



WORKSHOP ON NATIONAL IKB ACTION PLANS FOR NORTH AFRICAN COUNTRIES

29 September to 1 October 2026. Tangier, Morocco

UNEP/CMS/IKB-NAP2/Inf.7.2.2.1

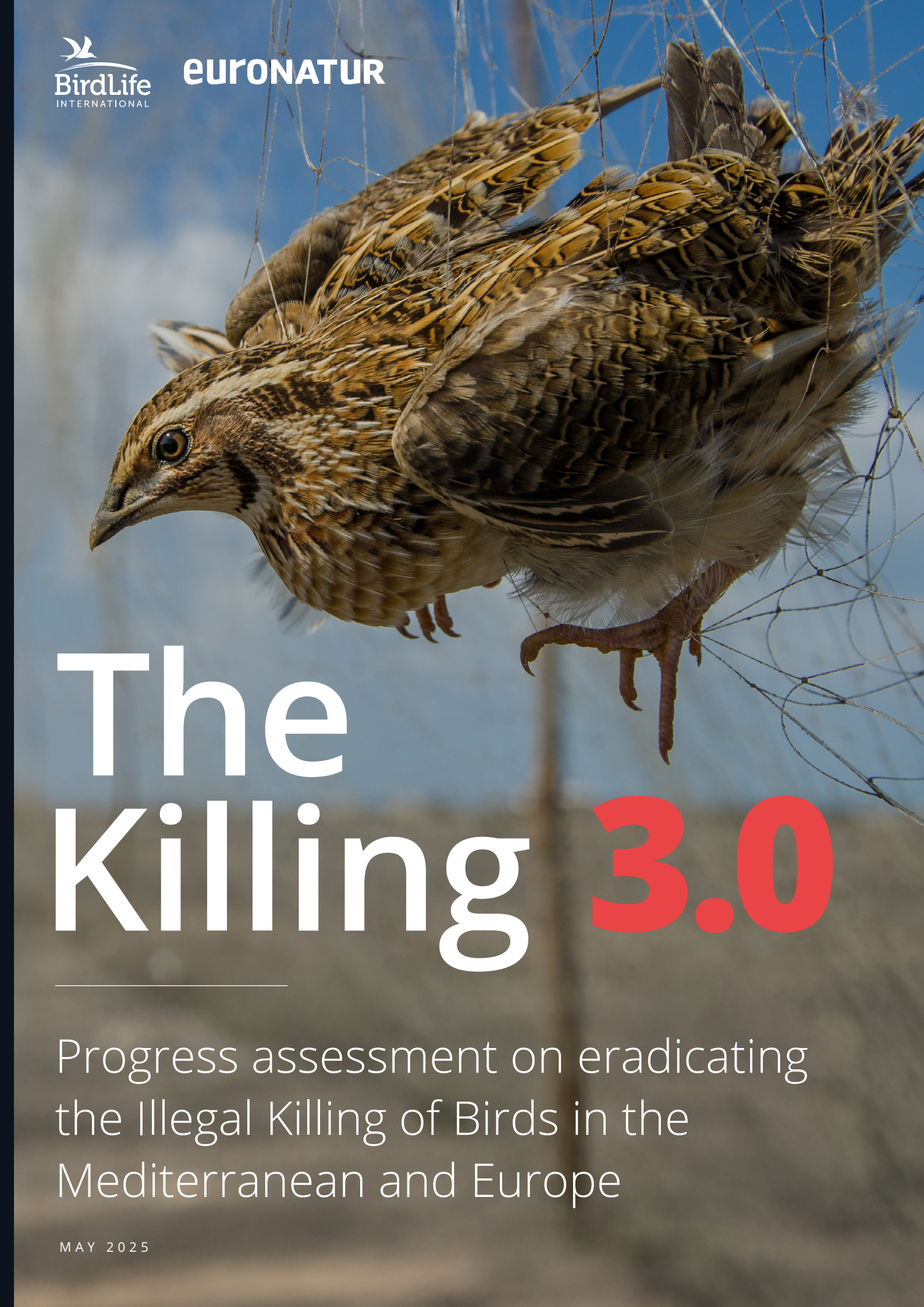
THE KILLING 3.0

PROGRESS ASSESSMENT ON ERADICATING THE ILLEGAL KILLING OF BIRDS IN THE MEDITERRANEAN AND EUROPE



The European Union was recognized as Champion Plus for their generous support and commitment towards addressing Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean for the period 2015 - 2028.





The Killing 3.0

Progress assessment on eradicating
the Illegal Killing of Birds in the
Mediterranean and Europe

Acronyms

APU	Anti-Poaching Unit
CMS	Convention on Migratory Species
CUFAA	(Comando unità forestali, ambientali e agroalimentari) - a specialised unit of the Italian Carabinieri force to manage environmental protection, forestry, and agricultural affairs
ECJ	European Court of Justice
ENPE	European Network of Prosecutors for the Environment
EUFJE	European Union Forum of Judges for the Environment
EU	European Union
IBA	Important Bird Area
IKB	Illegal Killing, Taking and Trade of Wild Birds
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
MIKT	CMS Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean
MOOC	Massive Open Online Course
NAP	National Action Plan
NGOs	Non-Governmental Organisations
PPWG	Preventing Poisoning Working Group
RSP	Rome Strategic Plan 2020-2030: Eradicating Illegal Killing, Taking and Trade in Wild Birds in Europe and the Mediterranean region
SBA	British Sovereign Base Areas in Cyprus
VCF	Vulture Conservation Foundation

Date of publication: 15 May 2025

Authors: see Acknowledgement for full list of authors

Prepared by: Lilla Barabas, Victoria Jones, Willem Van den Bossche, Samantha Lee, Luke Ozsanlav-Harris (all BirdLife International), Justine Vansynghel and Stefan Ferger (EuroNatur), and David de la Bodega (SEO/BirdLife)

Suggested citation: BirdLife International and EuroNatur (2025): Progress assessment on the eradication of illegal killing, taking and trade of wild birds in the Mediterranean and Europe.

Contents

Summary	5
1. Introduction	6
1.1 Progress prior to the Rome Strategic Plan	7
2.2 A strengthened policy framework for addressing IKB	8
2. Methods	10
2.1 Definition(s)	10
2.2 Study area	10
2.3 Information gathering	12
2.4 Data analysis	14
3. Results	16
3.1 Are governments on track to reach the RSP goal?	16
3.2 Trends of the major types of IKB	18
3.3 Scale of current IKB	19
3.4 Top 10 countries with the highest levels of illegal killing from current assessment	20
3.5 IKB response strategies assessed	22
3.6 Narrative highlights of the six main IKB response strategies	24
3.7 Questionnaire Part 2	28
4. Discussion	34
4.1 Interpretation of IKB	34
4.2 Rationale for using the number of individual birds in estimating the trends of IKB	35
4.3 Detection rate	35
4.4 Political will	36
4.5 Institutional structures and political instability	36
4.6 Monitoring: IKB data are too few and too low quality	37
4.7 Differences in sanctions	38
4.8 Some other points to note	38
4.9 Comparison with the official Scoreboard Results	38
5. Conclusions	39
6. Recommendations	42
6.1 Recommendations for government actions	42
6.2 Recommendations for international actions	50
Annexes:	52
Annex 1. National IKB situation & recommendations for Mediterranean countries	52
Annex 2. Original questionnaire	52
Acknowledgements	66

Progress assessment on the eradication of illegal killing, taking and trade of wild birds in the Mediterranean and Europe

Common Stonechat (*Saxicola torquatus*) caught on a limestick © BirdLife Cyprus

Summary

Countries that are members of the Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (CMS MIKT) and Bern Convention have all made a commitment to the Rome Strategic Plan (RSP) to eradicate the illegal killing, taking and trade of wild birds (IKB). This includes a 10-year goal to achieve at least a 50% reduction in the number of illegally killed birds by 2030, compared with 2020.

At the midpoint of the RSP, a survey of national NGOs and other experts, co-ordinated by BirdLife International and Euronatur, finds encouraging signs of progress in tackling IKB across the region, but warns that many countries will need to **significantly scale up their political will, investment, or enforcement efforts** to meet this target.

IKB trends have improved in some countries, demonstrating that efforts to tackle this issue are making a difference. At the midpoint of the RSP, **eight countries (17%)** are considered to be either on track to achieve the 50% reduction or have kept IKB at a consistently low level. Additionally, **12 countries (26%)** have achieved **slight reductions**. **17 countries (37%)** have stable or fluctuating IKB levels and significant challenges remain; **nine countries (20%)** were assessed to have worsening trends in IKB. Among the 10 countries with the highest levels of IKB in 2020, where progress is most urgent, none were assessed to be on track to meet the 50% reduction by 2030, but two had a slight improvement and four had no indication of significant change. Concerningly, the remaining four countries were assessed to have a worsening IKB trend.

This report highlights areas where governments can invest further to accelerate progress and meet their RSP targets within the next five years. The MIKT/ Bern Convention process is vital in providing a forum for sharing experiences and international co-operation. Several countries have already demonstrated effective strategies in tackling IKB, providing practical models that others can follow. However, the solution to IKB cannot be achieved at a local or national level but is a flyway-wide task. The positive impact for migratory bird populations can only be achieved if other countries along the flyway also step up their efforts.

Our findings emphasise the need for enhanced political commitment, data transparency, and dedicated financial support to meet international targets and reduce IKB effectively or to sustain and expand the progress already made. By building on successful initiatives and addressing remaining challenges, governments have an opportunity and legal obligation to lead the way in protecting bird populations and strengthening conservation efforts across the region. With increased political will, targeted investment, strengthened collaboration and the adoption of best practices, the goal of reducing IKB by 50% by 2030 is still within reach of every country in the region.

1 Introduction

Illegal killing, taking and trade of wild birds (IKB) is still occurring at significant scale in many countries of the African-Eurasian flyway. This poses a severe direct threat to a range of migratory birds. In the Mediterranean area alone, 375 species were reported to be known, or likely to be killed illegally in significant numbers each year (Brochet *et al.* 2016)¹. Reviews in the 2010s, led by BirdLife International, revealed the staggering scale of illegal killing. Based on data collected in 2014, it was estimated that in the Mediterranean region alone, an average of 25 million (between 11 and 36 million) individual birds were illegally killed or removed from the wild every year (Brochet *et al.* 2016)¹. A further 0.4-1.7 million birds a year were estimated to have been the victim of illegal practices in Northern Europe and the Caucasus (Brochet *et al.* 2019a)², and 3.2 million a year in the Arabian Peninsula, Iraq and Iran (Brochet *et al.* 2019b)³.

Brochet *et al.* (2016) highlighted the potential impact of IKB on global and European bird populations, identifying several threatened species with high percentages of their European or global populations affected. Several of these species are Globally Threatened or Near Threatened, such as the Saker Falcon (*Falco cherrug*), Eastern Imperial Eagle (*Aquila heliaca*), Pallid Harrier (*Circus macrourus*), Eurasian Curlew (*Numenius arquata*), Ferruginous Duck (*Aythya nyroca*), Little Bustard (*Tetrax tetrax*), Lesser White-fronted Goose (*Anser erythropus*), and White-headed Duck (*Oxyura leucocephala*). Species such as European Turtle-dove (*Streptopelia turtur*)⁴, Sociable Lapwing (*Vanellus gregarius*)⁵ and Egyptian Vulture (*Neophron percnopterus*)⁶ have suffered severe population declines, likely partly due to the immense scale of IKB in the Mediterranean and other parts of the African-Eurasian Flyway.

Information from tracked birds confirms that IKB is a major cause of mortality for migratory birds in the African-Eurasian flyway. Serratos *et al.* (2024)⁷ found that 38% of all deaths of tracked large migratory landbirds, with a known cause, were from illegal killing (including poisoning), with many globally threatened species being affected. A similar study focusing specifically on Egyptian Vulture (Oppel *et al.* 2021)⁸ found that, of tracked individuals where the cause of mortality could be determined, 20% were illegally shot and a further 15% poisoned.



Still many Egyptian Vultures (*Neophron percnopterus*) fall victim to illegal shooting or poisoning © M. Mendi

1.1 Progress prior to the Rome Strategic Plan

In response to the building evidence that IKB was a significant conservation issue, some national authorities increased their action, and national and international NGOs started to take action and prioritised locations where the most impact could be achieved for protecting birds from IKB. The BirdLife partnership introduced systematic IKB monitoring programmes in each of the worst-affected countries. By building good co-operation with the local law enforcement bodies, site-based interventions have reduced the number of birds killed in some of the worst sites in the past

decade. At the British Eastern Sovereign Base Area (SBA) in Cyprus, the illegal bird trapping was reduced by nearly 90%⁹ in 2023 compared to the period 2010-2015. In Spain, based on data from Wildlife Recovery Centres, the illegal killing of birds showed a declining trend of an average 62.2% in 2019-2021 compared to the period 2008-2018.¹⁰ Further, the unlawful use of calling devices for illegal killing of Common Quail (*Coturnix coturnix*) was reduced by over 50% in 2023 compared to 2015-2018 in Croatia.¹¹

Tackling illegal poisoning has resulted in remarkable conservation successes in the case of several native birds of prey across Europe. Between 2001 and 2020, Spain strengthened legal actions against wildlife poisoning, leading to an increase in the Spanish Imperial Eagle (*Aquila adalberti*) population from fewer than 40 breeding pairs in the 1970s to over 530 pairs in the early 2020s (BirdLife International, 2021a)¹². A reintroduction programme, combined with anti-poisoning campaigns and monitoring, led to the successful comeback of one of the rarest birds of prey in Europe, the Bearded Vulture (*Gypaetus barbatus*). Today, over 60 pairs of Bearded Vultures soar over the European Alps (VCF 2024)¹³.

However, reduction of illegalities is only maintained through sustained action. A grim reminder of this fact is that during the Covid-19 period, when law enforcement activity in many protected areas had to be scaled back, a surge in IKB was recorded in several areas (Manenti *et al.* 2020)¹⁴. In some cases, IKB issues are widespread geographically within a country and site-specific action can only have a limited impact.

¹ Brochet, A.-L., Van Den Bossche, W., Jbour, S., *et al.* (2016). Preliminary assessment of the scope and scale of illegal killing and taking of birds in the Mediterranean. Bird Conservation International, 26(1), 1–28. <https://doi.org/10.1017/S0959270915000416>

² Brochet, A.-L., Van Den Bossche, W., Jones, V., *et al.* (2019a). Illegal killing and taking of birds in Europe outside the Mediterranean: Assessing the scope and scale of a complex issue. Bird Conservation International, 29(1), 10–40. <https://doi.org/10.1017/S0959270917000533>

³ Brochet, A.-L., Jbour, S., Sheldon, R., Porter, R., Jones, V., *et al.* (2019b). A preliminary assessment of the scope and scale of illegal killing and taking of wild birds in the Arabian Peninsula, Iran, and Iraq. Sandgrouse, 41, 154–175.

⁴ European Commission: Directorate-General for Environment, International single species action plan for the conservation of the European turtle-dove *Streptopelia turtur* (2018 to 2028), Publications Office, 2018, <https://data.europa.eu/doi/10.2779/743376>

⁵ Donald, P., *et al.* (2021). Migration strategy, site fidelity and population size of the globally threatened Sociable Lapwing *Vanellus gregarius*. Journal of Ornithology, 162. <https://doi.org/10.1007/s10336-020-01844-y>

⁶ Oppel, S., *et al.* (2023). Long-term conservation efforts at flyway scale can halt the population decline in a globally endangered migratory raptor. Animal Conservation, <https://doi.org/10.1111/acv.12917>

⁷ Serratos, J., *et al.* (2024). Tracking data highlight the importance of human-induced mortality for large migratory birds at a flyway scale. Biological Conservation, 293. <https://doi.org/10.1016/j.biocon.2024.110525>

⁸ Oppel, S., *et al.* (2021) Major threats to a migratory raptor vary geographically along the eastern Mediterranean flyway, Biological Conservation, 262. <https://doi.org/10.1016/j.biocon.2021.109277>

⁹ Shialis, T., & Charalambides, M. (2025, February). Update on illegal bird trapping activity in Cyprus: Covering the autumn 2024 findings of BirdLife Cyprus' continuing monitoring programme for illegal bird trapping in Cyprus and providing an overview of the latest developments regarding the problem (Report). BirdLife Cyprus. https://birdlifecyprus.org/wp-content/uploads/sites/3/2025/02/BirdLife-Cyprus_Autumn_2024_Trapping_report_Final_for-publication.pdf

¹⁰ De La Bodega, D. (2024). Unpublished data: in the framework of LIFE Nature Guardians, an analysis was made of data from Wildlife Recovery Centres from 2019 to 2021, taking as reference data from seven

Spanish Regions indicating the above trend.

¹¹ BIOM Association (2024). Annual report for 2023. Safe Flyways Program. https://www.biom.hr/wp-content/uploads/2024/08/Annual-Report-2023_Association-Biom.pdf

¹² BirdLife International (2021a). Species factsheet: Spanish Imperial Eagle *Aquila adalberti*. <https://datazone.birdlife.org/species/factsheet/spanish-imperial-eagle-aquila-adalberti>

¹³ Vulture Conservation Foundation. (2020). Bearded Vulture to the Alps: Reintroduction and restocking. <https://4vultures.org/our-work/reintroduction-and-restocking/bearded-vulture-to-the-alps>

¹⁴ Manenti, R., *et al.* (2020). The good, the bad and the ugly of COVID-19 lockdown effects on wildlife conservation: Insights from the first European locked down country. Biological Conservation, 249, Article 108728. <https://doi.org/10.1016/j.biocon.2020.108728>

1.2 A strengthened policy framework for addressing IKB

The legislative or regulatory frameworks both nationally and internationally have significantly strengthened, via the EU, Council of Europe and the Convention on Migratory Species (CMS). Building on past work, the Contracting Parties and observers, together with partners and relevant stakeholders, of the Bern Convention and the CMS developed the Rome Strategic Plan 2020 – 2030: Eradicating Illegal Killing, Taking and Trade in Wild Birds in Europe and the Mediterranean region (RSP).

While the Rome Strategic Plan and the Intergovernmental Task Force on Illegal Killing, Taking and Trade of Migratory Birds in the Mediterranean (MIKT) are key instruments for addressing IKB in the region, the CMS Preventing Poisoning Working Group (PPWG) has also played an important role in addressing poisoning—one of the critical aspects of IKB. The 10-year multilateral RSP was adopted by all Mediterranean and European governments, including the EU, via the Joint CMS-Bern MIKT. This agreement and the MIKT process provide a solid basis to stimulate, support, and facilitate governments to agree a zero-tolerance approach to IKB, aiming for eradication of the issue. A 25% reduction by 2025 is a logical measure of adequate progress to achieve a 50% reduction by 2030 (compared to a 2020 baseline), itself a step towards complete eradication. These reductions are targeted to address both the scope and scale of illegal killing of birds, ensuring substantial progress in reducing both the overall numbers of birds killed and the geographical extent of the issue.

