategies already in place: promoting effective data-sharing, applying tested quantitative methods and innovating efficient tools, developing effective national legal frameworks, and improving law enforcement and criminal prosecution.

Additional strategies for scaling impact will include banning lead ammunition in the EU, training enforcement agencies and judiciaries, engaging the energy industry as stakeholders, coordinating with CMS-MIKT and CMS Energy Task Force to develop regulatory and enforcement frameworks, and investing in communications-led behavioural change.

Continuing with our proven strategies alongside these additional approaches will allow us to scale impact and secure lasting positive outcomes along the African-Eurasian flyway. Our partnership-based approach is a model for similar initiatives. We are developing project proposals based on the experience we have gained with MAVA, and we have already secured partial funding for IKB and poisoning.

“This partnership successfully created cross-sectoral synergies in the Mediterranean delivering tangible results for threatened species. I am sure it will become a reference for similar initiatives globally.”

Iván Ramírez, Convention on Migratory Species

“Wildlife crime is under the competences of national and regional authorities. This programme was important to foster collaboration, training and added on-the-ground action in Spain and elsewhere.”

Ruben Moreno-Opo, Spanish Ministry for the Ecological Transition

