

List and description of Symposia

Symposium 1. Tracking migrants to reveal the diversity of spatiotemporal strategies and ultimately understand the ecology of migration

Symposium leader: Kasper Thorup

Seasonal migration is a widespread phenomenon. Large numbers of birds breeding in the Palearctic spend the non-breeding season in Africa and many African-breeding species move within Africa during the non-breeding season. We have general knowledge of the distributions of most these species such as general wintering distribution. But the lack of precise knowledge of the movements occurring within seasons and overall connectivity among populations hampers understanding their ecology and the potential for devising conservation actions. The difficulty lies in our inability to track these small birds over longer distances and time frames. While recovering tracking devices is needed to track small songbirds, information on important parameters for understanding ecology, for example mortality and dispersal, generally requires satellite tracking. This symposium will showcase the wealth of information that has been acquired by a variety of tracking techniques from small devices such as geolocators to satellite tracking shedding light on the diversity of on spatiotemporal strategies and how they play out in Africa (and beyond). We will present models for understanding the ecology of migrants in Africa such as detailed study of Afro-Palearctic migration in cuckoos along with intra-African migration of several species. While such life on the move is most fascinating, the phenomenon is overall under threat and we aim to identify promising avenues for future tracking of migration within Africa.

Symposium 2. Wetlands and waterbirds

Symposium leaders: Tim Dodman, Achilles Byaruhanga and Khady Gueye Fall

Africa's waterbirds and wetlands attract well-deserved attention both amongst ornithologists and also at policy level. Monitoring, researching and conserving waterbirds are subject of a number of complementary initiatives ranging from grassroot ones through collaboration amongst a small number of countries ranging to flyway scale and global treaties. Presentations in this symposium will cover issues of waterbird monitoring and research, showing how this information leads to the conservation of threatened species and critical sites. The symposium will also highlight some challenges Africa's waterbirds and their critical sites are facing and some new initiatives that aim to improve their conservation status.

Symposium 3. Raptors and the Anthropocene

Symposium leaders: Kailen Padayachee and Petra Sumasgutner

Raptor populations throughout the world are being affected by anthropogenic drivers. Raptors are known to be susceptible to changes in land use and climate, as well as to direct persecution and environmental pollution. These factors are unlikely to operate independently, as for example climate change is likely to exacerbate the effects of rapid habitat change on population dynamics. Raptors vary in their responses; some are particularly vulnerable due in part to their slower life histories, while other species have shown high plasticity and positive population trends in response to factors such as increased urbanization. Simultaneously, raptors may have a range of impacts on humans, from essential ecosystem services like the control of rodent pest

species to problematic aspects such as predation on species of economic and conservation concern or interference with the development of transport and energy infrastructures. Finding sustainable solutions to these problems involves a combination of strong ecology combined with partnerships with policy makers and stakeholders. This symposium aims to provide a platform to highlight recent findings on this diversity of raptor-human interactions and on alternative approaches to mitigate conflicts and promote coexistence in order to maintain viable raptors populations in a changing world.

Symposium 4. Nature conservation and the arts in Africa

Symposium leader: Daniel Flenley

Engagement with science and conservation is greatly enhanced where that engagement takes place through the creative arts. Audiences exposed to scientific ideas through such pathways have been shown to demonstrate meaningful change in their understanding of topics and, where the topic has an environmental basis, their behaviour. This approach is used in various forms and contexts across Africa. Our symposium seeks to connect some of these practices and inspire further engagement with this powerful conservation tool. Bird conservation themes are encouraged, but not necessarily essential. Creative modes of presentation are encouraged, but not required.

Symposium 5. Impacts of renewable energy, and the rapid electrification of Africa on bird populations

Symposium leaders: Alvaro Camina and Sam Ralston

Access to reliable, affordable and clean electricity is critical for economic growth, sustainable development and realising fundamental human rights. Yet hundreds of millions of people in Africa lack access to electricity. This deficit is not because the continent lacks energy resources. The International Energy Agency (2019) estimates that Africa's potential wind power capacity could provide over 250 times the current demand for energy on the continent. This outstanding renewable energy potential and limited access to electricity, combined with a growing population, dramatically reducing costs of renewable power and the global imperative to incentivise low-carbon energy, suggest that Africa is on the precipice of an energy revolution. Many countries could leapfrog fossil fuels in favour of a rapidly growing renewable energy supply.

