

COMMUNITY NEWSLETTER

Issue 21



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KBA PARTNERS:



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GLOBAL



Clear Objectives Enable Effective Conservation: The African Elephant Case

Loxodonta africana © Francisco J. Serrano Eizaguerri

A groundbreaking new study reveals that optimal investment portfolios for conservation vary substantially based on even minor differences in objectives. By analysing African elephant populations in 79 protected areas, it was demonstrated that a strategy optimised for one goal is invariably suboptimal for others.

The [research](#), published in Conservation Science and Practice, highlights how precise conservation goals fundamentally dictate where money should be spent to protect African elephants. The authors used a return on investment (ROI) model to demonstrate that even minor adjustments in a project's objective—such as choosing between maximising total animal counts versus ensuring population viability—drastically shift which geographic areas receive funding.

For instance, efforts to increase raw numbers often prioritise large, declining populations, while a focus on stability favours smaller, manageable groups. The findings suggest that current "Business as Usual" (BAU) spending is frequently inefficient and fails to optimise results. For example, several sites that have recently received the greatest donor investment—such as Serengeti, Selous, Niassa, and Gorongosa—were identified as poor choices for any of the five conservation objectives tested: total elephants, total elephants (favourable status), total elephants (positive growth), populations (stable or positive growth), and populations (favourable status).

To maximise the total number of elephants across the continent, the study suggests that the greatest levels of donor funding should be allocated to countries like Zimbabwe (38%), Gabon (15%), and Zambia (9%). Meanwhile, to maximise elephant populations that have stable or positive growth rates, funding would be best allocated to Tanzania (22%), Zimbabwe (19%) and Angola (11%).

Budget sensitivity was another key part of the study. The authors concluded that the ideal investment strategy should change depending on the total available budget. In that sense, stakeholders should articulate precise, quantitative objectives and move away from simple ranking schemes to ensure limited resources achieve the greatest possible impact.



Loxodonta africana © Justin Ponder

This study reinforces the importance of prioritising conservation actions and making the most out of the limited resources available for it. Donor investment should be focused on areas that are key to the persistence of significant populations of elephants and other species. Key Biodiversity Areas (KBAs) provide a framework to make such decisions as they pinpoint important places with significant populations of the species that qualify them as KBAs. Protecting them means protecting the most important populations together with the associated biodiversity found at these sites.

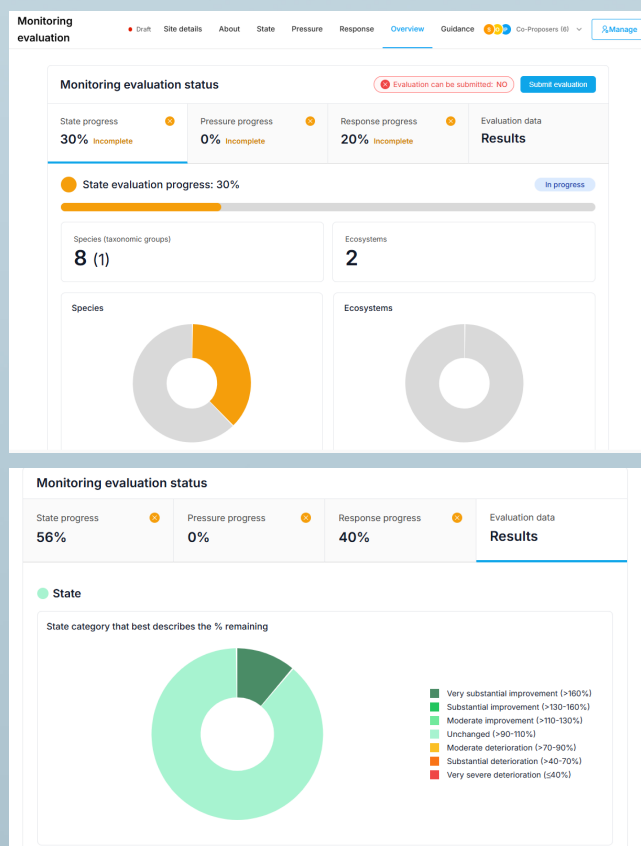
Monitoring KBAs for Long-Term Conservation: New KBA Monitoring Platform is Now Available on the WDKBA

To date, more than 16,600 Key Biodiversity Areas (KBAs) have been identified worldwide. The efforts to pinpoint these significant sites have been paramount, but identification is only the first step. Monitoring the status of qualifying species and ecosystems within KBAs, along with the pressures they face, is crucial for maintaining these sites as vital places for biodiversity persistence. Regular monitoring facilitates an assessment of the effectiveness of conservation measures over time and helps identify priority sites for action, prioritise conservation actions within them, and determine the effectiveness of any interventions.

Functionality to monitor KBAs is now available in the [World Database of Key Biodiversity Areas](#) (WDKBA). It is based on a State–Pressure–Response protocol that was developed to help the KBA Partnership track what is happening inside KBAs over time. The goal is to make monitoring more consistent, more accessible, and more useful for decision-making across the world’s KBAs. This functionality allows you to track changes in state (the status of the qualifying (also referred to as trigger) species and ecosystems) at the site, pressure (the threats and the extent to which they affect these species or ecosystems), and response (an evaluation of the conservation measures that are in place).

How it works

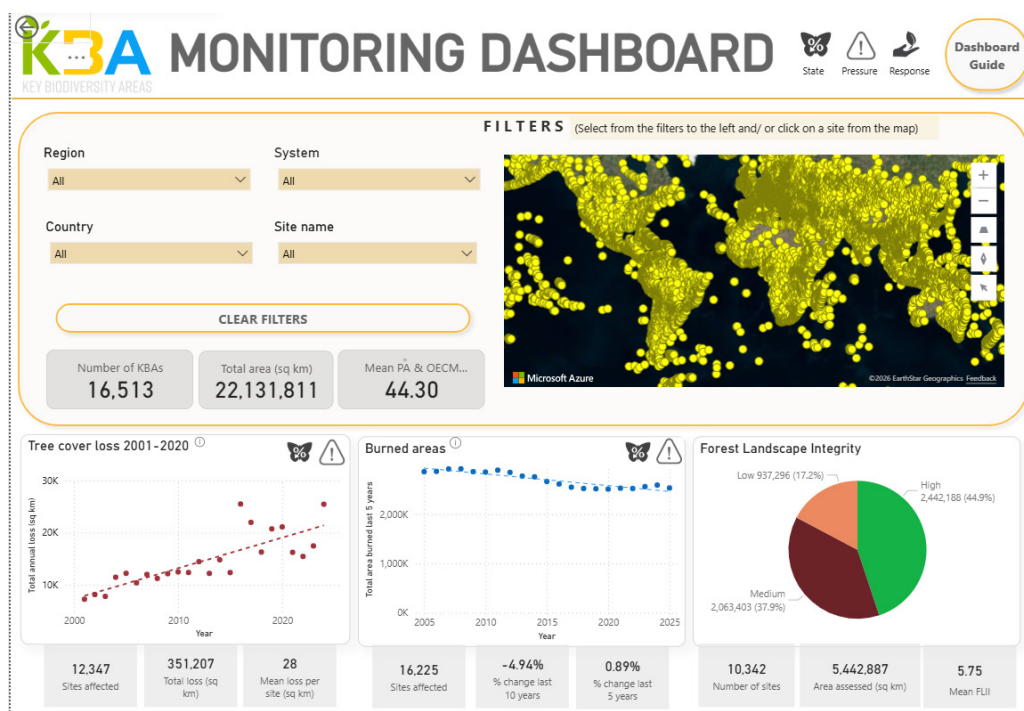
The monitoring features are available at the site level in the WDKBA. Monitoring evaluations are intended to happen every four years, with assessors encouraged to collaborate locally and draw on the best available evidence to provide a snapshot in time of what is happening at the site. There is flexibility within the system to support evaluations in sites where the availability information is limited (e.g., remote or understudied areas) and expert judgment may be needed. The platform



guides users through the evaluations step by step providing summaries along the way. This structure makes it possible to compare results across sites and over time while still allowing flexibility for very different kinds of KBAs.

What it captures

For state, the platform looks at whether species populations, ecosystem extent, or condition have improved, stayed stable, or declined relative to a baseline. For pressure, it records threats using the IUCN threat classification scheme and asks assessors to judge their timing, scope, severity, and overall impact. For response, it records protected area or OECM coverage, management planning, and conservation action, including whether actions are underway and what others may be needed.



Data sources and support

A major strength of the platform is its ability to draw on information available from other global datasets. The platform enables access to KBA-relevant metrics from datasets such as forest loss, burned areas, precipitation, night lights, human densities, infrastructure, among others, with links to data available on citizen science platforms (eBird).

It's important to note that though information can be drawn from external datasets, the platform will not fully automate the monitoring process, because ecological context is important and interpretation about the relevance of these datasets is needed from people who know about the site. Instead, it will act as a decision-support tool that helps people familiar with a site interpret the evidence and complete more informed evaluations.

Outputs visualisation

The results will be summarised and made publicly available on sites' factsheets, the [KBA Dashboard](#), and through [IBAT](#), with the possibility of aggregating site-level results across countries,

regions, or taxonomic groups. With this, users will be able to see not only how individual sites are faring, but also broader patterns such as the proportion of KBAs in favourable condition or the most common high-impact threats across multiple sites.

