



Biodiversity.

The case of
the Western
Balkans

euRONATUR

Table of contents

Executive summary	6
Stripping protected areas. The case of Vlora International Airport in Albania	7
Karst fields. The case of the ups and downs at Livanjsko Polje	19
A life in salt. The case of Salina Ulcinj in Montenegro	27
Safe flyways. The case of illegal killing of birds in Serbia	34
On the edge. The case of the Balkan lynx	44
Conclusions	52

BOSNIA
AND
HERZEGOVINA

SERBIA

MONTENEGRO

KOSOVO

NORTH
MACEDONIA

ALBANIA

This report is a product of the EuroNatur Foundation team.

Writing lead

Viktor Berishaj

Executive Director

Gabriel Schwaderer

Communication

Anja Arning

English language editor

Roxanne Diaz

Design

Magda Paszewska, Anastasiia Ivanova

longstory.eu

Case leads

Vjosë/Nartë Protected Area

Annette Spangenberg

Livanjsko Polje

Sandra Wigger and Stefan Ferger

Ulcinj Salina

Stefan Ferger

Illegal killing of birds

Justine Vansynghel and Stefan Ferger

Balkan lynx

Lisa Leschinski and Mareike Brix

Acknowledgements

Protection and Preservation of Natural

Environment in Albania (PPNEA)

Zydjon Vorpsi and Xhemal Xherri

Bledi Hoxha and Aleksandër Trajçe

Centar za Zastitu Zivotne Sredine (CZZS)

Igor Kalaba

Centar za Zaštitu i Proučavanje Ptica (CZIP)

Ksenija Medenica and Jovana Janjušević

Društvo za zaštitu i proučavanje ptica Srbije

(DZPPS)

Milan Ružić, Davor Marković

and Sandra Jovanović

Stiftung KORA

Manuela von Arx

Macedonian Ecological Society (MES)

Dime Melovski

Zoran Šeremet

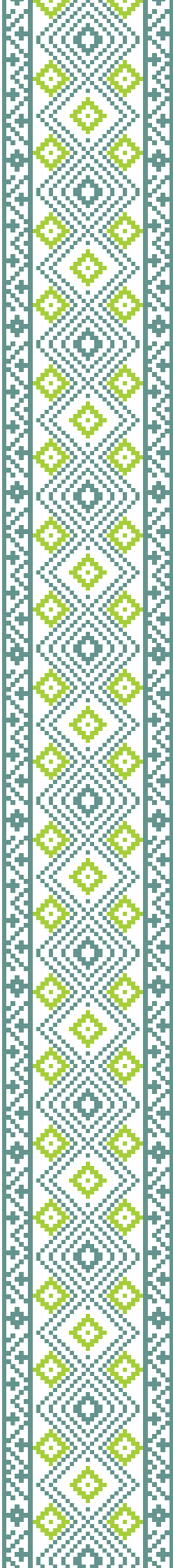
Disclaimer: This report reflects information accurate as of August 2024, to the best of our knowledge. For any observed errors, please contact viktor.berishaj@euronatur.org. Reproduction in whole or in part is permitted with attribution, including the title and credit to the publisher as the copyright holder.

Published by EuroNatur Foundation

November 2024

euronatur.org

EURONATUR



Executive Summary

The Western Balkans is a biodiversity hotspot marked by a unique blend of Mediterranean, Alpine, Pannonian, and Continental climates.

This diversity creates a range of habitats that support a wide array of species and ecosystems. The region is home to extensive mountains, forests, rivers, lakes and karst landscapes, which harbour numerous endemic and endangered species, such as the Balkan lynx and the Dalmatian Pelican. Conservation of these rich natural resources is critical as they are integral not only to the region's ecological sustainability but also to its cultural identity and economic stability, ensuring Europe-wide integrity of ecosystems.

This report presents an in-depth analysis of specific biodiversity challenges in the Western Balkans, focusing on key ecosystems and species impacted by national legislation, infrastructure projects, and policy shortcomings. Through detailed case studies of the Vjosë-Nartë Protected Area, Livanjsko Polje, Ulcinj Salina, further coastal wetlands and areas along the Adriatic Flyway and the habitats of the Balkan lynx, we explore threats to biodiversity on the local level and provide evidence of their systemic occurrence. Each narrative-driven case study highlights the importance of these areas to biodiversity, the current threats they face, and the gaps in policy and implementation that jeopardise their survival.

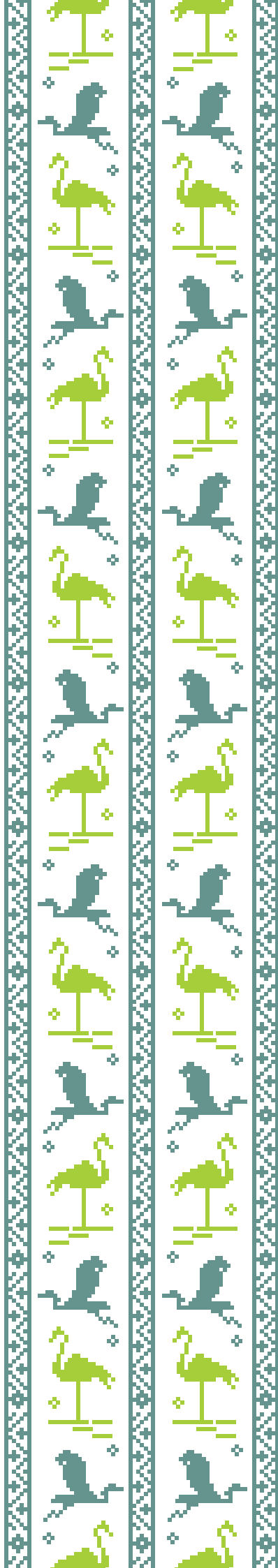
The cases reveal a consistent pattern of environmental challenges affecting biodiversity. These include the illegal killing of birds in Serbia, similar to the poaching pressures on the Balkan lynx across several countries, pointing to a widespread issue of inadequate law enforcement and policy implementation or lack thereof.

Mismanagement of protected areas and unclear ownership, as seen in Ulcinj Salina and the ongoing development pressures in Vjosë-Nartë Protected Area, reflect a broader regional struggle between dubious economic development and environmental preservation. On a national level, these problems are often addressed sporadically, with limited effectiveness, largely driven by NGO advocacy and intermittent international support rather than cohesive government action. Collectively, these issues contribute to habitat degradation, species decline, and reduced ecosystem integrity, underlining the need for more robust, integrated conservation strategies across the region.

Our findings reveal a consistent need for better alignment with the EU acquis, enhanced protective measures, and more robust regional cooperation.

The report concludes with strategic recommendations aimed at closing these gaps, enhancing environmental protection, and promoting sustainable development across the region, more specifically:

- Strengthen legal and policy frameworks across the region. We observe a recurring need for stronger enforcement of existing environmental regulations, better alignment with EU directives, and more robust local policies to protect biodiversity. This includes stricter adherence to EU Birds and Habitats Directives.
- Enhance institutional capacity and community engagement due to the importance of building local capacity for environmental management and involving communities in conservation efforts.
- Improve management and monitoring of protected areas and establish more effective monitoring systems to track and report on biodiversity.
- Restore and protect habitats to ensure the ecological connectivity necessary for species survival.
- Raise public awareness and education on biodiversity and the threats to its conservation. This is observed to be crucial for building public support for conservation initiatives and for fostering a culture of environmental consciousness.



Stripping protected areas.

The case of
Vlora International
Airport in Albania

The story

Where the Adriatic meets the Vjosa River lies the Narta Lagoon, which together form a mosaic of life, history, and biodiversity.

This story is not just about a place but about the opus of species that call this area home and the high environmental bill for the dubious development projects.

Once, the lagoon's tranquil waters mirrored the sky, painting it with the colours of over 200 species of birds that danced above its surface. The Dalmatian Pelican and the elegant flamingo, both celebrities of the avian world, graced the waters, drawing birdwatchers and nature lovers from across the globe. The shores teemed with the rare Loggerhead turtle, turning the lagoon into a theatre of nature's finest performances.

But today, a shadow looms over Vjosë-Nartë Protected Landscape. The construction of the Vlora International Airport, part of a sweeping vision to transform this biodiverse haven into a hub of tourism and infrastructure, threatens to mute the lagoon's vibrant voice. Plans unfold amidst fierce debates, legal battles, and an outcry from conservationists and local communities, who see the airport as a knife through the heart of the region's natural fabric.

This tale is a microcosm of a global 'struggle of development' at the expense of invaluable natural heritage. As diggers and bulldozers sculpt the earth, the fate of Vjosë-Nartë Protected Landscape hangs in a delicate

balance. Will the call of the pelican prevail, or will the roar of aeroplane engines drown it out? This is the case of the Vjosa Delta and the Narta Lagoon, a haven at a crossroads, awaiting a decision that could either restore their voice or silence them forever.



Biodiversity Context

Narta Lagoon, located at the intersection of the Vjosa River and the Adriatic Sea, is one of Albania's most critical wetlands and serves as a crucial node on the Adriatic flyway, a major migratory route for birds travelling between the European and African continents. Its strategic location and rich biodiversity make it an irreplaceable stopover for migratory birds seeking refuge and sustenance during their hard journeys.

Historically, the lagoon and its surroundings have been recognised for their natural beauty and biodiversity, playing a significant role in local culture and livelihoods. The area has been utilised for fishing, salt production, and agriculture, weaving a collage of human-nature interaction that has sustained local communities for generations.

The Narta Lagoon hosts a range of species, many of which are on the brink of extinction elsewhere. Notably, it hosts populations of the Dalmatian Pelican (*Pelecanus crispus*), globally classified as *Near Threatened*¹ and *Critically Endangered*², and the Greater Flamingo (*Phoenicopterus roseus*). The marine waters are crucial for the survival of the Loggerhead turtle (*Caretta caretta*), listed as vulnerable on the global IUCN Red List.

Overall, the area is home to over 20,000 water birds, which is of international importance. The lagoon is important because of the diversity (over 200) and abundance of its bird species (81,000 waterfowl IWC 1997; 14,742 individuals IWC 2023). It is an essential wintering, breeding and migratory stopover site for many bird species.

Protected bird species include:

- 142 species are included in the annexes of the Bern Convention, where 97 species are listed in annex II and 45 species in annex III
- 32 species are listed in the appendix I of the Emerald Network
- 61 species in the Ramsar Convention
- 85 species in the annexes of CMS³
- 92 species in the annexes of AEWA⁴

Moreover, this wetland is a shelter for breeding and roosting for more than 1% (Europe / Mediterranean region) of species such as:

- Pied Avocet (*Recurvirostra avosetta*) with 1 % of the common population of Southeast Europe, the Black Sea and Turkey
- Collared Pratincole (*Glareola pratincola*) with 1% of the European population
- Dalmatian Pelican (*Pelecanus crispus*) with up to 1.5% of the global population
- Greater Flamingo (*Phoenicopterus roseus*) with 1 % of the Mediterranean and Black Sea population

Until recent legislative changes, the entire lagoon area was part of the Vjosë-Nartë Protected Landscape, classified under IUCN Category V, which underscores its significance as a site of international conservation importance. It is designated as:

- an Important Bird Area (IBA),
- a Key Biodiversity Area (KBA), and
- an Emerald Site Candidate,

Moreover, this area is a potential Natura 2000 site once Albania becomes an EU Member State and fulfills the criteria for becoming a Ramsar site.

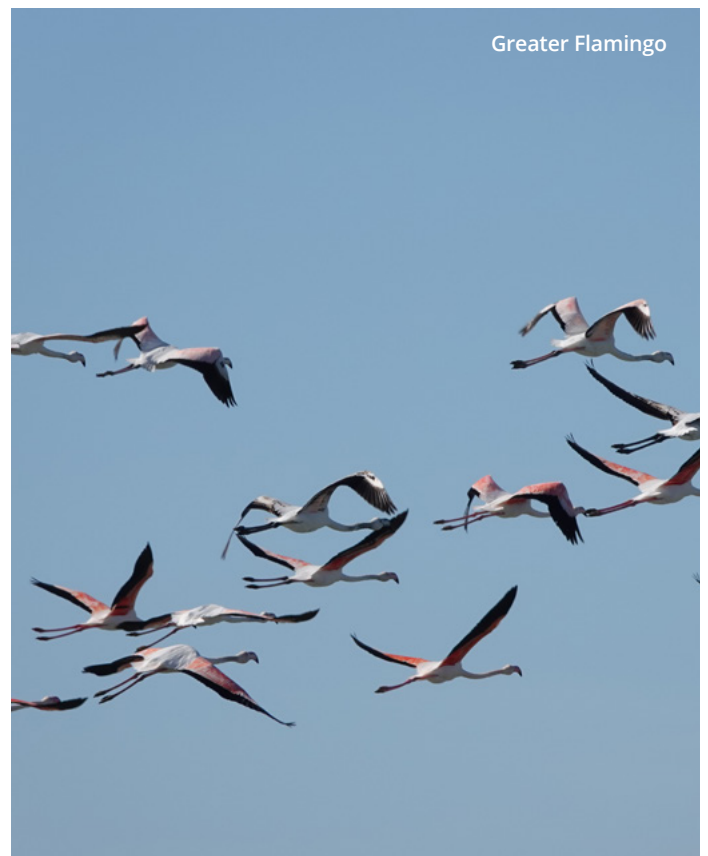
¹ According to IUCN Red List

² According to Albania Species Red List

³ Convention on the Conservation of Migratory Species of Wild Animals

⁴ Agreement on the Conservation of African-Eurasian Migratory Waterbirds

The ecological wealth of the Narta Lagoon contributes directly and indirectly to the local economy. It supports activities such as eco-tourism and birdwatching, which attract visitors from around the world, adding economic value through tourism while promoting conservation awareness. The lagoon's resources also support traditional fishing practices, agriculture, and small-scale farming that are a source of income and a way of life for the local communities.



Copyrights: Xhema Xherri

Challenges

Illegal Construction of Vlorë International Airport

The Vlorë International Airport represents a perfect example of projects bypassing environmental safeguards. Construction commenced in November 2021 without the necessary ENVIRONMENTAL IMPACT ASSESSMENTS (EIA) or construction permits, flouting legal and procedural norms. The EIA, conducted hastily and without adequate stakeholder consultation, was only finalised after the construction had already begun. This breach not only undermines environmental legislation but also sets a concerning precedent for governance and accountability in environmental management. While the construction started in November 2021, the construction permit was only granted in February 2023.