This energy revolution will have many positive benefits, including environmental (i.e. climate change mitigation). However, renewable energy and associated infrastructure (e.g., overhead power lines) can negatively impact wildlife, including birds. These impacts are potentially significant; many of the species affected already face a myriad of other threats. This symposium will discuss the risks this energy revolution could pose to Africa's birdlife and potential solutions. We hope to encourage the continent's ornithological community to rise to the challenge and grow the necessary knowledge and human capital to help the continent realise its renewable energy potential without harming nature.

Symposium 6. Developing capacity of early-career conservation leaders in Africa

Symposium leaders: Julius Arinaitwe and Sherilyn Bos

Africa is well-endowed with biodiversity and still has the opportunity to ensure a future where people and nature live sustainably and in harmony. The threats to this rich resource are underpinned by global demand for food and raw materials, the imperative of governments to lift growing human populations from poverty and the large-scale and severe negative impacts of climate change, among others. To attain this future scenario demands leaders able to articulate a fresh narrative that places nature as a positive contributor to sustainable development. Africa has a large young population in whose hands the sustainability of nature will ultimately depend. It is important that Africa develops conservation leaders to whom this responsibility will be handed and some civil society organisations, academic institutions and protected area agencies are making progress on this issue.

Symposium 7. Plight of African hornbills and conservation innovation

Symposium leader: Lucy Kemp

Only two of the African hornbill species are listed on the IUCN Red Data List (the two *Bucorvus* spp., listed as Vulnerable), with the remaining species all listed as of Least Concern. Whilst this might be true for some, the IUCN SSC Hornbill Specialist Group (HSG) needs to identify species that may actually be currently Threatened but are in reality listed as Data Deficient. Ongoing deforestation, combined with hornbills being the most commonly found birds in the bush-meat trade, suggests that at least some of the larger hornbill species must be more seriously threatened. The casqued forest hornbills are prevalent in the live trade, with the two *Ceratogymna* spp. most likely requiring CITES listings. This session aims to i) connect hornbill biologists working in Africa, ii) improve current Red-Listing efforts so that we have a clear idea of where research, conservation action and resources are required and iii) share existing conservation innovations that might be replicated across the continent. This session is for anyone with interests, knowledge and experience of any of the African hornbill species. The HSG would also welcome contact details for any individuals or organisations that are not represented at PAOC, so that we can all build and develop the local and regional contacts, and try and source funds for further conservation activities.

Symposium 8. CMS Vulture Multispecies Action Plan: implementation in sub-Saharan Africa – an assessment of progress

Symposium leader: Andre Botha

The CMS Vulture Multi-species Action Plan for African-Eurasian Vultures (Vulture MsAP) was adopted by all 124 Range States at CMS CoP12 at Manilla in the Philippines in October 2017. This symposium will focus on feedback from various presenters from across Africa about progress made with regard to the implementation of the actions in the Vulture MsAP in their countries/regions and what challenges and opportunities were identified during the first three years since the MsAP was adopted. We will also reflect on what more can and must be done to further promote and accelerate implementation across the range in Africa.

Symposium 9. Integrating science, policy and development to address unsustainable land use linked to African-Eurasian migrant landbird declines

Symposium leader: Samuel Temidayo Osinubi

Flyway-wide collaboration is key to effectively support conservation action for declining migrant landbirds across their range. This symposium brings together African science, policy and development experts in collaboration with European experts to review existing science, policy and practice, and explore innovative trans-disciplinary opportunities to deliver migrant landbird conservation across rapidly-changing landscapes.

Specifically, we aim to:

Improve our understanding of African-Eurasian migrant landbird declines in relation to the latest African research, build a clearer picture of the drivers and potential solutions by synthesizing knowledge from research being conducted throughout the flyway.

Improve the science-policy connection between African policy makers and conservation practitioners, and identify key research and policy questions

Enhance capacity for policy and practice-relevant research by strengthening collaboration and networking of scientists working on African-Eurasian migrant landbird declines, encouraging collaboration to fill policy and practice-relevant knowledge gaps

Bring scientists, policy makers and human development specialists together, creating a novel community to identify opportunities and innovative solutions to tackle African-Eurasian migrant declines while addressing human development needs.