Therefore, this current assessment comes about a decade after the first quantitative IKB review in the Mediterranean and aligns with the approaching mid-term evaluation of the RSP (2020-2030). The primary objective of this questionnaire-based report was to assess whether countries were progressing towards the goal of the Rome Strategic Plan (i.e. reaching at least a 50% reduction in IKB by 2030).

The main question was **whether the relevant countries were on track to reach this goal, and in which aspects governments need to increase their efforts**. Furthermore, by analysing patterns across the Mediterranean and beyond, we identify areas of concern with tackling IKB, where improvement is generally slower or especially challenging for several countries in the region. We provide recommendations based on these results and case studies to show successful examples for the different approaches that contribute to decreasing IKB. The methodology is primarily designed to give a region-wide picture of progress and a within-country comparison between time periods rather than to provide for direct comparisons among countries. We present the common issues and challenges that stakeholders face – together with good examples and recommendations to tackle them. Implementing the policy recommendations will further facilitate the reduction of IKB, saving millions of birds from illegal killing.



2 Methods

2.1 Definitions(s)

Illegal Killing, Taking and Trade of Wild Birds (IKB) is defined in this assessment as in the original (Brochet *et al.* 2016) paper as: “any form of deliberate action that results in the death or removal from the wild of an individual bird – including their parts or derivatives – (regardless of whether it was the target of this action or not) that is prohibited under national or regional legislation”. Illegal poisoning was treated as one type of IKB. Consequently, in those few countries where any form of hunting is currently prohibited, all the bird killing was considered as illegal, regardless of the target species. Further interpretation of IKB is provided in the Discussion section (on page xxx).

Results of this assessment are compared with those made by national authorities as part of the official IKB Scoreboard process jointly developed by the CMS MIKT and Bern Convention Secretariats. This Scoreboard is a standardised tool to assess progress in tackling IKB across the

range countries. Scoreboard reports, submitted by national governments, evaluate progress against key areas defined in the Rome Strategic Plan, such as legislation, enforcement, monitoring, and co-operation, providing a structured way to track improvements and identify gaps over time. Most of the previously submitted national Scoreboards are available on the dedicated website of the Bern Convention.¹⁵

In this study, we consider the Bern Convention signatories and MIKT member states as range countries (see more details under the Study Area). Please note, that our definition of range countries here is different from what the mentioned multilateral environmental agreements define as their range countries. Nonetheless, questionnaires were sent to the same set of 54 countries that have been invited to submit the official Scoreboard. We refer to the countries that returned our questionnaires as assessed countries.

2.2 Study area

We included in this study almost all countries that are signatories to the Bern Convention, or MIKT members or observers. We excluded some countries that have not been invited previously to submit IKB Scoreboard data (Burkina Faso, Senegal, Moldova and Faroe Islands). Microstates (Andorra, Monaco, Gibraltar, San Marino, and Vatican City) were excluded too.

In total, 54 countries received the questionnaire to provide basic national information (see Map 1). Twenty-two of these countries (those with a Mediterranean coast plus Serbia) were asked for additional in-depth information, because IKB had previously been assessed to be a more significant threat to birds in the Mediterranean basin:

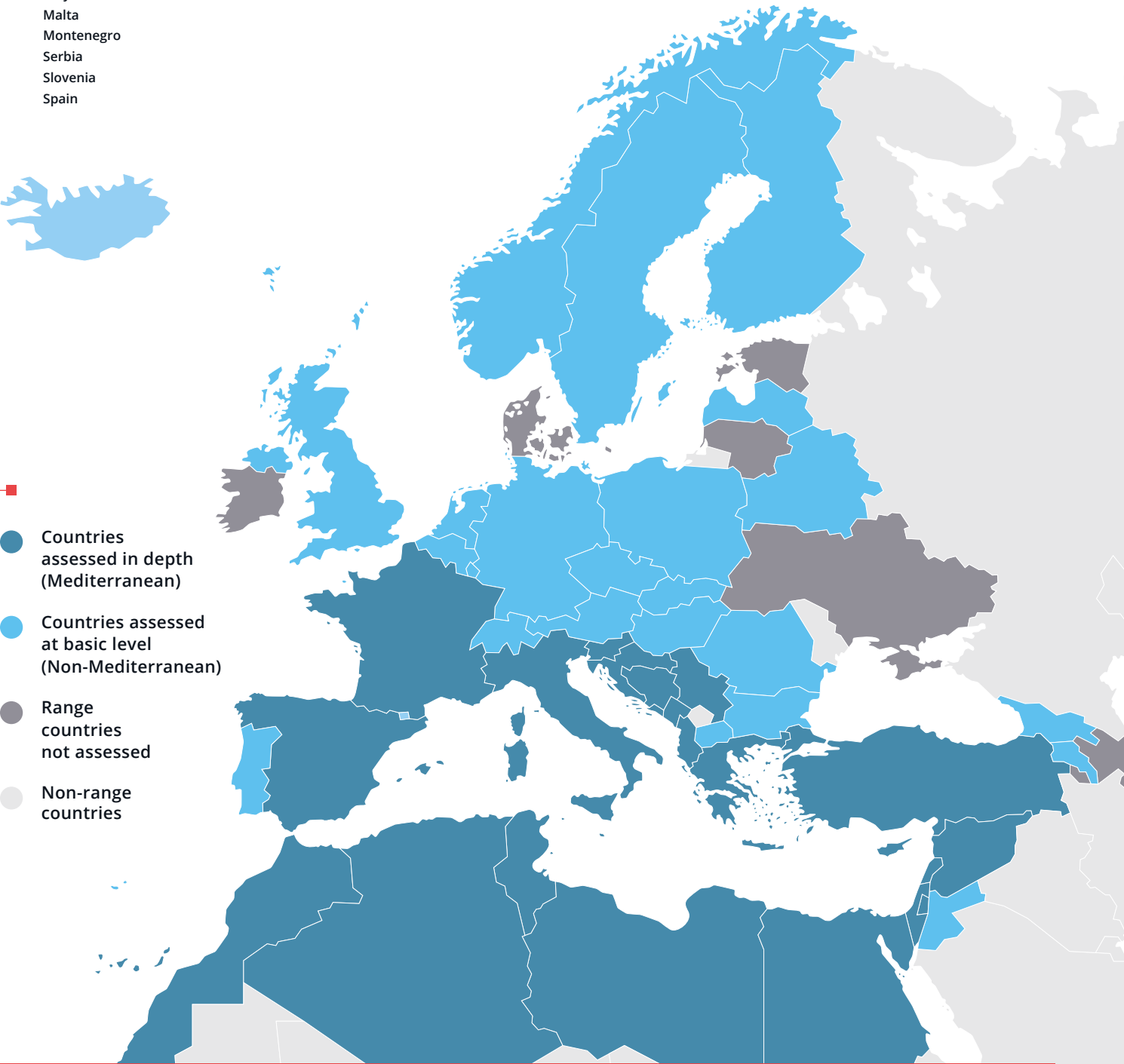
1. Spain, 2. France, 3. Italy, 4. Malta, 5. Slovenia, 6. Croatia, 7. Bosnia and Herzegovina, 8. Montenegro, 9. Albania, 10. Greece, 11. Cyprus, 12. Türkiye, 13. Syria, 14. Lebanon, 15. Israel 16. Palestine 17. Egypt, 18. Libya, 19. Tunisia, 20. Algeria, 21. Morocco 22. Serbia¹⁶.

For some analyses, the assessed Mediterranean countries/territories were grouped into three different sub-regions: “Europe”; “North Africa”; “Middle East”.

Table 1: List of Mediterranean countries and their sub-regions as defined in our study

Mediterranean countries

Europe	Middle East	North Africa
Albania Bosnia and Herzegovina Croatia Cyprus France Greece Italy Malta Montenegro Serbia Slovenia Spain	Israel Lebanon Palestine Syria Türkiye ¹⁷	Algeria Egypt Libya Morocco Tunisia



Map 1: Overview of countries within the range of the Rome Strategic Plan where progress in addressing IKB was assessed in this study in depth (Mediterranean region), or at basic level only (non-Mediterranean).¹⁸

¹⁵ <https://www.coe.int/en/web/bern-convention/ikb-scoreboard-assessment-table>
¹⁶ Serbia was included in the detailed analysis due to its geographical proximity and similarities of IKB issues typical to other Balkan countries. Thus, Serbia is included in our term “Mediterranean countries” or “Mediterranean” throughout this paper.
¹⁷ We did not separate the European and Asian part of Türkiye in this study. IKB is most prevalent in the Asian part of the country.
¹⁸ The contents of maps in this report do not imply the expression of any opinion on the part of BirdLife International or contributing organisations concerning the legal status of any country, territory or area or its authority, or concerning the delimitation of its frontiers or boundaries.

2.3 Information gathering

Questionnaires were used to gather information between June and December 2024. They consisted of 76 multiple-choice questions, five open questions and space for comments on interpretation, divided into two parts (see Annex 2). The first part was completed by all assessed countries on the national engagement with the CMS MIKT and Bern Convention process. The second part was a more in-depth series of narrative questions requested from the 22 Mediterranean countries.

The first part comprised 75 multiple-choice questions – scoring the situation from 0 to 3 in six different action strategies (labelled A-F in table 2). The scoring system of 0 to 3 followed a similar system to the governmental IKB Scoreboards used by CMS MIKT and the Bern Convention for tracking the national progress against the Rome Strategic Plan. For all questions there was also an option to mark a multiple-choice question with an “N/A”, meaning not applicable, not relevant or no information.

We aimed to assess progress under broad IKB response strategies similar to those “Indicator groups” used in the Rome Strategic Plan Scoreboard. In the Scoreboard, these are: A. National monitoring of IKB, B. Comprehensiveness of national legislation, C. Enforcement response, D. Prosecution and sentencing, and E. Prevention. An additional strategy was added in this study to reflect on the attitude and level of co-operation of national governments, i.e. political will and collaboration. Within these broad strategies, the specific questions differed from those in the scoreboard exercise, because the survey aimed to assess the recent efforts of the governments from the perspective of NGOs/independent experts. The six strategies that we defined for scoring were: A. Political will and co-operation, B. Monitoring, C. Legislation, D. Enforcement, E. Prosecution and sentencing, and F. Communication. Experts scored each of the strategies overall (A-F), as well as scoring several key points within each strategy (Table 2). For each key point experts scored two separate time periods: 2020-2024 and 2015-2019.

Table 2: Main strategies and key points from the questionnaire – Part 1

IKB Response Strategy	Key Points
A: Political will and co-operation	1. Priority of IKB on the political agenda 2. Existence and necessity of a National Action Plan or a similar strategic framework to address IKB 3. Government's participation at international IKB meetings 4. Government reporting (IKB Scoreboard), including questions about the agreement with the government's scoring, involvement of NGOs in the assessment process and transparency of the submitted scoreboards 5. Transparency of governmental work
B: Monitoring	1. Monitoring data availability and quality 2. Funding for monitoring 3. Existence of national databases 4. Public accessibility of IKB data
C: Legislation	1. Suitability of national IKB legislation 2. Effectiveness and dissuasiveness of penalties 3. International pressure or processes against the country
D: Enforcement	1. Co-operation among Law Enforcement Agencies 2. Co-operation of Law Enforcement Agencies with NGOs 3. Effectiveness of police response 4. Financial resourcing of Law Enforcement Agencies
E: Prosecution and sentencing	1. Existence and quality of a national sentencing guideline 2. Quality and effectiveness of prosecution 3. Degree of impunity 4. Deterrent effect of convictions 5. Publicity of outcomes 6. Availability of specialised training courses for prosecutors and judges dealing with wildlife crime
F: Communication and prevention	1. Understanding of motivations behind IKB 2. Public awareness raising by governments 3. Public awareness raising by NGOs 4. Media attention

▶ The second, more in-depth part of the questionnaire was requested only from the Mediterranean countries. It focused on narrative questions, and responses were used to formulate concrete recommendations:

- What is the importance of the different drivers behind IKB?
- Which aspects of IKB have got better or worse in scale and why?
- What key areas of action would result in greatest progress towards reducing IKB in the country?
- What is most needed for the national government (international support/ training/ capacity building/ info exchange/ etc.) to successfully tackle IKB?

Both parts were based on expert assessment. National experts from nature conservation organisations (NGOs) were identified mostly from the BirdLife and EuroNatur partnership to complete a questionnaire by selecting the category or score that most closely matched the approach and progress that their national government was demonstrating in tackling IKB. In countries where there was no national partner organisation identified, we included other independent, non-governmental experts. In the case of Algeria and Libya, these experts had an academic background. In Germany, the national BirdLife Partner transferred the questionnaire to another NGO, the Committee Against Bird Slaughter (CABS), who have long been involved in anti-IKB work and therefore responded about the situation in Germany. In Flanders, part of Belgium, Natuurpunt based its answers on the input of colleagues from Vogelbescherming Vlaanderen.

2.4 Data analysis

We received responses from 46 countries. Countries with very low levels of IKB (namely Finland, Israel, Latvia, Luxembourg, and Switzerland) are shown on Map 2 as countries that are on track to reach the 50% reduction target of the Rome Strategic Plan. Their scoring for the multiple-choice questions was excluded from further analysis because effectively there is not a significant IKB problem to solve.¹⁹

In part one, for each key point, the experts scored two time periods: a score was given for the progress between years 2020-2024 and 2015-2019. This made it possible to calculate changes in scoring between the two time periods and therefore measure progress towards the different strategies and key points. For example, using scorings from countries for each key point we calculated the average score for each of the six different strategies for the two time periods. We could then calculate a “progress score” for each strategy by subtracting the 2015-2019 average score from the 2020-2024 score. A positive “progress score” value indicated there has been progress in the implementation of that strategy.

The data that we present in the results sections focuses on:

- What was the average and median score for each IKB response strategy and how do scores differ between 2020-2024 and 2015-2019?
- Which key points has little progress been made on?
- What trends were indicated for the different types of IKB (shooting/trapping/poisoning)?
- What is the IKB trend like in each of the countries since 2020?



The Eurasian Blackcap (*Sylvia atricapilla*) is one of the main species targeted in the illegal practice of trapping to be served as ‘ambelopoulia’, a traditional dish in Cyprus. © Yuriy Balagula

¹⁹ Very low level of IKB” is used here similarly, but more strictly than the “insignificant” categorisation in the official Scoreboard report. However, in the absence of requesting new estimates on the number of illegally killed birds, we did not define it with a given limit of annual IKB. Instead, it was based on the experts’ opinion highlighting the fact that they did not consider IKB as a problem in their countries. For these countries, lower scoring in political will, investment in enforcement or the lack of improving trend would not mean the same as in countries with more significant IKB problems; therefore their scores were not included in the analysis for assessing progress for the different areas.

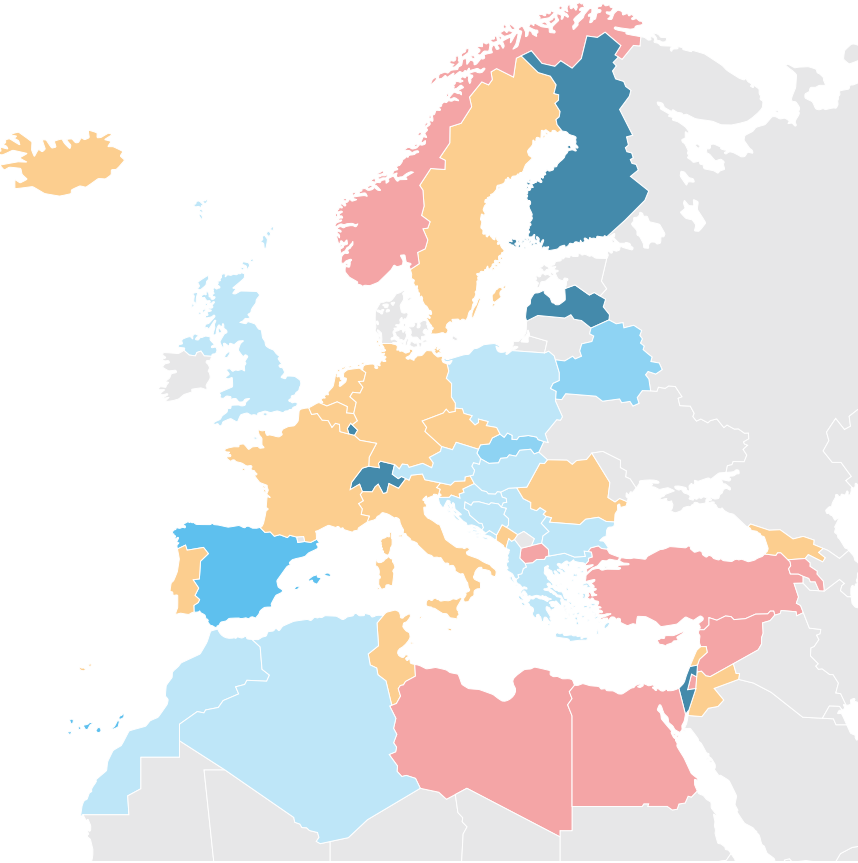
3 Results

3.1 Are governments on track to reach the Rome Strategic Plan goal?

In order to be “on-track” to reach the minimum 50% reduction target by 2030, we consider that the country’s estimated IKB trend should be at least a 25% reduction in illegally killed birds within this first five years of the decade²⁰ (which was the case for Belarus, Slovakia, and Spain) or the country should have succeeded in keeping IKB at a very low level in the past five years (which was the case for Finland, Israel, Latvia, Luxembourg, and Switzerland).

Map 2: Progress toward implementing the Rome Strategic Plan showing the countries/territories coloured by their IKB trend during the period 2020-2024.

- Increased IKB 5% to 24%
- No change in IKB -4% to 4%
- Decreased IKB -5% to -24%
- Decreased IKB -25% to -49%
- Decreased IKB -50% to -75%
- Very low level of IKB maintained



Even though over the past five years IKB trends have improved (or remained at a very low level) in 43% of all the assessed countries, most of the reductions are still below the 25% threshold (in 26% of all assessed countries). Out of the 46 countries that responded, **only 8 (17%) have met the minimum 25% mid-term reduction target to be on track for the 50% reduction by 2030, or have managed to maintain an already low level of IKB.** Another 12 (26%) have shown a slight reduction in IKB, while 17 of the countries (37%) have an unchanged/ stable IKB trend. In nine countries (20%), the IKB situation has deteriorated since 2020.

In countries already assessed in Brochet *et al.* (2016, 2019a, 2019b) to have very low levels of IKB, unchanged/stable IKB trends may be considered ‘acceptable’ and not of great interest. Therefore, we

included these countries in the same category with countries which are “on track” to reach the target of the Rome Strategic Plan. While all efforts towards eradicating IKB are of value, whether or not these countries are on track to reduce an already very low level of IKB by 50% does not make a substantial contribution to addressing IKB at the scale of the region. It is also important to mention that even if these countries have a very low level of estimated IKB, the issue might be on the rise. For example, Luxembourg has noted that the poisoning of crows seems to have become more regular in recent years. Although its extent is not known and probably still at a relatively low level, it is a warning for countries that may consider themselves as a “safe haven” for birds to still keep a look out for IKB issues to prevent the problem from increasing unnoticed.