Revision of the Vjosë-Nartë Protected Landscape

In a troubling development, the Albanian government has redefined the boundaries of the protected area to facilitate the airport's construction. The newly proclaimed "Pishë Poro-Nartë Protected Landscape" merges two previous territories (Vjosë-Nartë Protected Landscape and the Managed Nature Reserve/ PishëPoro Nature Park) but notably excludes a central area of 310 hectares⁵, precisely where the airport is being built. Additionally, 5,551.7 hectares of land, previously cultivated with olive orchards and vineyards, have been removed from protection. This significant reduction in protected land, nearly 20% of the former territory, deeply compromises the landscape's integrity.

⁵ [Harta-shoqeruese.pdf \(https://ppnea.org/wp-content/uploads/2022/11/Harta-shoqeruese.pdf\)](https://ppnea.org/wp-content/uploads/2022/11/Harta-shoqeruese.pdf)

Changes to the Law on Protected Areas

Complicating matters further, recent amendments to the law on Protected Areas enable the National Territorial Council ⁶ to approve intensive infrastructure projects within protected areas. These projects, which can include hydropower plants, extractive

industry activities, mass tourism and urban development, are fundamentally at odds with the conservation goals of these areas. This change not only contravenes the original purpose of the Protected Areas Law but also poses a direct threat to the biodiversity and ecological functions these areas are meant to safeguard.

Impacts and consequences

Environmental Impacts

Significant biodiversity loss

An assessment of the impacts of the airport construction and the changes in the boundaries of the Protected Areas was published in 2022 ⁷. The construction within the Vjosë-Nartë Protected Landscape has critically endangered several species and their habitats included in the Bern Convention annexes. Notably, the Dalmatian Pelican and other wetland-dependent species are facing the Narta habitat destruction, as well as the Vjosa Delta. The area's contraction to facilitate the airport has excluded vital habitats for ground-nesting birds and species reliant on riverine and coastal ecosystems, such as the Loggerhead sea turtle.

Habitat degradation

The redrawing of protected area boundaries has led to the exclusion of essential habitats, including olive groves and coastal zones integral to biodiversity. These changes disrupt the ecological balance, affecting CMS-listed species, like the Turtle Dove, and their respective feeding, nesting, and breeding patterns. The alteration of the landscape from a biodiverse-rich area to one focused on tourism and infrastructure is projected to cause irreversible environmental damage,

transforming the unique biodiversity character of the Vjosa Delta.

Inadequate Environmental Impact Assessment and planning

The Environmental Impact Assessment process was rushed and lacked thorough field studies, leading to a poor understanding and underestimation of the potential impacts on biodiversity. This inadequacy is particularly concerning given the area's status as home to species listed in Appendices I and II of the CMS, including the White-headed Duck (*Oxyura leucocephala*), Ferruginous Duck (*Aythya nyroca*), and the Greater Spotted Eagle (*Clanga clanga*), all of which are now at greater risk due to infrastructure development pressures.

The Albanian government's efforts to establish the Vjosa River as Europe's first Wild River National Park while simultaneously advancing development projects in the Vjosa Delta exemplify contradictory environmental management. Despite designating the Vjosa National Park in March 2023, the government did not integrate the delta into the national park's boundaries. This exclusion facilitates the construction of Vlora International Airport and other large-scale tourist developments already underway or planned within protected areas of Vjosë-Nartë Protected Landscape and the Marine National Park Karaburun-Sazan.

⁶ The head of the National Territorial Council is the Prime Minister of Albania, namely Edi Rama

⁷ [Strasbourg, 1 June 2012 \(https://rm.coe.int/files67-2022-osa-report-vloraairport-albania/1680ab31d8\)](https://rm.coe.int/files67-2022-osa-report-vloraairport-albania/1680ab31d8)

Socioeconomic Impacts

Displacement and economic disruption

The local communities, traditionally dependent on the natural resources of the Vjosa Delta, face significant changes. The shift towards tourism-oriented development threatens traditional livelihoods, including fishing and small-scale agriculture, potentially displacing families, further incentivising migration abroad and disrupting community structures.

Loss of cultural heritage

The transformation of the Vjosa Delta from a natural landscape into a commercialised area risks eroding the cultural identity of the local populations. Traditional practices and the intrinsic value of the natural environment are sidelined in favour of mass tourism, leading to a potential loss of cultural heritage and community cohesion.

Increased resource strain

The government's plans for mass tourism are placing additional strain on natural resources, with the Albanian coastline struggling to meet the growing demand for drinking water. To address this, the government initiated a project in 2019 to build a water supply station in Himara, drawing water from the Shushica River.

This development not only impacts local communities and ecosystems but also affects the Vjosa River, as Shushica is one of its tributaries. Since March 2023, the Shushica River has been part of the Vjosa Wild River National Park, meaning this project violates the protected status of the area.

Given these challenges, further pressure is expected on the rivers that are essential to both local communities and Albania's ecosystems if the construction of Vlora Airport proceeds alongside the expansion of mass tourism in the country.



Shrinking of participatory rights

The development of Vlora International Airport and associated infrastructure projects in the area have proceeded with inadequate consultation with local communities, breaching national EIA regulations and international commitments under the Aarhus Convention. The rapid advancement of the airport's construction, prior to the completion of necessary environmental and social impact assessments, did not allow for adequate community engagement or feedback. This lack of meaningful engagement has left the local communities inadequately informed and uninvolved in decision-making that directly affects their environment, livelihoods, and cultural heritage. The failure to properly consult local stakeholders not only undermines the legitimacy of the projects but also threatens to exacerbate social tensions and disenfranchisement among those most impacted by the environmental changes.

Policy challenges

Vlora International Airport construction

The construction of the Vlora International Airport (VIA) involves multiple and significant breaches of Albanian legal and regulatory frameworks governing environmental assessment, public-private partnerships, protected areas, and development permissions.

Airport concession

- Non-Compliance with development plans – The VIA project is inconsistent with local and national development plans (e.g., General Local Plans [PPV], Detailed Plan for Areas of National Importance [PDZRK]), which did not envisage an airport of such scale at the proposed location, thereby violating territorial development legislation.
- Violations of Strategic Environmental Assessment Law—Administrative acts preceding the concession contract breached Law No. 91/2013 on Strategic Environmental Assessment by failing to evaluate environmental impacts comprehensively during the early stages of planning.
- Breach of Concessions and Public-Private-Partnership (PPP) Law – These preliminary acts by the government also violated Law No. 125/2013 on Concessions and Public-Private Partnership, indicating non-adherence to the stipulated procedures for granting concessions.
- Contravention of Protected Areas Law – The initial administrative acts breached Law No. 81/2017 on Protected Areas, particularly concerning the preservation of ecological integrity and land use within designated protected zones.
- Flouting Environmental Impact Assessment Regulations – The preparatory procedures violated Law No. 10440/2011 on Environmental Impact Assessment (EIA) by inadequately addressing the environmental consequences and engaging in necessary public consultations.
- Breach of legal hierarchy and rule of law – The processes leading up to and including the approval of the concession contract contravened the principles of rule of law and the hierarchy of normative acts, undermining legal and regulatory frameworks.

Illegality Concerning the EIA and Environmental Declaration

- Non-Compliance with mandatory EIA procedures – Responsible authorities failed to adhere to mandatory procedures for conducting a comprehensive and legally compliant EIA process.
- Formal Deficiencies in the EIA Report – The EIA report lacked essential signatures and certifications required by law, compromising its legal validity.
- Ignoring legal limitations for development in Protected Areas – The EIA overlooked restrictions imposed by the Protected Areas Law for developments within such zones, failing to safeguard ecological and conservation interests mandated by law.
- Absence of Proper Assessment – The project did not undergo the “Proper Assessment” required for areas of special environmental significance, such as zones designated under the Emerald Network and Important Bird Areas, which are critical for ensuring the protection of biodiversity.
- Substantive issues with EIA Report – The EIA report did not meet the legal, technical, scientific, and methodological criteria established by the environmental framework, thus failing to provide a reliable basis for the project’s approval.

Illegality regarding the issuance of a Development Permit

- Premature approval of Development Permit – The development permit was issued before the environmental declaration was finalised, essential for setting developmental conditions based on environmental assessments.
- Non-Conformity with approved detailed plans – The development permit was granted in absence of an approved Detailed Plan for Areas of National Importance (PDZRK) by the National Territorial Council (KKT) and contrary to the forecasts of the General Local Plans of Vlorë Municipality.
- Lack of required public authority approvals – The permit was issued without obtaining the necessary opinions/ approvals from involved/interested public authorities, bypassing a critical oversight mechanism.
- Issuance without Civil Protection Certification – The VIA project lacked a Risk Certification required under the Civil Protection Law, essential for ensuring safety and preparedness against potential emergencies.

Redefinition of Protected Areas

The redefinition of the protected area involves merging two previous territories, the Vjosë-Nartë Protected Landscape and the Managed Nature Reserve/PishëPoro Nature Park, into what is now called the “Pishë Poro-Nartë Protected Landscape.” This change is not merely administrative but deeply strategic, removing about 310 hectares for the airport construction and an additional 5,551.7 hectares of cultivated hills from their protected status. Essentially, nearly 20% of the former territory is left unprotected, altering the landscape considerably and leaving a central portion significantly vulnerable to development pressures.

Failure to comply with protected areas and biodiversity laws

- Inconsistency with legal framework for Protected Areas ⁸ – The actions taken did not adhere to the requirements set forth in Law No. 81/2017 “On Protected Areas” which governs the establishment and modification of protected areas in Albania.
- Disregard for biodiversity protection laws – Modifications to the protected areas were not in accordance with the Law on the Protection of Biodiversity and the National Strategy for Biodiversity, failing to safeguard ecological integrity as mandated by these frameworks.
- Development plans non-compliance – The alterations to the protected areas did not conform to existing development plans, which are legislated to prevent the reduction or downgrading of protected area statuses. This highlights a critical oversight in adhering to territorial development regulations.

Administrative and process violations

- Improper administrative procedures – The legally competent authority, the Ministry of Tourism and Environment, did not initiate procedures for changing the boundaries and zoning of the protected areas. The change was initiated by the National Agency of Protected Areas, which is a procedural misstep.
- Lack of comprehensive Environmental Impact Assessment - The administrative acts related to the



Copyright: PPNEA

redefinition of protected areas were not subjected to the required Environmental Impact Assessments, violating Law No. 10440/2011 “On Environmental Impact Assessment” which ensures that environmental consequences are thoroughly evaluated.

- Insufficient public and expert consultation – There was a failure to properly consult with the public, NGOs, and scientific institutions, which is a breach of multiple laws designed to ensure stakeholder participation in environmental decision-making.

Technical and documentation errors

- Inadequate review and supporting documentation – The entire review process for the boundaries of protected areas relied on an assessment document that did not meet the criteria set by environmental protection, EIA, and biodiversity laws.
- Mapping and coordinate errors – The maps used in the decisions by the National Territorial Council and the Council of Ministers contained serious errors in coordinates. GIS coordinates for the removed airport area were incorrectly positioned, showing locations as far off as Iran, which indicates gross inaccuracies and negligence in documentation.

Changes to the Law on Protected Areas

The recent amendments to the law on protected areas, which the government argued would bring stricter protection to these zones, actually increase flexibility for interventions within them.

⁸ Before the adoption of the new Law on Protected Areas, which allows infrastructure projects within protected areas

Definition and intent of protected areas

A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values ⁹.

The legal amendments and their implications

In February 2024, the law on protected areas underwent amendments which allowed construction activities to take place in protected areas. The government argued that these changes would provide stricter protection for these areas. However, a detailed review reveals that they instead increase the flexibility to make interventions which negatively impact the area.

The amendments introduce several new concepts that effectively green-light tourism projects, particularly those labelled as five-star tourism. The challenge that these amendments to the law bring is the evasive manner in which these projects can be assessed to meet the conditions. Specifically, the law adds the concept of "excellence tourism," which is defined as tourism that offers accommodation in structures with the highest architectural and environmental standards, along with exclusive high-level tourist services. The ambiguity arises over what qualifies as high-standard architectural and environmental structures and what are considered exclusive services.

The changes also expand the scope from traditional and eco-tourism activities to "economic and tourism activities," aligning the objective of protection with the adaptability and features presented by the protected or sub-zones. Additionally, new notions like the "undisturbed natural area" and "slightly disturbed area" encourage human activities and projects.

The most opportune moment for tourism seems to be serving the government's agenda, which extends project development in protected areas under the guise of fostering development. Specifically, Article 16, Clause 2, now permits the construction of five-star structures, marking a departure from previous laws which stipulated that "National Parks" should maintain environmental protection levels aimed at preserving natural conditions and biodiversity for ecological stability and diversity.

While the list of principles has been expanded, presumably to offer greater protection, the elaboration of these principle, de facto open up possibilities for the contrary. These include the adaptability principle, which allows changes to a protected zone's category if evaluations show its characteristics and objectives no longer align with the designated category.

The activities that can be conducted in designated protected areas have been entirely reformulated compared to the amended law. Notably, the new list highlights that the government now has the discretion to determine and develop what activities can take place based on its decisions regarding the protected area's declaration.

With the new changes, another institutional layer has been added to the management of protected areas. Previously managed solely by the National Agency for Protected Areas, now, the Office for the Management of National Parks has been established. This technical-administrative institution, organised at both central and regional levels, operates within the geographic territory of the "National Park" area as defined by the Council of Ministers' creation decision.

⁹ [Effective protected areas | IUCN \(https://iucn.org/our-work/topic/effective-protected-areas\)](https://iucn.org/our-work/topic/effective-protected-areas)

Convention on the Conservation of European Wildlife and Natural Habitats - Bern Convention

Albania is a signatory party to the Bern Convention, which aims to ensure the conservation of wild flora and fauna and their natural habitats, with particular attention to endangered species and habitats. As a contracting party, Albania is obligated to take appropriate and necessary legislative and administrative measures to protect its biodiversity, especially the habitats of species listed under the Convention's appendices.

Under Article 3 of the Convention, Albania must promote national policies for conserving wild flora, fauna, and their habitats, focusing on endangered and vulnerable species. Additionally, Article 4 requires Albania to ensure the conservation of species' habitats, particularly those listed in Appendix II, and to give special attention to areas of importance for migratory species. The country's development and planning policies must consider conservation requirements to minimise damage to protected areas.

