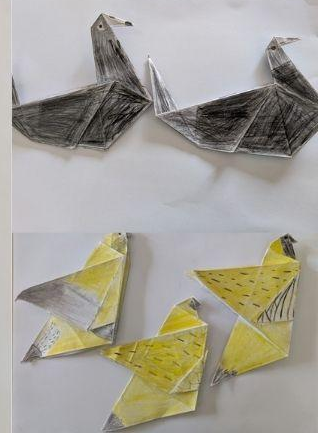




Wings on the Brink

PROTECTING THE WORLD'S ENDANGERED BIRDS



Project Name:Wings on the Brink: Protecting the World's Endangered Birds

Big Idea: Raising awareness of endangered birds

Essential Question: How can understanding endangered bird species help us take action to protect them and their habitats?

Team Members: (SAMUEL .E, DAVID .S, CHRISTINE .N, KIMBERLY .N, MARK .K, KEREN .H, JEREMIAH .O, FRED .A, RONALD .M, ROMWALD .M, CAROLINE .N, RITAH .N, PRAISE .N, GERALD .E, LYNATE .M)

School/Organization Name: TRIPPLE BLESSINGS NURSERY AND PRIMARY SCHOOL

Location :(WAKISO, UGANDA)

Engage: What challenge does your project address?

Our project addresses the rapid decline of endangered bird species due to habitat loss, climate change, pollution, and human activities such as urbanization, deforestation, and illegal hunting. Many bird populations are shrinking at alarming rates, and some species are close to extinction. For example Shoebill Stork a large, sought after bird in wetlands like Mabamba, vulnerable due to habitat encroachment, burning, and competition with fishermen. In this project, students designed posters, comic strips and made origami birds to celebrate and create awareness of endangered birds in Uganda.



Engage: Why did your team select this topic or challenge?

Our team chose this topic because endangered birds are often overlooked compared to larger animals, yet they are essential to healthy ecosystems. We wanted to raise awareness, educate others about the causes of bird endangerment, and explore ways people can help protect these species before it is too late. Ultimately, it's a challenge that combines scientific rigor with real potential for positive impact, allowing us to contribute to global efforts like the UN's Sustainable Development Goals on life on land.



Engage:

How is it a real world problem or concern?

This is a pressing real-world issue because biodiversity loss directly impacts ecosystems and human well-being. Birds play crucial roles in pollination, seed dispersal, and pest control; their extinction could disrupt food chains and agricultural systems. According to global reports, over 1,400 bird species are currently at risk of extinction, representing about 13% of all bird species worldwide. This isn't just an environmental concern, it's tied to broader problems like climate resilience, as changing migration patterns due to warmer temperatures affect entire regions. In Uganda, different bird species are endangered due to both local and international pressures, such as; habitat loss as the increasing human population leads to demand for land, resulting in deforestation, wetland drainage like the Mabamba swamp, agriculture and other development that destroy crucial bird habitats.



Investigation: Research work

To explore deep into our topic, our team made research on endangered birds

We discovered that birds are one of the most visible components of biodiversity and serve as important indicators of environmental health. However, numerous bird species around the world are facing the risk of extinction due to human driven changes in ecosystems. This research summarizes the key findings on the causes, trends and conservation strategies related to endangered birds.

The International Union for Conservation of Nature (IUCN) Red List is the most widely recognized global inventory of species' conservation statuses. According to the IUCN, over 1,500 bird species are currently threatened with extinction, representing more than 13% of all known bird species worldwide.

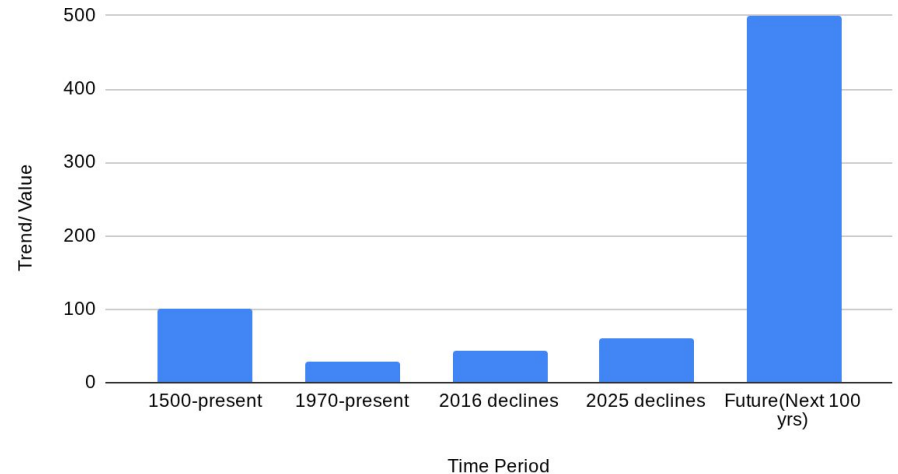


Investigation: A GLOBAL TREND OF BIRD ENDANGERMENT

Time Period	Trend/ Value	Indicator
1500-present	100	Bird extinctions (since records began)
1970-present	29	Bird population trend
2016 declines	44	% of bird species declining
2025 declines	61	% of bird species declining
Future(Next 100 yrs)	500	Predicted bird extinctions if trends continue



Trend/ Value vs. Time Period



Investigation: MAIN CAUSES OF BIRD ENDANGERMENT IN UGANDA

- 1. Habitat Loss and Degradation:** Wetlands, forests, and grasslands are being cleared for farming, settlement, and development. This reduces food, nesting sites, and safe breeding areas for birds. For example, the Grey crowned crane which is Uganda's national bird and its numbers have declined sharply in past decades due to habitat loss.
- 2. Illegal Trade and Hunting:** Some birds are captured for trade or killed due to misconceptions or conflict with people. For example, the Shoebill Stork whose nests are always disturbed and chicks are illegally traded
- 3. Climate Change:** Changes in rainfall patterns and temperatures can disrupt seasonal breeding and food supply especially for wetland and migratory species. For example the Hamerkop, and the African green broadbill which are all forest birds and suffering with changing weather patterns.
- 4. Pollution and Human Disturbance:** Poisoning intended for pests or predators inadvertently kills birds like vultures and cranes. Moreso, wetland drainage and pollution affect water bird species like shoebills.



SOLUTIONS TO PROTECT ENDANGERED BIRDS

Our team made research and came up with practical solutions on how to protect endangered birds and these are as follows;

- 1. Raising awareness starts with you and me**, our team created Origami birds and posters to celebrate the existence of the endangered birds as well educating people on how to protect and conserve birds to protect the ecosystem.
- 2. Protect and restore habitats** through creating and expanding protected areas such as national parks, wetlands, forests. They also suggested to restore destroyed habitats by replanting trees, reviving wetlands, stopping drainage and deforestation, especially in breeding areas. Thus, birds need safe places to nest, feed, and migrate.
- 3. Stop illegal hunting and trade** through enforcing wildlife laws that protect birds, crack down on trapping and smuggling especially parrots, cranes, songbirds and educating communities about why taking birds from the world harms ecosystems. Thus, fewer birds are removed or killed unnecessarily.
- 4. Combat Climate Change** by encouraging tree planting and forest conservation, supporting renewable energy and reduce fossil fuel use and helping communities adapt farming to protect bird habitats. Thus, migration patterns, food chains, and weather cycles stabilize.
- 5. Reduce Pollution and Poisoning** by banning harmful pesticides and chemicals, controlling plastic waste because coastal birds often ingest it and promoting safe livestock poisoning practices to prevent vulture deaths. Thus, birds will have safer food and cleaner environments.

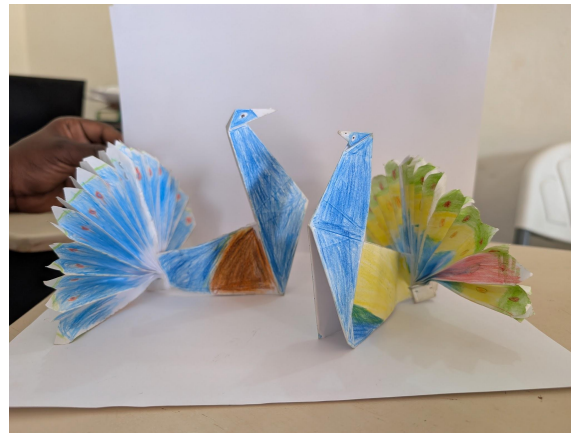
Action: We created comic strips to educate people about endangered birds around the world

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Action: We created origami art of endangered birds



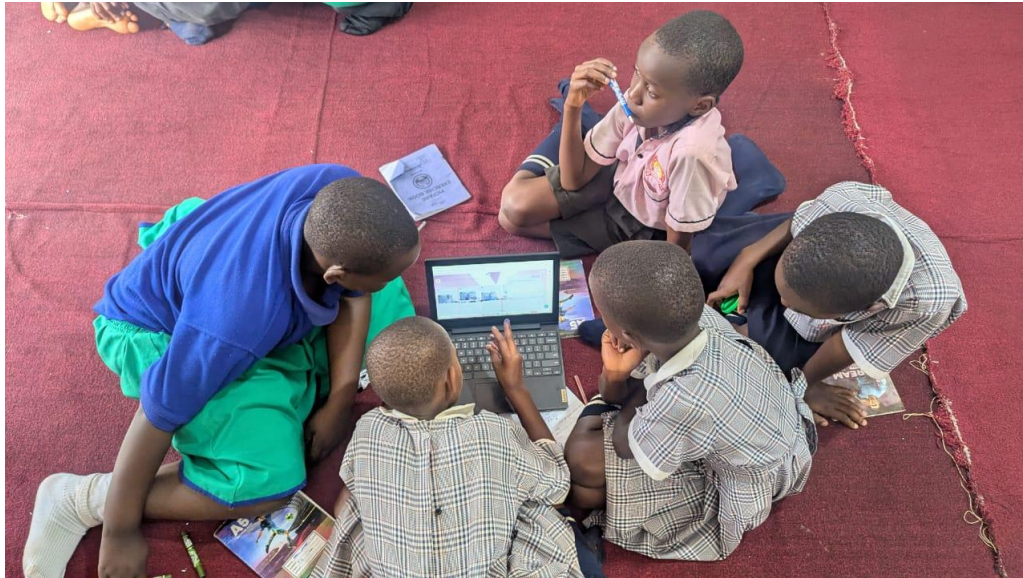
Action: Creation of Origami art of Endangered birds



We created origami art of endangered birds to learn about birds that are at risk of disappearing from the world. By folding paper into bird shapes, we practiced our creativity and fine motor skills while also learning why birds are important to nature. Our origami birds remind us that every bird matters and that we can be young heroes for nature.

Action: We created Google slides to showcase endangered birds in our country.

https://docs.google.com/presentation/d/1hrX0NoGccxhiAOxDRADoyRevCek_Mv7a/edit?usp=sharing&oid=104814321016213433210&rtpof=true&sd=true



This Google Slide presentation shows different endangered birds, their unique features, and colorful posters we created. We also explained the reasons why these birds are endangered, such as habitat loss, pollution, and hunting. Finally, we suggested solutions to protect them, including planting trees, reducing waste, and teaching people to care for nature. This project helped us learn why birds are important and how we can help save them for the future.