Symposium 10. Forest and woodland in a changing world: challenges for biodiversity conservation

Symposium leader: Tiwonge Mzumara-Gawa & Anthony Cizek

Mopane woodland are the most dominant vegetation type in southern Africa covering an estimated 555,000 km² in southern Angola, northern Namibia, northern Botswana into Zimbabwe, and central and northern Mozambique, in southern Zambia, Malawi and northern South Africa. These woodlands support a diverse avian community including threatened endemic species such as Black-cheeked and Lilian's lovebirds. In addition to that, the Mopane hosts a diversity of animals including some specialised to this habitat. These woodlands support a range of ecosystem services to rural communities providing fuel, construction materials, medicines and food. *Colophospermum mopane* is host to mopane worms which are a key livelihood and protein source for communities. The structure of Mopane woodlands is impacted by various forms of disturbance including the harvest of large stems for high quality timber, the production of charcoal, clearance for agriculture and browsing by large herbivores. The commercial demand for Mopane hard wood is rising from both legal and illegal harvesters. Processes such as climate change, this commercial harvest of timber and charcoal production are driving rapid change throughout southern Africa's woodlands. The recent CITES decision on regulating international trade on some hard wood species may stimulate increased demand for Mopane. This symposium aims to bring together stakeholders from the public and private sector, civil society and academia to explore the latest research into the drivers of change in Mopane woodlands, evidence in the extent of damage and the implications for conservation. The symposium will also begin the conversation on future approaches to management and policy recommendations.

Symposium 11. Species conservation

Submitted talks

Symposium 12. BirdMap: a bird atlas protocol for all of Africa

Symposium leader: Michael Brooks

The African Bird Atlas, BirdMap is a citizen science project that is driven by the energy of several hundred volunteers, who collectively are mapping the distribution of birds across the African continent. Building on the success of the second South African Bird Atlas, Kenya BirdMap, and Nigerian Bird Atlas Projects, BirdMap aims at providing unified approach to mapping the distribution, relative abundance and phenology of birds in Africa, using a unified single robust data collection protocol. To gather data, volunteers select a geographical 'pentad' on a map and record all the bird species seen within a set time frame, in order of species seen. This information is uploaded to the BirdMap database and is used for research and analysis by numerous biodiversity agencies, including the South African National Biodiversity Institute, BirdLife South Africa, as well as academics and students at various universities. This symposium is aimed at highlighting the lessons learned while developing the projects and best-practices that each project has developed to manage and roll out the initiatives in their areas. It also aims to introduce the protocol and project and open discussion with interested parties to collaborate into the future. A single robust bird atlas protocol. Creating the largest avian focused dataset for Africa for research and analysis, helping drive conservation aligned policy and development in Africa.

Symposium 13. Vulture Safe Zones

Submitted talks

Symposium 14. Bird monitoring to support decision making and reporting to Multilateral Environmental Agreements (MEAs)

Symposium leaders: Humbu Mafumo, Gwawr Jones, Sarah Scott

Bird monitoring data is critical for evidence-based conservation action but also for reporting on policies and international agreements. This symposium will bring African and European experts together to start a discussion about:

How bird monitoring data is currently being used for reporting on key agreements e.g. Convention on Migratory Species (CMS) & Convention on Biological Diversity (CBD)
Challenges and barriers to reporting, including linking to habitat monitoring and what to measure when it comes to surveys
Innovative solutions to data collection & analysis to support decision making

Symposium 15. African heron research and conservation: global linkages, local impacts

Symposium leader: Doug Harebottle

This symposium are open to all those who are doing studies on the biology and/or conservation of Ardeidae ("Herons"), or are implementing heron conservation activities. It will provide a forum for heron researchers and conservationists to get together, face to face, and exchange ideas, results and problems of their work. In holding this meeting in Africa, we particularly invite African researchers to present their work in a casual, open atmosphere among other international colleagues. We hope that participants will discuss issues novel to the African continent along with common global issues. African researchers can learn of fellow colleagues involved with heron research and conservation in various other corners of the world and vice versa to further

build and intensify our global network of specialists. We encourage those who are working with herons of conservation concern to present new results from their activities at the symposium. We are also eager to hear of more traditional studies/observations on population monitoring, national species distributions, breeding biology, behaviour, taxonomy, movements and migration, etc. The symposium will focus on management of heronries in urban settings and development of guidelines that can be used to aid in minimizing their negative impact. Case studies from other continents as well can be helpful to inform the discussion, as urbanisation of heronries is a global phenomenon.

