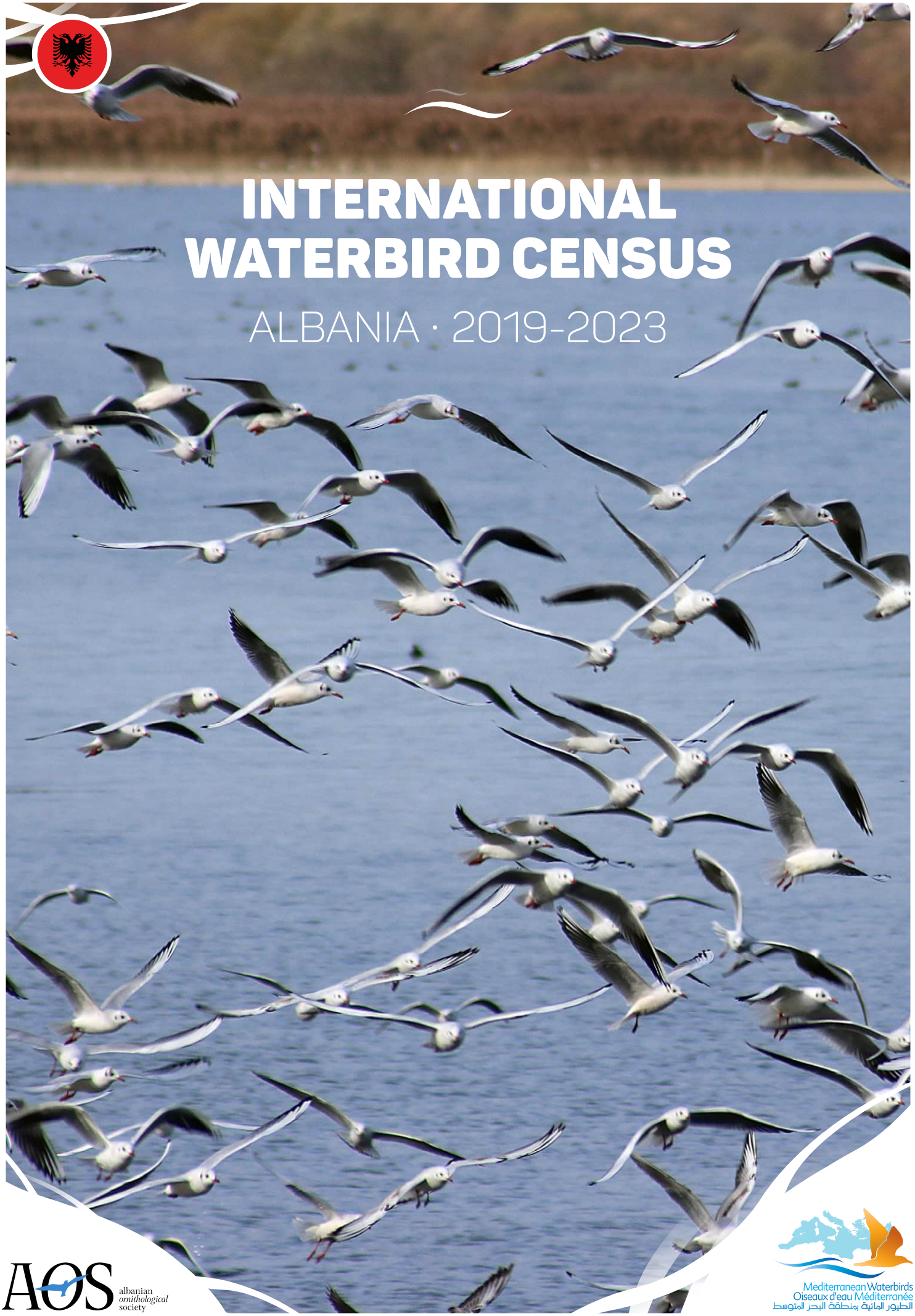


INTERNATIONAL WATERBIRD CENSUS

ALBANIA · 2019-2023

AOS albanian ornithological society

Mediterranean Waterbirds
Oiseaux d'eau Méditerranée
الطيور المائية بمنطقة البحر المتوسط

ACKNOWLEDGEMENTS AND LIST OF PARTICIPANTS

The International Waterbird Census (IWC) is made possible in Albania through the collaboration of a wide network of institutions, professionals, and dedicated volunteers. The coordination and implementation of the counts rely on the commitment of organizations such as the Albanian Ornithological Society (AOS), the National Agency for Protected Areas (NAPA), and other academic and environmental NGOs. This section recognizes the valuable contributions of all individuals and institutions who supported census efforts in the field and in analysis.