Considering concerns surrounding infrastructure and urbanisation developments, particularly the Vlora International Airport's potential impact on the Vjosë-Nartë Protected Landscape, the Standing Committee of the Bern Convention has issued specific recommendations to Albania based on the findings:

- Albania is urged to suspend construction of Vlora International Airport until a new Environmental Impact Assessment and a Proper/Appropriate Assessment are conducted to fully evaluate the environmental consequences.
- The Standing Committee encourages the establishment of the Vjosa National Park, including the delta and Narta Lagoon, as an IUCN Category II National Park, in line with Albania's national plan for areas of national importance.
- The Convention recommends a comprehensive, multi-year Wildlife Monitoring Programme to gather data on



Copyrights: Xhemal Xherri

avifauna, bats, and other species in the Vjosa-Narta area. This should include monitoring migratory patterns and the use of agricultural lands by birds. Data from this program will inform the decision on airport construction and other infrastructure development, with a concrete possibility of evaluating alternative airport sites.

EU Habitats and Birds Directives

As an EU accession candidate country, Albania is required to align its environmental legislation with the EU acquis, particularly important in this case with the Habitats Directive (92/43/EEC) and the Birds Directive (2009/147/EC).

The Habitats Directive

The Habitats Directive is designed to promote the conservation of Europe's natural habitats and wild species through the creation of a coherent ecological network known as Natura 2000. This network is intended to preserve biodiversity by ensuring the long-term survival of Europe's most threatened species and habitats. As part of its obligations under this directive, Albania must protect its natural habitats, particularly those home to species listed in the directive's annexes. Special attention is required for areas that are crucial for the survival of threatened or endemic species.

In practice, this means that Albania is required to implement strict conservation measures that prevent damage to important habitats, particularly those that qualify for inclusion in the Natura 2000 network or are recognised as candidate Emerald Network sites under the Bern Convention. One of the key obligations under the Habitats Directive is the requirement to conduct thorough Environmental Impact Assessments (EIA) for any plans or projects that could affect these protected areas. The EIA process must carefully consider the potential impacts on biodiversity and ensure that projects do not undermine the ecological integrity of the protected habitats.

The ongoing construction of Vloora International Airport within the Vjosë-Nartë Protected Landscape directly violates these obligations. The failure to properly assess the environmental risks, particularly to habitats crucial for the survival of local species, undermines Albania's obligation to protect these areas under the Habitats Directive.

The Birds Directive (2009/147/EC)

The Birds Directive aims to conserve all wild bird species naturally occurring in the EU by protecting their habitats, controlling hunting,

and establishing Special Protection Areas for at-risk species. Albania is required to align its national legislation with the directive and take the necessary measures to protect bird species, particularly migratory species, which are vulnerable to habitat loss and other threats.

Furthermore, the directive prohibits activities that would harm wild birds, such as the destruction of nesting sites or disruption of migratory routes. In this regard, any infrastructure project likely to impact bird populations, such as airports, must undergo rigorous environmental assessments to ensure that bird conservation is factored into the decision-making process.

The construction of Vloora International Airport poses a significant threat to several species protected under the Birds Directive. By proceeding with construction without conducting an adequate EIA that specifically considers the potential impact on these bird populations, Albania is failing to meet its obligations under the Birds Directive. Furthermore, the absence of mitigation measures to reduce the risks to bird species, such as adjusting the location of the airport or incorporating design changes to minimise bird strikes, further exacerbates the non-compliance.

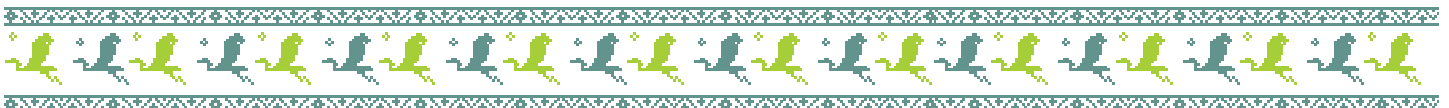


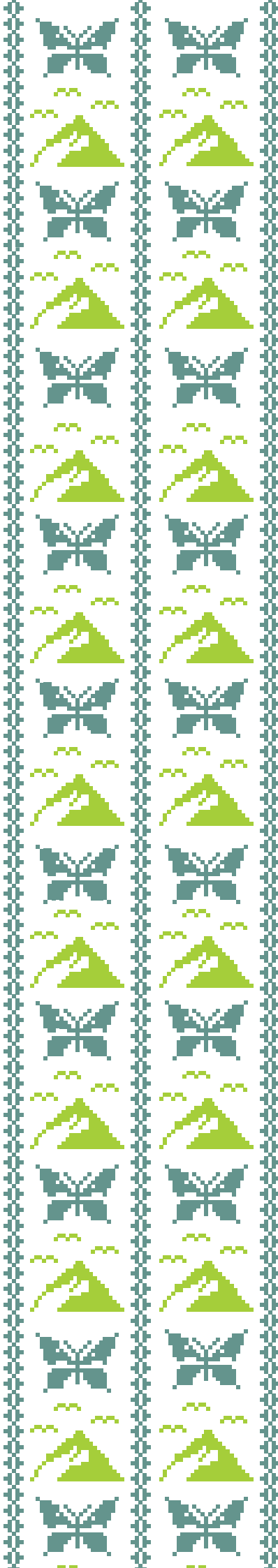
Recommendations

- Cease all construction activities at the Vlora International Airport site immediately. This step is critical to prevent further environmental damage and to reassess the project's alignment with environmental conservation goals.
- Initiate efforts to restore the construction site to its original state, or as close to it as possible, to mitigate the impacts already inflicted on the local ecosystem. This includes rehabilitating native vegetation and wildlife habitats disrupted by construction activities.
- Conduct a thorough assessment of the recent changes to the boundaries of the Vjosë-Nartë Protected Landscape. Priority should be given to reintegrating the airport construction site back into the protected area to ensure continuity of habitat and protection status.
- Repeal the changes made in February 2024 to the Protected Area Law. Restoring stringent EIA requirements will ensure that all projects undergo rigorous environmental scrutiny, irrespective of their investment label.
- Include the Vjosa Delta within the boundaries of the Vjosa National Park and develop a robust management plan for the entire park. Ensure the plan is equipped with adequate financial, human, and technical resources to effectively meet international conservation standards.
- Improve mechanisms for involving the public and relevant stakeholders in environmental decision-making processes, particularly in EIAs and protected area management plans. This should include open consultations, accessible reports, and the active inclusion of local communities and environmental NGOs.
- Set the cessation of airport construction and the reversal of protected area legislation changes as benchmarks for Albania's negotiations on Chapter 27 (Environment) of the EU Acquis. This approach will align national environmental policies with the EU framework, ensuring environmental governance plays a central role in Albania's EU integration process.



Copyrights: Xhema Xherra





Karst fields.

The case of
the ups and downs
at Livanjsko Polje

The story



Livanjsko Polje, a vast karst field in the heart of the Dinaric Alps in Bosnia and Herzegovina, stands as a monument to the convergence of nature and culture.

A landscape where the past weaves into the present, creating a rich biodiversity landmark. This plain is cradled by natural forces and centuries of human guardianship, which have together sculpted a variety of habitats, from lavish wet meadows to dense alluvial forests, that support an array of life forms. Its biodiverse richness serves as a vital corridor for migratory birds and a sanctuary for a myriad of flora and fauna species, making it a critical node in the regional biodiversity network.

Rooted deeply in this ancient soil are the communities of Livanjsko Polje, whose lives are rhythmically synced to shifts and changes of the seasons. These custodians of the land, comprising of farmers and local entrepreneurs, have cultivated practices that resonate with the natural cadence of their surroundings. Their agricultural and livestock endeavours are not merely acts of survival but are pivotal in nurturing and perpetuating the polje's diverse ecosystems.

Yet, this delicate equilibrium faces challenges. Despite being celebrated internationally as a Ramsar site and an Important Bird Area, Livanjsko Polje remains vulnerable, lacking robust national protection. This oversight jeopardises the conservation efforts essential for sustaining its unique environmental and cultural fabric. The community contends with threats from unsustainable water management, unchecked resource extraction, and gaps in legal protection.

The quest to secure proper recognition and protection for Livanjsko Polje is a critical endeavour. It transcends administrative formalities, aiming to safeguard a legacy of biodiversity and an age-old way of life.

Biodiversity context

Livanjsko Polje is a prime example of karst topography, which is characterised by soluble rock layers, primarily limestone, leading to distinctive landforms and a unique hydrological system. This karst field is a part of the expansive Dinaric Karst system that stretches along the Dinaric Alps.

The underlying geology of Livanjsko Polje consists largely of carbonate rocks, which are highly permeable due to dissolution processes that form extensive underground networks of caves and channels. These subterranean pathways contribute to the polje's complex system, where water flows beneath it. The field's drainage is predominantly subterranean; several rivers and streams that traverse the polje disappear into sinkholes, which channel water through a vast underground cave system. This system is part of the larger Cetina River Catchment, linking Livanjsko Polje to the Adriatic Sea, demonstrating critical connectivity across the region.

The polje experiences significant seasonal flooding, which is essential for maintaining wetland habitats. These floodwaters replenish the soil, supporting diverse agricultural activities. The flooding also creates temporary aquatic habitats that are crucial for the breeding of various species.

The polje hosts the largest peat bog in the Balkans, Zdralovac, covering an area of 76 km². Peatlands are crucial for carbon storage, water regulation, and habitats for specialised flora and fauna. The meadows and marches of the polje, which are seasonally flooded, provide essential breeding and feeding grounds for birds and other wildlife. Its grasslands and alluvial forests support a variety of plant species and serve as

important pastoral lands for grazing livestock, which helps maintain the ecological balance of the area.

As a biodiversity hotspot, Livanjsko Polje is a significant site for avian life. It hosts over 274 bird species, including migratory and resident birds, and is breeding home to 150 of those species. Over 100,000 water birds visit the area on their migratory journeys.

Furthermore, the area's flora includes a mix of aquatic and terrestrial species adapted to the karst landscape. The vascular plant diversity reaches up to 850 species, 25 mammal species, at least 18 fish species, 12 amphibian species, and 16 reptile species. It must be underlined that a considerable amount of data is missing, especially on insect species.

Livanjsko Polje lies within the territories of the municipalities of Bosansko Grahovo, Livno, and Tomislavgrad. The communities in these areas have developed lifestyles that are intricately linked to the natural rhythms of the polje. Traditional practices such as livestock grazing, hay making, and small-scale agriculture are prevalent and rely on the ecological services provided by the polje. Moreover, the region holds potential for nature-friendly tourism, which could offer sustainable economic opportunities to local populations.

The region is not only a natural treasure but also a cultural one, with archaeological findings dating back to the Illyrian period. Traditional land-use practices and the seasonal movements of shepherds and their flocks are part of the cultural fabric of Livanjsko Polje.

Challenges

Despite its significance, Livanjsko Polje faces numerous challenges threatening its well-being and the biodiversity it supports. These challenges are intricate, involving ecosystem disturbances, socio-economic pressures, and insufficient legal protections, all of which complicate the conservation efforts in the area.

Protection status of Livanjsko Polje

One of the primary issues is the absence of a national protection status for Livanjsko Polje. Although it is recognised internationally as a Ramsar site and an Important Bird Area, the polje does not hold corresponding national protections, which hampers the establishment of effective management and conservation strategies. A draft law for proclaiming the area as a protected landscape has been developed but is stalled at the municipal level. This lack of national status leaves the area vulnerable to various exploitative activities that can degrade the habitats irreparably.

Management and invasive infrastructure issues

The hydrological system of Livanjsko Polje, crucial for its wetland ecosystems, faces significant disruption. The redirection of water for hydroelectric power production, namely by Croatia's public utility company Hrvatska Elektroprivreda, which manages the water flow to Orlovac HPP in Croatia, alters the natural water dynamics. This manipulation of water courses leads to reduced water availability in the polje, affecting the natural flooding essential for maintaining wetland habitats.



Copyrights: Anto Perkovic

The pressure to intensify agricultural practices poses another significant risk, leading to the potential overuse of land and water resources. This intensification will inevitably result in habitat degradation and biodiversity loss, especially in areas where traditional farming methods have maintained natural balance for centuries.

Resource exploitation

Exploitative activities such as peat extraction and mining are prevalent in Livanjsko Polje. These activities disturb the land surface and alter the hydrological patterns, further degrading critical habitats. The extraction of peat destroys peat bogs, which are vital for carbon storage and water regulation.

Illegal waste disposal, logging, and poaching are widespread and contribute significantly to the degradation of natural resources. These activities result from insufficient enforcement of existing environmental laws and a lack of awareness among local populations about the impacts.

Socio-economic pressure

Rural depopulation due to economic pressures forces a change in land use patterns and leads to a decline in traditional management practices such as extensive grazing and mowing. This depopulation also results in a loss of local natural knowledge, which has been instrumental in maintaining the biodiversity of the area through centuries of sustainable practices.

Recent plans to develop wind power plants on the surrounding mountains pose a new threat. While renewable energy is crucial for Bosnia and Herzegovina's energy transition, the placement of such infrastructure needs careful consideration to avoid disrupting migratory bird flyways and altering the landscape in ways that could be detrimental to the local ecosystem and people.

Impacts and consequences

Environmental impacts

The unregulated water management practices, particularly the diversion of water for hydroelectric power, have led to significant and immediate change in the regional hydrological regime and habitat alterations in Livanjsko Polje¹. These changes disrupt the natural flooding regime essential for maintaining the wetland ecosystems. The loss of flooding reduces the availability of breeding and feeding habitats for numerous species, particularly amphibians and water birds.

Furthermore, the degradation of peat bogs, a direct consequence of peat extraction, impacts the area's ability to store carbon and regulate water, further aggravating habitat loss.

Activities such as agriculture intensification, peat extraction, and unauthorised waste disposal lead to increased pollution in the water bodies of Livanjsko Polje. Direct impact on the landscape through human-made developments in and around the polje pose a never-ending threat to migratory bird species that use this area as a corridor.

Socioeconomic impacts

The environmental degradation of Livanjsko Polje directly affects the livelihoods of local communities that depend on the land for farming and livestock grazing.

As traditional land uses become less viable, younger generations have moved away in search of better opportunities, leading to cultural erosion and loss of traditional knowledge. This rural depopulation further

¹ Full article: [Changes in hydrological regime caused by human intervention in karst: the case of the Rumin Springs](https://www.tandfonline.com/doi/full/10.1080/02626667.2015.1111518#abstract) (<https://www.tandfonline.com/doi/full/10.1080/02626667.2015.1111518#abstract>)

exacerbates the cycle of habitat neglect and degradation.