A shared conservation tool

The new KBA monitoring platform is not just about recording data, but about providing early warning when a site and its biodiversity are under pressure, showing where conservation measures are in place and working, and generating information that can influence policy, donor priorities, and management decisions. It turns site-level knowledge into something that can support action at national, regional, and global scales.

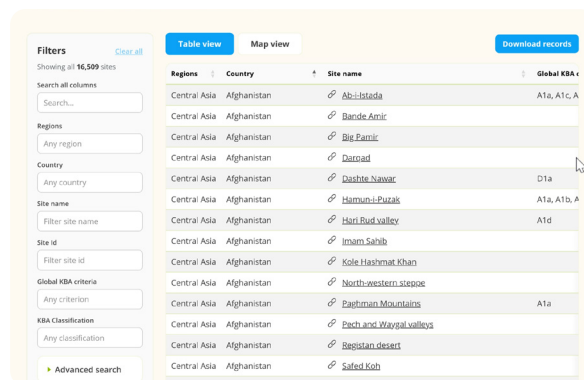
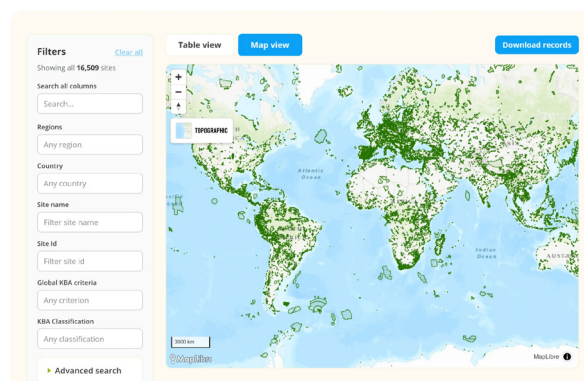
This is a platform for all. Site managers, KBA Partners, National Coordination Groups, and other knowledgeable contributors will all be able to participate, helping ensure that the system reflects real conditions on the ground. By combining local expertise with global datasets, the platform aims to make KBA monitoring both practical and scientifically reliable.

Exploring KBA Data: Enhanced Site and Map Search Functions

As part of the ongoing work to enhance KBA data exploration, various improvements have been made to the Site and Map search tools. One of the main ones has been the integration of the [Site](#) and [Map](#) tools, which enables users to switch between the two without losing search criteria and filters applied. Other key improvements are:

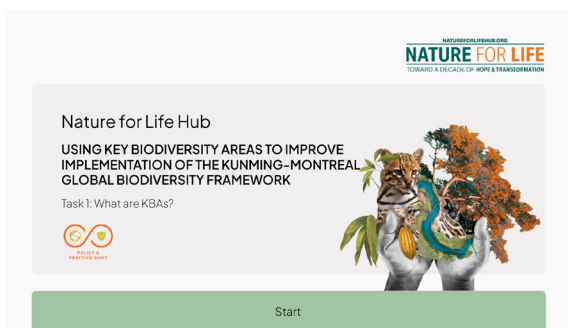
- Option to search KBAs by name or ID
- Site factsheets have a new map view available
- Option to filter data by country or region
- Option to filter search by criteria, classification, species
- Advanced conditional search
- Topographic and satellite images available for the Map Search

These search alternatives are available on the KBA website within the 'Explore Data' section.



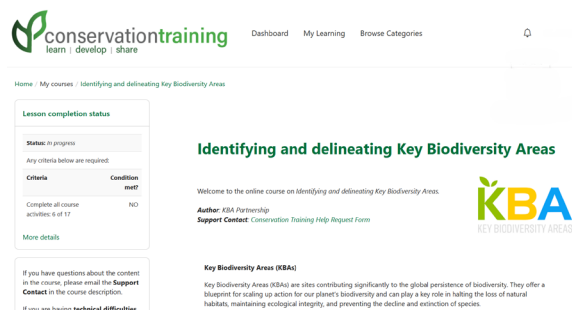
Keep Learning About KBAs

Using Key Biodiversity Areas to Improve Implementation of the KMGBF



Explore

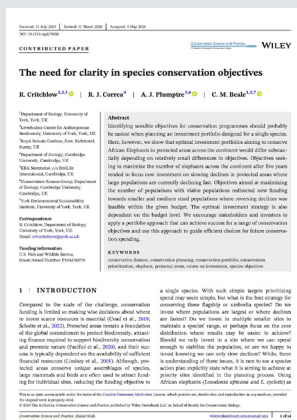
Identifying and Delineating Key Biodiversity Areas



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Latest Publications

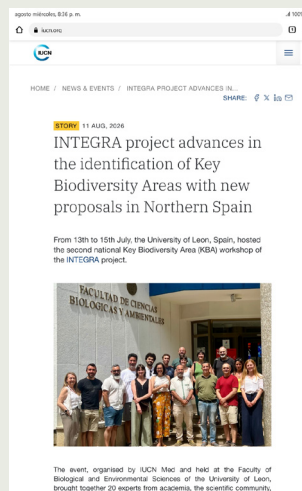
KBAs in the News



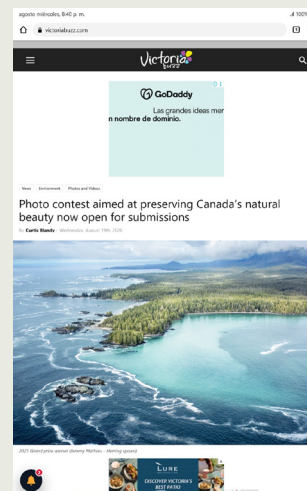
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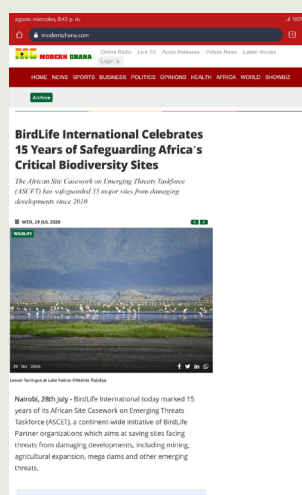


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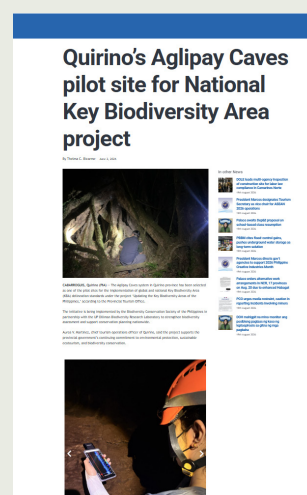


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AFRICA



From Village Land Use Plans to Key Biodiversity Areas: Unlocking Tanzania's Hidden Conservation Potential

Author: Shadrack Stephene Achilla, Directorate of Research, Compliance and Information (DRCI), National Land Use Planning Commission (NLUPC), Dodoma, Tanzania

Livingstone Mountains forests © Jojona

- NLUPC's records show approximately 4,900 approved Village Land Use Plans, roughly 40 percent of registered villages, as of mid-2026, each with zoning, tenure, and natural resource management rules.
- Village Land Use Plans cannot substitute for the Key Biodiversity Area Standard's quantitative species and ecosystem thresholds, but they can help field teams decide which villages to visit first, particularly in rangeland and forest-agriculture landscapes with little protected area coverage.
- Village Land Forest Reserves and other community-managed zones give the CBD's OECM test its governance evidence, a legal designation and enforced rules, but the same test also requires separate evidence of conservation outcomes, which governance evidence alone does not supply.
- Turning this into practice needs a standard data extraction protocol, a working link between NLUPC and Tanzania's KBA National Coordination Group, and field verification of outcomes before any candidate site is reported.

An archive invisible to KBA and OECM reporting

Village land use planning in Tanzania is a statutory process whose enabling laws and guidelines also sit within the country's broader environmental and international commitments, yet its practical contribution to Key Biodiversity Area and OECM processes remains, to date, largely unexplored. Under the Village Land Act of 1999 and the Land Use Planning Act of 2007, village assemblies work with district land use planning teams to zone village land into categories that typically include residential and agricultural areas, grazing land, water source protection zones, and Village Land Forest Reserves. NLUPC coordinates and archives the resulting plans nationally, with approximately 4,900 approved plans, roughly 40 percent of registered villages, as of mid-2026. The archive is a large and fast-growing record, not a census, and any use of it for conservation purposes has to work with that incompleteness rather than around it. Its statutory purpose was, and remains, to resolve land disputes, secure tenure through Certificates of Customary Right of Occupancy, and give district authorities a basis for land administration decisions, objectives that leave real, and largely unassessed, conservation value sitting inside the

archive rather than reaching the bodies that could use it.