We extend special thanks to the national team leaders and volunteers whose engagement across Albania has strengthened the country's long-term waterbird monitoring capacity. A heartfelt thank you to the entire volunteer network involved throughout the years, whose valuable contributions have supported all the counting teams. We extend our deepest gratitude in particular to Dr. Taulant Bino, National Coordinator in Albania, for his tireless efforts in making the International Waterbird Census possible since 1994.

ORGANIZATIONS:

Albanian Ornithological Society (AOS), National Agency for Protected Areas (NAPA), Association for Protection of Aquatic Wildlife in Albania (APAWA), University of Tirana (UT), Protection and Preservation of the Natural Environment of Albania (PPNEA), Agricultural University of Tirana (AUT), Birds of Albania (BOA).

INDIVIDUALS (TEAM LEADERS):

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Bibliographic reference: E. Xeka, B. Shehu and T. Bino. 2025.
International waterbird census. Albania report (2019-2023). Medwaterbirds Network, Tour du Valat, 12 p.

Cover image: Black-headed Gull (*Chroicocephalus ridibundus*) Lake Shkoder Nature Reserve © AOS / **Photo p.2:** Dunlin (*Calidris alpina*) foraging in Godulla e Ushtarit, Divjaka-Karavasta National Park © AOS / **Cartography:** Marta Lago, Khalil Baddour / **Translation and proofreading:** Charles La Via
With the contribution of Marta Lago, Khalil Baddour, Laura Dami / **Graphic design and layout:** Atelier Guillaume Baldini

MOBILIZED **NATIONAL OBSERVERS**

This report summarizes the results of Albania's national waterbird monitoring program from 2019 to 2023. It outlines the expansion of the monitoring network, analyzes trends in waterbird populations, and identifies key wetlands that meet international importance criteria. The findings contribute to national biodiversity assessments and aim to support evidence-based conservation planning and policy development for Albania's wetlands and waterbirds.

NUMBER OF VOLUNTEERS:

100-120

OBSERVERS INVOLVED IN COUNTS

TOTAL NUMBER OF SPECIES OBSERVED:

77

SPECIES OBSERVED IN ALBANIA (2019-2023)



NUMBER OF WETLANDS VISITED:

35

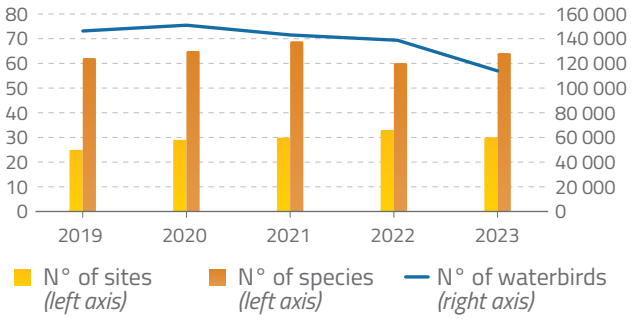
WETLANDS VISITED AT LEAST ONCE (2019-2023)

14

NEWLY COUNTED WETLANDS (2019-2023)

EVOLUTION IN THE NUMBER OF SITES VISITED,

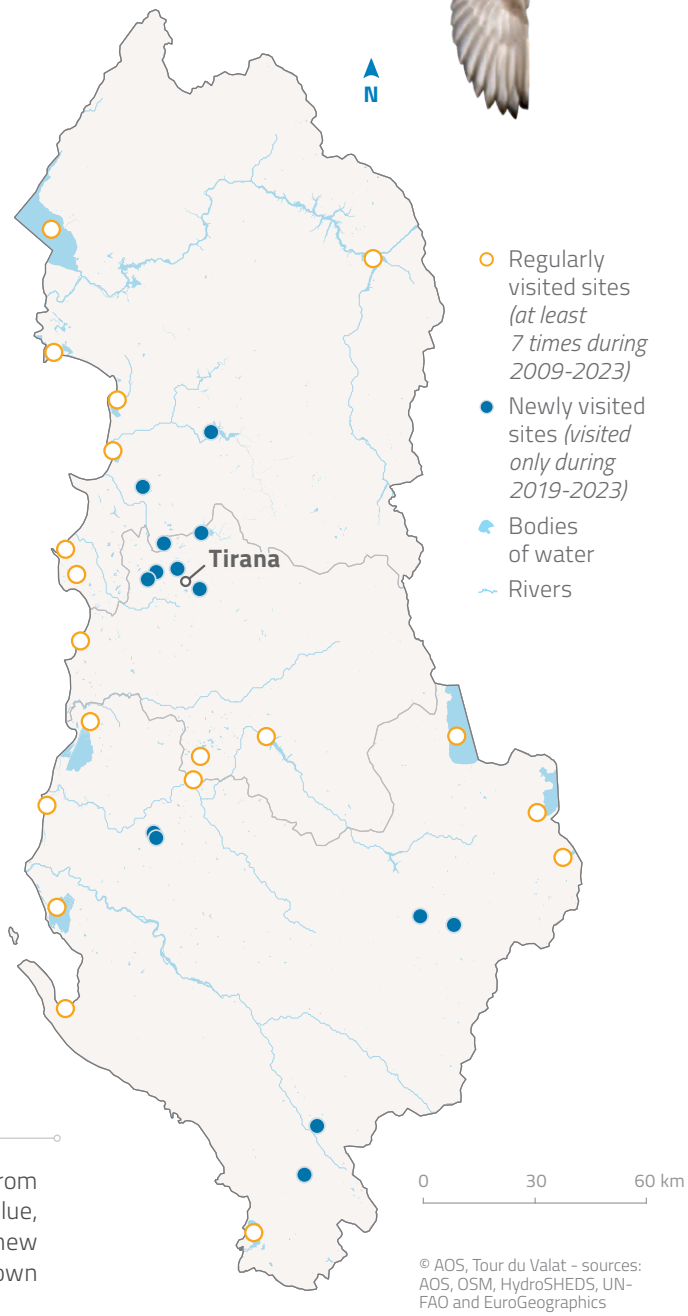
counted species and waterbirds (2019-2023)