Figure 1a: The trend in IKB plotted against the estimated annual IKB for all countries assessed in Brochet *et al.* (2016, 2019a). This plot depicts countries with an estimated annual IKB of more than 150,000. For countries with an estimated annual IKB of fewer than 150,000 – shown as unlabelled points on this graph - see Figure 1b.

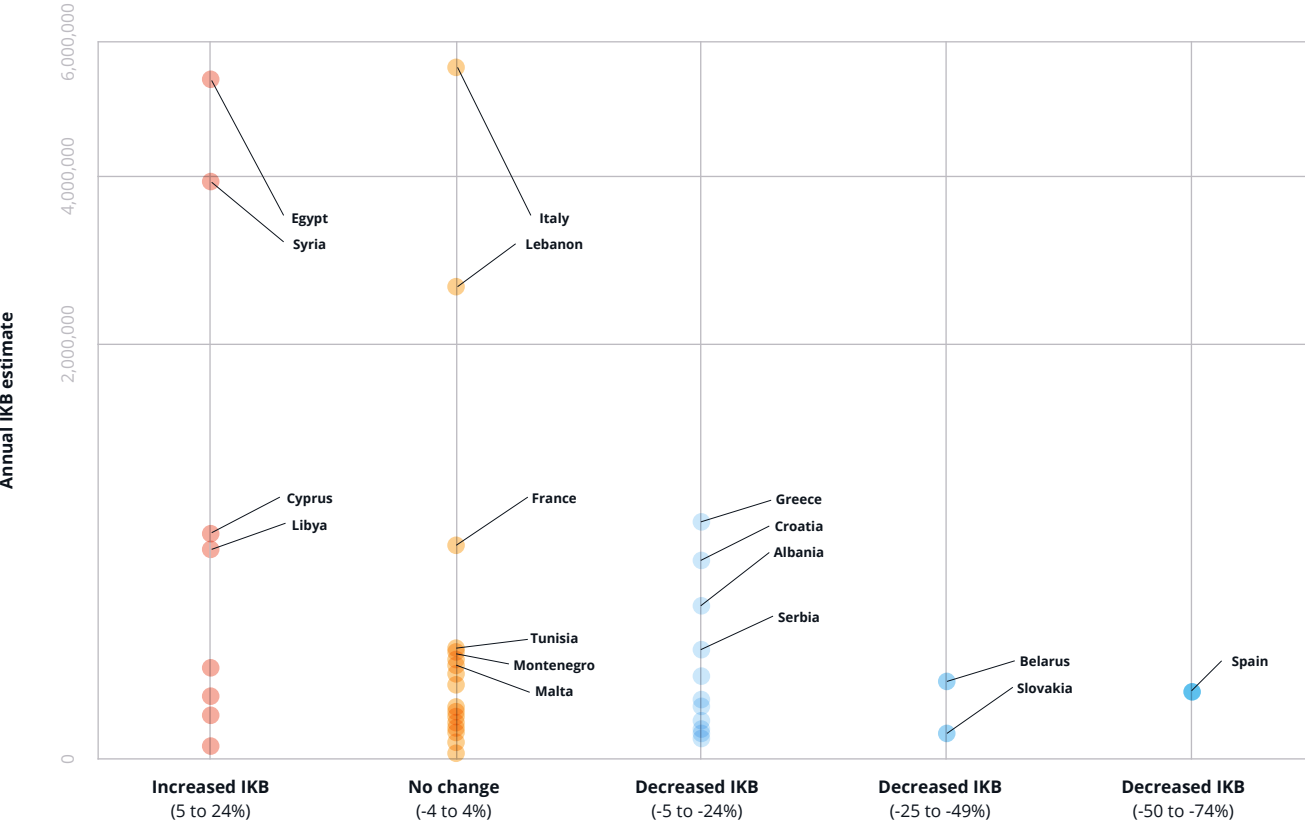
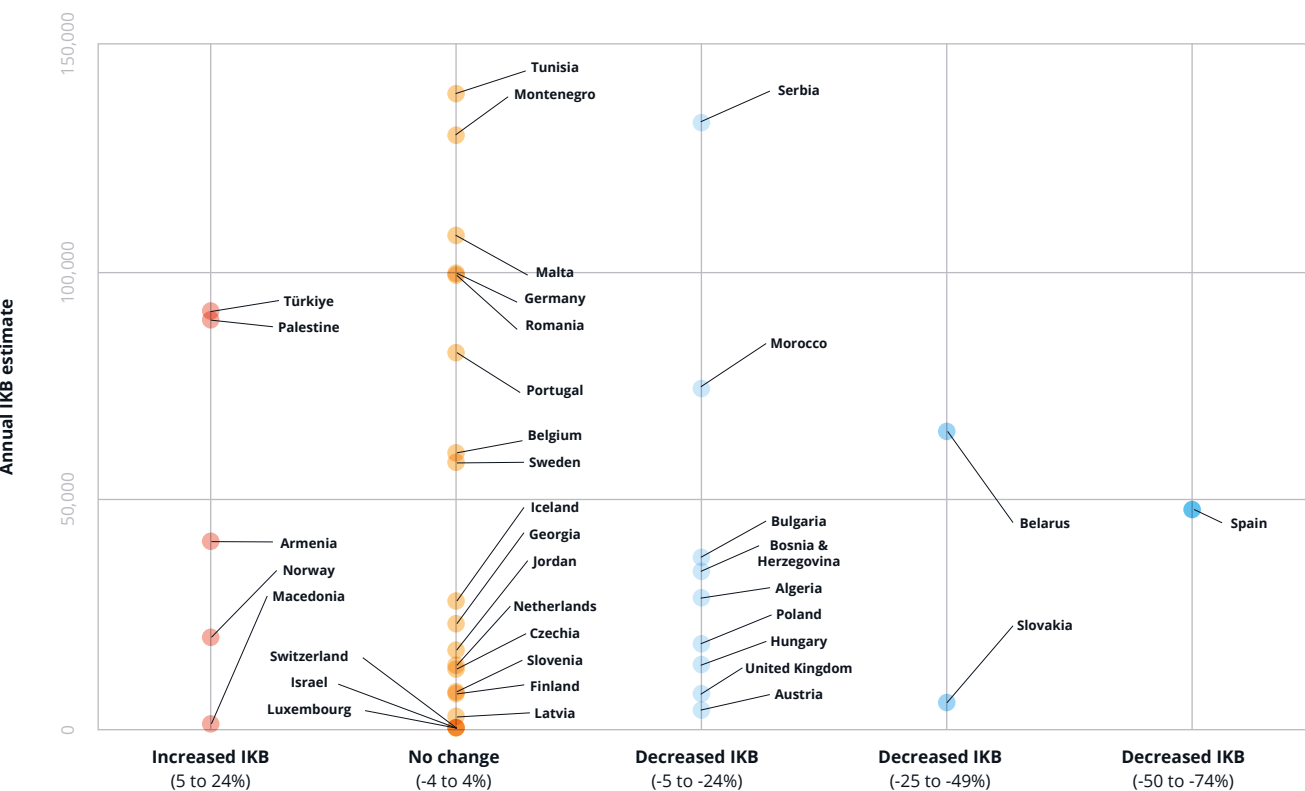


Figure 1b: The trend in IKB plotted against the estimated annual IKB for all countries assessed in Brochet *et al.* (2016, 2019a). This plot depicts only the countries with an estimated annual IKB of fewer than 150,000. For countries with an estimated annual IKB of more than 150,000, see Figure 1a.



²⁰ This is not an official target in the Rome Strategic Plan, only a logical intermediate goal for the halfway point, assuming steady progress throughout the period.

3.2 Trends of the major types of illegal killing of birds

Within countries, trends of IKB types (i.e. trapping, shooting, and poisoning) vary. All the major types of IKB showed trends somewhat similar to the general picture: trapping, shooting and poisoning trends were assessed mostly as stable or fluctuating. Thus, since 2020 the trend in illegal trapping, shooting and poisoning showed no significant change in over half (50-60%) of the countries (excluding the ones with a negligible IKB problem). Compared to the other two major types of IKB, illegal trapping trends have improved in more countries (12 countries; 29% of all assessed),

while least improvement and the number of incidents getting worse has been observed with shooting. Rarely, strong positive trends were noted for this most recent period: two countries estimated strongly improving trends for illegal poisoning (Austria and Hungary), and one country regarding illegal trapping (North Macedonia). It was only Spain that improved simultaneously regarding all major types of IKB. For this analysis, the two parts of Belgium, Wallonia and Flanders, were considered separately, because the trends were somewhat different, therefore n=42 (see Table 3).

Table 3: Number of countries that fall within categories of estimated change in trend for the three major types of IKB (trapping/shooting/poisoning) and overall IKB.

Number of countries where the estimated trend is:	Getting worse	Stable/ fluctuating	Slightly improving	Strongly improving	Not applicable or do not know
Trend in illegal trapping from 2020 to 2024	6 (14.29%)	21 (50.00%)	11 (26.19%)	1 (2.38%)	3 (7.14%)
Trend in illegal shooting events from 2020 to 2024	8 (19.05%)	25 (59.52%)	6 (14.29%)	0 (0.00%)	3 (7.14%)
Trend in illegal poisoning cases from 2020 to 2024	5 (11.90%)	22 (52.38%)	5 (11.90%)	2 (4.76%)	8 (19.05%)
Overall IKB trend from 2020 to 2024	5 (11.90%)	30 (71.43%)	7 (16.67%)	0 (0.00%)	0 (0.00%)

3.3 Scale of current illegal killing of birds

We used the same categories for the scale of IKB that were used in Brochet *et al.* 2016 and which are also used in the Bern Convention – CMS MIKT Scoreboard analysis. This classification divides countries into 4 broad IKB severity categories. These categories are shown with different shades of grey on Map 3.

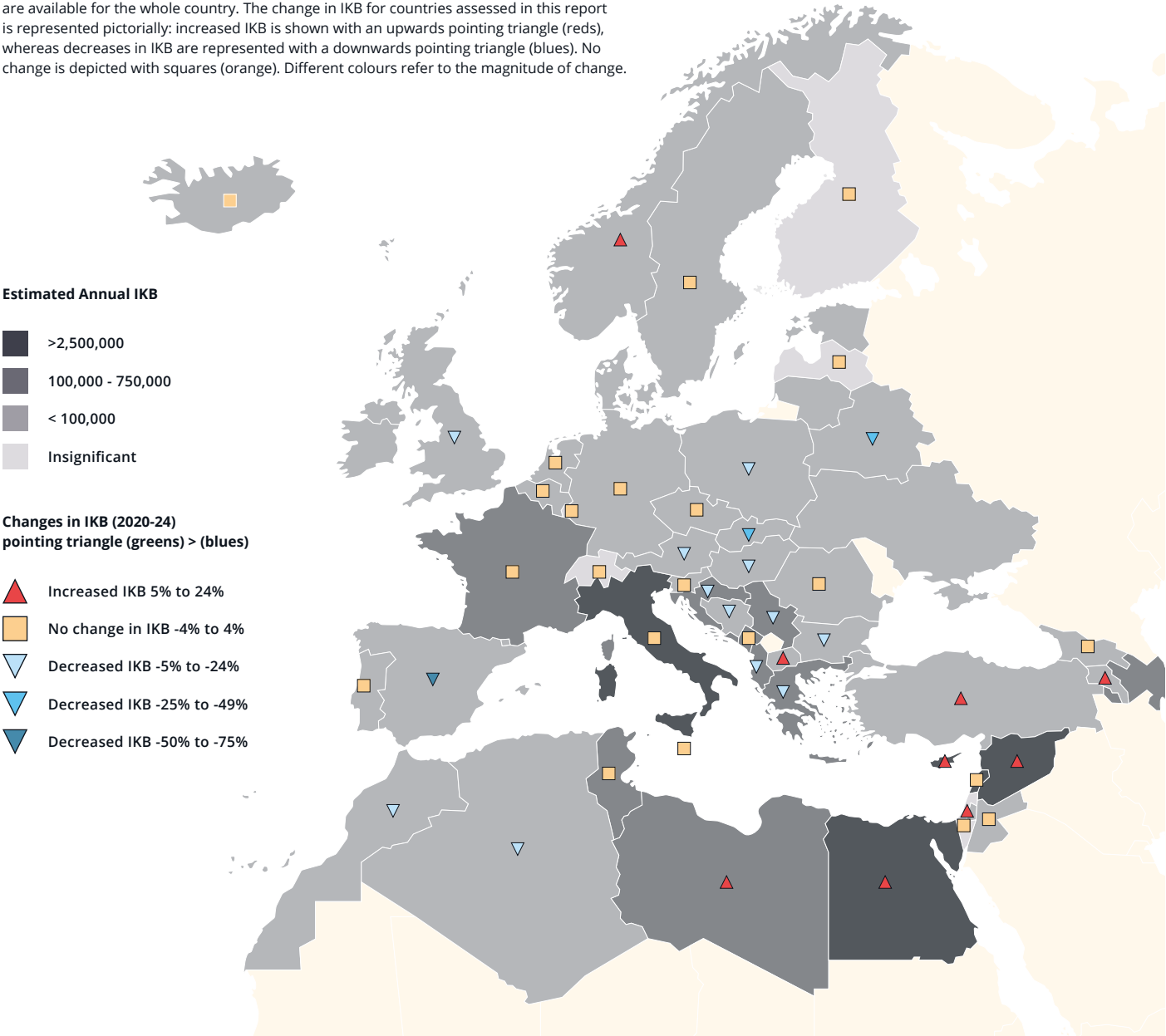
Very high – Class I More than 2,500,000: 4 range countries (Egypt, Italy, Lebanon and Syria)

High – Class II Between 750,001 and 2,500,000: 0 range countries currently falling in this category

Medium – Class III Between 100,000 and 750,000: 11 range countries (10 reported)

Low – Class IV Fewer than 100,000: 39 range countries (32 reported)

Map 3: Countries/territories are shaded by the estimated IKB severity category (=scale of IKB), primarily based on Brochet *et al.* (2016, 2019) estimates, except where more recent estimates are available for the whole country. The change in IKB for countries assessed in this report is represented pictorially: increased IKB is shown with an upwards pointing triangle (reds), whereas decreases in IKB are represented with a downwards pointing triangle (blues). No change is depicted with squares (orange). Different colours refer to the magnitude of change.



Five countries – four of which are in the Mediterranean region – marked that the scale of IKB had significantly decreased from 2020-2024 compared to 2015-2019. Thus, this improvement did not happen in the same period that we looked at in our main question, but before 2020)²¹. These five countries were: **Albania, Belarus, Bosnia and Herzegovina, Cyprus and Spain**.

Cyprus and **Spain** were therefore assessed to have improved from severity category II and III to severity category III and IV, respectively, since the assessment made in 2014-2015 (Brochet *et al.* 2016) a decade ago. **Belarus** and **Bosnia and Herzegovina** were already in the lowest category IV, thus they remained in the same category. Albania was in category III (with an estimate of an average of 265,000 illegally killed birds per year). The illegalities were closely linked to hunting tourism. The complete hunting ban, which has been in place since 2014, had a significant effect on reducing such illegalities, especially at the beginning, completely shutting down the hunting tourism industry. On the other hand, especially with the repeated extension of the ban, some former legal hunters have moved to pursue their hobby illegally. We expect that this type of IKB would be diminished with a new hunting

law in place (although possibly the number of birds killed would not decrease from such change, but at least the exploitation would be controlled after the reopening of hunting). Despite the reduction in IKB, it does not appear that the final figures have reached the threshold necessary to warrant an upgrade to category IV.

Partners from **Libya** and **Malta** indicated a moderate increase in the IKB situation for this 10-year period, but no countries indicated a significant enough deterioration to warrant recategorising them into a higher IKB severity class. In the case of Malta, the country was classified towards the lower limit of category III (with an estimate of an average of 108,000 illegally killed birds per year) by Brochet *et al.* (2016). The longer-term trend (2015-2024) estimate suggests a moderate increase in IKB, but not sufficient to move to a higher severity IKB class. In the case of Libya, the original Brochet *et al.* (2016) estimate placed it in category III, with an estimate of 503,000 illegally killed birds per year. The increase in illegalities was linked to low levels of control in hunting, which has been improved in the last few years. Therefore, we think that category III is still applicable.

3.4 Top 10 countries with the highest levels of illegal killing from current assessment

To maximise effectiveness of measures, it is important to focus on the urgency of action to address IKB in the countries with the highest levels. The three countries with the highest levels of IKB are responsible for an estimated 67.5% of all IKB in the study region; the top four countries are responsible for 77.5% and the countries with the 10 highest levels of IKB are responsible for about 91% of the illegally killed birds. Therefore, in this section we take a closer look at these 10 countries.

Since the analysis by Brochet *et al.* (2016), the top 10 countries with the highest levels of illegal killing have not changed, even though the order of these countries has changed slightly.

Our assessment shows that since 2020, the situation has improved in two of the top 10 countries with the highest IKB (Croatia, Greece), but the progress (5-24% reduction) has been less than needed to be on track to meet the RSP target. In four of the top 10 countries with the highest IKB (Azerbaijan, Italy, France and Lebanon), there has been no indication of significant change in IKB in the past five years. In four of the top 10 countries (Egypt, Syria, Cyprus and Libya), the IKB situation has apparently worsened during the 2020-2024 period.

Table 4: Top 10 countries with the highest estimated levels of illegal killing in the region

New rank (Old rank)	Country	Mean estimated number of birds killed or taken illegally per year – (estimates from Brochet <i>et al.</i> 2016 in black; new estimates shown in blue if available)	Source of any new information on scale of IKB in country since Brochet <i>et al.</i> (2016)	IKB trend since 2020
1 (1)	Italy	5.6M (2015)	No new official baseline	No significant change
2 (2)	Egypt	5.4M (2015)	No new official baseline	Slight increase (5 to 24%)
3 (3)	Syria	3.9M (2015)	No new official baseline	Slight increase (5 to 24%)
4 (4)	Lebanon	2.6M (2015)	No new official baseline	No significant change
5 (6)	Greece	643,000 (2024) 704,000 (2015)	New estimate by HOS; no new official baseline	Slight reduction (-5 to -24%)
6 (7)	Azerbaijan	590,000 (2015)	Scoreboard never submitted	No response, but no indication of significant change
7 (5)	Cyprus	640,000 (2024) 2.3m (2015)	New estimate by BirdLife Cyprus; no new official baseline	Slight increase (-5 to -24%) in IKB since 2020; major improvement since Brochet estimate (2014/15)
8 (8)	France	520,000 (2015)	No new official baseline	No significant change
9 (10)	Libya	500,000 (2015)	Scoreboard never submitted	Slight increase (5 to 24%)
10 (9)	Croatia	447,800 (2024) 510,000 (2015)	NGO estimate based on monitoring hotspots	Slight reduction (-5 to -24%)

²¹ It is important to note that in some cases this longer-term trend can be opposite in direction to the short-term trend, with which we assess progress towards the Rome Strategic Plan target. In the case of Cyprus, significant improvement happened prior to 2020 and there has been a slower backsliding since then.

3.5 Illegal killing of birds response strategies assessed

We have analysed the received data by the broad “strategies”²² explained earlier in Table 2. In Table 5, we present the simple statistical data on these six different categories: the median, the mode and the mean.