Symposium 16. Parasitism and mutualism

Submitted talks

Symposium 17. Bioacoustics

Submitted talks

Symposium 18. Poison response training for bird conservation: developing best practices

Symposium leader: Corinne Kendall

Poisoning has become a significant threat to Africa's birds, particularly vultures, cranes, and waterfowl. Several groups are using poison response training with communities, rangers, government officials, and law enforcement as a strategy to address this important issue. This session will cover different approaches to poison response training and other techniques for addressing the threat of pesticide poisoning to birds throughout Africa with a focus on lessons learned, challenges, and development of best practices. Speakers will cover different strategies that have been tried as well as their strengths and weaknesses in relation to responding to and reducing the threat of poisoning. The symposium will cover ranger-focused trainings, community-focused trainings, making the link to human health, and treatment of affected birds. The goal of the session will be to use current experience and practices in poison response training from a number of different countries to work towards best practices for poison response trainings in the future.

Symposium 19. West African birds as indicators of biodiversity

Symposium leader: Nico Arcilla

West Africa is home to the Upper Guinea Forests global biodiversity hotspot, a large number of Important Bird Areas, and the primary wintering grounds for long-distance migratory breeding in western Europe. Like the proverbial "canary in a coal mine" used by miners to indicate the quality of the air they breathed, birds provide critical information about the health of our environment. Birds' high visibility, sensitivity, and responses to environmental change make them valuable indicators of ecological integrity. Bird declines alert us to problems such as habitat destruction, unsustainable exploitation, and climate change. Birds in West Africa are threatened by rapidly increasing human impacts from exponential human population growth, including urbanisation and rapidly expanding plantation agriculture that have led to extensive forest destruction and uncontrolled hunting. However, relatively few published studies have assessed human impacts on birds in West Africa. This symposium brings together researchers investigating bird population and community responses to human impacts in West Africa to provide updates on birds' conservation status and make recommendations to improve conservation action. Speakers will address human impacts on taxa including, but not limited to,

forest understory birds, parrots, hornbills, vultures and other raptors, and wintering Afro-Paleartic migratory birds. We will examine birds' conservation status both in and outside of protected areas, including assessing the effectiveness of protected areas with and without anti-poaching patrols. We will also highlight means towards empowering West African residents to study and protect birds as fundamental to achieving conservation success.

Symposium 20. Human and honeyguide interactions

Submitted talks

Symposium 21. Foraging ecology and biogeography

Submitted talks

Symposium 22. Innovation in vulture conservation: a socio-environmental perspective

Symposium leaders: William Bowerman and Linda van den Heever

The "African Vulture Crisis" describes the long decline in populations of most Old World vulture species in Africa that have recently been reclassified as Critically Endangered or Endangered using IUCN criteria. Multiple human-caused stressors have been linked to vulture mortality including: poisoning, directly and in association with elephant poaching; indirectly and in association with secondary impacts from poisons used for human-wildlife conflict; harvesting for trade in vulture parts for traditional medicine and beliefs; alteration of habitat through changes in land use; lead poisoning from big game hunting; drowning in farm dams; and, collisions with electrical power infrastructure, amongst other threats. The U.S. National Science Foundation funded National Socio-Environmental Synthesis Center (SESYNC) was developed to produce actionable conservation outcomes working through teams of social and environmental scientists tackling real world problems. For five years, over 20 scientists and policy makers have been working together on this problem. We report here on novel approaches including the use of the One Health framework; conservation ethics; conservation criminology; human-vulture relationships; the role of vultures in disease; and, community conservation.

Symposium 23. Avian life history seasonality in changing African environments

Symposium leaders: Chima Nwaogu, Elizabeth Yohannes, Joseph Mwangi Muthahi, Barbara Helm

Understanding how environmental seasonality shapes life history traits through evolution and plasticity is fundamental to avian biology, especially in our times of rapid change. Yet, much of our understanding is inspired by work conducted in the north temperate regions, whereas most of life evolved and thrives in the tropics. Our understanding of avian seasonality in the tropics has often rested on rather indirect evidence and been prone to sweeping generalisations without in-depth evaluation of underlying patterns and variations among-species and localities. Recently, more papers are reporting ecological research in Africa, with most of it highlighting the unique life histories of tropical birds, and the tendency for tropical environments to influence varying selection pressures and evolutionary responses. Despite this and the centrality of birds in ecology, there has been hardly a symposium focusing on avian life history seasonality at the PAOC. Instead, talks on this subject have been scattered over different sessions. The aim of this symposium, therefore, is to provide a platform for ecologists interested in birds and environmental change in Africa to examine how seasonality of avian life history traits relates to local tropical conditions. We will take a broad view of life-history seasonality, including annual-

cycle stages such as breeding, moult, and local migration, but also physiological traits such as immune function, along a gradient of tropical environmental change, including desert, arid and semi-arid regions. We hope to; 1) offer an overview of the current state of research on avian life history seasonality. 2) foster collaborations among people working on avian life history seasonality in Africa. We have attracted international researchers to build bridges to global networks where studies in nature's rhythms and climate change are well rooted.