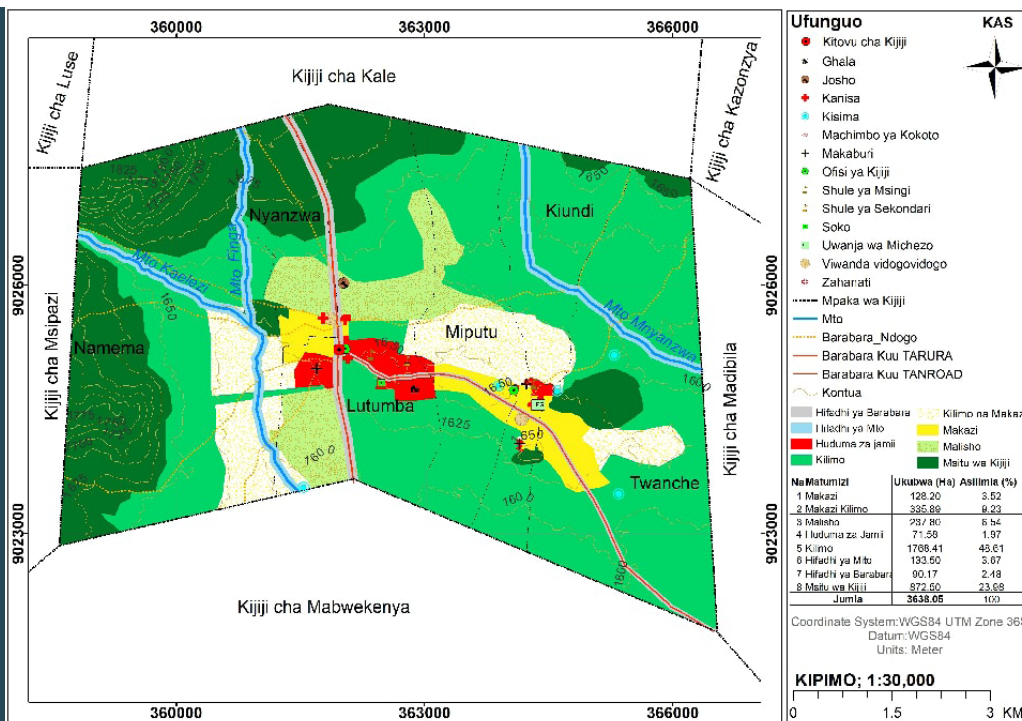
What VLUPs can and cannot do for Key Biodiversity Areas

Key Biodiversity Areas work on a demanding test. The Global Standard for the Identification of Key Biodiversity Areas, published by IUCN in 2016, sets eleven criteria across five categories, and a site only qualifies with quantitative evidence of species populations, ecosystem extent, or ecological integrity against fixed global thresholds. A village land use plan cannot supply that evidence, and this article is not arguing that it can. What the Standard's delineation procedures do call for, once a site is otherwise under consideration, is attention to land tenure and socio-economic context alongside the ecological data, and that is the layer village land use plans hold at village scale across the whole planned archive: tenure status, customary boundaries, and zoning decisions for grazing corridors, water catchments, and forest patches, mapped down to a resolution of individual land parcels within a single village (Figure 1). The more immediate use is upstream of delineation. Tanzania's KBA network is thin outside gazetted protected areas, particularly across rangeland and

forest-agriculture mosaics where field assessment resources are scarce and where research on joint village land use planning has already documented preserved wildlife corridors and livestock-wildlife coexistence. Reading the VLUP archive for zones

with that profile gives assessment teams a shortlist of villages worth visiting first. It narrows a search. It does not identify a KBA, and the difference matters enough that it should stay explicit every time this argument is made.

Figure 1. Proposed Village Land Use Plan for Kiundinamema village, Kalambo District, prepared in 2025. Credit: NLUPC.



What VLUPs can and cannot do for OECMs

The Convention on Biological Diversity defines an OECM as a geographically defined area, other than a protected area, governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity. The IUCN WCPA site-level tool for identifying OECMs, published by Jonas, MacKinnon, Marnewick and Wood in 2023, breaks that definition into eight criteria applied in three steps, and tests outcomes separately from governance. Village Land Forest Reserves supply the governance half of that test well: they are geographically bounded within an approved plan, governed by a village council under statutory authority, and subject to locally enforced rules restricting extraction, the kind of rule set physically posted at reserve boundaries (Figure 2). A zoning designation on paper is a governance fact, not evidence that biodiversity in that zone is being conserved, and the two should not be treated as interchangeable. Uisso, Chirwa, Ackerman and Mbwanbo's 2019 before-and-after study of the Kilosa REDD+ initiative provides the

clearest peer-reviewed evidence available: it found village participatory land use plans associated with improved forest management practice and reduced extractive pressure inside Village Land Forest Reserves. That is an important governance and management result, but it stops short of the sustained, positive biodiversity outcomes the OECM criteria require. Any VLUP zone put forward as an OECM candidate still needs a site-level assessment against the full criteria before it is reported.

Why the potential stays hidden

Tanzania's narrow KBA coverage outside gazetted protected areas, and its OECM under-reporting, reflect institutional invisibility of existing evidence as much as any absence of qualifying sites on the ground. Village land use plans are held at district level, often on paper, with no standard template for extracting the fields a conservation assessment needs. NLUPC's mandate sits inside land governance, organizationally separate from the bodies that nominate and confirm Key Biodiversity Areas or report OECMs internationally.

Figure 2. Village Land Forest Reserve signboard stating prohibited activities, management rules, and bylaw penalties. Credit: NLUPC



A plan approved in a district land office has no routine channel to reach a KBA National Coordination Group assessment table, even when the reserve it describes has been under active village management for years. This is not a purely technical gap. Village-level governance capacity varies considerably across districts, plans are unevenly enforced, and a zoning decision recorded in one village's plan does not guarantee the same standard of management in the next. Screening on VLUP data has to carry that variation forward rather than average it away.

What would need to change

Three things would connect the archive to both processes without overstating what it can prove. First, a standardized field-level extraction protocol that converts VLUP zoning categories into the specific governance and management fields a KBA or OECM screening step can use, rather than

leaving each district's records in incompatible formats. Second, a direct data-sharing arrangement between NLUPC and Tanzania's KBA National Coordination Group, so candidate sites move from a district archive into a national assessment pipeline as a matter of routine. Third, and non-negotiable, field verification of conservation outcomes, not just governance structure, before any VLUP-derived candidate is treated as a confirmed KBA lead rather than a screening result, or reported nationally or internationally as an OECM.

If a standardized extraction protocol, a formal data-sharing arrangement with the KBA National Coordination Group, and mandatory field verification of outcomes can be established, the VLUP archive can move from incidental utility to a routine, evidence-based input into both KBA prioritisation and OECM identification, without ever claiming to substitute for the ecological data those processes require.

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National Workshop Strengthens KBA Identification in Mozambique



Participants at the National KBA Workshop, held in Maputo City, Mozambique. Photo: WCS, 2026

Authors: Acácio Chechene, Rafaela Macuácuá and Hermenegildo Matimele, WCS Mozambique

The National Key Biodiversity Areas (KBA) Workshop was held in Maputo, Mozambique, from 29 June to 3 July 2026, bringing together experts from government institutions, academia and conservation organisations to assess KBAs using the Global KBA Standard.

Organised by Wildlife Conservation Society (WCS) Mozambique in partnership with the Ministry of Agriculture, Environment and Fisheries (MAAP), through the National Directory of Environment and Climate Change, as part of the *Building Biodiversity Knowledge for Action in Southern Africa (SBAPP)* project, funded by AFD and FFEM.

During the five-day workshop, participants assessed 35 candidate areas across Mozambique to determine their potential qualification as Key Biodiversity Areas. The assessments were

based on biodiversity information compiled from the Tropical Important Plant Areas (TIPAs) initiative, previously identified sites of biodiversity importance, species occurrence records, and data collected through recent field surveys. This information was used to evaluate potential KBA trigger biodiversity elements and support the delineation of site boundaries.

The workshop provided a valuable platform for reviewing and validating biodiversity data, discussing site eligibility under the Global KBA Standard, and strengthening collaboration among institutions working in biodiversity conservation. It also enhanced national capacity to apply the KBA Standard and promote the use of scientific evidence in conservation planning and decision-making.

Field Surveys Conducted on Sena and Goa Islands to Support KBA Identification

Authors: Acácio Chechene, Hermenegildo Matimele and Rafaela Macuácuá, WCS Mozambique

Goa Island. Photo: Acacio Chechene

Field surveys were conducted on Sena and Goa Islands, located at the entrance of Mossuril Bay in Nampula Province, to collect biodiversity data and assess their potential qualification as Key Biodiversity Areas (KBAs). The surveys focused on improving knowledge of the distribution, abundance and conservation status of species occurring on these small coral islands, which represent one of the most important examples of coral rag thicket habitat along the northern coast of Mozambique.

The expedition was led by researchers from WCS Mozambique and the Institute for Agricultural Research of Mozambique (IIAM) and took place in July 2026. The team carried out systematic surveys across the islands, documenting flora and fauna, mapping habitats, and collecting information required for KBA assessments and IUCN Red List evaluations.

Particular attention was given to several plant species of high conservation importance, including the endemic species *Euphorbia angularis* and the near-endemic threatened species *Barleria setosa* and *Barleria laceratiflora*. Data on their distribution, population size and habitat condition were collected to support assessments against the Global KBA Standard.

In addition to documenting priority plant species, the surveys recorded information on reptiles, invertebrates and birds, associated with these coastal island ecosystems. The team also assessed habitat integrity and identified potential threats that could affect the long-term persistence of species and ecosystems on the islands.