‘Data collection and monitoring’ had the lowest mean score across countries assessed – being the only IKB strategy with a mean score under 1 and a mode of 0. On the other hand, ‘Legislation’ had the highest mean score among assessed countries and was the only IKB action area where the median response was above 1.

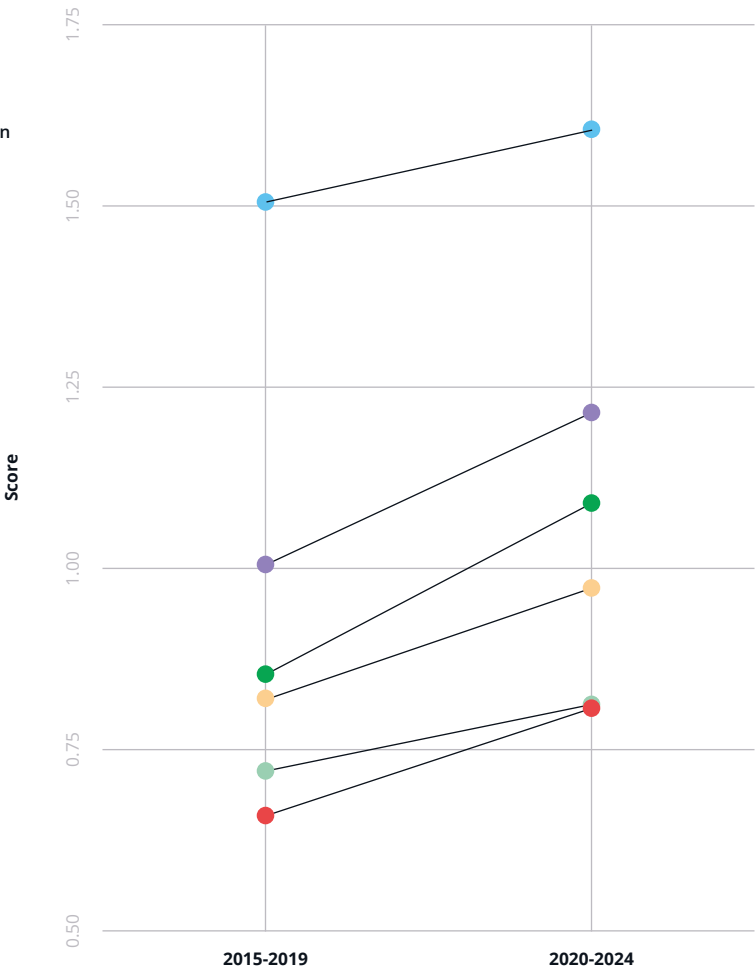
If we compare the situation in 2020-2024 to the period 2015-2019, there has been positive change in general, meaning that the number of countries with improvements exceeded the number of countries where the situation has worsened. While all areas seemed to have improved somewhat, ‘Enforcement’ was the IKB response strategy that has improved the most between the periods of interest, indicated by the steepest slope on Figure 2.

Table 5: Overview by strategies: scores for different response strategies to IKB. These scores are derived from the overall score that was given to a theme by each country from 0 (worst) to 3 (best).

	Political will and co-operation	Data collection and monitoring	Legislation	Enforcement	Prosecution and sentencing	Prevention and communication
Median	1.0	1.0	2.0	1.0	1.0	1.0
Mode	1	0	1	1	1	1
Mean	1.10	0.74	1.61	1.14	1.07	1.29

²² IKB response strategies: Political will and co-operation/Data collection and monitoring/Legislation/Enforcement/Prosecution and sentencing/Prevention and communication

Figure 2: Change in IKB response strategy scoring between the periods 2015-2019 and 2020-2024. The plotted scores represent the average values for each strategy based on survey responses from two periods: early (2015-2019) and recent (2020-2024). Each strategy consists of multiple key questions and average were calculated across all key questions within a strategy. (Note: the responses from a country were not included if it had been deemed to have very low levels of IKB. Also, if a country responded to a question for only one time period (2015-2019 or 2020-2024) then the response to that one question was excluded from the overall average.)



If we look at the average scores by each of the IKB severity categories, the countries with the biggest IKB problem (category I) have scored lower on average across all IKB response strategies compared to the countries with more moderate IKB (category IV), but enforcement seems to be especially problematic in general for countries with higher IKB. (Figure 3.)

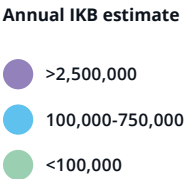
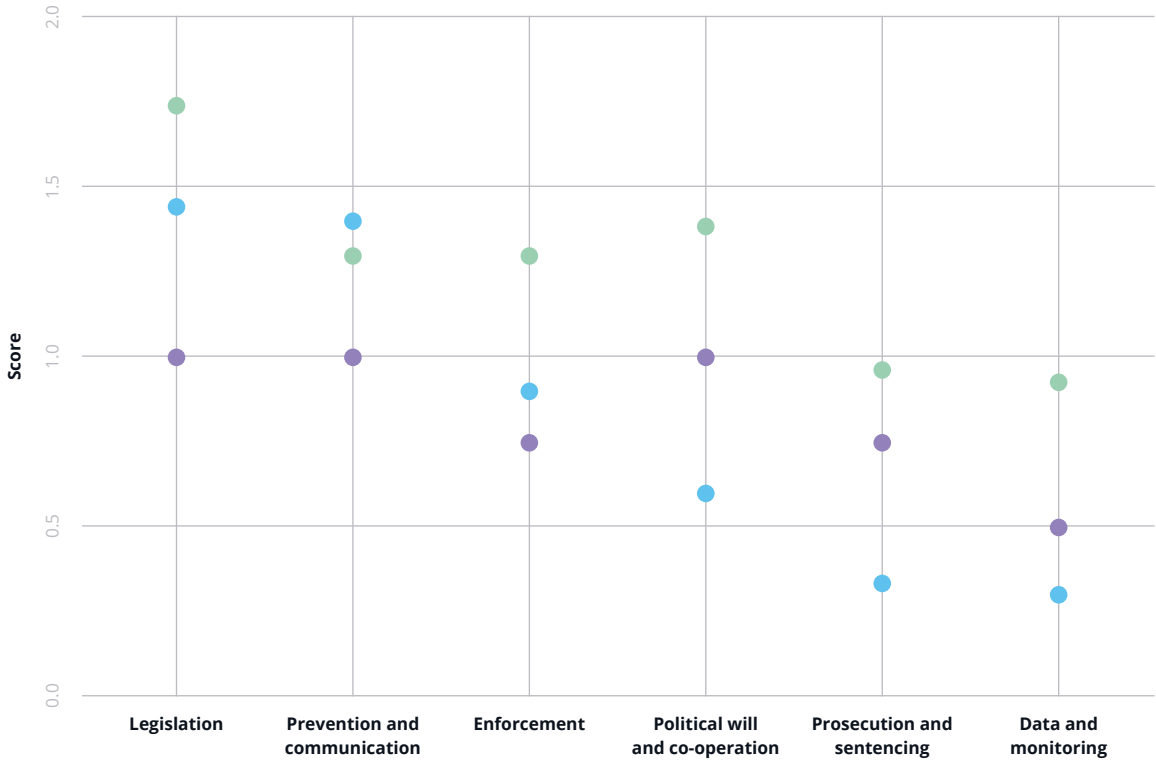


Figure 3: Average scores for different IKB response strategies (during 2020-2024) across countries with three different levels of overall IKB (n=41). The five countries that have very low levels of IKB were excluded. These average scores are derived from the overall score that was given to a response strategy and not the scores given to the key points (see table 2). These IKB levels are based on the IKB severity class in Brochet.²³



²³ No countries are currently in category 750,001-2,500,000

3.6 Narrative highlights of the six main illegal killing response strategies

3.6.1 Strategy ‘A’: Political will and co-operation

This section evaluates the political will and co-operation related to IKB in a given country. The key points addressed in this section include:

- 1. Priority of IKB on the political agenda
- 2. Existence and necessity of a National Action Plan or a similar strategic framework to address IKB
- 3. Governments’ participation at international IKB meetings
- 4. Government reporting (IKB Scoreboard), including questions about the agreement with the government’s scoring, involvement of NGOs in the assessment process and transparency of the submitted scoreboards

Political priority

Where IKB is not occurring at significant scale in a country, it is understandably very low on the political agenda. However, if we look at only the Mediterranean countries, there is also no correlation between the severity (scale) of IKB and the political will. There is a clear regional difference among the three sub-regions: Middle East countries (Syria, Lebanon, Palestine and Jordan) all ranked the issue as being high on the political agenda; North African countries (Morocco, Algeria, Tunisia, Libya and Egypt) had more heterogeneous responses (Algeria and Morocco scoring it as a higher political priority, Egypt and Libya apparently not prioritising it, and Tunisia in the middle), while in Mediterranean European countries, the political attention to IKB scored quite low (with the only exception being Spain).

National Action Plans (NAPs)

Only three countries marked a definite “yes” for the existence of the NAP (Czechia, Italy and Lebanon) and 12 others indicated “partly yes”, meaning either that it covers the topic only partly (e.g. only illegal poisoning and not other types of IKB) or it covers only specific regions of the country. What is more worrying is that none of the NAPs were considered to be fully implemented. Half of them were considered not to be implemented at all or only poorly, while the other half were considered to be implemented to some extent (but not completely).

Scoreboard reporting

The Scoreboard to assess the progress in combating IKB is a self-assessment framework for governments developed by the Secretariats of the Bern Convention and the CMS. The first scoreboard assessment was conducted in 2018, with uptake from 30 national governments. A second assessment was completed in 2020-2021 by 24 countries. The third assessment was carried out in 2023, with 25 countries replying out of the 54 invited to contribute. Fourteen countries completed the scoreboard on all three occasions. However, some of the countries with the highest levels of IKB did not report with the expected frequency (Egypt submitted 1 scoreboard, Syria 2, Lebanon 1 and Libya 0).

Co-operation

Most of the governments co-operate to some extent with relevant NGOs and other stakeholders. Overall, this co-operation was considered to have increased in more countries (four) than it had decreased (three), while in the majority of the countries there was no change in the score for co-operation between the two periods (2015-19 and 2020-24). This is reflected in the quality of the submitted scoreboards, which most of our experts consider realistic, with only one NGO partner objecting strongly to the results. Somewhat contradicting this, the transparency of the government work on IKB received very low scores. Only a quarter of the country respondents agreed that the level of transparency was adequately high, although there have been some improvements in the case of four countries in recent years. Transparency is crucial because, although governments have statutory responsibilities and law enforcement agencies have a clear role, effectively tackling IKB requires the involvement of multiple stakeholders, including NGOs, conservationists, and local communities. Engaging and sharing information with all relevant actors helps to ensure co-ordinated and effective responses to IKB incidents. Furthermore, the general public plays a vital role as the “eyes and ears on the ground”, reporting illegal activities and contributing to enforcement efforts. Without adequate transparency, opportunities for other stakeholders to support government efforts to tackle IKB are limited, and efforts to combat IKB may be less effective overall.

3.6.2 Strategy ‘B’: Monitoring and data collection

This section evaluates the quality of IKB monitoring and data collection in each country. Experts were asked to score the availability, quality, funding, and public accessibility of IKB data. This section received the lowest average overall score, which is not surprising since monitoring illegal activities can be extremely challenging. This echoes the findings from the official scoreboard reports, where only a few countries have been able to define a baseline, even though this was an important milestone of the RSP for assessing progress. In most countries, IKB monitoring has been carried out by NGOs and it’s unfortunately an exception rather than a rule when it’s financially supported with governmental funds. Several of the NGOs consulted maintain an IKB database and provide data to their governments.

Quality and reliability of IKB monitoring data

On average, experts agree about the existence of reliable IKB monitoring data, although it is mostly not from governmental sources. In most cases, the IKB monitoring covers only a small portion of the IKB or a few very specific locations within the country.

Funding for data collection

55% of the national respondents strongly disagreed that data collection was financed from governmental money.

National-level data collection system, including databases

47% scored 0 (strongly disagree) about the existence of national-level data collection systems.

Public availability of IKB data

On average, this is one of the questions that scored the lowest (mean=0.39). 70% of the scores were zero for publicly available official crime statistics.

3.6.3 Strategy ‘C’: Legislation

This section received the highest average score and was the only one where the median rating was 2. This corresponds with the official governmental scoreboard finding, where on average countries have repeatedly reported that the area of national legislation has been the best performing area of the five areas identified as critical for combating IKB.

Strength and completeness of national laws

74% of the experts agreed mostly or fully that their respective countries have complete and strong laws. This was defined as “the legislation has adequate provisions to deter and combat IKB and is supported by suitable legislation framework and/or regulations”. Despite the general satisfaction with the legislative framework, the country-specific loopholes are numerous. Only one expert strongly disagreed (Libya), where the hunting regulation law hasn’t been updated since 1968.

Effectiveness of penalties

This statement received mostly intermediate scores of 1 or 2. The issues with the penalties included the lack of, the proportionality and the depreciation of fines due to inflation, which means that they lose their deterrent effect.

International processes against the country

This question asked about the international pressure that countries have received, for example in the form of an EU infringement process, Ramsar Advisory Mission or Montreux record, CMS or AEWA implementation review, Bern Convention process: case-file system with IKB element. Four countries in the period 2020-2024 were affected: Greece, Italy, Malta and France, all of them EU countries. In the case of France and Malta, there have been recent European Court of Justice (ECJ) decisions (in 2021 and in 2024, respectively) to ban trapping of birds.

► 3.6.4 Strategy 'D': Enforcement response

This section evaluates the effectiveness of enforcement responses to IKB. In most countries, the law enforcement obligations are split among several different actors: police, gendarmerie, state inspectorate and customs service, for example, while national park rangers and hunting inspectors typically also play an important role in detecting and reporting IKB cases. These agencies may all have different levels of organisation, preparedness, training, resourcing and priorities. Therefore, some experts found it too general to give an overall scoring to the enforcement response. It is also worth mentioning that these questions received the highest score for improvement compared to the previous period (2015-2019), especially when it comes to co-operation with NGOs and the satisfaction of respondents with police response to reported IKB cases.

The average scores for co-operation of law enforcement agencies both between themselves and with NGOs, as well as the overall satisfaction with police responses, were relatively high, with an average of 1.4. However, the level of resourcing and specialised training scored well below 1 – indicating room for improvement in these areas.

3.6.5 Strategy 'E': Prosecution and sentencing

Experts were asked to assess the adequacy of sentencing guidelines, speed and effectiveness of prosecutions, conviction rates, proportionality of penalties, transparency of court outcomes, and the availability of specialised wildlife crime training for prosecutors and judges.

This area got the second lowest rating on average. This echoes the same gap observed in governmental scoreboards. There have been recent projects that tackle this known issue (e.g. Wildlife Crime Academy within Balkan detox LIFE and now in the current WildLIFE Crime Academy project, or the previous LIFE Swipe project). There is still a lot to be done, especially in Europe outside of the EU, where the score is lower in general (EU mean: 1.0, non-EU Europe mean: 0.55, North Africa mean: 1.2, Middle East mean: 1.0).

A key point that has shown the most improvement is sentencing guidelines. Additionally, the rate of impunity is decreasing, meaning that more

perpetrators of IKB (in parallel with other wildlife crimes) are facing legal consequences rather than escaping punishment. Strengthened sentencing frameworks and greater judicial awareness have contributed to this recent shift in an increasing number of countries and it is reflected in a higher conviction rate compared to previous years, thus reinforcing the role of the judiciary in deterring wildlife crime. The point showing least progress is the publicity and transparency of the outcomes of the court proceedings, while the lowest on average ($m=0.43$) is the availability of enough specially trained prosecutors and judges.

3.6.6 Strategy 'F': Communication and prevention

This section looked at various aspects to assess the public awareness initiatives by both governmental and non-governmental sources. Besides monitoring, this is again an area where typically NGOs do a lot of the prevention measures. We separated the existence of such initiatives from the question of funding. From the responses, it could appear that governments don't need to put a lot of effort into raising awareness because in many countries it is already well-supported by NGOs. However, the opposite is the case; NGOs often feel that they need to step into this area because the government is not playing its part. This is perhaps why the media attention (mean=1.57) and campaigning done by NGOs (mean=1.83) received much higher scores than governmental awareness raising initiatives and targeted socio-economic research (mean=0.76 and mean=0.64, respectively).



Although Song Thrushes (*Turdus philomelos*) are legally hunted in many places, it is illegal to trap them with mist-nets in most countries. © BirdLife Cyprus

3.7 Questionnaire Part 2

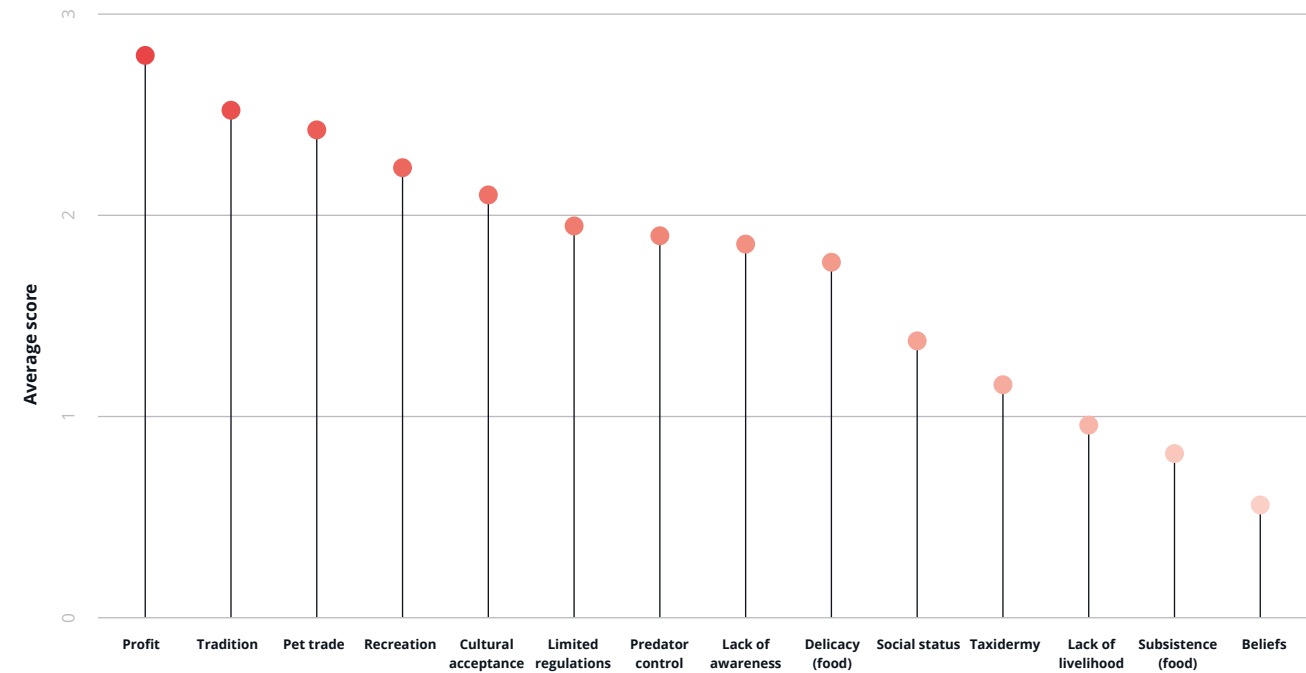
3.7.1 Drivers (reasons for killing) and enabling factors

1. How important are the following potential drivers (and enabling conditions) as motivating factors for IKB in your country?