Symposium 24. Urban wetland conservation management – goals, experiences and challenges

Symposium leader: Robert Cunliffe

Wetlands are an important component of the urban landscape for many African cities, due in part to development of population centres in proximity to water sources and in part because wetlands often pose challenges for physical development such that urban development tends to happen around rather than within wetlands, at least initially. Urban wetlands provide important habitat and make an important contribution to bird and biodiversity conservation. More generally, they provide a wide range of ecosystem services and make an important contribution to human well-being. Yet urban wetlands, in the face of rapid growth of human populations and increasing levels of urbanization, are coming under increasing threat and are experiencing high rates of loss and degradation. Drawing on experiences from Harare's headwater wetlands and that of other African cities, this symposium aims to illustrate the occurrence and importance of urban wetlands, specifically in terms of avian conservation and the often overlooked dependence of urban wetlands on the roles that birds play within them, as well as the threats to and losses of urban wetlands. It further seeks to document and discuss experiences gained in urban wetland conservation and management and to identify lessons learned and how these could be applied to other urban situations elsewhere in Africa.

Symposium 25. Conservation and demographics

Submitted talks

Symposium 26. Flamingos in a changing world

Symposium leader: Catherine King

While flamingos have historically been perceived as inhabiting remote and inhospitable environments, they are increasingly found in some of the same habitats as humans, and even to opportunistically benefit from this association. However, infrastructure developments, mining, and presence of humans and their domestic animals pose an increasing risk to flamingos, through alterations in water ecology, pollution, physical hazards during flamingo movements, disturbance, and overexploitation. While flamingos are icons of Africa, and an International Single Species Action Plan for the Lesser Flamingo *Phoeniconaias minor* has been in place since 2008, we still do not have a reliable estimate of how many flamingos there are on this continent, nor reliable means to assess population trends. Technological advances that could surmount identified challenges to monitoring flamingo populations are in development and insights into flamingo movements are occurring. Strategic management of sites in close proximity to humans that are used by flamingos can benefit both humans and flamingos, as is being demonstrated in Africa.

Round Table Discussions

Round Table Discussion 1: Sharing lessons on promoting conservation and responding to development pressure at Africa's iconic sites (IBAs/KBAs)

Led by: Ken Mwathe and Bronwyn Maree

Africa's Agenda 2063 envisages a prosperous Africa based on inclusive growth and sustainable development. Key flagship projects in energy, infrastructure, agriculture will push this agenda coupled with a desire to achieve the Sustainable Development Goals (SDGs). Africa's development will come at a great cost to Important Bird Areas (IBAs). Already, 59 out of over 1,300 Important Bird Areas (IBAs) in Africa are categorised as IBAs in danger due high development pressure. This round table will consider approaches to safeguarding IBAs as well as new safeguard responses.

Round Table Discussion 2: Birding apps and the use of technology in bird conservation

Led by: John Caddick

There are many people in Africa who have an interest in birds but do not have the resources to buy a field guide. Many however will have a modern smartphone or similar device. An increasing number of Birding Apps are now available which cover many countries in Africa. For example Birds of Africa which covers Nigeria / Benin / Togo and Ghana in its first version, and Birds of Zambia have both been published recently. The purpose of the RTD is to discuss the potential value of such Apps for conservation purposes. The proposed format is that 3 or 4 App developers will each spend 5 minutes to describe their Apps followed by a discussion which would cover requirements from a conservation perspective including potential users, content, capabilities, technology and cost.

Round Table Discussion 3: Developing capacity of early-career conservation leaders in Africa

Led by: Julius Arinaitwe and Sherilyn Bos

Africa is well-endowed with biodiversity and still has the opportunity to ensure a future where people and nature live sustainably and in harmony. The threats to this rich resource are underpinned by global demand for food and raw materials, the imperative of governments to lift growing human populations from poverty and the large-scale and severe negative impacts of climate change, among others. To attain this future scenario demands leaders able to articulate a fresh narrative that places nature as a positive contributor to sustainable development. Africa has a large young population in whose hands the sustainability of nature will ultimately depend. It is important that Africa develops conservation leaders to whom this responsibility will be handed and some civil society organisations, academic institutions and protected area agencies are making progress on this issue.