From 2019 to 2023, the number of sites visited in Albania increased, reflecting expanded monitoring efforts and capacity-building initiatives. However, the total number of waterbirds counted showed a slight decline after 2020. This trend may be linked to environmental changes such as habitat fragmentation, water pollution, human disturbances, or shifts in bird populations. Further analysis of species diversity trends will help clarify these variations.

SITES MONITORED in Albania (2009-2023)

The map shows the waterbird monitoring wetlands in Albania from 2019 to 2023. The 14 newly visited wetlands are marked in blue, while the 19 regularly monitored sites are shown in orange. The new sites include inland artificial reservoirs, some of which have shown an increasing trend in waterbird numbers over the years.



© AOS, Tour du Valat - sources: AOS, OSM, HydroSHEDS, UN-FAO and EuroGeographics

MAIN TRENDS (2019-2023) IN WATERBIRD POPULATIONS

DECLINING SPECIES, DURING THE ASSESSMENT PERIOD (2019-2023)

SPECIES		VALUES			
English name	Scientific name	Average nb. of birds	Nb. sites	Magn.*	±ES**
Common Ringed Plover	*Charadrius hiaticula*	11	3	-1.35	0.57
Mute Swan	*Cygnus olor*	27	5	-0.74	0.21
Northern Shoveler	*Spatula clypeata*	2 015	13	-0.30	0.15

* **Magn.:** Magnitude / ** **±SE:** Standard error. The trends shown in the tables are at least significant at an alpha risk of 5%.

Based on monitoring data collected between 2019 and 2023, statistical analyses have identified significant population declines in several waterbird species across wetland sites monitored in Albania. The table below presents three species with negative trends, including the magnitude of decline, standard error, and statistical significance (p-value). These findings highlight the need for strengthened conservation efforts for these species and their habitats. The negative magnitude values indicate a decreasing trend, with statistical significance confirmed for all three species ($p < 0.05$).

NORTHERN SHOVELER (*Spatula clypeata*)

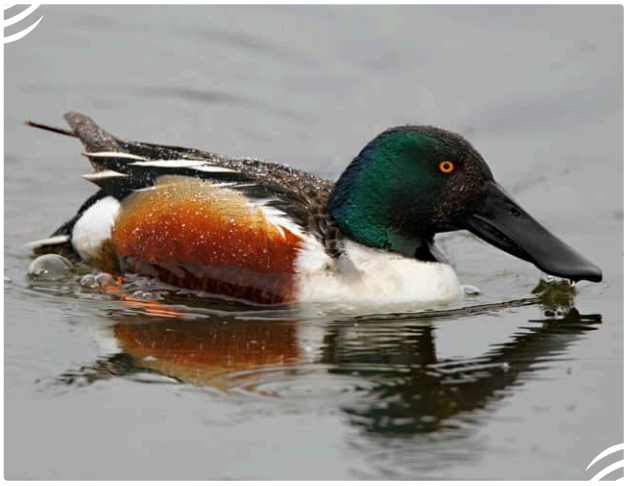
Despite being observed in high numbers (10,076 individuals), the **Northern Shoveler** showed a statistically significant decline from 2019 to 2023 at 13 monitored sites, with a trend magnitude of -0.30 (±0.15) and a p-value of 0.048. This trend may reflect broader habitat changes or pressures along the migratory route. Continued monitoring and the protection of high-quality wetland habitats are essential to reverse this decline.