In the questionnaire we asked the national experts to score 11 drivers and three enabling conditions based on their importance on a scale from 0 (lowest) to 3 (highest).

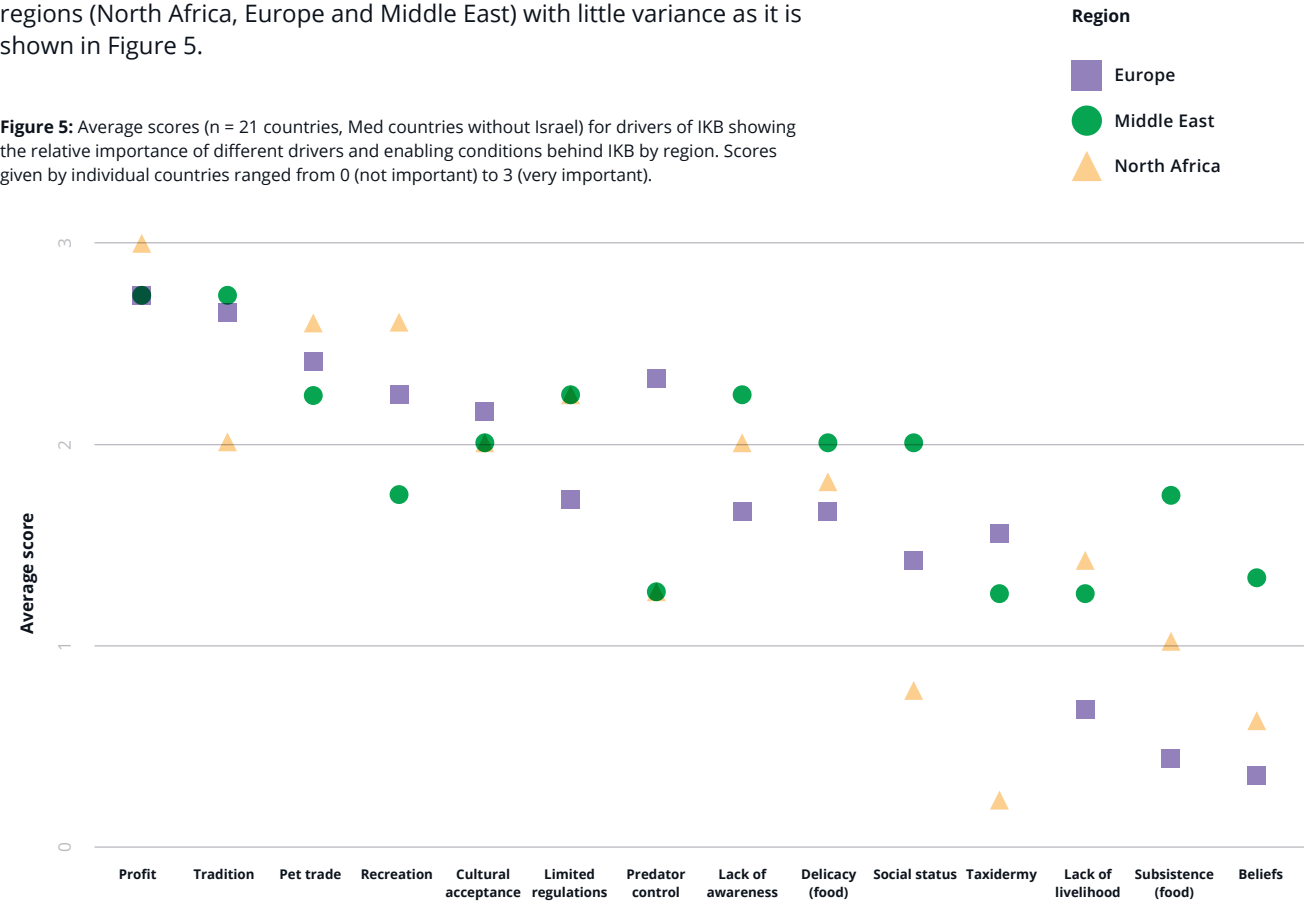
Drivers	Enabling conditions
• profit • tradition • pet trade • recreation • consumption by self/own family, because of delicacy meat • lack of alternative livelihoods • predator control • social status • taxidermy collection • poverty related need for food (subsistence) • beliefs	• lack of awareness • limited regulations • cultural acceptance

Figure 4: Average scores (n=21 countries) for drivers of IKB, showing the importance of different drivers and enabling conditions behind IKB. Scores given by individual countries ranged from 0 (not important) to 3 (very important).



In all 21 Mediterranean countries²⁴, profit, tradition, pet trade and recreation are the most mentioned drivers of IKB (Figure 4). These same four drivers received the highest average scores in each of the three regions (North Africa, Europe and Middle East) with little variance as it is shown in Figure 5.

Figure 5: Average scores (n = 21 countries, Med countries without Israel) for drivers of IKB showing the relative importance of different drivers and enabling conditions behind IKB by region. Scores given by individual countries ranged from 0 (not important) to 3 (very important).



Brochet *et al.* 2016 stated: “Species reported to be known or likely to be illegally killed in significant numbers in the Mediterranean were reported to be targeted for sport (82–85% of species impacted in significant number, with the lower number being the proportion targeted for which the reason was listed as of primary importance, and the upper number including those targeted for which the reason was listed as of secondary importance), food (65–71%) or for capture as cage-birds/decoys/etc. (29–39%).” We know that motivations are often interlinked and can occur simultaneously, thus strengthening each other (e.g. killing birds for sport and eating them).

Profit/commercial gain was identified as the most important motivation behind IKB in all regions. This aligns well with other studies, such as the extensive literature review on poaching motivation by Janssen *et al.* 2024, in which the authors emphasise that it is difficult to distinguish between poverty-based drivers (subsistence poaching, lack of alternative livelihood), and profit/commercial gain. It is also worth noting that although poverty-based drivers also occur to some extent, they are important drivers only in a few countries within the Mediterranean region. There were two countries where subsistence poaching was indicated to be a major driver in the Mediterranean region: **Egypt** and **Syria**, and three other countries where it had a medium-level importance. In these countries, addressing alternative livelihoods may be an important tool in the response to IKB.

²⁴Israel was excluded from the analysis of scores, because of very low level IKB

3.7.2 Free text questions

- 1. What major changes have influenced the IKB situation in the past 5 years (either positively or negatively)?
- 2. What are the key areas that your government needs to focus on that would contribute most to reducing levels of IKB in the next 5 years?
- 3. To your knowledge, has your government sought out support from or shared advice to other countries on IKB-related issues? Has your government collaborated with other countries in joint work to tackle cross-border IKB problems? If yes, please explain!
- 4. Has your country allocated an adequate budget to tackle IKB? Has the capacity (in terms of financial resources / human resources) of national authorities dealing with IKB significantly changed (increased/decreased) since 2020? Please, explain to what extent.
- 5. What kind of capacity building, training, collaboration etc. would help the national authorities the most?

3.7.2.1 What major changes have influenced the IKB situation in the past 5 years (either positively or negatively)?

Over the past five years, the IKB situation has seen both positive and negative developments influenced by legislative, institutional, and socio-economic factors. On the positive side, several Mediterranean countries have strengthened laws and enforcement mechanisms, with increased fines, bans on harmful practices, and enhanced collaboration between NGOs and law enforcement agencies. Countries like **Italy, Spain** and **Croatia** have experienced increased political attention to the issue. **Algeria, Morocco** and **Spain** have all seen stronger legal frameworks, while **Greece** and **Cyprus** have implemented more stringent measures, such as increasing fines and developing national action plans (NAPs) against illegal poisoning.

Several countries have focused on improving the effectiveness of law enforcement. **Algeria, Greece, Cyprus** and **Spain** have taken steps to empower police, customs officials, and environmental officers to better enforce these laws. **France, Morocco, Lebanon, Serbia** and **Albania** have established specialised enforcement units to control wildlife crime. NGOs have collaborated closely with governmental or local authorities, often increasing

the detection rate and capacity of tackling crimes with the involvement of devoted volunteers. This model of collaboration is an emerging theme across the Mediterranean, with excellent examples from **Croatia, Spain, Italy, Malta, Morocco, Lebanon, Greece** and **Cyprus**. **Algeria** and **Tunisia** have emphasised training, especially in CITES enforcement and wildlife crime detection. Public awareness campaigns, which were run almost exclusively by NGOs, have also helped to improve local engagement in reporting wildlife crime. In **Türkiye**, NGOs and local experts are making significant efforts to ensure that IKB becomes a priority in the government's agenda.

However, negative influences persist, including legislative gaps or regression, where weakened fines or lack of updated hunting regulations have emboldened perpetrators of illegal activities. Several countries, including **Lebanon, Syria**, and **Bosnia and Herzegovina**, have seen economic hardships exacerbating poaching and reducing the capacity of enforcement agencies. High fuel prices have negatively impacted the frequency of patrols, especially in **Lebanon** and **Bosnia and Herzegovina**.

Countries such as **Montenegro, Lebanon, Syria, Bosnia and Herzegovina, Serbia** and **Türkiye** have struggled with political instability, leading to delayed legislative processes, reduced law enforcement capacity, and inaction on wildlife protection. Institutional confusion and the restructuring of enforcement bodies have led to gaps in responsibility for investigating environmental crimes. Countries like **Albania** and **Italy** share a challenge with insufficient implementation of newly amended laws or national action plans, allowing illegal activities to persist.

The economic downturn in countries like **Egypt, Syria** and **Lebanon** has increased poverty-driven hunting.

3.7.2.2 What are the key areas that the government needs to focus on that would contribute most to reducing levels of IKB in the next 5 years?

Across all regions, there is a consistent recommendation to enhance legislative frameworks. **Albania, Croatia, Italy, Cyprus, Lebanon, Montenegro, Türkiye, Algeria, Libya, Tunisia** and **Serbia** all call for legislative reforms, including harsher penalties and closing legal loopholes. Legislative reforms are essential in most countries with high levels of IKB – especially

knowing that some countries (e.g. **Cyprus** and **Italy**) have even weakened their legislation during the past five years. Data management improvements, including national IKB databases and unified reporting systems, would enhance monitoring, and facilitate more effective enforcement by prioritising the worst affected areas and detection of shifts in IKB activities. The development of government-run national databases for IKB should be a priority in **Albania, Greece** and **Algeria**. Usually, the bigger the country, the more rational it is to emphasise focusing enforcement efforts on specific areas with high levels of IKB (termed 'IKB blackspots' in the Brochet *et al.* series of papers).

Many countries across the region emphasise the need for creating specialised enforcement units and providing training. The importance of such units have been emphasised in **Albania, Montenegro, Spain, Tunisia** and **Syria**. Further training for law enforcement officers is a common need identified for improving enforcement across all regions.

Public awareness campaigns and educational programmes aimed at the public are crucial to changing behaviours and increasing prevention. Countries like **Algeria, Greece, Italy, Tunisia, Syria** and **Türkiye** highlight the need for widespread communication campaigns to change public behaviour regarding IKB. **Algeria, Syria, Türkiye** and **Cyprus** emphasise integrating educational programmes in schools.

Economic measures like alternative livelihoods for poachers and funding for enforcement also play a critical role, especially in countries like Egypt and Syria. In general, countries in the Middle East and in North Africa (e.g. **Lebanon, Syria, Türkiye, Algeria** and **Tunisia**) place more emphasis on the role of economic measures, alternative livelihoods, and addressing social drivers behind IKB. These are areas where typically NGOs play a major role, but increased support from governments would be much needed. The recommendation to provide alternative income-generating activities is less pronounced in Mediterranean Europe, where subsistence hunting is not a common driver of IKB, and the focus is more on enforcement and legislation.

The importance of fostering compliance with the law (in general and also in the IKB context) cannot be overstated. Raising public awareness of legal requirements and their rationale can reduce the need for strict enforcement measures. Particularly where no subsistence element is involved, greater emphasis should be placed on proactive compliance to ensure long-term adherence to legal standards.

Finally, we found that there is a very low percentage of countries where there is a regular and established relationship with the authorities of neighbouring countries to address this problem. International co-operation is an area with a lot of potential for development, particularly through co-operation with NGOs and regional partnerships. It is vital in addressing cross-border issues and enhancing IKB prevention efforts – including minimising the IKB threats connected with hunting tourism. **Spain, Algeria** and **Lebanon** emphasise the role of NGOs and international partnerships in tackling IKB, with **Spain** particularly focused on international trafficking and cross-border initiatives.

3.7.2.3 To your knowledge, has your government sought support from or shared advice with other countries on IKB-related issues? Has your government collaborated with other countries in joint work to tackle cross-border IKB problems? If yes, please explain!

Cross-border collaboration on IKB in the North African, Middle Eastern, and European Mediterranean regions varies, but the majority of countries do not actively seek international support or cross-border collaboration with neighbouring countries to tackle IKB issues together. Countries like **Albania, Algeria, Bosnia and Herzegovina, Egypt, Greece, Lebanon, Libya** and **Türkiye** show little to no national authority engagement in cross-border efforts, with IKB often not prioritised. **Cyprus, Montenegro, Syria** and **Tunisia** demonstrate some fragmented initiatives, but government-led co-operation is minimal or focused on highly specific issues or cases. **Spain** actively participates in international forums (CMS, CITES) and law enforcement networks (Interpol, Europol, EnviCrimeNet), working with global efforts against IKB.

NGO stakeholders are generally very committed to international co-operation, often paving the way also for the governmental authorities to engage internationally.

²⁵ Such as Case 262/85 (Commission v. Italy, 1987), Case C-557/15 (Commission v. Malta, 2018), Case C-38/99 (Commission v. France, 2000), Case C-23/23 (Commission v. Malta, 2024)

► **3.7.2.4 Has your country allocated an adequate budget to tackle IKB? Has the capacity (in terms of financial resources/human resources) of national authorities dealing with IKB significantly changed (increased/decreased) since 2020? Please explain to what extent.**

Since 2020, many countries have reported inadequate financial and human resources for addressing IKB with some seeing little to no change in capacity. In most cases, the budget is tied to broader biodiversity conservation efforts (no specified IKB budget), making it vulnerable to diversion for other uses. Regional disparities are also common (among bigger regions, and also within countries with several autonomous regions), with some areas more underfunded than others (typically human resourcing being the costliest and therefore the most problematic of all). While countries like **Algeria** and **Spain** have invested in combating wildlife crimes, these efforts must be maintained in the long-run with dedicated budgets. In some cases, economic factors have exacerbated the situation, leading to a reduction in law enforcement capacity (e.g. in **Lebanon** and **Tunisia**).

3.7.2.5 What kind of capacity building, training, collaboration etc. would help the national authorities the most?

To strengthen national authorities' ability to tackle IKB, targeted capacity building, training, and collaboration are critical.

Many of our experts would advise specialised training for law enforcement, prosecutors, and judiciary on bird crime investigation techniques, species identification, and prosecution of wildlife crimes. For example, in 2024, the LPO (Ligue pour la Protection des Oiseaux) launched a Massive Open Online Course (MOOC) to provide ongoing training for judges on biodiversity issues in France (with 171 participants by the end of 2024).

SEO/BirdLife in collaboration with national experts produced investigation training videos as part of the LIFE Nature Guardians project, which they have now translated into English and collaborate with partners in other countries to reach enforcement officers beyond their borders. In 2023, the training videos were shared with 300 enforcement officers in Türkiye.

The first Police Investigation Manual of Crimes and Infractions against Biodiversity, published in

Spanish, English, Portuguese and Greek, has been created by the Autonomous Government of Andalusia and SEO/BirdLife together with Europol. This publication was developed out of the need to provide environmental police officers within Europe and beyond its borders with a basic conceptual tool that covers the most important aspects of the investigation of crimes committed against biodiversity.

A workshop for government prosecutors in the Mediterranean, organised by ENPE and UNEP/CMS, trained legal professionals on IKB and resulted in a specialised training package aimed at strengthening wildlife law enforcement across the region (available for download under 'Other documents').

Luckily, there are more such international initiatives. **The Wildlife Crime Academy** by the Vulture Conservation Foundation (VCF) conducts high quality, anti-poisoning training programmes to raise the operational capacity of staff from the relevant governmental institutions. Expert staff from Spain, primarily from the Junta de Andalucía, teach attendees all about investigation, forensic pathology and toxicology. It has been supported by several projects, such as the Balkan Detox LIFE and is now being extended to other countries in the new WildLIFE Crime Academy project.

The Green IMPEL Review Initiative (Green IRI) is a specialised peer review programme developed by the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL). Its primary focus is on assessing and enhancing the implementation and enforcement of EU nature conservation laws, particularly the Birds and Habitats Directives. Operating as a voluntary, non-audit peer review, the Green IRI facilitates collaboration among environmental authorities across EU member states. Unfortunately, there have been only two such initiatives on IKB to date (in **Italy** and **Romania**).

Collaboration between government agencies and NGOs is also crucial for effective data sharing and monitoring. International co-operation and best practice exchanges, such as study visits and conferences, are needed to enhance co-ordination on wildlife crime enforcement. Technological support is also seen as essential: many countries could benefit from experience in modern equipment such as drones and surveillance tools.

Non-EU countries are especially in need of support for alternative income sources and the development of national strategies.



4 Discussion

4.1 Interpretation of illegal killing of birds

The definitions of IKB vary depending on the legal framework, scope, and perspective used to define it. Brochet *et al.* 2016 defined IKB as “any deliberate action that leads to the death or removal of a bird from the wild, provided such actions are prohibited under national or regional laws.” This definition focuses on direct killing, prohibited hunting practices, and illegal capture methods (e.g. mist nets, limesticks). It highlights that an action can still be considered illegal even if the bird was not the intended target. The quoted definition from the original article was completed with the addition “including their parts or derivatives” here, to account for the additional explanation in the article which clarifies that activities (e.g. egg-collecting) are also to be included, if they have an illegal component (e.g. concerns a protected species or happened in a protected area).

The definition used in the official IKB Scoreboard encompasses “those unlawful activities committed intentionally resulting in the death, injury or removal of specimens of wild birds from the wild, either dead or alive, including their parts or derivatives”. Thus, it differs from our definition and focuses solely on intentional unlawful activities. However, it also clarifies that causing “injury” counts as IKB.

Applying Article 5 of the Birds Directive would broaden the definition of IKB beyond just illegal killing. This article prohibits not only direct killing but also destruction of nests and significant disturbance of birds, particularly during breeding. We have decided to continue using the Brochet *et al.* 2016 definition in this study to maintain consistency with the original review conducted 10 years ago. However, under this definition, some actions—such as destruction of empty nests—are not classified as IKB, even though they may still constitute bird-related crime under national legislation. The new EU Environmental Crime Directive introduces further legal perspectives compared to the Birds Directive by including not only killing and taking but also possession, sale or offering for sale of protected species, for example. This expands the definition beyond direct killing to include illegal trafficking and commercial trade related to bird species. The trade component is already included in the IKB definition used in this study.