With the changes in water management, land succession, and wildfires, the natural pastures have degraded, reducing the available grazing land. This forces the shepherd to consider relocation or change their traditional way of life.

Policy

The legal framework

In Bosnia and Herzegovina, environmental and nature conservation laws are primarily governed at the entity level, between the Federation of Bosnia and Herzegovina and Republika Srpska. Due to this political structure, the nature conservation legislation system is fragmented, leading to inconsistencies and complications in implementing unified national strategies for environmental protection.

The regulation of nature conservation is primarily managed under the "Law on Nature Protection" at the entity level, covering both the Federation of Bosnia and Herzegovina and Republika Srpska. This legal framework addresses various environmental concerns, including protection, air and water quality, waste management, and the establishment of an environmental protection fund. However, there's a notable lack of national laws specifically dedicated to environmental matters, leading to no unified national-level strategy for the environment and nature.

Protected areas and institutional capacity

Protected areas in Bosnia and Herzegovina cover 3.07% of the country's territory, which is relatively low compared to European standards. This limited coverage underscores

Similar challenges have been observed in other karst regions, such as the Camargue in France, where water diversion for agricultural purposes has led to significant ecological changes, impacting local biodiversity and human communities alike.

broader challenges in environmental governance, notably the lack of robust monitoring systems and institutional capacities.

The country lacks a specialised institution for biodiversity monitoring, which is crucial for assessing the health and status of protected areas. The existing frameworks for nature protection are primarily managed at the entity level, with each entity responsible for implementing and overseeing its own conservation laws. This decentralised approach leads to inconsistencies in enforcement and monitoring across different regions.

Moreover, these gaps in institutional capacity and monitoring hinder Bosnia and Herzegovina's efforts to align with EU environmental directives. Without comprehensive data and effective monitoring, it's difficult to manage existing protected areas effectively or to justify the establishment of new ones. Strengthening institutional capacities and developing a unified national strategy for biodiversity monitoring are essential steps towards better conservation outcomes and compliance with international environmental standards.

Proclamation of Livanjsko Polje Protected area

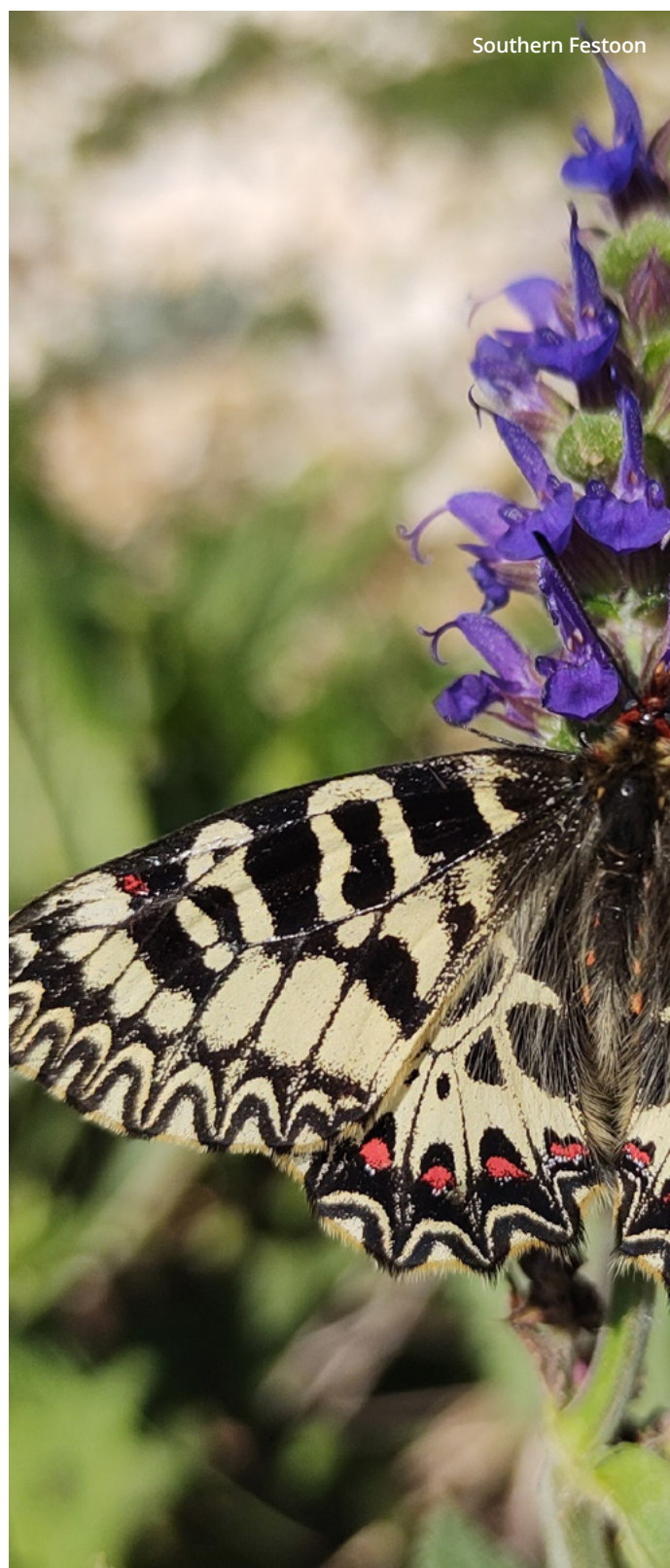
The legal framework for protected areas in Bosnia and Herzegovina is aligned with the IUCN protected area categories, which include:

1. Strict Nature Reserve (Category Ia)
2. Wilderness Area (Category Ib)
3. National Park (Category II)
4. Nature Park (Category IIIa)
5. Monument of Nature and Nature Characteristics (IIIb)
6. Habitat/Species Management Areas (Category IV)
7. Protected Landscapes (coastal and marine) (Category Va)
8. Regional Park (Category Vb)
9. Protected Areas with Sustainable Use of Natural Resources (Category VI)

Livanjsko Polje, designated as a Ramsar site and an Important Bird Area, is currently in the process of being declared a Category V Protected Landscape. This designation is intended to balance conservation needs with the sustainable economic activities of local communities.

The effort to declare Livanjsko Polje as a protected area involves multiple administrative levels, requiring approvals from municipal, cantonal, and entity levels. The draft law for its protection has faced significant delays, primarily due to poor coordination and communication between these governance levels. Another significant issue is the conflict between conservation goals and existing economic activities, such as peat extraction, which have previously been granted concessions.

Local municipalities often feel left out of the decision-making process, lacking resources to fully engage with and analyse conservation proposals. This has resulted in stalled efforts and reluctance to move forward with protective legislation.



There are ongoing efforts from environmental groups to engage local communities and government officials to restart and push forward the proclamation process. These efforts aim to align local economic interests with environmental conservation goals, fostering a more cooperative approach to achieving protected status for Livanjsko Polje.

Recommendations

- Officially declare Livanjsko Polje a Category V Protected Landscape with a clear zonation to provide the legal framework necessary to implement sustainable management practices and conservation measures.
- Establish and finance a management body and a detailed management plan that addresses key conservation issues, incorporates sustainable practices, and outlines responsibilities and roles for local stakeholders and management authorities.
- Develop and implement a sustainable water management strategy that preserves natural water courses and maintains the hydrological balance necessary for the wetland ecosystems.
- Introduce a subsidy scheme for local farmers to encourage and support extensive grazing practices, which are crucial for maintaining the open landscape and supporting biodiversity in Livanjsko Polje.
- Implement strict spatial planning regulations to limit activities that threaten the ecological integrity of the area, such as land concessions, mining, peat extraction, and extensive energy production.
- Strengthen the engagement of local communities and municipal authorities in conservation efforts by providing them with the necessary resources and training to effectively participate in the management and preservation of Livanjsko Polje.
- Implement projects that focus on restoring or improving natural habitats as a means of climate change resilience.



Copyrights: Ajdin Kamber / Adobe Stock





A life in salt.

The case of
Salina Ulcinj
in Montenegro

The story



In the tranquil town of Ulcinj, southern Montenegro, the Ulcinj Salina salt field paints a picturesque landscape near the Adriatic coast. It serves as a crucial chapter in the community's rich tapestry.

When a man was courting a woman and preparing for marriage, the bride's family would always ask a crucial question, "Where does he work?" If the groom's family responded that he worked at the Ulcinj salt plains, the bride's family would immediately feel reassured. Knowing that their daughter would marry someone with a stable and prosperous job, they would happily agree to give their daughter's hand in marriage.

However, beneath this cultural significance lies a brewing storm of ecological and

economic challenges. After its privatisation in 2005, the Ulcinj Salina faced severe neglect. It transformed from a thriving ecosystem and important local economy to a battleground of the rich biodiversity site fighting against plans to convert it into a luxury resort. This shift has sparked a struggle, pitting traditional livelihoods and environmental conservation against closed economic interests, leaving an entire ecosystem and the local community at a crossroads between preserving a vital part of their heritage and adapting to new economic realities.

Biodiversity Context

Ulcinj Salina has a rich history dating back to 1935 when it began its salt production operations. Over the decades, it provided employment for up to 400 people, significantly contributing to the local economy and cultural identity. The salt plains covered 60% of the salt needs of former Yugoslavia, highlighting its economic importance. Workers at Ulcinj Salina were well-supported with clothing, equipment, and a canteen offering diverse meal options, reflecting the prosperity and community spirit fostered by the salt production industry.

Ulcinj Salina is unparalleled in the eastern Adriatic region due to the extensive wetland habitats it offers. It is a crucial resting, wintering, and breeding site for numerous waterbird species along the Adriatic Flyway. The site supports thousands of individual birds and over 250 species annually, including iconic species such as the Greater Flamingo, Black-winged Stilt, and Dalmatian Pelican. These birds depend on the shallow waters of the Salina for feeding and breeding, which is rare along the rocky Adriatic coast. Additionally, Ulcinj Salina provides a habitat for various endangered species of fish, amphibians, reptiles, and plants. This biodiversity richness led to its designation as a candidate Emerald Site under the Bern Convention in 2007 and its recognition for meeting six of the nine criteria for designation as a Wetland of International Importance under the Ramsar Convention since 2006.

The high species diversity in its fauna and flora makes it a unique ecological asset. The Salina's importance as a migratory bird haven along the Adriatic Flyway cannot be overstated, with thousands of birds relying on it for survival. This includes species protected under the EU Birds Directive, highlighting the site's conservation value at an international level.

Despite its socio-economic and environmental importance, the condition of Ulcinj Salina has been precarious. It took significant international pressure ¹ for the Montenegrin government to designate the site as a Nature Park and a Ramsar Site in 2019. Since then, the formation of a dedicated management body has been pending. The planned management entity, a limited liability company formed by the Municipality of Ulcinj and the State of Montenegro, represented by the Ministry of Ecology, Spatial Planning, and Urbanism, has yet to be established.

The site's infrastructure, crucial for effective water management and conservation, has deteriorated over the years due to neglect and mismanagement. This has affected its functionality as a salt production site and a critical habitat for migratory birds. Restoration efforts are ongoing, mainly driven by NGOs ², but the slow progress in setting up a proper management structure and securing sustainable funding remains a significant challenge.

¹ Twelfth meeting of the Accession Conference with Montenegro at Ministerial level, Brussels, 10 December 2018: Montenegro demonstrates the capacity to manage the Natura 2000 network, including by affording the Ulcinj Salina the appropriate protection status and effectively implementing the necessary conservation measures leading to the improvement of its conservation status.

² [Digging deep for \(bio\)diversity - EuroNatur \(https://www.euronatur.org/en/what-we-do/news/digging-deep-for-biodiversity\)](https://www.euronatur.org/en/what-we-do/news/digging-deep-for-biodiversity)

Challenges

Privatisation

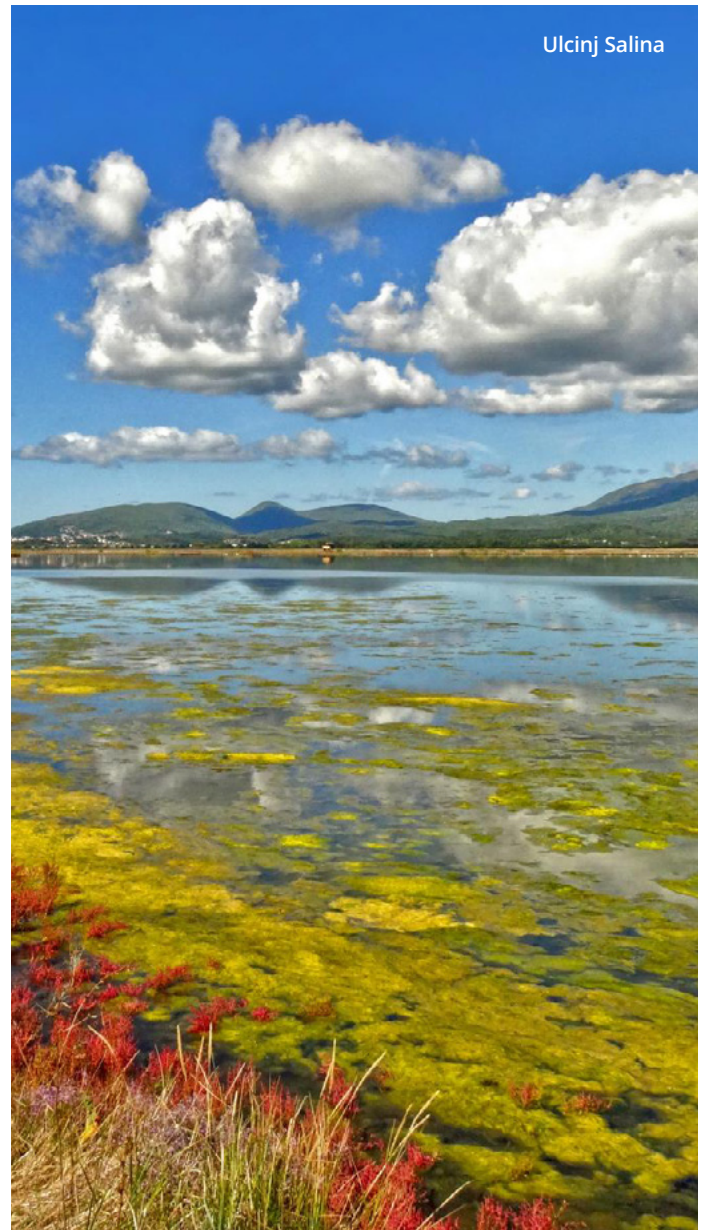
Ulcinj Salina was privatised in a non-transparent deal in 2005 ³, leading to neglect and deterioration as the new majority owners, Eurofond, whose focus was on potential real estate development like luxury touristic resorts rather than salt production. The last salt harvest was in 2013, after which the infrastructure was left to decay, impacting its ecological function.