COMMON RINGED PLOVER (*Charadrius hiaticula*)

The **Common Ringed Plover** showed a declining trend in Albania, with a magnitude of -1.35 (±0.57) across three sites from 2019 to 2023. Although the total number observed is low (35 individuals), the significant p-value (0.018) suggests a real decrease. As a species dependent on undisturbed coastal habitats, it may be affected by shoreline development and disturbance.

MUTE SWAN (*Cygnus olor*)

The **Mute Swan** population declined significantly at five sites in Albania between 2019 and 2023, with a trend magnitude of -0.74 (±0.21) and a highly significant p-value (0.0004). Despite being a well-known and widely distributed species, pressures such as wetland degradation and reduced food availability may be contributing factors.



Northern Shoveler (*Spatula clypeata*)
© S. Spasov

HIGHLIGHTS

Findings highlight the need for intensified site-based conservation, improved long-term monitoring, and research on species-specific pressures. Coordination with regional flyway initiatives could strengthen evidence-based conservation planning.



Sanderling (*Calidris alba*) feeding along the seashore in Vjose-Narte Protected Landscape ©AOS

INCREASING SPECIES,
DURING THE ASSESSMENT PERIOD (2019-2023)

SPECIES		VALUES			
English name	Scientific name	Average nb. of birds	Nb. sites	Magn.*	±ES**
Cattle Egret	*Bubulcus ibis*	137	8	1.28	0.55
Grey Plover	*Pluvialis squatarola*	1 617	9	0.43	0.20
Great Crested Grebe	*Podiceps cristatus*	1 692	29	0.24	0.12

* **Magn.:** Magnitude / ** **±SE:** Standard error. The trends shown in the tables are at least significant at an alpha risk of 5%.

Between 2019 and 2023. three waterbird species in Albania showed significant population increases based on trend analysis. These include the Cattle Egret, Grey Plover and Great Crested Grebe. Positive trends suggest favorable conditions in certain habitats, though continued monitoring and habitat management are essential to sustain these gains.

CATTLE EGRET (*Bubulcus ibis*)

The **Cattle Egret** showed a significant increase across eight sites monitored in Albania, with a positive trend magnitude of 1.28 (±0.55) and a p-value of 0.019. This species has expanded its range in recent decades and appears to be adapting well to agricultural landscapes. Continued monitoring is needed to understand habitat use and to assess potential conflicts with farming practices.

GREY PLOVER (*Pluvialis squatarola*)

The **Grey Plover** population showed a positive trend at nine sites in Albania from 2019 to 2023, with a trend magnitude of 0.43 (±0.20) and a p-value of 0.033. With over 8.000 individuals recorded, the species appears to be benefiting from stable conditions at key coastal wetlands and agricultural landscapes. Maintaining these areas undisturbed is important for sustaining this trend.

GREAT CRESTED GREBE (*Podiceps cristatus*)

The **Great Crested Grebe** showed a statistically significant upward trend between 2019 and 2023, with a magnitude of 0.24 (±0.12) across 29 sites and a p-value of 0.040. Its widespread distribution and adaptability to large freshwater bodies may be contributing to its stable or growing population. Ongoing monitoring and freshwater habitat conservation will help secure future increases.

HIGHLIGHTS

To support the continued increase of these species, it is important to maintain and enhance the quality of key wetland habitats. This work includes protecting feeding and roosting areas, minimizing human disturbance and ensuring water quality. Regular monitoring should be continued to detect changes early, while conservation efforts should focus on safeguarding the ecological conditions that have contributed to recent positive trends.

Black-tailed Godwit (*Limosa limosa*) in Vjose-Nartë Protected Landscape
©AOS



2 WETLANDS MAY BE DESIGNATED AS AREAS OF INTERNATIONAL IMPORTANCE

WETLANDS OF INTERNATIONAL IMPORTANCE FOR WATERBIRDS

Identification based on mid-January (2019-2023) count data for Ramsar Criteria 5 and 6.
Empty cells in the "Ramsar site" column identify sites not included in the Ramsar network.

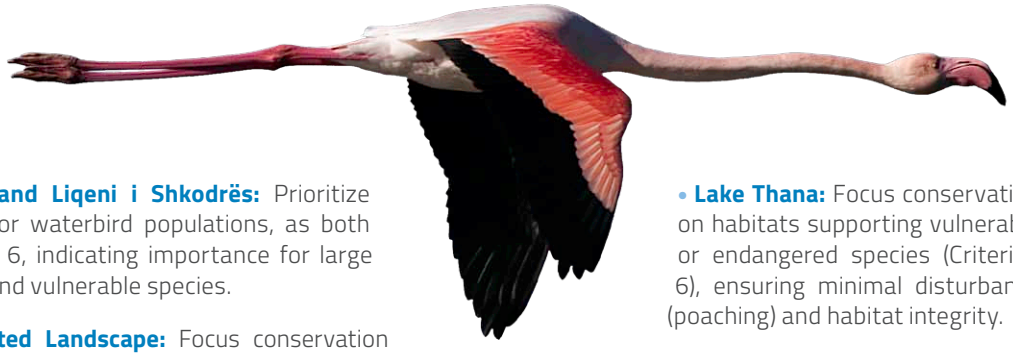
INTERNATIONAL IMPORTANCE SITE *Number of sites*	*Designated Ramsar site*	*> 20 000 waterbirds*	Ruddy Shelduck	Eurasian Wigeon	Dalmatian Pelican	Greater Flamingo	Eurasian Spoonbill	Grey Plover
Divjaka-Karavasta	Ⓡ	o		o	o	o	o	
Liqeni i Shkodres	Ⓡ	o	o					
Thana								o
Vjose-Nartë						o		