Following the definition from Brochet *et al.* 2016, certain activities unequivocally fall under IKB due to their direct violation of existing legal frameworks, even if it is not necessarily intentional. One example is the accidental hunting of protected species that resemble legally hunted ones. This occurs when hunters mistakenly kill birds that are visually similar to permitted game species. Despite being accidental, such incidents are considered illegal due to negligence or lack of due diligence on the part of the hunters.

Another clear-cut example of IKB is the deliberate killing of birds through unauthorised means, such as the use of banned poisons or illegal trapping techniques. The European Court of Justice (ECJ) has ruled against such practices in several cases, reinforcing their illegality.²⁵

While some activities are illegal under international law, others exist in a grey area where legality can be questioned by authorising it under national or regional legislation. One example is the abuse of derogations from the EU’s Birds Directive, which may comply with national legislation but contradict broader conservation goals and ECJ rulings.

A prime example is bird trapping in France, where traditional methods have been permitted despite conflicting with ECJ decisions. Similarly, spring hunting in Malta has been granted as a legal derogation, even though ongoing infringement proceedings have suggested it should be classified as illegal.

In our assessments, derogations are not considered IKB, even when they are clearly questionable, partly because there is not always a clear decision on a case. For example, spring hunting of Eurasian Woodcocks (*Scolopax rusticola*) in Hungary, which is officially labelled as “monitoring” to derogate from the EU Birds Directive, has been ongoing since 2009. Despite an ECJ ruling against an identical practice in Austria²⁶, this activity persists under the guise of scientific research.

The interpretation of illegality hugely affects our categorisation of IKB levels. For instance, Israel, a country labelled as having low levels of IKB, recently experienced an unprecedented poisoning event in

which over 1,100 Black Kites (*Milvus migrans*) were killed. Despite the massive impact on wildlife, this event was not classified as IKB because the use and application of the poison were legal under national law. Even though this same pesticide is banned in the USA, EU and other regions as well, it is permitted to be used in Israel, and the application itself was according to a standard protocol.

4.2 Rationale for using the number of individual birds in estimating the trends of illegal killing of birds

In our study, we utilised the number of individual birds illegally killed or taken per year as the primary metric for estimating IKB trends. This decision aligns with the methodology used in Brochet *et al.* (2016), where this measure served as the fundamental basis for quantifying IKB, and it also represents the key indicator in the Rome Strategic Plan 2020-2030 and aligns well with the concept of zero tolerance of IKB.

While other indicators could be employed to assess IKB, such as the total biomass of illegally killed birds or species-specific conservation values utilised in legal proceedings, these alternatives emphasise different aspects of the issue. Metrics incorporating conservation value would better highlight the disproportionate impact of IKB on raptors and other

threatened species, particularly in countries where their persecution is a major concern (e.g. the UK, Austria, Hungary, Czechia etc.). These approaches would better account for species rarity, ecological roles, and reproductive potential, thereby offering a more nuanced perspective on conservation consequences.

Although our primary focus remains on numerical trends for consistency with previous studies and on zero tolerance of all forms of IKB, we emphasise that the absolute number of birds killed is not the sole determinant of conservation impact. Even the loss of a small number of breeding pairs from a rare species can have significant repercussions on local populations, underscoring the critical conservation importance of targeted IKB mitigation efforts.

4.3 Detection rate

Our experts have based their estimates on information about the detected incidents of IKB. However, the detection rate is clearly dependent on the monitoring and enforcement efforts and circumstantial criteria such as predation of carcasses, or the geographical conditions in which the crimes are committed (which makes detection difficult). This highlights an important issue: a low reported level of IKB does not necessarily indicate an absence of the problem but may instead reflect the low level of attention the problem receives. In regions where enforcement, monitoring, and public awareness are limited, IKB cases can go unnoticed, creating a false perception that the issue is negligible or non-existent. Furthermore, in some countries, cases involving strong suspicions of IKB are often dismissed due to a lack of evidence, or frequently, a lack of effort to find

such evidence, further reinforcing the perception that IKB is not as prevalent as it truly is. A thought-provoking example could be Norway. The BirdLife Partner responded that they would have indicated that there was no change in IKB in Norway, had there not been a recent uncovering of a large network of illegal egg collectors. In summer 2024, Norwegian authorities dismantled a major bird egg trafficking operation, seizing over 56,300 eggs and arresting over a dozen people. This is the largest wildlife crime ever recorded in Norway. The case has had international repercussions, leading to additional arrests in the UK and Australia, highlighting the global scale of this illegal trade. This development has also led to a reassessment of Norway’s IKB ranking, demonstrating how increased enforcement and scrutiny can reveal hidden issues.

²⁵ Such as Case 262/85 (Commission v. Italy, 1987), Case C-557/15 (Commission v. Malta, 2018), Case C-38/99 (Commission v. France, 2000), Case C-23/23 (Commission v. Malta, 2024)

²⁶ Case C-161/19 (2020)

4.4 Political will

Political will is often cited as a key factor in successfully addressing IKB, yet its formation is a complex process shaped by public interests, economic considerations, social attitudes, and institutional dynamics. At its core, political will is driven by the priorities and pressures faced by decision-makers, which, in turn, are influenced by various stakeholders, including the general public, conservation groups, hunting lobbies, and economic actors.

In democratic countries, governments are more likely to take strong action against IKB if there is significant public pressure demanding it. When citizens express concern about biodiversity loss, environmental protection, and adherence to international obligations, politicians face an

incentive to act in order to maintain public support. Countries where the public has a high level of awareness about wildlife crime tend to show greater political engagement in tackling IKB. This is particularly evident in nations where NGOs using different channels of media have successfully framed IKB as a serious environmental crime rather than a minor cultural or legal issue.

However, in many Mediterranean countries where IKB remains prevalent, public attitudes are mixed. If public opposition to IKB is weak or fragmented, governments often deprioritise enforcement efforts in favour of policies that cater to larger interest groups, such as the hunting community or businesses linked to illegal bird trade.

4.5 Institutional structures and political instability

The effectiveness of political will also depends on the strength and structure of governmental institutions. In some countries, environmental ministries lack power compared to ministries responsible for agriculture, hunting, or tourism, which may have stronger political backing. This institutional imbalance can lead to weak enforcement of IKB laws, even if there is some political recognition of the issue.

Similarly, short-term political cycles mean that many leaders focus on immediate electoral gains rather than long-term conservation goals, making it difficult to maintain consistent efforts against IKB. Frequent changes in institutional structure can

easily lead to confusion about responsibilities and boundaries among various governmental actors.

Furthermore, political instability and corruption can significantly hinder political will. In countries where lobbying from hunting associations or other interest groups is strong, governments may intentionally weaken enforcement efforts to avoid conflicts with powerful stakeholders. In some cases, the interests of individuals in or linked to national authorities/ institutions are prioritised over enforcing the law regarding IKB, and corruption (including turning a blind eye to aspects of IKB) can be an issue from which individuals derive benefit.

Spring Watch training at Salina Nature Reserve © Ilaria Marchiori



4.6 Monitoring: Illegal killing of birds data are too few and too low quality

A key challenge in assessing the scale and trends of IKB is the lack of sufficient, high-quality monitoring data. In many countries, available data are either too sparse or lack the necessary detail, coverage or repeatable methodology to provide a clear, representative picture of the situation. Even when an index exists—for example, data collected on injured protected bird species during hunting seasons, there are often no accompanying data on enforcement efforts or monitoring effort. This creates uncertainty and leaves room for different interpretations when attempting to translate such data into broader IKB trend indicators.

Additionally, IKB monitoring data are inherently influenced by changes in bird populations. A decrease in IKB cases may not necessarily indicate improved enforcement or lower poaching rates but could instead reflect ecological changes. For example, in Libya, our expert estimated that the trend of IKB appeared to decline in recent years not because of increased enforcement but because severe droughts forced birds to alter their migratory routes, leading to fewer birds

passing through the traditional IKB hotspots. This highlights the importance of considering external environmental factors and population monitoring data when interpreting IKB trends.

Furthermore, the quality of monitoring itself is often compromised, limiting the reliability of available data. In some cases, safety concerns directly impact data collection. For example, in Lebanon, SPNL surveyors avoid conducting fieldwork during active hunting hours to prevent confrontations with poachers, who may pose a threat of violence. Such constraints reduce the effectiveness of monitoring efforts and may lead to under-reporting of IKB incidents.

Addressing these challenges requires greater investment in systematic monitoring, establishment of uniform and harmonised criteria and methodologies for the creation of databases. Improved data transparency, remotely deployable methods and stronger protections for those involved in field assessments are needed to ensure a more accurate representation of IKB trends.

4.7 Differences in sanctions

One issue that has not been analysed but would be of significant interest to follow up in future is the type and scope of sanctions applied across different countries. These could include criminal versus administrative sanctions, penalties, such as years of imprisonment, disqualification from hunting, or civil liability. A comparison of national legislation could provide valuable insights into the disparities in the type and intensity of sanctions applied across the region, helping towards

greater harmonisation. However, this type of comparison requires a deeper legal analysis, as national frameworks vary significantly in their definitions, enforcement mechanisms, and judicial interpretations. Independently from this study, EuroNatur and BirdLife International are currently working on piloting this type of analysis for the West Balkan region with a specialised environmental legal expert to better understand these differences and their implications.

4.8 Some other points to note

Illegal poisoning is often treated differently from the rest of IKB, probably because birds are often not the main intended target of the poison and because it can be hard to detect – therefore, it may be perceived differently from direct shooting or trapping. Since poisoning often affects vultures, eagles and other birds of prey, it can have a high conservation impact on rare species which is noticeable at population level. This direct conservation impact has generated more dedicated conservation projects than other types of IKB.

Regional differences within a country were hard to capture in this overview report. Several partners indicated that the situation is more complex than can be captured with an overall score. A single score can be challenging for countries, such as the UK, with a devolved government. However, even for Malta (one of the smallest countries included within the survey), our BirdLife Partner drew attention to how different the level of law enforcement is between Malta and Gozo.

4.9 Comparison with the official Scoreboard Results

Our survey looked at the progress on IKB primarily from an NGO perspective. Even though our scored response strategies greatly overlap with similar areas assessed in the official Scoreboards, our questions for the scoring were somewhat different and had more emphasis on features that are

especially important for the non-governmental stakeholders, such as transparency and collaboration. However, a comparison between the governmental scoreboard results and our independent survey still indicates key similarities and a few discrepancies.

4.9.1 Coverage

Our goal was to include all CMS MIKT and Bern Convention range countries in this assessment, maintaining the same geographical scope as the official Scoreboard exercises. Responses were received from partners across 46 different countries, though the number of official Scoreboard submissions varied between 24 and 30 national governments participating in each round.

Table 3 shows which countries out of the 46 assessed ones submitted IKB scoreboards to CMS and the Bern Convention.

4.9.1 Overall response strategy scoring

In both assessments, **national legislation** emerged as the highest scoring response strategy, reflecting a broadly strong legal framework against IKB across the range countries.

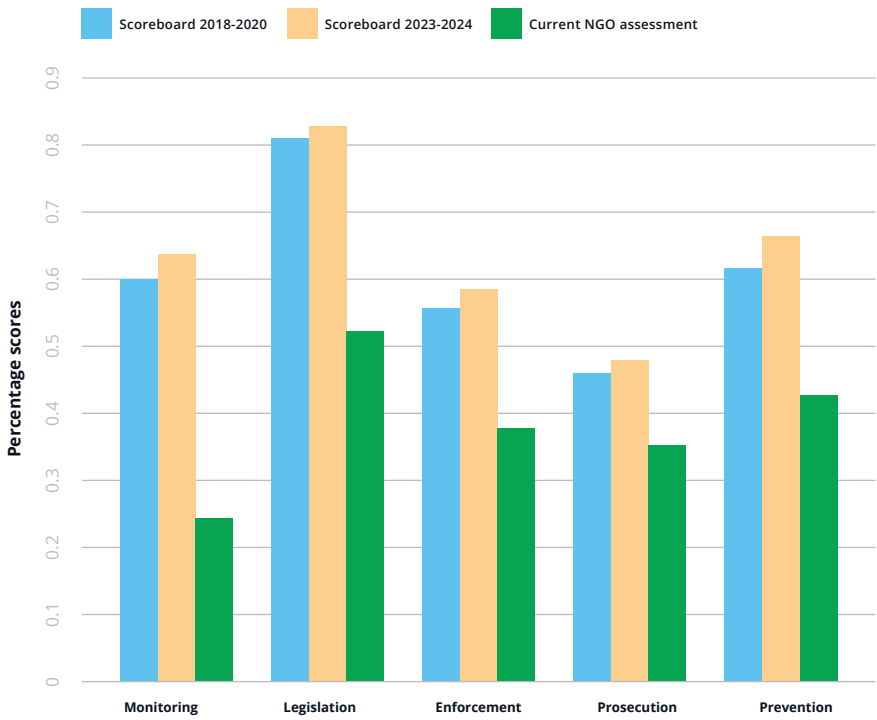
However, a significant divergence was observed in the area of **data collection and monitoring**. While government-reported Scoreboards suggest a relatively strong performance in IKB monitoring, our non-governmental respondents rated this area considerably lower. This discrepancy may indicate that monitoring data exist but are not accessible or well communicated to NGOs and other independent experts. Alternatively, it could suggest that NGOs have a more realistic understanding of the scale of IKB monitoring, potentially identifying gaps in enforcement or under-reporting that are not reflected in official government assessments.

Prosecution and sentencing was the lowest scoring response strategy in the Scoreboard assessment, and that weakness is similarly reflected in our study, where this area got the second lowest score after monitoring.

Table 3: Number of countries submitting IKB scoreboards

Number of Scoreboards submitted by governments	Number of countries reported in our analysis	Country codes
0	11.5	AM, AT, BE (Flanders), JO, LU, LY, LV, MK, PL, PT, PS, RO
1	10	DE, DZ, BY, BA, IL, EG, LB, MA, NL, NO
2	11.5	AL, BE (Wallonia), BG, CY, FI, FR, IS, SI, SK, SE, SY, TR
All 3 times	13	HR, CH, CZ, GE, GR, HU, IT, MT, ME, RS, ES, TN, GB

Figure 6, Comparison of official scoreboard and our assessment in five strategy scores: This comparison of relative scores of the five major response strategies is based on Figure 2 shown in the Assessment of the 3rd National Scoreboard Reporting (page 11) for the official scoreboard average score as attributed by 16 countries (which submitted two or three Scoreboards). The NGO assessment is based on scores received from 41 countries (excluding the ones with very low levels of IKB). Although, the scoreboard and our questionnaire do not answer exactly to the same questions, it is interesting to see how these scores nonetheless reveal a somewhat similar pattern in the relative scoring of the different response strategies. Despite the differences in methodology and coverage, both assessments highlight similar rankings among the strategies relating to Legislation, Enforcement, Prosecution and Prevention, while suggests a differently perceived stance on monitoring.



5 Conclusions

Some important progress has been made in addressing IKB, particularly in improving co-operation among law enforcement agencies and NGOs, increasing police responses to IKB cases, and strengthening legal frameworks. Our analysis shows that achieving success in combating IKB is possible, but that its long-term sustainability depends on continuous investment in key areas such as enforcement, legislation, and prosecution. Even after substantial progress, the situation can rapidly deteriorate if IKB is deprioritised. Recorded instances of such setbacks in Cyprus underscore the importance of maintaining dedicated efforts (see details in the national annexes).

Here are the most important points that can be deduced from the analysis of the scores:

- **Political Commitment and Co-operation:** while political will varies across regions, some countries, like Spain, have demonstrated strong engagement in tackling IKB. There is potential for other affected countries to build on existing efforts and adopt best practices.
- **National Action Plans (NAPs):** several countries have developed National Action Plans to address IKB, but their implementation and consistency can be improved. Strengthening NAPs and ensuring their adequate resourcing would enhance their effectiveness. Many countries still lack either a plan or a multistakeholder committee. Allocation of responsibility, the development of a multistakeholder NAP committee, and allocation of resources to implementation can all be improved.
- **Transparency and Data Collection:** some progress has been made in increasing transparency, though access to official IKB data remains limited. Encouraging governments to establish baselines, national monitoring systems and to improve data-sharing would facilitate better-informed policy decisions.
- **Legal Frameworks and Enforcement:** most countries already have strong laws against IKB, and there have been successful enforcement cases. However, ensuring that penalties are proportionate and dissuasive, while aligning them with inflation, would enhance their impact.
- **International Accountability:** several countries are engaged in international processes addressing IKB, which presents an opportunity for collaborative solutions and shared best practices. This is particularly prevalent in the European Union and a stronger collaboration within and between other regions (Balkans, Middle East, North Africa) and along the flyways would undoubtedly be advantageous for all countries concerned.
- **Judicial and Law Enforcement Capacity:** there has been improvement in police responses to IKB cases, but providing additional resources and specialised training for law enforcement, prosecutors, and judges would further strengthen legal outcomes. Some good practice examples for international initiatives are mentioned below in the chapter “Recommendations”.
- **Public Awareness and Media Attention:** NGOs have played a key role in raising awareness, and media coverage has increased in some regions. Expanding government-led public awareness campaigns could further enhance public engagement, compliance and more civil support for tackling IKB.
- **Understanding the Drivers of IKB:** A deeper exploration of the socio-economic and cultural factors driving IKB is envisaged under the RSP and would help in designing more targeted interventions. Attitudes evolve and change with the cultural landscape over time. New generations may have very different attitudes towards IKB, so public awareness may need to target multiple generations with different forms of messaging.

While challenges persist, there is a clear opportunity to build on the progress already made. Based on the listed findings, we provide detailed recommendations both for national governments and international bodies, such as the CMS MIKT secretariat, the Bern Convention secretariat and the European Commission. Later on in the report, we highlight some success stories and best practice examples related to the above-mentioned points from different countries that can inspire further actions for tackling the IKB problem.

6 Recommendations

6.1 Recommendations for government actions

6.1.1 Increase political will, develop a National Action Plan, put in place a multistakeholder committee and implement the action plan

Efforts to address the illegal killing of birds face numerous challenges that hinder progress in mitigating this serious issue. To overcome these challenges, a comprehensive strategy must be implemented that combines legislative reform, enhanced enforcement, improved data collection, public awareness campaigns, international co-operation, support for alternative livelihoods and further research on socioeconomic drivers.

One major challenge is the lack of political will to prioritise IKB reduction. Only a limited number of countries have developed comprehensive National Action Plans to combat IKB, and even fewer have fully implemented them. To address this, governments must demonstrate stronger commitment by developing and implementing national IKB action plans together with all relevant stakeholders by making use of **existing guidance and best practice examples**. Defining clear responsibilities and providing adequate funding for implementation of the National Action Plans is essential to effectively reduce IKB. Notably, the stakeholder-inclusive development and implementation is also the first objective of the Rome Strategic Plan, which all range countries committed to implement in 2019.