From Monitoring to Conservation Action: How ASCET is Strengthening the Protection of Africa's Key Biodiversity Areas

Author: Fred Barasa, IBA/KBA Officer BirdLife International Africa

Across Africa, biodiversity faces unprecedented pressure from infrastructure expansion, mining, oil and gas exploration, renewable energy developments, agricultural expansion, urbanisation, pollution, invasive species and climate change. Many of these developments occur within or adjacent to sites that are internationally recognised for their biodiversity importance.

BirdLife International's network of Important Bird and Biodiversity Areas (IBAs) and Key Biodiversity Areas (KBAs) represents some of the continent's most significant places for birds and other biodiversity. However, identifying these sites is only the beginning. Their long-term conservation depends on continuous monitoring, timely detection of emerging threats, and coordinated responses that influence decisions before irreversible damage occurs.

The African Sites Casework on Emerging Threats Taskforce (ASCET) was established to help achieve exactly that. [Celebrating 15 years of dedicated site casework advocacy](#) and learning since its founding in 2010, ASCET has successfully stopped or slowed down damaging development threats at more than 35 major sites across Africa, protecting 79,889 km² of critical habitats.

Since its establishment, ASCET has provided a continent-wide mechanism for transforming scientific monitoring into practical conservation action. By bringing together BirdLife Partners across Africa, the BirdLife Global Team, and supporting Partners, ASCET has ensured that evidence gathered from site monitoring informs advocacy, policy engagement, legal interventions, and conservation planning. In many respects, monitoring has provided the evidence, while ASCET has delivered the response.

The BirdLife IBA/KBA Programme has, for over four decades, identified and documented the

world's most important sites for bird conservation. More recently, the development of the Global KBA Standard expanded this approach to include all taxonomic groups and ecosystems, ensuring that sites important for biodiversity receive global recognition.

Many IBAs and KBAs continue to experience increasing pressure from competing land uses and development interests. Roads, ports, dams, transmission lines, mining concessions, wind farms and agricultural schemes often overlap with critical biodiversity areas.

Conservation therefore depends on an adaptive management approach that combines: Site identification, monitoring, threat assessment, conservation action, policy engagement and long-term management. ASCET has become a key component of this adaptive management cycle.

BirdLife Partners routinely monitor IBAs and KBAs using standardised monitoring protocols. The purpose is simple: determine whether the biodiversity values for which a site was identified are being maintained.

Monitoring focuses on three interconnected components: state; which looks at how biodiversity is changing. This includes population trends of trigger species and habitat quality; pressure-looking at what threats are affecting the site and responses which look at the conservation actions being undertaken, like the advocacy campaigns. Together, these indicators provide a comprehensive picture of whether conservation efforts are succeeding.

Thus, ASCET provides a structured forum where Partners can present evidence of emerging threats affecting priority IBAs and KBAs. Members collectively assess: the severity of threats, urgency of intervention, available scientific evidence, relevant policy mechanisms, advocacy opportunities and potential conservation partners.



The Taskforce then helps coordinate responses at national, regional or international levels. Rather than individual Partners responding independently, ASCET creates a coordinated, science-based approach that draws upon expertise from across the BirdLife Partnership.

What does site casework involve

Site Casework refers to coordinated advocacy undertaken to address threats affecting IBAs and KBAs. Depending on the nature of the threat, casework may involve reviewing Environmental and Social Impact Assessments; preparing scientific submissions; engaging government agencies; advising project developers; influencing financial institutions; supporting legal processes; engaging Multilateral Environmental Agreements; preparing technical briefs; public communication and media engagement and facilitating dialogue among stakeholders.

Importantly, ASCET seeks solutions that balance sustainable development with biodiversity conservation. The objective is not to oppose development, but to ensure that development avoids, minimises or adequately mitigates impacts on globally important biodiversity.

Case Studies: Lake Natron, Tanzania and Dakatcha Woodland, Kenya

Lake Natron supports approximately 75% of the world's breeding population of the Lesser Flamingo. Monitoring revealed that proposed soda ash extraction posed serious risks to breeding habitats. BirdLife Partners used long-term ecological evidence to demonstrate these risks and coordinated advocacy with national and international organisations. The proposal attracted significant international attention and ultimately did not proceed, demonstrating the value of science-based advocacy supported by monitoring.

Monitoring undertaken by Nature Kenya documented the importance of Dakatcha Woodland for globally threatened species including Clarke's Weaver and Sokoke Pipit. When large-scale biofuel developments threatened the area, monitoring data became the foundation for national advocacy. The resulting engagement helped prevent extensive habitat loss while increasing recognition of the site's conservation importance.



As BirdLife continues expanding the IBA and KBA Programme across Africa, the integration of monitoring and casework will become increasingly important. Ultimately, conservation is not measured by how much information we collect. It is measured by whether that information changes decisions, influences policy, prevents habitat loss and safeguards biodiversity.

For over fifteen years, ASCET has demonstrated that when robust monitoring is combined with coordinated advocacy, scientific evidence becomes one of the most powerful tools for conserving Africa's most important places for nature.

Thus, the future of the IBA/KBA Programme lies not only in identifying sites of global significance, but in ensuring that every monitoring observation has the potential to trigger timely, coordinated and effective conservation action. In this regard, ASCET stands as a vital bridge between science and action, helping transform knowledge into lasting protection for Africa's biodiversity.

ASIA



From the Roof of the World to the Desert's Edge: Civil Society Protecting Central Asia's Living Heritage

Chyckkan Gorge, Kyrgyzstan © Vlad Ushakov

Author: Viktor Novikov, [Zoi Environment Network](#) (Originally published on the [CEPF website](#))

Stretching across seven countries and spanning two of Asia's great mountain systems — the Pamir and Tien Shan — the Mountains of Central Asia Biodiversity Hotspot forms one of the planet's most extraordinary natural regions. It harbors around 6,000 plant species, nearly a quarter of which are found nowhere else on Earth. This is the cradle of many crops that now feed the world: apples, apricots, walnuts, pistachios, wheat and barley all originated here. Snow leopards patrol the ridgelines, while saker falcons and golden eagles soar across both

high-altitude landscapes and lowlands.

The Mountains of Central Asia Hotspot does not stand in isolation. To the north, the vast steppes of Kazakhstan are home to the iconic saiga antelope. To the south and west, the Amu Darya and Syr Darya rivers — born in the Pamir and Tien Shan — sustain the ancient oases of Central Asian civilizations, along with wetlands and lakes vital for migratory species, and the remnants of the Aral Sea, itself a global symbol of what is lost when ecosystems collapse.

To avoid such a fate for the nature of the Mountains of Central Asia, the Critical Ecosystem Partnership Fund (CEPF) has been supporting the conservation of the region since 2019. CEPF grants have funded civil society-led efforts to protect and sustainably use the hotspot's vital ecosystems. Founded in 2000 by the [Global Environment Facility \(GEF\)](#), [Conservation International](#) and [the World Bank](#), CEPF is a joint initiative of [l'Agence Française de Développement](#), Conservation International, the [European Union](#), [Fondation Franklinia](#), [Fondation Hans Wilsdorf](#), the GEF, the [Government of Canada](#), the [Hempel Foundation](#), the [Government of Japan](#), [The Nature Conservancy](#) and the World Bank.

This partnership is launching a new phase of investment in the Mountains of Central Asia Biodiversity Hotspot for 2026–2031. The new action will build on the progress made under previous investment and help organizations and communities withstand mounting strains on the natural world.

A Treasure Under Pressure

The region's biodiversity faces diverse threats. Some are universal: overgrazing has degraded pastures across the hotspot, as livestock pressure compounds climate-driven shifts in vegetation. Overuse of wild plants—endemic tulips collected for trade, medicinal herbs harvested beyond sustainable limits—reduces species with narrow ranges. Climate change is accelerating, with temperatures rising at 0.2 to

0.4°C per decade, glaciers retreating and snowmelt patterns shifting.

Other pressures are site specific. In the fruit and nut forests of Kyrgyzstan and Kazakhstan—the native range of apple—hybridization with cultivated varieties, along with the expansion of settlements, is eroding the genetic integrity of wild populations. In mountain grasslands, rivers and lakes, increasingly accessible by road, the growth of tourism is introducing waste and disturbance into pristine habitats that evolved in relative isolation. At the same time, declining scientific capacity and limited government presence leave some Key Biodiversity Areas without adequate monitoring and protection.

The 2025 update of CEPF's Ecosystem Profile—a stakeholder-driven analysis of the biodiversity and socioeconomic conditions of the hotspot—identified 126 globally threatened species for the region, nearly double the count from 2017.

Where Civil Society Acts and Innovates

Civil society organizations are central to conservation in the Mountains of Central Asia Biodiversity Hotspot. They operate at scales and in locations that government agencies and international programs rarely reach: individual gorges; high-altitude pastures; and valley communities where daily decisions on grazing and wild plant use are made. They are also a source of innovation.



Cranes fly over high-altitude lake in Issyk-Kul, Kyrgyzstan © Vlad Ushakov

KYRGYZSTAN | Micro-Reserves: Protecting Biodiversity One Hectare at a Time

In the foothills and mountains of the Tien Shan, a quiet revolution in conservation governance is underway. Working in collaboration with local and national authorities, CEPF grantees the Leader Civil Initiative Center and the Global and Local Information Partnership have pioneered the concept of micro-reserves: small, locally managed protected areas ranging from as little as one hectare to several hundred. Such micro-reserves have now been formally recognized under regulations, establishing a legal basis for community-based conservation that fills the gaps between large protected areas. These micro-reserves are very effective at the conservation of rare and localized plants, for example. The model is replicable across the region and demonstrates that formal conservation need not depend solely on government capacity or large-scale infrastructure.