- **Criterion 5:** A wetland should be considered internationally important if it regularly* supports 20,000 or more waterbirds.
- **Criterion 6:** A wetland should be considered internationally important if it regularly* supports 1% of the individuals in a population of one species or subspecies of waterbirds.

* **To define the notion of "regularly,"** we have applied the following rule (currently under review by COP15 RAMSAR, 2025): A wetland is considered to regularly support a population of waterbirds of a given size if either of the following conditions is met:

1. The average of the annual maxima recorded over a period of at least five years reaches or exceeds the required threshold; or
2. The required number of birds is recorded in at least two-thirds of the years for which adequate data are available, provided that data are available for at least three years in total.

For the 2019–2023 period, four wetland sites in Albania are identified as meeting the criteria for designation as Ramsar Sites of International Importance. These sites are Divjaka-Karavasta, Lake Shkodra (Liqeni i Shkodrës), Vjosa-Nartë Protected Landscape and Lake Thana. All sites satisfy Criterion 6, highlighting their importance for supporting significant populations of waterbirds. Additionally, Divjaka-Karavasta and Lake Shkodra also meet Criterion 5, underlining their role in regularly supporting 20.000 or more waterbirds. The table above summarizes the sites, their coordinates, and the Ramsar criteria satisfied.



HIGHLIGHTS

- **Divjaka-Karavasta and Liqeni i Shkodrës:** Prioritize protection efforts for waterbird populations, as both meet Criteria 5 and 6, indicating importance for large bird congregations and vulnerable species.
- **Vjose-Nartë Protected Landscape:** Focus conservation on habitats supporting vulnerable or endangered species (Criterion 6), ensuring minimal disturbance and habitat integrity. Stop Vlora International Airport from being constructed inside the Protected Landscape of Vjose-Nartë.
- **Lake Thana:** Focus conservation on habitats supporting vulnerable or endangered species (Criterion 6), ensuring minimal disturbance (poaching) and habitat integrity.
- **All Sites:** Strengthen monitoring of bird populations and habitat conditions to maintain compliance with Ramsar criteria.



Eurasian teal (*Anas crecca*) in Godulla wetland, Divjaka-Karavasta National Park
© AOS

SUGGESTED ACTIONS

- **Divjaka-Karavasta and Liqeni i Shkodrës:** Implement targeted waterbird habitat conservation and control activities to protect large bird populations (Criteria 5 & 6).
- **Vjose-Nartë:** Stop the construction of the new international airport in Vjose-Nartë, as it poses a significant threat to one of Albania's most important wetland ecosystems. The area supports large congregations of waterbirds, including the globally threatened Dalmatian Pelican (*Pelecanus crispus*) and Greater Flamingo (*Phoenicopterus roseus*). The development would lead to inevitable habitat disturbance, loss of critical feeding and roosting areas and a high risk of bird-aircraft collisions. Protecting this site is essential for Albania's biodiversity commitments and flyway conservation obligations.
- **Lake Thana:** Strengthen protection by enforcing targeted habitat conservation measures, especially for vulnerable and endangered species identified under Criterion 6. Restoration efforts and minimization of human disturbance are urgently needed to preserve its ecological value. Including the site within Albania's protected areas network would significantly improve its legal protection and enable more effective control of illegal bird killing, one of the most persistent threats identified in recent years.
- **All Sites:** Establish regular ecological monitoring and community engagement programs to support sustainable site management.