6.1.2 Support monitoring and set up national IKB databases

Another significant obstacle is the scarcity of reliable data on IKB. Government-funded monitoring programmes are rare, and publicly available statistics on wildlife crimes and offences are often

non-existent. This lack of data hampers the ability to assess the scale of the problem and develop targeted interventions. To improve the situation, governments should make use of the **existing guidance** and establish national IKB databases, ensure data transparency, and fund regular monitoring programmes to facilitate evidence-based policymaking and resource allocation.

CASE STUDY

Monitoring: surveillance programme in Cyprus

BirdLife Cyprus, in partnership with the RSPB (BirdLife UK), has been running a long-term programme to monitor and tackle illegal bird trapping in Cyprus. This ongoing initiative, which began in 2002, aims to collect reliable data to understand the scale of the problem and track changes over time. By regularly gathering field data, BirdLife Cyprus has built the most comprehensive record of bird-trapping activities on the island, allowing them to observe long-term trends and assess the effectiveness of enforcement measures.

The monitoring is based on a structured approach called the 'Bird Trapping Monitoring Protocol'. This protocol was developed by BirdLife Cyprus and the RSPB in collaboration with local authorities, including the Cyprus Game and Fauna Service and the British Sovereign Base Area (SBA) Police.

The programme focuses on two districts, Larnaca and Famagusta, which are known hotspots for illegal bird trapping. These areas also include the Dhekelia Eastern SBA, which is under British control. The surveillance team inspects randomly selected areas, each covering a square kilometre. They primarily look for mist nets, but also record limesticks, if found. BirdLife Cyprus works closely with local law enforcement agencies. When their team finds evidence of illegal trapping, such as mist nets or limesticks, they immediately inform the relevant authorities to take action.

Reports analysing the findings from this surveillance programme and the country developments on bird trapping is regularly published online by BirdLife Cyprus and available for anyone on their website: <https://birdlifecyprus.org/combating-bird-crime/surveillance-programme/>



Trapped Eastern Olivaceous Warbler (*Iduna pallida*) in mist net © BirdLife Cyprus



Removing mist nets with the internal security forces © SPNL



► 6.1.3 Strengthen forensic evidence in IKB investigations

Governments should establish clear recommendations for the gathering and processing of forensic evidence in IKB cases. A key measure is ensuring the availability of wildlife recovery centres or a network of veterinary stations capable of conducting initial examinations, such as necropsies, to determine potential causes of mortality. Additionally, states must allocate the necessary technical and budgetary resources to support toxicological analyses and expert reports, which are essential for providing solid evidence in legal proceedings.

To enhance the effectiveness of investigations, governments should also develop standardised action protocols for law enforcement officers, wildlife recovery centres, and toxicology laboratories. These protocols should outline best practices for evidence collection, chain of custody procedures, and forensic analysis, ensuring that investigations meet the legal standards required to establish responsibility and secure convictions. Strengthening forensic capabilities will significantly improve the ability to combat IKB and uphold wildlife protection laws.

6.1.4 Ensure strong laws and effective penalties

While most countries have adequate legal frameworks, existing laws frequently contain outdated penalties that are insufficient to deter offenders. Although the scope of the Rome Strategic Plan is not limited to the EU, a regulatory proposal could be considered to harmonise and strengthen legal frameworks and sanctions, making use of existing **model law provisions** and **sentencing guidelines** developed by CMS MIKT and the Bern Convention. The EU’s Environmental Crime Directive establishes minimum sanctions and accessory penalties, which could serve as a reference for ensuring more effective deterrence even for non-EU countries.

Additionally, it is important to consider civil liability for wildlife offences, ensuring that offenders are held accountable for the damage caused. Establishing appropriate and harmonised wildlife valuation mechanisms (such as **this proposal** developed by the LIFE Nature Guardians project) would help quantify the impact of illegal activities and guide the reparation of damage. In this context, accessory penalties—such as bans on hunting, trade restrictions, or mandatory conservation contributions—should be integrated into enforcement frameworks to strengthen the overall effectiveness of penalties.

6.1.5 Establish specific IKB enforcement agencies with sufficient resources

To strengthen enforcement, governments should create specialised enforcement units focused on wildlife crimes, improve co-ordination between agencies, and provide **targeted training to law enforcement officers**. Training should be repeated or updated periodically, allowing for some level of staff turnover. Law enforcement agencies frequently lack the necessary resources and specialised training to address wildlife crimes effectively. Although co-operation between agencies and non-governmental organisations (NGOs) has improved in recent years, it remains inadequate in many regions. Governments should enhance co-ordination between agencies and NGOs and ensure that enforcement units have the necessary resources to address IKB effectively.

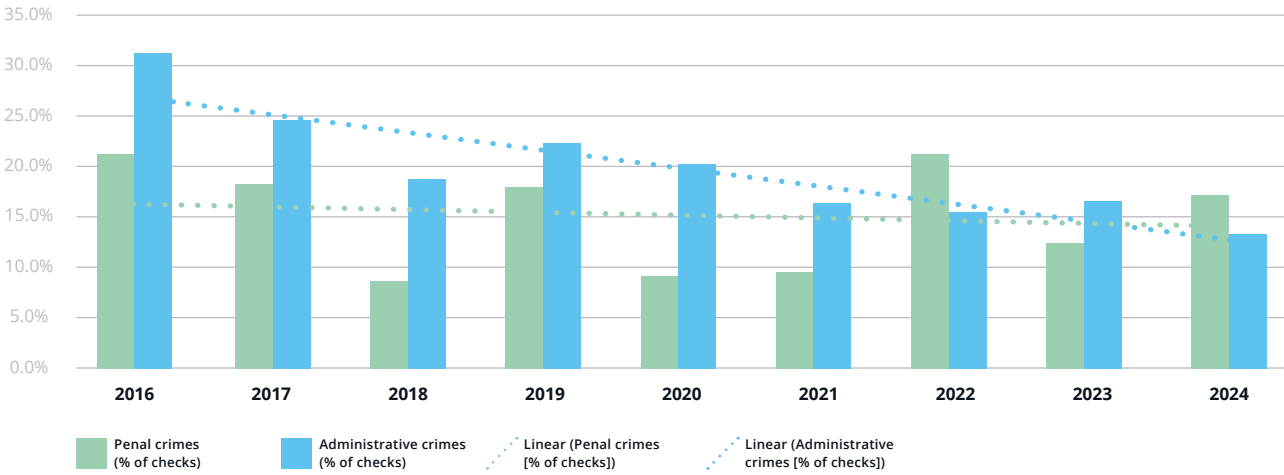


CASE STUDY

Enforcement: Operation “Recall” in Rome Province, Italy

Operation Recall – conducted annually between October and December – is a co-operative action by LIPU (BirdLife Italy) volunteer guards and CUFAA (the special branch of Carabinieri dealing with wildlife crimes) against the illicit use of electronic callers/recorders for hunting larks and thrushes. Operation Recall was started by the LIPU volunteer guards, who receive special training and need to pass an exam before they accompany officers to the field. They carry out checks targeted towards hunters suspected of using electronic lures (tape recorders). The guards join the Carabinieri patrol, then approach the hunters, identify themselves and start the check. Any breaches in the law are dealt with by the CUFAA staff. The effectiveness (measured as number of crime reports/fines by the police) clearly indicates that IKB still exists but, due to the widespread control of the territory and the formal complaints made over the years, the trend is decreasing. From 2016 to 2024, the observed frequency of penal crimes has decreased from 21.4% to 17.3%, while that of the administrative sanctions from 31.6% to 13.4%.

Figure 7: Results of Operation Recall (2016–2024) showing a clear downward trend in poaching activities indicated by the dotted lines, when the number of resulting penal crimes and administrative sanctions are assessed against the surveillance efforts (number of checks made during the operation period).



Illegal hide removal in the Neretva delta © Biom

CASE STUDY

Education: training programmes for law enforcement officers

SEO/BirdLife Spain co-ordinated the LIFE Nature Guardians project (2018-2023), which increased the effectiveness and efficiency of actions aimed at combating environmental crimes. One of the LIFE Nature Guardians outputs was the provision of training to more than 1,500 law enforcement officers from Spain, Portugal, and other European countries. The training covered a range of topics, including biodiversity crime investigation, environmental cybercrime, Open-Source Intelligence (OSINT), and tracking the economic profits of environmental criminals.

The training sessions were delivered by experts from various organisations, including the Autonomous Government of Andalusia and the Guardia Civil. The programme also provided opportunities for officers from different countries to collaborate and share best practices, fostering greater cross-border co-operation in tackling environmental crimes.

To further support law enforcement efforts, the project developed several important resources. The Police Investigation Manual of Crimes and Infractions against Biodiversity was published in Spanish, English, and Greek. This manual – created by the Autonomous Government of Andalusia and SEO/BirdLife together with Europol – provided a comprehensive guide to investigating biodiversity crimes, offering practical tools and methodologies for environmental police officers across Europe.

Additionally, the project organised the Workshop on Environmental Crime Investigation – in collaboration with EnviCrimeNet and Europol – that brought together environmental police agencies from 27 countries. It facilitated knowledge sharing and the development of joint solutions to combat environmental crimes more effectively.

6.1.6 Provide training for prosecutors and judges

Our analysis shows that profit or commercial gain is the number one driver behind IKB across the whole region. However, deterrent penalties are rarely enforced in countries with the highest level of IKB, and judges and prosecutors often lack the specialised knowledge needed to handle wildlife crime cases in a way that reflects the significance of these issues. To address this, governments should provide **specialised training for judges and prosecutors** to ensure that offenders are held accountable and receive appropriate penalties.

6.1.7 Raise public awareness

Public awareness is another critical area of concern. Governments have done little to raise public awareness about IKB, leaving NGOs to lead such campaigns. These efforts require stronger government support to achieve widespread behavioural change. Based on a more in-depth understanding of motivations driving IKB, governments must take the lead in launching **awareness campaigns** to reduce public tolerance for IKB. Partnering with NGOs can amplify the reach and impact of these initiatives, promoting a cultural shift away from tolerance of IKB towards bird conservation.

To maximise effectiveness, it is essential to establish comprehensive communication strategies and leverage marketing channels that can effectively engage different audiences. Utilising tools such as social media, traditional media outlets, educational programmes, and community-driven initiatives can help tailor messages and ensure they reach key stakeholders. A well-structured communication approach is vital to fostering long-term changes in public attitudes and behaviours toward IKB.

CASE STUDY

Volunteer engagement: Engaging volunteers to combat illegal killing of Common Quail (*Coturnix coturnix*) in Croatia

Since 2017, Association Biom (BirdLife Croatia) has been actively combating illegal killing of Quail in Croatia through monitoring, tackling and awareness-raising initiatives. The use of electronic tape lures to attract Quails is a widespread illegal practice that significantly threatens bird populations. By involving volunteers in monitoring activities, Biom has created a community-based approach to conservation that not only gathers crucial data but also raises public awareness and strengthens enforcement efforts.

Between 2017 and 2024, Biom conducted 31 days of fieldwork to monitor the use of illegal Quail lures. During this period, 46 cases of illegal lures were recorded, involving 99 prohibited devices across seven Croatian counties. To expand their efforts, Biom launched a volunteer programme, which involved recruiting, training, and supporting a network of volunteers to monitor Quail poaching in their local regions. The programme was carefully structured to ensure that volunteers were well-prepared and supported throughout their participation. Volunteers can recognise tape lures for Common Quail from a long distance (1-2 km away) and report it effectively to the law enforcement agencies. Constant volunteer effort brought to an end Quail poaching in at least three hotspots.

Biom ensures that volunteers are supported throughout their monitoring activities. Volunteers are provided with mentoring, gift sets, certificates of recognition, and further education about bird conservation as a token of appreciation for their contributions. Volunteers have been playing a crucial role in detecting and reporting illegal activities, thereby strengthening enforcement actions. Community-based monitoring and tackling protocol can give better results for tackling IKB, as it makes it possible to be in more sites at the same time.

Common Quail (*Coturnix coturnix*) © Olexandr Reznikov



Lake Nasser, Egypt © istockphoto



the Ministry of Environment and BirdLife Malta to understand the extent of hunting tourism at Lake Nasser. The study revealed that four local tour operators conducted 15 hunting trips, totalling 1,091 hunting days, with a peak density of 11 hunters per day between January and March 2023.

The findings from this investigation were presented at a national workshop, leading to discussions with the government. Consequently, the Egyptian government imposed a hunting ban at Lake Nasser for the 2023/2024 and 2024/2025 seasons, marking a milestone in wildlife conservation in Egypt. While this ban was crucial for protecting biodiversity, it also impacted the livelihoods of hunting tour operators, creating economic challenges for the local community.

Recognising the need for a sustainable solution that balances conservation with economic livelihoods, NCE initiated a project to promote birdwatching as an alternative income source for hunting tour operators in Lake Nasser. The project aimed to position Lake Nasser as an ecotourism destination. Activities included raising awareness, engaging in dialogue with local and central authorities, and building partnerships with tourism stakeholders, government bodies, and the local community. The project successfully carried out bird monitoring to document species and population trends. Several workshops and training sessions were held to equip local hunting tour operators with the necessary skills to transition from hunting to guiding nature-based tourism activities.

The positive response from former hunters demonstrated a strong interest in transitioning to birdwatching tourism as an alternative livelihood. However, challenges remain, including securing additional funding, developing the necessary infrastructure, and effectively marketing Lake Nasser as a premier birdwatching destination to attract visitors. Future steps will focus on expanding training programmes, enhancing ecotourism facilities, and strengthening promotion efforts through national and international platforms.

CASE STUDY

**Alternative livelihood:
Egypt, Nasser Lake**

Lake Nasser, one of the largest man-made lakes in the world, spans approximately 5,000 square kilometres. Its vast wetlands in the middle of the Sahara serve as a crucial stopover site and wintering ground for migratory birds. It is an Important Bird Area (IBA) and a key site for migratory birds along the flyway. For many years, Lake Nasser was a hotspot for bird hunting, particularly by hunters from Malta. The lack of law enforcement and the lake's huge size and remote location exacerbated illegal hunting, which led to significant declines in bird populations and disrupted the ecological balance.

During the 2022-2023 hunting season, Nature Conservation Egypt (NCE, BirdLife Egypt) conducted an investigation in collaboration with

6.1.8 Facilitate greater co-operation (between organisations and also internationally)

Given the cross-border nature of IKB, particularly in regions with significant hunting tourism, international co-operation is essential. Governments should foster more cross-border collaboration, share intelligence, and adopt best practices to enhance enforcement efforts and reduce illegal bird killing.

6.1.9 Change behaviours (through work on alternative livelihoods)

Finally, in areas where subsistence hunting is driven by poverty, governments should invest in alternative livelihoods to reduce reliance on illegal bird killing. Providing communities with sustainable income options can help address the root causes of IKB and promote long-term conservation efforts.



Poaching hide removal at the Drava river © Biom

6.2 Recommendations for international actions

6.2.1 Strengthen political will and co-ordination across regions

Addressing IKB requires a unified international approach to ensure consistent political commitment across all affected countries. Many Mediterranean governments, despite being strongly impacted by IKB, often show low political prioritisation of the issue. To counteract this, international bodies such as the CMS and Bern Convention secretariats should work towards increasing political engagement, urging and supporting governments to develop and implement National Action Plans. Additionally, greater political pressure must be applied to ensure that all countries comply with international commitments, such as those under the EU Birds Directive, the EU Environmental Crime Directive or multilateral environmental treaties, such as the Bern Convention, and the CMS. Politicians and decision-makers must be strongly encouraged to set clear milestones, targets, timelines, and compliance indicators for IKB reduction, and to incorporate these elements into their National Action Plans, and set up multistakeholder committees to ensure effective progress and accountability in addressing IKB.

More frequent communication in the period between the international meetings are necessary to maintain the momentum and support for the national governments.

6.2.2 Support monitoring and international reporting

A major barrier to effective IKB mitigation is the lack of reliable and consistent data. Government-funded monitoring programmes should be encouraged, and international bodies should push for transparent reporting on wildlife crime. Additionally, international funding mechanisms should be developed to support capacity-building for IKB data collection in countries with limited resources. To ensure consistency and effectiveness in reporting, guidelines have been developed on the minimum content that reports should include, outlining essential information to be collected. Relevant methodologies have been proposed under projects such as LIFE Nature Guardians ([methodology](#)

[report](#)), which provides a framework for developing environmental crime databases, and LIFE Against Bird Crime ([Database recommendations report](#)), which offers recommendations for larger-scale (EU-wide or regional) databases.

6.2.3 Ensure effective penalties and legal harmonisation

Despite legislation against IKB in all analysed range countries, outdated or lenient penalties may fail to deter offenders. International bodies should set minimum penalty standards, ensuring fines and sentences reflect the severity of the crime, and promote the existing recommendations, like [model law provisions](#) and [sentencing guidelines](#), more proactively. Penalties should be inflation-adjusted and regularly reviewed for effectiveness. Stricter hunting regulations should be extended to countries where key conservation measures—such as bans on spring hunting, lead ammunition in wetlands, and electronic calling devices—are still not in place, preventing the displacement of illegal activities to regions with weaker laws.



Calling device © Niklas Keller

6.2.4 Establish specific IKB enforcement agencies with sufficient resources

Many IKB cases involve cross-border elements such as smuggling or illegalities by foreign tourist hunters. International agreements should facilitate intelligence-sharing, joint investigations, and co-ordinated responses between national enforcement agencies. Encouraging countries to exchange best practices and engage in bilateral or regional anti-ICKB initiatives would enhance overall effectiveness. Existing structures (such as EUROPOL, INTERPOL, IMPEL, ENPE, EUFJE), and joint enforcement operations or international peer-learning programs (such as the Wildlife Crime Academy, IMPEL's Green IRI, etc.) should be promoted among the national governments.

In addition to enforcement co-operation, engagement with the hunting sector and agricultural organisations is essential. Collaborating with hunting associations can help build dialogue and find common ground in promoting sustainable hunting practices, increase compliance and eliminate illegal activities. Likewise, working with agricultural organisations can foster agreements that improve rural conditions and promote environmentally responsible land-use practices. Strengthening ties with these sectors is a key way to reach long-term success in tackling IKB.



Rehabilitated Common Kestrel (Falco tinnunculus) release © BirdLife Malta

CASE STUDY

Communication: Flight for Survival Campaign

Launched in 2019, the “Flight for Survival” campaign was a BirdLife initiative aimed at raising awareness about the illegal killing, taking, and trade of birds along the African-Eurasian flyway, as well as highlighting the conservation activities needed to combat this issue. Over the course of the four-year long campaign, it followed the spectacular migratory journeys of various iconic bird species and exposed the different dangers they faced in some of the most notorious illegal killing blackspots along the flyway.

Each year, the campaign showcased the vital conservation work carried out by BirdLife Partner organisations to protect migratory birds from poaching. The initiative had a strong visual identity, co-ordinated by BirdLife International and BirdLife Europe, while the stories featured in the campaign were contributed by partner organisations working on the ground.