This session aims to:

- Share information on the opportunities available for capacity/leadership development of early career conservationists.
- Identify key gaps and barriers in this work.

- Develop recommendations for enhancing opportunities and reach of existing/new initiatives.

Importantly, the session will propose recommendations to extend the reach and scale of existing opportunities, for example through use of IT and online courses.

Round Table Discussion 4: Making ornithology accessible, inclusive and diverse

Led by: Merlyn Nomusa Nkomo

The relationship between mankind and birds is ancient. Early men looked to nature, particularly birds to gain important environmental cues, know where to find food and many species were revered in their religions and cultures among other practices. Some modern societies still practice traditions that are evidence of a distant past of cooperation with birds and when we cared for their welfare as collective communities. However, presently, ornithology as a discipline does not reflect this globally and most notably in Africa. Conservation is slowly transforming, yet the field of ornithology still trails behind. With the current global challenge of biodiversity collapse and climate change, the birding community needs to be more diverse now more than ever to garner support for avian conservation. The nature of the challenges we face in conserving nature need nuanced, diverse and trans-disciplinary approaches. By-in from the majority of the people living on the continent, rural and urban of all races, ages and gender is pivotal to our success.

The aim of this RTD is to be a platform for transformative intergenerational dialogue on the challenges and barriers to entry faced by different people in ornithology. The discussion will include contributions from individuals, youth groups and organisations sharing their experiences on the burden of transformation. This RTD is for everyone, most importantly and not limited to, leaders of clubs, organisations, departments and institutions seeking to diversify their programming and membership to truly mirror the communities they exist in. Please contact Merlyn Nomusa Nkomo on merynomsa@gmail.com with questions or if you or your organisation are interested in contributing or being featured in the talks preceding the discussion.

Round Table Discussion 5: Vulture Conservation Forum and Vulture Safe Zones

Led by: Salisha Chandra and Hanneline Smit-Robinson

Vulture Conservation Forum

Over the last 50 years, populations of African vultures have declined by 80-97% (over 92% for five species). Stopping and reversing these declines is one of the biggest challenges in conservation in Africa. This is a hugely complex issue because the threats to vultures vary from sub-region to sub-region and are part of the bigger picture of the continuing challenge of poaching, unsustainable resource use, cultural attitudes and beliefs, and the absence of safeguards for biodiversity in many development plans.

Given the cross-cutting and diverse threats vultures face and the varied skillsets and resources required to address them, collaborative and inclusive approaches are essential to making a difference. In tackling the crisis in South Asia, a collective response network 'Saving Asian Vultures from Extinction' (SAVE) demonstrates what organizations can achieve when they come together with a united vision.

This Round Table aims to discuss the opportunities and challenges of developing a similar consortium in Africa. Our overall goal is to foster collaborative and coordinated conservation action to halt and hopefully reverse declines of this majestic group of birds.

Vulture Safe Zones (VSZs)

Old World vultures is widely considered to be one of the most threatened functional guilds in the world. To stem the tide of losses, landscape-level conservation initiatives are needed, not only in our nature reserves and national parks, but also on privately-owned land that supports vulture populations. First conceptualised and applied in Asia, where vulture numbers were decimated by the veterinary drug diclofenac, Vulture Safe Zones (VSZs) cover vast stretches of privately-owned land that are managed in ways that are conducive to vulture survival. This includes, but is not limited to, implementing poison response protocols, protecting breeding birds from disturbance, implementing mitigation measures on powerlines to prevent collisions and electrocutions and ensuring that food provided at supplementary feeding sites is free of lead and other contaminants. The Multi-species Action Plan to Conserve African-Eurasian Vultures (Vulture MsAP) has now brought this initiative to Africa, where it is being adapted to address the unique and multi-faceted challenges facing the continent's vultures. The presentations and panel discussions will help participants to interrogate the concept of VSZs, what it takes to establish them, key lessons learnt and challenges still to be overcome in this fight to save one of the most threatened groups of birds in the world.