ALBANIAN WETLANDS

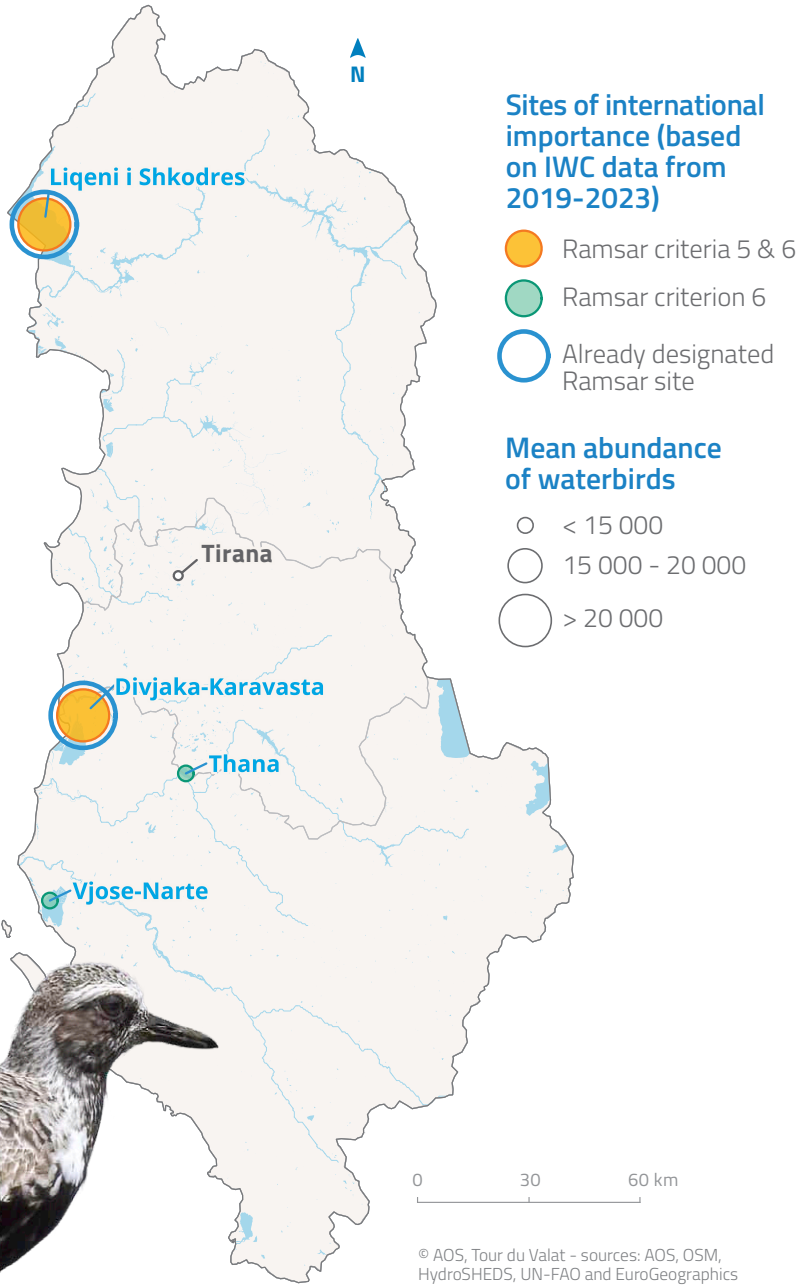
responding to Criteria 5 and 6
based on 2019-2023 IWC data.

Based on International Waterbird Census data (2019–2023), four sites in Albania—Shkodra Lake, Divjaka-Karavasta, Vjose-Nartë and Thana Lake—satisfy Ramsar criteria for international importance.

Shkodra and Divjaka-Karavasta meet Criteria 5 and 6, supporting over 20.000 waterbirds and species of global concern.

Vjose-Nartë meets Criterion 6, supporting more than 1% of the global population of Greater Flamingo (*Phoenicopterus roseus*), highlighting the urgent need for stronger protection of this key wetland habitat.

Lake Thana meets Criterion 6, supporting over 1% of the global population of Grey Plover (*Pluvialis squatarola*), yet it remains undesignated and lacks formal management under national conservation frameworks.



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Grey Plover
(*Pluvialis squatarola*)

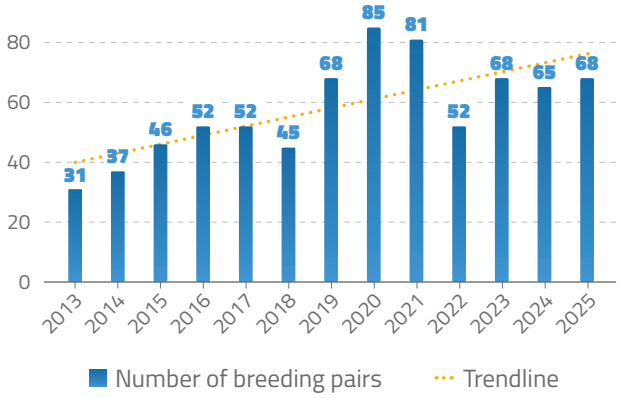
FOCUS ON A COUNTRY'S FLAGSHIP SPECIES:
THE DALMATIAN PELICAN (*PELECANUS CRISPUS*)

Once widespread across Albania's coastal and inland wetlands, the Dalmatian Pelican (*Pelecanus crispus*) experienced severe population declines in the mid-20th century. Major drainage schemes from the 1950s to 70s eradicated large parts of suitable habitat in Durrës, Tërbuf, and Maliq, causing the loss of key breeding colonies. Despite its protected status under both national and international frameworks, the species' Albanian population remains highly vulnerable well into the 21st century.