A key aspect of the campaign was its inclusiveness, providing a platform to amplify the voices of any flyway partners addressing the issue of illegal bird killing. Articles and stories from the campaign were widely shared and had a significant social media presence, particularly during peak migration periods, ensuring the message reached a broad audience and raised awareness about the threats faced by migratory birds.

The campaign's website is available at <https://flightforsurvival.org>.

Annexes



Annex 1.
National IKB situation & recommendations
for Mediterranean countries

Available at the QR code provided

Annex 2. Original questionnaire

Below is the questionnaire that was sent out to all participating countries:

Introduction

Aim of the report

In autumn 2024, we want to publish a joint assessment of progress on fighting IKB. The geographic scope includes all Med countries + all Bern Convention countries (we will ask all national BL partners from these countries to fill in Part 1 of this questionnaire), but special focus is given to the Mediterranean countries (Part 2 & 3 of the questionnaire only applies to them).

The output report will be a compilation of expert opinion of Safe Flyways project partners and other partner NGOs working on the topic to see how the signatory countries improve the IKB situation towards the min. 50% reduction by 2030 (compared to the 2020 situation) to which the governments signed up for by adopting the Rome Strategic Plan. The main question we want to answer is: are we on track to reach this goal?

Based on your contributions, together we want to release a detailed synthesis report with policy recommendations for MEAs/EC/governments, as well as a brief extract 4-pager alongside the main report for laymen for keeping a general media awareness on the issue.

Additional information

This is a joint undertaking for the broader BirdLife partnership working on IKB in the region. It’s been challenging to create a harmonised template that fits to all the different situations in the relevant countries. Therefore, we have created an interactive Hatch platform to discuss all your questions, comments, suggestions regarding the whole process of this exercise - from the data collection till the dissemination.



Instruction for filling out this survey

This data collection form has 3 parts:

1. Questionnaire: to quantify the attitude and progress your government is demonstrating in tackling the IKB (including illegal poisoning) problem

This will reflect on the national engagement with the CMS-MIKT/ Bern Convention process. It contains single-choice questions – scoring the situation from 0 to 3 in six different areas: a.) Political will & cooperation b.) Data collection & monitoring c.) Legislation d.) Enforcement e.) Prosecution & sentencing f.) Prevention & communication and an overall assessment of the progress.

The scaling from 0 to 3 follows the similar system as applied in the governmental IKB scoreboards. (Some of these previous submitted national scoreboards are available publicly online.) This first part of our survey is based entirely on expert opinion.

2. Narrative part only for the Med countries: case studies (e.g. important legislative changes) and policy recommendations (especially highlighting the positive examples)

This second part focusses on specific questions:

- which aspects of IKB have got better or worse in scale and why?
- what key areas of action would result in greatest progress towards reducing IKB in the country?
- recommendations on what is most needed (international support/ training/ capacity building/ info exchange etc.)

3. Underlying (new) data and known changes of blackspot status only for the Med countries²⁷

In this third part we include previous data on top national blackspots from the Brochet *et al.* 2015 paper and our aim is to update the blackspot list with new information. Please, indicate:

- new information regarding the old blackspots (got better or worse?)
- add new blackspots, if relevant
- which actions were carried out at these places and with what result

Part 1: Questionnaire form

1. Basic data

Country:	
Contributor(s) name(s):	
Organization:	
E-mail:	
Date of assessment:	

²⁷ The “Part 3” of the questionnaire served only internal data collection purposes. This data was not used, analysed and published in this current assessment.

2. Scoring the national situation and the government’s effort

(0-not at all, 1-somewhat agree, 2-mainly agree, 3-strongly agree
N/A can stand for - Not relevant/Not applicable/Not known or I don’t know)

Selection #1: Political will and cooperation	0	1	2	3	N/A
IKB ranked high on the political agenda in my country in the period 2020-2024 (0-not at all, 1-somewhat agree, 2-mainly agree, 3-strongly agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019) IKB ranked high on the political agenda in my country for 2015-2019	☐	☐	☐	☐	☐
National Action Plan: is there a NAP or similar strategic framework to address IKB. (N/A- no, but not needed, 0-no, but there's a definite need, 1- no, but there is an intention to make it, 2 – partly yes (e.g. only on illegal poisoning) 3 - yes	☐	☐	☐	☐	☐
If you answered ‘yes’ (2 or 3) to the previous question: how many years old is the NAP? (0-it’s not fully adopted yet, 1-between 0-2 years, 2-between 3-5 years, 3-more than 5 years)	☐	☐	☐	☐	☐
If you answered ‘yes’ (2 or 3) to the previous question: to what extent is the NAP being implemented? (0-not at all, 1-poorly, 2-to some extent 3-fully)	☐	☐	☐	☐	☐
The government has demonstrated an active role at IKB-themed international meetings, such as CMS MIKT/ Bern Convention meetings in the period 2020-2024 (0-not at all, 1-somewhat agree, 2-mainly agree, 3-strongly agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐

The number of previous Scoreboard assessments that our government submitted (out of the total 3 occasions) you can check this in the attached Table on national scoreboard reporting	☐	☐	☐	☐	☐
The government has cooperated well with NGOs and other stakeholders in connection with the IKB work (e.g. involving them in consultations, circulating relevant information) In the period 2020-2024 (0-not at all, 1-somewhat agree, 2-mainly agree, 3-strongly agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
The quality of the 2023 scoreboard assessment is good, we agree with the government's scoring. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree, N/A-government did not submit the latest assessment, or it was not shared with us) There is high transparency for IKB-related governmental work (e.g. the scoreboards are public, the government shares it with stakeholders) for period 2020-2024 (0-not at all, 1-somewhat agree, 2-mainly agree, 3-strongly agree)	☐	☐	☐	☐	☐
There is high transparency for IKB-related governmental work (e.g. the scoreboards are public, the government shares it with stakeholders) for period 2020-2024 (0-not at all, 1-somewhat agree, 2-mainly agree, 3-strongly agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
Overall grade for Political will and cooperation (2020-2024):	☐	☐	☐	☐	☐

Selection #2: Monitoring and data collection	0	1	2	3	N/A
There is reliable, good quality IKB monitoring data available to the government on the different forms of IKB in the period 2020-2024 (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
The data collection is financed from governmental money in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There is national-level data collection into one or more databases in the period 2020-2024. (0-there is no national-level IKB data collection, 3 – yes, there is a reliable system with national-level database(s))	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There is national-level data collection into one or more databases in the period 2020-2024. (0-there is no national-level IKB data collection, 3 – yes, there is a reliable system with national-level database(s))	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
Overall grade for Political will and cooperation (2020-2024):	☐	☐	☐	☐	☐

Selection #3: Legislation	0	1	2	3	N/A
There are complete and strong laws[1] in place against wildlife crime in my country in alignment with international legislation (e.g. Birds Directive and Bern Convention) in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
The penalties expressed in this legislation are effective, proportionate, and dissuasive in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There are any international processes against my country on the basis of IKB related issues in the period 2020-2024 (e.g. EU infringement process, Ramsar Advisory Mission or Montreux record, CMS implementation review, Ramsar advisory mission, Bern process with IKB element) (0-none, 1-official complaint submitted to EC/Bern Convention etc. 2-recently opened case, 3-ongoing case that is open for years)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
Overall grade for Political will and cooperation (2020-2024):	☐	☐	☐	☐	☐

[1] It assumes that national legislation has adequate provisions to deter and combat IKB and is supported by suitable legislation framework and/or regulations.

Selection #4: Enforcement response	0	1	2	3	N/A
There is good cooperation among law enforcement agencies for tackling IKB at national level in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
There is good cooperation among law enforcement agencies and NGOs for tackling IKB in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
We are satisfied with the police responses to reported IKB cases (good protocols in place, quick, responsive, effective, professional) in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
The law enforcement agencies are well resourced to deal with the IKB problem (capacity, equipment, available budget for investigations etc.) in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐

There are enough law enforcement officers who are specially trained in wildlife crime investigations. There are specialized law enforcement units to deal with wildlife crime in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
Overall grade for Political will and cooperation (2020-2024):	☐	☐	☐	☐	☐

Selection #5: Prosecution & sentencing	0	1	2	3	N/A
There is an adequate national sentencing guideline available for prosecutors and judges in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
The prosecution of wildlife crime cases is reasonably quick and effective in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐

The prosecution of wildlife crime cases typically results in conviction where it is warranted in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
In case of conviction, the penalties are proportionate and deterrent in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
Outcomes of court proceedings are made publicly available in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There are enough prosecutors & judges who are specially trained in wildlife crime prosecution and sentencing in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
Overall grade for Political will and cooperation (2020-2024):	☐	☐	☐	☐	☐

Selection #6: Prevention and communication	0	1	2	3	N/A
The drivers/motivations behind IKB have been adequately studied with targeted socio-economic research. The national authorities are aware of these studies in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There have been adequate measures to increase the awareness of the general public against IKB by the national government in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There have been adequate measures to increase the awareness of the general public against IKB, but those =are done by NGOs and funded by non-governmental sources in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
There's been high national media attention on IKB cases in the period 2020-2024. (0-strongly disagree, 1-somewhat agree, 2-mostly agree, 3-fully agree, in case there's been no media attention because there wasn't any bigger case, please mark N/A)	☐	☐	☐	☐	☐
<i>And earlier? (2015-2019)</i>	☐	☐	☐	☐	☐
Overall grade for Political will and cooperation (2020-2024):	☐	☐	☐	☐	☐

3. Overall evaluation

Selection #1: Political will and cooperation	0	1	2	3	N/A
Scale of current IKB (0-low/1-medium/2-high/3-very high)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
Trend in illegal trapping since 2020 (0-getting worse, 1-stable/ fluctuating, 2- slightly improving 3- strongly improving)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
Trend in illegal shooting events since 2020 (0-getting worse, 1-stable/fluctuating, 2- slightly improving 3- strongly improving)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
Trend in illegal poisoning cases since 2020 (0-getting worse, 1-stable/fluctuating, 2- slightly improving 3- strongly improving)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐
Trend in illegal shooting events since 2020 (0-getting worse, 1-stable/fluctuating, 2- slightly improving 3- strongly improving)	☐	☐	☐	☐	☐
And earlier? (2015-2019)	☐	☐	☐	☐	☐

Is your country on track to reach 50% reduction by 2030 compared to the situation in/around 2020? (0-not at all, 1- unlikely, 2-with some more additional effort it is possible, 3-looks very likely, already reached)	☐	☐	☐	☐	☐
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Please mark how you see the trend since 2020 (put a tick below the estimated category):

Estimate of progress from 2020 towards Rome Strategic Plan vision of eradicating IKB								
No change or increase in IKB					Reduction in IKB			
Very large increase in IKB	Large increase in IKB	Moderate increase in IKB	Slight increase in IKB	No significant change in IKB	Slight reduction in IKB	Moderate reduction in IKB	Large reduction in IKB	Very large reduction in IKB
75% or more	50 to 74%	25 to 49%	5 to 24%	4 to -4%	-5 to -24%	-25 to -49%	-50 to -74%	-75 to -100%
☐	☐	☐	☐	☐	☐	☐	☐	☐

Part 2: Narrative part (for Med partners only)

Below is the questionnaire that was sent out to all participating countries:

- What’s the partner’s overall assessment of progress – how far off the target are we?
- Which areas within that have gotten worse/better
- Reflection on Government’s attitude and on scoreboarding process

In this 2nd part we intend to collect the input for case studies about general issues that are common problems in several different countries (e.g. electronic calling devices, spring hunting derogations, enforcement in small communities, law relaxations and legislative loopholes, fake rings) and for the Recommendation part for the governments (constructive suggestions for practical and working solutions).

Please answer the following questions

1. How important are the following potential drivers (and enabling conditions) as motivating factors for IKB in your country?

Drivers / enabling conditions	0-unlikely, probably non existent	1-low, scarce	2-medium, it occurs, but not important	3-major driver	N/A - not known
tradition	☐	☐	☐	☐	☐
profit	☐	☐	☐	☐	☐
predator control	☐	☐	☐	☐	☐
recreation	☐	☐	☐	☐	☐
social status	☐	☐	☐	☐	☐
consumption by self/own family, because of delicacy meat	☐	☐	☐	☐	☐
poverty related need for food (subsistence)	☐	☐	☐	☐	☐
beliefs[2]	☐	☐	☐	☐	☐
pet trade	☐	☐	☐	☐	☐
taxidermy collection	☐	☐	☐	☐	☐
lack of alternative livelihoods	☐	☐	☐	☐	☐
lack of awareness	☐	☐	☐	☐	☐
limited regulations	☐	☐	☐	☐	☐
cultural acceptance	☐	☐	☐	☐	☐

[2] Beliefs that are related to positive or negative associations with the consumption or use of these bird species



2. What major changes have influenced the IKB situation in the past 5 years (either positively or negatively)?
3. What are the key areas that govt needs to focus on that would contribute most to reducing levels of IKB in the next 5 years?
4. To your knowledge, has your gov't sought out support from or shared advice to other countries on IKB-related issues? Has your gov't collaborated with other countries in joint work to tackle cross-border IKB problems? If yes, please explain!
5. Has your country allocated adequate budget to tackle IKB? Has the capacity (in terms of financial resources / human resources) of national authorities dealing with IKB significantly changed (increased / decreased) since 2020? Please, explain to what extent.
6. What kind of capacity building, training, collaboration etc. would help the national authorities the most?



Acknowledgements

We are grateful to national experts and other national contributors who provided valuable national information on illegal killing and to the organisations that supported their work.

Albania: Zydjon Vorpsi and Ledi Selgjekaj (Protection and Preservation of Natural Environment in Albania)

Armenia: Tsovinar Hovhannisyan (Foundation for the Preservation of Wildlife and Cultural Assets [FPWC])

Algeria: Ghoulem Tiar (Environmental Research Centre)

Austria: Matthias Schmidt & Johannes Hohenegger (BirdLife Austria)

Belarus: Alexandre Vintchevski (The Wilderness LLC)

Belgium: Flanders – Diemer Vercayie (Natuurpunt), Free Van Rompaey (Vogelbescherming Vlaanderen), Wallonia – Jean-Yves Paquet (Natagora)

Bosnia and Herzegovina: Nermina Sarajlić and Dražen Kotrošan (Ornithological Society “Naše ptice”)

Bulgaria: Dimitar Gradinarov (Bulgarian Society for the Protection of Birds [BSPB])

Croatia: Tibor Mikuska (Croatian Society for Birds and Nature Protection [CSBNP]) and Bolesław Słociński (Association Biom – BirdLife Croatia)

Cyprus: Tassos Shialis and Melpo Apostolidou (BirdLife Cyprus)

Czechia: Zdeněk Vermouzek (Czech Society for Ornithology [CSO])

Egypt: Haitham Mossad (Nature Conservation Egypt)

France: Gwenaél Quaintenne, Laurent Couzi, Pascal Orabi, Colette Carichiopulo, François-Xavier Couzi, Thierry Micol (Ligue pour la Protection des Oiseaux [LPO])

Finland: Teemu Lehtiniemi (BirdLife Finland)

Georgia: Nika Budagashvili and Tinatin Arveladze (SABUKO Society for Nature Conservation)

Germany: Axel Hirschfeld (Committee Against Bird Slaughter [CABS])

Greece: Nadia Sideri-Manoka and Myrto Karydi (Hellenic Ornithological Society [HOS])

Hungary: Márton Árvay and Márton Horváth (Magyar Madártani és Természetvédelmi Egyesület [MME])

Iceland: Menja von Schmalensee and Róbert A. Stefánsson (BirdLife Iceland (Fuglaverndarfélag Íslands/Fuglavernd))

Israel: Yoav Perlman (Society for the Protection of Birds in Israel/BirdLife Israel)

Italy: Giovanni Albarella (Lega Italiana Protezione Uccelli [LIPU])

Jordan: Tareq Qaneer (The Royal Society for the Conservation of Nature)

Latvia: Viesturs Ķerus (Latvian Ornithological Society [LOB])

Lebanon: Yara Alchammas and Bassima Khatib (Society for the Protection of Nature in Lebanon)

Libya: Khaled Salem Etayeb (Libyan Society for Birds & University of Tripoli, Dept. of Zoology) and Salih A. Buirzayqah (Alhayat Organisation)

Luxembourg: Patric Lorgé (natur&ëmwelt – BirdLife Luxembourg)

Malta: Nicholas Barbara, Alice Tribe, Marcella Giornetti (BirdLife Malta)

Montenegro: Marija Lekić, Bojan Zeković, Marija Šoškić Popović, Nikola Novović, Jovana Drobniak (Center for Protection and Research of Birds [CZIP])

Morocco: Mohamed Amezian and Khadija Bourass (GREPOM/BirdLife Morocco)

Netherlands: Sjoerd van Muiswinkel and Jaime García-Moreno (Vogelbescherming Nederland)

North Macedonia: Danka Uzunova and Metodija Veleviski (Macedonian Ecological Society)

Norway: Paul Shimmings (BirdLife Norway)

Palestine: Imad Atrash (Palestine Wildlife Society)

Poland: Jarosław Krogulec (OTOP/BirdLife Polska)

Portugal: Julieta Costa (Portuguese Society for the Study of Birds [SPEA])

Romania: Dan Hulea (Romanian Ornithological Society [SOR])

Serbia: Davor Marković, Sandra Jovanović and Milan Ružić (Bird Protection and Study Society of Serbia [BPSS])

Slovakia: Jozef Chavko (Raptor Protection of Slovakia [RPS]), Miroslav Demko (SOS/BirdLife Slovakia)

Slovenia: Tilen Basle and Urša Očko (DOPPS – BirdLife Slovenia)

Spain: David de la Bodega Zugasti (SEO/BirdLife)

Syria: Nabegh Ghazal Asswad (Syrian Society for the Conservation of Wildlife [SSCW])

Sweden: Daniel Bengtsson (BirdLife Sweden)

Switzerland: Raffael Ayé (BirdLife Switzerland)

Tunisia: Claudia Feltrup-Azafzaf, Hichem Azafzaf, Mohamed Hedi Aissa (Association “Les Amis des Oiseaux” [AAO/BirdLife in Tunisia])

Türkiye: Şafak Arslan and Serdar Özuslu (Doğa Derneği)

United Kingdom: Mark Thomas (Royal Society for the Protection of Birds [RSPB])

Special thanks to Laura Dami and Elisa Tuailon (Tour du Valat) for their valuable advice and feedback on an earlier version of this study.



The Eastern Imperial Eagle (*Aquila heliaca*) is a true beneficiary of anti-poisoning conservation measures © Agamu Photo Agency



Acknowledgement

Our sincere thanks go to the data contributors who provided essential national information on the illegal killing and taking of birds, and the organisations that supported their efforts. This work was supported by the Hans Wilsdorf Foundation through the BirdLife International Safe Flyways IKB project, by Oak Foundation, and by the European Union.

Contact

Lilla Barabas
Flyways Conservation Officer at BirdLife Europe and Central Asia
lilla.barabas@birdlife.org

Justine Vansynghel
Project Manager Migratory Birds at EuroNatur
Justine.Vansynghel@euronatur.org

Authors



euRONATUR

With thanks



Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.