Round Table Discussion 6: Waterbirds and the East Atlantic Flyway

Led by: Tim Dodman, Achilles Byaruhanga and Khady Gueye Fall

The East Atlantic Flyway is a major migratory route connecting the Arctic with Southern Africa, vital for both Palearctic and intra-African migratory birds, especially waterbirds. Africa's Atlantic coastline supports a vital network of wetlands where birds congregate during their non-breeding season, whilst some support significant colonial breeding colonies. In addition, the whole coastal belt is of cumulative importance for a wide range of non-congregatory species.

Effective conservation of migratory birds requires countries and partners to work together and share data, experiences and joint actions. Some flyway initiatives are underway, including the BirdLife East Atlantic Flyway Initiative and the Wadden Sea Flyway Initiative, whilst Migratory Birds for People links wetland centres along the flyway. A new major eight-year regional project is anticipated to start in 2023 focused on strengthening climate resilience along the African part of the flyway, especially in relation to migratory birds. The planned programme will embrace a flyway approach, with direct action at several sites. This RTD will present the flyway, partner initiatives and the new project, and will seek engagement and input from all countries of the flyway, including examples of climate impacts to sites and birds and potential solutions.

Round Table Discussion 7: Integrating science, policy and development to address unsustainable land use linked to African-Eurasian migrant landbird declines

Led by: Samuel Temidayo Osinubi

Flyway-wide collaboration is key to effectively support conservation action for declining migrant landbirds across their range. This symposium brings together African science, policy and

development experts in collaboration with European experts to review existing science, policy and practice, and explore innovative trans-disciplinary opportunities to deliver migrant landbird conservation across rapidly-changing landscapes.

Specifically, we aim to:

- Improve our understanding of African-Eurasian migrant landbird declines in relation to the latest African research, build a clearer picture of the drivers and potential solutions by synthesizing knowledge from research being conducted throughout the flyway.
- Improve the science-policy connection between African policy makers and conservation practitioners, and identify key research and policy questions
- Enhance capacity for policy and practice-relevant research by strengthening collaboration and networking of scientists working on African-Eurasian migrant landbird declines, encouraging collaboration to fill policy and practice-relevant knowledge gaps
- Bring scientists, policy makers and human development specialists together, creating a novel community to identify opportunities and innovative solutions to tackle African-Eurasian migrant declines while addressing human development needs.

und Table Discussion 8: The African Bird Atlas project - European ornithology's greatest need

Led by: Ulf Ottossen, Michael Brooks and Talatu Tende

Africa's biodiversity provides critical ecosystem services. It contributes to the continent's economy and serves as a buffer to climate change. However, the continent is experiencing a dramatic loss of biodiversity even before we can fully document and enjoy the benefits of these natural resources. Integrating biodiversity considerations into policies is key for mitigating these losses, and data is critical for informed decision-making.

ABAP is the greatest need for European Ornithology. The final frontier for European ornithology is knowing where the birds that spend the northern winter in Africa currently go, and what they do. In addition to climate change, development in Africa, and especially the loss of natural vegetation through expanding agriculture, are having major impacts on the distributions of migrants, and on the timing of their migration. From the perspective of research and conservation needs in the African-Eurasian bird migration system, the largest information gap will be met by a continent-scale atlas project like ABAP.

Focusing on birds ABAP implements the protocol developed in the Southern Africa Bird Atlas Project 2 (SABAP2). It is designed to capture bird distributional data across wide spatial scales. Using multiple data entry points including the BirdLasser app, this citizen science project is exceptional in its ability to report current biodiversity changes and thus provide decision-makers with up-to-date information. In Kenya and Nigeria, implementations of atlassing have been found to be a very effective way to engage nature enthusiasts to becoming citizen scientists. The African Bird Atlas Project seeks to mobilize collaborative data among ongoing national projects across the continent to establish an up-to-date database for Africa's birds. It will also develop institutional capacity of all partners for managing and using the data to improve environmental management decisions, while connecting more people to nature. ABAP's success can be seen in the sustained growth of data coverage, including establishment of new country-level atlases, and the development of user-friendly data summaries. Its impact can be measured through the inclusion of the data collected in driving key conservation management decisions throughout the continent.