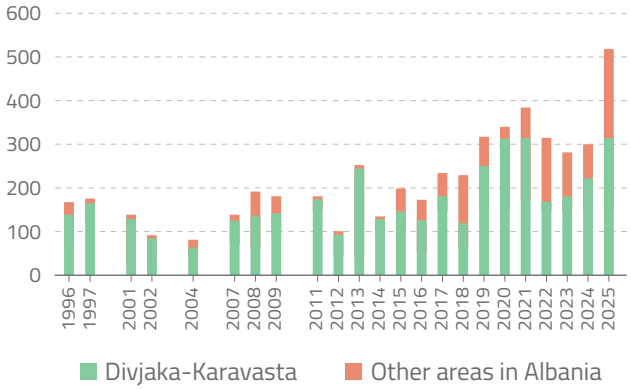
Early 20th-century records indicate breeding colonies in Karavasta and Maliq with wintering populations observed all along the coastal area of Albania as well as in Lakes Shkodra, Ohrid and Prespa. By the early 2000s, only Karavasta Lagoon retained a breeding colony. In 1984, the population was estimated at 81 breeding pairs, but this plummeted to 19 by 2001, due to poaching, egg collection, and nest destruction. Encouragingly, protection efforts initiated post 2003 started to reverse the decline. Major success has been noted since 2013 due to the implementation of several conservation measures. In 2020, the colony reached the number of 85 breeding pairs, marking a 64% increase since 2013.

EVOLUTION OF DALMATIAN PELICAN
breeding pairs in albania since 2013

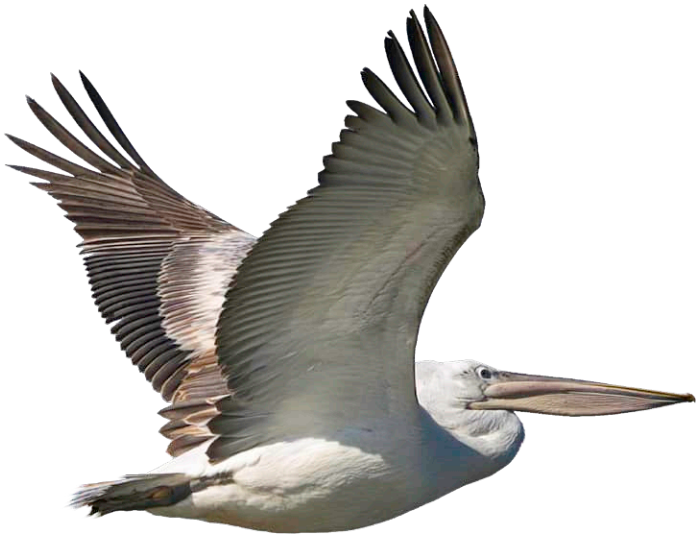


Meanwhile the wintering population of the **Dalmatian Pelican** in Albania from 1996 to 2025 ranges from 82-519 individuals with an average of 223 per year. The Divjaka-Karavasta wetland ecosystem hosts 52–97% of Albania's wintering Dalmatian Pelicans, with numbers ranging from 63 specimens in 2004 to 316 individuals in 2021 and 2025 (mean ≈173 and c. 82% of Albania). Other wintering sites include Thana Lake and Nartë Lagoon. The relatively stable wintering numbers contrast with the precarious breeding trends, underlining the lagoon's critical role in the species' life cycle.

RELATIVE IMPORTANCE OF DIVJAKA-KARAVASTA FOR DALMATIAN PELICANS
wintering in Albania (1996-2024)



Throughout its life cycle in Albania, the species is threatened by human disturbance related to illegal fishing and unregulated tourism in their breeding ground in Divjaka-Karavasta. Habitat loss and erosion due to natural sediment shifts and sea-level rise have reduced the nesting island's area by nearly 50% in the past two decades. Flooding events related to seasonal storms flood their nests and lead to chick mortality. Avian influenza caused mortality and limited breeding success in 2022.



Pollution and eutrophication due to agricultural runoff and inadequate waste water management affect fish stocks and water quality, indirectly impacting pelican foraging success. Finally, power line collisions were also reported in several cases in recent years in areas of major importance for the Dalmatian Pelican in Albania. Unfortunately, new threats are looming for the Dalmatian Pelican and other birds of the coastal wetlands as plans for further urbanisation in Divjaka-Karavasta and other coastal wetlands continue to persist despite the advocacy campaigns of national and international NGOs. Vlora International Airport, located at the heart of the migratory map of the western metapopulation of the Dalmatian Pelican, might cause further negative impacts through disturbance and collision.