KAZAKHSTAN | Restoring a Lake, Reviving a Community

Lake Yesik, nestled in the mountains above Almaty, was partially buried by a major mudflow in 1963 and has struggled ecologically ever since. Working with Almaty State Nature Reserve and local communities, CEPF grantee Karaganda Regional Environmental Centre has supported the restoration of the lake's ecosystem—combining hydrological rehabilitation with biodiversity monitoring and community engagement in sustainable tourism. The project is an example of how civil society can broker collaboration among protected area managers, local residents and the tourism sector.

TAJIKISTAN | Safeguarding a Genetic Legacy

In Tajikistan's remote Pamir Mountains, some of the rare trees and plants cling to survival, including the Critically Endangered Darvaz hawthorn (*Crataegus darvasica*). Farmers—predominantly women—have maintained hundreds of varieties of durum wheat, hulled barley, legumes and mountain fruit trees for generations. CEPF grantees Iktidor, Agroecology Zarzamin, Ganji Tabiat, Duniyoi Mukhabbat, and Kuhhoi Pomir have established dedicated conservation programs—combining in situ protection, community awareness and seed systems,

ex situ propagation of seedlings, and engagement with national botanical institutions. This work directly complements Tajikistan's national biodiversity commitments under the Kunming-Montreal Global Biodiversity Framework.

KYRGYZSTAN | Modern Biodiversity Monitoring

Modern conservation in the Mountains of Central Asia Biodiversity Hotspot is no longer limited to field notebooks and foot patrols. CEPF grantees Wildlife Conservation Society, University of Central Asia and Union of Photojournalists in Kyrgyzstan have pioneered the use of drone-based assessment of pasture and forest conditions, mobile apps for wildlife monitoring and reporting, and online maps of ecological risks and Key Biodiversity Areas. This citizen-science approach provides continuous, distributed monitoring at a scale no government agency could sustain alone, while contributing directly to the Kunming–Montreal Global Biodiversity Framework.



Butterfly perched on wild apricot
© Vlad Ushakov

TURKMENISTAN | Wildlife in Koytendag

In Turkmenistan's remote Koytendag Mountains, a range of dramatic canyons and cave systems at the edge of the hotspot, wildlife has long depended on a fragile network of springs and water sources. CEPF grantees Center for Large Landscape Conservation, Obadeskahyzmat, and Nature Protection Society of Turkmenistan improved water supply and wildlife monitoring in Koytendag Nature Reserve and initiated collaboration with Uzbekistan's Surkhan Nature Reserve toward nomination as a transboundary UNESCO World Heritage Site. This investment illustrates the value of civil society action in catalyzing larger conservation efforts

and focusing on practical, locally driven solutions that deliver tangible conservation outcomes.

REGIONAL | Strengthening the Western Tien Shan Transboundary Conservation Partnership

The Western Tien Shan UNESCO World Heritage Site spans the borders of three countries, and its long-term conservation depends on cooperation that transcends national boundaries. A CEPF-supported project conducted by Biodiversity Conservation Fund of Kazakhstan has helped establish and strengthen trilateral collaboration and management of this shared landscape, bringing together officials, park managers and civil society organizations from Kazakhstan, Kyrgyzstan and Uzbekistan in regular dialogue. This growing partnership has the potential to serve as a model for transboundary cooperation in mountain ecosystem conservation across the region.

Further information about CEPF grants in the Mountains of Central Asia Biodiversity Hotspot is available [here](#).

Working with Governments and the Global Environment Facility (GEF)

CEPF grants to civil society are not an alternative to government action or large conservation investment, they are a complement to it. Across the Mountains of Central Asia, CEPF grantees work alongside, and in coordination with, some of the region's most significant conservation programs, including major initiatives supported by the GEF.

The GEF-funded Tien Shan Mountain biodiversity project in Kyrgyzstan has provided technical and other support to strengthen biodiversity management in several protected areas. CEPF grantees working in adjacent KBAs and buffer zones have helped fill important gaps: engaging local communities where park managers have limited presence; documenting traditional knowledge and improving monitoring; and advocating for land-use decisions that protect ecological corridors.



Snow leopard (*Panthera uncia*) © Vlad Ushakov

In Tajikistan, the GEF-supported project in the Upper Amu Darya basin has strengthened the management of protected areas. CEPF grantees have

complemented these efforts by conducting species surveys, supporting community benefit-sharing initiatives, and helping to build the civil society capacity needed to sustain conservation outcomes within Tajikistan's environmental governance system.

The Global Snow Leopard and Ecosystem Protection Program (GSLEP) has positioned the snow leopard as the flagship species for mountain conservation diplomacy. CEPF grantees have contributed monitoring data, community ranger networks, and human-wildlife conflict mitigation work.

Looking Ahead: A New Chapter with the GEF Small Grants Program

In addition to its efforts to conserve the world's biodiversity hotspots, CEPF has begun a new role in relation to the GEF Small Grants Program (SGP), a globally recognized mechanism for channeling resources directly to grassroots civil society organizations and communities. CEPF is serving as the executing agency for Conservation International (CI) as CI becomes one of two new implementing agencies for the GEF SGP. The CI/CEPF team will deliver the SGP in Turkmenistan and four other countries: Equatorial Guinea; Libya; Saint Vincent and the Grenadines; and Sri Lanka.

The GEF SGP will launch in Turkmenistan in mid-2026 and is expected to cover the entire country. Its mandate extends beyond biodiversity — encompassing climate change, land degradation, and other priority areas — while sharing CEPF's foundational commitment to civil society as the primary agent of change.

Together Toward Global Goals

CEPF's grant-making program in the Mountains of Central Asia — nearly 100 projects in the first phase, with a new portfolio starting in 2026 — reflects the global importance of Central Asian's biodiversity and ecosystems and the efficacy of its civil society. From community rangers in Kyrgyzstan monitoring snow leopard, to women's networks in Tajikistan conserving endangered trees and crops, to advocacy for micro-reserves, all these actions advance the Kunming-Montreal Global Biodiversity Framework's vision of living in harmony with nature. These actions are complemented by the new GEF SGP program in Turkmenistan, and indeed the GEF's efforts around the globe. Together with a multitude of partners in the conservation and sustainable development community and government, we are driving progress toward global goals that address challenges, build resilience and forge a sustainable future.

SOUTH AMERICA



From Monitoring to Conservation: Two Updated KBAs for the Last Valleys of the Chilean Woodstar



Male Chilean Woodstar © Ronny Peredo

Author: Chilean Network of Bird and Wildlife Observers (ROC)

- The Chilean Woodstar is classified as **Critically Endangered**: annual censuses show a decline from ~1,500 individuals to **an estimated 434 in 2024**.
- The species is **locally extinct in the Azapa Valley**, which historically harbored the largest population, and currently persists in parts of the **Vítor and Camarones Valleys**.
- The **three KBAs** within its range were inherited sites from the IBA program, identified by other species and **lacking confirmed criteria** under the Global Standard. The only site where the hummingbird was listed was **the Azapa Valley** (2,091 km²), the valley where it is now considered locally extinct.
- Following the re-evaluation, **two sites were identified by the hummingbird**, meeting criteria **A1a and B1**: Valle de Camarones (25 km²) and Quebrada de Vítor (11.6 km²), both extending into the valley following the vegetation occupied by the species.
- The assessment used the parameter **number of mature individuals**, made possible by the Aves Chile monitoring series.
- The **entire network of micro-reserves** is included within the updated sites.
- Updating these KBAs supports the application for government land and the search for funds to acquire private properties.

The Chilean Woodstar (*Eulidia yarrellii*) is the smallest bird in Chile. Declared a Natural Monument and the symbol of the Arica commune, it is classified as Critically Endangered both nationally and internationally. Although it was common in the Arica and Parinacota valleys a few decades ago, its population has experienced a marked decline. According to censuses conducted by AvesChile since 2003, the species has decreased from approximately 1,500 individuals to an estimated 434 in 2024. This decline is closely related to habitat loss, particularly in the Azapa Valley, which historically harbored the largest population and where the species is now considered locally extinct. Thus, the Chilean Woodstar is now restricted to areas of the Vítor and Camarones valleys, where the conservation of remaining vegetation and breeding sites is essential to prevent further population decline.

The guiding framework for the conservation of this species is the Recovery, Conservation, and Management Plan (RECOGE), published in 2022, with twelve lines of action. Within this framework, various organizations have promoted initiatives to protect and restore its habitat. AvesChile, for example, spearheaded the first protected area for the hummingbird—the Chilean Woodstar Natural Monument, with more than 10 hectares managed by CONAF (National Forestry Corporation). Subsequently, a GEF (Global Endowment for Climate and Energy) project for threatened species enabled the establishment of five additional micro-reserves between 2017 and 2022.

These initiatives are complemented by the work of the Chilean Network of Bird and Wildlife Observers (ROC), which — with the support of American Bird



From left to right: ROC's Microreserve; Habitat restoration carried out by ROC. © ROC

Conservancy (ABC) — recently requested the Ministry of National Assets to grant a 15-hectare concession in the Vitor Valley, with the aim of expanding this network of micro-reserves.

Along the same lines, ROC is currently working on the conservation and restoration of the Chilean Woodstar's habitat in the Vitor micro-reserve. As part of this process, a management plan is being developed following the Open Standards for Conservation. The conservation targets have already been preliminarily defined, the territory has been characterized, and an initial workshop was held with public services and local stakeholders, thus moving towards coordinated site management. Additionally, habitat restoration is progressing within the micro-reserve, with the planting of approximately 2,000 native flora specimens, including tree species in conservation categories such as the tamarugo (*Prosopis tamarugo*), the carza (*Haplorhus peruviana*), and the pacama (*Morrellia pavonis*), with the participation of the local community.

In this context, accurately delimiting the areas where the Chilean Woodstar still survives is crucial. Therefore, to expand the network of micro-reserves, support applications for public lands, and/or seek funding to acquire private properties, it was proposed to update Key Biodiversity Areas (KBAs) located within the species' distribution area.

Upon reviewing the overlap between the species' current distribution and the network of Key Biodiversity Areas, it was found that three KBAs existed in these valleys, but **none had been identified for the presence of the hummingbird**. These were legacy sites from the Important Bird Areas (IBA) program, originally designated for other species and lacking confirmed criteria under the Global Standard. One of them, Codpa Valley, had even been delisted. The two remaining KBAs covered only limited portions of the valleys. The Chilean Woodstar, however, was listed in a fourth KBA: Azapa

Valley, another legacy IBA site covering 2,091 km² that remains outdated. This is precisely the valley where the species is now considered locally extinct.

The result was paradoxical: **on the map, Chile's most threatened bird appeared associated with the only place where it is no longer found, and not with the two valleys where it still survives.**

This situation highlighted the need to update the boundaries of these sites to reflect the species' current distribution and the territories where its main breeding populations are concentrated. The question then became whether the available information demonstrated that Vitor and Camarones met the criteria to be recognized as Key Biodiversity Areas due to the presence of the Chilean Woodstar.

The answer lay in the data accumulated over years of monitoring. The process of updating the KBAs that overlapped with their distribution relied on information gathered by AvesChile during its annual monitoring efforts. The shared database contained georeferenced records of nests and leks between 2021 and 2024, along with the type of ownership—public or private—of each record. This information was supplemented with records of the species available on eBird between 2020 and 2025.

Thanks to this dataset, it was possible to evaluate both sites using the **number of mature individuals as a parameter**. For this purpose, the abundance estimate provided by AvesChile for each valley was used as a base and converted to mature individuals by applying an approximate ratio of 1.5 total individuals per mature individual. In the Camarones Valley, an estimated 199 individuals were counted, with a range of 108 to 380, equivalent to 133 mature individuals. In the Vitor Ravine, the estimate was 235 individuals, with a range of 138 to 384, equivalent to approximately 157 mature individuals. This is supplemented by documented

reproductive evidence between 2021 and 2024: eight leks and nine confirmed nests in Camarones, and seven leks and five nests in Vitor¹.



Female Chilean Woodstar ©
Ronny Peredo

To interpret these records, it is important to consider that males establish reproductive territories— *leks* — associated with foraging sites, and after mating, females build their nests independently. Each *lek* corresponds to a reproductive unit, and each confirmed nest indicates at least one additional reproductive female. Thus, the minimum number of reproductive units is 17 in Valle de Camarones and 12 in Quebrada de Vitor.

When comparing the estimates for each site with the current global estimate of mature individuals, Valle de Camarones contains 63.3% of the population and Quebrada de Vitor 74.76%. The fact that both figures together exceed 100% reflects that the most recent counts carried out in the valleys surpass the available global reference and demonstrates the high degree of concentration of the known population in these two territories.

Abundance and reproduction data confirmed the importance of both valleys for the species. Based on this information, both sites meet criterion **A1a**, for harboring a substantial fraction of the global population of a Critically Endangered species, and criterion **B1**, associated with a geographically restricted distribution, exceeding the required reproductive unit thresholds in both cases.

Once the importance of both sites was confirmed, the next step was to revise their boundaries to more accurately represent the habitat used by the Chilean Woodstar. The common principle was to extend the sites following the vegetation occupied by the species and exclude areas that do not correspond to its habitat. In this way, the new polygons aim to better reflect the hummingbird's actual distribution and, at the same time, facilitate more precise land management.

In the case of the **Camarones Valley** (formerly the Cuya sector of the Camarones Valley), the boundaries were correctly defined, but they only encompassed a portion of the valley near the coast and, therefore, a smaller part of the species' distribution. Extending the boundaries upstream, following the available habitat, increased its area from 2.8 to 25 km². The same criteria were applied to the **Quebrada de Vitor** (formerly the Chaca Valley). The new polygon incorporated the area corresponding to the delisted Codpa Valley at its upper end, but its final area decreased from 66.9 to 11.6 km². This reduction does not represent a loss of priority habitat, as the previous polygon was thick and included a significant portion of slopes and grasslands without vegetation, while the new boundaries more precisely reflect the areas where habitat for the species actually exists.

To define the new boundaries, relevant management elements were also considered. These included the boundaries of existing micro-reserves, ensuring their full incorporation, and a significant portion of the valley's agricultural lands. These latter areas represent spaces where it is possible to work towards coexistence between production and conservation and which, in the future, could become areas of interest for expanding the micro-reserve network.

The updated Key Biodiversity Areas have concrete consequences for the conservation of the Chilean Woodstar. The entire network of micro-reserves is now included within the KBAs, aligning existing management practices with international priorities. Furthermore, by cross-referencing the records with the type of land ownership, it is possible to identify where to request state-owned land from the government and where funding is needed to acquire private properties or establish conservation mechanisms.

For the ROC, the recognition of these two sites as Key Biodiversity Areas represents a new opportunity to strengthen the conservation of a species that today depends on an increasingly smaller and more fragmented territory. While monitoring allows us to understand where and how the Chilean Woodstar persists, the protection and restoration of these valleys is key to ensuring that these last refuges can remain part of its future.

¹ AvesChile (2024). *Population estimate of the Chilean Woodstar for the 2022, 2023, and 2024 seasons and implementation of actions of the RECOGE plan for the Chilean Woodstar, Arica and Parinacota Region*. Ministry of the Environment, Exempt Resolution 1093.

Panama Launches National Initiative to Identify KBAs in Alignment with Global Biodiversity Goals

Author: Amphibian Survival Alliance

Coiba National Park © Alex E. Proimos

Panama City, May 18th, 2026. The Ministry of Environment of Panama, H.E. Juan Carlos Navarro, in collaboration with the Key Biodiversity Areas (KBA) Partnership and supported by the Amphibian Survival Alliance (ASA), a partner of the KBA Partnership, has officially launched the National Key Biodiversity Areas (KBA) Assessment through the signing of a Memorandum of Understanding.

This landmark initiative represents a critical step in advancing Panama's commitments under the Kunming-Montreal Global Biodiversity Framework (KM-GBF), including targets related to biodiversity conservation, spatial planning, ecosystem restoration, and the effective protection of areas of high biodiversity importance.

The National KBA Assessment will identify, map, and document sites that are essential for the persistence of biodiversity across Panama. These results will directly inform the implementation of the country's National Biodiversity Strategy and Action Plan (NBSAP) and contribute to achieving national conservation priorities, including the 30x30 target to protect and effectively conserve at least 30% of land and marine areas by 2030.

H.E. Juan Carlos Navarro, Minister of Environment of Panama, highlighted the importance of the new international collaboration established through the initiative: *"Today, Panama strengthens its efforts to protect biodiversity through the support of two important international allies, the Key Biodiversity Areas Partnership and the Amphibian Survival Alliance. This collaboration will help strengthen the national process to identify and protect areas of highest biodiversity importance across the country, including Indigenous territories, through science, international cooperation, and joint action with local communities. Protecting these ecosystems is essential for the future of Panama*

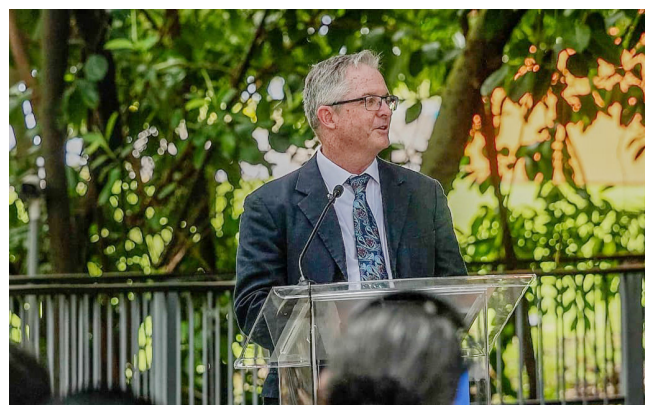
and for the conservation of biodiversity across the Americas, particularly amphibians, which continue to face alarming declines throughout the region."



H.E. Juan Carlos Navarro, Minister of Environment of Panama
© Ministerio de Ambiente, Panamá

Dr. Andrew Plumptre, Head of the KBA Secretariat, added:

"Panama's commitment to undertaking a national KBA assessment demonstrates strong leadership in applying the KBA Standard to guide conservation action. Identifying sites of global biodiversity importance is essential to achieving international targets and ensuring that conservation investments are directed where they are most needed."



Dr. Andrew Plumptre, Head of the KBA Secretariat
© Ministerio de Ambiente, Panamá

The process will be led by a National Coordination Group (NCG) composed of government institutions, scientific organizations, civil society, Indigenous Peoples, and private sector representatives. This inclusive and science-based approach ensures that biodiversity priorities are identified transparently and integrated into national decision-making processes.



Dr. Gina Della Togna, Executive Director of the Amphibian Survival Alliance © Ministerio de Ambiente, Panamá

Dr. Gina Della Togna, Executive Director of the Amphibian Survival Alliance, noted:

“As a partner of the KBA Partnership, ASA is proud to support Panama in advancing this process. This initiative will help translate global commitments

into tangible conservation action on the ground while strengthening collaboration across sectors and ensuring the use of the best available science”.

The initiative will also strengthen ecosystem resilience, identify critical habitats, and support the long-term provision of ecosystem services essential for livelihoods, water security, and climate adaptation.

Importantly, the National KBA Assessment will also help position Panama to access and mobilize international biodiversity finance, including opportunities through mechanisms such as the Global Environment Facility (GEF), the Green Climate Fund (GCF), and other multilateral and bilateral funding streams. By identifying priority areas backed by globally recognized standards, Panama strengthens its ability to align conservation investments with national priorities and global commitments.

By aligning national action with global biodiversity goals, Panama reinforces its role as a regional leader in conservation and contributes to the global effort to halt and reverse biodiversity loss by 2030.



NORTH AMERICA



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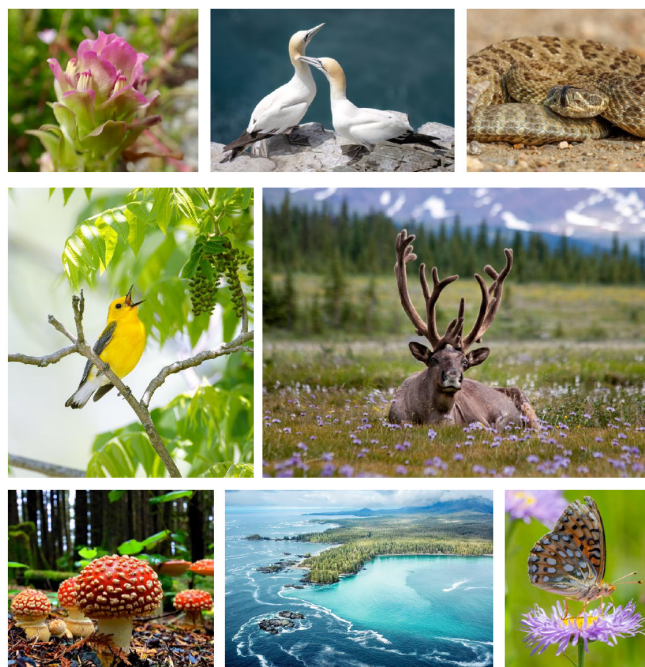


In June, the KBA Canada Secretariat also published a revised version of the [*National Standard for the Identification of KBAs in Canada*](#). The Canadian program was the first national coordination group to publish a national KBA standard in 2019, and this update reflects the intervening years of experience gained by the program. The Canadian national standard is a very conservative adaptation of the global standard and remains closely aligned, using virtually all the same thresholds but allowing consideration of national populations and extents, and national threat rankings. The revision is narrowly focused on revised thresholds for national ecosystem criteria A2 (threatened ecosystems) and B4 (geographically restricted ecosystems). Following years of testing and expert input in Canada and in collaboration with Wildlife Conservation Society colleagues worldwide, it was determined that the thresholds established in the 2016 Global Standard for these criteria were too high to capture important sites for a majority of ecosystem types in Canada, including some that are highly threatened. While the Canadian national standard was able to undergo revision relatively quickly in response to these findings, these changes will only affect national criteria. The global KBA partnership continues to take in feedback on this subject from multiple countries and KBA experts, and is undertaking new analyses that could eventually lead to changes to these criteria in the global KBA Standard and Guidelines. The reduced ecosystem thresholds will allow KBA



A National Standard for the Identification of Key Biodiversity Areas in Canada

Version 2.0



proposers to recognize more high-quality sites of disproportionate importance for ecosystems in Canada. The revised National Standard also contains updated guidance on delineation of KBAs, and new information on the collaborative two-stage review process that is required for all KBAs in Canada.

The Threatened Old Growth Forest Dependent Species of the Carmanah and Walbran Valleys



© Deb Freeman

Author: Peter Cressey for the Friends of Carmanah Walbran

The Carmanah Walbran Provincial Park is located on Southern Vancouver Island within the Traditional Territory of the Pacheedaht and Dididaht First Nations. The park contains the whole 11,000 hectares of the Carmanah Valley and 5,500 hectares of the lower Walbran Valley

Since 2012, the Friends of Carmanah Walbran have been working to increase the area of protected Old Growth Forest in the Walbran watershed. We have advocated for a 1,500-hectare area along the park boundary called the Central Walbran. The Upper Walbran Valleys have become highly fragmented by clearcuts and are still being logged.

To enable access and bring public attention to this remote area, we instigated a project that has built and maintained trails, boardwalks, stairs, signage, outhouses, and a visitor centre. There are around 3 kms of boardwalk trail over the delicate forest soils, helping to mitigate the impact of the increasing number of visitors.

The time spent in this forest has allowed us to document the area's unique species. We have held annual Bio and Myco blitzes, flora, fauna, and fungi surveys with the help of many knowledgeable and passionate people. Over the years, this has created a connected and engaged community working for the forest's protection. The iNat project for this area has now collected over 750 species. This has led to a temporary deferral of logging in the Central Walbran in 2021 and has gone towards its recent designation [as part of a Key Biodiversity Area \(KBA\) in 2026](#).

This year we have again organized with the 'Old Growth Birders and Bio-Blitzers' a Marbled Murrelet (MaMu) educational event. This weekend event is called 'MaMu Day' and is held on July 12th every year at the very height of the birds' nesting season.



The MaMu is a small, elusive seabird (*Brachyramphus marmoratus*) that relies on coastal old-growth forests, the forest being its nesting grounds. The birds make use of the shelter and safety offered by the trees to lay their single egg on the thick moss mats that accumulate on their wide branches. The chick, once fledged, must make its first flight from the tree branch to its waiting parents in the ocean, a flight that can be up to 50 kms in distance.

The bird was designated in 2003 by the Canadian government Committee on the Status of Wildlife in Canada (COSEWIC) as a threatened species. The primary threat is the ongoing loss of coastal Old Growth forests to industrial logging and nest predation which has been increased by forest fragmentation and edge habitats frequented by their Corvid predators like Crows, Ravens and Stellar's Jays. As these seabirds spend most of their time diving for seafood in coastal waters, they are also impacted by fisheries by-catch, marine food depletion, oil spills, and other pollution. Depending on the nesting quality of the forest trees, MaMu requires 10-50 hectares of intact old-growth forest per pair (Dr Alan Burger).

On the Saturday evening of the weekend's event, the 51 attendees took part in a learning circle led by Dr. Royann Petrell, with various other MaMu experts and birders. Then, after camping overnight, we woke up for an early start at predawn on Sunday morning. This is the best time to hear and observe the birds as they use the low light and misty conditions to avoid predators as they fly from the ocean into their nesting grounds.

This year we are on the northern edge of the Walbran side of the park. The event was originally planned to be held in Central Walbran, but in March this year a logging company gate with 24hr security was installed on the only access road. Repeated requests to allow us access for this bird watching event were denied. The exclusion from this area is concerning, with the current logging deferral still only temporary.

As we gathered in the grey light of the early morning, there was heavy mist drifting amongst the trees in the park. Conditions like this are ideal for hearing MaMu, the old loggers' name for them, being 'fog larks', as in the mist they will call more frequently to each other. We could hear their seabird-like 'keer-keer-keer' calls first, then dozens of murrelets appeared at treetop height, moving fast across a clearcut on the edge of the park.

They are roughly pigeon-sized birds; their wings are distinctively paddle-shaped. The wings are dual-purpose, shaped for both swimming underwater to depths of 30 m to catch small fish and for flights of up to 30-50 kilometres inland to reach their hatchlings.

Bernard Schroeder, a long-time bird researcher specializing in endangered species, was here with a state-of-the-art radar antenna detecting the flight

speeds (80-90 km/hr), numbers, and locations of murrelets travelling up the watershed.

Peer-reviewed radar counts from 1996 to 2018 established a steady 2.4% annual decrease coast-wide, with the steepest declines concentrated in the heaviest logged watersheds. Another study focused on sea-counts off Pacific Rim National Park Reserve showed higher annual declines of -3.1% per year, amounting to an alarming loss of over 50% of the local population over the past 20 years. BC Conservation Data Center gives a 2021 BC population estimate of 74,300, down from 99,100 in 2007, and predicts a short-term decline of 30-70% and a long-term decline of 50-80%. These population declines raise serious concerns about the species' survival, with reduced genetic diversity making it less able to cope with the threats of climate change, warming oceans, and bird flu.

As the morning progressed, we watched the spectacle of the birds' flight; cameras clicked, and hands pointed as the birds circled and flew past, everyone now standing, the surprise and awe in people's voices comparable to a fireworks display.

Amongst the many people who were watching the murrelets was a group of artists whose experience here will inspire their art and evolve into a future art event, perhaps in the local communities of Lake Cowichan or Port Renfrew, and in the capital, Victoria.

The last call was heard at around 6.30 am. In the quiet after, we stayed and talked about this experience with this rare and endangered bird and what we can do to ensure that this ancient forest and the incredible species that rely on them can continue.



© Deb Freeman

To support the protection of the critical Marbled Murrelet Old Growth Forest habitat, please email your letters of support to the Minister of Environment and Parks, Tamara Davidson, at ENV.Minister@gov.bc.ca

For more information, email friendsofcarmanahwalbran@gmail.com

EUROPE



Advancing the Identification of KBAs in Spain

Sierra Nevada, Spain © Antonio Morales García

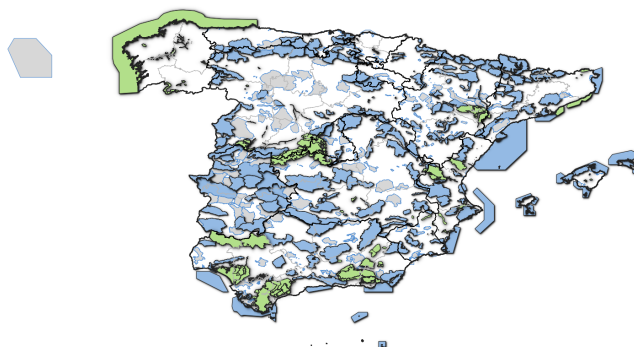
Authors: David Fco. Díaz Fernández (Spanish KBA National Coordination Group); Faye Weaver, Catherine Numa (IUCN Centre for Mediterranean Cooperation); Octavio Infante (SEO/BirdLife, Chair - Spanish KBA National Coordination Group)

- Spain's first national KBA assessment is underway through the INTEGRA project, coordinated by IUCN and the Experimental Station of Arid Zones.
- Two national expert workshops have brought together 29 specialists from universities, NGOs and public institutions.
- More than 40 potential new global KBAs have already been identified, alongside the revision of many existing sites.
- Sierra Nevada is emerging as one of the world's most significant KBAs, with around 300 potential trigger species currently under assessment.
- A third workshop in the Canary Islands later this year will focus on one of Spain's richest centres of endemism and hopes to continue the expansion of the national KBA network.

A comprehensive national KBA identification process has started in Spain thanks to [INTEGRA](#), a research project led by IUCN and the Experimental Station of Arid Zones (EEZA-CSIC) and supported by the Biodiversity Foundation of the Spanish Ministry for Ecological Transition and Demographic Challenge (MITECO) through co-financing from the European Regional Development Fund (ERDF). INTEGRA aims to assess ecosystem services at the national scale, to design a network that is ecologically coherent and climate-resilient, and to generate knowledge to advance the spatial integration of three key elements of green infrastructure – biodiversity, connectivity and resilience- and can continue to provide societal benefits.

The first year of the project is dedicated to the identification and characterisation of Key Biodiversity Areas (KBAs) in Spain. This first national assessment using the KBA Standard is both promising and challenging. Spain is one of the most biodiverse countries in Europe, with many endemic species, many of which have recently been assessed for the [National Red List](#), creating an excellent opportunity to increase the coverage of KBAs across the country. Like any KBA process,

however, beyond time and funding limitations - with only three workshops to be organised- major challenges are expected regarding non-assessed species and the need to revisit the boundaries of existing KBAs to improve their compliance with the management requirements of the KBA Standard.



Existing and proposed KBAs in Spain; in green new proposals or existing KBA with boundary modifications; in blue, existing KBA with updated trigger species; in grey, existing KBA with no data (yet). Canary Islands are not included in this map.

The Spanish KBA initiative began in 2024 with various KBA training sessions within the framework of the [GaP](#) project, and the creation of the National Coordination Group, which is currently coordinated by the Spanish Ornithological Society

([SEO/BirdLife](#)). Since then, SEO/BirdLife has also led the assessment of Important Bird and Biodiversity Areas (IBAs), including the [Effect-IBA](#) project, which delivered two important foundations for the KBA assessment: bird data, which enabled more than 140 IBAs to be assessed as global KBAs, including potential new KBAs; and a new approach for developing Extent of Suitable Habitat (ESH) maps for [freshwater species](#) from locality data. In the framework of INTEGRA, in addition to SEO/BirdLife's bird assessments, data on other species were requested from members of the National Coordination Group. Notably, the Iberian Society of Ichthyology ([SIBIC](#)) supplied all continental fish data from the [Carta Piscícola](#) - more than 67,000 records - for analysis using the new ESH methodology, while the Spanish Association for the Conservation and Study of Bats ([SECEMU](#)) supplied a list of species and KBAs, including proposed new sites. Data on individual species were also provided by the Spanish Society for Plant Conservation Biology ([SEBICOP](#)) and the Spanish Entomological Association ([AeE](#)). Other organisations, including the [Zerynthia Association](#), which coordinates the National Red List process for butterflies, and [Biosfera Environmental Consultancy](#), which coordinates the [Iberian desman](#) strategy and surveys, supplied key data on threatened and endemic species.



During the Leon workshop, the participants visited a potential KBA proposed due to the presence of several endemic, threatened rock-dwelling plant species, such as *Petrocoptis viscosa*, pictured here at the Castle of Cornatel. © David Díaz

So far, two workshops have been organised to share and review the gathered data, obtain more information, and discuss the delineation of both existing and new KBAs. The first workshop was held in Seville in June, hosted by the Doñana Biological Station, while the second was organised in Leon in July, hosted by the University of Leon. A total of 29 experts from universities, NGOs and local authorities (such as royal gardens and park technicians) have participated, resulting in the proposal of 636 trigger species for 266 sites, including the re-delineation of many existing KBAs and the identification of more than 40 new potential global KBAs. In total, the current KBA dataset includes over 1,400 records of 683 species for over 410 sites. The workshop data is still being curated, with updated information for some very relevant groups for KBA identification, including new data for Mollusca from the Spanish Society of Malacology ([SEM](#)).



Group photo of the Seville workshop participants (June 2026). © IUCN

One of the highlights of this process is the revision of Sierra Nevada, in Granada (Andalucía), with a (not yet complete) list of 300 potential trigger species, mostly endemic plants and arthropods, many of which are globally threatened. This is particularly significant because, although a KBA may contain populations of hundreds of species within its boundaries – and thousands in the case of tropical areas – the nature of the KBA criteria implies that few species meet global criteria. In fact, only 102 KBAs worldwide have 100 or more species meeting KBA criteria. While, logically, not all the species proposed for Sierra Nevada will trigger the KBA criteria, the high levels of endemism, the clarity on the taxonomic status of the species, and the in-depth knowledge of the area and its species

- largely thanks to the University of Granada's decades of work in the area- will make it possible to rank Sierra Nevada among the world's leading KBAs in terms of the number of confirmed species, and certainly far above any other KBA continental European level.

While these workshops comprise a significant advancement in the identification of KBAs in Spain, they have also highlighted the ongoing threats and conservation challenges to species. Unfortunately, during the workshop in Seville it was confirmed that the fairy shrimp (*Linderiella baetica*), a small crustacean assessed as Critically Endangered in 2019 and only known from the temporary Carretones pond in Puerto Real (Cádiz), a candidate for KBA criterion A1e, may be extinct in the wild as a shopping centre has since been built on the site, completely transforming the species' only known habitat. On the other hand, a few days after the workshop in Leon, one of the three known populations of the Critically Endangered *nomevés* ("you don't see me" in Spanish, *Gyrocarum oppositifolium*) was surrounded by one of the largest recent fires in the country; miraculously, the slope where the species is found was not affected.



As part of the Leon workshop, the participants visited a potential KBA proposed due to the presence of *nomevés* (*Gyrocarum oppositifolium*), an endemic, Critically Endangered plant species. © IUCN

Considering threatened (or potentially threatened) and range-restricted species, there are around 7,000 potential trigger species in Spain, of which

this first assessment aims to cover approximately 1,000, including many of the nationally endemic species recently assessed for the [National Red List](#) by the Spanish Species Specialist Group of the IUCN Species Survival Commission. Many of these endemic species are found in the Canary Islands, where a third workshop will take place this autumn.

There are still many gaps to fill and numerous challenges to address, including how to better involve representatives of the Autonomous Communities (which manage data of critical importance for KBA identification), improving coordination between Red Listing and KBA processes (in most cases, both processes require the involvement of the same experts), raising funds for continuing KBA assessments (some areas and taxonomic groups won't be sufficiently covered by INTEGRA, including ecosystems which are not being assessed at this stage). Despite these challenges, which are inherent to any KBA process, the advances to date are very promising, particularly thanks to the high level of involvement and participation of national experts in such a demanding process.

Group photo of the Leon workshop participants (July 2026). © IUCN



The results of this KBA assessment will be submitted to the National Coordination Group by January 2027, and the sites will be formally proposed to the Regional Focal Point and the KBA Secretariat between February and April 2027.

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A low-angle shot of a giraffe's head and neck, looking upwards towards a clear blue sky. The giraffe has a white coat with large, irregular brown spots. Its long neck extends diagonally across the frame. The background is a soft-focus view of green trees and foliage.

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