Round Table Discussion 9: Bird monitoring to support decision making and reporting to Multilateral Environmental Agreements (MEAs)

Led by: Humbu Mafumo, Gwawr Jones and Sarah Scott

Bird monitoring data is critical for evidence-based conservation action but also for reporting on policies and international agreements. This symposium will bring African and European experts together to start a discussion about:

- How bird monitoring data is currently being used for reporting on key agreements e.g. Convention on Migratory Species (CMS) & Convention on Biological Diversity (CBD)
- Challenges and barriers to reporting, including linking to habitat monitoring and what to measure when it comes to surveys
- Innovative solutions to data collection & analysis to support decision making

Round Table Discussion 10: Going, going, gone: tackling the illegal killing of birds for belief-based use

Led by: Salisha Chandra and Darcy Ogada

The trade of avian body parts for belief-based use has been identified as one of the most significant anthropogenic causes of avian mortality and population decline (Alves et al. 2013, Boakye et al. 2019). Belief-based use includes the use of whole birds, either alive or dead, or their body parts for traditional or spiritual purposes. These include traditional medicine, both preventative and therapeutic, and for spiritual healing including of folk illnesses, for spiritual protection, clairvoyance, or to bring success or misfortune to others (Boakye et al. 2019). While this practice is widely known from West Africa, it is prevalent throughout every region of the continent (Williams et al. 2014). Belief-based use is one of a number of wild animal uses that collectively make up the wildlife trade and evidence from Africa suggests that it is interlinked with the trade in bushmeat and live-birds, and they are likely interdependent (Buij et al. 2016, R. Martin pers. comm.). Given the severity of trade for belief-based use, and particularly among species groups that already occur at low densities such as raptors and hornbills, it is likely to be a significant contributor to declines within these groups in Africa (Buij et al. 2016, Williams et al. 2014).

This Round Table aims to 1) discuss ways to markedly increase both local and international awareness about the seriousness of this threat to Africa's birds, and 2) share experiences about the best ways to tackle it. Our overarching goal is to bring a collective focus on this growing and significant threat affecting many taxa that we hope fosters much needed collaborative conservation action.

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Boakye, M.K., Wiafe, E.D. and Ziekah, M.Y., 2019. Ethnomedicinal use of vultures by traditional medicinal practitioners in Ghana. *Ostrich*, 90(2), pp.111-118.

Buij, R., Nikolaus, G., Whytock, R., Ingram, D.J. and Ogada, D., 2016. Trade of threatened vultures and other raptors for fetish and bushmeat in West and Central Africa. *Oryx*, 50(4), pp.606-616.

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Round Table Discussion 11: Community involvement in avitourism, ornithological research, and bird conservation

Led by: Andrew de Blocq

The involvement of local communities in the preservation of natural assets is essential for conservation success. Community buy-in requires consultation, inclusion, representation, and local benefits. One way to benefit local communities is direct and indirect job creation through research, conservation, and avitourism. We would like to facilitate a discussion around where in Africa examples of effective community involvement exist relating to avitourism, ornithological research, and bird conservation projects. A short presentation on the work of BirdLife South Africa's Empowering People Programme will give some context, whereafter we will invite contributions and points of discussion from the floor.

Round Table Discussion 12: Long term conservation action plan for Secretarybirds

Led by: Melissa Whitecross

The uplisting of Secretarybirds (*Sagittarius serpentarius*) to Endangered on the IUCN Red List highlighted the need for immediate action to stop the regional decline of this iconic African raptor. While the species ranges across most of sub-Saharan Africa, barring the tropical forests of central Africa, it has already become virtually extinct in West Africa and is restricted to protected areas in East Africa. This situation motivated BirdLife South Africa to organise a conservation planning workshop, including a Population & Habitat Viability Assessment (PHVA), facilitated by the IUCN SSC Conservation Planning Specialist Group. The outputs from this workshop are to be discussed during this roundtable for the planning of a long-term strategy for Secretarybird conservation, and to inform the drafting of a Conservation Action Plan for the species across all African range states. We therefore encourage participants from range states in Africa to join this round table so that we can initiate continental-scale collaborations towards saving this species.

Round Table Discussion 13: Bird ringing in Africa

Led by: Dieter Oschadleus

Ringing activities have been conducted in Africa for over 70 years, and ringing is an important tool in survey work and continuing studies on the biology, survival and movement of birds. Invited speakers will present overviews on the SAFRING and East African ringing schemes, as well as a brief history of ringing in Africa. There will be opportunities for RTD participants to

provide updates on recent or current ringing projects and activities from their regions and/or the species groups they are working on. The primary aim of this RTD is networking with anyone involved in ringing, or interested in ringing, in Africa. Discussions will be held on standardizing training, biometrics, and data curation. There will be feedback and discussion on accessing resources related to ringing (ringing training guides, bird identification guides, ringing publications, etc). Finally, future ringing activities and networking opportunities will be discussed.