To counteract those threats, several measures have been implemented in Albania including the adoption of a National Acton Plan for safeguarding the species in Albania, guarding the nesting sites during the breeding season, providing nesting materials and constructing artificial platforms or breeding beds, regular monitoring of breeding and wintering populations, and national and international protection of the major foraging and breeding areas including their designation as Ramsar Sites. Important Bird and Biodiversity Areas, Key Biodiversity Areas, Emerald Sites and advocacy campaigns for the protection of Divjaka-Karavasta, Vjose-Nartë and other coastal wetlands.

Nonetheless, further action is needed in habitat restoration including the stabilization of the nesting island and construction of additional platforms, strengthening law enforcement to prevent illegal activities within protected areas, promoting the Dalmatian Pelican as a flagship species to support sustainable tourism, coordinated actions with neighbouring countries who share wintering and foraging grounds and continuous advocacy and lobbying against urbanisation of the protected coastal areas.



Dalmatian Pelican (*Pelecanus crispus*) in Divjaka-Karavasta National Park
© AOS

All the above demonstrates that despite its fragile status, the Dalmatian Pelican in Albania shows signs of resilience under sustained conservation action undertaken mainly in the Divjaka-Karavasta wetland ecosystem as the most vital habitat for both breeding and wintering individuals in Albania. A combination of habitat management, law enforcement, community engagement and international cooperation is still imperative to ensure the long-term survival of this iconic species in Albania

Landscape view of Divjaka-Karavasta National Park from Karavasta Lagoon © AOS



TOWARD A SUSTAINABLE FUTURE FOR THE INTERNATIONAL WATERBIRD CENSUS IN ALBANIA

For three decades, the International Waterbird Census (IWC) has served as Albania's most consistent and coordinated bird monitoring effort. Its continuity is thanks to a strong core of committed experts, institutions and volunteers who return to the field every January, often under challenging conditions, to ensure data is collected, shared and used. However, behind each successful census lies a growing set of unresolved challenges that threaten the long-term sustainability of the scheme.

A primary concern is the lack of a stable support mechanism to ensure the annual implementation of the census. To date the IWC has relied heavily on project-based funding to cover logistical needs such as transportation, coordination and basic equipment. While this model has allowed the census to continue, it creates uncertainty from year to year and makes long-term planning difficult. The absence of institutional financial support limits the potential for strategic development of the scheme and poses a barrier to fully embedding it within national biodiversity monitoring programs.



Greater Flamingo (*Phoenicopterus roseus*) in Divjaka-Karavasta National Park © AOS

In parallel, there is an ongoing gap in human capacity. While the core census team includes skilled field leaders with years of experience, the broader pool of trained observers remains limited. Currently, too few individuals are able to conduct counts independently and in accordance with IWC protocols. Ensuring sustainability will therefore require investment in systematic training, mentoring, and experience-sharing among institutions and young professionals.

Since 2017, the National Agency for Protected Areas (NAPA) has increased its engagement by actively involving its regional staff in the counts. This collaboration has helped expand coverage and strengthen institutional ownership of the monitoring process. However, to fully integrate the IWC into Albania's national conservation strategy it must move beyond voluntary participation. The census needs to be formally recognized within institutional workplans, supported through operational frameworks and treated as a national obligation for conservation planning and international reporting.

Given Albania's importance as a wintering ground for numerous waterbird species, several of which are of international conservation concern, maintaining a reliable national waterbird monitoring scheme is of high ecological and strategic value. The IWC is not only essential for assessing population trends and habitat conditions, but also provides the foundation for fulfilling commitments under agreements such as the AEWA, the Ramsar Convention and national biodiversity strategies.

Looking ahead, the Albanian Ornithological Society (AOS) reiterates its commitment to leading and coordinating the IWC in Albania, while calling for broader institutional support and cooperation. Establishing a sustainable nationally endorsed monitoring framework grounded in technical quality, inter-agency collaboration and long-term vision, will be essential for ensuring the continued success of the census and the protection of Albania's wetland biodiversity.

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Ruddy Turnstone (*Arenaria interpres*) in Vjose-Nartë Protected Landscape
© AOS

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Wetland and lagoon landscape in Kune-Vain-Tale Managed Reserve
© AOS

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Lesser Black-backed Gull (*Larus fuscus*) in Viluni lagoon © L. Shala

Mediterranean Waterbirds
Oiseaux d'eau Méditerranée
الطيور المائية بمنطقة البحر المتوسط

https://medwaterbirds.net

Mediterranean coordination:

With the financial and technical support of: