



Press Release - For Immediate Release

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Rwanda Wildlife Conservation Association Unveils Groundbreaking Research Findings from Rugezi Marsh Biodiversity Survey

The Rwanda Wildlife Conservation Association (RWCA) has today released the preliminary findings from the first-ever comprehensive Biodiversity Survey conducted on Rugezi Marsh in Rwanda. The monumental research effort reveals new insights into the unique ecosystem of Rugezi Marsh, an internationally recognised and Ramsar-protected site. The research effort also marks a significant milestone in Rwanda's conservation efforts, uncovering a wealth of biodiversity and interesting results that showcase the critical importance of this site and its long-term protection.

In 2023, RWCA mobilised a team of dedicated researchers from Rwanda and East Africa to conduct the extensive biodiversity survey at Rugezi Marsh. The researchers spent several weeks in the field in two phases, with data collected during both the dry and rainy seasons, to ensure a comprehensive understanding of the marsh's ecological diversity. The survey covered different biodiversity groups, including plants, mammals, birds, reptiles, amphibians, fish, and insects.

From the preliminary analysis of findings, the team documented a total of **638 different species** with **433 new records** that had not been previously documented at Rugezi Marsh.

Additionally, the team is excited to announce the identification of two species that have not previously been recorded in Rwanda: the Hydrilla Leafcutter Moth (*Parapoynx diminutalis*), and a climbing plant (*Zehneria tridactyla*).

Overall, the Rugezi Biodiversity Survey documented 9 species that are globally threatened, according to the IUCN Red List of Threatened Species, and 14 Albertine Rift endemic species. As the analysis continues, and advanced laboratory techniques involving molecular analysis are applied, more exciting findings are expected.

“This research establishes a comprehensive baseline that we can now use to monitor the species and the whole ecosystem of Rugezi Marsh. It will inform future monitoring efforts and has revealed valuable information, including new, threatened, and endemic species, which is essential for guiding conservation actions. Protecting Rugezi Marsh depends on this information and is crucial for developing a long-term management plan that ensures its full protection.

“We greatly appreciate the collaboration that made this research possible, including support from the Government of Rwanda, National Geographic Society, researchers, local leaders, and most importantly the communities whose local knowledge guided our team throughout the whole research journey. This reinforces the idea that science and conservation cannot succeed without the involvement of local communities,” said Dr Olivier Nsengimana, Founder and Executive Director of RWCA.

“The Biodiversity Survey conducted by the Rwanda Wildlife Conservation Association has not only enriched our understanding of Rugezi Marsh, but also strengthened the capacity of Rwandan researchers. We are excited about the discoveries made during the survey, which further strengthen our commitment to protecting and conserving Rugezi for generations to come. When nature thrives, so do we and I encourage everyone to be champions for conservation,” said Juliet Kabera, Director General, Rwanda Environment Management Authority.

To celebrate and share the research findings, RWCA in collaboration with Rwanda Environment Management Authority (REMA) is hosting the “Rugezi Marsh Unveiled” event on 20 September 2024, at Canal Olympia in Kigali. The event will feature the premiere of a documentary film directed by Rwandan filmmaker James Rooney Dukundane capturing the research journey and the beauty of Rugezi Marsh, followed by a panel discussion with the Rwandan researchers who led the survey. The event aims to foster knowledge sharing among conservationists, government officials, and other stakeholders, encouraging collaboration for the future of Rwanda’s wetlands.

To learn more about the work of RWCA, visit rwandawildlife.org.

Key Findings from the Rugezi Marsh Biodiversity Survey

Plants: 197 species recorded of which 109 were newly documented in Rugezi Marsh. We recorded 8 species that are endemic to the Albertine Rift, including *Trifolium purseglovei* and *Vaccinium stanleyi*, as well as 3 globally threatened species which are *Bothriocline glomerate* (Endangered), *Afroligusticum runsorricum* (Vulnerable) and *Oenanthe mildbraedii* (Vulnerable).

Arthropods: At least 149 species have been recorded and this number is likely to increase as we conduct further analysis. This includes 49 different species of butterflies.

Aquatic Macroinvertebrates: 82 aquatic macroinvertebrate species including 29 species that are indicators of good water quality. The aquatic moth *Paraponyx dimunitalis* was recorded for the first time in Rwanda.

Fish: 3 species were recorded, including *Enteromius alberti* and *Pseudocrenilabrus multicolor* documented for the first time in Rugezi Marsh. Additionally, it was the first time that *Enteromius alberti* was recorded in the wetland habitat of Rwanda. The third fish species found in Rugezi Marsh is *Clarias liocephalus*, which is also the most abundant.

Amphibians: 14 species were recorded in Rugezi Marsh, including 8 newly documented by this study. All recorded species are not globally threatened based on the IUCN Red List of Threatened Species. However, two species namely *Africalus orophilus* and *Ptychadena chrysogaster* are categorised as Endangered at the national level, while *Hyperolius lateralis* is also categorised as Vulnerable at national level. Four species are endemic to the Albertine Rift, namely *Leptopelis kivuensis*, *Africalus orophilus*, *Phrynobatrachus bequaerti* and *Ptychadena chrysogaster*.

Reptiles: 13 species recorded including chameleons, snakes, and lizards, with 10 newly documented for Rugezi Marsh. The five-toed skink (*Leptosiaphos graueri*) is classified as Endangered on the IUCN Red List of Threatened Species.

Birds: 127 species recorded, with 28 newly documented for Rugezi Marsh. With these new records, the total number of bird species so far recorded in and around Rugezi Marsh has now been increased to 222. The recorded species include the Endangered Grey Crowned Crane (*Balearica regulorum*), and the emblematic, yet Vulnerable Albertine Rift Endemic Grauer's Swamp Warbler (*Bradypterus graueri*). Other notable species recorded during this study include the Lake Victoria endemics, namely Carruther's Cisticola (*Cisticola carruthersi*) and Papyrus Yellow Warbler (*Calamonastide gracilirostris*). The latter was believed to have disappeared from the marsh due to the extensive destruction of its habitat. Among the newly documented species is the Rwenzori Nightjar (*Caprimulgus ruwenzorii*), an Albertine Rift endemic bird whose

observation in this study marks the first documented record of its distribution beyond the montane rainforests (in Rwanda). Further, the survey did not record other papyrus-dependent species, namely, the Papyrus Gonolek (*Laniarius mufumbiri*), Papyrus Canary (*Crithagra koliensis*) and the White-winged Swamp Warbler (*Bradypterus carpalis*) which were known to inhabit Rugezi Marsh. The absence of these species calls for enforced regulation of papyrus cutting as well as the restoration of papyrus stands within the marsh and continued landscape conservation interventions for the persistence of globally threatened birds (3 species) and the endemic birds (6 species) that call Rugezi Marsh home.

Mammals: 53 species recorded including 51 newly documented for Rugezi Marsh. Within this total, 22 bat species were recorded, representing 40% of known bat species in Rwanda. Mammals such as jackals, genets, serval cats, otters, and mongoose were documented, as well as a wide variety of rodents for which we are currently conducting further laboratory analysis to identify specific species.

Some key records that we are already aware of include; the Harrison's giant mastiff bat (*Otomops harrisoni*) which is globally threatened (Vulnerable) based on the IUCN Red List of Threatened Species, two species of otters *Aonyx congicus* and *Hydrictis maculicollis* that are classified as Near Threatened and one species of rodent; Delany's swamp mouse (*Delanymys brooksi*) is classified as Vulnerable according to the IUCN Red List of Threatened species.

Morphological and molecular analyses are also underway for 408 specimens from the Rugezi marshland. These specimen records from the research undertaken are new for the Rugezi marshland, and most of the DNA sequence records will be new for the country. This means the research will likely contribute the first validated gene sequence records for multiple species, and several new species discoveries are anticipated.

The preliminary findings showcase the critical importance of Rugezi Marsh as a unique and diverse ecosystem requiring ongoing protection and conservation efforts. As we continue with the analysis we hope to reveal even more interesting results. RWCA remains committed to working in partnership with the Government of Rwanda, international partners, and local communities living nearby the marsh, to safeguard this invaluable ecosystem. The findings will be instrumental in shaping conservation strategies and promoting sustainable management of this unique wetland.

Note to Editors

Rwanda Wildlife Conservation Association

The Rwanda Wildlife Conservation Association (RWCA) is a non-governmental organisation, with the mission of using home-grown solutions to protect and restore threatened wildlife and wild places. Established to halt the illegal trade of endangered Grey Crowned Cranes in Rwanda, RWCA has now broadened its efforts to other threatened species in Rwanda as well as the important habitats they rely on. RWCA's strategic areas include species threat reduction, research and monitoring, wildlife interventions, conservation education, community involvement and livelihoods, and restoring and protecting natural habitats.

Rugezi Marsh

Rugezi Marsh, a Ramsar-protected site located in the north of Rwanda, is renowned for its rich biodiversity and the crucial ecosystem services it provides. RWCA has been working at Rugezi Marsh, in collaboration with REMA and other stakeholders, since 2015 to strengthen the management and protection of this important area for Grey Crowned Cranes and all its diversity. A team of Community Rangers has been established to patrol the marsh and reduce the number of community members entering the marsh for its natural resources. RWCA has also been working extensively with local communities to improve livelihoods, raise awareness of the need to protect the marsh and provide alternative access to resources.

Media Resources

For more information or to arrange interviews, please contact Cedric Ujeneza, Communications Manager, RWCA, at cedric@rwandawildlife.org or on +250 786 148 315.

To download photos from the Rugezi Marsh Biodiversity Survey click [here](#).