While Eurofond was looking to attract investors for luxurious projects, it claimed ownership not just for the salt harvesting but of the land itself. This resulted in a legal battle, to which the Montenegrin government clarified in December 2021 that the land belonged to the state of Montenegro.

Mismanagement

The lack of proper management has led to critical water mismanagement, disrupting the Salina's role as a vital habitat. Incorrect water levels hinder its function both as a salt-producing area and as a crucial site for migratory birds and halophytic plant communities, affecting the biodiversity balance.

After the ruling of December 2021, Ulcinj Salina is managed on an interim basis by the Public Enterprise for National Parks of Montenegro. However, the management has been minimal and primarily focused on guarding the site. A formal management body, already foreseen in the Site Protection Act in 2019 and planned as a joint venture between the Municipality of Ulcinj and the Montenegrin state, is still in the process of being established.



Copyrights: CZIP

Conservation efforts

Civil society organisations like CZIP, MSJA, BirdLife, Tour du Valat, MANS and EuroNatur and international bodies like the European Commission have been instrumental in advocating for the Salina's protection. The European Commission has tied the site's management to Montenegro's EU accession process, emphasising its importance in conservation networks.

³ [Solana-izvjestaj_ENG-final-min.pdf \(https://czip.me/wp-content/uploads/2021/02/Solana-izvjestaj_ENG-final-min.pdf\)](https://czip.me/wp-content/uploads/2021/02/Solana-izvjestaj_ENG-final-min.pdf);

[Solana-Bajo-Sekulić-i-prodaja-imovine-studija-slučaja-autoput_ENG.pdf](https://www.mans.co.me/en/wp-content/uploads/2020/07/Solana-Bajo-Sekulić-i-prodaja-imovine-studija-slučaja-autoput_ENG.pdf)

[\(https://www.mans.co.me/en/wp-content/uploads/2020/07/Solana-Bajo-Sekulić-i-prodaja-imovine-studija-slučaja-autoput_ENG.pdf\)](https://www.mans.co.me/en/wp-content/uploads/2020/07/Solana-Bajo-Sekulić-i-prodaja-imovine-studija-slučaja-autoput_ENG.pdf)

Impacts and consequences

Environmental impacts and consequences

The environmental threats to Ulcinj Salina are complex. The site, in its best condition, spurs its own ecosystem and is a key resting, wintering and breeding area along the Adriatic Flyway for migratory birds. The diverse ecosystem of the salt plain supports a range of flora and fauna, contributing to the overall ecological health and resilience of the region.

The area also suffers from on-site impoundment and the diversion of streams and rivers. The entire ecosystem relies on a human-made hydrological regime, which is currently compromised due to dysfunctional pumps and severely damaged water management infrastructure (dikes, channels, sluices, etc.). This situation has devastating effects on the local ecosystem and its species.

Excessive livestock grazing presents another substantial environmental threat. Uncontrolled and extensive grazing negatively impacts biodiversity and leads to habitat erosion. This affects the natural environment and poses potential problems for salt-making and tourism.

Natural events such as harsh winters, floods, droughts, fires, and earthquakes also pose potentially devastating threats to the ecosystem, species, infrastructure, and properties within Salina Ulcinj.

Poaching has been a problem mainly for the birds resting in Ulcinj Salina in autumn and winter due to direct illegal shooting and disturbance by gunshots. However, this has (for the time being) largely been solved by the security service installed by the interim managers of the Public Enterprise of the National Parks of Montenegro.

Off-site pollution, including polluted inland and sea waters and illegal sewage from nearby Port Milena channel, poses a threat to the area.

Social impacts and consequences

Infrastructure and industrial development within the protected area have historically negatively impacted ecosystems and species, especially in areas used for salt storage. Although the current infrastructure has a limited environmental impact, past urbanisation efforts have already caused significant damage. Unsustainable tourism plans, while not yet realised, pose one of the main threats to the area. Without proper management, excessive resource extraction, including hunting, poaching, and fishing, further exacerbates the problem. Further inadequate management issues are related to insufficient technical and human resources to protect and effectively manage the area. This inadequacy has strong negative implications for conservation efforts.

Inappropriate land and sea use, particularly the abandonment of traditional salt-making processes, has led to a devastating loss of biodiversity and cultural and landscape values. This change also negatively impacts social life and tourism development. Human population growth, higher consumption, and material aspirations contribute to uncontrolled mass tourism development in nearby beach areas. The abandonment of traditional land-use practices that supported biodiversity has also resulted in increased waste generation, posing a potentially serious threat to the area.

Lastly, a lack of information, knowledge, and education among the local population

and stakeholders about the area's values and threats contributes to a lack of interest and political pressure for protection. This

moderate threat underscores the need for increased awareness and education to foster better conservation practices.

Policy

The policy context regarding Salina Ulcinj reflects a complex interplay of legal, administrative, and environmental considerations since its designation as a Nature Park in 2019. Despite the protective status, several significant issues continue to impede effective management and conservation efforts.

Protection and management

Since Salina Ulcinj was designated as a Nature Park in 2019 and included in the Ramsar list of wetlands of international importance, the primary challenge has shifted from policy gaps to the extremely slow progress in establishing an effective management body, defining a comprehensive management plan, and securing financing for restoration and ongoing management. The absence of an active management structure means that essential conservation activities are delayed, and the site's ecological integrity is at risk.

Compliance with European Directives

Montenegro is obligated to comply with the EU Birds and Habitat Directives, necessitating the designation of Salina Ulcinj as a Special Protection Area and a Site of Community Importance. Effective management to improve the site's conservation status is crucial. The European Commission has underscored this requirement in the closing benchmarks for Chapter 27 of the EU accession negotiations, highlighting the need for better governance and conservation measures.

Administrative delays and actions

Several administrative hurdles further complicate the situation. The government of Montenegro has not yet revoked its decision to establish a military training ground in Sinjajevina, which adds to the regional environmental pressures. Despite ongoing work to establish the natura 2000 network, critical actions concerning Ulcinj Salina are significantly delayed. As of 29 June 2022, a meeting concluded that the management model for Salina Ulcinj would be a limited liability company jointly founded by the Government of Montenegro and the Municipality of Ulcinj. However, the municipality has not yet formalised the establishment of this company or related decisions and regulations, including appointing a manager, internal organisation, and operation rules.

Restoration and conservation

Efforts to restore and conserve Salina Ulcinj are ongoing but face significant obstacles. A working group established by the Municipality of Ulcinj has prepared a management plan, and external experts have completed a hydrological study for the site, one of the activities outlined in the Action Plan for the National Environmental Approximation Strategy. Additionally, a project to repair the dikes at Ulcinj Salina, critical for restoring ecological balance and maintaining the wetland habitat, was planned for 2022 but was not implemented due to administrative

barriers. Specifically, the then-director of the National Parks of Montenegro refused to sign the permit request for the repair works, delaying a crucial conservation project.

After the government's replacement of the mentioned director, the restoration works could finally be implemented by CZIP in late 2023.

Recommendations

To ensure the effective conservation and sustainable management of Salina Ulcinj, the following recommendations should be implemented:

- Designate the Ulcinj Salina as a Special Protection Area and a Site of Community Importance.
 - The Municipality of Ulcinj and the Government of Montenegro should immediately proceed with the formal establishment of a limited liability company to manage Salina Ulcinj.
 - Once established, the management entity should be adequately staffed with skilled professionals and provided with sufficient financial resources to carry out its conservation and management duties effectively.
 - Collaborate with NGOs and international partners to elaborate a comprehensive management plan. This plan should be fully financed and include detailed actions for restoration, conservation, and sustainable use of the site.
 - Implement restoration projects, such as repairing the dikes, to restore the ecological balance of Ulcinj Salina. Continuous management should focus on maintaining the site's biodiversity while also benefiting the local community.
 - Transpose the Habitat and Birds Directives to ensure long-term sustainability and compatibility with the EU Acquis
 - The European Commission should strictly adhere to its closing benchmarks, ensuring that Montenegro meets all requirements, particularly those related to the conservation status of Salina Ulcinj, before the country is granted EU membership. This includes thorough verification that the conservation status has significantly improved, as per the recommendations above
- Increase efforts to educate and engage local communities and stakeholders about the biodiversity and cultural significance of Salina Ulcinj. Raising awareness will foster local support for conservation initiatives and generate political pressure for continued protection efforts.
 - Establish a robust monitoring and evaluation framework to regularly assess the implementation of conservation and management activities. This should include periodic reviews and updates to the management plan based on ecological monitoring data and stakeholder feedback.



Copyrights: Peter Sackl





Safe flyways.

The case of
illegal killing
of birds
in Serbia

The story

In the heart of Serbia, where the land whispers tales of migrations old and new, the sky becomes a stage twice a year.

Each spring and autumn, a breathtaking spectacle unfolds as millions of birds traverse the skies, navigating the Adriatic Flyway¹, a route stitched through the Western Balkans, connecting the birds' breeding with their non-breeding grounds. Among these travellers are waterbirds, raptors, and songbirds, each playing a crucial role in the symphony of nature.

The Adriatic Flyway, particularly its Serbian stretch, is dotted with vital resting sites like wetlands and floodplains that serve as sanctuaries where these voyagers pause to rest and feed. These spots are not just stops on a journey but are crucial for the survival of these species, providing the necessary safe havens to fuel the exhausting migration.

However, this natural marvel is shadowed by a grim reality. The illegal killing of birds has become a widespread and destructive force, especially in migration bottlenecks like Serbia, where the geography itself seems to funnel these birds through an ordeal of danger. Hunters for sport and income, farmers protecting crops from perceived threats, and pigeon keepers culling predators create an array of challenges that these migratory species must navigate, not only in the air but also on the ground.



Even though the motivations vary, the outcome is tragically the same: a significant toll on bird populations that could have lasting impacts on biodiversity and ecological balance. In Serbia, the narrative of bird migration is not just about the astonishment with nature's routines but also a story of survival in the face of human-induced threats.

¹ [ADRIATIC_FLYWAY_2009_Conference_Proceedings.pdf](https://www.euronatur.org/fileadmin/docs/jagd/ADRIATIC_FLYWAY_2009_Conference_Proceedings.pdf)
(https://www.euronatur.org/fileadmin/docs/jagd/ADRIATIC_FLYWAY_2009_Conference_Proceedings.pdf)

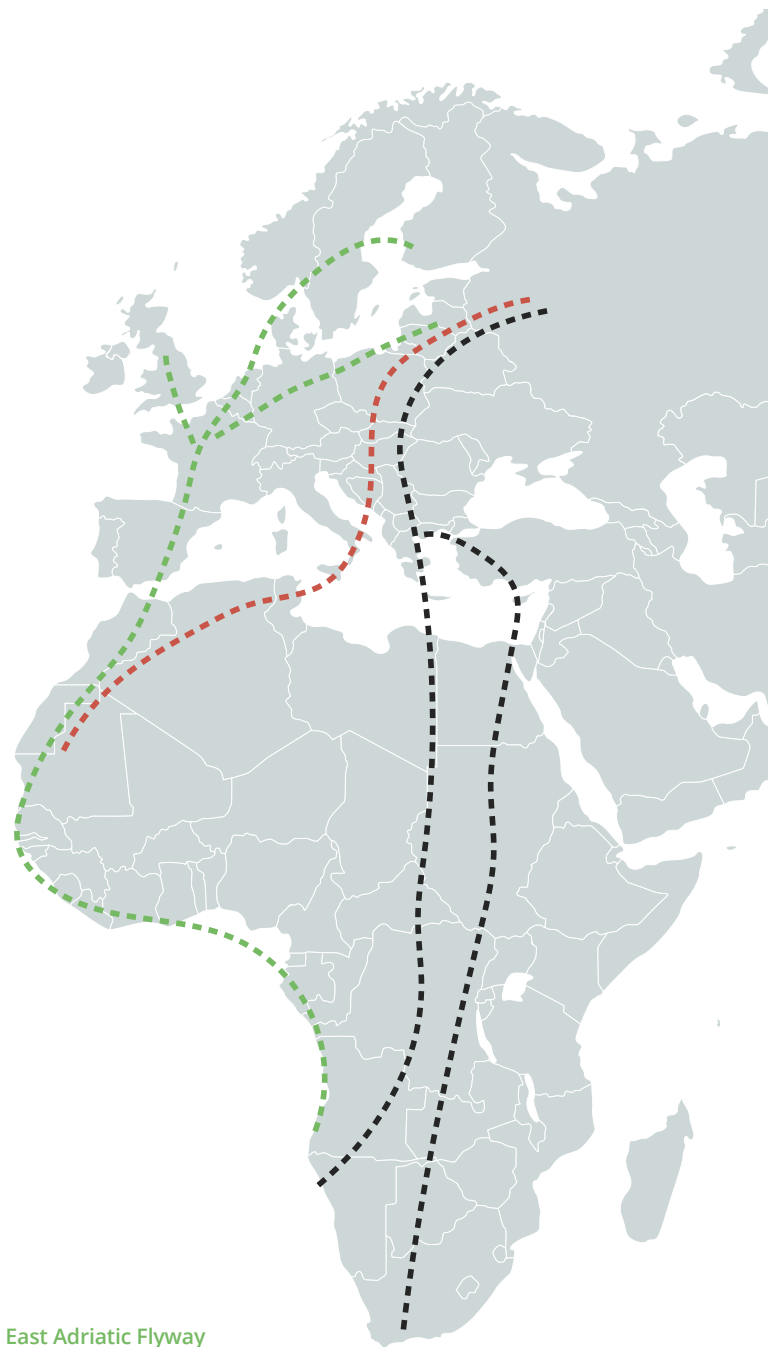
Biodiversity Context

The Adriatic Flyway has served as a crucial migration route for centuries, connecting the vast cold expanses of the winter northern hemisphere, with limited food resources, to the temperate and tropical climates of the summer global south, where there is plenty of food. This flyway is not just a path in the sky but a lifeline for millions of birds. Historically, this route has been recognised for its critical role in the annual life cycle of these species, with the resting sites, such as the lush wetlands and rich floodplains, being the ecological treasures along the flyway.

163 000 birds are illegally killed in Serbia each year

In recent years, studies like the one conducted by the BirdLife International ² partnership have drawn a dark picture of the challenges faced by these migratory birds. This 2016 comprehensive study revealed that an estimated 25 million birds are illegally killed or taken across the Mediterranean each year, with Serbia accounting for a significant portion of this toll, of an estimated 104,000-163,000 birds. Specifically, regions like Vojvodina are hotspots for illegal bird killing, where tens of thousands of birds, including up to approximately 60,000 Common Quails (*Coturnix coturnix*) annually, fall victim to these practices.

The illegal killing of birds (IKB) disrupts ecological processes and threatens



East Adriatic Flyway
Adriatic Flyway
Black Sea & Mediterranean Flyway

populations of affected bird species. It also threatens the very fabric of biodiversity that has been woven over millennia along the Adriatic Flyway. Therefore, it becomes clear that the conservation of this migratory route is not just about protecting birds but preserving the ecological heritage that defines this region.

² <https://www.cambridge.org/core/journals/bird-conservation-international/article/preliminary-assessment-of-the-scope-and-scale-of-illegal-killing-and-taking-of-birds-in-the-mediterranean/34A06A94874DB94BE2BBACC4F96C3B5E>

Challenges

Inadequate enforcement and cultural norms of poaching

The primary challenge in the fight against the illegal killing of birds in Serbia centres around the ineffective enforcement of existing laws coupled with a persistent culture of illegal hunting activities. Despite sufficiently clear regulations that prohibit the killing of protected species and the use of illegal hunting methods, these destructive practices continue unabated. In the rare cases where offenders are convicted, the penalties are so light that they have no deterrent effect. This gap between legislation and enforcement is exemplified by the Serbian government's failure to develop a National Action Plan (NAP) for combating the illegal killing of birds, despite its international commitments under the Bern Convention and the Convention on Migratory Species (CMS) and the strategic necessities outlined in the Conventions' joint Rome Strategic Plan for eradicating the illegal killing of birds.

Geographical vulnerabilities and seasonal peaks

The Adriatic Flyway, a critical migration route for millions of birds, illustrates a natural challenge. During migration seasons (i.e. spring and autumn), this route experiences pronounced illegal activities in geographical bottlenecks that naturally funnel birds through Serbia. These areas, critical for the birds' rest and refuelling, become zones where they are most vulnerable to poaching, leading to significant disturbances in their migratory patterns and affecting populations of ecologically relevant bird species.



Copyrights: Karin Herr

Unnatural mortality and habitat disturbance

The illegal killing of birds introduces an unnatural mortality factor among already stressed migratory bird populations. This is not merely about the reduction in bird numbers; the associated activities severely disrupt their natural behaviours and degrade crucial habitats. For example, the noise and disturbance from gunfire not only results in direct fatalities but also stress plenty of other individuals and scare away entire flocks, thus degrading the quality of essential resting sites that are vital for the birds' survival during their tough journeys.

Enforcement challenges and government accountability

Government and enforcement agencies often face criticism for marginalising the issue of illegal killing of birds. Flawed (and partly obviously false³) government reporting and the failure to implement strategic plans as required by international conservation agreements underscore a broader issue of accountability. Moreover, the establishment of a specialised environmental police unit in 2021 of almost one hundred police officers to

³ E.g. in the Assessment of the 3rd national Scoreboard reporting by contracting parties to the Bern convention and MIKT (<https://rm.coe.int/tpvs26-2023-3rd-ikb-scoreboard-analysis/1680acfd8a>) on page 44 and onward, Group C, D, and E, there is a clear discrepancy. For example, group C: "2018 NAP is developed and waiting approval", "2020 NAP is approved and being implemented", "2023 NAP is in early development stages".

handle a variety of environmental crimes has not sufficiently addressed the enforcement gap. Allegations of personal relationships between law enforcement and poachers raise serious concerns about the effectiveness of these measures.

Complex dynamics among stakeholders

The relationship between legal hunting organisations and the practice of poaching adds another layer of complexity to enforcement and community engagement efforts. While hunting organisations officially condemn poaching, it is often their members who are found engaging in these illegal

activities. This complicates the enforcement landscape and blurs the lines between legitimate and illicit hunting practices.

They come, they pay, they kill

From the conservationists' perspective on the ground, the situation is rather grim. The sentiment, "They come, they pay, they kill," voiced by local conservationists, captures the frustration and challenges they face. It highlights the cynical nature of the international hunting tourism industry in Serbia ⁴, where illegal killings are often masked as legitimate sporting activities, exploiting both the legal loopholes and the enforcement weaknesses.

Impacts and consequences

Environmental impacts and consequences

The illegal killing of birds along the Adriatic Flyway casts a long shadow over the region's environmental health, with effects rippling out beyond the immediate tragedy of lost avian life. As hunters discharge firearms and encroach upon secluded natural areas, the once tranquil habitats critical for bird migration become zones of disturbance. The sound of gunfire and the presence of humans markedly degrade these habitats' quality. Essential for rest and refuelling during the tough journey, these compromised areas see a decrease in their ability to support the birds that depend on them. This degradation not only threatens the survival rates of migrating species but also chips away at the overall ecological integrity of these environments.

Beyond the direct impact on individual species and populations, the relentless illegal

killing of migratory birds exerts a broader toll on biodiversity. Each year, significant numbers of birds are illegally taken from the wild, disrupting the delicate balance of the ecosystem. This loss of biodiversity extends its effects through the food network, altering ecological processes and diminishing the natural diversity that underpins the health of the region, with spillover effects into the breeding and wintering sites.

Among the affected species, the Common Quail in Vojvodina stands out, with an estimated 60,000 quails falling prey to illegal activities annually. The reality of these unsustainable practices is that they not only peril populations but also drive long-term declines and potential local extinctions of these vulnerable birds. This continuing pressure reveals the stark challenge of protecting these species and their habitats from the brink of irreversible damage.

⁴ Example by Lasarota Hunting, offering a chance to fire more than 6,000 ammunition shots towards quails and doves: <https://lasarotta.blogspot.com/2021/06/dove-quail-shooting-in-serbia.html>; Another example by La Starna Hunting: <https://la-starna.com/?p=395> see point 4: "Unlimited killing of game"...and this photo clearly shows two electronic calling devices beneath the wooden staircase on the right. <https://la-starna.com/wp-content/uploads/2024/01/y996-1.jpg>

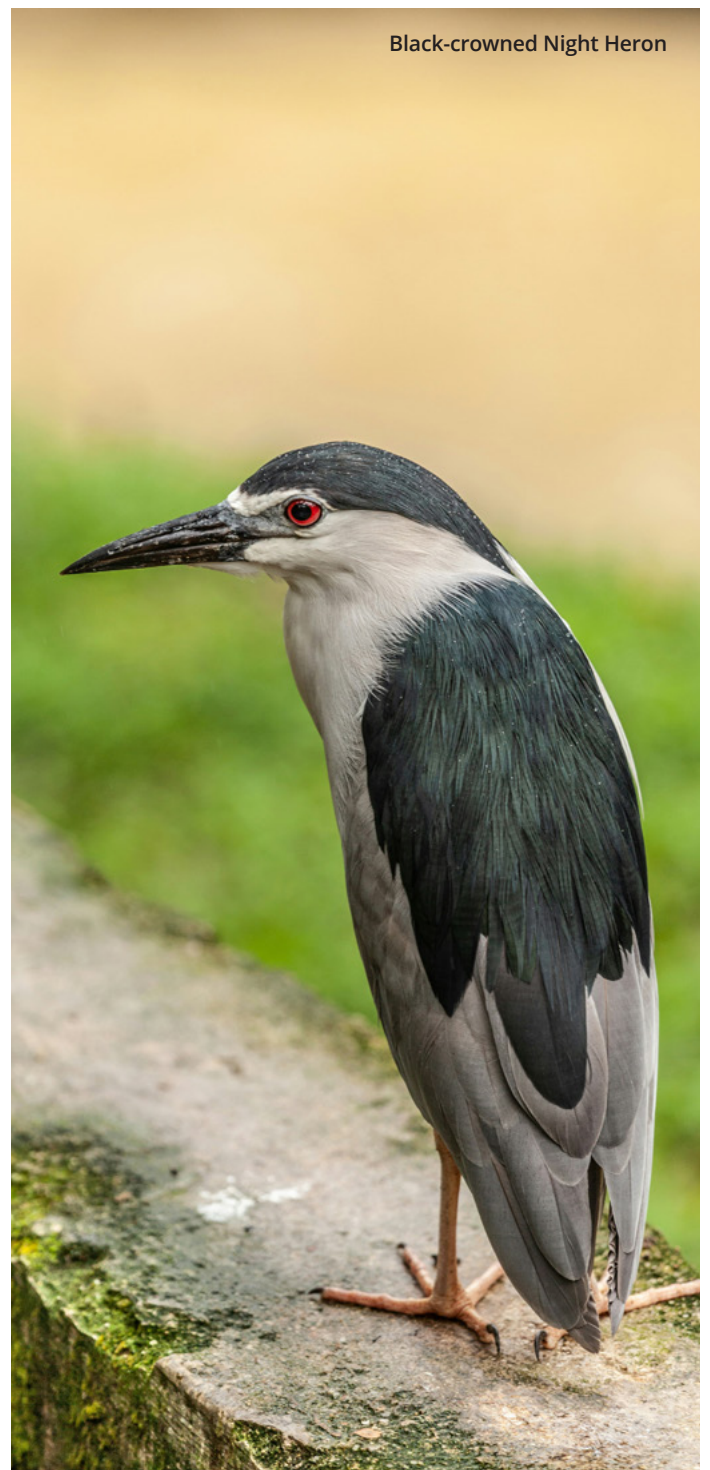
Socioeconomic impacts and consequences

The wave of effects of illegal bird killings in Serbia extends into the socioeconomic frame of local communities and the broader region, with far-reaching consequences.

Birds that hold significant cultural importance are becoming scarcer, eroding a piece of the community's identity and heritage. The impact on these traditions affects the cultural landscape and the community cohesion that these activities foster.

The illegal killing of birds, often driven by the thrill of shooting and by the lure of immediate financial gain through black market sales, inflicts long-term damage on local economies. This short-sighted exploitation undermines more sustainable economic activities like sustainable fishing and farming, which depend on robust, biodiverse ecosystems. As these natural systems are compromised, the broader economic stability and future livelihoods of local communities are put at risk. This cycle of degradation and loss contrasts the potential benefits of conservation and sustainable use of natural resources, highlighting the need for urgent and effective interventions to halt these destructive illegal practices.

In Serbia, while birds like pheasants and large game are occasionally part of the diet, many other bird species traditionally are not. Quails, for instance, are primarily targeted by hunters, not for their culinary value but because they present a quick and engaging challenge for both hunters and their dogs. The practice reflects more on the nature of hunting as a sport rather than a means of subsistence. Similarly, wild geese are sometimes used for food, but this is relatively rare.



Historically, there was a time when sparrows were hunted and consumed during the Christmas season in Serbia, but this custom has vanished over the years, signalling a shift in dietary preferences and cultural practices. Today, hunting small songbirds is largely driven by foreign hunters from countries like Italy, Malta, and Cyprus.

Policy

Overview of legislative framework and persistent gaps

In Serbia, the legal framework governing the protection of migratory birds ⁵ has seen important yet temporary updates. For instance, in 2021, the quail hunting season was shortened by 15 days, and temporary bans have been placed on hunting Turtle Doves and Grey Partridge. Evidence of the positive effects (i.e. less birds hunted and subsequent population increase) of shortening of hunting seasons is limited, as hunters tend to increase their efforts. Hunting bans, however, seem to be effective, as recent reports to the commission underline ⁶. Despite these temporary adjustments, which might or might not have a positive effect on local bird populations, significant policy gaps remain, particularly concerning the trade of devices designed for large-scale or non-selective capture and hunting. Devices such as electronic callers, electronic decoys, traps, and mist nets are legally sold both online and in hunting stores, worsening the issue of illegal killing of birds by making these tools widely available and accessible to potential offenders.

Birdlife in Serbia (BPSSS), monitored the sale of these devices between 2022 and 2024, revealing a considerable market for electronic calling devices and traps. Even when manufacturers of these devices have been caught operating illegally, the consequences have been minimal, often just a warning before they resume their operations. This leniency highlights a broader issue of weak enforcement and insufficient deterrence within Serbia's legal system.



Copyrights: Kozioł Kamila / Adobe Stock

Inadequacies in sentencing and enforcement

A critical loophole in the enforcement of wildlife protection laws is the light sentencing for environmental crimes. All sentences related to environmental crimes are under five years, and often, perpetrators can have their charges dropped under the so-called "opportunity principle." This principle allows minor offences to be resolved by paying a fee that is later redistributed to charities or local associations. This principle significantly reduces the risk of committing illegal killing of birds, thus failing to deter criminal activities effectively.

Moreover, the game warden service faces a conflict of interest, as local hunting societies employ wardens who are essentially responsible for policing the very groups that hired them. This arrangement undermines the integrity of wildlife protection efforts and places wardens in a precarious position where even unfounded accusations against them can jeopardise their careers.

⁵ https://datazone.birdlife.org/userfiles/file/hunting/HuntingRegulations_Serbia.pdf

⁶ <https://pecbms.info/wp-content/uploads/2024/05/td-2024-w-flyway.pdf>

Being part of international conventions, like CMS and the Bern Convention, the Serbian Government has access to model law provision and sentencing guidelines that would enable it to improve its legislation and increase the deterrent effects of the judges' verdicts. Using these resources in a structured way with the respective stakeholders should be organised in a National Action Plan framework ⁷.

Compliance with the EU Acquis

Serbia's efforts to align with the European Union's environmental protection framework, particularly the EU Birds Directive and the Environmental Crime Directive (ECD), reveal significant non-compliance issues. The ECD mandates that EU member states treat environmental offences, including the illegal killing and trade of protected species, as criminal offences, subject to substantial penalties. However, in Serbia, many of these offences are treated as misdemeanours, resulting in negligible fines and no substantial legal repercussions.

This misalignment is particularly evident in the handling of cases involving the possession and trade of protected species. For example, the possession of unmarked specimens of protected species is typically treated as a misdemeanour, leading to minimal enforcement actions that fail to address the scale of the problem adequately. The environmental inspection responsible for enforcing these regulations is understaffed and lacks the authority to act swiftly and

effectively, often requiring police collaboration to carry out their duties.

Transposition and implementation of the EU Acquis in Serbia

As Serbia progresses towards EU accession, the country faces significant challenges in aligning its environmental legislation with EU standards, specifically under the Birds Directive, the Habitats Directive, and the Environmental Crime Directive. Despite partial nominal compliance on paper, the practical enforcement and application of these directives reveal substantial gaps that undermine conservation efforts.

Compliance with the EU Birds Directive

Serbian legislation includes provisions that align with the EU Birds Directive, such as the prohibition of hunting from motor vehicles, including boats moving faster than five kilometres per hour. This rule is even more restrictive than the EU directive, showcasing Serbia's commitment to strong legal frameworks – in theory. However, hunting from motor-powered boats in winter remains prevalent, highlighting a significant enforcement gap. This discrepancy between law and practice illustrates a broader issue: while Serbian laws may, in part, formally comply with the EU's requirements, their effective implementation remains a major challenge, undermining the protection of migratory birds and their habitats.

⁷ The following documents are recommended for consultation:

-Legislative Guidance Materials relating to the Illegal Killing, Taking and Trade of Wild Birds (UNEP/CMS/MIKT5/Outcome 1 / T-PVS/Inf (2022) 18_rev2) and Model Law Provisions on Illegal Killing, Taking and Trade of Wild Birds (IKB) (UNEP/CMS/MIKT5/Outcome 2 / T-PVS/Inf (2022) 19_rev3), endorsed by MIKT Members, and by the Standing Committee of the Bern Convention at its 42nd Meeting (November 2022).

-Recommendation No. 171 (2014) of the Standing Committee of the Bern Convention, adopted on 5 December 2014, on the setting-up of national policing/investigation priorities to tackle illegal killing, trapping and trade of (UNEP/CMS/MIKT4/Inf.10).

- Recommendation N° 177 (2015) on the gravity factors and sentencing principles for the evaluation of offences against birds, and in particular the illegal killing, trapping and trade of wild birds (UNEP/CMS/MIKT4/Inf.11).

-C. Naves, D. de la Bodega, S. Cabezas-Díaz, N. López et al. Report on the economic valuation of protected animal species. LIFE Guardianes de la Naturaleza. SEO/BirdLife. Madrid, 2020. (UNEP/CMS/MIKT4/Inf.8).

Compliance with the Environmental Crime Directive

The transposition of the ECD into Serbian law is incomplete and lacks the robustness needed to effectively deter environmental crimes, including those impacting biodiversity. The ECD, revised in 2008, emphasises the need for penalties to be strong enough to act as a deterrent and calls for precise definitions of criminal offences to improve the prosecution and adjudication of environmental crimes. However, the penalties for environmental offences in Serbia are notably lenient and not aligned with the severity of the crimes:

- Penalties – The range of penalties for serious environmental crimes is insufficient, spanning only from six months to five years of imprisonment, often accompanied by an option for a monetary fine. This level of punishment fails to meet the ECD's standards for deterrence.
- Recognition of offences – Serbian law does not recognize the possession of protected wild fauna or flora species as a criminal offence, it is merely treated as a misdemeanour, irrespective of the quantity involved. This approach starkly contrasts with ECD requirements, where such possession should result in significant criminal penalties.
- Trading offences – The laws regarding the trade of protected species are vague and do not specifically address the trade in wildlife, flora, and fauna. Current legislation covers general forbidden trade and cross border trade without adequately addressing the nuances of wildlife trade within Serbia's borders.

Recommendations

The following recommendations aim to align national practices with international conservation standards and effectively address current legal gaps and enforcement challenges.

The foremost recommendation is to develop and implement a National Action Plan on IKB that adheres to the goals and recommendations of the joint CMS/Bern Convention Rome Strategic Plan, which was adopted also with the vote of the Serbian government. This National Action Plan should be comprehensive, involving all relevant stakeholders throughout the development process to ensure a broad consensus and integrated approach to tackling IKB. Serbia's National Action Plan should encompass a set of strategies to address the following:

Improve the legal framework

- Criminalisation of illegal wildlife possession and trade – Amend the legal framework to make the possession and trade of wildlife (dead or alive) explicitly criminal offences. This adjustment will align domestic laws with

the Environmental Crime Directive and increase the legal consequences for violators.

- Adjustment of legal penalties – Specify and increase the lower limits and increase the upper limits for prison sentences related to wildlife crimes to enhance their deterrent effect. Prohibition of non-selective capture devices – ban the sale, possession and use of devices designed for large-scale or non-selective capture, killing, and hunting of wildlife. This includes electronic callers, traps, and other related equipment that facilitates IKB.
- Empowerment of Civil Society – Recognise and enhance the legal standing of civil society organisations in IKB cases, allowing them to participate as experts and advocates in legal processes.

Raise awareness and capacity to strengthen enforcement

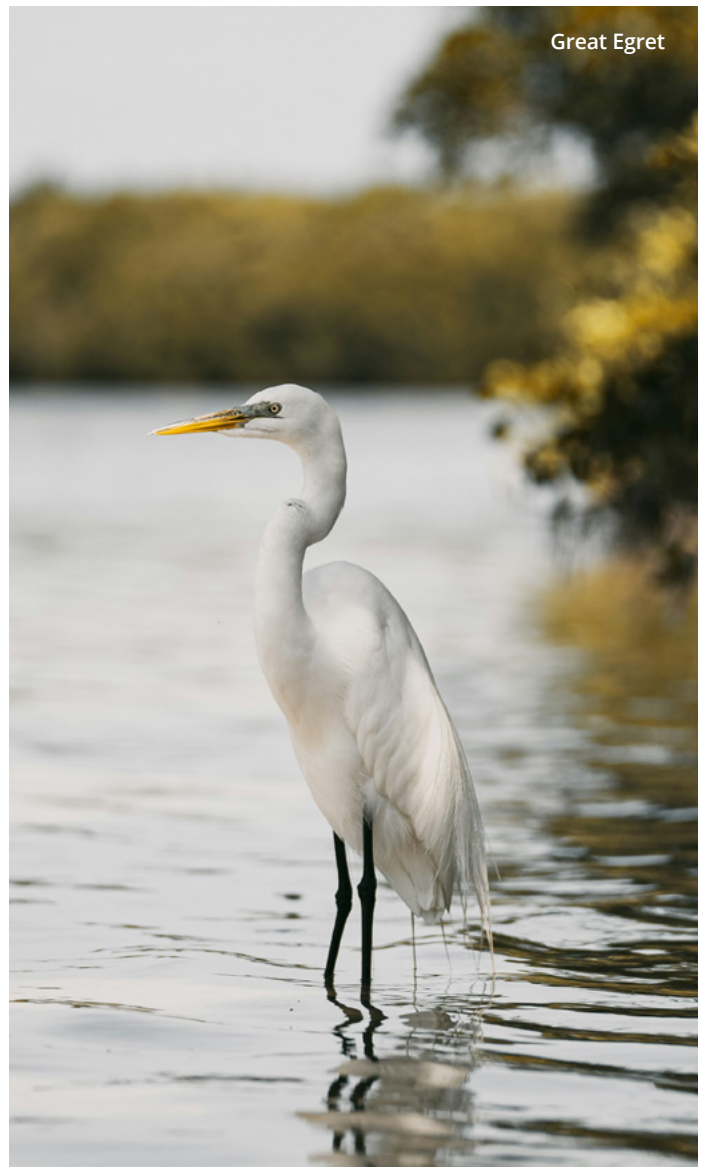
- Strengthen environmental crime units – Improve the capabilities of existing environmental crime units by providing adequate funding and mandates to address IKB with the seriousness it requires.
- Education and training for stakeholders – Implement mandatory regular, specialised education and training programs for police, inspectorates, prosecutors, and judges to improve their ability to recognise, prevent, and prosecute wildlife crimes effectively.

- Establishment of intersectoral taskforces – Create governmental taskforces comprising experts from various fields related to IKB, like enforcers (police, rangers, etc.), prosecutors and judges, but also game wardens, veterinarians, as well as governmental bodies and non-governmental organisations dealing with bird conservation. These task forces should coordinate efforts across different sectors to ensure a unified response to wildlife crimes, also considering the transnational nature of IKB and their links with other crimes.
- Code of conduct and proper jurisdiction – Develop a specific code of conduct and clear jurisdictional guidelines (including sentencing guidelines) to ensure consistent and effective responses to IKB incidents.
- Implementation of international conservation plans – Actively work towards fully implementing the Rome Strategic Plan, which outlines critical strategies for migratory bird conservation.
- National awareness campaigns – Launch national media campaigns to raise public awareness about the consequences of poaching and bird capturing, aiming to shift public perception and encourage reporting of illegal activities.

Designate and effectively manage protected areas

Improve the capabilities of existing environmental crime units by providing adequate funding, training, and mandates to address IKB with the seriousness it requires.

Designate and rigorously manage protected areas where all forms of bird hunting are banned. The list of Important Bird Areas (IBAs) in Serbia ⁸ provides a valuable priority list for such hunting ban sites. The enforcement against poaching should be significantly

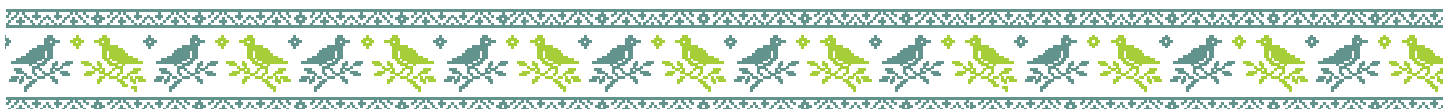


Great Egret

Copyrights: Chris Andrews / Unsplash

improved, especially (but not solely) in these sites. Amongst those sites that need the most urgent attention are, for instance, Labudovo okno, a 4 km stretch along the Danube river, which is crucial for the resting and wintering of waterbirds, and the large fishponds, like Ečka, Bečej, Baranda, Opovo, Bač, Svilojevo, Kapetanski Rit and Vršački Ritovi.

⁸ [Data Zone - BirdLife International \(https://datazone.birdlife.org/site/results?cty=271\)](https://datazone.birdlife.org/site/results?cty=271)





On the edge.
The case of
the Balkan lynx

The story

In the shadowed forests and stoic mountains of the Balkans, a ghostly figure moves with stealthy grace. The Balkan lynx is more than just a creature of flesh and blood, it is a symbol of the wild heart of this region, moving through North Macedonia, Albania, and Kosovo.

With less than 40 individuals remaining, the Balkan lynx is holding on by the thread, on the brink of extinction, making it one of Europe's most endangered large carnivores.

As night falls and the landscape transforms under the moon's pale gaze, the lynx begins its silent patrol. Active from dusk till dawn, this elusive predator has long been shrouded in mystery and myth. Ancient stories passed down through generations often painted the lynx as a malevolent spirit of the forest. Yet, perceptions are changing as the fog of superstition lifts, replaced by a growing interest in nature and wildlife conservation. The Balkan lynx is now emerging as a beloved icon, a point of pride and a beacon for conservation efforts.



Protecting the Balkan lynx requires a partnership of scientists, conservationists, government agencies, and local communities in spirit and paper. This partnership should navigate the complex socio-political landscape of the Balkans to implement effective conservation strategies. The challenge is immense, but the commitment to save this magnificent creature must transcend borders, offering a chance not only for the lynx but for the entire ecosystem it underpins.

Biodiversity context

Historically widespread across the Balkans, the Balkan lynx (*Lynx lynx balcanicus*), a subspecies of the Eurasian lynx, has been integral to the region's natural heritage as a top predator. The health of lynx populations reflects the overall condition of their habitat, making their conservation a barometer for broader environmental health. Protecting the lynx and its environment benefits a wide array of species, underscoring the interconnectedness of the Balkan ecosystem and the need for a systemic conservation approach.

The Balkan lynx has become a flagship species for conservation efforts across the Western Balkans, symbolising the natural heritage of the region. Its image adorns national currency and stamps, and it even serves as a mascot for the North Macedonian football team, embedding it deeply in the cultural identity of the nations within its range.

The survival of the Balkan lynx is a critical conservation priority, as listed in Appendix II of the Bern Convention and Appendix I of the Bonn Convention.

Despite its iconic status, the Balkan lynx faces significant threats. Its numbers dwindled dramatically in the last half a century to less than 40 individuals due to illegal killing, deforestation, habitat loss, and prey depletion.

The establishment of the Balkan Lynx Recovery Programme (BLRP) in 2006 marked a turning point in conservation efforts. This international initiative focuses on habitat protection, stakeholder integration, and ecological research. The programme has led to a significant increase in scientific

knowledge and data availability on the Balkan lynx, providing the basis for crucial decisions, such as the inclusion of the Balkan lynx in Appendix II of the Bern Convention in 2017, as well as Appendix I of The Convention on Migratory Species (CMS) in 2024. Furthermore, the programme has significantly contributed to the establishment of protected areas such as Shebenik-Jabllanice (2008), Korabi (2011) and Munella (2022) in Albania and Shar (2021) on the North Macedonian side, which are crucial habitats for the lynx survival.

Today, the Balkan lynx is recognised as Critically Endangered on the IUCN Red List, reflecting the urgent need for ongoing and enhanced conservation efforts. The baseline for current conservation initiatives is the precarious state of an isolated and small population that continues to be vulnerable to genetic bottleneck effects, stochastic events, and human-induced pressures.

The story of the Balkan lynx is one of both historical significance and urgent conservation needs. As we look forward, the continued focus on this subspecies aims to preserve a key component of the Balkans' biodiversity and maintain the ecological integrity and cultural heritage of the region.



Challenges

Habitat destruction and fragmentation

One of the crucial threats to the Balkan lynx is the destruction and fragmentation of its habitat. Fragmentation affects the lynx and its prey species on individual and population levels. Deforestation, poor forest management and illegal logging lead to the destruction of critical lynx habitats all over its range, including protected areas. A detailed analysis of the Balkan Lynx Recovery Programme on forest loss within the region highlights a consistent trend of forest and tree cover loss over 12 and 18-year periods, primarily driven by inappropriate local and national forest management policies, including forest fire management and illegal logging.

As its habitats become increasingly fragmented, lynx's movement and gene flow between population nuclei are severely disrupted. This isolation not only weakens the overall population by reducing genetic diversity but also hampers the ability of individuals to find mates, heightening the already tremendous risk of inbreeding. Moreover, the loss of biodiversity in these degraded forests affects the lynx's prey species, such as roe deer and hares, which depend on intact habitats for food and shelter.

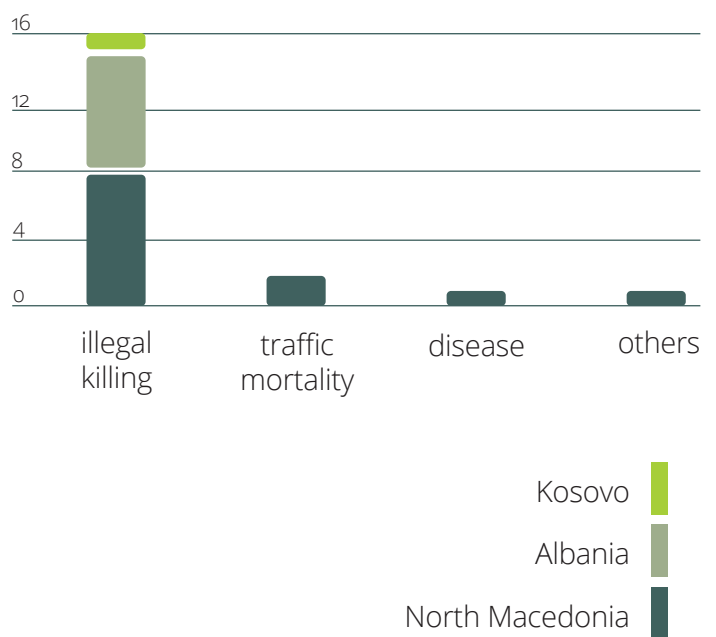
While certain areas are designated as protected, the management and enforcement of these protections often fall short. Dubbed "paper parks", these areas provide nominal protection on paper but lack the effective enforcement needed to prevent illegal activities and ensure sustainable habitat management. Moreover, as countries in the Western Balkans prioritise infrastructure

development, including road and energy infrastructure, these factors amplify the disruption of lynx habitat and populations.

Illegal killing

Illegal killing poses a direct threat to the already critically endangered lynx population (see graph below). With a critically small population, even a few unlawful killings can have dire consequences, pushing the species closer to the brink of extinction. Wildlife crimes, including the poaching of lynx and their prey, are inadequately prosecuted, with offenders rarely facing deterring penalties. This legal leniency fails to deter illegal activities and undermines the broader conservation efforts necessary to protect the lynx.

Known Balkan Lynx Mortality 2006-2023



Source: Balkan Lynx Recovery Programme

Small Population Size

The extremely small population of the Balkan lynx, comprising less than 40 individuals, suffers from loss of genetic diversity and inbreeding, which diminishes its adaptability to environmental changes and increases vulnerability to diseases. This situation lowers reproductive success and poses a significant risk of extinction in the (not so-) long run. The population's small size makes it vulnerable to stochastic events, such as disease outbreaks or natural disasters, which could rapidly wipe out the remaining animals.

Lack of effective conservation of lynx

Despite a gradual improvement in public attitudes towards the lynx, achieving widespread recognition of its endangered status remains a challenge, particularly within the political landscape. Responsible institutions are failing to implement and enforce key measures to protect the Balkan

lynx, its habitat, and its prey. None of the range countries have adopted national action plans, and a comprehensive transboundary Conservation Strategy is also missing. While the lynx is now listed under the Bonn Convention and developing a Regional Conservation Strategy is part of its Concerted Actions, there is alarmingly low commitment to existing conservation efforts and initiatives. This lack of political support obstructs critical measures needed to protect the lynx and its habitat. Without robust community and political backing, as well as policy initiatives focused on enforcing laws, establishing ecological corridors, and promoting sustainable forest management, effective conservation becomes increasingly difficult. The stark reality is that, without immediate and decisive action, this population faces the grim prospect of extinction in the foreseeable future.

Impacts and consequences

Environmental impacts and consequences

It is important to understand that the Balkan lynx is under enormous pressure in two respects:

Firstly, there is the "internal" danger that arises from the critically small population size, which is reflected in inbreeding effects, low genetic diversity and reduced adaptability to changing environmental factors such as climate shifts or new diseases.

Secondly, this extremely vulnerable status is not addressed with the urgently needed concerted conservation actions; instead, the population is experiencing additional external pressure from the factors described above,

such as habitat deterioration, illegal killing and weak law enforcement and protection management.

All in all, it is clear that the Balkan lynx is doomed if the situation cannot be changed in the shortest possible time.

Moreover, the Balkan lynx's decline is not just a concern for the species but a warning sign of larger environmental degradation. Its disappearance would not only result in the loss of a keystone predator but also signify deeper ecological damage.

Social impacts and consequences

Protecting the Balkan lynx has the potential to unite environmental conservation

efforts across the Balkans. However, weak governance, corruption, and competing social and economic priorities often hinder this potential.

As views shift from seeing the lynx as a feared predator to a symbol of pride, there's an opportunity for community-led conservation initiatives. The Balkan lynx holds cultural significance in the Balkans and local communities are recognising the importance of coexisting with it, integrating its conservation with traditional practices like livestock herding through protective measures like guard dogs.

Programmes like the Balkan Lynx Recovery Programme (BLRP) are fostering policy development and cross-border cooperation, leading to robust lynx monitoring and new



Balkan lynx

Copyright: PPNEA

protected areas. The collaborative nature of the BLRP highlights how environmental conservation can strengthen regional cooperation, enable knowledge transfer and enhance political relationships across borders.

Policy

The conservation framework for the Balkan lynx across Albania, Kosovo, and North Macedonia is structured around the Bern Convention and the EU Habitats Directive, supplemented by national legislation tailored to each country's specific circumstances and requirements.

Bern Convention and several main provisions

As signatories, Albania and North Macedonia are directly bound by the Bern Convention, which mandates the strict protection of the Balkan lynx, listed in Appendix II. This includes prohibitions against illegal killing and capture and requires the preservation of habitats essential for the species' survival. Due to its unique international status, Kosovo aligns with the convention's guidelines through its national policies and regional cooperation efforts.

Article 2 of the Bern Convention mandates that contracting parties maintain wildlife populations at levels that meet ecological, scientific, and cultural needs while considering economic and recreational aspects. However, the current critically endangered status of the Balkan lynx on the IUCN Red List indicates that these obligations are not being met by the countries. This discrepancy underscores the urgent need for these countries to implement more effective conservation measures to improve the survival prospects of the Balkan lynx.

Article 4 of the Bern Convention, which focuses on habitat protection, mandates that contracting parties ensure the conservation of habitats for species listed in its appendices, which includes the Balkan lynx. This obligation has led to creating the Emerald Network, parallel to the EU's Natura 2000, to establish protected areas. However, challenges remain,

such as the absence of Jablanica, a critical habitat for the lynx, from North Macedonia's protected areas list and Polis-Valamara in Albania. This gap highlights ongoing issues complying with the convention's requirements, especially in safeguarding essential habitats against threats like the proposed hydropower developments in North Macedonia's Mavrovo National Park.

Mavrovo is identified as a core reproduction area for the critically endangered Balkan lynx. Concerns arose when plans for extensive hydropower development threatened the park's ecological integrity. In response to these plans, a complaint was submitted, and the Bern Convention's Standing Committee took action by recommending the suspension of the development projects until a strategic environmental assessment (SEA) could be conducted. This assessment specifically considered the cumulative impacts of all planned developments and addressed the conservation needs of the Balkan lynx, among other species. The recommendation led to the European Bank for Reconstruction and Development (EBRD) and the World Bank reconsidering their financial involvement, showcasing the international implications of local conservation decisions.

EU Habitats Directive and several main provisions

The EU Habitats Directive is a guideline for aligning Western Balkans conservation measures and practices with EU environmental policies. Albania, Kosovo, and North Macedonia are working to harmonise their legal framework with the directive to ensure the protection of natural habitats and the conservation of wild fauna and flora.

There is still no silver lining regarding the transposition and implementation of these frameworks in national legislation. As an aspiring member of the EU, the countries should continue working on designating Special Areas of Conservation (SAC) for the Natura 2000 network to ensure the highest level of habitat protection. Countries must work on implementing necessary conservation measures to preserve these habitats, regulate any potentially harmful projects, and prevent significant disturbances to the species and their habitats. This framework is crucial for the Balkan lynx, requiring proactive measures against illegal activities like poaching and ensuring sufficient prey and habitat are maintained for their survival.

There are fundamental gaps regarding the implementation of the provisions related to species protection, taking into consideration that illegal killing is one of the key reasons for lynx population depletion.

Recommendations

The multiple challenges facing the Balkan lynx emphasise the urgent need for stronger conservation efforts. Protecting habitats, enforcing anti-poaching laws, effective management plans, and enhancing genetic

diversity are all essential to preventing the species' extinction.

Addressing the following recommendations is crucial to effectively strengthen the conservation strategy for the Balkan lynx.

Improvement of habitat:

- Enhance habitat connectivity: Establish ecological corridors between critical habitats, such as Mavrovo National Park and Munella Mountain Nature Park, to facilitate lynx gene flow and movement. Assess and mitigate the impacts of infrastructure projects that fragment these connections.
- Designate and properly manage Protected Areas (PA): New protected areas must be designated. It is crucial to develop and implement PA management plans that include biodiversity monitoring, addressing threats like illegal activities, and restoring habitat.
- Alignment of legislation with EU: Implement stricter laws and policies regarding hunting and forestry to enhance protections for the lynx.
- Restore degraded habitats: Implement reforestation and restoration projects in key areas to improve habitat quality for the lynx.

Concrete conservation actions and capacity building:

- Management Plans for the lynx: These plans should outline clear goals for species recovery and threat mitigation. A coordinated regional strategy with a monitoring framework is also vital, as the lynx's habitat spans multiple countries, necessitating cross-border cooperation. Conservation actions based on the management plans and strategies need to be implemented.
- Active Conservation Management – Reinforcement of the lynx: To enhance the genetic diversity of the Balkan lynx population, a reinforcement strategy would involve releasing individuals from other lynx populations. This approach would aim to strengthen the genetic pool, potentially improving the resilience and long-term survival of the species in its natural habitat.
- Develop community engagement programmes: Create educational programmes for youth and local communities focused on sustainable wildlife management.
- Involve local hunting groups: Engage hunting communities in conservation efforts to leverage their knowledge.
- Coordinate regional efforts: Enhance collaboration among Balkan countries for joint conservation initiatives addressing political and logistical challenges.



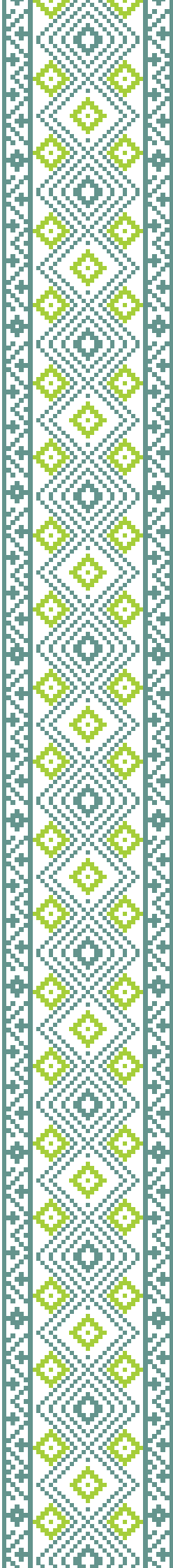
Copyrights: Ilir Shyti / PPNEA

- Stray dog population management: Implement spay/neuter programs to control stray dog populations and reduce resource competition. Conduct campaigns to inform the public about the impact of stray dogs on wildlife.

Combat illegal killing:

- Ensure consistent legal prosecution of cases of illegal killings
- Tighten Anti-Poaching Laws: Enact stricter regulations against illegal killing with significant penalties for offenders.
- Provide specialised training: Equip law enforcement with training on wildlife crime and the ecological importance of the lynx.





Conclusions

It is clear that the issues faced by this biodiversity-rich region are interconnected and complex.

The diverse case studies presented in this report not only illuminate specific local and systemic threats but also underscore the urgent need for strategic, actionable responses.

There is a critical need for immediate action to halt ongoing destructive activities, such as construction at the Vlora International Airport, and to initiate restoration efforts where damage has occurred, such as in Ulcinj Salina and Vjosë-Nartë. This includes restoring habitats to their original state or as close as possible to mitigate the impacts on local ecosystems.

A recurring theme across our cases is the necessity for stronger legal frameworks and policy measures. This includes the repeal of detrimental legal changes, such as those allowing harmful infrastructure developments in protected areas, and the enhancement of enforcement mechanisms to combat illegal activities like construction and poaching.

Effective management plans are crucial for the long-term sustainability of key biodiversity areas. As highlighted in the cases of Livanjsko Polje and Ulcinj Salina, this involves establishing or improving management bodies with adequate resources and clear responsibilities to ensure the proper implementation of conservation measures and sustainable use of natural resources.

Enhancing the involvement of local communities and stakeholders in conservation efforts is vital. This includes fostering partnerships with NGOs, local authorities, and international bodies to

collaboratively develop and implement conservation strategies, as well as raising public awareness about the ecological and economic importance of biodiversity conservation.

The alignment with EU environmental directives is essential for the Western Balkans' EU accession process. We stress the importance of setting environmental benchmarks, like those related to the protection and management of areas such as Vjosë-Nartë, as prerequisites for EU membership negotiations. This approach ensures that environmental governance plays a central role in the region's integration into the EU.

A way forward with a goal-oriented approach

The Kunming-Montreal Global Biodiversity Framework (GBF), adopted at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity, sets ambitious targets to safeguard the planet's biodiversity by 2030. Implementing these targets at the national level in the Western Balkans would significantly enhance biodiversity conservation efforts. By developing specific, actionable national plans that align with these global targets, the region can ensure measurable progress in protecting its unique ecosystems. This approach not only supports biodiversity but also reinforces commitments to sustainable development and climate resilience.

Simultaneously, there is a pressing need to strengthen the Green Agenda for the Western Balkans (GAWB) within the framework of the European Green Deal; hence, the European Commission's proactive involvement becomes crucial. By ensuring that the GAWB's objectives align closely with the EU Green Deal, the Commission should be able to

foster effective governance and enhance resource allocation. This enhanced alignment would facilitate integrated environmental and economic policies that significantly benefit the EU and the Western Balkans.

Moreover, the financial architecture supporting biodiversity conservation in the region needs to be more ambitious and structured. Current instruments like the

Instrument for Pre-accession Assistance, Economic and Investment Plans, and other EU funding mechanisms should dedicate a specific budgetary line for biodiversity. Increased targeted financing would enable the implementation of the aforementioned national plans under the GBF and the specific actions of the GAWB, ultimately leading to more robust conservation outcomes.



Copyrights: Zylion Vorpsi



